



IR Series

Helical geared motors

Helisel Dişlili Redüktörler



REDÜKTÖR VARYATÖR / GEARBOX & VARIATOR



Yağ Tablosu

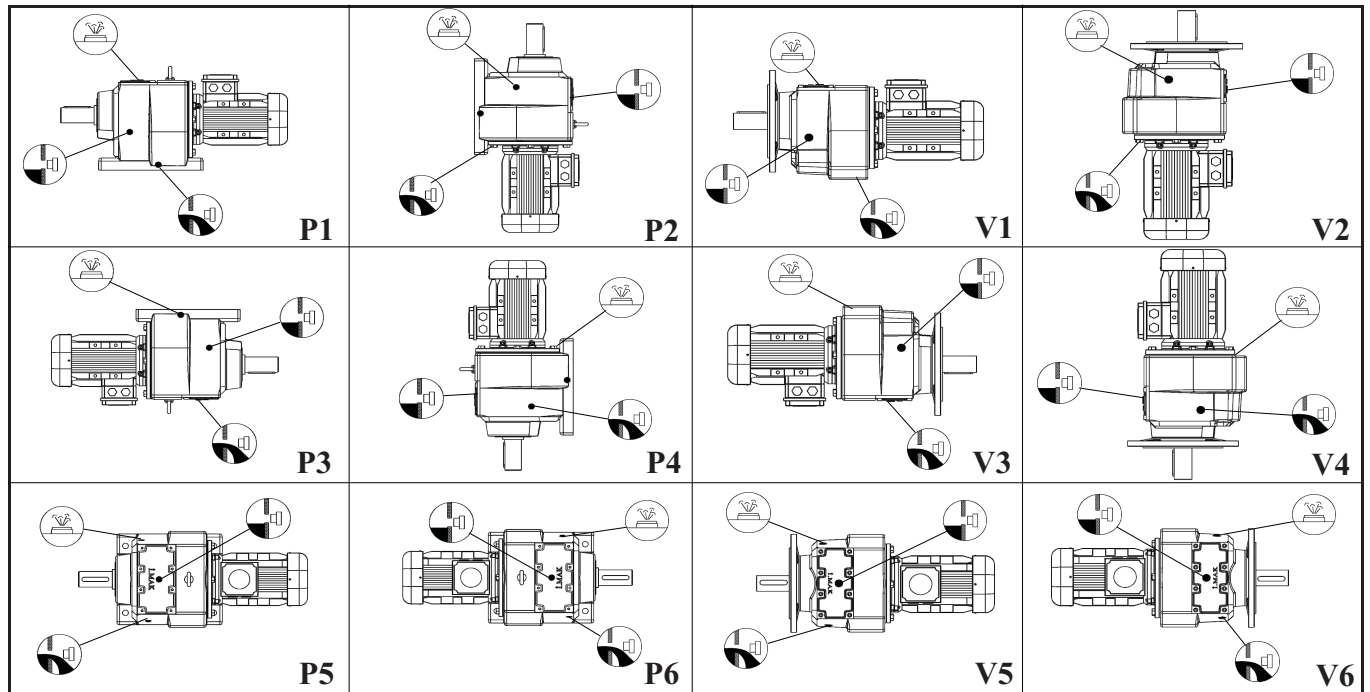
Lubricant Table

Schmiere Tabelle

Yağ Cinsi Lubricant Art des Schmierstoffes	ISO Viskozite Sınıfı Viscosity Class Vizkozitäts Klasse	DIN 51517-3	Kullanım Sıcaklığı Usage Temperature Gebrauchs Temperature	Firma Firm Firma						
				Mobil	ARAL	bp	Shell	Castrol	KLOBER	Esso
Mineral Yağ Mineral Oil Minerallöl	ISO VG 320	CLP	0.....+100	Mobilgear XMP 320	Degol BG 320	Energol GR-XP320	Omala F320	Alpha SP 320	GEM 1 320 N	Spartan EP 320
	ISO VG 220	CLP	-5.....+100	Mobilgear XMP 220	Degol BG 220	Energol GR-XP220	Omala F220	Alpha SP 220	GEM 1 220 N	Spartan EP 220
	ISO VG 150	CLP	-5.....+100	Mobilgear XMP 150	Degol BG 150	Energol GR-XP150	Omala 150	Alpha SP 150	GEM 1 150 N	Spartan EP 150
	ISO VG 100	CLP	-5.....+100	-	Degol BG 100	Energol GR-XP100	Omala 100	Alpha SP 100	GEM 1 100 N	Spartan EP 100
Sentetik Yağ Synthetic Oil Synthetisch Öl	ISO VG 320	CLP PG	-25.....+140	Gylgoyle 320	Degol GS 320	Enersyn SG-XP320	Tivela S 320	Alphasyn PG 320	Klübersynth GH 6-320	Glycolube 320
	ISO VG 220	CLP PG	-25.....+140	-	Degol GS 220	Enersyn SG-XP220	Tivela S 220	Alphasyn PG 220	Klübersynth GH 6-220	-
	ISO VG 150	CLP PG	-30.....+140	-	Degol GS 150	Enersyn SG-XP150	Tivela S 150	Alphasyn PG 150	Klübersynth GH 6-150	-
	ISO VG 100	CLP PG	-30.....+140	-	-	-	-	-	Klübersynth GH 6-100	-



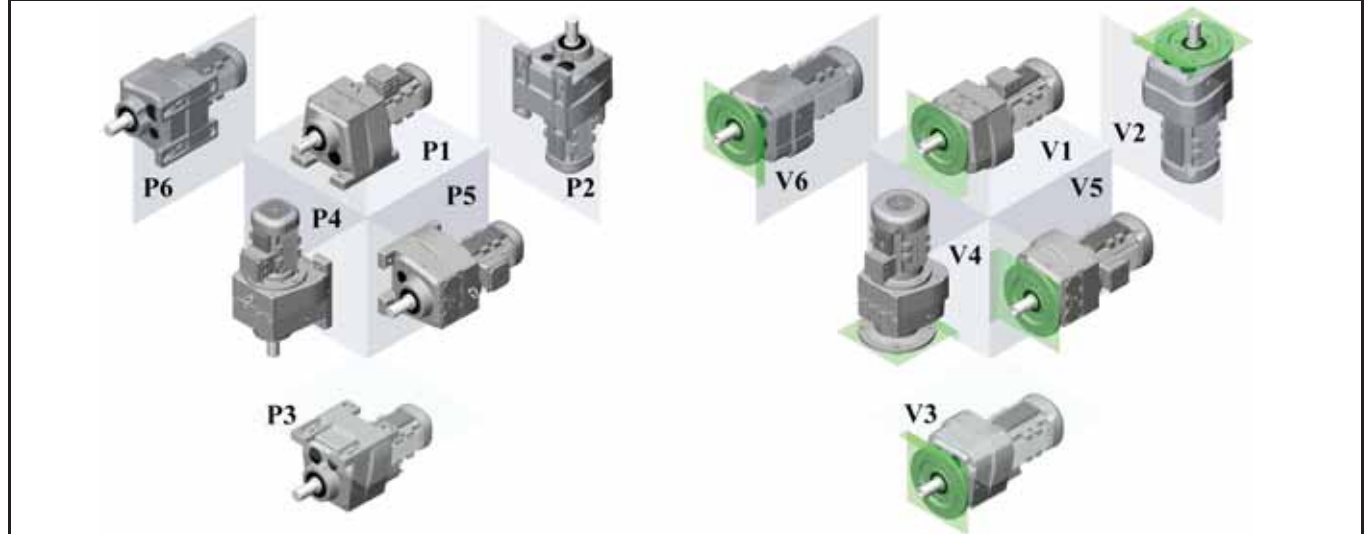
i.Mak® Montaj Pozisyonları ve Yağ Miktarları
Mounting Positions and Oil Quantities
Bauformen und Ölmengen Tabellen



Yağ Doldurma
Vent Plug
Entlüftung

Yağ Seviye Tespit
Oil Level
Ölstand

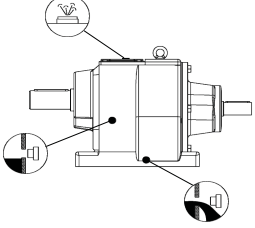
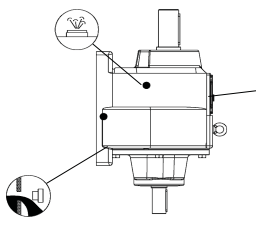
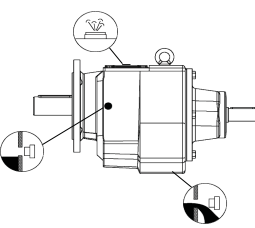
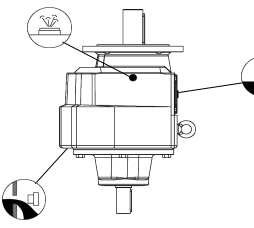
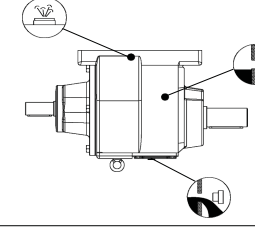
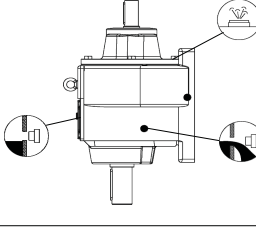
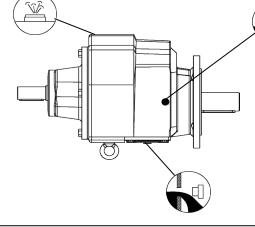
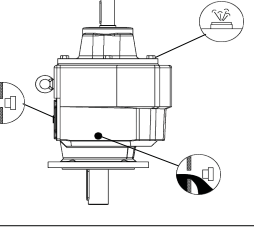
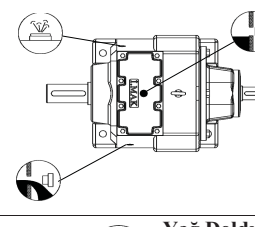
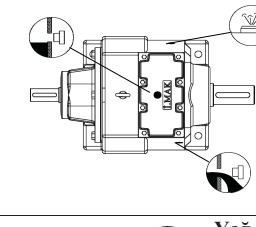
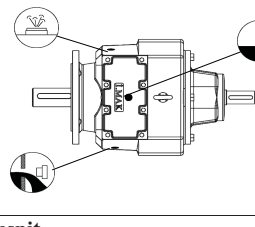
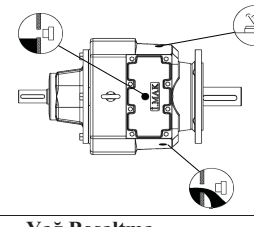
Yağ Boşaltma
Drain Plug
Ölablab

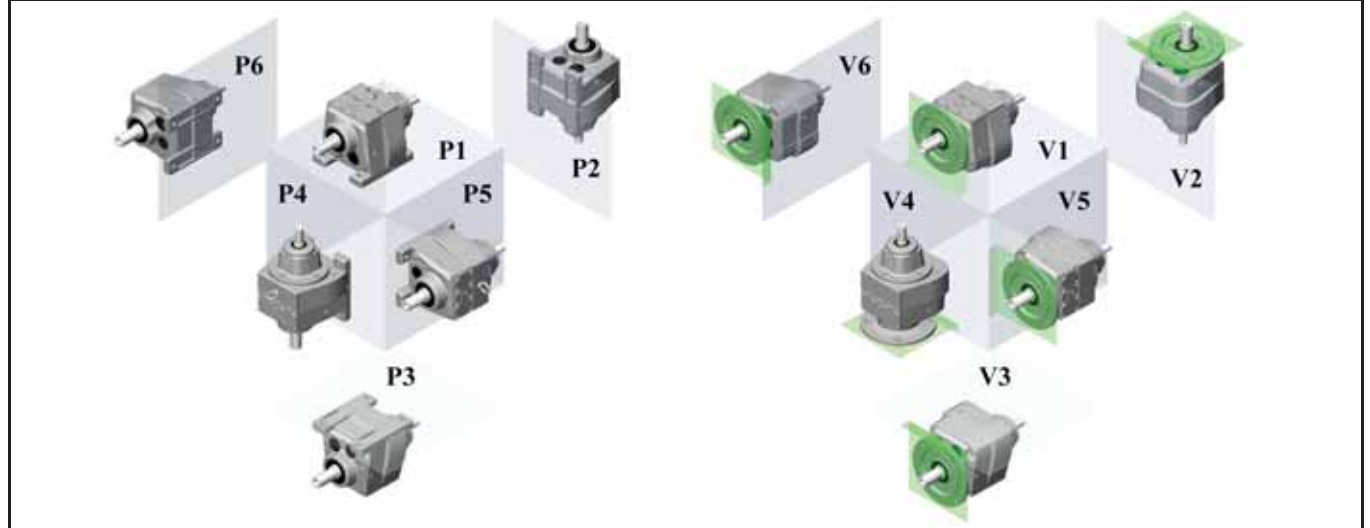


TİP Type Typ	Bağlantı Pozisyonları için Yağ Miktarları (litre) Oil Quantities for Mounting Positions (liter) Ölmengen Tabellen für Bauformen (liter)											
	P1	V1	P5	P6	V5	V6	P3	V3	P2	P4	V2	V4
İR_M 42 / 43	0,4 / 0,35			0,5 / 0,45			0,5 / 0,45				0,7 / 0,65	
İR_M 52 / 53	0,8 / 0,75			0,8 / 0,75			0,8 / 0,75				1,2 / 1,15	
İR_M 621 / 631	1,25 / 1,1			1,25 / 1,1			1,25 / 1,1				1,8 / 1,65	
İR_M 62 / 63	1,25 / 1,1			1,25 / 1,1			1,25 / 1,1				1,8 / 1,65	
İR_M 721 / 731	2,2 / 2			2,2 / 2			2,2 / 2				2,7 / 2,5	
İR_M 72 / 73	2,5 / 2,3			2,5 / 2,3			2,5 / 2,3				3 / 2,8	
İR_M 82 / 83	5,5 / 5			5,5 / 5			5,5 / 5				7,5 / 7	
İR_M 92 / 93	9 / 8			9 / 8			9 / 8				11 / 10	
İR_M 102/103	14 / 13			14 / 13			14 / 13				17 / 16	
İR_M 122/123	28 / 30			28 / 30			28 / 30				33 / 35	



i.Mak® Montaj Pozisyonları ve Yağ Miktarları
Mounting Positions and Oil Quantities
Bauformen und Ölmengen Tabellen

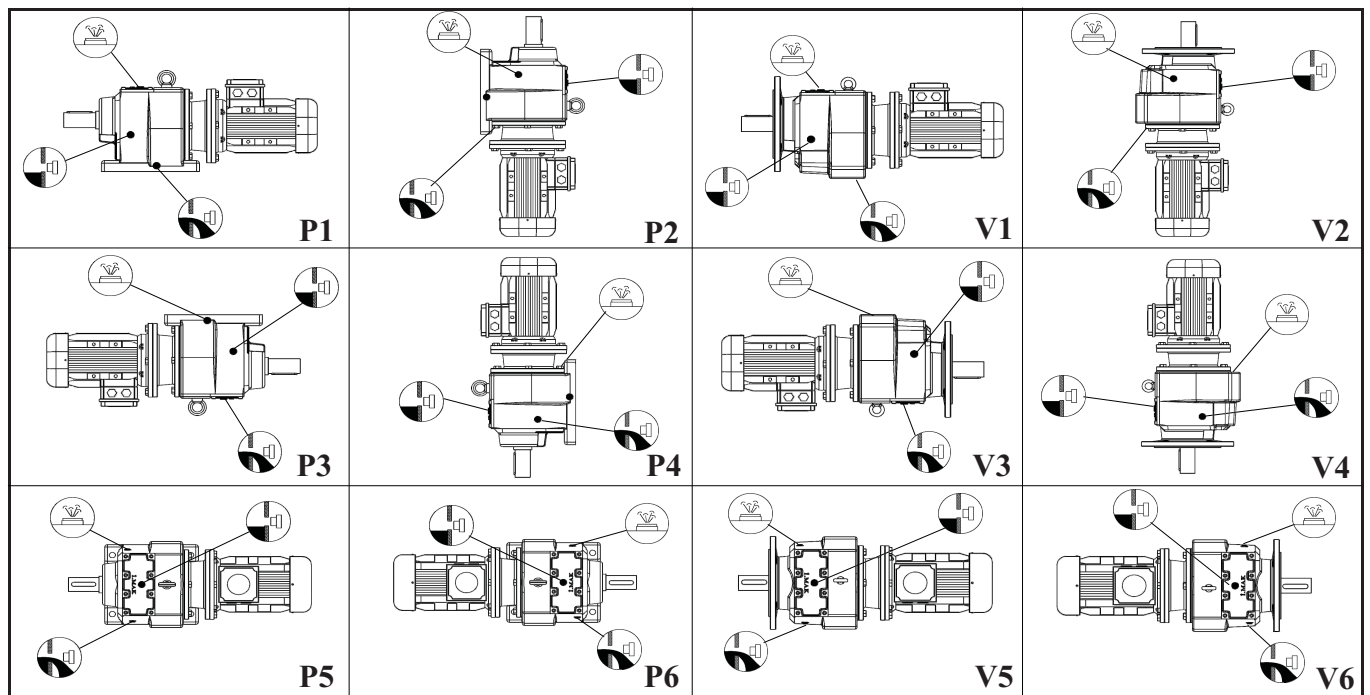
			
			
			
 Yağ Doldurma Vent Plug Entlüftung	 Yağ Seviye Tespit Oil Level Ölstand	 Yağ Boşaltma Drain Plug Ölablak	



TİP Type Typ	Bağlantı Pozisyonları için Yağ Miktarları (litre) Oil Quantities for Mounting Positions (liter) Ölmengen Tabellen für Bauformen (liter)											
	P1	V1	P5	P6	V5	V6	P3	V3	P2	P4	V2	V4
İR_ 42 / 43	0,4 / 0,35			0,5 / 0,45			0,5 / 0,45				0,7 / 0,65	
İR_ 52 / 53	0,8 / 0,75			0,8 / 0,75			0,8 / 0,75				1,2 / 1,15	
İR_ 621 / 631	1,25 / 1,1			1,25 / 1,1			1,25 / 1,1				1,8 / 1,65	
İR_ 62 / 63	1,25 / 1,1			1,25 / 1,1			1,25 / 1,1				1,8 / 1,65	
İR_ 721 / 731	2,2 / 2			2,2 / 2			2,2 / 2				2,7 / 2,5	
İR_ 72 / 73	2,5 / 2,3			2,5 / 2,3			2,5 / 2,3				3 / 2,8	
İR_ 82 / 83	5,5 / 5			5,5 / 5			5,5 / 5				7,5 / 7	
İR_ 92 / 93	9 / 8			9 / 8			9 / 8				11 / 10	
İR_ 102 / 103	14 / 13			14 / 13			14 / 13				17 / 16	
İR_ 122 / 123	28 / 30			28 / 30			28 / 50				33 / 35	



i.Mak® Montaj Pozisyonları ve Yağ Miktarları
Mounting Positions and Oil Quantities
Bauformen und Ölmengen Tabellen



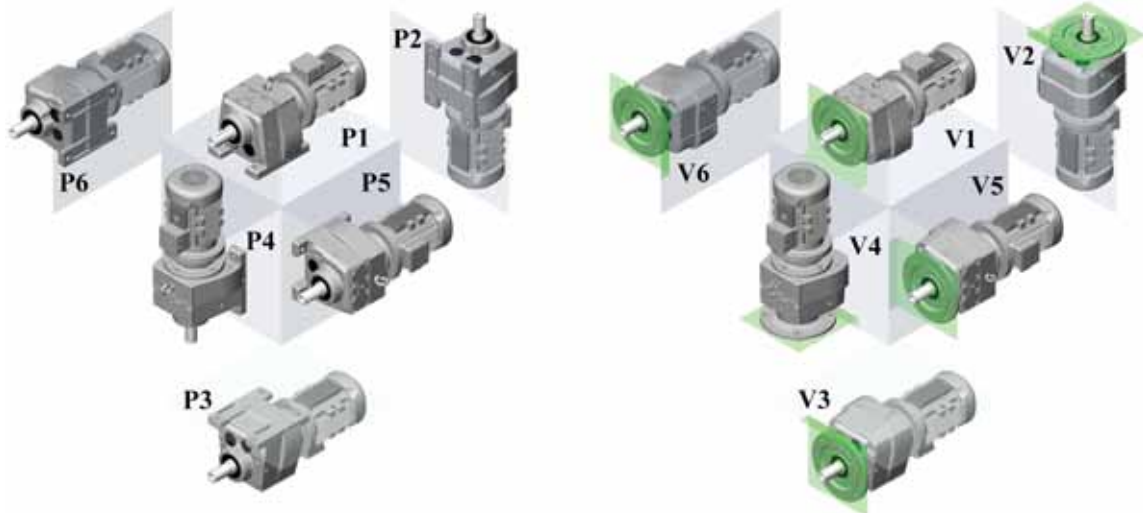
Yağ Doldurma
Vent Plug
Entlüftung



Yağ Seviye Tespit
Oil Level
Ölstand



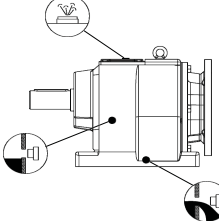
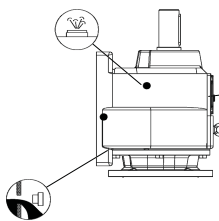
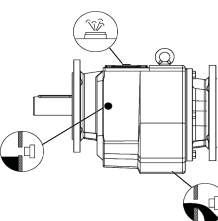
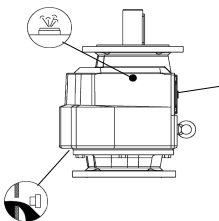
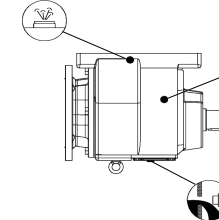
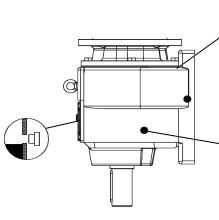
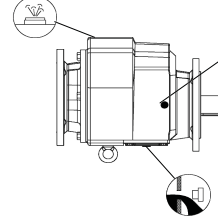
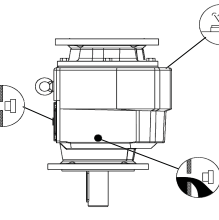
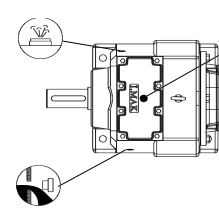
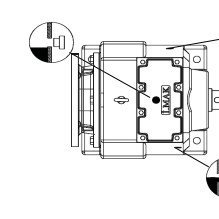
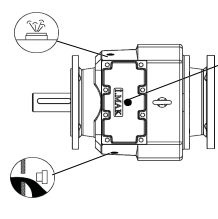
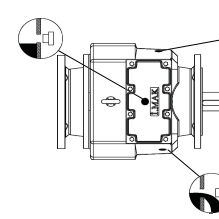
Yağ Boşaltma
Drain Plug
Ölablab

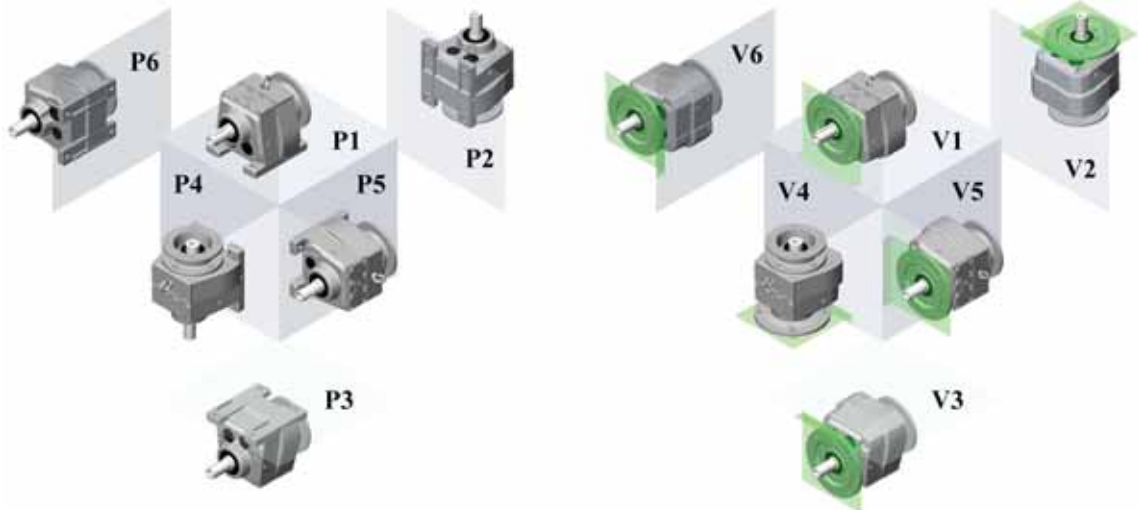


TİP Type Typ	Bağlantı Pozisyonları için Yağ Miktarları (litre) Oil Quantities for Mounting Positions (liter) Ölmengen Tabellen für Bauformen (liter)											
	P1	V1	P5	P6	V5	V6	P3	V3	P2	P4	V2	V4
İR_PM 42 / 43	0,4 / 0,35			0,5 / 0,45			0,5 / 0,45				0,7 / 0,65	
İR_PM 52 / 53	0,8 / 0,75			0,8 / 0,75			0,8 / 0,75				1,2 / 1,15	
İR_PM 621 / 631	1,25 / 1,1			1,25 / 1,1			1,25 / 1,1				1,8 / 1,65	
İR_PM 62 / 63	1,25 / 1,1			1,25 / 1,1			1,25 / 1,1				1,8 / 1,65	
İR_PM 721 / 731	2,2 / 2			2,2 / 2			2,2 / 2				2,7 / 2,5	
İR_PM 72 / 73	2,5 / 2,3			2,5 / 2,3			2,5 / 2,3				3 / 2,8	
İR_PM 82 / 83	5,5 / 5			5,5 / 5			5,5 / 5				7,5 / 7	
İR_PM 92 / 93	9 / 8			9 / 8			9 / 8				11 / 10	
İR_PM 102 / 103	14 / 13			14 / 13			14 / 13				17 / 16	
İR_PM 122 / 123	28 / 30			28 / 30			28 / 30				33 / 35	



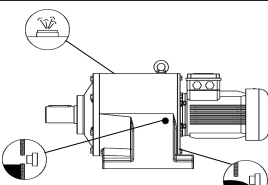
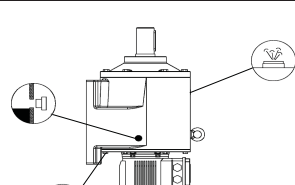
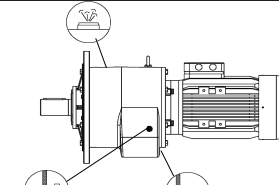
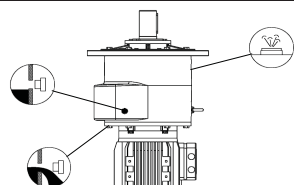
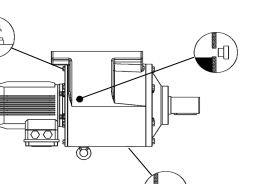
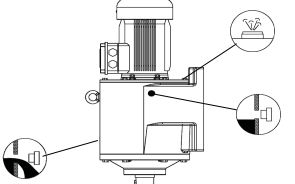
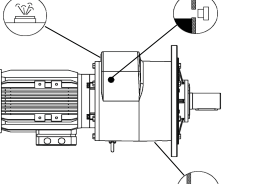
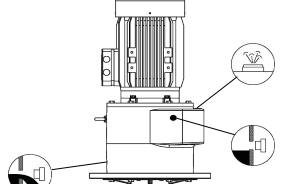
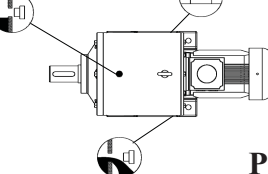
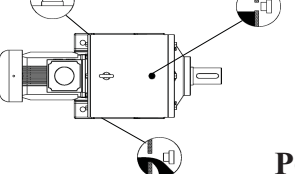
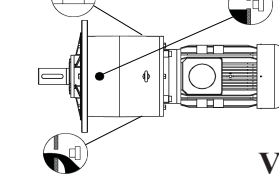
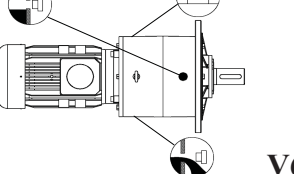
İ.Mak[®] Montaj Pozisyonları ve Yağ Miktarları
Mounting Positions and Oil Quantities
Bauformen und Ölmengen Tabellen

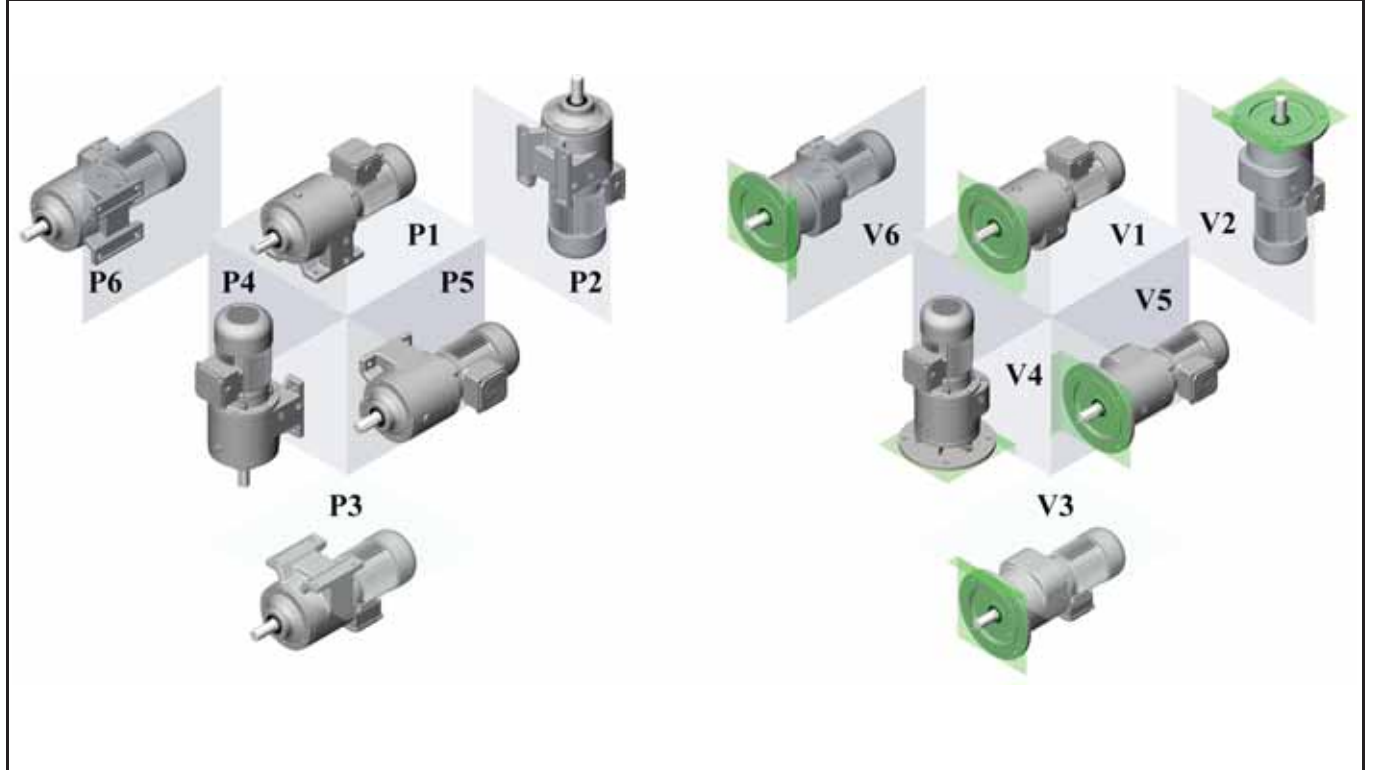
 P1	 P2	 V1	 V2
 P3	 P4	 V3	 V4
 P5	 P6	 V5	 V6
 Yağ Doldurma Vent Plug Entlüftung	 Yağ Seviye Tespit Oil Level Ölstand	 Yağ Boşaltma Drain Plug Ölablak	



TİP Type Typ	Bağlantı Pozisyonları için Yağ Miktarları (litre) Oil Quantities for Mounting Positions (liter) Ölmengen Tabellen für Bauformen (liter)											
	P1	V1	P5	P6	V5	V6	P3	V3	P2	P4	V2	V4
İR_P 42 / 43	0,4 / 0,35			0,5 / 0,45			0,5 / 0,45				0,7 / 0,65	
İR_P 52 / 53	0,8 / 0,75			0,8 / 0,75			0,8 / 0,75				1,2 / 1,15	
İR_P 621 / 631	1,25 / 1,1			1,25 / 1,1			1,25 / 1,1				1,8 / 1,65	
İR_P 62 / 63	1,25 / 1,1			1,25 / 1,1			1,25 / 1,1				1,8 / 1,65	
İR_P 721 / 731	2,2 / 2			2,2 / 2			2,2 / 2				2,7 / 2,5	
İR_P 72 / 73	2,5 / 2,3			2,5 / 2,3			2,5 / 2,3				3 / 2,8	
İR_P 82 / 83	5,5 / 5			5,5 / 5			5,5 / 5				7,5 / 7	
İR_P 92 / 93	9 / 8			9 / 8			9 / 8				11 / 10	
İR_P 102 / 103	14 / 13			14 / 13			14 / 13				17 / 16	
İR_P 122 / 123	28 / 30			28 / 30			28 / 30				33 / 35	

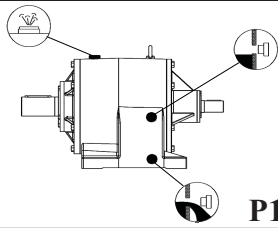
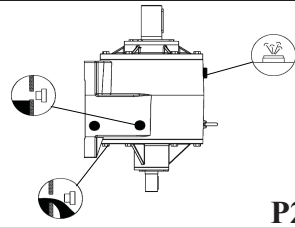
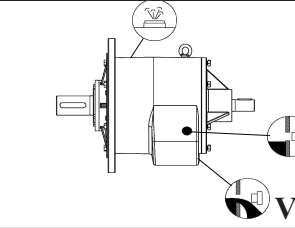
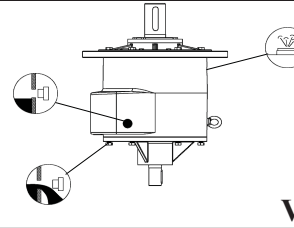
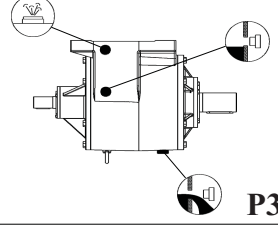
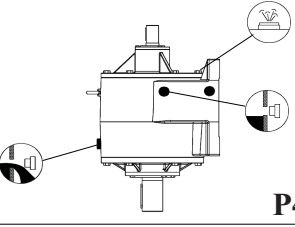
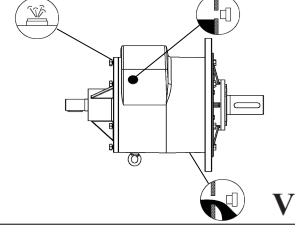
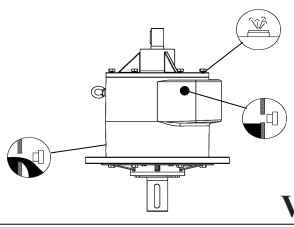
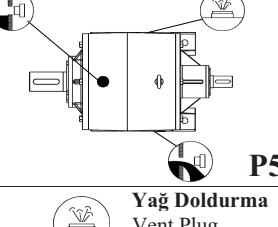
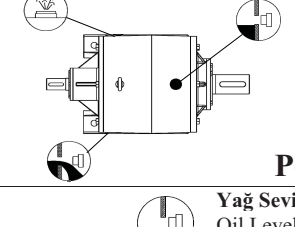
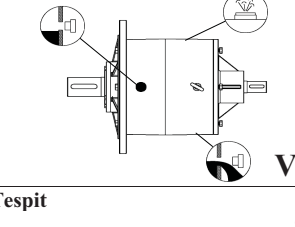
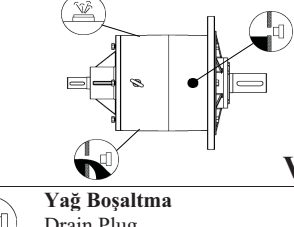


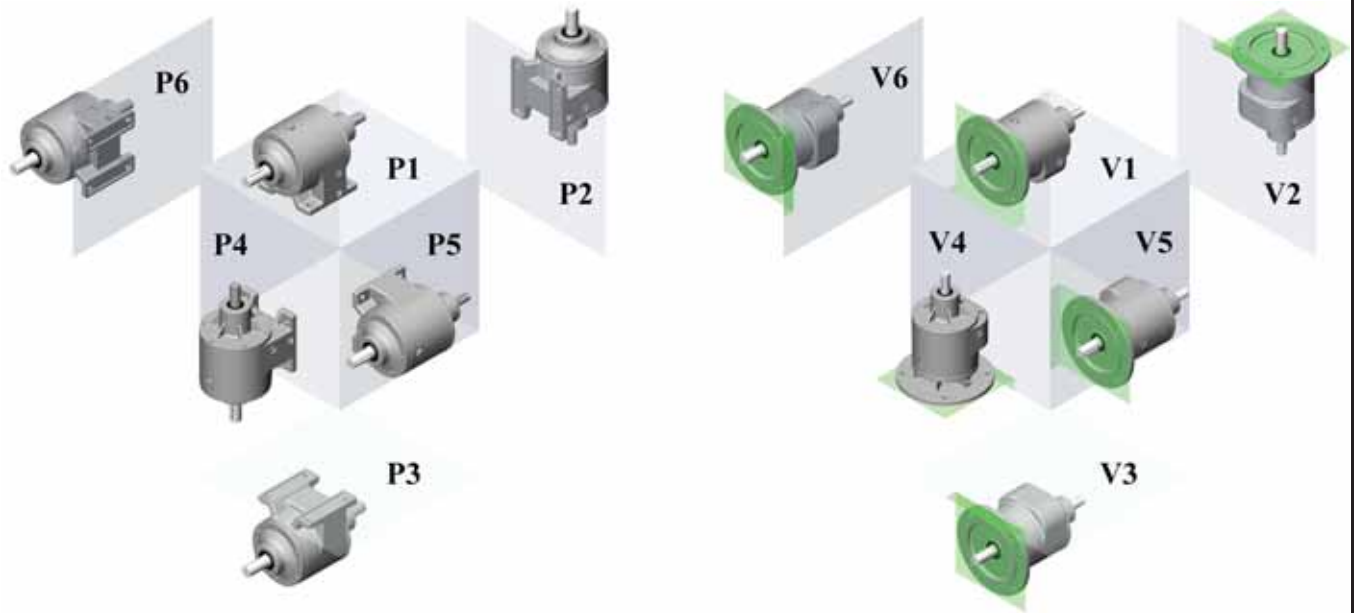
 P1	 P2	 V1	 V2		
 P3	 P4	 V3	 V4		
 P5	 P6	 V5	 V6		
 Yağ Doldurma Vent Plug Entlüftung		 Yağ Seviye Tespit Oil Level Ölstand		 Yağ Boşaltma Drain Plug Ölaltab	



TİP Type Typ	Bağlantı Pozisyonları için Yağ Miktarları (litre) Oil Quantities for Mounting Positions (liter) Ölmengen Tabellen für Bauformen (liter)											
	P1	V1	P5	P6	V5	V6	P3	V3	P4	P2	V4	V2
İR_M 151	28			24			20			51		
İR_M 181	90			100			100			120		

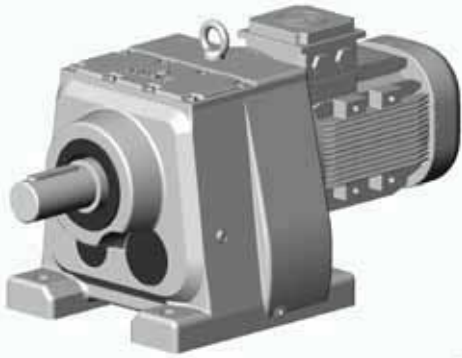


 P1	 P2	 V1	 V2		
 P3	 P4	 V3	 V4		
 P5	 P6	 V5	 V6		
 Yağ Doldurma Vent Plug Entlüftung		 Yağ Seviye Tespit Oil Level Ölstand		 Yağ Boşaltma Drain Plug Ölabil	

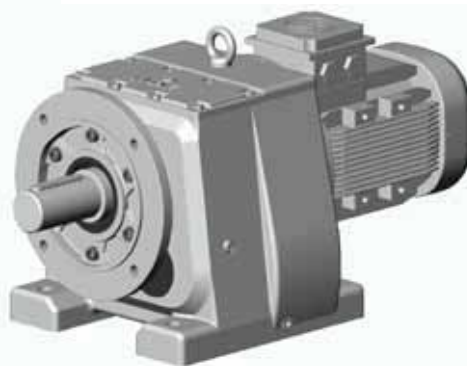


TİP Type Typ	Bağlantı Pozisyonları için Yağ Miktarları (litre) Oil Quantities for Mounting Positions (liter) Ölmengen Tabellen für Bauformen (liter)											
	P1	V1	P5	P6	V5	V6	P3	V3	P4	P2	V4	V2
İR_151	28			24			20			51		
İR_181	90			100			100			120		





İRAM ...



İRAFM ...



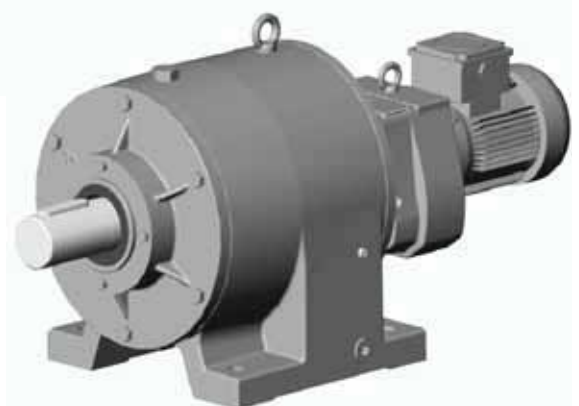
İRAM ... - ...



İRFM ...



İRFM ... - ...



İRAM ... - ...



Monoblok Helisel Dişlili Motorlu Redüktörler Güç ve Devir Tablosu

Monoblock Helical Geared Motors Performance Tables

Monoblock Stirnradgetriebemotoren Leistung und Drehzahlübersicht

P ₁	n ₂	i	S _f	M ₂	F _{QV2}			
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ		
[kW] Hp	[r.p.m]			[Nm]	[N]			kg
0,12 0,16	0,28	5008	0,84	3744	26000	İRAM İRFM	93 İR 63 / 63 M 4a	161 151 162 161
	0,30	4673	0,90	3494	26000			
	0,31	4545	0,92	3398	26000			
	0,33	4241	0,99	3171	26000			
	0,34	4138	1,01	3094	26000			
	0,36	3861	1,09	2887	26000			
	0,37	3778	1,11	2824	26000			
	0,40	3525	1,19	2635	26000			
	0,41	3456	1,21	2584	26000			
	0,44	3168	1,32	2368	26000			
	0,47	2992	1,12	2271	26000	İRAM İRFM	92 İR 63 / 63 M 4a	161 131 162 141
	0,50	2792	1,20	2119	26000			
	0,53	2636	1,27	2001	26000			
	0,57	2460	1,36	1867	26000			
	0,60	2343	1,43	1778	26000			
	0,64	2186	1,53	1659	26000			
	0,67	2096	1,59	1591	26000			
	0,72	1956	1,71	1485	26000			
	0,74	1886	1,77	1431	26000			
	0,80	1760	1,90	1336	26000			
	0,88	1592	2,10	1208	26000			
	0,99	1409	2,40	1069	26000			
	1,06	1315	2,50	998	26000			
	1,17	1201	2,80	912	26000			
	1,28	1098	3,80	833	26000			
	0,48	2930	0,90	2190	18000	İRAM İRFM	83 İR 63 / 63 M 4a	159 101 160 106
	0,53	2659	0,99	1988	18000			
	0,63	2205	1,12	1648	18000			
	0,70	2013	1,22	1505	18000			
	0,76	1840	1,34	1376	18000	İRAM İRFM	82 İR 63 / 63 M 4a	159 111 160 116
	0,79	1779	1,43	1350	18000			
	0,89	1580	1,61	1199	18000			
	1,0	1418	1,69	1076	18000			
	1,1	1278	1,88	970	18000			
	1,2	1157	2,00	878	18000			
	1,3	1050	2,20	797	18000			
	1,4	984	2,00	747	18000			
	1,6	887	2,40	673	18000			
	1,7	803	2,60	609	18000			
	2,1	663	3,00	503	18000			
	2,3	604	3,20	458	18000			
	1,0	1375	0,94	1044	12100	İRAM İRFM	73 İR 52 / 63 M 4a	157 50 158 53
	1,1	1223	1,05	928	12100			
	1,3	1095	1,18	831	12100			
	1,3	1079	1,19	819	12100			
	1,4	966	1,33	733	12100			
	1,6	894	1,44	679	12100			
	1,7	801	1,44	608	12100			
	1,8	789	1,44	599	12100			
	2,0	702	1,84	533	12100			
	2,0	697	1,85	529	12100			
	2,2	627	2,00	476	12100			



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Monoblock Stirnradgetriebemotoren Leistung und Drehzahlübersicht



P ₁	n ₂	i	S _f	M ₂	F _{QV2}			
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ		
[kW] Hp	[r.p.m]			[Nm]	[N]			kg
0,12 0,16	2,5	563	2,30	427	12100	İRAM İRFM	73 İR 52 / 63 M 4a	157 50 158 53
	2,5	553	2,30	420	12100			
	2,6	535	2,30	406	12100			
	3,0	469	2,60	356	12100			
	3,3	419	2,90	318	12100			
	3,4	414	2,90	314	12100			
	3,7	376	3,20	285	12100			
	3,8	370	3,30	281	12100			
	1,5	921	0,78	699	10100	İRAM İRFM	721 İR 53 / 63 M 4a	155 50 156 53
	1,7	824	0,87	625	10100			
	1,9	742	0,97	563	10100			
	2,1	675	1,07	512	10100			
	2,3	604	1,56	458	10100			
	2,6	533	1,77	405	10100			
	2,9	491	1,88	373	10100			
	2,9	480	1,95	364	10100			
	3,3	423	2,20	321	10100			
	3,6	390	2,30	296	10100			
	4,1	344	2,60	261	10100			
	4,6	306	3,00	232	10100			
	1,7	836	0,86	635	10100	İRAM İRFM	731 İR 52 / 63 M 4a	155 51 156 54
	1,9	749	0,96	568	10100			
	2,1	674	1,06	512	10100			
	2,3	600	1,56	455	10100			
	2,6	530	1,77	402	10100			
	3,0	468	2,00	355	10100			
	3,4	416	2,20	316	10100			
	3,8	372	2,50	282	10100			
	4,2	333	2,80	253	10100			
	4,7	300	2,90	228	10100			
	1,8	777	0,84	590	7300	İRAM İRFM	63 İR 52 / 63 M 4a	153 42 154 47
	2,0	704	0,93	534	7300			
	2,3	622	1,04	472	7300			
	2,5	566	1,15	430	7300			
	2,9	475	1,37	361	7300			
	3,1	449	1,45	341	7300			
	3,5	397	1,64	301	7300			
	3,7	379	1,72	288	7300			
	4,3	323	2,00	245	7300			
	4,9	286	2,20	217	7300			
	5,1	273	2,40	207	7300			
	5,8	242	2,60	184	7300			
	6,5	215	3,00	163	7300			
	6,1	231	2,30	178	7300	İRAM İRFM	62 İR 52 / 63 M 4a	153 37 154 42
	6,9	203	2,60	156	7300			
	7,6	184	2,70	142	7300			
	8,6	162	3,00	125	7300			
	9,5	148	3,30	114	7300			
	10,4	134	3,60	103	7300			
	3,7	377	0,75	286	4250	İRAM İRFM	53 İR 42 / 63 M 4a	151 23 152 25
	4,2	333	0,84	253	4250			
	4,6	303	0,93	230	4250			



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P ₁	n ₂	i	S _f	M ₂	F _{QV2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip			
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type			
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ			
[kW] Hp	[r.p.m]			[Nm]	[N]				kg
0,12 0,16	5,2	268	1,05	203	4250	İRAM İRFM	53 İR 42 / 63 M 4a	151	23
	5,9	237	1,19	180	4250			152	25
	6,5	216	1,30	164	4250				
	7,3	192	1,47	146	4250				
	7,4	188	1,49	143	4250				
	8,3	168	1,67	128	4250				
	9,2	152	1,85	115	4250				
	10	136	1,99	103	4250				
	11	123	2,30	93	4250				
	13	111	2,50	84	4250				
	14	100	2,80	76	4250				
	13	105,66	2,30	83	5350			121	17
	16	88,98	2,80	70	5150			122	19
	18	77,16	3,10	60	5150			123	20
	21	67,60	3,30	53	5150				
	17	81,366	1,27	64	2270	İRAM İRFM İRAFM	43 / 63 M 4a	118	11
	20	70,053	1,48	55	2270			119	12
	23	60,896	1,70	48	2270			120	13
	26	53,331	1,94	42	2270				
	30	46,977	2,20	37	2270				
	33	41,849	2,50	33	2270				
	38	36,378	2,90	28	2120				
	44	31,859	3,20	25	2120				
	50	28,063	3,70	22	2000				
	53	26,193	4,00	20	2000				
	56	24,829	4,20	19	2000				
	62	22,615	4,40	18	1940				
	66	21,108	4,80	17	1940				
	70	20,009	5,20	16	1940				
	75	18,593	5,50	15	1940				
	79	17,763	5,80	14	1900				
	85	16,450	6,20	13	1900				
	89	15,806	6,40	12	1850				
	96	14,604	7,10	11	1850				
	99	14,087	7,50	11	1850				
	108	12,995	7,90	10	1750				
	121	11,581	8,90	9	1700				
	125	11,242	5,40	9	1650	İRAM İRFM İRAFM	42 / 63 M 4a	118	10
	142	9,845	6,00	8	1600			119	11
	161	8,672	6,80	7	1500			120	12
	182	7,673	7,90	6	1450				
	204	6,872	11,4	5	1450				
	230	6,080	12,8	5	1450				
	253	5,538	13,7	4	1360				
	259	5,398	14,2	4	1300				
	286	4,900	15,1	4	1250				
	291	4,803	16,0	4	1200				
	322	4,350	16,9	3	1100				
	327	4,280	17,8	3	1100				
	370	3,780	19,2	3	1100				
	406	3,449	21,5	3	1080				





P ₁	n ₂	İ	S _f	M ₂	F _{QV2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip			
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type			
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ			
[kW] Hp	[r.p.m]			[Nm]	[N]			kg	
0,18 0,25	0,11	6466,41	0,77	14503	73000	İRAM İRFM	151 İR 63 / 80 M 8a	167 167	482 532
	0,16	4256,64	1,20	9547	73000				
	0,19	3660,46	1,50	8210	73000				
	0,24	2858,32	1,80	6411	73000				
	0,33	2144,03	2,27	4809	73000				
	0,34	2076,56	2,50	4657	73000				
	0,54	1298,44	4,20	2912	73000				
	0,53	2636	0,85	3001	26000	İRAM İRFM	92 İR 63 / 63 M 4b	161 162	131 141
	0,57	2460	0,91	2801	26000				
	0,60	2343	0,95	2667	26000				
	0,64	2186	1,02	2489	26000				
	0,67	2096	1,06	2386	26000				
	0,72	1956	1,14	2227	26000				
	0,74	1886	1,18	2147	26000				
	0,80	1760	1,27	2004	26000				
	0,88	1592	1,40	1812	26000				
	0,99	1409	1,60	1604	26000				
	1,1	1315	1,67	1497	26000				
	1,2	1201	1,86	1367	26000				
	1,3	1098	2,50	1250	26000				
	1,4	993	2,70	1131	26000				
	0,79	1779	0,95	2025	18100	İRAM İRFM	82 İR 63 / 63 M 4b	159 160	111 116
	0,89	1580	1,07	1799	18100				
	1,0	1418	1,12	1614	18100				
	1,1	1278	1,25	1455	18000				
	1,2	1157	1,33	1317	18000				
	1,3	1050	1,46	1195	18000				
	1,4	984	1,33	1120	18000				
	1,6	887	1,60	1010	18000				
	1,7	803	1,73	914	18000				
	2,1	663	2,00	755	18000				
	2,3	604	2,10	688	18000				
	1,3	1095	0,79	1247	12100	İRAM İRFM	73 İR 52 / 63 M 4b	157 158	50 53
1,3	1079	0,79	1228	12100					
1,4	966	0,89	1100	12100					
1,6	894	0,96	1018	12100					
1,7	801	0,96	912	12100					
1,8	789	0,96	898	12100					
2,0	702	1,23	799	12100					
2,0	697	1,23	794	12100					
2,2	627	1,33	714	12100					
2,5	563	1,53	641	12100					
2,5	553	1,53	630	12100					
2,6	535	1,53	609	12100					
3,0	469	1,73	534	12100					
3,3	419	1,93	477	12100					
3,4	414	1,93	471	12100					
3,7	376	2,10	428	12100					
3,8	370	2,20	421	12100					
4,2	332	2,40	378	12100					
5,1	276	2,60	314	12100					



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Monoblock Stirnradgetriebemotoren Leistung und Drehzahlübersicht

P ₁	n ₂	i	S _f	M ₂	F _{QV2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip Type Typ			kg
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads				
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte				
[kW] Hp	[r.p.m]			[Nm]	[N]				
0,18	5,2	270	2,70	307	12100	İRAM İRFM	73 İR 52 / 63 M 4b	157	50
	5,6	250	2,90	285	12100				
	5,7	244	2,90	278	12100				
0,25	2,3	604	1,04	688	10100	İRAM İRFM	721 İR 53 / 63 M 4b	155	50
	2,6	533	1,18	607	10100				
	2,9	491	1,25	559	10100				
	2,9	480	1,30	546	10100				
	3,3	423	1,46	482	10100				
	3,6	390	1,53	444	10100				
	4,1	344	1,73	392	10100				
	4,6	306	2,00	348	10100				
	2,3	600	1,04	683	10100				
	2,6	530	1,18	603	10100				
	3,0	468	1,33	533	10100				
	3,4	416	1,46	474	10100				
	3,8	372	1,67	424	10100				
	4,2	333	1,86	379	10100				
	4,7	300	1,94	342	10100				
	2,9	475	0,91	541	7300	İRAM İRFM	63 İR 52 / 63 M 4b	153	42
	3,1	449	0,97	511	7300				
	3,5	397	1,09	452	7300				
	3,7	379	1,15	431	7300				
	4,3	323	1,33	368	7300				
	4,9	286	1,47	326	7300				
	5,1	273	1,60	311	7300				
	5,8	242	1,73	276	7300				
	6,5	215	2,00	245	7300				
	7,3	191	2,30	217	7300				
	6,1	231	1,53	267	7300	İRAM İRFM	62 İR 52 / 63 M 4b	153	37
	6,9	203	1,73	235	7300				
	7,6	184	1,80	213	7300				
	8,6	162	2,00	187	7300				
	9,5	148	2,20	171	7300				
	10	134	2,40	155	7300				
	5,9	237	0,79	270	4250	İRAM İRFM	53 İR 42 / 63 M 4b	151	23
	6,5	216	0,87	246	4250				
	7,3	192	0,98	219	4250				
	7,4	188	0,99	214	4250				
	8,3	168	1,11	191	4250				
	9,2	152	1,23	173	4250				
	10	136	1,33	155	4250				
	11	123	1,53	140	4250				
	13	111	1,67	126	4250				
	14	100	1,87	114	4250				
	5,8	154,46	3,10	282	12100	İRAM İRFM İRAFM	73 / 71 M 6a	133	37
	4,6	152,090	1,46	357	10100	İRAM İRFM İRAFM	731 / 80 M 8a	130	42
	5,2	134,933	1,65	317	10100				



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P ₁	n ₂	i	S _f	M ₂	F _{QV2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip			
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type			
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ			
[kW] Hp	[r.p.m]			[Nm]	[N]				
0,18 0,25	5,9	152,090	1,88	278	10100	İRAM İRFM İRAFM	731 / 71 M 6a	130	39
	6,7	134,933	2,10	246	10100			131	42
	7,7	116,652	2,50	213	10100			132	45
	8,9	100,847	2,80	184	10100				
	7,0	127,94	1,80	234	7300	İRAPM İRFPM İRAFPM	63 / 71 M 6a	180	32
	7,5	119,40	1,90	218	7300			181	37
								182	38
	9,3	96,27	2,30	176	7300	İRAM İRFM İRAFM	63 / 71 M 6a	127	30
	10,2	87,81	2,60	160	7300			128	35
								129	36
	7,0	127,94	1,80	234	7300	İRAPM İRFPM İRAFPM	631 / 71 M 6a	177	32
	7,5	119,40	1,90	218	7300			178	37
								179	40
	9,3	96,27	2,30	176	7300	İRAM İRFM İRAFM	631 / 71 M 6a	124	30
	10	87,81	2,60	160	7300			125	35
								126	38
	11	127,94	2,70	150	7300	İRAPM İRFPM İRAFPM	63 / 63 M 4b	180	31
	12	119,40	2,90	140	7300			181	36
								182	37
	11	127,94	2,70	150	7300	İRAPM İRFPM İRAFPM	631 / 63 M 4b	177	31
	12	119,40	2,90	140	7300			178	36
								179	37
	8,5	105,66	0,99	193	5000	İRAM İRFM İRAFM	53 / 71 M 6a	121	18
	10	88,98	1,18	162	5000			122	20
	12	77,16	1,33	141	5000			123	21
	13	105,66	1,53	124	5000	İRAM İRFM İRAFM	53 / 63 M 4b	121	17
	16	88,98	1,85	104	4900			122	19
	18	77,16	2,07	91	4900			123	20
	21	67,60	2,20	79	4750				
	26	54,81	2,80	64	4750				
	29	48,41	3,40	57	4750				
	17	53,331	0,83	97	2270	İRAM İRFM İRAFM	43 / 71 M 6a	118	13
	19	46,977	0,95	86	2270			119	14
								120	14
	17	81,366	0,85	95	2250	İRAM İRFM İRAFM	43 / 63 M 4b		
	20	70,053	0,99	82	2250				
	23	60,896	1,13	71	2220				
	26	53,331	1,29	63	2220				
	30	46,977	1,47	55	2220				
	33	41,849	1,67	49	2090				
	38	36,378	1,93	43	2090			118	12
	44	31,859	2,10	37	2000			119	13
	50	28,063	2,50	33	2000			120	13
	53	26,193	2,70	31	1960				
	56	24,829	2,80	29	1900				
	62	22,615	2,90	27	1900				
	66	21,108	3,20	25	1900				
	70	20,009	3,50	23	1900				
	75	18,593	3,70	22	1900				
	79	17,763	3,90	21	1860				



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P ₁	n ₂	i	S _f	M ₂	F _{QV2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip			
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type			
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ			
[kW] Hp	[r.p.m]			[Nm]	[N]				
0,18 0,25	85	16,450	4,20	19	1860	İRAM İRFM İRAFM	43 / 63 M 4b	118	12
	89	15,806	4,30	19	1800			119	13
	96	14,604	4,70	17	1800			120	13
	99	14,087	5,00	17	1800				
	108	12,995	5,30	15	1720				
	121	11,581	6,00	14	1700				
	125	11,242	3,60	13	1610	İRAM İRFM İRAFM	42 / 63 M 4b	118	11
	142	9,845	4,00	12	1550			119	12
	161	8,672	4,60	10	1460			120	12
	182	7,673	5,30	9	1400				
	204	6,872	7,60	8	1400				
	230	6,080	8,50	7	1400				
	253	5,538	9,10	7	1320				
	259	5,398	9,50	6	1250				
	286	4,900	10,00	6	1200				
	291	4,803	10,70	6	1150				
	322	4,350	11,30	5	1060				
	327	4,280	11,90	5	1060				
	370	3,780	12,80	5	1050				
	406	3,449	14,30	4	1020				
0,25 0,34	0,15	4766,77	0,76	14849	73000	İRAM İRFM	151 İR 63 / 80 M 8b	167	484
	0,19	3660,46	1,07	11402	73000			167	534
	0,33	2144,03	1,6	6679	73000				
	0,40	1743,35	1,97	5431	73000				
	0,58	1205,72	3,10	3756	73000				
	0,19	7333	0,85	11421	55000	İRAM İRFM	123 İR 73 / 71 M 4a	165	334
	0,21	6617	0,94	10306	55000			166	336
	0,22	6286	0,96	9791	55000				
	0,25	5578	1,10	8688	55000				
	0,28	4983	1,20	7761	55000				
	0,31	4476	1,34	6971	55000				
	0,35	4039	1,49	6291	55000				
	0,38	3659	1,63	5699	55000				
	0,42	3324	1,82	5177	55000				
	0,34	4059	1,43	6418	55000	İRAM İRFM	122 İR 73 / 71 M 4a	165	328
	0,38	3671	1,58	5805	55000			166	330
	0,46	3066	1,87	4848	55000				
	0,52	2698	2,10	4266	55000				
	0,60	2333	2,50	3689	55000				
	0,29	4790	0,82	7461	34000	İRAM İRFM	103 İR 73 / 71 M 4a	163	215
	0,33	4230	0,90	6588	34000			164	218
	0,37	3760	0,94	5856	34000				
	0,42	3359	0,96	5232	34000				
	0,46	3014	1,05	4694	34000				
	0,52	2713	1,15	4226	34000				
	0,57	2448	1,35	3813	34000				
	0,51	2733	0,96	4322	34000	İRAM İRFM	102 İR 73 / 71 M 4a	163	208
	0,58	2413	1,06	3816	34000			164	211
	0,65	2145	1,17	3392	34000				
	0,73	1916	1,31	3030	34000				
	0,86	1635	1,59	2585	34000				



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P ₁	n ₂	i	S _f	M ₂	F _{QV2}			Tip		
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük			Type		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads			Typ		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte					
[kW] Hp	[r.p.m]			[Nm]	[N]				kg	
0,25 0,34	0,96	1460	1,74	2309	34000	İRAM İRFM	102 İR 73 / 71 M 4a		163 164	208 211
	1,1	1311	1,90	2073	34000					
	1,2	1180	2,40	1866	34000					
	1,3	1103	2,60	1744	34000					
	1,4	986	2,60	1559	34000					
	1,6	884	2,60	1398	34000					
	1,8	796	2,60	1259	34000					
	1,9	718	2,60	1135	34000					
	2,2	650	2,60	1028	34000					
	2,4	575	2,60	909	34000					
	0,74	1886	0,85	2982	26000	İRAM İRFM	92 İR 63 / 71 M 4a		161 162	132 142
	0,80	1760	0,91	2783	26000					
	0,88	1592	1,00	2517	26000					
	0,99	1409	1,15	2228	26000					
	1,1	1315	1,20	2079	26000					
	1,2	1201	1,34	1899	26000					
	1,3	1098	1,82	1736	26000					
	1,4	993	1,96	1570	26000					
	1,6	901	1,96	1425	26000					
	1,7	821	1,96	1298	26000					
	1,9	749	1,96	1184	26000					
	2,0	685	1,96	1083	26000					
	1,9	725	2,80	1146	26000	İRAM İRFM	93 İR 62 / 71 M 4a		161 162	152 162
	2,2	648	3,10	1025	26000					
	1,2	1162	0,88	1837	18100	İRAM İRFM	82 İR 63 / 71 M 4a		159 160	112 117
	1,3	1042	0,98	1648	18100					
	1,5	940	1,09	1486	18100					
	1,6	851	1,20	1346	18100					
	1,8	772	1,33	1221	18100					
	1,9	724	1,32	1145	18100					
	2,1	653	1,51	1033	18100					
	2,4	590	1,62	933	18100					
	2,6	536	1,85	848	18100					
	2,9	488	1,95	772	18100					
	3,2	444	2,00	702	18100					
	3,4	406	2,20	642	18100					
	3,6	394	2,40	623	18100					
	3,9	359	2,50	568	18100					
	4,4	315	3,10	498	18100					
	4,9	286	3,30	452	18100					
	5,4	261	3,50	413	18100					
	2,0	702	0,88	1110	12100	İRAM İRFM	73 İR 52 / 71 M 4a		157 158	51 54
	2,0	697	0,88	1102	12100					
	2,2	627	0,95	991	12100					
	2,5	563	1,10	890	12100					
	2,5	553	1,10	874	12100					
	2,6	535	1,10	846	12100					
	3,0	469	1,25	742	12100					
	3,3	419	1,39	663	12100					
	3,4	414	1,39	655	12100					
	3,7	376	1,54	595	12100					
	3,8	370	1,58	585	12100					



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P ₁	n ₂	i	S _f	M ₂	F _{QV2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip Type Typ			kg
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads				
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte				
[kW] Hp	[r.p.m]			[Nm]	[N]				
0,25 0,34	4,2	332	1,73	525	12100	İRAM İRFM	73 İR 52 / 71 M 4a	157	51
	5,1	276	1,87	436	12100				
	5,2	270	1,92	427	12100				
	5,6	250	2,10	395	12100				
	5,7	244	2,10	386	12100				
	6,0	232	2,20	372	12100	İRAM İRFM	72 İR 52 / 71 M 4a	157	48
	6,8	206	2,40	331	12100				
	2,6	533	0,85	843	10100	İRAM İRFM	721 İR 53 / 71 M 4a	155	51
	2,9	491	0,90	776	10100				
	2,9	480	0,94	759	10100				
	3,3	423	1,05	669	10100				
	3,6	390	1,10	617	10100				
	4,1	344	1,25	544	10100				
	4,6	306	1,44	484	10100				
	5,1	274	1,51	433	10100				
	5,7	246	1,65	389	10100				
	6,3	221	1,87	349	10100				
	7,0	199	2,00	315	10100				
	7,8	180	2,20	285	10100				
	8,6	163	2,50	258	10100				
	9,5	148	2,70	234	10100				
	2,6	530	0,85	838	10100	İRAM İRFM	731 İR 52 / 71 M 4a	155	52
	3,0	468	0,96	740	10100				
	3,4	416	1,05	658	10100				
	3,8	372	1,20	588	10100				
	4,2	333	1,34	527	10100				
	4,7	300	1,40	474	10100				
	5,2	267	1,58	422	10100				
	5,9	238	1,77	376	10100				
	6,5	214	1,98	338	10100				
	7,0	201	2,10	318	10100				
	7,8	180	2,30	285	10100				
	8,6	162	2,60	256	10100				
	9,6	146	2,90	231	10100				
	4,3	323	0,96	511	7300	İRAM İRFM	63 İR 52 / 71 M 4a	153	43
	4,9	286	1,05	452	7300				
	5,1	273	1,15	432	7300				
	5,8	242	1,25	383	7300				
	6,5	215	1,44	340	7300				
	7,3	191	1,63	302	7300				
	8,2	170	1,84	269	7300				
	9,3	151	2,00	239	7300				
	10	136	2,30	215	7300				
	6,1	231	1,10	371	7300	İRAM İRFM	62 İR 52 / 71 M 4a	153	38
	6,9	203	1,25	326	7300				
	7,6	184	1,30	295	7300				
	8,6	162	1,44	260	7300				
	9,5	148	1,58	238	7300				
	10	134	1,73	215	7300				
	8,3	168	0,80	266	4250	İRAM İRFM	53 İR 42 / 71 M 4a	151	25
	9,2	152	0,89	240	4250				
	10	136	0,95	215	4250				



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P ₁ GÜÇ Power Leistung [kW] Hp	n ₂ Çıkış Devri Output Speeds Abtriebswelle Drehzahlen [r.p.m]	i Tahvil Ratio Übersetzung	S _f Servis Faktörü Service Factor Betriebsfaktor	M ₂ Çıkış Momenti Output Torque Abtriebswelle Drehmomente [Nm]	F _{QV2} Rad. Yük Over Loads Querkräfte [N]	Tip Type Typ		 kg
0,25 0,34	11	123	1,10	194	4250	İRAM İRFM 53 İR 42 / 71 M 4a	151	25
	13	111	1,20	176	4250		152	27
	14	100	1,34	158	4250			
	2,4	293,461	2,90	957	26000	İRAPM İRFPM 93 / 80 M 8b	192	131
	2,6	273,733	3,00	892	26000		193	141
	2,9	240,506	3,50	784	26000		194	151
	2,8	250,50	1,80	817	18100	İRAM İRFM 83 / 80 M 8b	136	78
	3,2	221,16	2,00	721	18100		137	83
	3,4	208,58	2,30	680	18100		138	85
	5,8	154,46	2,23	392	12100	İRAM İRFM 73 / 71 M 6b	133	38
	6,7	133,53	2,59	339	12100		134	41
	8,7	103,60	3,24	263	12100		135	44
	9,1	154,46	3,40	252	12100	İRAM İRFM 73 / 71 M 4a	133	37
							134	40
							135	43
	4,6	152,090	1,05	496	10100	İRAM İRFM 731 / 80 M 8b	130	44
	5,2	134,933	1,19	440	10100		131	47
							132	50
	5,9	152,090	1,35	386	10100	İRAM İRFM 731 / 71 M 6b	130	40
	6,7	134,933	1,51	342	10100		131	43
	7,7	116,652	1,80	296	10100		132	46
	8,9	100,847	2,00	256	10100			
	9,2	152,090	2,10	248	10100	İRAM İRFM 731 / 71 M 4a	130	39
	10	134,933	2,30	220	10100		131	42
	12	116,652	2,70	190	10100		132	45
	14	100,847	3,10	164	10100			
	16	88,933	3,50	145	10100			
	7,0	127,94	1,30	324	7300	İRAPM İRFPM 63 / 71 M 6b	180	33
	7,5	119,40	1,37	303	7300		181	38
							182	39
	9,3	96,27	1,65	244	7300	İRAM İRFM 63 / 71 M 6b	127	31
	10	87,81	1,86	223	7300		128	36
							129	37
	7,0	127,94	1,30	324	7300	İRAPM İRFPM 631 / 71 M 6b	177	33
	7,5	119,40	1,37	303	7300		178	38
							179	39
	9,3	96,27	1,65	244	7300	İRAM İRFM 631 / 71 M 6b	124	31
	10	87,81	1,86	223	7300		125	36
							126	37
	11	127,94	1,94	209	7300	İRAPM İRFPM 63 / 71 M 4a	180	32
	12	119,40	2,00	195	7300		181	37
							182	38
	15	96,27	2,60	157	7300	İRAM İRFM 63 / 71 M 4a	127	30
	16	87,81	2,80	143	7300		128	35
	17	83,37	3,00	136	7300			
	20	70,97	3,80	116	7300		129	36



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P ₁	n ₂	i	S _f	M ₂	F _{QV2}			Tip		kg
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük			Type		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads			Typ		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte					
[kW]	[r.p.m]			[Nm]	[N]					
Hp										
0,25	11	127,94	1,94	209	7300	İRAPM	631 / 71 M 4a		177	32
	12	119,40	2,00	195	7300	İRFPM			178	37
						İRAFPM			179	38
0,34	15	96,27	2,60	157	7300	İRAM	631 / 71 M 4a		124	30
	16	87,81	2,80	143	7300	İRFM			125	35
	17	83,37	3,00	136	7300	İRAFM			126	36
	20	70,97	3,80	116	7300					
	13	105,66	1,10	172	4550					
	16	88,98	1,33	145	4550					
	18	77,16	1,49	126	4500					
	21	67,60	1,58	110	4400	İRAM			121	18
	26	54,81	2,00	89	4400	İRFM		53 / 71 M 4a	122	20
	29	48,41	2,40	79	4300	İRAFM			123	21
	32	43,98	2,80	72	4150					
	36	39,09	3,10	64	4150					
	40	34,93	3,40	57	4150					
	23	60,896	0,82	99	2130					
	26	53,331	0,93	87	2130					
	30	46,977	1,06	77	2130					
	38	36,378	1,39	59	2010					
	44	31,859	1,54	52	1920					
	50	28,063	1,78	46	1920					
	53	26,193	1,92	43	1880					
	56	24,829	2,00	40	1840					
	62	22,615	2,10	37	1830	İRAM		43 / 71 M 4a	118	13
	66	21,108	2,30	34	1820	İRFM			119	14
	70	20,009	2,50	33	1810	İRAFM			120	14
	75	18,593	2,70	30	1810					
	79	17,763	2,80	29	1780					
	85	16,450	3,00	27	1770					
	89	15,806	3,10	26	1720					
	96	14,604	3,40	24	1720					
	99	14,087	3,60	23	1720					
	108	12,995	3,80	21	1660					
	121	11,581	4,30	19	1630					
	125	11,242	2,60	19	1550					
	142	9,845	2,90	16	1490					
	161	8,672	3,30	14	1400					
	182	7,673	3,80	13	1340					
	204	6,872	5,50	11	1340					
	230	6,080	6,10	10	1340					
	253	5,538	6,60	9	1260	İRAM	42 / 71 M 4a		118	12
	259	5,398	6,80	9	1190	İRFM			119	13
	286	4,900	7,20	8	1140	İRAFM			120	13
	291	4,803	7,70	8	1090					
	322	4,350	8,10	7	1000					
	327	4,280	8,50	7	1000					
	370	3,780	9,20	6	950					
	406	3,449	10,30	6	900					
0,37	0,22	4099,41	0,78	14699	73000	İRAM	151 İR 63 / 80 M 6a		167	482
	0,35	2552,42	1,31	9152	73000	İRFM			167	532
	0,50	1790,46	1,85	6420	73000					



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P ₁	n ₂	i	S _f	M ₂	F _{QV2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip Type Typ			kg
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads				
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkkräfte				
[kW] Hp	[r.p.m]			[Nm]	[N]				
0,37 0,50	0,73	1228,05	2,45	4403	73000	İRAM	151 İR 63 / 80 M 6a	167	482
	0,89	1016,50	3,50	3645	73000	İRFM		167	532
	0,28	4983	0,81	11486	55000	İRAM İRFM	123 İR 73 / 71 M 4b	165	335
	0,31	4476	0,91	10318	55000			166	337
	0,35	4039	1,00	9310	55000				
	0,38	3659	1,10	8434	55000				
	0,42	3324	1,23	7662	55000				
	0,34	4059	0,96	9499	55000	İRAM İRFM	122 İR 73 / 71 M 4b	165	329
	0,38	3671	1,07	8591	55000			166	331
	0,46	3066	1,26	7175	55000				
	0,52	2698	1,41	6314	55000				
	0,60	2333	1,70	5460	55000				
	0,68	2070	1,90	4844	55000				
	0,76	1849	2,10	4327	55000				
	0,84	1661	2,30	3887	55000				
	0,57	2448	0,91	5643	34000	İRAM İRFM	103 İR 73 / 71 M 4b	163 164	216 219
	0,65	2145	0,79	5020	34000	İRAM İRFM	102 İR 73 / 71 M 4b	163	209
	0,73	1916	0,89	4484	34000			164	212
	0,86	1635	1,07	3826	34000				
	0,96	1460	1,18	3417	34000				
	1,1	1311	1,28	3068	34000				
	1,2	1180	1,62	2761	34000				
	1,3	1103	1,75	2581	34000				
	1,4	986	1,75	2307	34000				
	1,6	884	1,75	2069	34000				
	1,8	796	1,75	1863	34000				
	1,9	718	1,75	1680	34000				
	2,2	650	1,75	1521	34000				
	2,4	575	1,75	1346	34000				
	1,2	1201	0,91	2811	26000	İRAM İRFM	92 İR 63 / 71 M 4b	161	133
	1,3	1098	1,23	2570	26000			162	143
	1,4	993	1,33	2324	26000				
	1,6	901	1,33	2109	26000				
	1,7	821	1,33	1921	26000				
	1,9	749	1,33	1753	26000				
	2,0	685	1,33	1603	26000				
	1,9	725	1,89	1697	26000	İRAM İRFM	93 İR 62 / 71 M 4b	161	153
	2,2	648	2,10	1516	26000			162	163
	2,6	538	2,30	1259	26000				
	2,7	527	2,50	1233	26000				
	2,9	479	2,80	1121	26000				
	3,2	436	3,10	1020	26000				
	3,5	398	3,40	931	26000				
	3,8	364	3,70	852	26000				
	4,2	334	4,00	782	26000				
	1,8	772	0,89	1807	18100	İRAM İRFM	82 İR 63 / 71 M 4b	159	113
	1,9	724	0,89	1694	18100			160	118
	2,1	653	1,02	1528	18100				
	2,4	590	1,10	1381	18100				
	2,6	536	1,25	1254	18100				



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P ₁	n ₂	i	S _f	M ₂	F _{Q1/2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip			
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type			
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ			
[kW] Hp	[r.p.m]			[Nm]	[N]		kg		
0,37 0,50	2,9	488	1,32	1142	18100	İRAM İRFM	82 İR 63 / 71 M 4b	159	113
	3,2	444	1,40	1039	18100			160	118
	3,4	406	1,48	950	18100				
	3,6	394	1,64	922	18100				
	3,9	359	1,73	840	18100				
	4,4	315	2,10	737	18100				
	4,9	286	2,20	669	18100				
	5,4	261	2,30	611	18100				
	3,7	376	1,04	880	12100	İRAM İRFM	73 İR 52 / 71 M 4b	157	52
	3,8	370	1,07	866	12100			158	55
	4,2	332	1,18	777	12100				
	5,1	276	1,26	646	12100				
	5,2	270	1,30	632	12100				
	5,6	250	1,39	585	12100				
	5,7	244	1,43	571	12100				
	6,0	232	1,49	551	12100			İRAM İRFM	72 İR 52 / 71 M 4b
	6,8	206	1,62	489	12100	158	52		
	8,8	160	2,50	380	12100				
	4,1	344	0,84	805	10100	İRAM İRFM	721 İR 53 / 71 M 4b	155	52
	4,6	306	0,97	716	10100			156	55
	5,1	274	1,02	641	10100				
	5,7	246	1,12	576	10100				
	6,3	221	1,26	517	10100				
	7,0	199	1,36	466	10100				
	7,8	180	1,51	421	10100				
	8,6	163	1,70	381	10100				
	9,5	148	1,85	346	10100				
	3,8	372	0,81	871	10100	İRAM İRFM	731 İR 52 / 71 M 4b	155	53
	4,2	333	0,91	779	10100			156	56
	4,7	300	0,95	702	10100				
	5,2	267	1,06	625	10100				
	5,9	238	1,20	557	10100				
	6,5	214	1,33	501	10100				
	7,0	201	1,41	470	10100				
	7,8	180	1,55	421	10100				
	8,6	162	1,75	379	10100				
	9,6	146	1,96	342	10100				
	12,6	111	0,81	260	4250	İRAM İRFM	53 İR 42 / 71 M 4b	151	26
	14,0	100	0,91	234	4250			152	28
	2,4	293,46	1,95	1416	26000	İRAPM İRFPM İRAFPM	93 / 90 S 8a	192	134
	2,6	273,73	2,00	1320	26000			193	144
	2,9	240,50	2,40	1160	26000			194	154
	3,1	293,46	2,50	1101	26000	İRAPM İRFPM İRAFPM	93 / 80 M 6a	192	129
	3,3	273,73	2,60	1027	26000			193	139
	3,7	240,50	3,00	902	26000			194	149
	4,2	213,60	3,50	801	26000				
	2,8	250,50	1,22	1208	18100	İRAM İRFM İRAFPM	83 / 90 S 8a	136	81
	3,2	221,16	1,35	1067	18100			137	86
3,4	208,58	1,57	1006	18100	138			88	



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P ₁	n ₂	i	S _f	M ₂	F _{Qv2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip			
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type			
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ			
[kW] Hp	[r.p.m]			[Nm]	[N]				
0,37 0,50	3,6	250,50	1,57	940	18100	İRAM İRFM İRAFM	83 / 80 M 6a	136	76
	4,1	221,16	1,78	830	18100			137	81
	4,3	208,58	2,00	783	18100			138	83
	4,8	186,71	2,10	701	18100				
	5,3	168,34	2,30	632	18100				
	5,8	154,46	1,51	580	12100	İRAM İRFM İRAFM	73 / 80 M 6a	133	40
	6,7	133,53	1,75	501	12100			134	43
	8,7	103,60	2,19	389	12100			135	46
	9,9	91,36	2,77	343	12100				
	9,1	154,46	2,30	373	12100	İRAM İRFM İRAFM	73 / 71 M 4b	133	38
	10	133,53	2,60	322	12100			134	41
	14	103,60	3,37	250	12100			135	44
	5,9	152,090	0,91	571	10100	İRAM İRFM İRAFM	731 / 80 M 6a	130	42
	6,7	134,933	1,02	506	10100			131	45
	7,7	116,652	1,21	438	10100			132	48
	8,9	100,847	1,36	378	10100				
	9,2	152,090	1,42	367	10100	İRAM İRFM İRAFM	731 / 71 M 4b	130	40
	10	134,933	1,59	325	10100			131	43
	12	116,652	1,85	281	10100			132	46
	14	100,847	2,10	243	10100				
	16	88,933	2,40	215	10100				
	7,0	127,94	0,87	480	7170	İRAPM İRFPM İRAFPM	63 / 80 M 6a	180	35
	7,5	119,40	0,92	448	7170			181	40
								182	41
	9,3	96,27	1,11	361	7170	İRAM İRFM İRAFM	63 / 80 M 6a	127	33
	10	87,81	1,26	329	7170			128	38
								129	39
	7,0	127,94	0,87	480	7170	İRAPM İRFPM İRAFPM	631 / 80 M 6a	177	35
	7,5	119,40	0,92	448	7170			178	40
								179	41
	9,3	96,27	1,11	361	7170	İRAM İRFM İRAFM	631 / 80 M 6a	124	33
	10	87,81	1,26	329	7170			125	38
								126	39
	11	127,94	1,31	309	7170	İRAPM İRFPM İRAFPM	63 / 71 M 4b	180	33
	12	119,40	1,41	288	7170			181	38
								182	39
	15	96,27	1,75	232	7170	İRAM İRFM İRAFM	63 / 71 M 4b		
	16	87,81	1,93	212	7170			127	31
	17	83,37	2,00	201	7170			128	36
	20	70,97	2,60	171	7170			129	37
	23	61,03	2,80	147	7170				
	27	51,65	3,80	125	7170				
	11	127,94	1,31	309	7170	İRAPM İRFPM İRAFPM	631 / 71 M 4b	177	33
	12	119,40	1,41	288	7170			178	38
								179	39
	15	96,27	1,75	232	7170	İRAM İRFM İRAFM	631 / 71 M 4b	124	31
	16	87,81	1,93	212	7170			125	36
	17	83,37	2,00	201	7170			126	37



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P ₁	n ₂	i	S _f	M ₂	F _{Qv2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip Type Typ			
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads				
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte				
[kW] Hp	[r.p.m]			[Nm]	[N]				
0,37 0,50	20	70,97	2,60	171	7170	İRAM	631 / 71 M 4b	124	31
	23	61,03	2,80	147	7170	İRFM		125	36
	27	51,65	3,80	125	7170	İRAFM		126	37
	16	88,98	0,90	215	4250	İRAM İRFM İRAFM	53 / 71 M 4b	121	19
	18	77,16	1,00	186	4250			122	21
	21	67,60	1,07	163	4200			123	22
	26	54,81	1,36	132	4050				
	29	48,41	1,65	117	4050				
	32	43,98	1,89	106	4050				
	36	39,09	2,00	94	4000				
	40	34,93	2,30	84	4000				
	45	31,33	2,50	76	4000				
	50	28,21	2,80	68	4000				
	55	25,46	3,00	61	3850	İRAM İRFM İRAFM	52 / 71 M 4b	121	18
	61	23,02	3,30	56	3800			122	20
	64	21,88	3,35	53	3800			123	21
	81	17,18	3,50	42	3600				
	93	15,05	4,30	37	3550				
	105	13,29	4,80	33	3500	İRAM İRFM İRAFM	43 / 71 M 4b	118	14
	119	11,81	5,40	29	3500			119	15
	133	10,55	5,90	26	3500			120	15
	38	36,378	0,94	88	1880				
	44	31,859	1,04	77	1850				
	50	28,063	1,20	68	1820				
	53	26,193	1,30	63	1800				
	56	24,829	1,36	60	1760				
	62	22,615	1,43	55	1740				
	66	21,108	1,55	51	1700				
	70	20,009	1,70	48	1650				
	75	18,593	1,80	45	1600				
	79	17,763	1,90	43	1600				
	85	16,450	2,00	40	1550				
	89	15,806	2,10	38	1500				
	96	14,604	2,30	35	1500				
	99	14,087	2,40	34	1490				
	108	12,995	2,60	31	1450				
	121	11,581	2,90	28	1430				
	125	11,242	1,75	28	1400	İRAM İRFM İRAFM	42 / 71 M 4b	118	13
	142	9,845	1,96	24	1350			119	14
	161	8,672	2,20	21	1300			120	14
	182	7,673	2,60	19	1250				
	204	6,872	3,70	17	1200				
	230	6,080	4,10	15	1150				
	253	5,538	4,40	14	1100				
	259	5,398	4,60	13	1080				
	286	4,900	4,90	12	1030				
	291	4,803	5,20	12	970				
	322	4,350	5,50	11	950				
	327	4,280	5,80	10	900				
	370	3,780	6,20	9	900				
	406	3,449	6,90	8	850				



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P ₁	n ₂	i	S _f	M ₂	F _{QV2}			
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ		
[kW] Hp	[r.p.m]			[Nm]	[N]			kg
0,55 0,75	0,34	4099,41	0,79	14047	73000	İRAM İRFM	151 İR 63 / 80 M 4a	167 482 167 532
	0,45	3097,86	0,98	10615	73000			
	0,59	2390,20	1,18	8190	73000			
	0,78	1790,46	1,70	6135	73000			
	0,93	1509,47	2,02	5172	73000			
	1,09	1289,63	2,36	4419	73000			
	1,33	1049,16	2,90	3595	73000			
	1,61	868,43	3,95	2976	73000			
	0,49	2829	0,91	9841	55000	İRAM İRFM	123 İR 72 / 80 M 4a	165 337 166 339
	0,56	2517	1,05	8756	55000			
	0,62	2260	1,14	7862	55000			
	0,68	2044	1,27	7110	55000			
	0,84	1657	1,68	5764	55000			
	0,93	1511	1,86	5256	55000			
	1,0	1357	2,10	4721	55000			
	1,1	1227	2,30	4268	55000			
	1,4	1025	2,80	3566	55000			
	0,52	2698	0,95	9386	55000	İRAM İRFM	122 İR 73 / 80 M 4a	165 331 166 333
	0,60	2333	1,15	8116	55000			
	0,68	2070	1,27	7201	55000			
	0,76	1849	1,41	6432	55000			
	0,84	1661	1,57	5778	55000			
	0,91	1535	1,60	5340	55000			
	1,2	1173	1,09	4081	34000	İRAM İRFM	103 İR 72 / 80 M 4a	163 218 164 221
	1,3	1046	1,20	3639	34000			
	1,5	923	1,32	3211	34000			
	1,7	821	1,46	2856	34000			
	1,9	733	1,60	2550	34000			
	2,1	658	1,75	2289	34000			
	2,4	592	1,90	2059	34000			
	2,6	535	2,20	1861	34000			
	2,9	485	2,80	1687	34000			
	0,96	1460	0,79	5079	34000	İRAM İRFM	102 İR 73 / 80 M 4a	163 211 164 214
	1,1	1311	0,86	4561	34000			
	1,2	1180	1,09	4105	34000			
	1,3	1103	1,18	3837	34000			
	1,4	986	1,18	3430	34000			
	1,6	884	1,18	3075	34000			
	1,8	796	1,18	2769	34000			
	1,9	718	1,18	2498	34000			
	2,2	650	1,18	2261	34000			
	2,4	575	1,18	2000	34000			
	1,9	725	1,27	2522	26000	İRAM İRFM	93 İR 62 / 80 M 4a	161 155 162 165
	2,2	648	1,41	2254	26000			
	2,6	538	1,55	1872	26000			
	2,7	527	1,73	1833	26000			
	2,9	479	1,91	1666	26000			
	3,2	436	2,10	1517	26000			
	3,5	398	2,30	1385	26000			
	3,8	364	2,50	1266	26000			
	4,2	334	2,70	1162	26000			



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P ₁	n ₂	i	S _f	M ₂	F _{QV2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip Type Typ			kg
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads				
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte				
[kW] Hp	[r.p.m]			[Nm]	[N]				
0,55 0,75	4,4	315	2,30	1147	26000	İRAM İRFM	92 İR 62 / 80 M 4a	161	135
	5,0	278	2,60	1012	26000			162	145
	5,7	247	2,90	899	26000				
	6,3	221	3,30	804	26000				
	2,6	536	0,84	1865	17350	İRAM İRFM	82 İR 63 / 80 M 4a	159	115
	2,9	488	0,89	1698	17350			160	120
	3,2	444	0,94	1545	17350				
	3,4	406	0,99	1412	17300				
	3,6	394	1,10	1371	17300				
	3,9	359	1,16	1249	17350				
	4,4	315	1,42	1096	17350				
	4,9	286	1,51	995	17350				
	5,4	261	1,60	908	17300				
	5,8	240	1,92	835	17300				
	6,4	218	2,00	758	17300				
	7,7	181	2,30	630	17300				
	6,0	232	1,00	819	11500	İRAM İRFM	72 İR 52 / 80 M 4a	157	51
	6,8	206	1,09	728	11500			158	54
	8,8	160	1,73	565	11500				
	6,3	221	0,85	769	9500	İRAM İRFM	721 İR 53 / 80 M 4a	155	54
	7,0	199	0,91	692	9500			156	57
	7,8	180	1,01	626	9500				
	8,6	163	1,15	567	9500				
	9,5	148	1,24	515	9500				
	7,0	201	0,95	699	9500	İRAM İRFM	731 İR 52 / 80 M 4a	155	55
	7,8	180	1,04	626	9500			156	58
	8,6	162	1,18	564	9500				
	9,6	146	1,32	508	9500				
	2,4	293,46	1,31	2104	25000	İRAPM İRFPM İRAFPM	93 / 90 L 8a	192	136
	2,6	273,73	1,36	1963	25000			193	146
	2,9	240,50	1,59	1725	25000			194	156
	3,1	293,46	1,70	1637	24700	İRAPM İRFPM İRAFPM	93 / 80 M 6b	192	130
	3,3	273,73	1,80	1527	24700			193	140
	3,7	240,50	2,02	1341	24700			194	150
	4,2	213,60	2,35	1191	24700				
	4,8	293,46	2,66	1052	25000	İRAPM İRFPM İRAFPM	93 / 80 M 4a	192	129
	5,1	273,73	2,85	981	25000			193	139
	5,8	240,50	3,20	862	25000			194	149
	6,6	213,60	3,65	766	25000				
	3,6	250,50	1,05	1397	17350	İRAM İRFM İRAFPM	83 / 80 M 6b	136	77
	4,1	221,16	1,20	1233	17350			137	82
	4,3	208,58	1,35	1163	17350			138	84
	4,8	186,71	1,41	1041	17300				
	5,3	168,34	1,55	939	17300				
	5,6	250,50	1,65	898	17350	İRAM İRFM İRAFPM	83 / 80 M 4a	136	76
	6,3	221,16	1,86	793	17350			137	81
	6,7	208,58	2,10	748	17350			138	83
	7,5	186,71	2,20	669	17350				
	8,3	168,34	2,40	604	17350				
	9,2	152,68	2,60	547	17100				



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P ₁	n ₂	i	S _f	M ₂	F _{Qv2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip Type Typ			kg
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads				
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte				
[kW] Hp	[r.p.m]			[Nm]	[N]				
0,55 0,75	10	139,19	2,90	499	17100	İRAM	83 / 80 M 4a	136	76
	11	127,44	3,20	457	17100	İRFM		137	81
	12	117,12	3,50	420	17100	İRAFM		138	83
	14	103,03	3,90	369	17100				
	5,8	154,46	1,01	861	11500	İRAM	73 / 80 M 6b	133	41
	6,7	133,53	1,18	745	11500	İRFM		134	44
	8,7	103,60	1,47	578	11500	İRAFM		135	47
	9,9	91,36	1,86	510	11500				
	9,1	154,46	1,58	554	11500	İRAM İRFM İRAFM	73 / 80 M 4a	133	40
	10	133,53	1,81	479	11500			134	43
	14	103,60	2,27	371	11500			135	46
	15	91,36	2,90	328	11500				
	17	81,25	3,26	291	11500				
	19	72,76	3,45	261	11500				
	21	65,52	3,60	235	11500				
	24	59,41	3,90	213	11500				
	7,7	116,652	0,81	651	9500	İRAM	731 / 80 M 6b	130	43
	8,9	100,847	0,91	562	9500	İRFM		131	46
						İRAFM		132	49
	9,2	152,090	0,96	545	9500	İRAM İRFM İRAFM	731 / 80 M 4a	130	42
	10	134,933	1,07	484	9500			131	45
	12	116,652	1,24	418	9500			132	48
	14	100,847	1,44	362	9500				
	16	88,933	1,61	319	9500				
	18	78,425	1,81	281	9350				
	20	69,746	2,10	250	9350				
	22	62,455	2,30	224	9300				
	25	55,543	2,60	199	9250				
	28	49,737	2,90	178	9250				
	31	44,791	3,20	161	9200				
	10	87,81	0,85	490	7090	İRAM	63 / 80 M 6b	127	34
						İRFM		128	39
						İRAFM		129	40
	11	127,94	0,88	459	7090	İRAM İRFM İRAFM	63 / 80 M 4a	127	33
	12	119,40	0,95	428	7090			128	38
	15	96,27	1,18	345	7090			129	39
	16	87,81	1,30	315	7090				
	17	83,37	1,39	299	7090				
	20	70,97	1,73	254	7090				
	23	61,03	1,87	219	7090				
	27	51,65	2,50	185	7090				
	30	46,79	2,80	168	7090				
	33	42,55	3,10	153	7090				
	39	35,74	3,70	128	7090				
	10	87,81	0,85	490	7090	İRAM	631 / 80 M 6b	124	34
						İRFM		125	39
						İRAFM		126	40
	11	127,94	0,88	459	7090	İRAM	631 / 80 M 4a	124	33
	12	119,40	0,95	428	7090	İRFM		125	38
	15	96,27	1,18	345	7090	İRAFM		126	39
	16	87,81	1,30	315	7090				



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Monoblock Stirnradgetriebemotoren Leistung und Drehzahlübersicht

P ₁	n ₂	i	S _f	M ₂	F _{Qv2}			
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ		
[kW] Hp	[r.p.m]			[Nm]	[N]			 kg
0,55 0,75	17	83,37	1,39	299	7090	İRAM İRFM İRAFM	631 / 80 M 4a	124 33 125 38 126 39
	20	70,97	1,73	254	7090			
	23	61,03	1,87	219	7090			
	27	51,65	2,50	185	7090			
	30	46,79	2,80	168	7090			
	33	42,55	3,10	153	7090			
	39	35,74	3,70	128	7090			
	26	54,81	0,91	197	4150	İRAM İRFM İRAFM	53 / 80 M 4a	121 21 122 23 123 24
	29	48,41	1,10	174	4000			
	32	43,98	1,27	158	3950			
	36	39,09	1,40	140	3950			
	40	34,93	1,55	125	3900			
	45	31,33	1,68	112	3900			
	50	28,21	1,90	101	3900			
	55	25,46	2,00	91	3800			
	61	23,02	2,20	83	3700			
	64	21,88	2,25	78	3700			
	81	17,18	2,35	63	3450	İRAM İRFM İRAFM	52 / 80 M 4a	121 20 122 22 123 23
	93	15,05	2,90	55	3450			
	105	13,29	3,20	48	3400			
	119	11,81	3,60	43	3350			
	133	10,55	4,00	38	3350			
	148	9,47	4,30	34	3350			
	50	28,063	0,81	101	1620	İRAM İRFM İRAFM	43 / 80 M 4a	118 16 119 17 120 17
	53	26,193	0,87	94	1600			
	56	24,829	0,92	89	1560			
	62	22,615	0,96	81	1540			
	66	21,108	1,05	76	1500			
	70	20,009	1,15	72	1450			
	75	18,593	1,21	67	1400			
	79	17,763	1,28	64	1400			
	85	16,450	1,36	59	1350			
	89	15,806	1,41	57	1300			
	96	14,604	1,55	52	1300			
	99	14,087	1,64	51	1290			
	108	12,995	1,73	47	1250			
	121	11,581	1,95	42	1230			
	125	11,242	1,18	41	1360	İRAM İRFM İRAFM	42 / 80 M 4a	118 15 119 16 120 16
	142	9,845	1,32	36	1310			
	161	8,672	1,50	32	1270			
	182	7,673	1,73	28	1220			
	204	6,872	2,50	25	1160			
	230	6,080	2,80	22	1110			
	253	5,538	3,00	20	1060			
	259	5,398	3,10	20	1050			
	286	4,900	3,30	18	1020			
	291	4,803	3,50	17	940			
	322	4,350	3,70	16	910			
	327	4,280	3,90	16	880			
	370	3,780	4,20	14	860			
	406	3,449	4,70	13	810			



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P ₁	n ₂	i	S _f	M ₂	F _{QV2}			
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ		
[kW] Hp	[r.p.m]			[Nm]	[N]			kg
0,75 1	0,40	3469,26	0,72	16210	73000	İRAM İRFM	151 İR 63 / 80 M 4b	167 484
	0,55	2552,42	0,97	11926	73000			167 534
	0,67	2076,56	1,19	9703	73000			
	0,93	1509,47	1,47	7053	73000			
	0,96	1456,66	1,70	6806	73000			
	1,3	1049,16	2,13	4902	73000			
	1,6	860,38	2,64	4020	73000			
	0,62	2260	0,83	10721	55000	İRAM İRFM	123 İR 72 / 80 M 4b	165 339
	0,68	2044	0,93	9696	55000			166 341
	0,84	1657	1,23	7860	55000			
	0,93	1511	1,37	7168	55000			
	1,0	1357	1,53	6437	55000			
	1,1	1227	1,70	5821	55000			
	1,4	1025	2,00	4862	55000			
	1,6	902	2,30	4279	55000			
	1,8	800	2,60	3795	55000			
	2,0	715	2,90	3392	55000			
	0,68	2070	0,94	9819	55000	İRAM İRFM	122 İR 73 / 80 M 4b	165 333
	0,76	1849	1,03	8771	55000			166 335
	0,84	1661	1,15	7879	55000			
	0,91	1535	1,18	7282	55000			
	1,0	1362	1,18	6461	55000			
	1,1	1265	1,53	6001	55000			
	1,3	1050	1,91	4981	55000			
	1,5	932	1,91	4421	55000			
	1,7	833	1,91	3952	55000			
	1,9	748	1,91	3548	55000			
	2,0	706	1,91	3349	55000			
	2,2	634	1,91	3008	55000			
	2,4	572	1,91	2713	55000			
	2,7	518	1,91	2457	55000			
	3,0	471	1,91	2234	55000			
	3,3	429	1,91	2035	55000			
	3,6	391	1,91	1855	55000			
	3,9	358	1,91	1698	55000			
	4,3	328	1,91	1556	55000			
	4,7	300	1,91	1423	55000			
	1,2	1173	0,80	5564	33450	İRAM İRFM	103 İR 72 / 80 M 4b	163 220
	1,3	1046	0,88	4962	33450			164 223
	1,5	923	0,97	4378	33450			
	1,7	821	1,07	3895	33450			
	1,9	733	1,17	3477	33450			
	2,1	658	1,28	3121	33450			
	2,4	592	1,39	2808	33450			
	2,6	535	1,64	2538	33450			
	2,9	485	2,10	2301	33450			
	3,3	428	2,40	2030	33450			
	3,7	381	2,60	1807	33450			
	4,1	340	2,80	1613	33450			
	1,2	1180	0,80	5598	33450	İRAM İRFM	102 İR 73 / 80 M 4b	163 213
	1,3	1103	0,87	5232	33450			164 216
	1,4	986	0,87	4677	33450			



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P ₁	n ₂	i	S _f	M ₂	F _{Qv2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip			
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type			
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	 			
[kW] Hp	[r.p.m]			[Nm]	[N]	kg			
0,75 1	1,6	884	0,87	4193	33450	İRAM İRFM	102 İR 73 / 80 M 4b	163	213
	1,8	796	0,87	3776	33450			164	216
	1,9	718	0,87	3406	33450				
	2,2	650	0,87	3083	33450				
	2,4	575	0,87	2728	33450				
	2,2	648	1,03	3074	24700	İRAM İRFM	93 İR 62 / 80 M 4b	161	157
	2,6	538	1,13	2552	24700			162	167
	2,7	527	1,27	2500	24700				
	2,9	479	1,40	2272	24700				
	3,2	436	1,53	2068	24700				
	3,5	398	1,67	1888	24700				
	3,8	364	1,83	1727	24700				
	4,2	334	2,00	1584	24700				
	4,4	315	1,70	1517	24700	İRAM İRFM	92 İR 62 / 80 M 4b	161	137
	5,0	278	1,93	1339	24700			162	147
	5,7	247	2,10	1190	24700				
	6,3	221	2,40	1064	24700				
	3,9	359	0,85	1703	16900	İRAM İRFM	82 İR 63 / 80 M 4b	159	117
	4,4	315	1,04	1494	16900			160	122
	4,9	286	1,11	1357	16900				
	5,4	261	1,17	1238	16900				
	5,8	240	1,41	1138	16900				
	6,4	218	1,50	1034	16900				
	7,7	181	1,69	859	16900				
	2,7	256,048	1,27	2504	33450	İRAM İRFM İRAFM	103 / 100 L 8a	142	195
	3,1	225,112	1,88	2201	33450			143	198
	3,4	207,689	2,00	2031	33450			144	220
	3,8	184,584	2,30	1805	33450				
	4,2	165,496	2,60	1618	33450				
	5,0	140,701	3,10	1376	33450				
	3,1	293,46	1,25	2232	24700	İRAPM İRFPM İRAFPM	93 / 90 S 6a	192	134
	3,3	273,73	1,32	2082	24700			193	144
	3,7	240,50	1,48	1829	24700			194	154
	4,2	213,60	1,72	1625	24700				
	4,8	293,46	1,95	1435	24700	İRAPM İRFPM İRAFPM	93 / 80 M 4b	192	131
	5,1	273,73	2,10	1338	24700			193	141
	5,8	240,50	2,30	1176	24700			194	151
	6,6	213,60	2,70	1044	24700				
	7,3	191,38	3,00	936	24500				
	8,1	172,72	3,30	844	24500				
	4,1	221,16	0,88	1682	16900	İRAM İRFM İRAFM	83 / 90 S 6a	136	81
	4,3	208,58	0,98	1586	16900			137	86
	4,8	186,71	1,04	1420	16900			138	88
	5,3	168,34	1,13	1280	16700				
	5,6	250,50	1,21	1225	17100	İRAM İRFM İRAFM	83 / 80 M 4b		
	6,3	221,16	1,36	1081	17050			136	78
	6,7	208,58	1,55	1020	17000			137	83
	7,5	186,71	1,61	913	17000			138	85
	8,3	168,34	1,76	823	17000				
	9,2	152,68	1,90	746	16900				



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P ₁	n ₂	i	S _f	M ₂	F _{QV2}			Tip		kg
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük			Type		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads			Typ		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte					
[kW]	[r.p.m]			[Nm]	[N]					
Hp										
0,75 1	10	139,19	2,10	681	16900	İRAM İRFM İRAFM	83 / 80 M 4b		136	78
	11	127,44	2,30	623	16900				137	83
	12	117,12	2,50	573	16900				138	85
	14	103,03	2,80	504	16800					
	15	91,85	3,20	449	16800					
	6,7	133,53	0,86	1016	11200	İRAM İRFM İRAFM	73 / 90 S 6a		133	45
	8,7	103,60	1,08	788	11200				134	48
	9,9	91,36	1,36	695	11200				135	51
	9,1	154,46	1,15	755	11200	İRAM İRFM İRAFM	73 / 80 M 4b			
	10	133,53	1,33	653	11200					
	14	103,60	1,66	507	11200					
	15	91,36	2,12	447	11200				133	42
	17	81,25	2,39	397	11200				134	45
	19	72,76	2,53	356	11200				135	48
	21	65,52	2,60	320	11200					
	24	59,41	2,90	290	11200					
	27	52,47	3,30	257	11200					
	30	46,63	3,70	228	11200					
	12	116,652	0,91	570	9350	İRAM İRFM İRAFM	731 / 80 M 4b			
	14	100,847	1,05	493	9350					
	16	88,933	1,18	435	9350					
	18	78,425	1,33	383	9200					
	20	69,746	1,53	341	9200				130	44
	22	62,455	1,72	305	9150				131	47
	25	55,543	1,92	272	9100				132	50
	28	49,737	2,10	243	9100					
	31	44,791	2,30	219	9050					
	35	39,887	3,20	195	9050					
	40	35,224	3,50	172	9000					
	44	31,622	3,40	157	9000	İRAM İRFM İRAFM	721 / 80 M 4b		130	44
	50	28,055	3,80	139	9000				131	47
	15	96,27	0,86	471	7000	İRAM İRFM İRAFM	63 / 80 M 4b			
	16	87,81	0,95	429	7000					
	17	83,37	1,01	408	7000					
	20	70,97	1,27	347	7000					
	23	61,03	1,37	298	7000				127	35
	27	51,65	1,87	253	7000				128	40
	30	46,79	2,00	229	7000				129	41
	33	42,55	2,20	208	7000					
	39	35,74	2,70	175	7000					
	47	29,85	3,20	146	7000					
	56	25,16	3,80	123	7000					
	15	96,27	0,86	471	7000	İRAM İRFM İRAFM	631 / 80 M 4b			
	16	87,81	0,95	429	7000					
	17	83,37	1,01	408	7000				124	35
	20	70,97	1,27	347	7000				125	40
	23	61,03	1,37	298	7000				126	41
	27	51,65	1,87	253	7000					
	30	46,79	2,00	229	7000					
	33	42,55	2,20	208	7000					



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P ₁	n ₂	i	S _f	M ₂	F _{QV2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip			
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type			
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte				
[kW] Hp	[r.p.m]			[Nm]	[N]				
0,75 1	39	35,74	2,70	175	7000	İRAM	631 / 80 M 4b	124	35
	47	29,85	3,20	146	7000	İRFM		125	40
	56	25,16	3,80	123	7000	İRAFM		126	41
	32	43,98	0,94	215	3800	İRAM İRFM İRAFM	53 / 80 M 4b	121	23
	36	39,09	1,03	191	3750			122	25
	40	34,93	1,13	171	3600			123	26
	45	31,33	1,23	153	3550				
	50	28,21	1,38	138	3550				
	55	25,46	1,48	124	3500				
	61	23,02	1,62	113	3500				
	64	21,88	1,65	107	3400				
	71	19,69	1,82	96	3350				
	79	17,77	2,00	87	3300				
	87	16,07	2,30	79	3300				
	81	17,18	1,73	85	3300	İRAM İRFM İRAFM	52 / 80 M 4b	121	22
	93	15,05	2,10	75	3200			122	24
	105	13,29	2,30	66	3150			123	25
	119	11,81	2,60	59	3150				
	133	10,55	2,90	52	3100				
	148	9,47	3,15	47	3100				
	158	8,88	3,40	44	3050				
	176	7,97	3,50	40	3050				
	195	7,17	3,70	36	3000				
	216	6,47	3,90	32	3000				
	241	5,82	4,00	29	3000				
	66	21,108	0,77	103	1470	İRAM İRFM İRAFM	43 / 80 M 4b	118	17
	70	20,009	0,84	98	1420			119	18
	75	18,593	0,89	91	1390			120	19
	79	17,763	0,94	87	1370				
	85	16,450	1,00	80	1320				
	89	15,806	1,03	77	1290				
	96	14,604	1,13	71	1270				
	99	14,087	1,20	69	1260				
	108	12,995	1,27	64	1230				
	121	11,581	1,43	57	1200				
	125	11,242	0,87	56	1320	İRAM İRFM İRAFM	42 / 80 M 4b	118	16
	142	9,845	0,97	49	1270			119	17
	161	8,672	1,10	43	1230			120	18
	182	7,673	1,27	38	1180				
	204	6,872	1,83	34	1120				
	230	6,080	2,10	30	1070				
	253	5,538	2,20	27	1030				
	259	5,398	2,30	27	1020				
	286	4,900	2,40	24	990				
	291	4,803	2,60	24	910				
	322	4,350	2,70	22	880				
	327	4,280	2,80	21	850				
	370	3,780	3,10	19	830				
	406	3,449	3,40	17	800				



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P ₁	n ₂	i	S _f	M ₂	F _{QV2}			
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkkräfte	Typ		
[kW] Hp	[r.p.m]			[Nm]	[N]			kg
1,1 1,5	0,70	2005,04	0,85	13741	73000	İRAM İRFM	151 İR 63 / 90 S 4a	167 487 167 537
	0,83	1690,37	0,97	11584	73000			
	0,97	1444,14	1,15	9897	73000			
	1,33	1049,16	1,47	7190	73000			
	1,63	860,38	1,82	5896	73000			
	2,00	699,98	2,11	4797	73000			
	2,97	471,36	2,25	3230	73000			
	1,73	808,20	3,73	5623	73000	İRAM İRFM	151 İR 62 / 90 S 4a	167 482 167 532
	0,84	1657	0,84	11528	55000	İRAM İRFM	123 İR 72 / 90 S 4a	165 335 166 337
	0,93	1511	0,93	10513	55000			
	1,0	1357	1,05	9441	55000			
	1,1	1227	1,16	8537	55000			
	1,4	1025	1,38	7131	55000			
	1,6	902	1,57	6276	55000			
	1,8	800	1,78	5566	55000			
	2,0	715	1,99	4975	55000			
	2,2	642	2,20	4467	55000			
	2,4	579	2,40	4028	55000			
	2,5	551	2,50	3834	55000			
	2,9	491	2,80	3416	55000			
	0,91	1535	0,80	10680	55000	İRAM İRFM	122 İR 73 / 90 S 4a	165 336 166 338
	1,0	1362	0,80	9476	55000			
	1,1	1265	1,04	8801	55000			
	1,3	1050	1,30	7305	55000			
	1,5	932	1,30	6484	55000			
	1,7	833	1,30	5796	55000			
	1,9	748	1,30	5204	55000			
	2,0	706	1,30	4912	55000			
	2,2	634	1,30	4411	55000			
	2,4	572	1,30	3980	55000			
	2,7	518	1,30	3604	55000			
	3,0	471	1,30	3277	55000			
	3,3	429	1,30	2985	55000			
	3,6	391	1,30	2720	55000			
	3,9	358	1,30	2491	55000			
	4,3	328	1,30	2282	55000			
	4,7	300	1,30	2087	55000			
	1,9	733	0,80	5100	32550	İRAM İRFM	103 İR 72 / 90 S 4a	163 216 164 219
	2,1	658	0,87	4578	32550			
	2,4	592	0,95	4119	32550			
	2,6	535	1,12	3722	32550			
	2,9	485	1,43	3374	32550			
	3,3	428	1,64	2978	32550			
	3,7	381	1,77	2651	32550			
	4,1	340	1,91	2366	32550			
	4,6	305	2,10	2122	32550			
	5,1	275	2,30	1913	32550			
	5,6	248	2,70	1725	32550			
	5,9	239	2,70	1688	32550	İRAM İRFM	102 İR 72 / 90 S 4a	163 214 164 217
	6,6	211	3,00	1490	32550	İRAM İRFM	102 İR 72 / 90 S 4a	163 214 164 217



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Monoblock Stirnradgetriebemotoren Leistung und Drehzahlübersicht



P ₁	n ₂	i	S _f	M ₂	F _{QV2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip			
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type			
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ			
[kW] Hp	[r.p.m]			[Nm]	[N]				
1,1 1,5	1,9	725	1,05	5044	23500	İRAM İRFM	93 İR 62 / 90 S 4a	161	160
	2,2	648	1,14	4508	23500			162	170
	2,6	538	1,25	3743	23500				
	2,7	527	1,36	3667	23500				
	4,4	315	1,16	2225	23000	İRAM İRFM	92 İR 62 / 90 S 4a	161	140
	5,0	278	1,32	1964	23000			162	150
	5,7	247	1,48	1745	23000				
	6,3	221	1,66	1561	23000				
	5,4	261	0,80	1816	16900	İRAM İRFM	82 İR 63 / 90 S 4a	159	120
	5,8	240	0,96	1670	16900			160	125
	6,4	218	1,02	1517	16900				
	7,7	181	1,15	1259	16900				
	2,7	256,048	1,17	3672	32550	İRAM İRFM İRAFM	103 / 100 L 8b	142	197
	3,1	225,112	1,28	3229	32550			143	200
	3,4	207,689	1,39	2979	32550			144	222
	3,8	184,584	1,55	2647	32550				
	4,2	165,496	1,75	2374	32550				
	5,0	140,701	2,10	2018	32550				
	3,1	293,46	0,85	3273	23500	İRAPM İRFPM İRAFPM	93 / 90 L 6b	192	136
	3,3	273,73	0,90	3053	23500			193	146
	3,7	240,50	1,00	2683	23000			194	156
	4,2	213,60	1,17	2383	23000				
	4,8	293,46	1,33	2104	23500	İRAPM İRFPM İRAFPM	93 / 90 S 4a	192	134
	5,1	273,73	1,42	1963	23500			193	144
	5,8	240,50	1,60	1725	23500			194	154
	6,6	213,60	1,82	1532	23000				
	7,3	191,38	2,00	1372	23000				
	8,1	172,72	2,30	1239	23000				
	8,9	156,82	2,50	1125	23000				
	11	131,17	3,00	941	22900				
	12	120,68	3,20	865	22900				
	13	110,02	3,50	789	22900				
	6,3	221,16	0,93	1586	16900	İRAM İRFM İRAFM	83 / 90 S 4a	136	81
	6,7	208,58	1,06	1496	16900			137	86
	7,5	186,71	1,10	1339	16900			138	88
	8,3	168,34	1,20	1207	16750				
	9,2	152,68	1,30	1095	16750				
	10	139,19	1,45	998	16750				
	11	127,44	1,60	914	16750				
	12	117,12	1,75	840	16600				
	14	103,03	1,95	739	16600				
	15	91,85	2,20	659	16600				
	17	82,47	2,50	591	16500				
	19	74,47	2,80	534	16500				
	21	66,18	3,10	475	16500				
	24	59,39	3,50	426	16500				
	26	53,54	3,80	384	16400				
	29	48,44	4,30	347	16400				
	10	133,53	0,90	958	10500	İRAM İRFM İRAFM	73 / 90 S 4a	133	45
	14	103,60	1,13	743	10500			134	48
	15	91,36	1,44	655	10500			135	51



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Monoblock Stirnradgetriebemotoren Leistung und Drehzahlübersicht

P ₁	n ₂	i	S _f	M ₂	F _{QV2}			
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ		
[kW] Hp	[r.p.m]			[Nm]	[N]			kg
1,1 1,5	17	81,25	1,63	583	10500	İRAM İRFM İRAFM	73 / 90 S 4a	133 45 134 48 135 51
	19	72,76	1,72	522	10500			
	21	65,52	1,80	470	10500			
	24	59,41	1,97	426	10500			
	27	52,47	2,26	376	10500			
	30	46,63	2,52	334	10500			
	16	88,933	0,80	638	9250	İRAM İRFM İRAFM	731 / 90 S 4a	130 47 131 50 132 53
	18	78,425	0,90	562	9100			
	20	69,746	1,04	500	9100			
	22	62,455	1,17	448	9050			
	25	55,543	1,31	398	9000			
	28	49,737	1,44	357	9000			
	31	44,791	1,61	321	8950			
	35	39,887	2,20	286	8950			
	40	35,224	2,40	253	8900			
	45	31,308	2,60	225	8900			
	50	27,971	2,90	201	8800			
	56	25,095	3,20	180	8800	İRAM İRFM İRAFM	721 / C80 M 4	130 40 131 43 132 46
	62	22,590	3,50	162	8700			
	44	31,622	2,30	230	8900			
	50	28,055	2,60	204	8800			
	58	24,254	3,00	177	8800	İRAM İRFM İRAFM	721 / 90 S 4a	130 45 131 48 132 51
	20	70,97	0,87	509	6500	İRAM İRFM İRAFM	63 / 90 S 4a	127 38 128 43 129 44
	23	61,03	0,93	438	6500			
	27	51,65	1,27	370	6500			
	30	46,79	1,40	336	6500			
	33	42,55	1,55	305	6500			
	39	35,74	1,85	256	6500			
	47	29,85	2,20	214	6500			
	56	25,16	2,60	180	6500			
	65	21,50	3,00	154	6500			
	68	20,53	3,20	147	6500			
	77	18,18	3,60	130	6500	İRAM İRFM İRAFM	631 / 90 S 4a	124 38 125 43 126 44
	20	70,97	0,87	509	6500			
	23	61,03	0,93	438	6500			
	27	51,65	1,27	370	6500			
	30	46,79	1,40	336	6500			
	33	42,55	1,55	305	6500			
	39	35,74	1,85	256	6500			
	47	29,85	2,20	214	6500			
	56	25,16	2,60	180	6500			
	65	21,50	3,00	154	6500			
	68	20,53	3,20	147	6500	İRAM İRFM İRAFM	62 / 90 S 4a	127 33 128 38 129 39
	77	18,18	3,60	130	6500			
	93	15,130	3,70	110	6300			
	104	13,475	4,20	98	6300	İRAM İRFM İRAFM		
	115	12,206	4,40	89	6300			



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P ₁	n ₂	i	S _f	M ₂	F _{QV2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip			
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type			
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ			
[kW] Hp	[r.p.m]			[Nm]	[N]				
1,1 1,5	93	15,130	3,70	110	6300	İRAM	621 / 90 S 4a	124	33
	104	13,475	4,20	98	6300	İRFM		125	38
	115	12,206	4,40	89	6300	İRAFM		126	39
	45	31,33	0,84	225	3400	İRAM İRFM İRAFM	53 / 90 S 4a	121	26
	50	28,21	0,95	202	3300			122	28
	55	25,46	1,00	183	3300			123	29
	61	23,02	1,11	165	3250				
	64	21,88	1,12	157	3250				
	71	19,69	1,24	141	3200				
	79	17,77	1,38	127	3100				
	87	16,07	1,55	115	3050				
	81	17,18	1,18	125	3050	İRAM	52 / C80 M 4	121	20
	93	15,05	1,45	110	3050	İRFM		122	22
						İRAFM		123	23
	105	13,29	1,61	97	3000	İRAM İRFM İRAFM	52 / 90 S 4a		
	119	11,81	1,81	86	3000				
	133	10,55	2,00	77	3000				
	148	9,47	2,15	69	2900				
	158	8,88	2,30	65	2800				
	176	7,97	2,40	58	2650			121	25
	195	7,17	2,50	52	2600			122	27
	216	6,47	2,60	47	2600			123	28
	241	5,82	2,70	42	2550				
	267	5,25	2,80	38	2500				
	278	5,03	2,90	37	2500				
	310	4,51	3,20	33	2450				
	345	4,06	3,40	30	2400				
	383	3,66	3,60	27	2400				
	96	14,604	0,77	105	1200	İRAM	43 / 90 S 4a	118	21
	99	14,087	0,82	101	1180	İRFM		119	22
	108	12,995	0,86	93	1150	İRAFM		120	22
	121	11,581	0,98	83	1100				
	182	7,673	0,86	56	1050	İRAM İRFM İRAFM	42 / 90 S 4a		
	204	6,872	1,25	50	1030				
	230	6,080	1,40	44	1000				
	253	5,538	1,50	40	1000				
	259	5,398	1,55	39	960			118	20
	286	4,900	1,65	36	930			119	21
	291	4,803	1,75	35	890			120	21
	322	4,350	1,85	32	860				
	327	4,280	1,95	31	830				
	370	3,780	2,10	28	800				
	406	3,449	2,30	25	770				
1,5 2	0,93	1509,47	0,80	14106	73000	İRAM İRFM	151 İR 63 / 90 L 4a	167	489
	1,09	1289,59	0,95	12051	73000			167	539
	1,45	963,50	1,20	9004	73000				
	1,73	808,20	1,55	7553	73000				
	2,10	665,88	1,83	6223	73000				
	2,45	571,65	2,17	5342	73000				
	2,86	489,45	2,87	4574	73000				



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P ₁	n ₂	i	S _f	M ₂	F _{QV2}			
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkkräfte	Typ		
[kW] Hp	[r.p.m]			[Nm]	[N]			kg
1,5 2	1,1	1227	0,85	11641	55000	İRAM İRFM	123 İR 72 / 90 L 4a	165 342 166 344
	1,4	1025	1,02	9725	55000			
	1,6	902	1,15	8558	55000			
	1,8	800	1,30	7590	55000			
	2,0	715	1,46	6783	55000			
	2,2	642	1,61	6091	55000			
	2,4	579	1,76	5493	55000			
	2,5	551	1,83	5228	55000			
	2,9	491	2,00	4658	55000			
	3,2	436	2,30	4137	55000			
	3,6	388	2,50	3681	55000			
	4,0	348	2,80	3302	55000			
	1,3	1050	0,95	9962	55000			
	1,5	932	0,95	8842	55000			
	1,7	833	0,95	7903	55000			
	1,9	748	0,95	7097	55000			
	2,0	706	0,95	6698	55000			
	2,2	634	0,95	6015	55000			
	2,4	572	0,95	5427	55000			
	2,7	518	0,95	4914	55000			
	3,0	471	0,95	4469	55000			
	3,3	429	0,95	4070	55000			
	3,6	391	0,95	3710	55000			
	3,9	358	0,95	3396	55000			
	4,3	328	0,95	3112	55000			
	4,7	300	0,95	2846	55000			
	2,6	535	0,82	5076	31000	İRAM İRFM	103 İR 72 / 90 L 4a	163 223 164 226
	2,9	485	1,05	4601	31000			
	3,3	428	1,20	4061	31000			
	3,7	381	1,30	3615	31000			
	4,1	340	1,40	3226	31000			
	4,6	305	1,55	2894	31000			
	5,1	275	1,70	2609	31000			
	5,6	248	2,00	2353	31000			
	5,9	239	2,00	2302	31000	İRAM İRFM	102 İR 72 / 90 L 4a	163 216 164 219
	6,6	211	2,20	2032	31000			
	7,4	188	2,40	1811	31000			
	8,3	168	2,70	1618	31000	İRAM İRFM	93 İR 62 / 90 L 4a	161 157 162 167
	3,8	364	0,92	3453	23100			
	4,2	334	1,00	3169	23100			
	4,4	315	0,85	3034	22700	İRAM İRFM	92 İR 62 / 90 L 4a	161 137 162 147
	5,0	278	0,97	2678	22700			
	5,7	247	1,08	2379	22700			
	6,3	221	1,22	2129	22700			
	2,7	256,048	0,86	5008	31000	İRAM İRFM İRAFM	103 / 112 M 8a	142 205 143 208 144 230
	3,1	225,112	0,94	4403	31000			
	3,4	207,689	1,02	4062	31000			
	3,8	184,584	1,14	3610	31000			
	4,2	165,496	1,28	3237	31000			
	5,0	140,701	1,55	2752	31000			



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P ₁	n ₂	i	S _f	M ₂	F _{Qv2}			
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ		
[kW] Hp	[r.p.m]			[Nm]	[N]			kg
1,5 2	3,5	256,048	1,09	3895	31000	İRAM İRFM İRAFM	103 / 100 L 6a	142 196
	4,0	225,112	1,19	3424	31000			143 199
	4,3	207,689	1,31	3159	31000			144 221
	4,9	184,584	1,47	2808	31000			
	5,4	165,496	1,64	2517	31000			
	6,4	140,701	2,00	2140	31000			
	7,1	126,151	2,20	1919	31000			
	4,8	293,46	0,97	2870	23100	İRAPM İRFPM İRAFPM	93 / 90 L 4a	192 136
	5,1	273,73	1,04	2677	23100			193 146
	5,8	240,50	1,17	2352	23100			194 156
	6,6	213,60	1,34	2089	22800			
	7,3	191,38	1,50	1871	22800			
	8,1	172,72	1,65	1689	22800			
	8,9	156,82	1,82	1533	22800			
	11	131,17	2,18	1283	22700			
	12	120,68	2,35	1180	22700			
	13	110,02	2,60	1076	22700			
	14	96,96	2,93	948	22700			
	16	86,16	3,30	843	22700			
	8,3	168,34	0,88	1646	16700	İRAM İRFM İRAFM	83 / 90 L 4a	136 83
	9,2	152,68	0,95	1493	16700			137 88
	10	139,19	1,06	1361	16700			138 90
	11	127,44	1,17	1246	16500			
	12	117,12	1,28	1145	16500			
	14	103,03	1,43	1007	16300			
	15	91,85	1,60	898	16300			
	17	82,47	1,83	806	16300			
	19	74,47	2,00	728	16300			
	21	66,18	2,20	647	16250			
	24	59,39	2,50	581	16250			
	26	53,54	2,80	524	16250			
	29	48,44	3,10	474	16200			
	30	45,93	3,20	449	16200			
	34	41,22	3,60	403	16200			
	38	37,16	4,00	363	16200			
	15	91,36	1,06	893	10000	İRAM İRFM İRAFM	73 / 90 L 4a	133 47
	17	81,25	1,19	795	10000			134 50
	19	72,76	1,26	711	10000			135 53
	21	65,52	1,32	641	10000			
	24	59,41	1,45	581	10000			
	27	52,47	1,66	513	10000			
	30	46,63	1,85	456	10000			
	34	41,66	2,05	407	10000			
	37	37,38	2,30	366	10000			
	45	31,16	2,60	305	10000			
	50	27,84	2,99	272	10000			
	56	24,97	3,10	244	10000			
	62	22,48	3,63	220	10000			
	22	62,455	0,86	611	8950	İRAM İRFM İRAFM	731 / 90 L 4a	130 49
	25	55,543	0,96	543	8900			131 52
	28	49,737	1,06	486	8900			132 55
	31	44,791	1,18	438	8850			



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P ₁	n ₂	i	S _f	M ₂	F _{Qv2}							
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip						
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type						
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ						
[kW] Hp	[r.p.m]			[Nm]	[N]			kg				
1,5 2	35	39,887	1,61	390	8850	İRAM İRFM İRAFM	731 / 90 L 4a	130	49			
	40	35,224	1,76	344	8800			131	52			
	45	31,308	1,90	306	8800			132	55			
	50	27,971	2,10	274	8700							
	56	25,095	2,30	245	8700							
	62	22,590	2,50	221	8600							
	58	24,254	2,20	241	8700	İRAM İRFM İRAFM	721 / 90 L 4a	130	47			
	65	21,388	2,50	212	8600			131	50			
								132	53			
	27	51,65	0,94	505	5400	İRAM İRFM İRAFM	63 / 90 L 4a	127	40			
	30	46,79	1,02	458	5400							
	33	42,55	1,13	416	5400							
	39	35,74	1,35	349	5400							
	47	29,85	1,61	292	5400							
	56	25,16	1,90	246	5400							
	65	21,50	2,20	210	5400							
	68	20,53	2,30	201	5400							
	77	18,18	2,60	178	5400							
	90	15,59	2,90	152	5400							
	101	13,81	3,30	135	5400							
	27	51,65	0,94	505	5400	İRAM İRFM İRAFM	631 / 90 L 4a	124	40			
	30	46,79	1,02	458	5400							
	33	42,55	1,13	416	5400							
	39	35,74	1,35	349	5400							
	47	29,85	1,61	292	5400							
	56	25,16	1,90	246	5400							
	65	21,50	2,20	210	5400							
68	20,53	2,30	201	5400								
77	18,18	2,60	178	5400								
90	15,59	2,90	152	5400								
101	13,81	3,30	135	5400			125	45				
93	15,130	2,70	150	5200	İRAM İRFM İRAFM	62 / 90 L 4a	127	35				
104	13,475	3,10	134	5200								
115	12,200	3,20	121	5200								
126	11,102	3,50	110	5200								
139	10,074	3,80	100	5200								
150	9,350	3,60	93	5200								
165	8,510	3,80	84	5200								
182	7,673	4,00	76	5200								
197	7,100	4,20	70	5200							128	40
93	15,130	2,70	150	5200					İRAM İRFM İRAFM	621 / 90 L 4a	124	35
104	13,48	3,10	134	5200								
115	12,20	3,20	121	5200								
126	11,10	3,50	110	5200								
139	10,07	3,80	100	5200								
150	9,35	3,60	93	5200								
165	8,51	3,80	84	5200								
182	7,67	4,00	76	5200								
197	7,10	4,20	70	5200			125	40				
93	15,130	2,70	150	5200	İRAM İRFM İRAFM	621 / 90 L 4a	126	41				
104	13,48	3,10	134	5200								
115	12,20	3,20	121	5200								
126	11,10	3,50	110	5200								
139	10,07	3,80	100	5200								
150	9,35	3,60	93	5200								
165	8,51	3,80	84	5200								
182	7,67	4,00	76	5200								
197	7,10	4,20	70	5200								



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Monoblock Helical Geared Motors Performance Tables

Monoblock Stirnradgetriebemotoren Leistung und Drehzahlübersicht

P ₁	n ₂	i	S _f	M ₂	F _{QV2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip Type Typ			kg
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads				
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte				
[kW] Hp	[r.p.m]			[Nm]	[N]				
1,5 2	64	21,88	0,82	214	2950	İRAM İRFM İRAFM	53 / 90 L 4a	121	28
	71	19,69	0,91	193	2900				
	79	17,77	1,00	174	2900				
	87	16,07	1,13	157	2800				
	105	13,29	1,18	132	2750	İRAM İRFM İRAFM	52 / 90 L 4a	121	27
	119	11,81	1,33	117	2700				
	133	10,55	1,46	105	2650				
	148	9,47	1,58	94	2600				
	158	8,88	1,72	88	2550				
	176	7,97	1,76	79	2550				
	195	7,17	1,83	71	2550				
	216	6,47	1,96	64	2500				
	241	5,82	2,00	58	2400				
	267	5,25	2,10	52	2350				
	278	5,03	2,15	50	2350				
	310	4,51	2,30	45	2250				
	345	4,06	2,50	40	2200				
	383	3,66	2,70	36	2150				
	423	3,31	2,90	33	2150				
	459	3,05	2,80	30	2150				
	483	2,90	4,10	29	2150				
	545	2,57	4,10	26	2150				
	296	9,47	3,10	47	2350				
	315	8,88	3,10	44	2350				
	351	7,97	3,10	40	2200				
	391	7,17	3,20	36	2200				
	433	6,47	3,50	32	2150				
	481	5,82	3,50	29	2100				
	533	5,25	3,70	26	2000				
	557	5,03	4,00	25	1900				
	621	4,51	4,40	22	1750				
	204	6,872	0,92	68	1000	İRAM İRFM İRAFM	42 / 90 L 4a	118	22
	230	6,080	1,03	60	970				
	253	5,538	1,10	55	970				
	259	5,398	1,14	54	930				
	286	4,900	1,21	49	900				
	291	4,803	1,28	48	860				
	322	4,350	1,35	43	830				
	327	4,280	1,43	42	800				
	370	3,780	1,54	38	770				
	406	3,449	1,72	34	750				
2,2 3	1,4	1012,06	0,85	13871	73000	İRAM İRFM	151 İR 73 / 100 L 4a	168	498
	1,9	735,26	1,18	10078	73000				
	2,4	586,63	1,47	8163	73000	İRAM İRFM	151 İR 72 / 100 L 4a	168	496
	2,9	485,57	1,98	6757	73000				
	3,2	436,68	2,20	6076	73000				
	3,9	359,13	2,67	4997	73000				
	4,6	306,48	3,20	4265	73000				
	1,8	800	0,89	11132	55000	İRAM İRFM	123 İR 72 / 100 L 4a	165	346
	2,0	715	0,99	9949	55000				
	2,2	642	1,10	8933	55000				



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P ₁	n ₂	İ	S _f	M ₂	F _{Q1/2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip			
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type			
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ			
[kW] Hp	[r.p.m]			[Nm]	[N]			 kg	
2,2 3	2,4	579	1,20	8057	55000	İRAM İRFM	123 İR 72 / 100 L 4a	165 166	346 348
	2,5	551	1,25	7667	55000				
	2,9	491	1,40	6832	55000				
	3,2	436	1,60	6067	55000				
	3,6	388	1,75	5399	55000				
	4,0	348	1,95	4842	55000				
	4,5	314	2,10	4369	55000				
	4,9	285	2,40	3966	55000				
	5,4	259	2,60	3604	55000				
	5,9	236	2,90	3284	55000				
	6,5	215	3,20	2992	55000				
	3,3	428	0,82	5956	30700	İRAM İRFM	103 İR 72 / 100 L 4a	163 164	227 230
	3,7	381	0,89	5302	30700				
	4,1	340	0,95	4731	30700				
	4,6	305	1,05	4244	30700				
	5,1	275	1,16	3827	30700				
	5,6	248	1,36	3451	30700	İRAM İRFM	102 İR 72 / 100 L 4a	163 164	220 223
	5,9	239	1,36	3376	30700				
	6,6	211	1,50	2981	30700				
	7,4	188	1,67	2656	30700				
	8,3	168	1,84	2373	30700	İRAPM İRFPM İRAFPM	123 / 132 S 8b	198 199 200	341 343 371
	3,3	209,172	1,36	6000	55000				
	3,8	186,123	1,54	5339	55000	İRAM İRFM İRAFPM	123 / 132 S 8b	145 146 147	337 339 367
	4,2	167,082	1,72	4793	55000				
	4,6	151,088	1,90	4334	55000				
	5,7	122,480	2,50	3513	55000				
	6,3	111,746	2,60	3205	55000				
	7,0	100,314	3,00	2877	50000				
	7,7	90,712	3,30	2602	50000				
	9,2	75,766	3,80	2173	50000				
	3,5	256,048	0,74	5712	30700	İRAM İRFM İRAFPM	103 / 112 M 6a	142 143 144	204 207 229
	4,0	225,112	0,81	5022	30700				
	4,3	207,689	0,89	4633	30700				
	4,9	184,584	1,00	4118	30700				
	5,4	165,496	1,12	3692	30700				
	6,4	140,701	1,36	3139	30700				
	7,1	126,151	1,50	2814	30700				
	5,5	256,048	1,17	3672	30700	İRAM İRFM İRAFPM	103 / 100 L 4a	142 143 144	195 198 220
	6,2	225,112	1,27	3229	30700				
	6,7	207,689	1,38	2979	30700				
	7,6	184,584	1,56	2647	30700				
	8,5	165,496	1,74	2374	30700				
	10	140,701	2,10	2018	30550				
	11	126,151	2,30	1809	30550				
	12	113,930	2,60	1634	30550				
	14	103,519	2,80	1485	30550				
	15	94,544	3,10	1356	30550				
	16	86,727	3,30	1244	30550				
	18	77,321	3,70	1109	30400				





P ₁	n ₂	i	S _f	M ₂	F _{Qu2}							
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip						
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type						
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ						
[kW] Hp	[r.p.m]			[Nm]	[N]			kg				
2,2 3	5,8	240,50	0,80	3449	22500	İRAM İRFM İRAFM	93 / 100 L 4a	139 137				
	6,6	213,60	0,91	3063	22500							
	7,3	191,38	1,02	2745	22500							
	8,1	172,72	1,12	2477	22500							
	8,9	156,82	1,24	2249	22500							
	11	131,17	1,48	1881	22500							
	12	120,68	1,60	1731	22500							
	13	110,02	1,77	1578	22500							
	14	96,96	2,00	1391	22500							
	16	86,16	2,30	1236	22400							
	18	77,10	2,50	1106	22400							
	20	68,65	2,70	985	22400							
	23	60,50	3,00	868	22400							
	26	53,76	3,60	771	22250							
	29	48,11	4,00	690	22250							
	32	43,29	4,50	621	22250							
		11	127,44	0,80	1828				16100	İRAM İRFM İRAFM	83 / 100 L 4a	136 87
		12	117,12	0,87	1680				16100			
		14	103,03	0,97	1478				16100			
		15	91,85	1,10	1317				16100			
17		82,47	1,25	1183	16050							
19		74,47	1,40	1068	16050							
21		66,18	1,55	949	16050							
24		59,39	1,75	852	16000							
26		53,54	1,90	768	16000							
29		48,44	2,10	695	16000							
30		45,93	2,20	659	15900							
34		41,22	2,50	591	15900							
38		37,16	2,70	533	15850							
42		33,62	3,20	482	15800							
47		30,08	3,50	431	15750							
52		27,12	3,80	389	15500							
57		24,54	4,20	352	15300							
63		22,27	4,60	319	15100							
		17	81,25	0,81	1165	9700	İRAM İRFM İRAFM	73 / 100 L 4a	133 51			
		19	72,76	0,86	1044	9700						
	21	65,52	0,90	940	9700							
	24	59,41	0,99	852	9700							
	27	52,47	1,13	753	9700							
	30	46,63	1,26	669	9700							
	34	41,66	1,40	597	9700							
	37	37,38	1,56	536	9700							
	45	31,16	1,77	447	9700							
	50	27,84	1,98	399	9700							
	56	24,97	2,11	358	9700							
	62	22,48	2,47	322	9700							
	69	20,29	2,72	291	9700							
	76	18,35	2,93	263	9700							
	84	16,62	3,20	238	9700							
	93	15,06	3,90	216	9700							



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Monoblock Stirnradgetriebemotoren Leistung und Drehzahlübersicht



P ₁	n ₂	i	S _f	M ₂	F _{QV2}			Tip		
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük			Type		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads			Typ		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte					
[kW] Hp	[r.p.m]			[Nm]	[N]					kg
2,2 3	103	13,53	3,70	197	9350	İRAM İRFM İRAFM	72 / 100 L 4a		133	49
									134	52
									135	55
	31 35 40 45 50 56 62	44,791 39,887 35,224 31,308 27,971 25,095 22,590	0,80 1,10 1,20 1,30 1,45 1,60 1,75	642 572 505 449 401 360 324	8650 8650 8600 8600 8500 8500 8400	İRAM İRFM İRAFM	731 / 100 L 4a		130	53
									131	56
									132	59
	58	24,254	1,50	353	8500	İRAM İRFM İRAFM	721 / C90 L 4		130	47
									131	50
									132	53
	65 74 82 91 102 115 125 142	21,388 19,021 17,033 15,339 13,731 12,126 11,172 9,866	1,70 1,90 2,10 2,30 2,40 2,80 2,90 3,30	311 277 248 223 200 177 163 144	8400 8350 8300 8300 8200 8200 8200 8100	İRAM İRFM İRAFM	721 / 100 L 4a		130	51
									131	54
									132	57
	39 47 56 65 68 77 90 101	35,74 29,85 25,16 21,50 20,53 18,18 15,59 13,81	0,92 1,10 1,30 1,52 1,60 1,80 2,00 2,30	513 428 361 308 294 261 224 198	4550 4550 4550 4550 4550 4550 4550 4550	İRAM İRFM İRAFM	63 / 100 L 4a		127	44
									128	49
									129	50
	39 47 56 65 68 77 90 101	35,74 29,85 25,16 21,50 20,53 18,18 15,59 13,81	0,92 1,10 1,30 1,52 1,60 1,80 2,00 2,30	513 428 361 308 294 261 224 198	4550 4550 4550 4550 4550 4550 4550 4550	İRAM İRFM İRAFM	631 / 100 L 4a		124	44
									125	49
									126	50
	93	15,13	1,87	220	4150	İRAM İRFM İRAFM	62 / C90 L 4		127	35
									128	40
									129	41
	104 115 126 139 150 165 182 197 216 234	13,48 12,20 11,10 10,07 9,35 8,51 7,67 7,10 6,48 5,99	2,10 2,20 2,40 2,60 2,50 2,60 2,70 2,90 3,00 3,20	196 178 162 147 136 124 112 103 94 87	4150 4150 4150 4150 4150 4150 4150 4150 4150 4150	İRAM İRFM İRAFM	62 / 100 L 4a		127	39
									128	44
									129	45





P ₁	n ₂	i	S _f	M ₂	F _{QV2}			Tip		kg
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük			Type		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads			Typ		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte					
[kW] Hp	[r.p.m]			[Nm]	[N]					
2,2 3	93	15,13	1,87	220	4150	İRAM İRFM İRAFM	621 / C90 L 4		124	35
									125	40
									126	41
	104	13,48	2,10	196	4150					
	115	12,20	2,20	178	4150					
	126	11,10	2,40	162	4150					
	139	10,07	2,60	147	4150					
	150	9,35	2,50	136	4150	İRAM İRFM İRAFM	621 / 100 L 4a		124	39
	165	8,51	2,60	124	4150				125	44
	182	7,67	2,70	112	4150				126	45
	197	7,10	2,90	103	4150					
	216	6,48	3,00	94	4150					
	234	5,99	3,20	87	4150					
	105	13,29	0,80	194	2350	İRAM İRFM İRAFM	52 / C90 L 4		121	27
	119	11,81	0,91	172	2250				122	29
									123	30
	133	10,55	1,00	154	2150					
	148	9,47	1,08	138	2100					
	158	8,88	1,17	129	2100					
	176	7,97	1,20	116	2100					
	195	7,17	1,25	104	2100					
	216	6,47	1,33	94	2050					
	241	5,82	1,36	85	2050					
	267	5,25	1,43	76	2050	İRAM İRFM İRAFM	52 / 100 L 4a		121	31
	278	5,03	1,46	73	2050				122	33
	310	4,51	1,60	66	2050				123	34
	345	4,06	1,73	59	2000					
	383	3,66	1,84	53	2000					
	423	3,31	1,97	48	2000					
	459	3,05	1,95	44	2000					
	483	2,90	2,00	42	2000					
	545	2,57	2,20	37	2000					
	265	10,55	2,00	77	2050					
	296	9,47	2,10	69	2050					
	315	8,88	2,10	65	2000					
	351	7,97	2,10	58	1950					
	391	7,17	2,20	52	1900					
	433	6,47	2,30	47	1850	İRAM İRFM İRAFM	52 / 90 L 2a		121	27
	481	5,82	2,30	42	1850				122	29
	533	5,25	2,50	38	1800				123	30
	557	5,03	2,70	37	1800					
	621	4,51	3,00	33	1700					
	690	4,06	3,10	30	1600					
	765	3,66	3,30	27	1550					
	846	3,31	3,50	24	1500					
3 4	1,73	807,34	0,78	15319	73000					
	1,87	747,36	0,86	14181	73000	İRAM İRFM	151 İR 72 / 100 L 4b		168	499
	2,39	586,53	1,08	11129	73000				168	549
	2,88	485,49	1,47	9212	73000					



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Monoblock Stirnradgetriebemotoren Leistung und Drehzahlübersicht

P ₁	n ₂	i	S _f	M ₂	F _{Qv2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip Type Typ			kg
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads				
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte				
[kW] Hp	[r.p.m]			[Nm]	[N]				
3	3,47	403,65	1,53	7659	73000	İRAM İRFM	151 İR 72 / 100 L 4b	168	499
	3,72	376,84	1,91	7150	73000				
	5,02	278,72	2,55	5289	73000				
	5,73	244,45	2,97	4638	73000				
4	2,5	551	0,92	10455	55000	İRAM İRFM	123 İR 72 / 100 L 4b	165	349
	2,9	491	1,03	9317	55000				
	3,2	436	1,17	8273	55000				
	3,6	388	1,28	7362	55000				
	4,0	348	1,43	6603	55000				
	4,5	314	1,57	5958	55000				
	4,9	285	1,76	5408	55000				
	5,4	259	1,94	4914	55000				
	5,9	236	2,10	4478	55000				
	6,5	215	2,30	4080	55000				
	5,1	275	0,87	5218	30000				
	5,6	248	1,02	4706	30000				
	5,9	239	1,02	4535	30000				
	6,6	211	1,12	4004	30000				
	7,4	188	1,25	3567	30000				
	8,3	168	1,38	3188	30000				
	3,3	209,172	1,00	8182	50000	İRAPM İRFPM İRAFPM	123 / 132 M 8a	198	350
								199	352
								200	380
	3,8	186,123	1,13	7280	50000	İRAM İRFM İRAFPM	123 / 132 M 8a	145	346
	4,2	167,082	1,26	6535	50000				
	4,6	151,088	1,39	5910	50000				
	5,7	122,480	1,85	4791	50000				
	6,3	111,746	1,94	4371	50000				
	7,0	100,314	2,20	3924	50000				
	4,3	209,172	1,29	6363	50000	İRAPM İRFPM İRAFPM	123 / 132 S 6b	198	343
								199	345
								200	373
	4,8	186,123	1,45	5662	50000	İRAM İRFM İRAFPM	123 / 132 S 6b	145	339
	5,4	167,082	1,62	5083	50000				
	6,0	151,088	1,79	4596	50000				
	7,3	122,480	2,40	3726	50000				
	8,1	111,746	2,50	3400	50000				
	9,0	100,314	2,80	3052	48000				
	9,9	90,712	3,00	2760	48000				
	11,9	75,766	3,70	2305	48000				
	5,5	256,048	0,86	5008	30000	İRAM İRFM İRAFPM	103 / 100 L 4b	142	198
	6,2	225,112	0,93	4403	30000				
	6,7	207,689	1,00	4062	30000				
	7,6	184,584	1,14	3610	29700				
	8,5	165,496	1,28	3237	29700				
	10	140,701	1,54	2752	29700				
	11	126,151	1,69	2467	29700				
	12	113,930	1,91	2228	29700				
	14	103,519	2,10	2025	29700				
	15	94,544	2,30	1849	29450				



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Monoblock Stirnradgetriebemotoren Leistung und Drehzahlübersicht

P ₁	n ₂	İ	S _f	M ₂	F _{Q1/2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip			
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type			
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ			
[kW] Hp	[r.p.m]			[Nm]	[N]	kg			
3	16	86,727	2,40	1696	29450	İRAM İRFM İRAFM	103 / 100 L 4b	142	198
	18	77,321	2,70	1512	29450			143	201
	21	68,283	3,10	1335	29450			144	223
	23	60,691	3,50	1187	29300				
4	9	156,82	0,91	3067	22000	İRAM İRFM İRAFM	93 / 100 L 4b		
	11	131,17	1,09	2565	22000				
	12	120,68	1,17	2360	22000				
	13	110,02	1,30	2152	22000				
	14	96,96	1,46	1896	22000				
	16	86,16	1,65	1685	21750				
	18	77,10	1,83	1508	21750			139	140
	20	68,65	1,98	1343	21750			140	150
	23	60,50	2,20	1183	21750			141	160
	26	53,76	2,70	1051	21750				
	29	48,11	3,90	941	21750				
	32	43,29	3,30	847	21500				
	36	39,13	3,60	765	21500				
	39	35,52	4,00	695	21500				
	43	32,34	4,40	632	21500				
	5	17	82,47	0,92	1613			15900	İRAM İRFM İRAFM
19		74,47	1,03	1456	15800				
21		66,18	1,14	1294	15700				
24		59,39	1,31	1161	15700				
26		53,54	1,39	1047	15700				
29		48,44	1,57	947	15700				
30		45,93	1,60	898	15500				
34		41,22	1,80	806	15500	136	90		
38		37,16	2,00	727	15500	137	95		
42		33,62	2,30	658	15400	138	97		
47		30,08	2,50	588	15400				
52		27,12	2,80	530	15300				
57		24,54	3,10	480	15100				
63		22,27	3,40	436	14900				
69		20,26	3,70	396	14500				
76		18,47	4,00	361	14250				
83	16,86	4,20	330	14150					
91	15,41	4,30	301	14100					
6	94	14,89	4,40	296	14050	İRAM İRFM İRAFM	82 / 100 L 4b	136	100
	106	13,23	4,80	263	14000			137	105
	118	11,87	5,00	236	14000			138	107
7	27	52,47	0,83	1026	9500	İRAM İRFM İRAFM	73 / 100 L 4b		
	30	46,63	0,92	912	9500				
	34	41,66	1,02	815	9500				
	37	37,38	1,15	731	9500				
	45	31,16	1,30	609	9500				
	50	27,84	1,45	544	9500			133	54
	56	24,97	1,55	488	9500			134	57
	62	22,48	1,81	440	9500			135	60
	69	20,29	2,00	397	9500				
	76	18,35	2,15	359	9500				
	84	16,62	2,35	325	9500				
	93	15,06	2,80	295	9500				



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P ₁	n ₂	i	S _f	M ₂	F _{Qv2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip			
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type			
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ			
[kW] Hp	[r.p.m]			[Nm]	[N]				
3	103	13,53	2,72	269	8800	İRAM İRFM İRAFM	72 / 100 L 4b	133	52
	116	12,02	2,78	239	8800			134	55
	130	10,74	3,20	213	8800			135	58
	150	9,33	3,40	185	8800				
4	168	8,33	3,64	165	8800	İRAM İRFM İRAFM	731 / 100 L 4b	130	56
	35	39,887	0,80	780	8450			131	59
	40	35,224	0,88	689	8400			132	62
	45	31,308	0,95	612	8400				
	50	27,971	1,06	547	8300	İRAM İRFM İRAFM	721 / 100 L 4b	130	54
	56	25,095	1,17	491	8300			131	57
	62	22,590	1,28	442	8200			132	60
	65	21,388	1,25	425	8200				
	74	19,021	1,39	378	8150	İRAM İRFM İRAFM	63 / 100 L 4b	127	47
	82	17,033	1,55	338	8100			128	52
	91	15,339	1,70	305	8100			129	53
	102	13,731	1,75	273	8000				
	115	12,126	2,10	241	8000	İRAM İRFM İRAFM	631 / 100 L 4b	124	47
	125	11,172	2,10	222	8000			125	52
	142	9,866	2,40	196	7900			126	53
	160	8,769	2,50	174	7900				
	179	7,834	2,60	156	7900	İRAM İRFM İRAFM	62 / 100 L 4b	127	47
	199	7,029	2,80	140	7800			128	52
	221	6,327	3,20	126	7800			129	53
	47	29,85	0,81	584	4300				
	56	25,16	0,95	492	4300	İRAM İRFM İRAFM	62 / 100 L 4b	127	47
	65	21,50	1,11	420	4300			128	52
	68	20,53	1,17	402	4300			129	53
	77	18,18	1,32	356	4300				
	90	15,59	1,47	305	4300	İRAM İRFM İRAFM	62 / 100 L 4b	127	47
	101	13,81	1,68	270	4300			128	52
	104	13,48	1,54	268	3750			129	53
	115	12,20	1,61	242	3750				
	126	11,10	1,75	220	3750	İRAM İRFM İRAFM	62 / 100 L 4b	127	47
	139	10,07	1,90	200	3750			128	52
	150	9,35	1,80	186	3750			129	53
	165	8,51	1,90	169	3750				
	182	7,67	2,00	152	3750	İRAM İRFM İRAFM	62 / 100 L 4b	127	47
	197	7,10	2,10	141	3750			128	52
	216	6,48	2,20	129	3750			129	53
	234	5,99	2,30	119	3750				
	245	5,72	3,90	114	3750	İRAM İRFM İRAFM	62 / 100 L 4b	127	47
	263	5,32	3,90	106	3750			128	52
	277	5,06	4,20	100	3750			129	53



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P ₁	n ₂	i	S _f	M ₂	F _{Qv2}			
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ		
[kW] Hp	[r.p.m]			[Nm]	[N]	kg		
3 4	312	4,49	4,50	89	3750	İRAM İRFM İRAFM	62 / 100 L 4b	127 47 128 52 129 53
	351	3,99	4,80	79	3750			
	377	3,71	3,50	74	3750			
	427	3,28	3,60	65	3750			
	481	2,91	3,70	58	3750			
	540	2,59	3,70	51	3750			
	573	2,44	3,70	49	3750			
	104	13,48	1,54	268	3750	İRAM İRFM İRAFM	621 / 100 L 4b	124 42 125 47 126 48
	115	12,20	1,61	242	3750			
	126	11,10	1,75	220	3750			
	139	10,07	1,90	200	3750			
	150	9,35	1,80	186	3750			
	165	8,51	1,90	169	3750			
	182	7,67	2,00	152	3750			
	197	7,10	2,10	141	3750			
	216	6,48	2,20	129	3750			
	234	5,99	2,30	119	3750			
	245	5,72	3,90	114	3750			
	263	5,32	3,90	106	3750			
	277	5,06	4,20	100	3750			
	312	4,49	4,50	89	3750			
	351	3,99	4,80	79	3750			
	377	3,71	3,50	74	3750			
	427	3,28	3,60	65	3750			
	481	2,91	3,70	58	3750			
	540	2,59	3,70	51	3750			
	573	2,44	3,70	49	3750			
	158	8,88	0,86	176	1950	İRAM İRFM İRAFM	52 / 100 L 4b	121 34 122 36 123 37
	176	7,97	0,88	158	1900			
	195	7,17	0,91	142	1850			
	216	6,47	0,98	128	1850			
	241	5,82	1,00	116	1850			
	267	5,25	1,05	104	1800			
	278	5,03	1,07	100	1800			
	310	4,51	1,17	90	1750			
	345	4,06	1,27	81	1750			
	383	3,66	1,35	73	1750			
	423	3,31	1,45	66	1750			
	459	3,05	1,43	61	1750			
	483	2,90	1,50	58	1750			
	545	2,57	1,61	51	1750			
	265	10,55	1,46	105	1750	İRAM İRFM İRAFM	52 / 100 L 2a	121 31 122 33 123 34
	296	9,47	1,60	94	1700			
	315	8,88	1,56	88	1700			
	351	7,97	1,54	79	1650			
	391	7,17	1,63	71	1600			
	433	6,47	1,74	64	1600			
	481	5,82	1,74	58	1550			
	533	5,25	1,85	52	1550			
	557	5,03	2,00	50	1500			
	621	4,51	2,20	45	1500			
	690	4,06	2,30	40	1400			
	765	3,66	2,50	36	1400			
	846	3,31	2,60	33	1350			



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P ₁	n ₂	i	S _f	M ₂	F _{Qv2}			
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ		
[kW] Hp	[r.p.m]			[Nm]	[N]		kg	
4 5,5	2,4	590,59	0,79	14942	70000	İRAM İRFM	151 İR 82 / 112 M 4b	169 556
	2,9	479,79	1,11	12139	70000			169 606
	3,2	431,48	1,25	10916	70000			
	3,9	355,15	1,48	8985	70000			
	4,8	292,73	1,83	7406	70000			
	5,7	244,27	2,18	6180	70000			
	6,9	201,67	2,60	5102	70000			
	3,2	436	0,88	11031	50000	İRAM İRFM	123 İR 72 / 112 M 4b	165 356
	3,6	388	0,96	9816	50000			166 358
	4,0	348	1,07	8804	50000			
	4,5	314	1,18	7944	50000			
	4,9	285	1,32	7210	50000			
	5,4	259	1,45	6553	50000			
	5,9	236	1,60	5971	50000			
	6,5	215	1,76	5439	50000	İRAM İRFM İRBM	151 / 160 M 8a	148 541
	7,7	90,364	2,60	4713	72000			148 591
								149 731
	4,6	151,088	1,04	7880	48000	İRAM İRFM İRAFM	123 / 160 M 8a	145 391
	7,0	100,314	1,65	5232	48000			146 393
								147 421
	4,3	209,172	0,96	8485	47750	İRAPM İRFPM İRAFPM	123 / 132 M 6a	198 343
								199 345
								200 373
	4,8	186,123	1,09	7550	47750	İRAM İRFM İRAFM	123 / 132 M 6a	145 339
	5,4	167,082	1,22	6777	47750			146 341
	6,0	151,088	1,34	6129	47750			147 369
	7,3	122,480	1,80	4968	47750			
	8,1	111,746	1,87	4533	46900			
	9,0	100,314	2,10	4069	46900			
	9,9	90,712	2,30	3680	46900			
	11,9	75,766	2,80	3073	46750	İRAM İRFM İRAFM	103 / 112 M 4b	
	7,6	184,584	0,86	4813	29100			142 205
	8,5	165,496	0,96	4316	29100			143 208
	10	140,701	1,16	3669	29100			144 230
	11	126,151	1,27	3290	29100			
	12	113,930	1,43	2971	29000			
	14	103,519	1,54	2699	29000			
	15	94,544	1,71	2465	29000			
	16	86,727	1,82	2262	29000			
	18	77,321	2,00	2016	29000			
	21	68,283	2,30	1781	29000	İRAM İRFM İRAFM	93 / 112 M 4b	139 147
	23	60,691	2,60	1583	28800			140 157
	26	54,223	3,00	1414	28800			141 167
	29	48,648	3,30	1269	28800			
	32	43,792	3,70	1142	28800			
	11	131,17	0,81	3420	21200			
	12	120,68	0,88	3147	21200	İRAM İRFM İRAFM	93 / 112 M 4b	
	13	110,02	0,97	2869	21200			



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P ₁	n ₂	i	S _f	M ₂	F _{Q1/2}					
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip				
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type				
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ				
[kW] Hp	[r.p.m]			[Nm]	[N]			kg		
4 5,5	14	96,96	1,10	2528	21200	İRAM İRFM İRAFM	93 / 112 M 4b	139 147		
	16	86,16	1,23	2247	21200					
	18	77,10	1,37	2010	21000					
	20	68,65	1,48	1790	21000					
	23	60,50	1,65	1578	21000					
	26	53,76	1,98	1402	20900					
	29	48,11	2,20	1255	20900					
	32	43,29	2,50	1129	20900					
	36	39,13	2,70	1020	20800					
	39	35,52	3,00	926	20800					
	43	32,34	3,30	843	20700					
	47	29,52	3,60	770	20700					
60	23,38	4,30	619	18000	İRAM	92 / 112 M 4b	139 127			
68	20,60	4,50	545	18000	İRFM		140 137			
76	18,31	4,90	485	18000	İRAFM		141 147			
21	66,18	0,85	1726	15400	İRAM İRFM İRAFM	83 / 112 M 4b	136 107			
24	59,39	0,95	1549	15400						
26	53,54	1,05	1396	15400						
29	48,44	1,18	1263	15150						
30	45,93	1,20	1198	15150						
34	41,22	1,35	1075	15150						
38	37,16	1,50	969	15150						
42	33,62	1,76	877	15000						
47	30,08	1,92	784	15000						
52	27,12	2,10	707	14950						
57	24,54	2,30	640	14700						
63	22,27	2,50	581	14350						
69	20,26	2,80	528	14250	İRAM İRFM İRAFM	73 / 112 M 4b	133 61			
76	18,47	3,00	482	14150						
83	16,86	3,10	440	13600						
91	15,41	3,20	402	13600						
94	14,89	3,30	388	13300						
106	13,23	3,60	345	13100						
118	11,87	3,80	310	13000						
131	10,70	4,20	279	13000						
145	9,68	4,60	252	13000						
37	37,38	0,86	975	9300				İRAM İRFM İRAFM	72 / 112 M 4b	134 62
45	31,16	0,97	813	9300						
50	27,84	1,08	726	9300						
56	24,97	1,16	651	9300						
62	22,48	1,36	586	9300						
69	20,29	1,50	529	9300						
76	18,35	1,61	478	9300						
84	16,62	1,76	433	9300						
93	15,06	2,10	393	9300						
103	13,53	2,04	358	8350						
116	12,02	2,15	318	8350						
130	10,74	2,40	284	8350						
150	9,33	2,55	247	8350	İRAM İRFM İRAFM	72 / 112 M 4b	135 65			
168	8,33	2,73	221	8350						
187	7,47	2,91	198	8350						
208	6,73	3,10	178	8350						
231	6,07	3,60	161	8350						





P ₁	n ₂	i	S _f	M ₂	F _{Qu2}			
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ		
[kW] Hp	[r.p.m]			[Nm]	[N]			kg
4 5,5	74	19,021	1,05	504	8000	İRAM İRFM İRAFM	721 / 112 M 4b	130 131 132 <



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P ₁	n ₂	i	S _f	M ₂	F _{QV2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip			
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type			
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte				
[kW] Hp	[r.p.m]			[Nm]	[N]				
4 5,5	104	13,48	1,15	357	3400	İRAM İRFM İRAFM	621 / 112 M 4b		
	115	12,20	1,21	323	3400				
	126	11,10	1,31	294	3400				
	139	10,07	1,43	267	3400				
	150	9,35	1,35	248	3400				
	165	8,51	1,42	225	3400				
	182	7,67	1,50	203	3400				
	197	7,10	1,60	188	3400				
	216	6,48	1,65	172	3400				
	234	5,99	1,76	159	3400				
	245	5,72	2,90	151	3400				
	263	5,32	2,90	141	3400				
	277	5,06	3,10	134	3400				
	312	4,49	3,40	119	3400				
	351	3,99	3,60	106	3400				
	377	3,71	2,60	98	3400				
	427	3,28	2,70	87	3400				
	481	2,91	2,80	77	3400				
	540	2,59	2,80	69	3400				
	573	2,44	2,80	65	3400				
5,5 7,5	3,3	429,06	0,80	14926	65000	İRAM İRFM	151 İR 82 / C112 M 4	169	556
	3,9	355,15	1,09	12355	65000				
	4,8	288,93	1,34	10051	65000	İRAM İRFM	181 / 160 M 8b	150	1023
	4,2	165,414	1,94	11862	85000				
	4,8	145,399	2,10	10426	85000	İRAM İRFM İRBM	151 / 160 M 8b	148	551
	5,0	138,808	2,30	9954	85000				
	7,7	90,364	1,88	6480	72000	İRAM İRFM İRBM	151 / 132 M 6b	148	498
	10	90,364	2,40	5040	72000				
	12	75,868	2,90	4231	72000	İRAM İRFM İRBM	123 / 132 M 6b	146	350
	13	67,166	3,30	3746	72000				
	15	59,978	3,70	3345	72000	İRAM İRFM İRAFM	123 / 132 S 4c	145	337
	6,0	151,088	0,98	8427	45210				
	7,3	122,480	1,31	6831	45210	İRAM İRFM İRAFM	123 / 132 S 4c	146	339
	7,5	186,123	1,23	6673	45210				
	8,4	167,082	1,37	5991	45210	İRAM İRFM İRAFM	123 / 132 S 4c	147	367
	9,3	151,088	1,52	5417	44490				
	11	122,480	1,94	4391	44200	İRAM İRFM İRAFM	123 / 132 S 4c	145	337
	13	111,746	2,00	4007	44100				
	14	100,314	2,30	3597	43800	İRAM İRFM İRAFM	123 / 132 S 4c	146	339
	15	90,712	2,50	3252	43700				
	18	75,766	3,00	2717	43570	İRAM İRFM İRAFM	123 / 132 S 4c	147	367
	21	66,672	3,40	2391	43180				
	24	59,160	3,80	2121	43180	İRAM İRFM İRAFM	123 / 132 S 4c	147	367
	26	52,849	4,30	1895	43180				



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Monoblock Stirnradgetriebemotoren Leistung und Drehzahlübersicht

P ₁	n ₂	İ	S _f	M ₂	F _{Q1/2}			
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ		
[kW] Hp	[r.p.m]			[Nm]	[N]			kg
5,5 7,5	11	126,151	0,92	4523	28500	İRAM İRFM İRAFM 103 / 132 S 4c	142	218
	12	113,930	1,04	4085	28500			
	14	103,519	1,12	3712	28500			
	15	94,544	1,24	3390	28500			
	16	86,727	1,32	3110	28300			
	18	77,321	1,47	2772	28300			
	21	68,283	1,69	2448	28300			
	23	60,691	1,91	2176	28300			
	26	54,223	2,20	1944	28000			
	29	48,648	2,40	1744	28000			
	32	43,792	2,70	1570	27900			
	35	39,525	2,90	1417	27900			
	39	35,870	3,20	1286	27900			
	44	31,677	3,70	1136	27750			
	14	96,96	0,80	3476	20000			
16	86,16	0,90	3089	20000				
18	77,10	1,00	2764	20000				
20	68,65	1,08	2461	20000				
23	60,50	1,20	2169	20000				
26	53,76	1,44	1928	20000				
29	48,11	1,60	1725	20000				
32	43,29	1,80	1552	20000				
36	39,13	1,96	1403	19800				
39	35,52	2,20	1274	19800				
43	32,34	2,40	1160	19800				
47	29,52	2,60	1058	19800				
52	27,01	2,80	968	19600				
57	24,76	3,10	888	19600				
60	23,38	3,10	851	17800	İRAM İRFM İRAFM 92 / 132 S 4c	139	140	
68	20,60	3,30	750	17600				
76	18,31	3,60	666	17450				
85	16,38	3,90	596	17250				
95	14,74	4,20	537	17100				
105	13,32	4,60	485	17000	İRAM İRFM İRAFM 83 / 132 S 4c	136	110	
29	48,44	0,86	1737	14800				
30	45,93	0,87	1647	14800				
34	41,22	0,93	1478	14700				
38	37,16	1,10	1332	14600				
42	33,62	1,28	1205	14500				
47	30,08	1,40	1079	14450				
52	27,12	1,52	972	14250				
57	24,54	1,69	880	14100				
63	22,27	1,85	798	14000				
69	20,26	2,00	726	13750				
76	18,47	2,20	662	13350				
83	16,86	2,30	605	13050				
91	15,41	2,30	553	12800				
94	14,89	2,40	542	12800				İRAM
106	13,23	2,60	482	12200	İRFM	137	125	
118	11,87	2,70	432	12000	İRAFM	138	127	



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P ₁	n ₂	i	S _f	M ₂	F _{Qv2}		
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip	
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type	
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkkräfte	Typ	
[kW] Hp	[r.p.m]			[Nm]	[N]		kg
5,5 7,5	131	10,70	3,10	389	11900	İRAM İRFM İRAFM 82 / 132 S 4c	136 120 137 125 138 127
	145	9,68	3,40	352	11650		
	159	8,79	3,70	320	11250		
	170	8,24	3,80	300	11100		
	188	7,43	4,10	270	10900		
	208	6,72	4,20	245	10800		
	230	6,10	4,50	222	10700		
	252	5,55	4,60	202	10600	İRAM İRFM İRAFM 73 / 132 S 4c	133 74 134 77 135 80
	277	5,06	4,80	184	10500		
	62	22,48	0,99	806	8500		
	69	20,29	1,09	727	8500		
	76	18,35	1,17	658	8500		
	84	16,62	1,28	596	8500		
	93	15,06	1,56	540	8500		
	103	13,53	1,48	493	7870	İRAM İRFM İRAFM 72 / 132 S 4c	133 72 134 75 135 78
	116	12,02	1,56	438	7870		
	130	10,74	2,40	391	7870		
	150	9,33	1,88	340	7870		
	168	8,33	1,98	303	7870		
	187	7,47	2,12	272	7870		
	208	6,73	2,25	245	7870		
	231	6,07	2,62	221	7870		
	255	5,49	2,70	200	7870		
	281	4,99	2,71	182	7870		
	312	4,49	2,83	163	7870		
	346	4,05	2,98	147	7870		
	381	3,67	3,12	134	7870		
	422	3,32	3,30	121	7870		
	465	3,01	3,40	110	7870	İRAM İRFM İRAFM 72 / 132 S 2a	133 72 134 75 135 78
	512	2,73	3,60	99	7870		
	545	2,57	3,60	94	7870		
	461	6,074	4,90	111	7870		
	510	5,494	5,10	100	7870	İRAM İRFM İRAFM 721 / C112 M 4	130 62 131 65 132 68
	561	4,995	5,10	91	7870		
	623	4,497	5,20	82	7870		
	690	4,059	5,50	74	7870		
	91	15,339	0,93	558	7800	İRAM İRFM İRAFM 721 / 132 S 4c	130 74 131 77 132 80
	102	13,731	0,95	500	7800		
	125	11,172	1,16	407	7800		
	115	12,126	1,12	441	7600		
	142	9,866	1,32	359	7550		
	160	8,769	1,36	319	7500		
	179	7,834	1,40	285	7450		
	199	7,029	1,56	256	7400		
	221	6,327	1,72	230	7400		
	245	5,710	1,88	208	7350		
	271	5,164	2,10	188	7350		
	299	4,677	2,20	170	7300		
	330	4,240	2,20	154	7280		
	368	3,809	2,20	139	7250		



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P ₁	n ₂	i	S _f	M ₂	F _{QV2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip			
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type			
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ			
[kW] Hp	[r.p.m]			[Nm]	[N]				
5,5 7,5	407	3,438	2,20	125	7100	İRAM	721 / 132 S 4c	130	74
	450	3,109	2,20	113	7100	İRFM		131	77
	497	2,816	2,20	103	7100	İRAFM		132	80
	548	2,553	2,20	93	7100				
	101	13,81	0,92	495	3300	İRAM	63 / 132 S 4c	127	67
						İRFM		128	72
						İRAFM		129	73
	101	13,81	0,92	495	3300	İRAM	631 / 132 S 4c	124	67
						İRFM		125	72
						İRAFM		126	73
	115	12,20	0,88	444	3000	İRAM	62 / C112 M 4	127	50
	126	11,10	0,95	404	3000	İRFM		128	55
	139	10,07	1,04	367	3000	İRAFM		129	56
	150	9,35	0,98	340	3000				
	165	8,51	1,04	310	3000				
	182	7,673	1,09	279	3000		62 / 132 S 4c		
	197	7,108	1,16	259	3000				
	216	6,480	1,20	236	3000				
	234	5,992	1,28	218	3000				
	245	5,723	2,10	208	3000				
	263	5,325	2,10	194	3000	İRAPM		180	64
	277	5,060	2,30	184	3000	İRFPM		181	69
	311	4,499	2,40	164	3000	İRAFPM		182	70
	350	3,998	2,60	146	3000				
	377	3,711	1,92	135	3000				
	426	3,287	1,96	120	3000				
	480	2,917	2,00	106	3000				
	540	2,592	2,00	94	3000		621 / C112 M 4		
	573	2,444	2,00	89	3000				
	115	12,20	0,88	444	3000	İRAM		124	50
	126	11,10	0,95	404	3000	İRFM		125	55
	139	10,07	1,04	367	3000	İRAFM		126	56
	150	9,35	0,98	340	3000				
	165	8,51	1,04	310	3000				
	182	7,673	1,09	279	3000		621 / 132 S 4c		
	197	7,108	1,16	259	3000				
	216	6,480	1,20	236	3000				
	234	5,992	1,28	218	3000				
	245	5,723	2,10	208	3000				
	263	5,325	2,10	194	3000	İRAPM		177	64
	277	5,060	2,30	184	3000	İRFPM		178	69
	311	4,499	2,40	164	3000	İRAFPM		179	70
	350	3,998	2,60	146	3000				
	377	3,711	1,92	135	3000				
	426	3,287	1,96	120	3000				
	480	2,917	2,00	106	3000				
	540	2,592	2,00	94	3000		62 / 132 S 2a	180	62
	573	2,444	2,00	89	3000			181	67
	394	7,10	2,30	129	3000	İRAPM		182	68
	432	6,48	2,30	118	3000	İRFPM			
	467	5,99	2,30	109	3000	İRAFPM			



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P ₁	n ₂	i	S _f	M ₂	F _{Qv2}			Tip		kg
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük			Type		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads			Typ		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte					
[kW] Hp	[r.p.m]			[Nm]	[N]					
5,5 7,5	490	5,72	4,20	104	3000	İRAPM İRFPM İRAFPM	62 / 132 S 2a		180	62
	526	5,32	4,20	97	3000				181	67
	553	5,06	4,50	92	3000				182	68
	624	4,49	4,80	82	3000					
	702	3,99	5,20	73	3000					
	755	3,71	3,80	68	3000					
	854	3,28	3,90	60	3000					
	394	7,10	2,30	129	3000	İRAPM İRFPM İRAFPM	621 / 132 S 2a		177	64
	432	6,48	2,30	118	3000				178	69
	467	5,99	2,30	109	3000				179	70
	490	5,72	4,20	104	3000					
	526	5,32	4,20	97	3000					
	553	5,06	4,50	92	3000					
	624	4,49	4,80	82	3000					
	702	3,99	5,20	73	3000					
	755	3,71	3,80	68	3000					
	854	3,28	3,90	60	3000					
7,5 10	4,2	165,414	1,42	16175	85000	İRAM İRFM	181 / 160 L 8a		150	1054
	4,8	145,399	1,58	14218	85000				150	1104
	5,0	138,808	1,66	13573	85000					
	5,4	165,414	1,82	12581	85000	İRAM İRFM	181 / 160 M 6b		150	1031
	6,2	145,399	2,00	11058	85000				150	1081
	6,5	138,808	2,10	10557	85000					
	6,8	132,705	2,20	10093	85000					
	7,4	121,763	2,40	9261	85000					
	8,0	112,232	2,60	8536	85000					
	5,4	165,414	2,90	12581	85000					
	6,2	145,399	3,30	11058	85000					
	6,5	138,808	3,40	10557	85000					
	6,8	132,705	3,60	10093	85000					
	7,4	121,763	3,90	9261	85000					
	7,7	90,364	1,38	8836	72000	İRAM İRFM İRBM	151 / 160 L 8a		148	582
									148	632
									149	772
	10	90,364	1,77	6873	70500	İRAM İRFM İRBM	151 / 160 M 6b		148	559
	12	75,868	2,10	5770	70500				148	609
	13	67,166	2,40	5108	70500				149	749
	15	59,978	2,70	4562	70500					
	15	90,364	2,70	4418	70000	İRAM İRFM İRBM	151 / 132 M 4b		148	504
	18	75,868	3,30	3709	70000				148	554
	21	67,166	3,70	3284	70000				149	694
	23	59,978	4,10	2932	70000					
	7,5	186,123	0,90	9100	45210	İRAM İRFM İRAFM	123 / 132 M 4b		145	348
	8,4	167,082	1,00	8169	45210				146	350
	9,3	151,088	1,11	7387	44490				147	378
	11	122,480	1,42	5988	44200					
	13	111,746	1,47	5464	44100					
	14	100,314	1,68	4905	43800					
	15	90,712	1,83	4435	43300					
	18	75,766	2,20	3704	43180					
	21	66,672	2,50	3260	43180					



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Monoblock Stirnradgetriebemotoren Leistung und Drehzahlübersicht

P ₁	n ₂	i	S _f	M ₂	F _{Q1/2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip			
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type			
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ	 		
[kW] Hp	[r.p.m]			[Nm]	[N]				kg
7,5 10	24	59,160	2,80	2893	43180	İRAM İRFM İRAFM	123 / 132 M 4b	145	348
	26	52,849	3,10	2584	43180			146	350
	29	47,474	3,40	2321	42900			147	378
	33	42,840	3,80	2095	42720				
	34	40,700	4,00	1990	42720				
	16	86,727	0,97	4240	27000	İRAM İRFM İRAFM	103 / 132 M 4b	142	229
	18	77,321	1,08	3780	27000			143	232
	21	68,283	1,24	3339	27000			144	254
	23	60,691	1,40	2967	26500				
	26	54,223	1,60	2651	26500				
29	48,648	1,76	2379	26100					
32	43,792	1,97	2141	26000					
35	39,525	2,10	1932	25800					
39	35,870	2,40	1754	28500					
44	31,677	2,70	1549	25500					
50	28,155	3,10	1377	25000					
56	25,155	3,40	1230	24500					
62	22,568	3,80	1103	24200					
20	68,65	0,79	3356	19200	İRAM İRFM İRAFM	93 / 132 M 4b	139	171	
23	60,50	0,88	2958	19200			140	181	
26	53,76	1,05	2628	19100			141	191	
29	48,11	1,17	2352	19000					
32	43,29	1,32	2117	19000					
36	39,13	1,48	1913	19000					
39	35,52	1,60	1737	19000					
43	32,34	1,76	1581	18900					
47	29,52	1,92	1443	18900					
52	27,01	2,10	1321	18800					
57	24,76	2,30	1211	18700					
60	23,38	2,30	1161	17000	İRAM İRFM İRAFM	92 / 132 M 4b	139	151	
68	20,60	2,40	1023	17000			140	161	
76	18,31	2,60	909	17000			141	171	
85	16,38	2,90	813	16800					
95	14,74	3,10	732	16800					
105	13,32	3,40	661	16700					
127	11,01	4,10	547	16550					
139	10,05	4,40	499	16500					
152	9,20	4,50	457	16500					
38	37,16	0,80	1817	14300	İRAM İRFM İRAFM	83 / 132 M 4b	136	121	
42	33,62	0,94	1644	14150			137	126	
47	30,08	1,03	1471	14050			138	128	
52	27,12	1,11	1326	13800					
57	24,54	1,24	1200	13500					
63	22,27	1,36	1089	13350	İRAM İRFM İRAFM	83 / 132 M 4b	136	121	
69	20,26	1,48	991	13150			137	126	
76	18,47	1,60	903	12950			138	128	
83	16,86	1,68	824	12500					
91	15,41	1,72	753	12050					
94	14,89	1,76	739	12050	İRAM İRFM İRAFM	82 / 132 M 4b	136	131	
106	13,23	1,92	657	11800			137	136	
118	11,87	2,00	589	11450			138	138	



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Monoblock Stirnradgetriebemotoren Leistung und Drehzahlübersicht

P ₁	n ₂	i	S _f	M ₂	F _{QV2}		
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip	
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type	
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ	
[kW] Hp	[r.p.m]			[Nm]	[N]		kg
7,5 10	131	10,70	2,20	531	11100	İRAM İRFM İRAFM 82 / 132 M 4b	136 131
	145	9,68	2,50	480	10850		
	159	8,79	2,70	436	10650		
	170	8,24	2,80	409	10500		
	188	7,43	3,00	369	10400		
	208	6,72	3,10	334	10200		
	230	6,10	3,30	303	10100		
	252	5,55	3,40	275	10000		
	277	5,06	3,50	251	9900		
	303	4,62	3,60	229	9800		
	332	4,22	3,70	209	9650		
	346	4,05	3,80	201	9600		
	379	3,69	4,00	183	9500		
	415	3,37	4,20	167	9500		
	455	3,08	4,40	153	9500		
	478	2,93	4,40	145	9500		
	524	2,67	4,50	133	9500		
	590	2,37	4,60	118	9500		
	69	20,29	0,80	992	7600	İRAM İRFM İRAFM 73 / 132 M 4b	133 85
	76	18,35	0,86	897	7600		
	84	16,62	0,94	813	7600		
	93	15,06	1,14	736	7600		
	103	13,53	1,09	672	7500	İRAM İRFM İRAFM 72 / 132 M 4b	133 83
	116	12,02	1,15	597	7500		
	130	10,74	1,28	533	7500		
	150	9,33	1,36	463	7500		
	168	8,33	1,45	413	7500		
	187	7,47	1,56	371	7500		
	208	6,73	1,65	334	7500		
	231	6,07	1,92	301	7500		
	255	5,49	1,98	273	7500		
	281	4,99	1,99	248	7500		
	312	4,49	2,08	223	7500		
	346	4,05	2,18	201	7500		
	381	3,67	2,29	182	7500		
	422	3,32	2,43	165	7500		
	465	3,01	2,50	149	7500		
	512	2,73	2,70	136	7500		
	545	2,57	2,70	128	7500		
	461	6,074	3,60	151	7870	İRAM İRFM İRAFM 72 / 132 S 2c	133 72
	510	5,494	3,70	136	7870		
	561	4,995	3,70	124	7870		
	623	4,497	3,80	112	7870		
	690	4,059	4,00	101	7870		
	115	12,126	0,82	602	7400	İRAM İRFM İRAFM 721 / 132 M 4b	130 85
	142	9,866	0,97	490	7400		
	160	8,769	1,00	435	7370		
	179	7,834	1,03	389	7350		
	199	7,029	1,14	349	7300		
	221	6,327	1,26	314	7300		
	245	5,710	1,38	283	7250		
	271	5,164	1,53	256	7250		



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P ₁	n ₂	i	S _f	M ₂	F _{Qv2}				Tip	
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük				Type	
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads				Typ	
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte					
[kW]	[r.p.m]			[Nm]	[N]					kg
7,5 10	299	4,677	1,60	232	7200	İRAM İRFM İRAFM	721 / 132 M 4b		130	85
	330	4,240	1,64	210	7170					
	368	3,809	1,64	189	7150					
	407	3,438	1,64	171	7000					
	450	3,109	1,64	154	7000					
	497	2,816	1,64	140	7000					
	548	2,553	1,64	127	7000				132	91
11 15	4,2	165,414	0,97	23724	85000	İRAM İRFM	181 / 180 L 8b		150	1096
	4,8	145,399	1,08	20853	85000					
	5,0	138,808	1,13	19908	85000				150	1146
	5,4	165,414	1,24	18452	85000	İRAM İRFM	181 / 160 L 6b		150	1047
	6,2	145,399	1,36	16219	85000					
	6,5	138,808	1,43	15484	85000					
	6,8	132,705	1,50	14803	85000					
	7,4	121,763	1,64	13582	85000					
	8,0	112,232	1,77	12519	85000					
	8,5	165,414	1,99	11862	85000	İRAM İRFM	181 / 160 M 4b		150	1020
	9,6	145,399	2,20	10426	85000					
	10	138,808	2,30	9954	84000					
	11	132,705	2,40	9516	84000					
	11	121,763	2,70	8732	84000					
	12	112,232	2,90	8048	83000					
	16	85,188	3,80	6109	83000					
	10	90,364	1,21	10080	69300	İRAM İRFM İRBM	151 / 160 L 6b		148	575
	12	75,868	1,43	8463	69300					
	13	67,166	1,64	7492	69300					
	15	59,878	1,84	6679	69300					
	15	90,364	1,84	6480	69000	İRAM İRFM İRBM	151 / 160 M 4b		148	548
	18	75,868	2,30	5440	69000					
	21	67,166	2,50	4816	69000					
	23	59,878	2,80	4294	69000					
	29	48,796	3,50	3499	69000					
	11	122,480	0,97	8783	47200	İRAM İRFM İRAFM	123 / C132 M 4		145	350
	13	111,746	1,00	8013	45700					
	14	100,314	1,15	7193	44800	İRAM İRFM İRAFM	123 / 160 M 4b		145	402
	15	90,712	1,25	6505	44300					
	18	75,766	1,50	5433	43870					
	21	66,672	1,70	4781	43180					
	24	59,160	1,90	4242	43180					
	26	52,849	2,20	3790	43180					
	29	47,474	2,40	3404	43000					
	33	42,840	2,60	3072	43000	İRAM İRFM İRAFM	123 / 160 M 4b		145	402
	34	40,700	2,70	2919	43000					
	39	36,114	3,00	2590	42880					
	43	32,262	3,40	2313	42700					
	48	28,980	3,80	2078	42700					
	23	60,691	0,95	4352	25000	İRAM İRFM İRAFM	103 / 160 M 4b		142	283
	26	54,223	1,09	3888	25000					
	29	48,648	1,20	3489	24800					



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P ₁	n ₂	i	S _f	M ₂	F _{Q1/2}			Tip		kg
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük			Type		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads			Typ		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte					
[kW] Hp	[r.p.m]			[Nm]	[N]					
11 15	32	43,792	1,35	3140	24800	İRAM İRFM İRAFM	103 / 160 M 4b	142	283	
	35	39,525	1,45	2834	24500			143	286	
	39	35,870	1,64	2572	24500			144	308	
	44	31,677	1,84	2272	24200					
	50	28,155	2,10	2019	24000					
	56	25,155	2,30	1804	23800					
	62	22,568	2,60	1618	23500					
	69	20,316	2,80	1457	23100					
	76	18,336	3,20	1315	22800					
	84	16,582	3,50	1189	22500					
	93	15,104	3,90	1083	22000					
	79	17,692	3,20	1288	22000	İRAM	102 / 160 M 4b	142	276	
						İRFM		143	279	
						İRAFM		144	301	
	29	48,11	0,80	3450	17800	İRAM İRFM İRAFM	93 / 160 M 4b	139	225	
	32	43,29	0,90	3104	17800			140	235	
	36	39,13	0,98	2806	17600			141	245	
	39	35,52	1,09	2547	17500					
	43	32,34	1,20	2319	17450					
	47	29,52	1,30	2117	17250					
	52	27,01	1,41	1937	17150					
	57	24,76	1,55	1776	17000					
	60	23,38	1,55	1702	15400	İRAM	92 / C132 M 4	139	153	
						İRFM		140	163	
						İRAFM		141	173	
	68	20,60	1,66	1500	15150	İRAM İRFM İRAFM	92 / 160 M 4b	139	205	
	76	18,31	1,80	1333	15000			140	215	
	85	16,38	1,95	1192	14800			141	225	
	95	14,74	2,10	1073	14600					
	105	13,32	2,30	970	14400					
	127	11,01	2,80	802	14150					
	139	10,05	3,00	732	14000					
	152	9,20	3,10	670	13650					
	168	8,31	3,20	605	13400					
	186	7,54	3,60	549	13000					
	204	6,87	3,90	500	12850					
	223	6,27	4,30	456	12700					
	63	22,27	0,92	1597	12150	İRAM İRFM İRAFM	83 / 160 M 4b	136	175	
	69	20,26	1,00	1453	12000			137	180	
	76	18,47	1,10	1324	11900			138	182	
	83	16,86	1,15	1209	11650					
	91	15,41	1,17	1105	11350					
	94	14,89	1,20	1084	11200	İRAM	82 / C132 M 4	136	133	
						İRFM		137	138	
						İRAFM		138	140	
	106	13,23	1,31	963	10950	İRAM İRFM İRAFM	82 / 160 M 4b	136	185	
	118	11,87	1,38	864	10750			137	190	
	131	10,70	1,55	779	10500			138	192	
	145	9,68	1,70	705	10350					
	159	8,79	1,85	640	10050					





P ₁	n ₂	i	S _f	M ₂	F _{Qu2}								
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip							
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type							
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	 							
[kW] Hp	[r.p.m]			[Nm]	[N]	kg							
11 15	170	8,24	1,90	600	9800	İRAM İRFM İRAFM	82 / 160 M 4b	136 137 138	185 190 192				
	188	7,43	2,00	541	9700								
	208	6,72	2,10	489	9600								
	230	6,10	2,20	444	9500								
	252	5,55	2,30	404	9400								
	277	5,06	2,40	368	9300								
	303	4,62	2,50	336	9250								
	332	4,22	2,50	307	9150								
	346	4,05	2,60	295	9050								
	379	3,69	2,70	269	8950								
	415	3,37	2,80	245	8800								
	455	3,08	3,00	224	8700								
	478	2,93	3,00	213	8700								
	524	2,67	3,10	195	8700								
	590	2,37	3,10	173	8700								
	168	8,33	0,99	606	5580	İRAM İRFM İRAFM	72 / C132 M 4	133 134 135	85 88 91				
	187	7,47	1,06	544	5580								
	208	6,73	1,13	490	5580								
	231	6,07	1,30	442	5580								
	255	5,49	1,35	400	5580								
	281	4,99	1,35	363	5580								
	312	4,49	1,42	327	5580								
	346	4,05	1,50	295	5580								
	381	3,67	1,56	267	5580								
	422	3,32	1,66	242	5580								
	465	3,01	1,70	219	5580								
	512	2,73	1,82	199	5580								
	545	2,57	1,82	187	5580								
	461	6,074	2,40	221	7870					İRAM İRFM İRAFM	72 / 132 M 2a	133 134 135	83 86 89
	510	5,494	2,50	200	7870								
561	4,995	2,50	182	7870									
623	4,497	2,60	164	7870									
690	4,059	2,70	148	7870									
15 20	5,4	165,414	0,85	25161	84000	İRAM İRFM	181 / 180 L 6a	150 150	1103 1153				
	6,2	145,399	0,94	22117	84000								
	6,5	138,808	0,98	21114	84000								
	6,8	132,705	1,03	20186	84000								
	7,4	121,763	1,12	18521	84000								
	8,0	112,232	1,22	17072	84000								
	8,5	165,414	1,46	16175	84000	İRAM İRFM	181 / 160 L 4a	150 150	1040 1090				
	9,6	145,399	1,64	14218	84000								
	10	138,808	1,71	13573	83300								
	11	132,705	1,79	12977	83300								
	11	121,763	1,95	11907	83300								
	12	112,232	2,10	10975	82100								
	16	85,188	2,80	8330	82100								
	19	75,308	3,90	7364	81500								
	21	67,935	4,30	6643	81000								
	12	75,868	1,05	11540	69000					İRAM İRFM İRBM	151 / 180 L 6a	148 148 149	631 681 821
	13	67,166	1,20	10217	69000								



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P ₁	n ₂	i	S _f	M ₂	F _{Qv2}			
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ		
[kW] Hp	[r.p.m]			[Nm]	[N]			kg
15 20	15	90,364	1,35	8836	69000	İRAM İRFM İRBM	151 / 160 L 4a	
	18	75,868	1,65	7419	68700			148 568
	21	67,166	1,85	6568	68700			148 618
	23	59,978	2,10	5865	68700			149 758
	29	48,796	2,60	4772	68700			
	35	40,390	3,40	3950	68500			
	39	36,323	3,80	3552	68000			
	15	90,712	0,92	8870	45200	İRAM İRFM İRAFM	123 / 160 L 4a	
	18	75,766	1,10	7409	45000			145 434
	21	66,672	1,25	6520	44800			146 436
	24	59,160	1,39	5785	44400			147 464
	26	52,849	1,58	5168	44250			
	29	47,474	1,72	4642	44000			
	33	42,840	1,90	4189	43780			
	34	40,700	1,98	3980	43540			
	39	36,114	2,20	3531	43500			
	43	32,262	2,50	3155	43400			
	48	28,980	2,80	2834	42700			
	54	26,151	3,10	2557	41800			
	59	23,687	3,40	2316	41000			
	65	21,522	3,70	2105	40000			
	53	26,282	3,00	2609	41800	İRAM İRFM İRAFM	122 / 160 L 4a	145 428
	59	23,766	3,30	2359	41700			146 430
	71	19,850	4,00	1971	41600			147 458
	80	17,468	4,50	1734	41500			
	26	54,223	0,80	5302	23000	İRAM İRFM İRAFM	103 / 160 L 4a	
	29	48,648	0,88	4757	22500			142 315
	32	43,792	0,98	4282	22000			143 318
	35	39,525	1,06	3865	21500			144 340
	39	35,870	1,20	3508	21300			
	44	31,677	1,35	3098	21300			
	50	28,155	1,55	2753	21000			
	56	25,155	1,70	2460	20800			
	62	22,568	1,90	2207	20500			
	69	20,316	2,10	1987	20000			
	76	18,336	2,30	1793	20000			
	84	16,582	2,60	1621	20000			
	93	15,104	2,90	1477	20000			
	79	17,692	2,30	1756	20000	İRAM İRFM İRAFM	102 / 160 L 4a	142 308
	90	15,624	2,70	1551	19500			143 311
	101	13,887	3,00	1379	19500			144 333
	113	12,407	3,40	1232	19000			
	132	10,585	4,10	1051	19000			
	148	9,457	4,50	939	18000			
	68	20,60	1,21	2045	14000	İRAM İRFM İRAFM	92 / 160 L 4a	139 237
	76	18,31	1,32	1818	13900			140 247
	85	16,38	1,43	1626	13800			141 257
	95	14,74	1,54	1463	13750			
	105	13,32	1,70	1322	13600			
	127	11,01	2,00	1093	13500			



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P ₁	n ₂	i	S _f	M ₂	F _{Qv2}			Tip	 	kg
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük			Type		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads			Typ		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte					
[kW] Hp	[r.p.m]			[Nm]	[N]					
15 20	139	10,05	2,20	998	13500	İRAM İRFM İRAFM	92 / 160 L 4a		139	237
	152	9,20	2,30	913	13300					
	168	8,31	2,40	825	13200					
	186	7,54	2,60	749	13050					
	204	6,87	2,90	682	12900					
	223	6,27	3,20	622	12800					
	244	5,74	3,30	570	12600					
	266	5,26	3,30	522	12500					
	316	4,43	3,60	440	12400					
	83	16,86	0,84	1649	10350	İRAM İRFM İRAFM	83 / 160 L 4a		136	207
	91	15,41	0,86	1507	10100					
	106	13,23	0,96	1313	9900	İRAM İRFM İRAFM	82 / 160 L 4a		136	217
	118	11,87	1,01	1178	9700					
	131	10,70	1,14	1062	9650					
	145	9,68	1,25	961	9600					
	159	8,79	1,35	873	9500					
	170	8,24	1,39	818	9300					
	188	7,43	1,50	738	9200					
	208	6,72	1,54	667	9050					
	230	6,10	1,65	606	8950					
	252	5,55	1,70	551	8850					
	277	5,06	1,75	502	8800					
	303	4,62	1,80	459	8700					
	332	4,22	1,85	419	8600					
	346	4,05	1,90	402	8500					
	379	3,69	2,00	366	8350					
	415	3,37	2,10	335	8300					
	455	3,08	2,20	306	8250					
	478	2,93	2,20	290	8250					
	524	2,67	2,30	265	8250					
	590	2,37	2,30	236	8250					
18,5 25	8,5	165,414	1,18	19949	82900	İRAM İRFM	181 / 180 M 4b		150	1069
	9,6	145,399	1,33	17535	82900					
	10	138,808	1,38	16741	82200					
	11	132,705	1,45	16005	82200					
	11	121,763	1,58	14685	82200					
	12	112,232	1,70	13535	81000					
	16	85,188	2,30	10274	81000					
	19	75,308	3,20	9082	80400					
	21	67,935	3,50	8193	79900					
	28	50,881	4,60	6136	79700					
	31	45,734	5,20	5516	79100					
	15	90,364	1,09	10898	68600	İRAM İRFM İRBM	151 / 180 M 4b		148	597
	18	75,868	1,34	9150	68600					
	21	67,166	1,50	8100	68600					
	23	59,978	1,66	7233	68600					
	29	48,796	2,10	5885	68600					
	35	40,390	2,80	4871	68300					
	39	36,323	3,10	4381	68300					
	43	32,859	3,40	3963	67500					
	47	29,873	3,80	3603	67500					
	51	27,273	4,10	3289	67000					



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P ₁	n ₂	i	S _f	M ₂	F _{QV2}	Tip			kg
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Type	Typ		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads				
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte				
[kW] Hp	[r.p.m]			[Nm]	[N]				
18,5 25	18	75,766	0,89	9138	44380	İRAM İRFM İRAFM	123 / 180 M 4b	145	454
	21	66,672	1,01	8041	44350			146	456
	24	59,160	1,13	7135	44300			147	484
	26	52,849	1,28	6374	44250				
	29	47,474	1,40	5725	44150				
	33	42,840	1,55	5167	44100				
	34	40,700	1,60	4909	43540				
	39	36,114	1,78	4355	43500				
	43	32,262	2,00	3891	43400				
	48	28,980	2,30	3495	42800				
	54	26,151	2,50	3154	42300				
	59	23,687	2,70	2857	41500				
	65	21,522	3,00	2596	41500				
	71	19,604	3,30	2364	41500				
	78	17,894	3,60	2158	41500				
	53	26,282	2,40	3218	40000			145	438
	59	23,766	2,60	2910	40000			146	440
								147	468
	71	19,850	3,20	2430	41700	İRAM İRFM İRAFM	122 / 180 M 4b	145	448
	80	17,468	3,60	2139	41600			146	450
	90	15,500	4,10	1898	41500			147	478
	101	13,846	4,60	1695	41370				
	35	39,525	0,86	4767	21000				
	39	35,870	0,97	4326	20450				
	44	31,677	1,09	3820	20100				
	50	28,155	1,25	3396	19800			142	335
	56	25,155	1,38	3034	19600			143	338
	62	22,568	1,54	2722	19000			144	360
	69	20,316	1,70	2450	19000				
	76	18,336	1,90	2211	18900				
	84	16,582	2,10	2000	18900	İRAM İRFM İRAFM	103 / 180 M 4b		
	93	15,104	2,30	1822	18700				
	79	17,692	1,90	2166	18500				
	90	15,624	2,30	1913	18500				
	101	13,887	2,40	1700	18250				
	113	12,407	2,70	1519	18100			142	328
	132	10,585	3,30	1296	18000			143	331
	148	9,457	3,70	1158	17900			144	353
	165	8,485	4,10	1039	17700				
	183	7,638	4,10	935	17700				
	196	7,144	4,20	875	17500				
	85	16,38	1,16	2006	12900	İRAM İRFM İRAFM	102 / 180 M 4b		
	95	14,74	1,25	1805	12750				
	105	13,32	1,38	1631	12650				
	127	11,01	1,65	1348	12450			139	257
	139	10,05	1,78	1231	12350			140	267
	152	9,20	1,82	1126	12200			141	277
	168	8,31	1,90	1017	12100				
	186	7,54	2,10	923	12050				
	204	6,87	2,30	841	12000				
	223	6,27	2,60	768	11850				





P ₁	n ₂	i	S _f	M ₂	F _{Qu2}								
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip							
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type							
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ							
[kW] Hp	[r.p.m]			[Nm]	[N]	kg							
18,5 25	244	5,74	2,70	703	11800	İRAM İRFM İRAFM	92 / 180 M 4b	139 140 141	257 267 277				
	266	5,26	2,70	644	11750								
	316	4,43	2,90	542	11750								
	343	4,08	3,00	500	11600								
	373	3,75	3,40	459	11500								
	391	3,58	3,50	438	11850								
	452	3,10	3,50	380	11850								
	504	2,78	3,50	340	11850								
	548	2,55	3,60	313	11850								
	571	2,45	3,60	300	11850								
	131	10,70	0,92	1310	9400	İRAM İRFM İRAFM	82 / 180 M 4b	136 137 138	237 242 244				
	145	9,68	1,01	1185	9300								
	159	8,79	1,10	1076	9250								
	188	7,43	1,22	910	9050								
	208	6,72	1,25	823	8950								
	230	6,10	1,34	747	8850								
	252	5,55	1,38	680	8750								
	277	5,06	1,42	620	8650								
	303	4,62	1,46	566	8550								
	332	4,22	1,50	517	8400								
346	4,05	1,54	496	8250	İRAM İRFM İRAFM	181 / 180 L 4b	150 150	1079 1129					
379	3,69	1,62	452	8150									
415	3,37	1,70	413	8050									
455	3,08	1,78	377	8000									
478	2,93	1,78	358	8000									
524	2,67	1,82	327	8000									
590	2,37	1,86	291	8000									
22 30	8	165,414	1,00	23724					81500	İRAM İRFM	181 / 180 L 4b	150 150	1079 1129
	10	145,399	1,12	20853					81500				
	10	138,808	1,16	19908					80800				
	11	132,705	1,22	19032	80800								
	11	121,763	1,33	17463	80800								
	12	112,232	1,43	16096	79600								
	16	85,188	1,91	12218	79500								
	19	75,308	2,70	10801	78900								
	21	67,935	2,90	9743	78400								
	28	50,881	3,90	7297	78200								
	31	45,734	4,40	6559	77600								
	15	90,364	0,92	12960	68000	İRAM İRFM İRBM	151 / 180 L 4b	148 148 149	607 657 797				
	18	75,868	1,13	10881	68000								
	21	67,166	1,26	9633	68000								
	23	59,978	1,40	8602	67700								
	29	48,796	1,74	6998	67500								
	35	40,390	2,40	5793	67500								
	39	36,323	2,60	5209	67000								
	43	32,859	2,80	4713	66800								
	47	29,873	3,20	4284	66800								
51	27,273	3,50	3911	66500									
56	24,833	3,80	3562	66000									
62	22,671	4,10	3251	65000									



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P ₁	n ₂	i	S _f	M ₂	F _{QV2}		
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip	
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type	
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkkräfte	Typ	
[kW] Hp	[r.p.m]			[Nm]	[N]		kg
22 30	24	59,160	0,95	8485	44000	İRAM İRFM İRAFM 123 / 180 L 4b	145 479
	26	52,849	1,08	7580	44000		
	29	47,474	1,18	6809	44000		
	33	42,840	1,30	6144	43900		
	34	40,700	1,35	5837	43700		
	39	36,114	1,50	5179	43600		
	43	32,262	1,70	4627	43400		
	48	28,980	1,90	4156	43000		
	54	26,151	2,10	3751	42500		
	59	23,687	2,30	3397	42000		
	65	21,522	2,50	3087	41500		
	71	19,604	2,80	2812	41500		
	78	17,894	3,10	2566	41500		
	71	19,850	2,70	2890	41000		
	80	17,468	3,00	2543	41000		
	90	15,500	3,50	2257	41000		
	101	13,846	3,90	2016	41000	İRAM İRFM İRAFM 122 / 180 L 4b	145 473
	113	12,438	4,30	1811	40140		
	122	11,495	4,60	1674	40140		
	44	31,677	0,92	4543	20000		
	50	28,155	1,05	4038	19500		
	56	25,155	1,16	3608	19500		
	62	22,568	1,30	3237	19100		
	69	20,316	1,43	2914	19000		
	76	18,336	1,60	2630	18700		
	84	16,582	1,77	2378	18500		
	93	15,104	1,98	2166	18000		
	79	17,692	1,60	2576	17600		
	90	15,624	1,92	2275	17200		
	101	13,887	2,10	2022	17000		
	113	12,407	2,30	1806	16700		
	132	10,585	2,80	1541	16500		
	148	9,457	3,10	1377	16300	İRAM İRFM İRAFM 103 / 180 L 4b	142 360
	165	8,485	3,40	1235	16000		
	183	7,638	3,50	1112	16000		
	196	7,144	3,60	1040	16000		
	219	6,382	3,70	929	15700		
	244	5,726	3,80	834	15700		
	272	5,154	3,90	750	15700		
	301	4,652	4,10	677	15500		
	333	4,207	4,20	613	15500		
	376	3,723	3,90	542	15500		
	417	3,360	4,00	489	15000		
	461	3,039	4,00	442	15000		
	509	2,752	4,10	401	15000		
	561	2,495	4,10	363	15000		
	619	2,263	4,10	329	15000		
	79	17,692	1,60	2576	17600	İRAM İRFM İRAFM 102 / 180 L 4b	142 353
	90	15,624	1,92	2275	17200		
	101	13,887	2,10	2022	17000		
	113	12,407	2,30	1806	16700		
	132	10,585	2,80	1541	16500		
	148	9,457	3,10	1377	16300		
	165	8,485	3,40	1235	16000	İRAM İRFM İRAFM 102 / 180 L 4b	143 356
	183	7,638	3,50	1112	16000		
	196	7,144	3,60	1040	16000		
	219	6,382	3,70	929	15700		
	244	5,726	3,80	834	15700		
	272	5,154	3,90	750	15700		
	301	4,652	4,10	677	15500	İRAM İRFM İRAFM 102 / 180 L 4b	144 378
	333	4,207	4,20	613	15500		
	376	3,723	3,90	542	15500		
	417	3,360	4,00	489	15000		
	461	3,039	4,00	442	15000		
	509	2,752	4,10	401	15000		
	561	2,495	4,10	363	15000	İRAM İRFM İRAFM 102 / 180 L 4b	144 378
	619	2,263	4,10	329	15000		
	105	13,32	1,16	1939	12100	İRAM İRFM İRAFM 92 / 180 L 4b	139 282
	127	11,01	1,39	1603	11800		
	139	10,05	1,50	1463	11700		
	152	9,20	1,53	1340	11500		
	168	8,31	1,60	1210	11100		
	186	7,54	1,79	1098	10900		



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P ₁	n ₂	i	S _f	M ₂	F _{Q1/2}			
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ		
[kW] Hp	[r.p.m]			[Nm]	[N]			kg
22 30	204	6,87	1,96	1000	10900	İRAM İRFM İRAFM	92 / 180 L 4b	139 282
	223	6,27	2,20	913	10800			
	244	5,74	2,20	836	10700			
	266	5,26	2,30	766	10600			
	316	4,43	2,40	645	10600			
	343	4,08	2,50	594	10500			
	373	3,75	2,90	546	10500			
	391	3,58	2,90	521	10500			
	452	3,10	2,90	451	10500			
	504	2,78	3,00	404	10500			
	548	2,55	3,00	372	10500			
	571	2,45	3,00	357	10500			
	208	6,72	1,05	978	8750	İRAM İRFM İRAFM	82 / 180 L 4b	136 262
	230	6,10	1,12	888	8600			
	252	5,55	1,16	808	8450			
	277	5,06	1,19	737	8350			
	303	4,62	1,23	673	8250			
	332	4,22	1,26	614	8050			
	346	4,05	1,30	590	7900			
	379	3,69	1,36	537	7800			
	415	3,37	1,43	491	7700			
	455	3,08	1,50	448	7600			
	478	2,93	1,50	426	7600			
	524	2,67	1,53	389	7600			
	590	2,37	1,57	346	7600			
30 40	16	85,188	1,40	16660	78100	İRAM İRFM	181 / 200 L 4c	150 1125
	19	75,308	1,97	14728	77500			
	21	67,935	2,20	13286	77000			
	28	50,881	2,80	9951	76800			
	31	45,734	3,20	8944	76200			
	34	41,350	3,50	8087	76000			
	37	37,963	4,50	7424	75500			
	41	34,324	4,90	6713	75000			
	29	48,796	1,28	9543	66000	İRAM İRFM İRBM	151 / 200 L 4c	148 653
	39	36,323	1,90	7104	66000			
	43	32,859	2,10	6426	65400			
	47	29,873	2,40	5842	65200			
	51	27,273	2,50	5334	65000			
	56	24,833	2,80	4857	64900			
	62	22,671	3,00	4434	64500			
	67	20,772	3,30	4062	64200			
	73	19,089	3,60	3733	64000			
	74	18,795	3,50	3676	63000			
	82	17,002	3,90	3325	63000			
	87	16,126	4,30	3154	62400			
	29	47,474	0,86	9285	44250	İRAM İRFM İRAFM	123 / 200 L 4c	145 534
	33	42,840	0,95	8378	44250			
	34	40,700	0,99	7960	44000			
	39	36,114	1,10	7063	44000			
	43	32,262	1,25	6310	43990			
	48	28,980	1,39	5668	43970			
	54	26,151	1,54	5114	43000			



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P ₁	n ₂	i	S _f	M ₂	F _{QV2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip Type Typ			kg
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads				
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte				
[kW] Hp	[r.p.m]			[Nm]	[N]				
30	59	23,687	1,69	4632	42000	İRAM İRFM İRAFM	123 / 200 L 4c	145	534
	65	21,522	1,85	4209	42000				
	71	19,604	2,10	3834	41500				
	78	17,894	2,30	3500	41500				
40	80	17,468	2,20	3468	42000	İRAM İRFM İRAFM	122 / 200 L 4c	145	528
	90	15,500	2,50	3078	42000				
	101	13,846	2,80	2749	41800				
	113	12,438	3,20	2470	40500				
	122	11,495	3,40	2282	40500				
	137	10,200	3,80	2025	40210				
	154	9,112	4,20	1809	39100				
	171	8,185	4,30	1625	38900				
	181	7,724	4,40	1534	38440				
	202	6,938	4,40	1378	38000				
	224	6,261	4,40	1243	37800				
	247	5,671	4,40	1126	37400				
	272	5,153	4,30	1023	37400				
	298	4,694	4,30	932	37400				
	327	4,284	4,30	851	37400				
	357	3,917	4,30	778	37400				
	391	3,585	4,30	712	37400				
	426	3,284	4,30	652	37400				
	62	22,57	0,95	4414	15900	İRAM İRFM İRAFM	103 / 200 L 4c	142	415
	69	20,32	1,05	3973	15900				
	76	18,34	1,17	3586	15900				
	84	16,58	1,30	3243	15900				
	93	15,10	1,45	2954	15900				
	90	15,624	1,41	3102	15700	İRAM İRFM İRAFM	102 / 200 L 4c	142	408
	101	13,887	1,50	2757	15700				
	113	12,407	1,69	2463	15500				
	132	10,585	2,00	2102	15100				
	148	9,457	2,30	1878	15100				
	165	8,485	2,50	1685	14800				
	183	7,638	2,60	1517	14500				
	196	7,144	2,60	1418	14500				
	219	6,382	2,70	1267	14500				
	244	5,726	2,80	1137	14500				
	272	5,154	2,80	1023	14350				
	301	4,652	3,00	924	14100				
	333	4,207	3,00	835	14100				
	376	3,723	2,90	739	14100				
	417	3,360	2,90	667	14100				
	461	3,039	2,90	603	13850				
	509	2,752	3,00	546	13850				
	561	2,495	3,00	495	13850				
	619	2,263	3,00	449	13850				
	204	6,87	1,43	1364	10600	İRAM İRFM İRAFM	92 / 200 L 4c	139	337
	223	6,27	1,57	1245	10500				
	244	5,74	1,63	1140	10500				
	266	5,26	1,66	1044	10350				
	316	4,43	1,78	880	10200				
	343	4,08	1,82	810	10100				



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P ₁ GÜÇ Power Leistung [kW] Hp	n ₂ Çıkış Devri Output Speeds Abtriebswelle Drehzahlen [r.p.m]	i Tahvil Ratio Übersetzung	S _f Servis Faktörü Service Factor Betriebsfaktor	M ₂ Çıkış Momenti Output Torque Abtriebswelle Drehmomente [Nm]	F _{QV2} Rad. Yük Over Loads Querkräfte [N]	Tip Type Typ	 kg	
30 40	373	3,75	2,10	745	10000	İRAM İRFM İRAFM 92 / 200 L 4c	139	337
	391	3,58	2,10	711	10000		140	347
	452	3,10	2,10	616	10000		141	357
	504	2,78	2,20	551	10000			
	548	2,55	2,20	507	10000			
	571	2,45	2,20	486	10000			
37 50	19	75,308	1,60	18165	76700	İRAM İRFM 181 / 225 S 4a	150	1161
	21	67,935	1,75	16386	76100		150	1211
	28	50,881	2,30	12273	75600			
	31	45,734	2,60	11031	75400			
	34	41,350	2,80	9974	74800			
	37	37,963	3,60	9157	74600			
	41	34,324	4,00	8279	74100			
	45	31,187	4,40	7522	73600			
	49	28,454	4,90	6863	73600			
	29	48,796	1,03	11770	64750	İRAM İRFM İRBM 151 / 225 S 4a	148	689
	39	36,323	1,55	8761	64750		148	739
	43	32,859	1,69	7926	64100		149	879
	47	29,873	1,90	7206	63900			
	51	27,273	2,10	6578	63650			
	56	24,833	2,30	5990	63500			
	62	22,671	2,40	5468	63300			
	67	20,772	2,70	5010	63000			
	73	19,089	2,90	4604	63000			
	74	18,795	2,80	4533	62700			
	82	17,002	3,20	4101	62500			
	87	16,126	3,50	3890	62200			
	93	15,003	3,70	3619	61900			
	97	14,363	3,70	3464	61700			
	106	13,200	4,10	3184	61500			
	43	32,262	1,01	7782	44000	İRAM İRFM İRAFM 123 / 225 S 4a	145	569
	48	28,980	1,13	6990	43970		146	571
	54	26,151	1,25	6308	42300		147	599
	59	23,687	1,38	5713	41500			
	65	21,522	1,50	5191	41000			
	71	19,604	1,66	4729	41000			
	78	17,894	1,82	4316	41500			
	80	17,468	1,82	4278	41000	İRAM İRFM İRAFM 122 / 225 S 4a	145	513
	90	15,500	2,00	3796	41000		146	515
	101	13,846	2,30	3391	40900		147	543
	113	12,438	2,60	3046	40140			
	122	11,495	2,70	2815	40140			
	137	10,200	3,10	2498	40210			
	154	9,112	3,40	2231	39100			
	171	8,185	3,50	2004	38900			
	181	7,724	3,60	1891	38440			
	202	6,938	3,60	1699	38000			
	224	6,261	3,60	1533	37800			
	247	5,671	3,60	1389	37400			
	272	5,153	3,50	1262	37400			
	298	4,694	3,50	1149	37400			
	327	4,284	3,50	1049	37400			



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P ₁	n ₂	i	S _f	M ₂	F _{Q1/2}			Tip		
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük			Type		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads			Typ		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte					
[kW] Hp	[r.p.m]			[Nm]	[N]				kg	
37 50	357	3,917	3,50	959	37400	İRAM İRFM İRAFM	122 / 225 S 4a	145	513	
	391	3,585	3,50	878	37400			146	515	
	426	3,284	3,50	804	37400			147	543	
	90	15,624	1,14	3826	15000	İRAM İRFM İRAFM	102 / 225 S 4a			
	101	13,887	1,22	3401	14600					
	113	12,407	1,37	3038	14600					
	132	10,585	1,65	2592	14350					
	148	9,457	1,85	2316	14350					
	165	8,485	2,00	2078	14100					
	183	7,638	2,10	1870	14100					
	196	7,144	2,10	1749	14100					
	219	6,382	2,20	1563	14100			142	443	
	244	5,726	2,20	1402	13800			143	446	
	272	5,154	2,30	1262	13800			144	468	
	301	4,652	2,40	1139	13800					
	333	4,207	2,50	1030	13800					
	376	3,723	2,30	912	13500					
	417	3,360	2,40	823	13500					
	461	3,039	2,40	744	13500					
	509	2,752	2,40	674	13450					
	561	2,495	2,40	611	13300					
	619	2,263	2,40	554	13200					
	45 60	21	67,935	1,44	19929	75340	İRAM İRFM	181 / 225 M 4c		
		28	50,881	1,89	14926	74740				
		31	45,734	2,10	13416	74240				
		34	41,350	2,30	12130	74040				
37		37,963	3,00	11137	73440				150	1185
41		34,324	3,30	10069	73240				150	1235
45		31,187	3,60	9149	72740					
49		28,454	4,00	8347	72240					
54		26,053	4,30	7643	72240					
65		21,694	5,20	6364	72000					
70		19,923	5,70	5845	71500					
43		32,859	1,39	9639	63100	İRAM İRFM İRBM	151 / 225 M 4c			
47		29,873	1,57	8763	62900					
51		27,273	1,70	8001	62650					
56		24,833	1,85	7285	62500					
62		22,671	2,00	6651	62300					
67		20,772	2,20	6094	62000					
73		19,089	2,40	5600	62000					
74		18,795	2,30	5514	61700			148	713	
82		17,002	2,60	4988	61500			148	769	
87		16,126	2,80	4731	61200			149	903	
93		15,003	3,10	4401	60900					
97		14,363	3,10	4213	60700					
106		13,200	3,30	3872	60500					
114		12,280	3,50	3602	60000					
123		11,388	3,60	3341	60000					
124	11,285	3,90	3311	60000						
135	10,344	3,90	3034	60000						



i.Mak[®] Monoblok Helisel Dişlili Motorlu Redüktörler Güç ve Devir Tablosu
Monoblock Helical Geared Motors Performance Tables
Monoblock Stirnradgetriebemotoren Leistung und Drehzahlübersicht



P ₁	n ₂	i	S _f	M ₂	F _{QV2}			Tip		kg
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük			Type		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads			Typ		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkkräfte					
[kW]	[r.p.m]			[Nm]	[N]					
Hp										
45	54	26,151	1,03	7672	42500	İRAM	123 / 225 M 4c		145	614
	59	23,687	1,12	6949	41500				146	616
	65	21,522	1,23	6314	41500				147	644
60	71	19,604	1,37	5751	41500	İRFM				
	78	17,894	1,50	5249	41500					
	80	17,468	1,50	5202	40200	İRAM	122 / 225 M 4c		145	608
	90	15,500	1,70	4616	40200					
	101	13,846	1,90	4124	40200					
	113	12,438	2,10	3704	40200					
	122	11,495	2,30	3423	40140					
	137	10,200	2,50	3038	40210					
	154	9,112	2,80	2714	39100					
	171	8,185	2,90	2438	38900					
	181	7,724	2,90	2300	38440					
	202	6,938	2,90	2066	38000					
	224	6,261	2,90	1865	37800					
	247	5,671	2,90	1689	36200					
	272	5,153	2,90	1535	36200					
	298	4,694	2,90	1398	36200					
	327	4,284	2,90	1276	36200					
	357	3,917	2,90	1167	36000					
	391	3,585	2,90	1068	36000					
	426	3,284	2,90	978	36000					
	101	13,887	1,00	4136	14000					
	113	12,407	1,12	3695	14000					
	132	10,585	1,35	3152	14000					
	148	9,457	1,52	2817	14000	İRAM	102 / 225 M 4c		142	488
	165	8,485	1,68	2527	13800					
	183	7,638	1,71	2275	13800					
	196	7,144	1,76	2128	13800					
	219	6,382	1,80	1901	13500					
	244	5,726	1,85	1705	13500					
	272	5,154	1,90	1535	13500					
	301	4,652	2,00	1385	13500					
	333	4,207	2,00	1253	13500					
	376	3,723	1,90	1109	13500					
	417	3,360	1,96	1001	13300					
	461	3,039	1,96	905	13300					
	509	2,752	2,00	820	13000					
	561	2,495	2,00	743	13000					
	619	2,263	2,00	674	13000					
55	28	50,881	1,55	18243	73380	İRAM	181 / C225 M 4		150	1241
	75								150	1291
75	31	45,734	1,75	16398	72880	İRFM				
	34	41,350	1,92	14826	72680					
	37	37,963	2,40	13612	72080					
	41	34,324	2,70	12307	71880					
	45	31,187	2,90	11182	71380					
	49	28,454	3,30	10202	70880					
	54	26,053	3,50	9341	70880					
	65	21,694	4,20	7778	70640					
	70	19,923	4,60	7143	70140					



Monoblok Helisel Dişlili Motorlu Redüktörler Güç ve Devir Tablosu

Monoblock Helical Geared Motors Performance Tables

Monoblock Stirnradgetriebemotoren Leistung und Drehzahlübersicht

P ₁	n ₂	i	S _f	M ₂	F _{QV2}				
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip Type Typ			kg
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads				
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte				
[kW] Hp	[r.p.m]			[Nm]	[N]				
55 75	76	18,344	5,00	6577	70100	İRAM İRFM	181 / 250 M 4c	150	1291
	83	16,926	5,40	6069	70050				
	87	16,027	5,90	5746	70000				
	90	15,544	4,00	5573	70000				
	101	13,912	4,60	4988	70000				
	47	29,873	1,28	10711	61450	İRAM İRFM İRBM	151 / 250 M 4c	148	819
	51	27,273	1,39	9779	61200				
	56	24,833	1,51	8904	61050				
	62	22,671	1,65	8129	60850				
	67	20,772	1,81	7448	60550				
	73	19,089	1,96	6844	60550				
	74	18,795	1,92	6739	60250				
	82	17,002	2,10	6096	60050				
	87	16,126	2,30	5782	59750				
	93	15,003	2,50	5379	59450				
	97	14,363	2,50	5150	59250				
	106	13,200	2,70	4733	59050				
	114	12,280	2,90	4403	58550				
	123	11,388	2,90	4083	58550				
	124	11,285	3,20	4046	58500				
	135	10,344	3,20	3709	58500				
	148	9,435	3,50	3383	58000				
	155	9,023	3,70	3235	57800				
	162	8,636	3,80	3096	57500				
	177	7,928	4,20	2843	57000				
	80	17,468	1,23	6358	40500	İRAM İRFM İRAFM	122 / C225 M 4	145	648
	90	15,500	1,39	5642	40500				
	101	13,846	1,55	5040	40500				
	113	12,438	1,75	4528	40140				
	122	11,495	1,85	4184	40140				
	137	10,200	2,10	3713	40210				
	154	9,112	2,30	3317	39100				
	171	8,185	2,30	2979	38900				
	181	7,724	2,30	2812	38440				
	202	6,938	2,30	2525	38000				
	224	6,261	2,40	2279	35600	İRAM İRFM İRAFM	122 / 250 M 4c	145	574
	247	5,671	2,40	2064	35600				
	272	5,153	2,30	1876	35600				
	298	4,694	2,30	1709	35600				
	327	4,284	2,30	1559	35000				
	357	3,917	2,30	1426	35000				
	391	3,585	2,30	1305	35000				
	426	3,284	2,30	1195	35000				
75 100	34	41,350	1,41	20217	71200	İRAM İRFM	181 / 280 S 4	150	1414
	37	37,963	1,79	18561	70600				
	41	34,324	1,96	16782	70400				
	45	31,187	2,20	15248	69900				
	49	28,454	2,40	13912	69400				
	54	26,053	2,60	12738	69400				
	65	21,694	3,10	10607	69160				
	76	18,344	3,70	8969	68660				
	83	16,926	4,00	8276	68620				



Monoblok Helisel Dişlili Motorlu Redüktörler Güç ve Devir Tablosu

Monoblock Helical Geared Motors Performance Tables

Monoblock Stirnradgetriebemotoren Leistung und Drehzahlübersicht

P ₁	n ₂	i	S _f	M ₂	F _{QV2}			
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip Type Typ		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads			
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte			
[kW] Hp	[r.p.m]			[Nm]	[N]			kg
75 100	87	16,027	2,90	7836	68570	İRAM İRFM	181 / 280 S 4	150 1414
	90	15,544	4,30	7600	68520			
	101	13,912	3,40	6802	68520			
	115	12,200	3,80	5965	68520			
	130	10,785	4,30	5273	68520			
	67	20,772	1,33	10156	59400	İRAM İRFM İRBM	151 / 280 S 4	148 942
	73	19,089	1,44	9333	59400			
	74	18,795	1,41	9189	59100			
	82	17,002	1,56	8313	58900			
	87	16,126	1,72	7884	58600			
	93	15,003	1,84	7335	58600			
	97	14,363	1,84	7022	58100			
	106	13,200	2,00	6454	57900			
	114	12,280	2,10	6004	57400			
	124	11,285	2,30	5518	57300			
	135	10,344	2,40	5057	57300			
	148	9,435	2,60	4613	57300			
	155	9,023	2,70	4412	56150			
	162	8,636	2,80	4222	56150			
	177	7,928	3,10	3876	56000			
	183	7,639	2,80	3735	56000			
	192	7,297	3,30	3568	55400			
	201	6,967	3,00	3406	55100			
	210	6,663	3,00	3258	55000			
	220	6,377	3,10	3118	54800			
	239	5,854	3,30	2862	54800			
	257	5,454	3,00	2667	54500			
	268	5,220	3,10	2552	54000			
	292	4,792	3,30	2343	54000			
	372	3,759	3,80	1838	54000			
90 120	41	34,324	1,64	20138	68680	İRAM İRFM	181 / 280 M 4	150 1468
	45	31,187	1,81	18298	68180			
	49	28,454	2,00	16694	67680			
	54	26,053	2,20	15286	67680			
	65	21,694	2,60	12728	67440			
	70	19,923	2,80	11689	66940			
	76	18,344	3,10	10763	66900			
	83	16,926	3,30	9931	66850			
	87	16,027	2,40	9403	66800			
	90	15,544	3,60	9120	66800			
	101	13,912	2,80	8162	66500			
	115	12,200	3,20	7158	66300			
	130	10,785	3,60	6328	66150			
	146	9,597	4,00	5631	66000			
	82	17,002	1,30	9975	57900	İRAM İRFM İRBM	151 / 280 M 4	148 996
	87	16,126	1,43	9461	57600			
	93	15,003	1,53	8802	57600			
	97	14,363	1,53	8427	57100			
	106	13,200	1,67	7745	56900			
	114	12,280	1,77	7205	56400			
	124	11,285	1,93	6621	56300			
	135	10,344	1,97	6069	56300			



i.Mak® Monoblok Helisel Dişlili Motorlu Redüktörler Güç ve Devir Tablosu
Monoblock Helical Geared Motors Performance Tables
Monoblock Stirnradgetriebemotoren Leistung und Drehzahlübersicht



P ₁	n ₂	i	S _f	M ₂	F _{QV2}		
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük	Tip	
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads	Type	
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte	Typ	
[kW] Hp	[r.p.m]			[Nm]	[N]		kg
90 120	148	9,435	2,20	5536	56300	İRAM İRFM İRBM 151 / 280 M 4	148 996 148 1046 149 1186
	155	9,023	2,30	5294	55150		
	162	8,636	2,40	5067	55150		
	177	7,928	2,60	4651	55000		
	183	7,639	2,30	4482	55000		
	192	7,297	2,80	4281	54400		
	201	6,967	2,50	4088	54100		
	210	6,663	2,50	3909	54000		
	220	6,377	2,60	3741	53800		
	239	5,854	2,70	3435	53800		
	257	5,454	2,50	3200	53500		
	268	5,220	2,60	3063	52900		
	292	4,792	2,70	2812	52900		
	372	3,759	3,10	2205	52900		
110 150	45	31,187	1,48	22364	66240	İRAM İRFM 181 / 315 S 4	150 1618 150 1668
	49	28,454	1,64	20404	65740		
	54	26,053	1,77	18682	65740		
	65	21,694	2,10	15557	65500		
	70	19,923	2,30	14287	65000		
	76	18,344	2,50	13154	64960		
	83	16,926	2,70	12138	64910		
	87	16,027	2,00	11493	64860		
	90	15,544	2,90	11147	64750		
	101	13,912	2,30	9976	64500		
	115	12,200	2,60	8749	64000		
	130	10,785	3,00	7734	64000		
	146	9,597	3,30	6882	63500		
	160	8,772	4,50	6290	63500		
	179	7,806	5,00	5598	63000		
	148	9,435	1,77	6766	55050	İRAM İRFM İRBM 151 / C280 M 4	148 1059 148 1109 149 1249
	155	9,023	1,85	6470	53900		
	162	8,636	1,94	6193	53900		
	177	7,928	2,10	5685	53750		
	183	7,639	1,91	5478	53750		
	192	7,297	2,30	5233	53150		
	201	6,967	2,00	4996	52750		
	210	6,663	2,10	4778	52650		
	220	6,377	2,10	4573	52450		
	239	5,854	2,30	4198	52450		
	257	5,454	2,10	3911	51950		
	268	5,220	2,10	3743	51350		
	292	4,792	2,30	3436	50900		
	372	3,759	2,60	2696	50000		
132 180	65	21,694	1,77	18668	63340	İRAM İRFM 181 / 315 M 4a	150 1700 150 1750
	70	19,923	1,93	17144	62840		
	76	18,344	2,10	15785	62800		
	83	16,926	2,30	14565	62750		
	87	16,027	1,67	13791	62700		
	90	15,544	2,50	13376	62590		
	101	13,912	1,91	11971	62340		
	115	12,200	2,20	10498	61840		



i.Mak[®] Monoblok Helisel Dişlili Motorlu Redüktörler Güç ve Devir Tablosu
 Monoblock Helical Geared Motors Performance Tables
 Monoblock Stirnradgetriebemotoren Leistung und Drehzahlübersicht



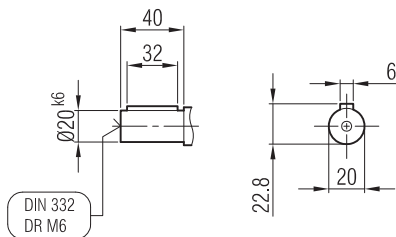
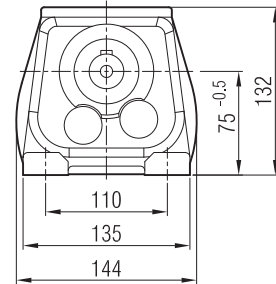
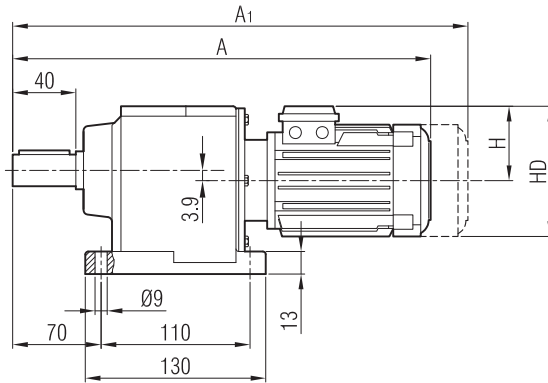
P ₁	n ₂	i	S _f	M ₂	F _{QV2}		Tip		
GÜÇ	Çıkış Devri	Tahvil	Servis Faktörü	Çıkış Momenti	Rad. Yük		Type		
Power	Output Speeds	Ratio	Service Factor	Output Torque	Over Loads		Typ		
Leistung	Abtriebswelle Drehzahlen	Übersetzung	Betriebsfaktor	Abtriebswelle Drehmomente	Querkräfte				
[kW] Hp	[r.p.m]			[Nm]	[N]				kg
132	130	10,785	2,40	9281	61840	İRAM İRFM	181 / 315 M 4a	150	1700
	146	9,597	2,70	8258	61340			150	1750
180	160	8,772	3,70	7548	61340				
	179	7,806	4,20	6717	60840				
160	130	10,785	2,00	11249	58000	İRAM İRFM	181 / 315 M 4b	150	1777
	146	9,597	2,30	10010	58000			150	1827
220	160	8,772	3,10	9150	55000				
	179	7,806	3,40	8142	53500				
185	130	10,785	1,75	13007	56000	İRAM İRFM	181 / 315 L 4a	150	1791
	146	9,597	1,96	11574	55500			150	1841
250	160	8,772	2,70	10579	53000				
	179	7,806	3,00	9414	51000				



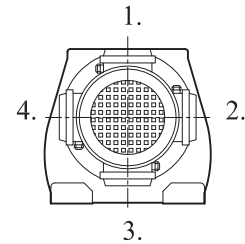


İRAM 42

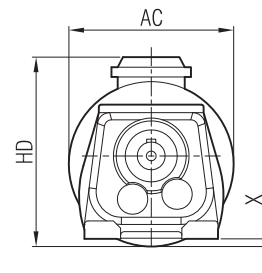
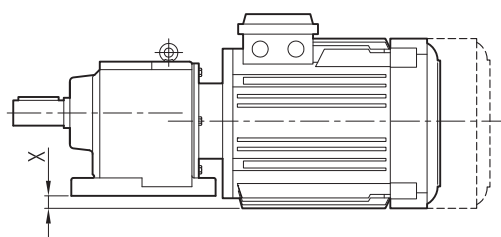
İRAM 43



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80-90 Tip/Type/Typ



	56	63	71	80	90 S	90 L									
A		356	384	414	433	458									
A ₁		414	457	497	518	543									
H		99	111	118	132	132									
HD		162	182	198	222	222									
AC		123	132	158	193	193									
X		-	-	7.9	25.4	25.4									

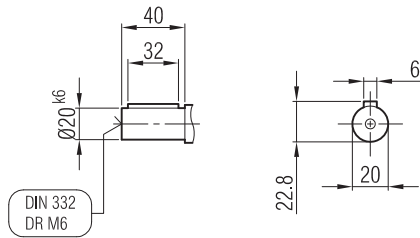
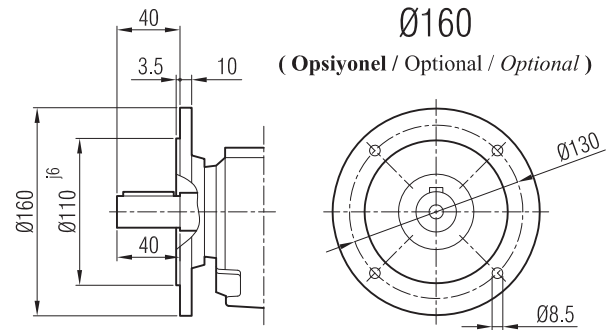
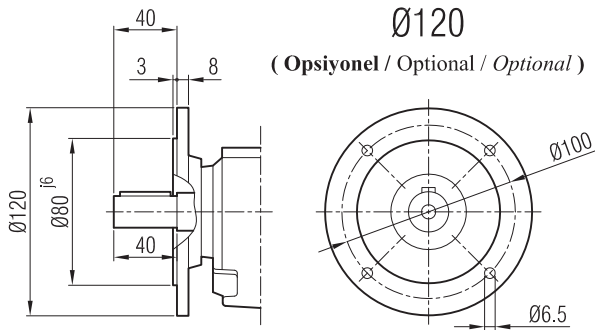
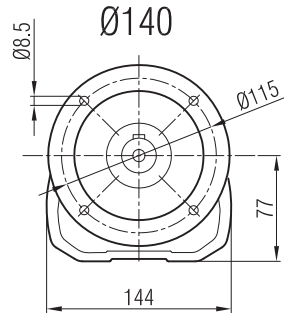
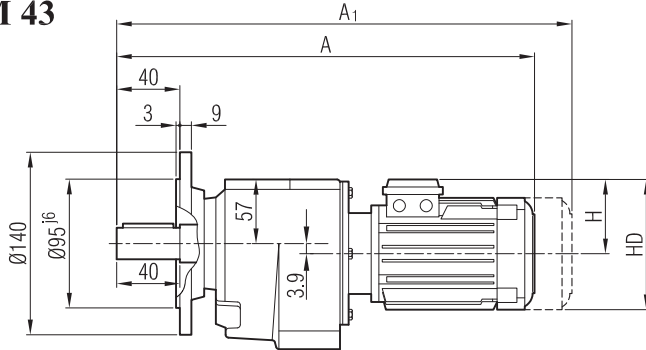
"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse



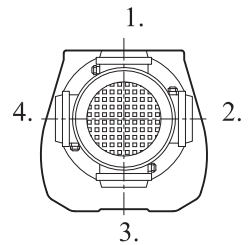


İRFM 42

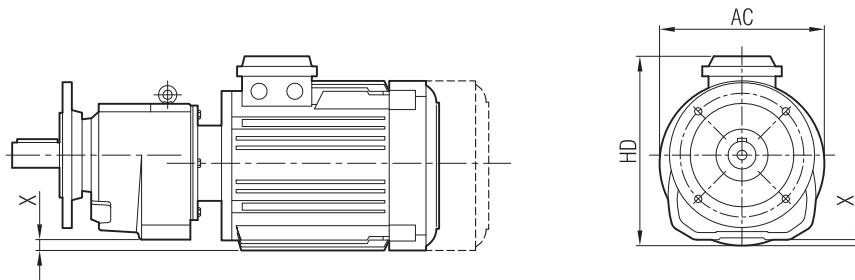
İRFM 43



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80-90 Tip/Type/Typ



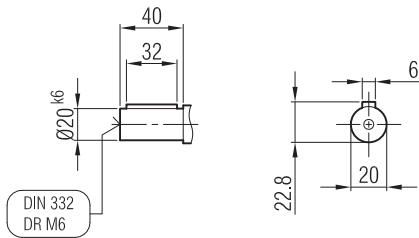
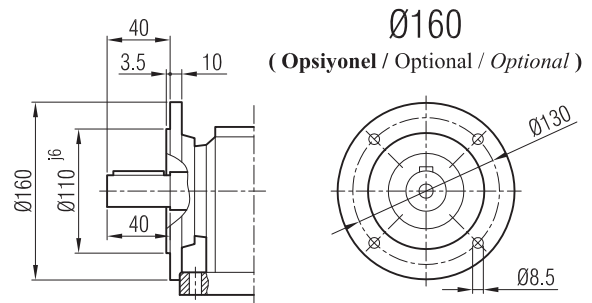
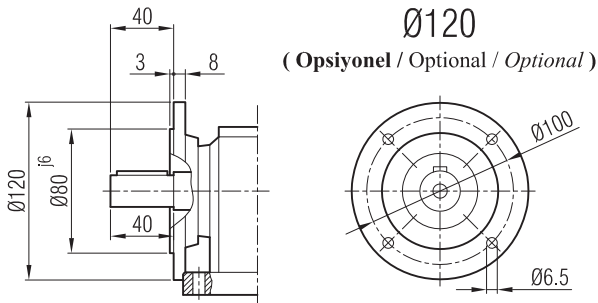
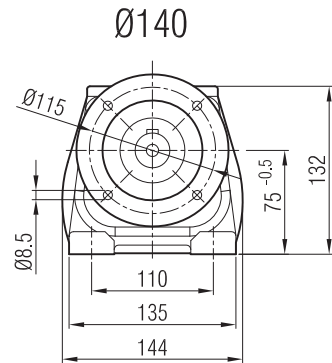
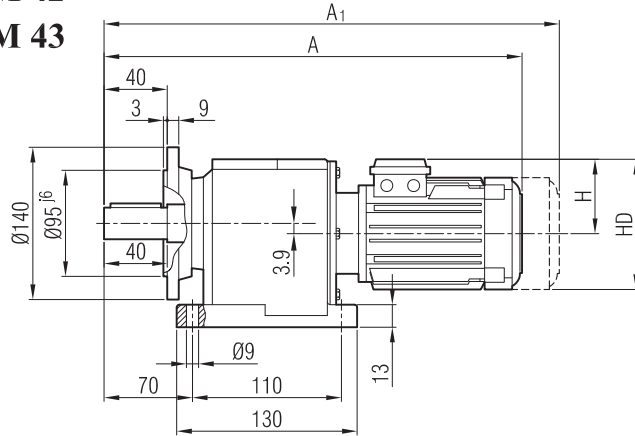
	56	63	71	80	90 S	90 L									
A		356	384	414	433	458									
A ₁		414	457	497	518	543									
H		99	111	118	132	132									
HD		162	182	198	222	222									
AC		123	132	158	193	193									
X		-	-	5.9	23.4	23.4									

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

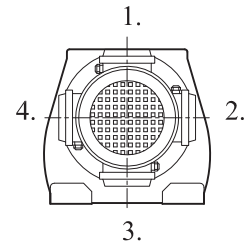




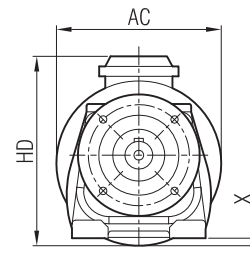
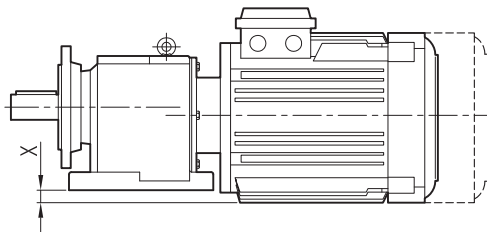
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Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80-90 Tip/Type/Typ



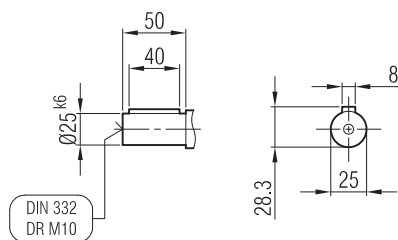
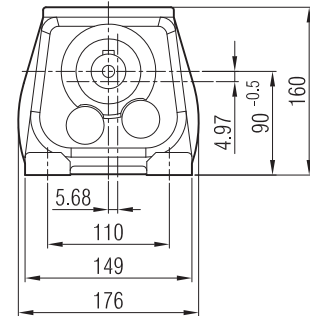
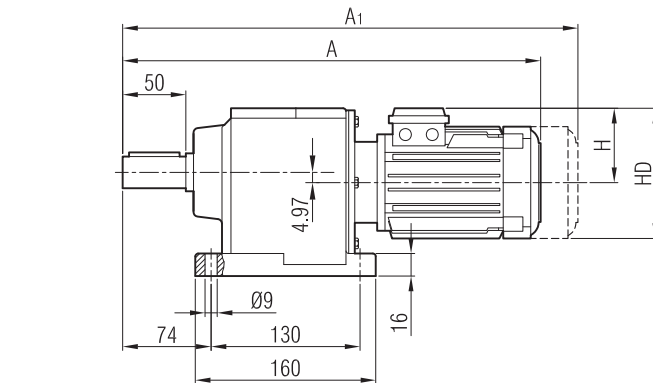
	56	63	71	80	90 S	90 L										
A		356	384	414	433	458										
A ₁		414	457	497	518	543										
H		99	111	118	132	132										
HD		162	182	198	222	222										
AC		123	132	158	193	193										
X		-	-	7.9	25.4	25.4										

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

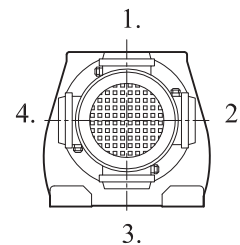




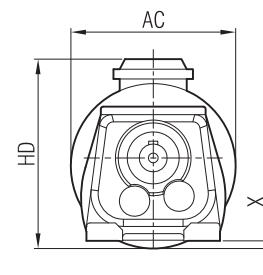
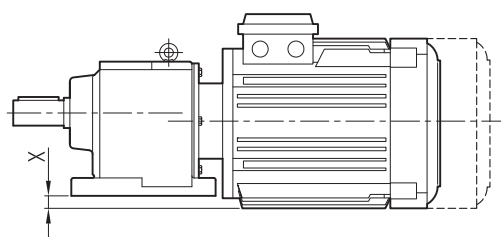
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İRAM 53



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80-90-100 **Tip/Type/Typ**



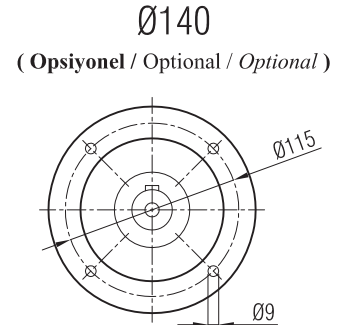
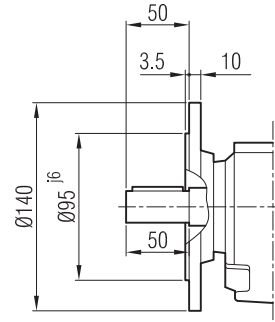
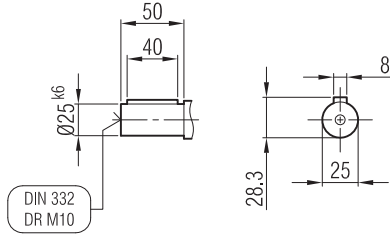
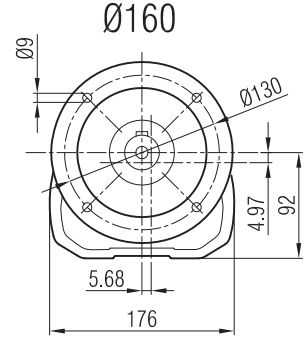
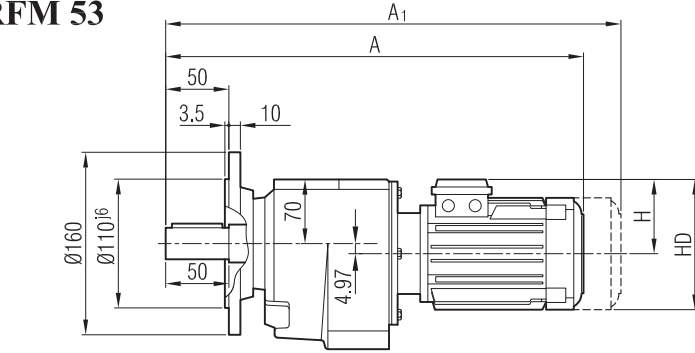
	56	63	71	80	90 S	90 L	100									
A		431	417	447	466	491	520									
A ₁		489	490	530	551	576	622									
H		99	111	118	132	132	141									
HD		162	182	198	222	222	241									
AC		123	132	158	193	193	217									
X		-	-	-	5	5	15									

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

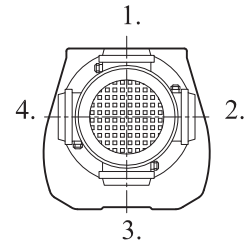




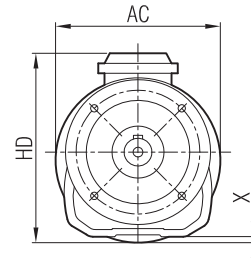
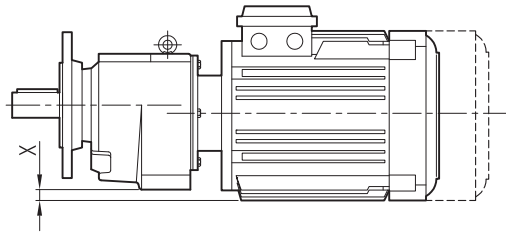
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İRFM 53



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80-90-100 Tip/Type/Typ



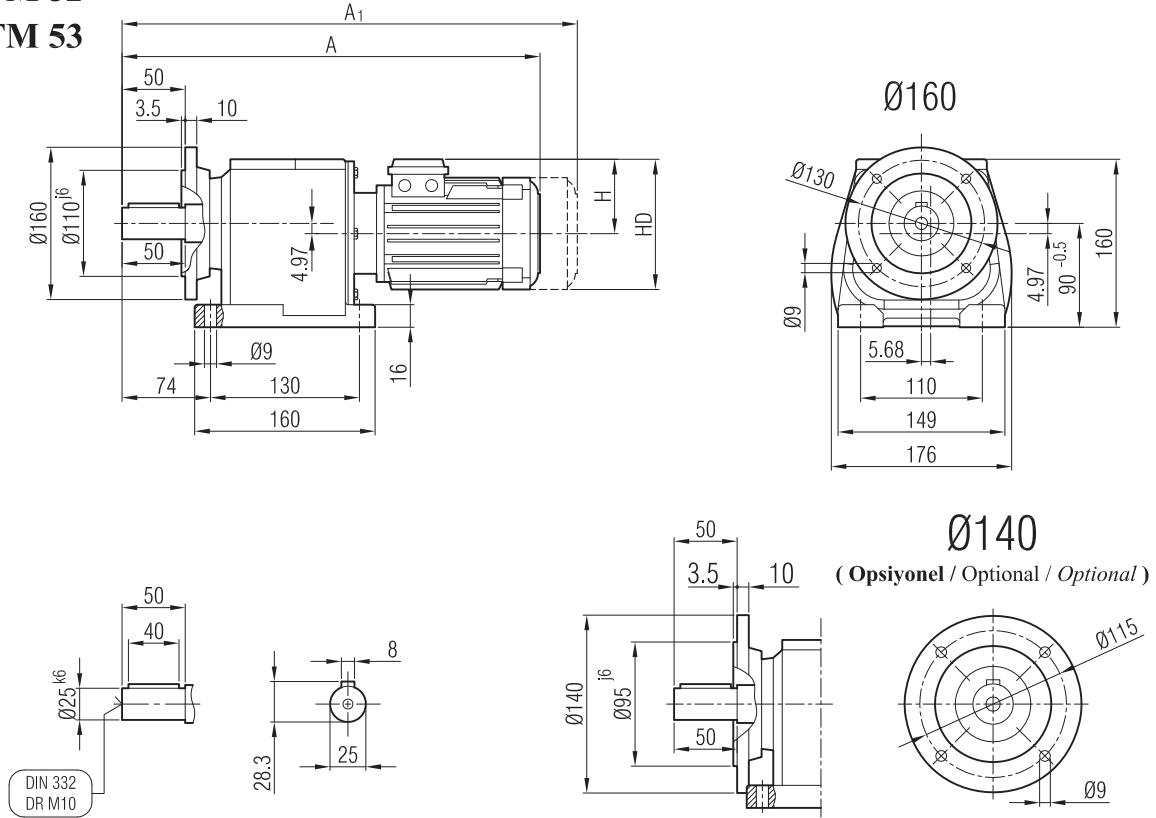
	56	63	71	80	90 S	90 L	100									
A		431	417	447	466	491	520									
A ₁		489	490	530	551	576	622									
H		99	111	118	132	132	141									
HD		162	182	198	222	222	241									
AC		123	132	158	193	193	217									
X		-	-	-	3	3	13									

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

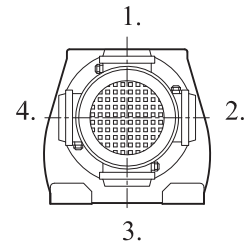




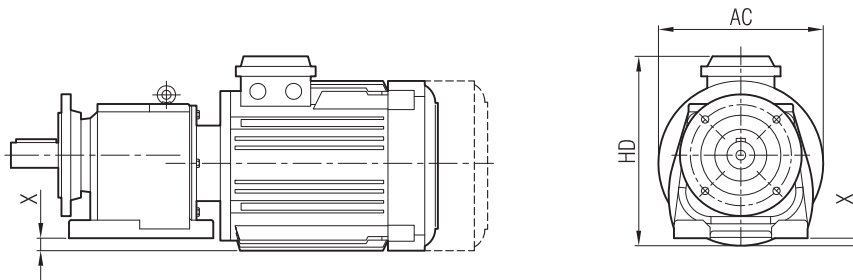
İRAFM 52
İRAFM 53



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80-90-100 **Tip/Type/Typ**



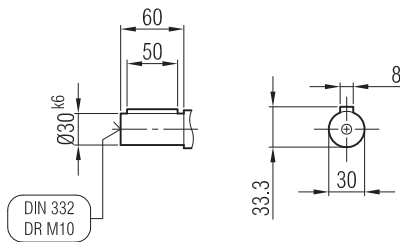
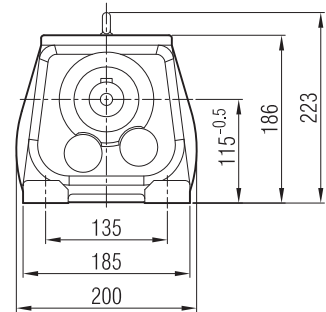
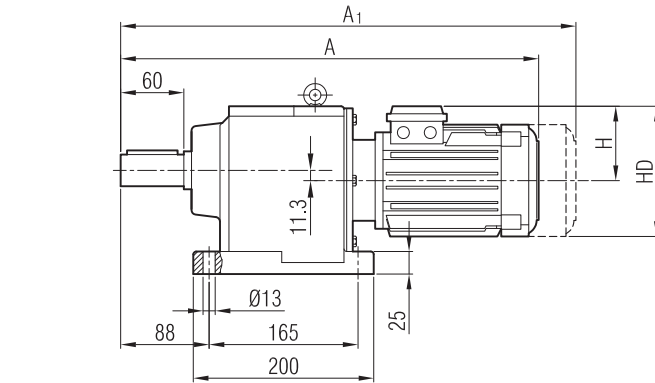
	56	63	71	80	90 S	90 L	100									
A		431	417	447	466	491	520									
A ₁		489	490	530	551	576	622									
H		99	111	118	132	132	141									
HD		162	182	198	222	222	241									
AC		123	132	158	193	193	217									
X		-	-	-	5	5	15									

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

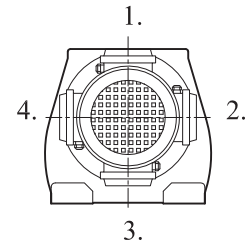




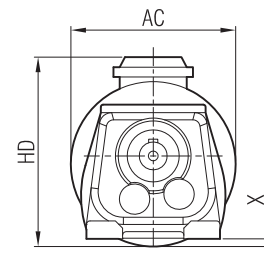
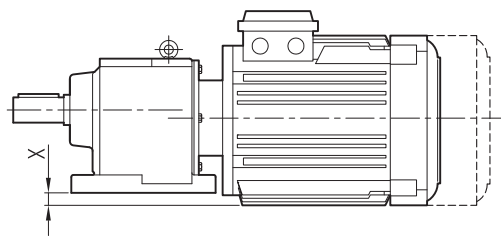
İRAM 621
İRAM 631



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80-90-100-112 **Tip/Type/Typ**



	56	63	71	80	90 S	90 L	100	112							
A			452	482	507	532	574	595							
A ₁			525	565	592	617	676	707							
H			111	118	132	132	141	149							
HD			182	198	222	222	241	261							
AC			132	158	193	193	217	232							
X			-	-	-	-	-	8.5							

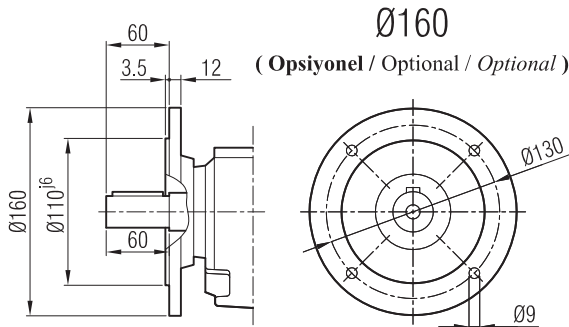
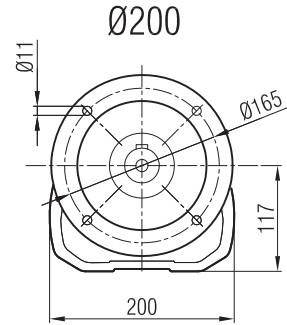
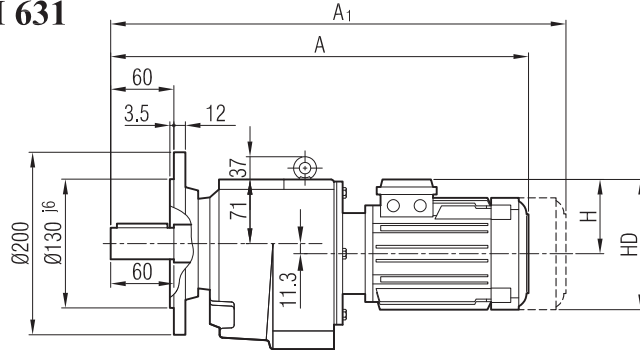
"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse



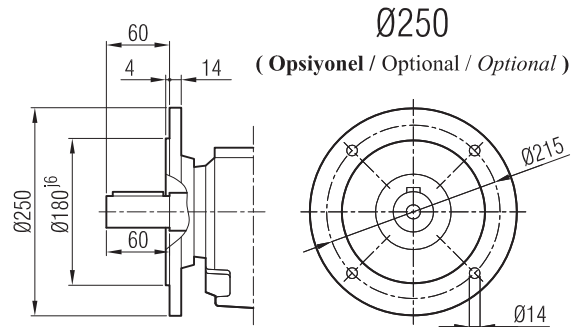


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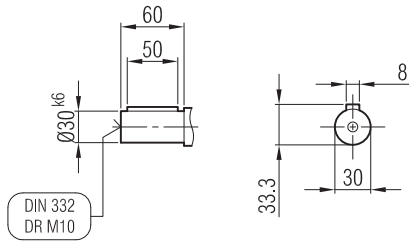
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(Opsiyonel / Optional / Optional)

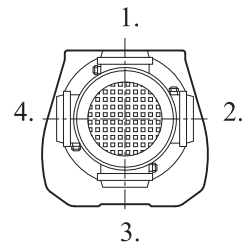


(Opsiyonel / Optional / Optional)

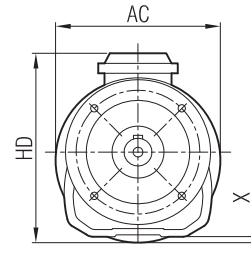
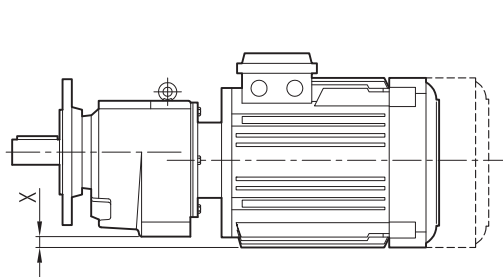


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Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80-90-100-112 Tip/Type/Typ



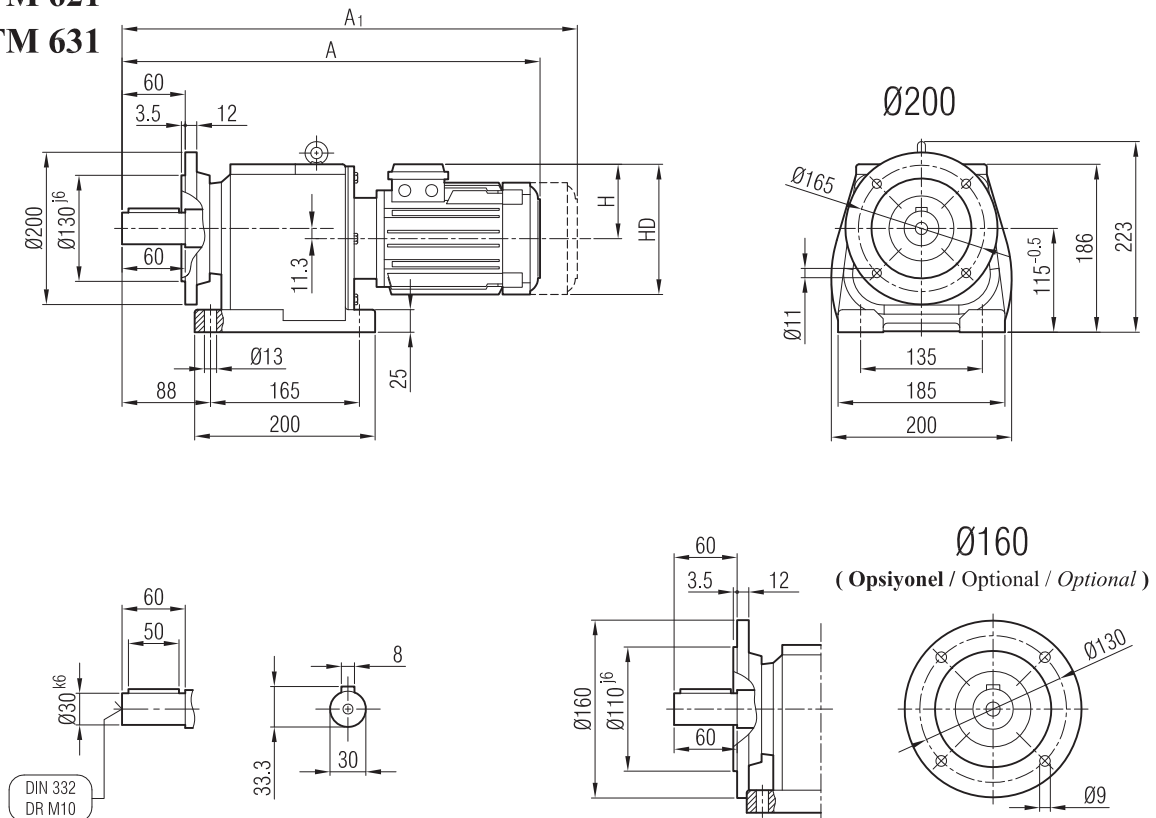
	56	63	71	80	90 S	90 L	100	112								
A			452	482	507	532	574	595								
A ₁			525	565	592	617	676	707								
H			111	118	132	132	141	149								
HD			182	198	222	222	241	261								
AC			132	158	193	193	217	232								
X			-	-	-	-	-	6.5								

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

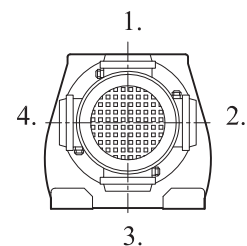




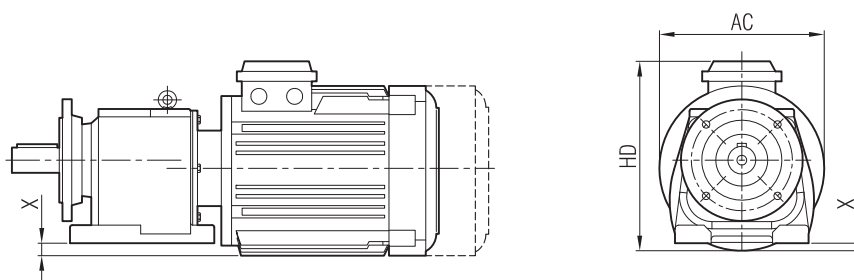
İRAFM 621
İRAFM 631



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80-90-100-112 **Tip/Type/Typ**



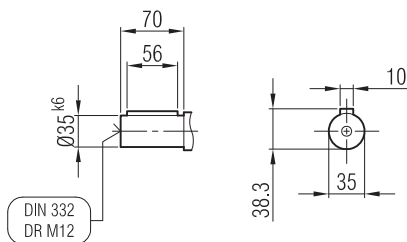
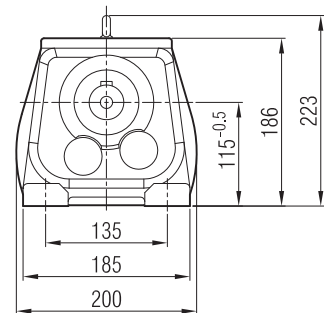
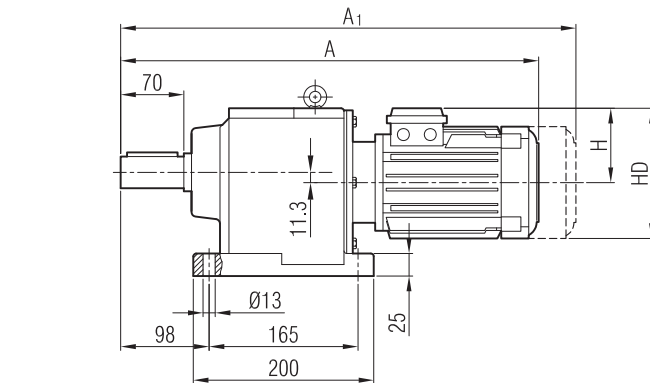
	56	63	71	80	90 S	90 L	100	112								
A			452	482	507	532	574	595								
A ₁			525	565	592	617	676	707								
H			111	118	132	132	141	149								
HD			182	198	222	222	241	261								
AC			132	158	193	193	217	232								
X			-	-	-	-	-	8.5								

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

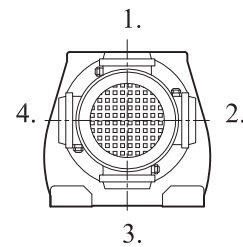




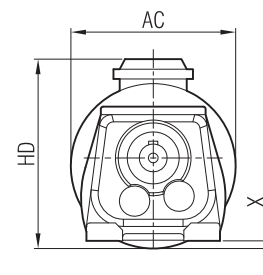
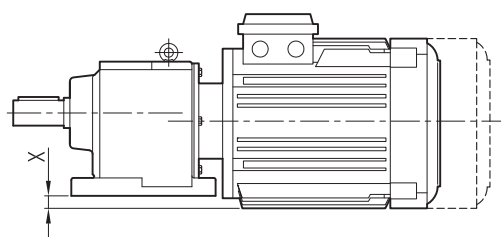
İRAM 62
İRAM 63



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80-90-100-112 **Tip/Type/Typ**



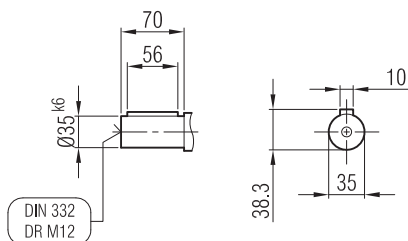
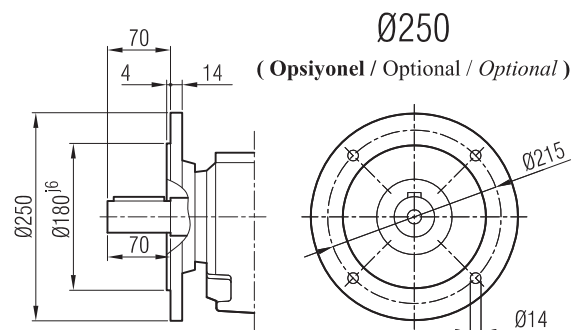
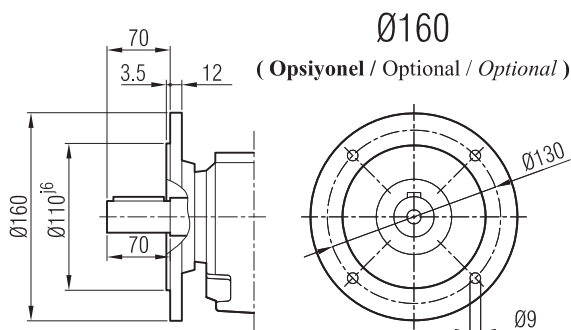
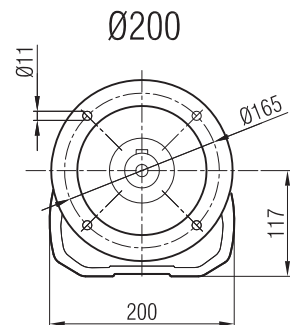
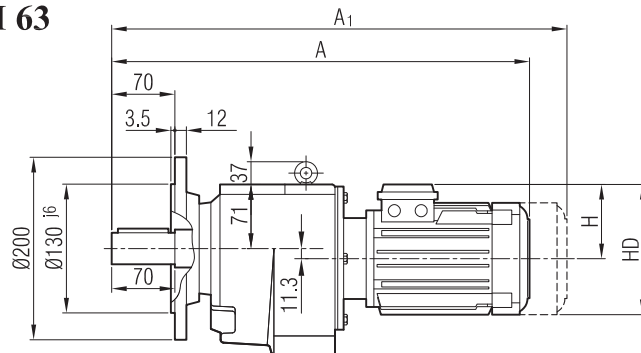
	56	63	71	80	90 S	90 L	100	112								
A			462	492	517	542	584	605								
A ₁			535	575	602	627	686	717								
H			111	118	132	132	141	149								
HD			182	198	222	222	241	261								
AC			132	158	193	193	217	232								
X			-	-	-	-	-	8.5								

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

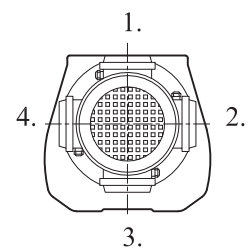




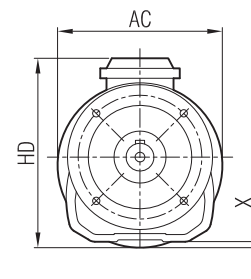
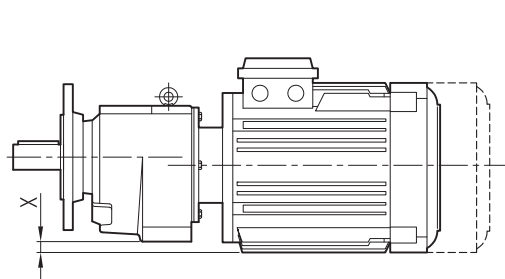
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İRFM 63



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80-90-100-112 **Tip/Type/Typ**



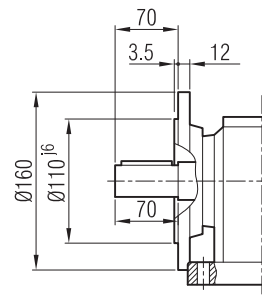
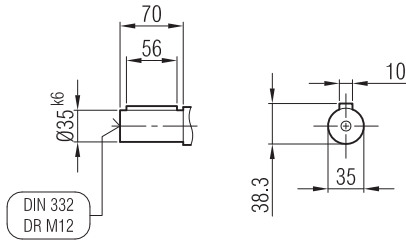
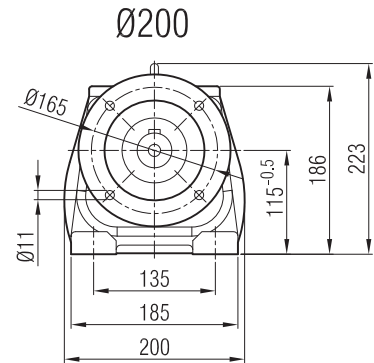
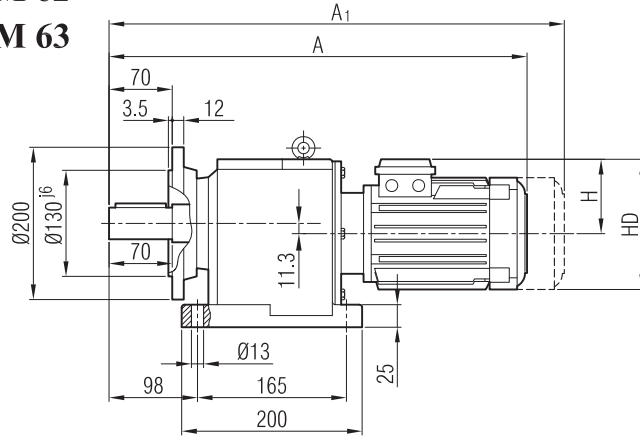
	56	63	71	80	90 S	90 L	100	112								
A			462	492	517	542	584	605								
A ₁			535	575	602	627	686	717								
H			111	118	132	132	141	149								
HD			182	198	222	222	241	261								
AC			132	158	193	193	217	232								
X			-	-	-	-	-	6.5								

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

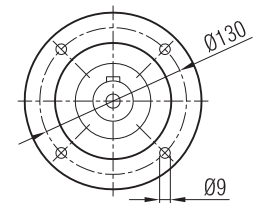




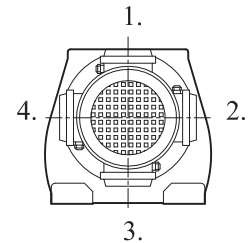
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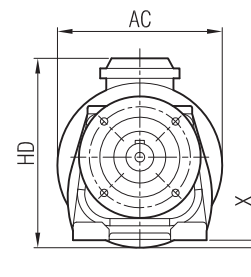
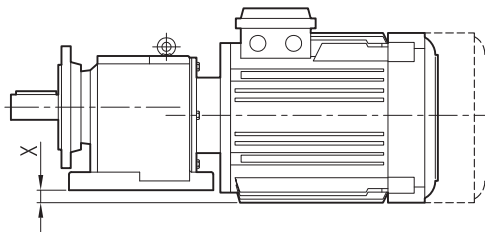
Ø160
(Opsiyonel / Optional / Optional)



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80-90-100-112 Tip/Type/Typ



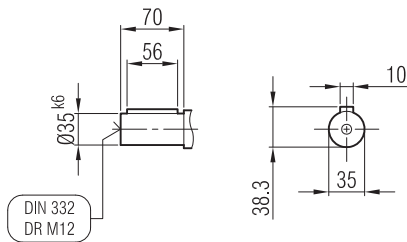
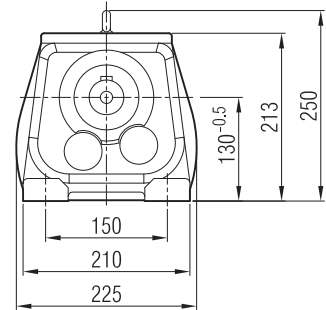
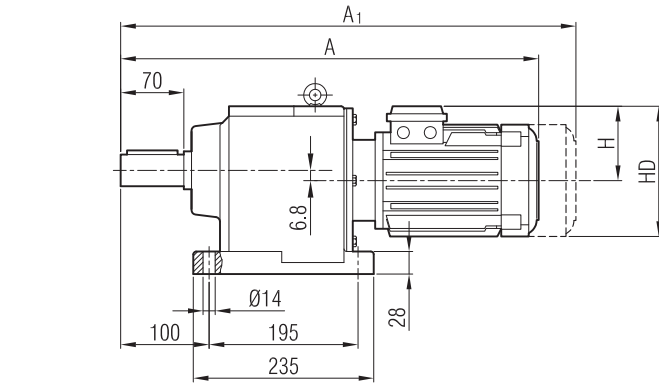
	56	63	71	80	90 S	90 L	100	112								
A			462	492	517	542	584	605								
A ₁			535	575	602	627	686	717								
H			111	118	132	132	141	149								
HD			182	198	222	222	241	261								
AC			132	158	193	193	217	232								
X			-	-	-	-	-	8.5								

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

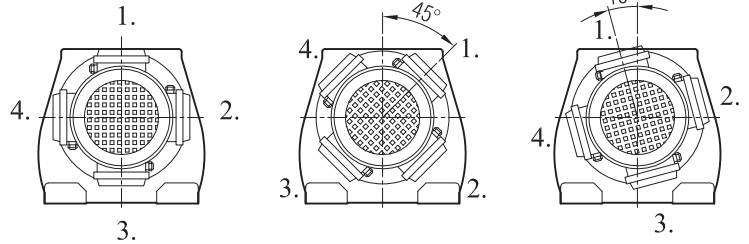




İRAM 721
İRAM 731



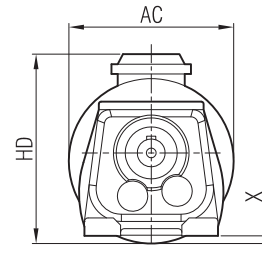
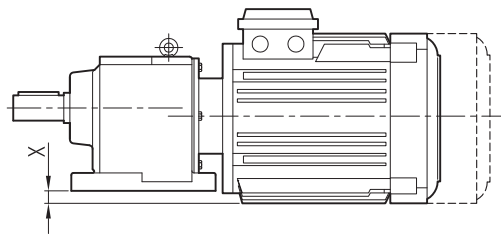
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



90-100-112-132 **Tip/Type/Typ**

71 **Tip/Type/Typ**

80 **Tip/Type/Typ**



	56	63	71	80	90 S	90 L	100	112	132 S	132 M						
A			478	509	535	560	600	621	665	711						
A ₁			551	592	620	645	702	746	807	853						
H			111	118	132	132	141	149	182	182						
HD			182	198	222	222	241	261	314	314						
AC			138	158	193	193	217	232	279	279						
X			-	-	-	-	-	-	16.3	16.3						

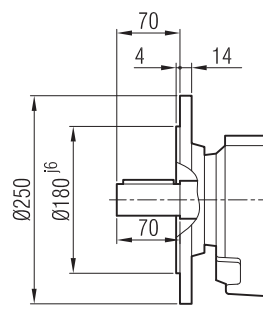
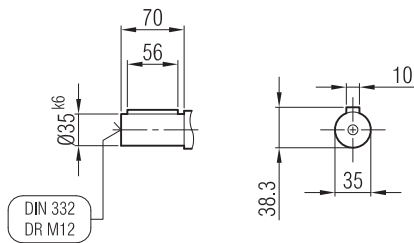
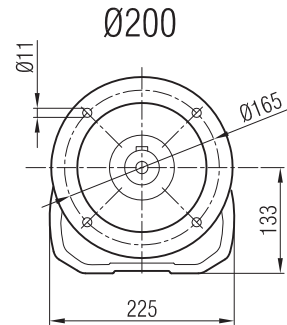
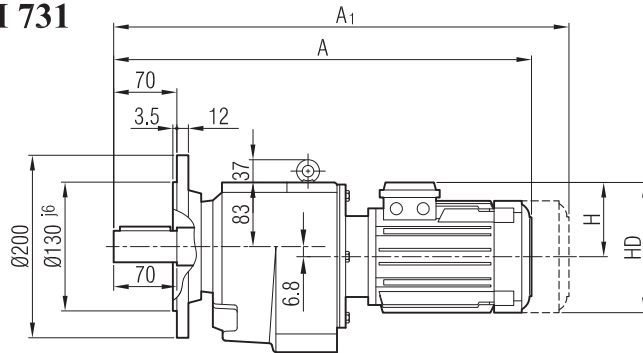
"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse



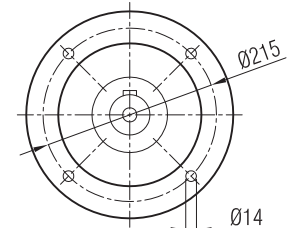


İRFM 721

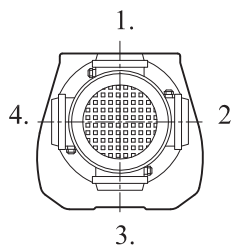
İRFM 731



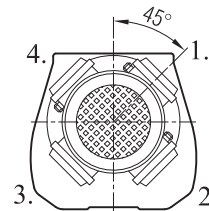
Ø250
(Opsiyonel / Optional / Optional)



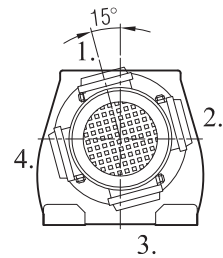
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



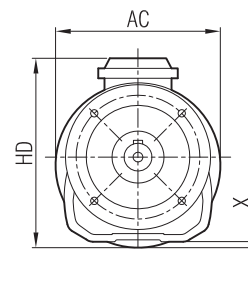
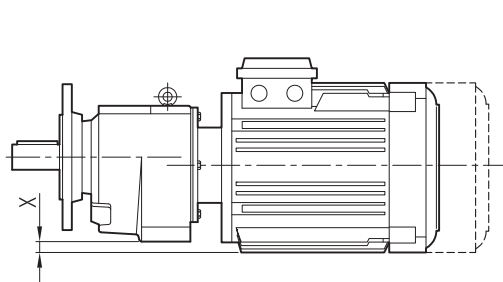
90-100-112-132 **Tip/Type/Typ**



71 **Tip/Type/Typ**



80 **Tip/Type/Typ**



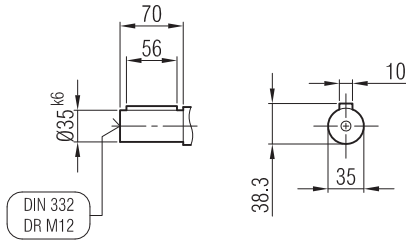
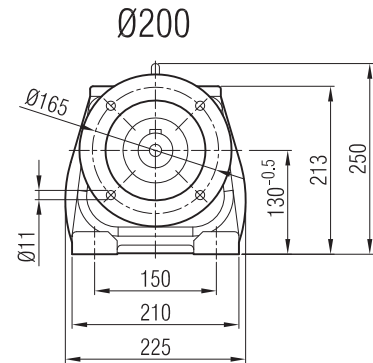
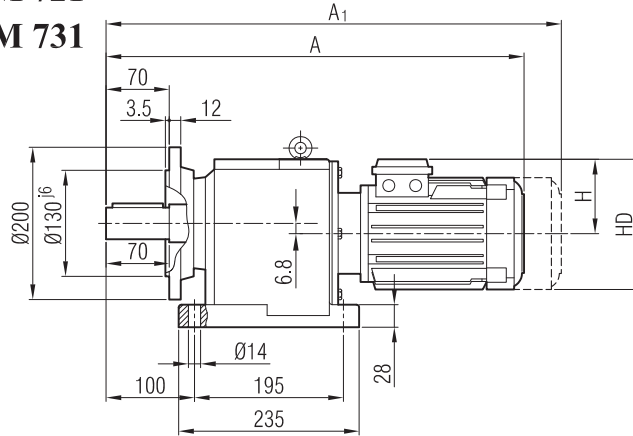
	56	63	71	80	90 S	90 L	100	112	132 S	132 M						
A			478	509	535	560	600	621	665	711						
A ₁			551	592	620	645	702	746	807	853						
H			111	118	132	132	141	149	182	182						
HD			182	198	222	222	241	261	314	314						
AC			138	158	193	193	217	232	279	279						
X			-	-	-	-	-	-	13.3	13.3						

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

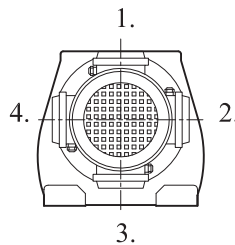




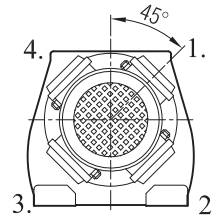
İRAFM 721
İRAFM 731



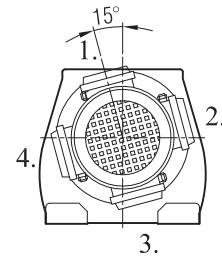
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



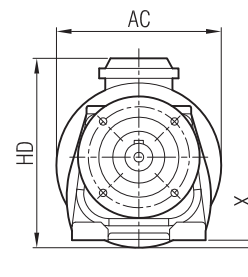
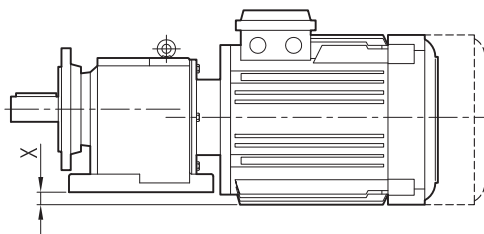
90-100-112-132 **Tip/Type/Typ**



71 **Tip/Type/Typ**



80 **Tip/Type/Typ**



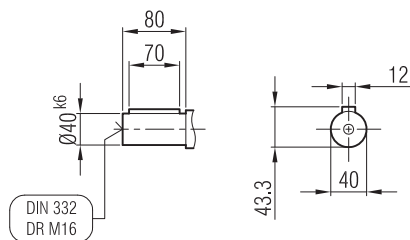
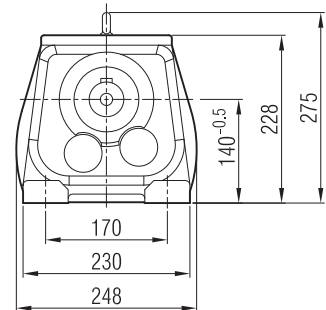
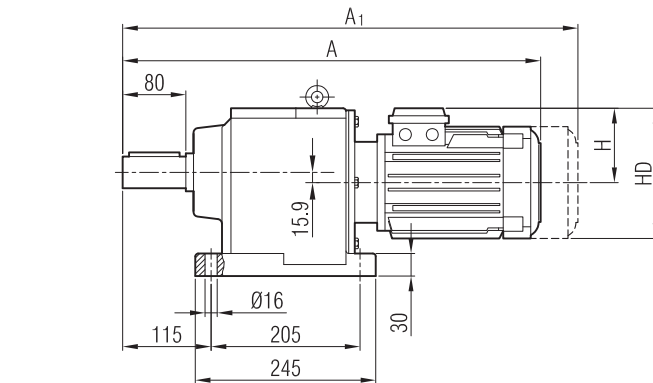
	56	63	71	80	90 S	90 L	100	112	132 S	132 M						
A			478	509	535	560	600	621	665	711						
A ₁			551	592	620	645	702	746	807	853						
H			111	118	132	132	141	149	182	182						
HD			182	198	222	222	241	261	314	314						
AC			138	158	193	193	217	232	279	279						
X			-	-	-	-	-	-	16.3	16.3						

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

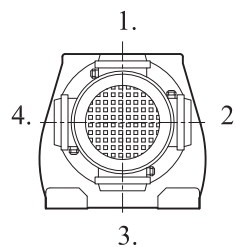




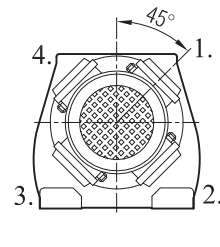
İRAM 72
İRAM 73



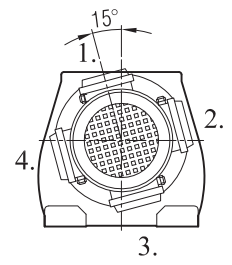
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



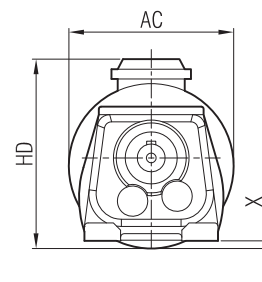
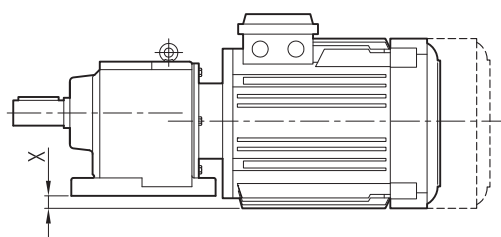
90-100-112-132 **Tip/Type/Typ**



71 **Tip/Type/Typ**



80 **Tip/Type/Typ**



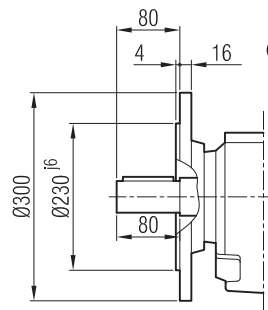
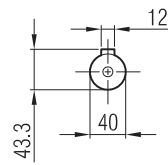
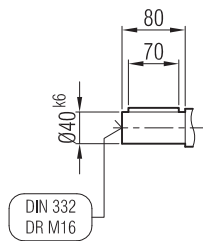
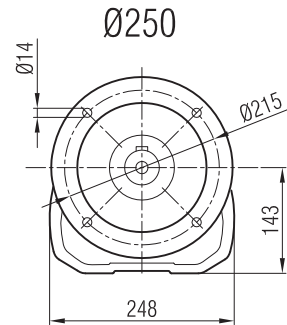
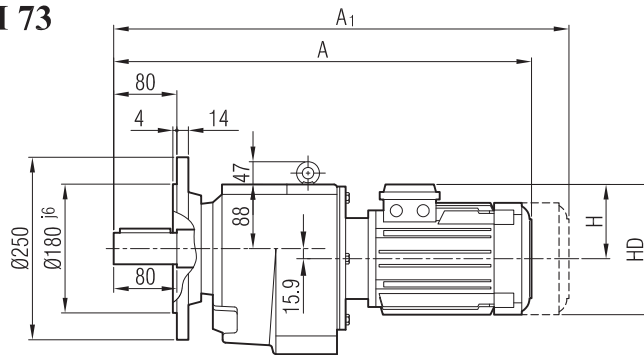
	56	63	71	80	90 S	90 L	100	112	132 S	132 M						
A			506	537	561	586	628	647	693	739						
A ₁			579	620	646	671	730	772	835	881						
H			111	118	132	132	141	149	182	182						
HD			182	198	222	222	241	261	314	314						
AC			132	158	193	193	217	232	279	279						
X			-	-	-	-	-	-	8	8						

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

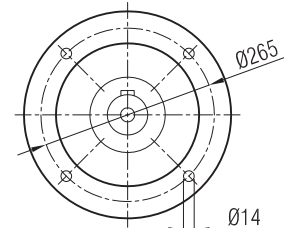




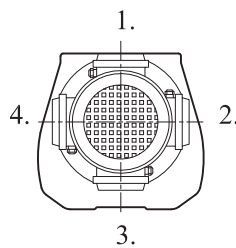
İRFM 72
İRFM 73



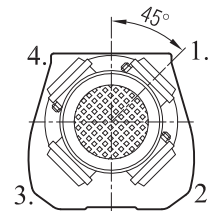
Ø300
(Opsiyonel / Optional / Optional)



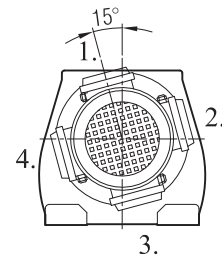
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



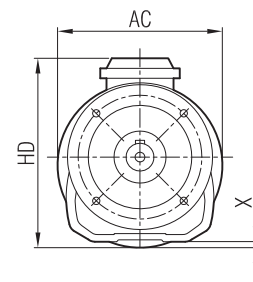
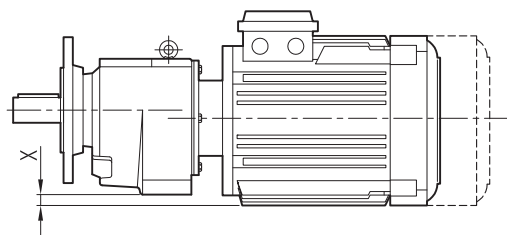
90-100-112-132 **Tip/Type/Typ**



71 **Tip/Type/Typ**



80 **Tip/Type/Typ**



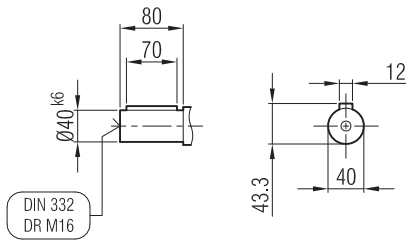
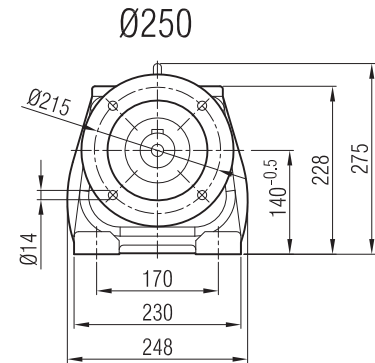
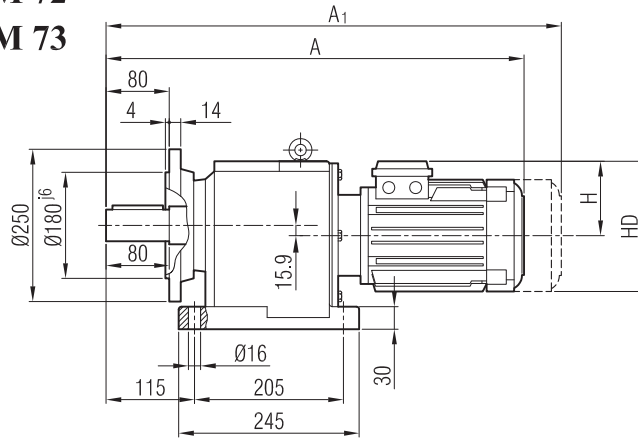
	56	63	71	80	90 S	90 L	100	112	132 S	132 M						
A			506	537	561	586	628	647	693	739						
A ₁			579	620	646	671	730	772	835	881						
H			111	118	132	132	141	149	182	182						
HD			182	198	222	222	241	261	314	314						
AC			132	158	193	193	217	232	279	279						
X			-	-	-	-	-	-	5	5						

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

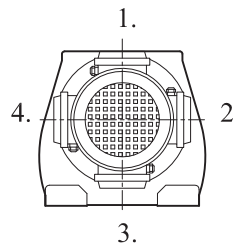




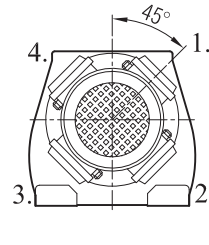
İRAFM 72
İRAFM 73



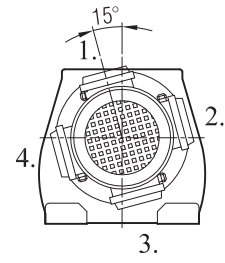
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



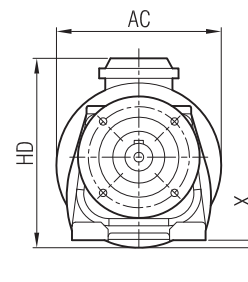
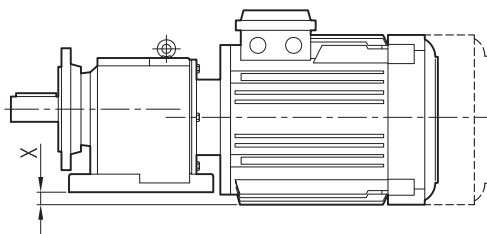
90-100-112-132 **Tip/Type/Typ**



71 **Tip/Type/Typ**



80 **Tip/Type/Typ**



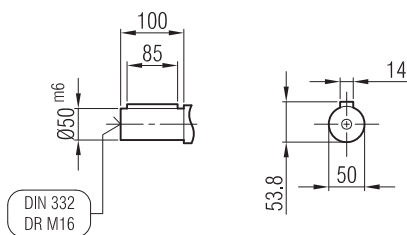
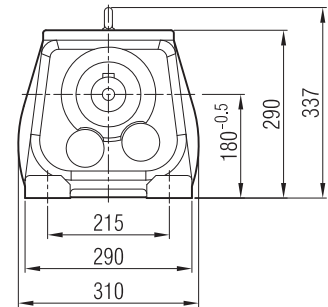
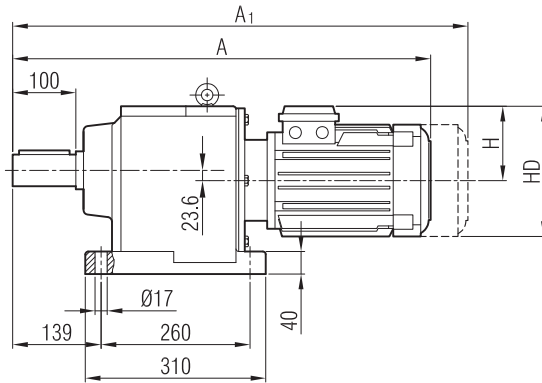
	56	63	71	80	90 S	90 L	100	112	132 S	132 M						
A			506	537	561	586	628	647	693	739						
A ₁			579	620	646	671	730	772	835	881						
H			111	118	132	132	141	149	182	182						
HD			182	198	222	222	241	261	314	314						
AC			132	158	193	193	217	232	279	279						
X			-	-	-	-	-	-	8	8						

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

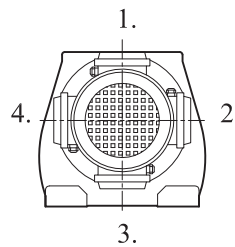




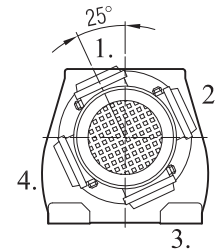
İRAM 82
İRAM 83



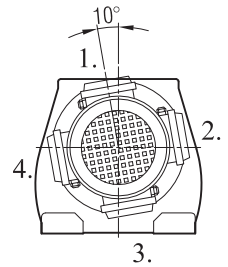
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



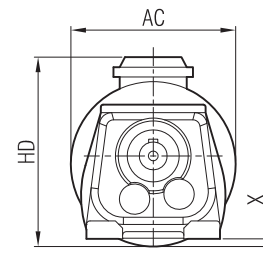
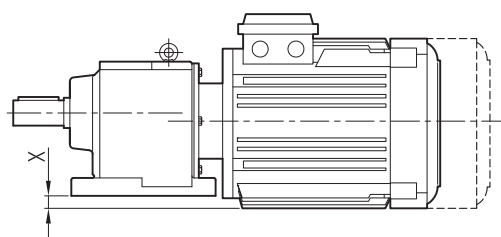
90-100-132-160-180 **Tip/Type/Typ**



80 **Tip/Type/Typ**



112 **Tip/Type/Typ**



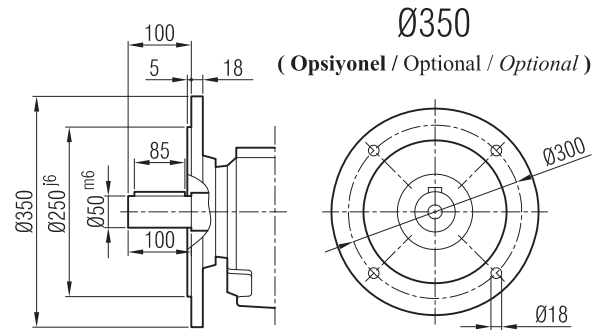
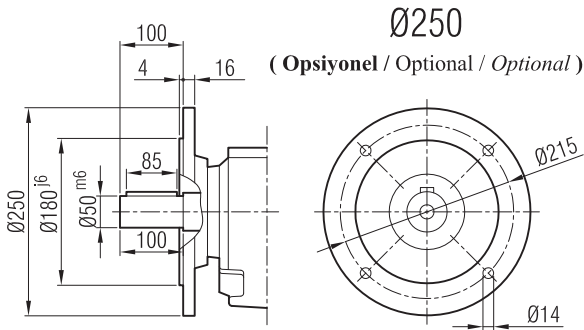
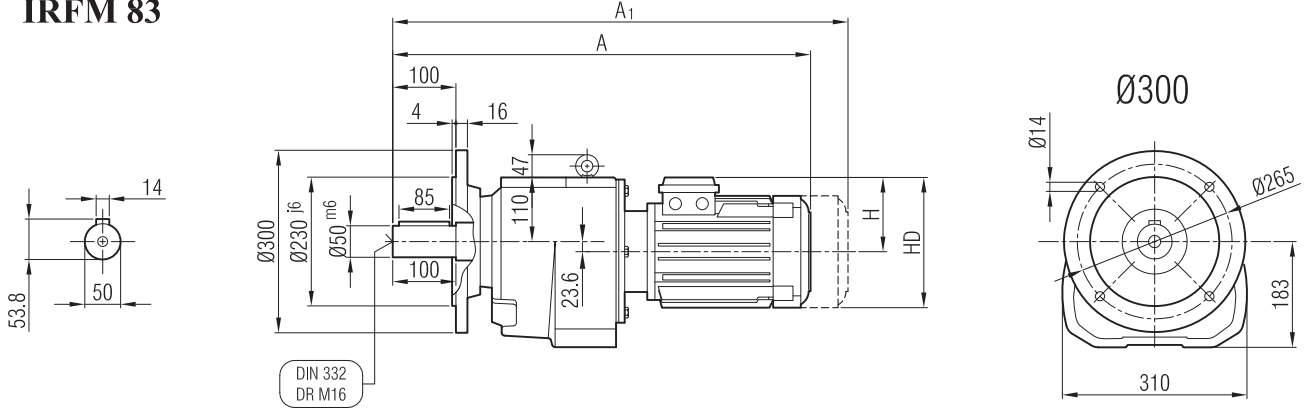
	56	63	71	80	90 S	90 L	100	112	132 S	132 M	160 M	160 L	180 M	180 L			
A				607	628	653	696	718	769	815	885	924	936	974			
A ₁				690	713	738	798	843	911	957	1075	1114	1131	1169			
H				118	132	132	141	149	182	182	225	225	248	248			
HD				198	222	222	241	261	314	314	385	385	428	428			
AC				158	193	193	217	232	279	279	325	325	370	370			
X				-	-	-	-	-	-	-	4	4	24	24			

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

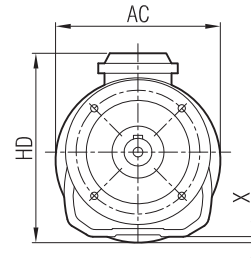
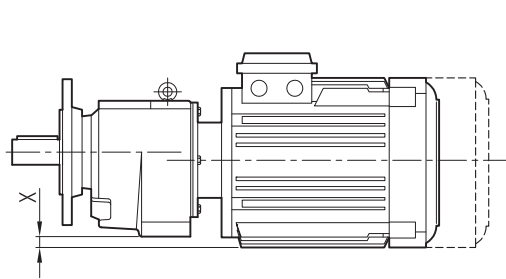
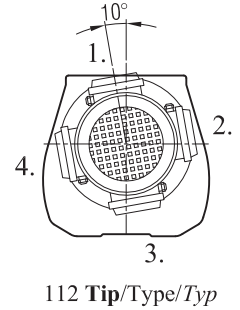
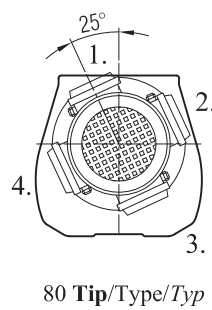
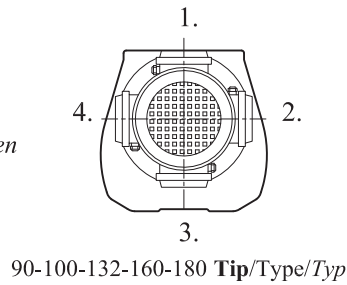




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İRFM 83



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



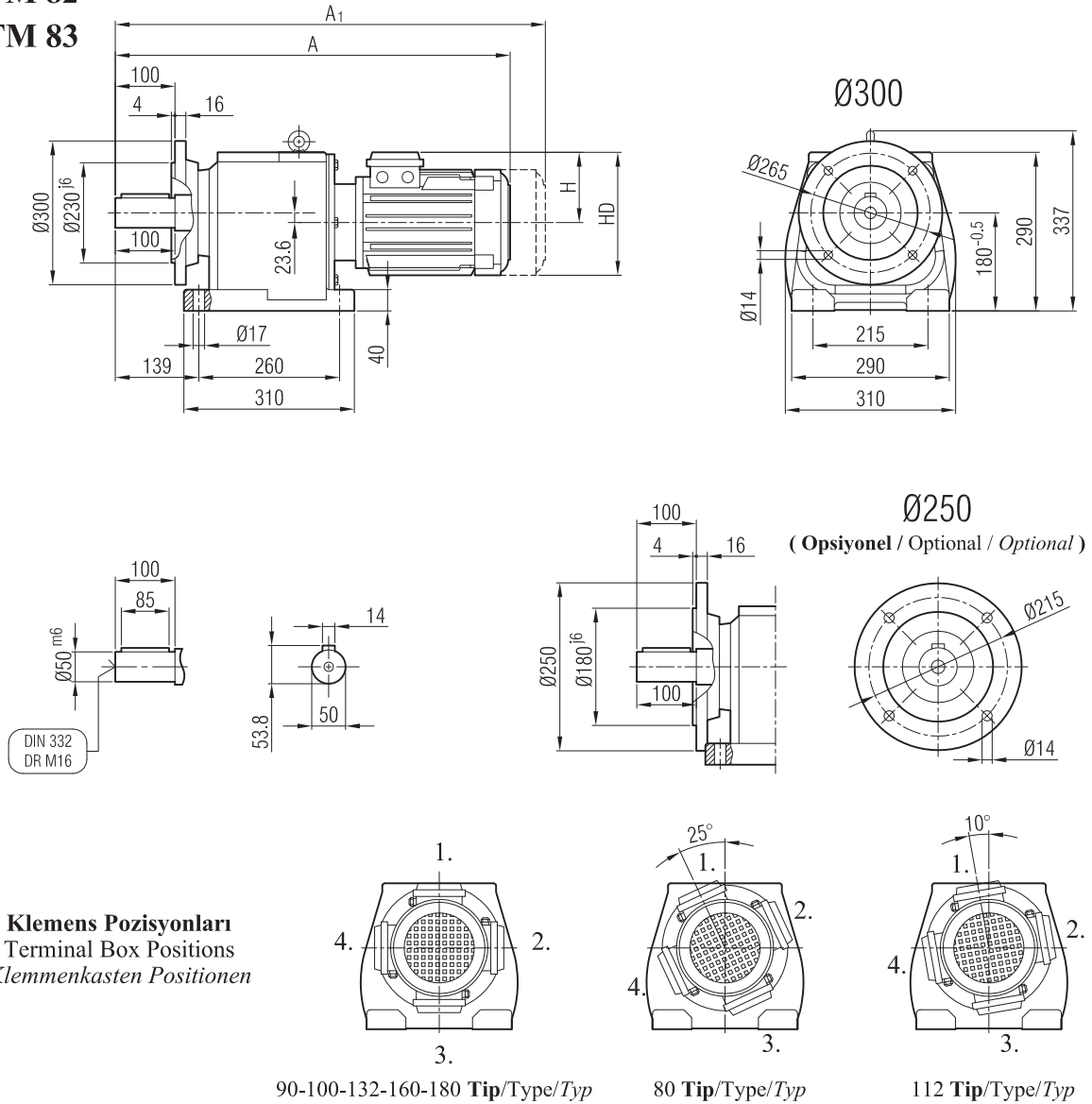
	56	63	71	80	90 S	90 L	100	112	132 S	132 M	160 M	160 L	180 M	180 L			
A				607	628	653	696	718	769	815	885	924	936	974			
A ₁				690	713	738	798	843	911	957	1075	1114	1131	1169			
H				118	132	132	141	149	182	182	225	225	248	248			
HD				198	222	222	241	261	314	314	385	385	428	428			
AC				158	193	193	217	232	279	279	325	325	370	370			
X				-	-	-	-	-	-	-	1	1	21	21			

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse





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İRAFM 83



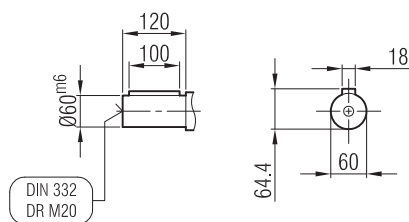
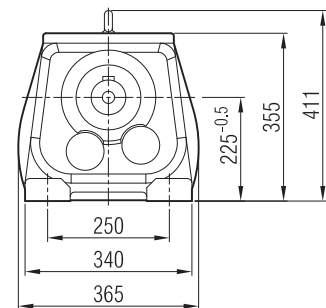
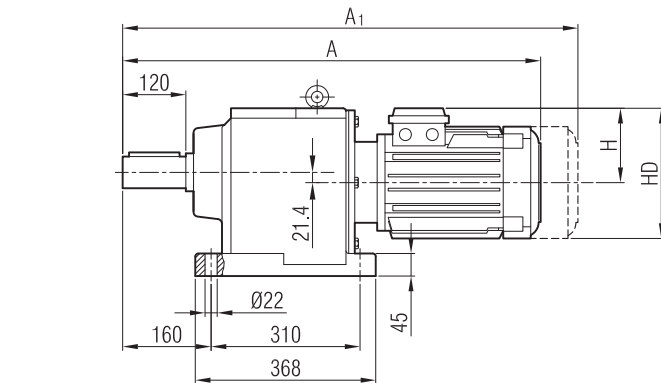
	56	63	71	80	90 S	90 L	100	112	132 S	132 M	160 M	160 L	180 M	180 L			
A				607	628	653	696	718	769	815	885	924	936	974			
A ₁				690	713	738	798	843	911	957	1075	1114	1131	1169			
H				118	132	132	141	149	182	182	225	225	248	248			
HD				198	222	222	241	261	314	314	385	385	428	428			
AC				158	193	193	217	232	279	279	325	325	370	370			
X				-	-	-	-	-	-	-	4	4	24	24			

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

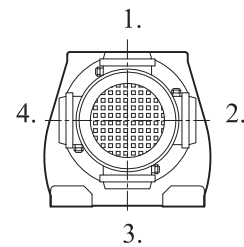




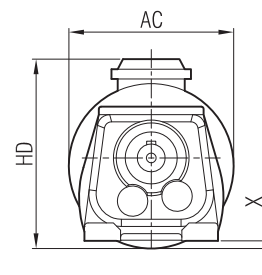
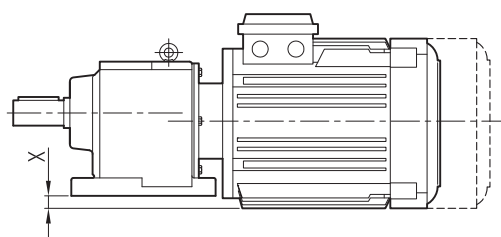
İRAM 92
İRAM 93



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



80-90-100-112-132-160-180-200 **Tip/Type/Typ**



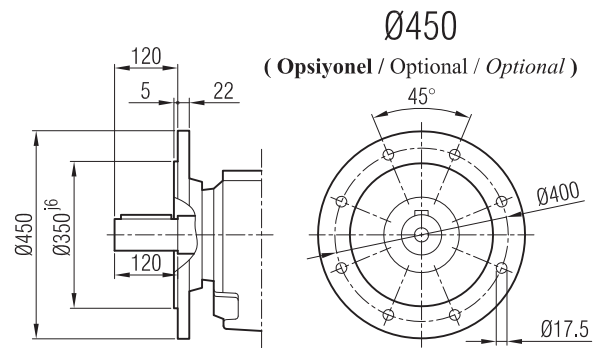
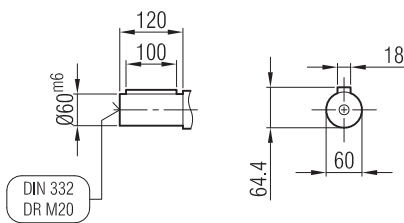
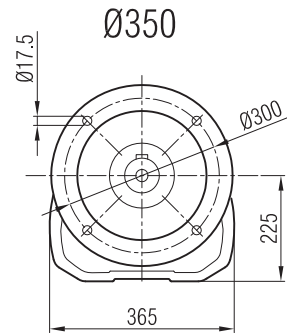
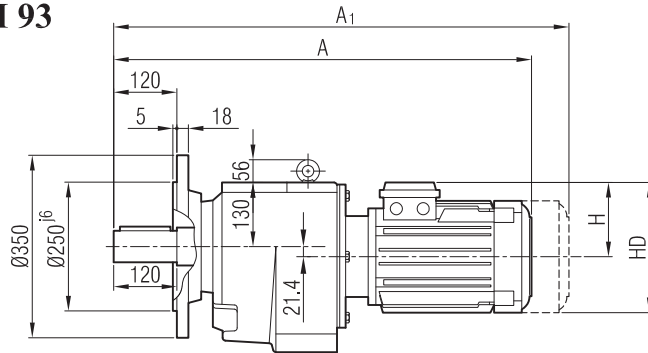
	56	63	71	80	90 S	90 L	100	112	132 S	132 M	160 M	160 L	180 M	180 L	200		
A				769	783	808	754	777	824	870	957	1001	1015	1053	1092		
A ₁				852	868	893	856	902	966	1012	1147	1191	1210	1248	-		
H				118	132	132	141	149	182	182	225	225	248	248	275		
HD				198	222	222	241	261	314	314	385	385	428	428	425		
AC				158	193	193	217	232	279	279	325	325	370	370	415		
X				-	-	-	-	-	-	-	-	-	-	-	-		

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

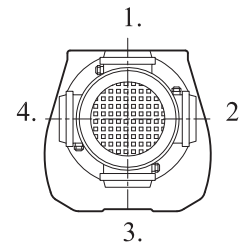




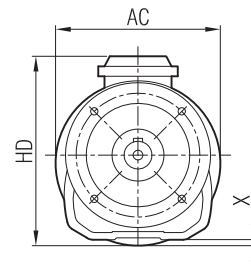
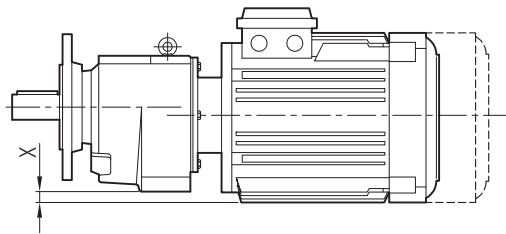
İRFM 92
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Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



80-90-100-112-132-160-180-200 **Tip/Type/Typ**



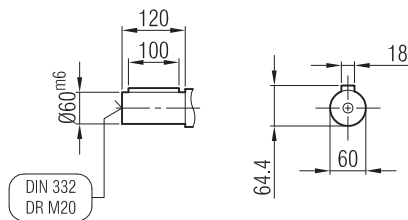
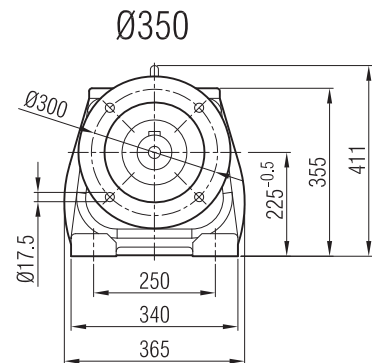
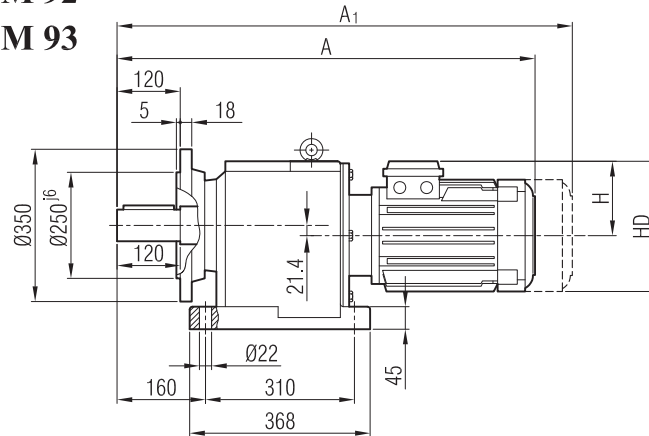
	56	63	71	80	90 S	90 L	100	112	132 S	132 M	160 M	160 L	180 M	180 L	200		
A				769	783	808	754	777	824	870	957	1001	1015	1053	1092		
A ₁				852	868	893	856	902	966	1012	1147	1191	1210	1248	-		
H				118	132	132	141	149	182	182	225	225	248	248	275		
HD				198	222	222	241	261	314	314	385	385	428	428	425		
AC				158	193	193	217	232	279	279	325	325	370	370	415		
X				-	-	-	-	-	-	-	-	-	-	-	-		

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

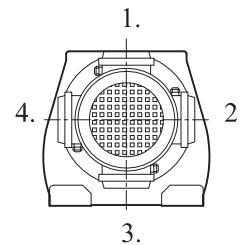




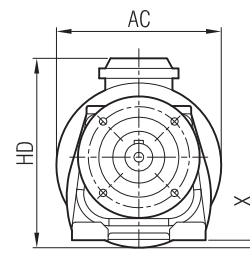
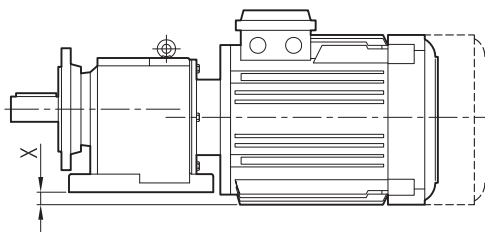
İRAFM 92
İRAFM 93



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



80-90-100-112-132-160-180-200 **Tip/Type/Typ**



	56	63	71	80	90 S	90 L	100	112	132 S	132 M	160 M	160 L	180 M	180 L	200		
A				769	783	808	754	777	824	870	957	1001	1015	1053	1092		
A ₁				852	868	893	856	902	966	1012	1147	1191	1210	1248	-		
H				118	132	132	141	149	182	182	225	225	248	248	275		
HD				198	222	222	241	261	314	314	385	385	428	428	425		
AC				158	193	193	217	232	279	279	325	325	370	370	415		
X				-	-	-	-	-	-	-	-	-	-	-	-		

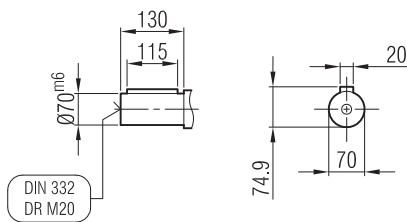
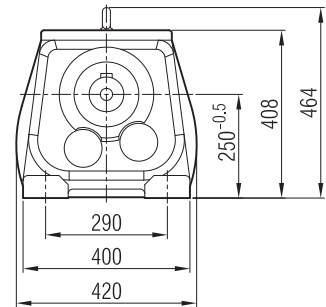
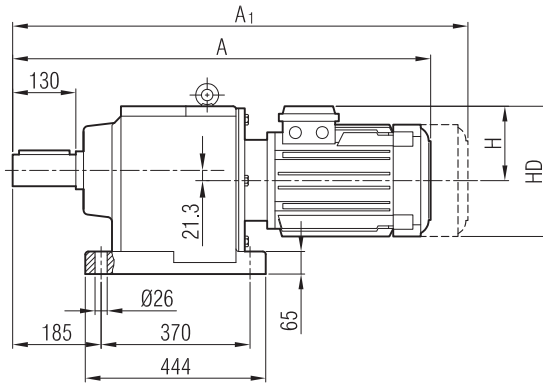
"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse



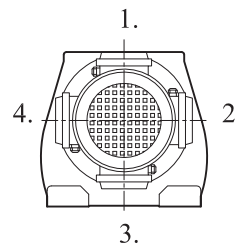


İRAM 102

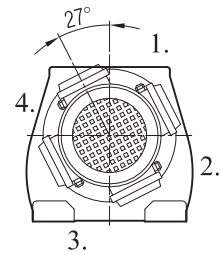
İRAM 103



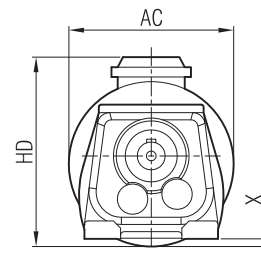
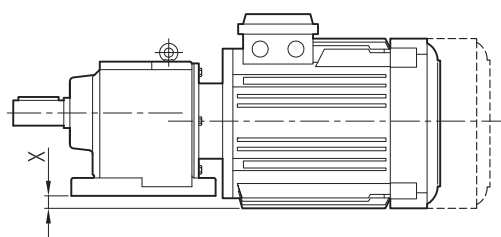
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



100-112-132-160-200-225 **Tip/Type/Typ**



180 **Tip/Type/Typ**



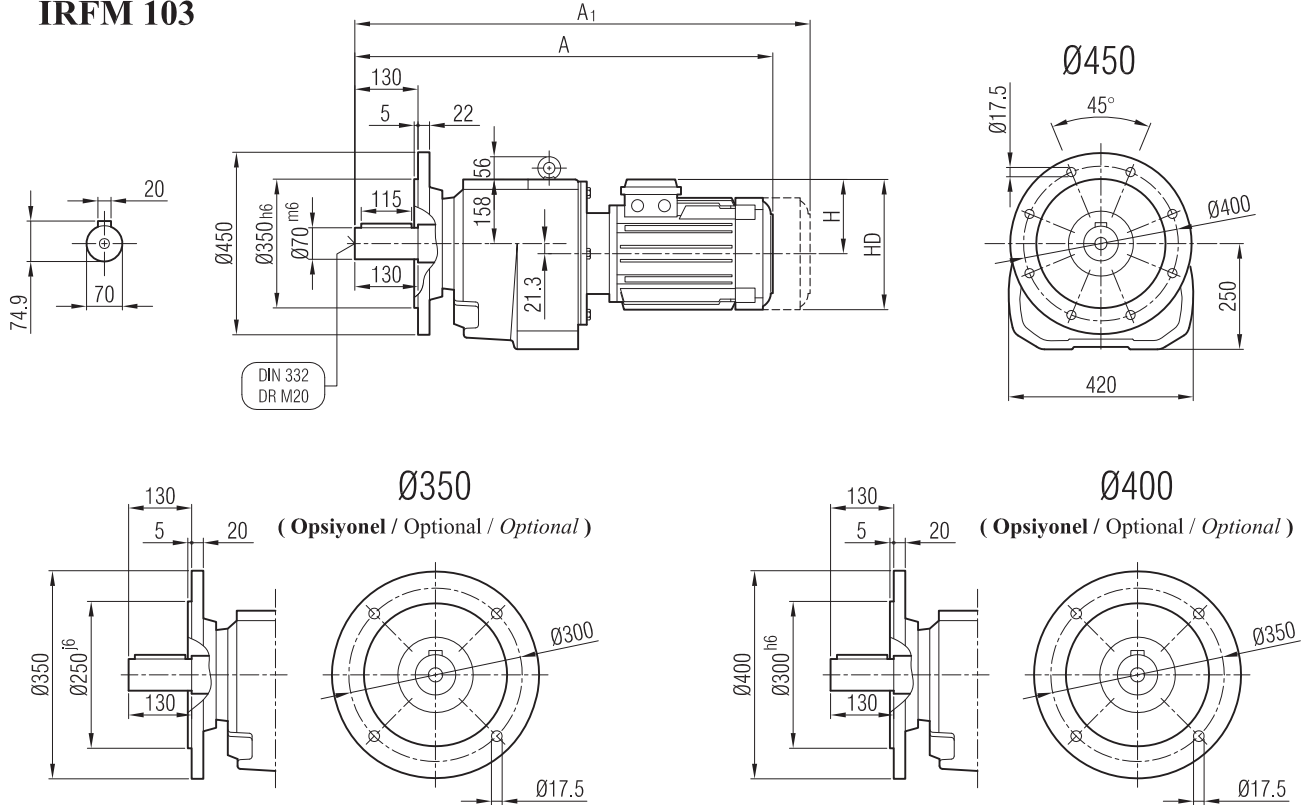
	56	63	71	80	90 S	90 L	100	112	132 S	132 M	160 M	160 L	180 M	180 L	200	225 S	225 M
A							902	923	893	939	1023	1053	1082	1120	1172	1179	1204
A ₁							992	1048	1035	1081	1213	1243	1277	1315	-	-	-
H							141	149	182	182	225	225	248	248	275	285	285
HD							241	261	314	314	385	385	428	428	425	510	510
AC							217	232	279	279	325	325	370	370	415	456	456
X							-	-	-	-	-	-	-	-	-	-	-

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

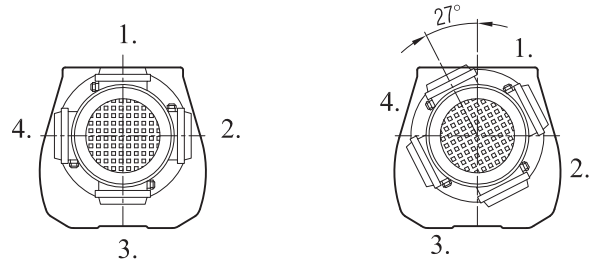




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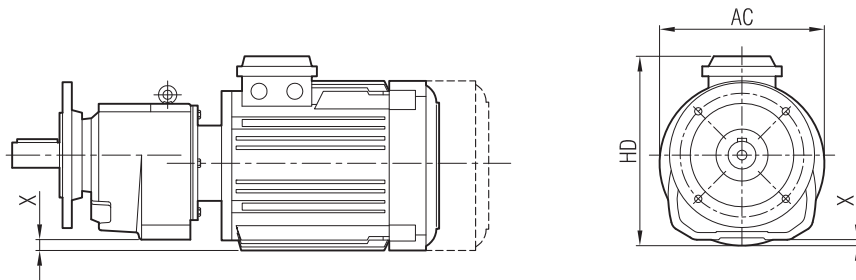


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



100-112-132-160-200-225 **Tip/Type/Typ**

180 **Tip/Type/Typ**



	56	63	71	80	90 S	90 L	100	112	132 S	132 M	160 M	160 L	180 M	180 L	200	225 S	225 M
A							902	923	893	939	1023	1053	1082	1120	1172	1179	1204
A ₁							992	1048	1035	1081	1213	1243	1277	1315	-	-	-
H							141	149	182	182	225	225	248	248	275	285	285
HD							241	261	314	314	385	385	428	428	425	510	510
AC							217	232	279	279	325	325	370	370	415	456	456
X							-	-	-	-	-	-	-	-	-	-	-

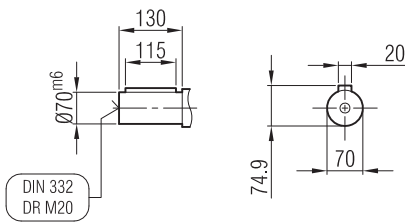
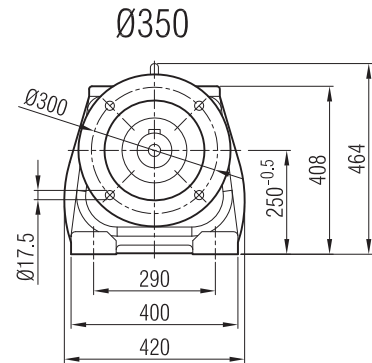
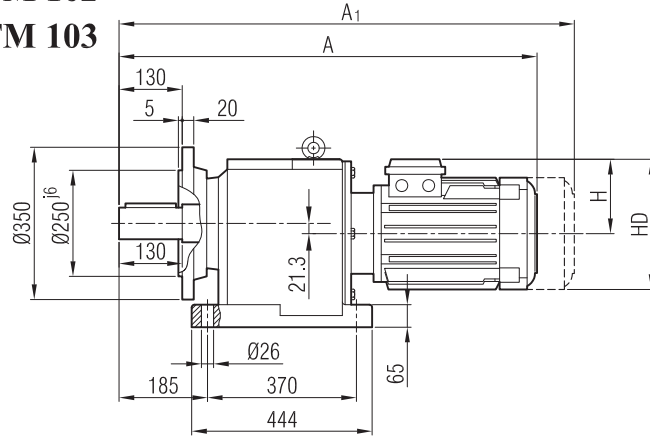
"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse



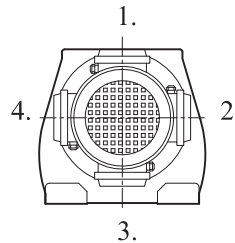


İRAFM 102

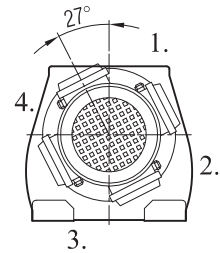
İRAFM 103



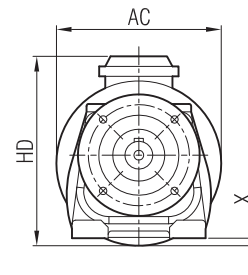
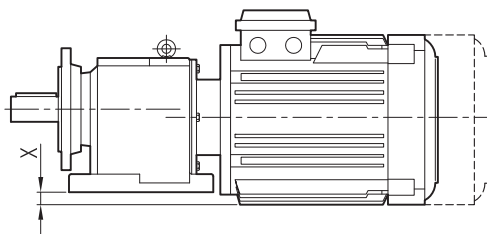
Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



100-112-132-160-200-225 **Tip/Type/Typ**



180 **Tip/Type/Typ**



	56	63	71	80	90 S	90 L	100	112	132 S	132 M	160 M	160 L	180 M	180 L	200	225 S	225 M
A							902	923	893	939	1023	1053	1082	1120	1172	1179	1204
A ₁							992	1048	1035	1081	1213	1243	1277	1315	-	-	-
H							141	149	182	182	225	225	248	248	275	285	285
HD							241	261	314	314	385	385	428	428	425	510	510
AC							217	232	279	279	325	325	370	370	415	456	456
X							-	-	-	-	-	-	-	-	-	-	-

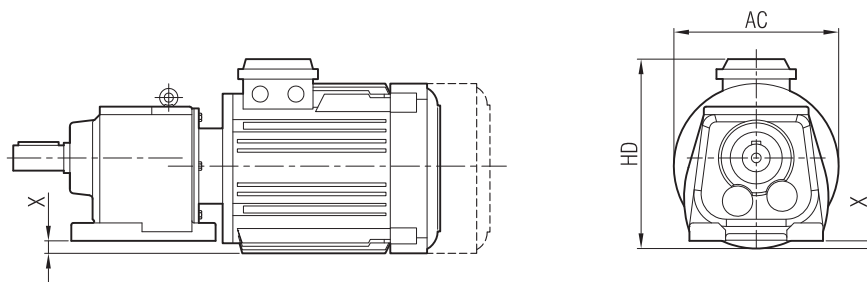
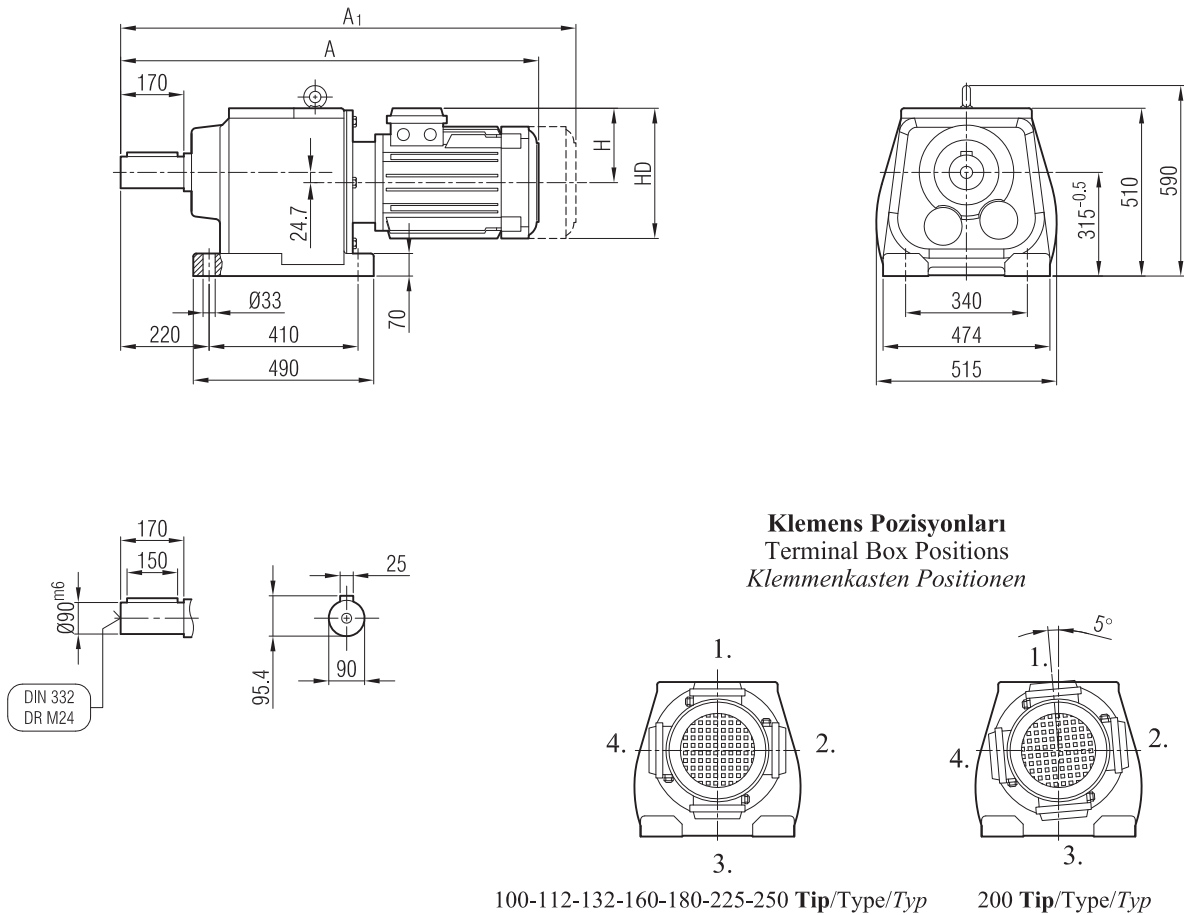
"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse





İRAM 122

İRAM 123



	63	71	80	90 S	90 L	100	112	132 S	132 M	160 M	160 L	180 M	180 L	200	225 S	225 M	250
A								957	1003	1080	1124	1140	1178	1227	1260	1285	1362
A ₁								1099	1145	1270	1314	1335	1372	-	-	-	-
H								182	182	225	225	248	248	275	285	285	322
HD								314	314	385	385	428	428	425	510	510	572
AC								279	279	325	325	370	370	415	456	456	480
X								-	-	-	-	-	-	-	-	-	-

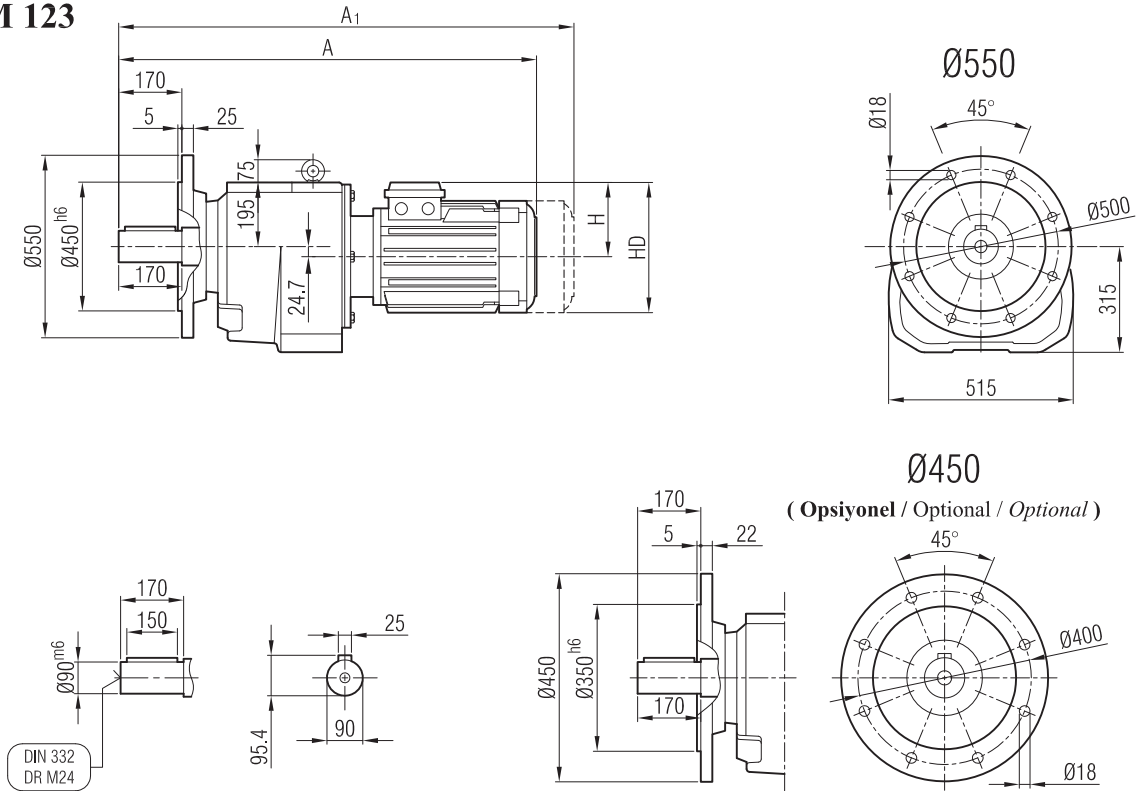
"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse



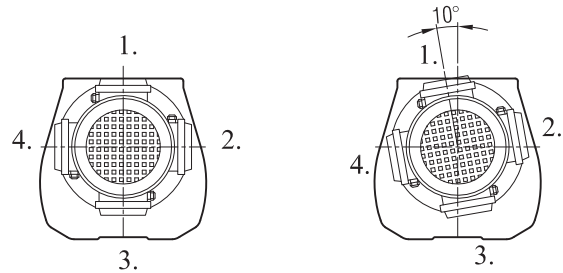


İRFM 122

İRFM 123

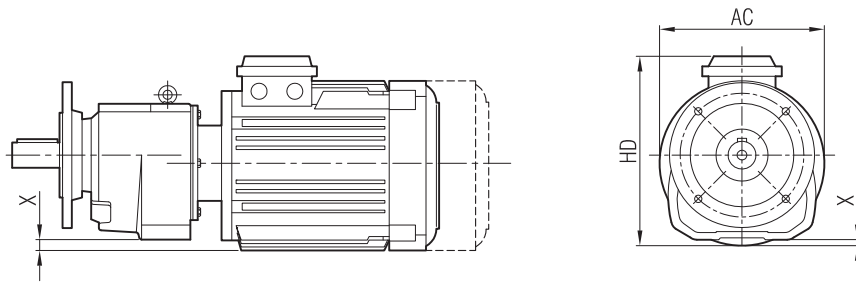


Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



100-112-132-160-180-225-250 Tip/Type/Typ

200 Tip/Type/Typ



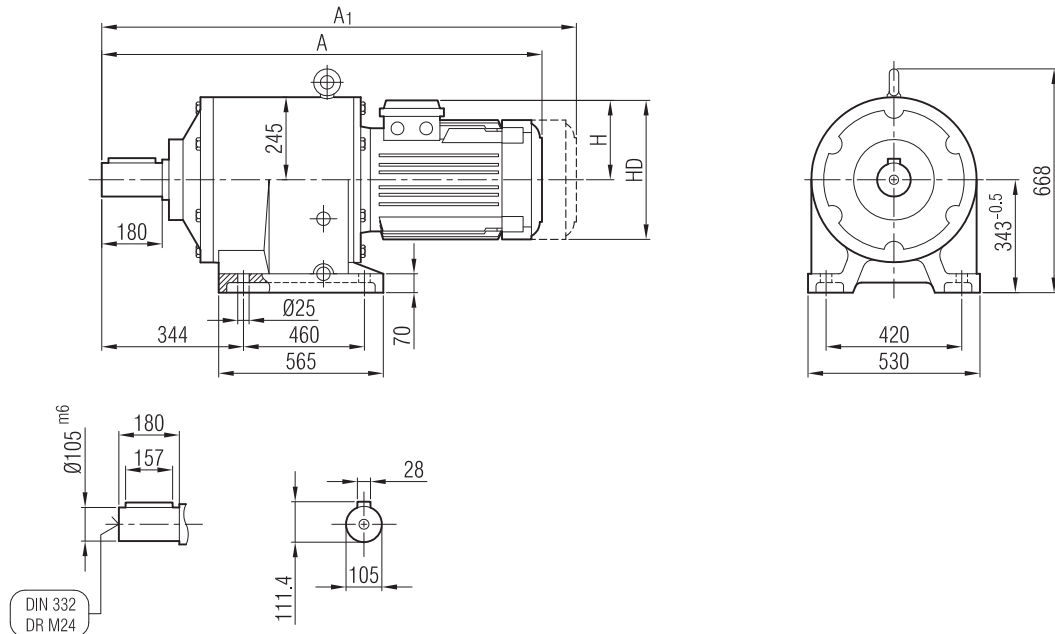
	63	71	80	90 S	90 L	100	112	132 S	132 M	160 M	160 L	180 M	180 L	200	225 S	225 M	250
A								957	1003	1080	1124	1140	1178	1227	1260	1285	1362
A ₁								1099	1145	1270	1314	1335	1372	-	-	-	-
H								182	182	225	225	248	248	275	285	285	322
HD								314	314	385	385	428	428	425	510	510	572
AC								279	279	325	325	370	370	415	456	456	480
X								-	-	-	-	-	-	-	-	-	-

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

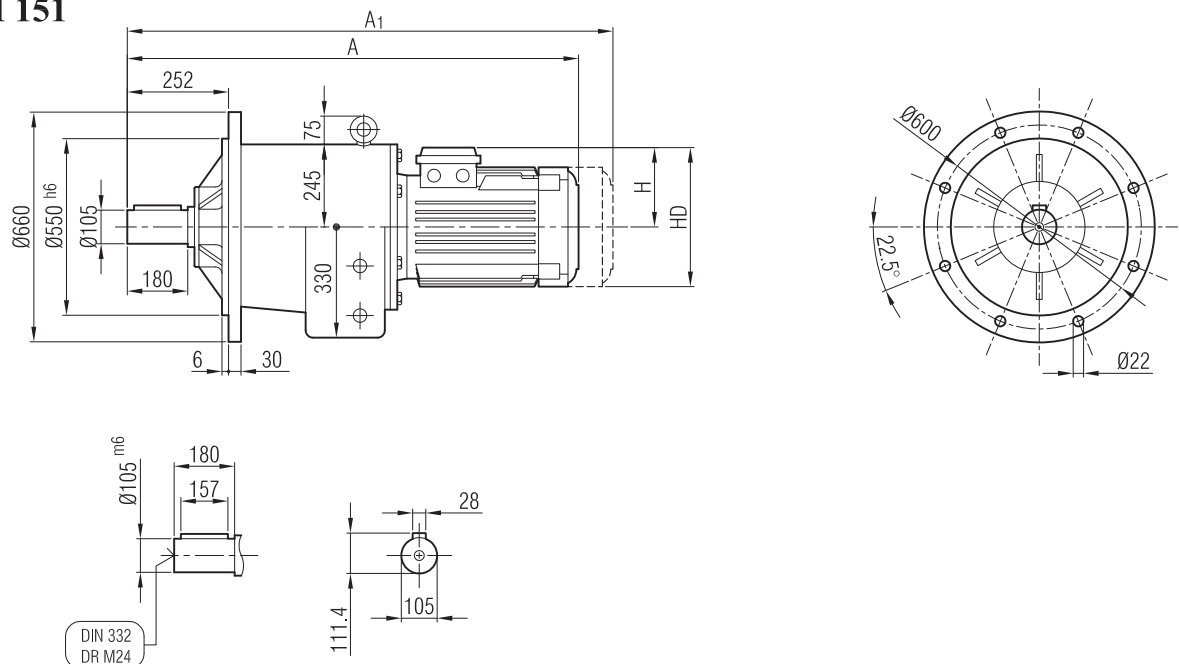




İRAM 151



İRFM 151



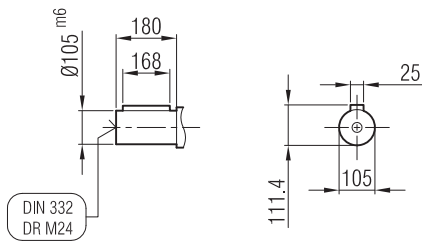
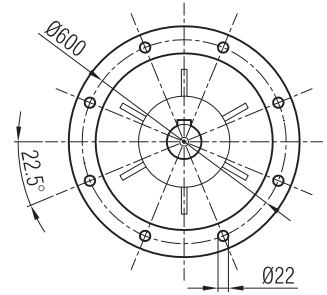
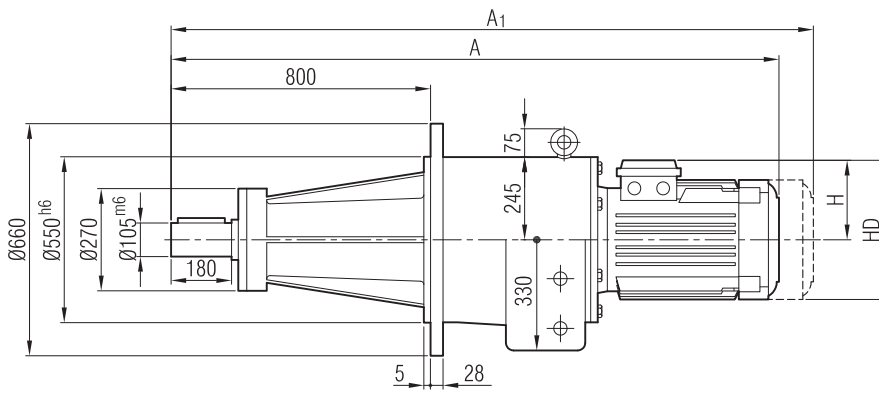
	80	90 S	90 L	100	112	132 S	132 M	160 M	160 L	180 M	180 L	200	225 S	225 M	250	280 S	280 M
A							1168	1252	1296	1305	1343	1403	1406	1431	1507	1569	1569
A ₁							-	-	-	-	-	-	-	-	-	-	-
H							182	225	225	248	248	275	285	285	322	350	350
HD							314	385	385	428	428	475	510	510	572	630	630

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse





İRBM 151



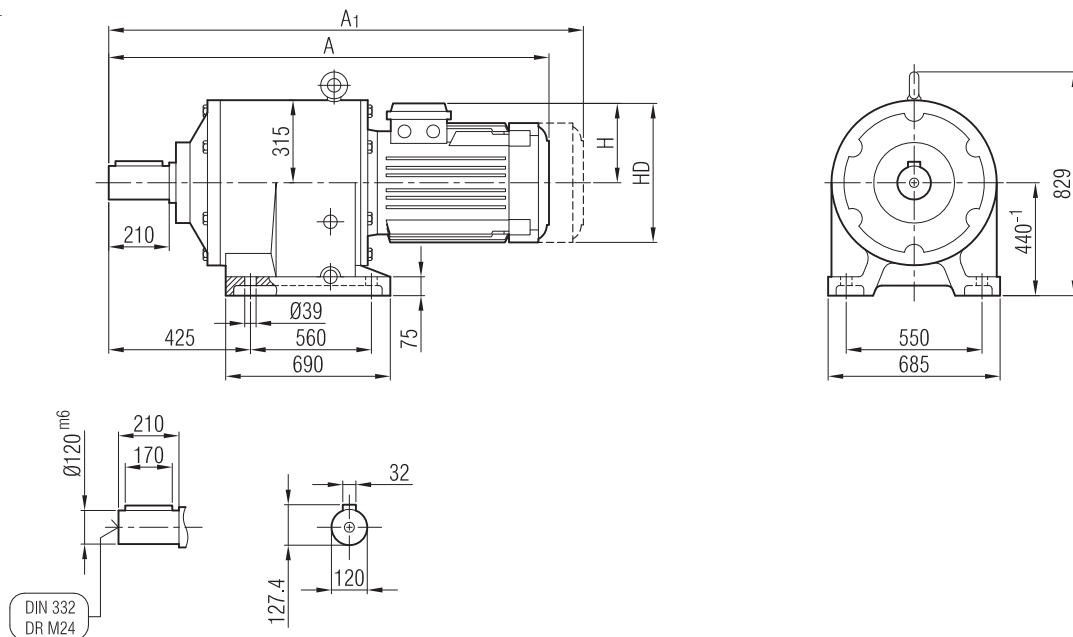
	80	90 S	90 L	100	112	132 S	132 M	160 M	160 L	180 M	180 L	200	225 S	225 M	250	280 S	280 M
A							1715	1800	1844	1853	1891	1951	1954	1979	2055	2117	2117
A ₁							-	-	-	-	-	-	-	-	-	-	-
H							182	225	225	248	248	275	285	285	322	350	350
HD							314	385	385	428	428	475	510	510	572	630	630

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

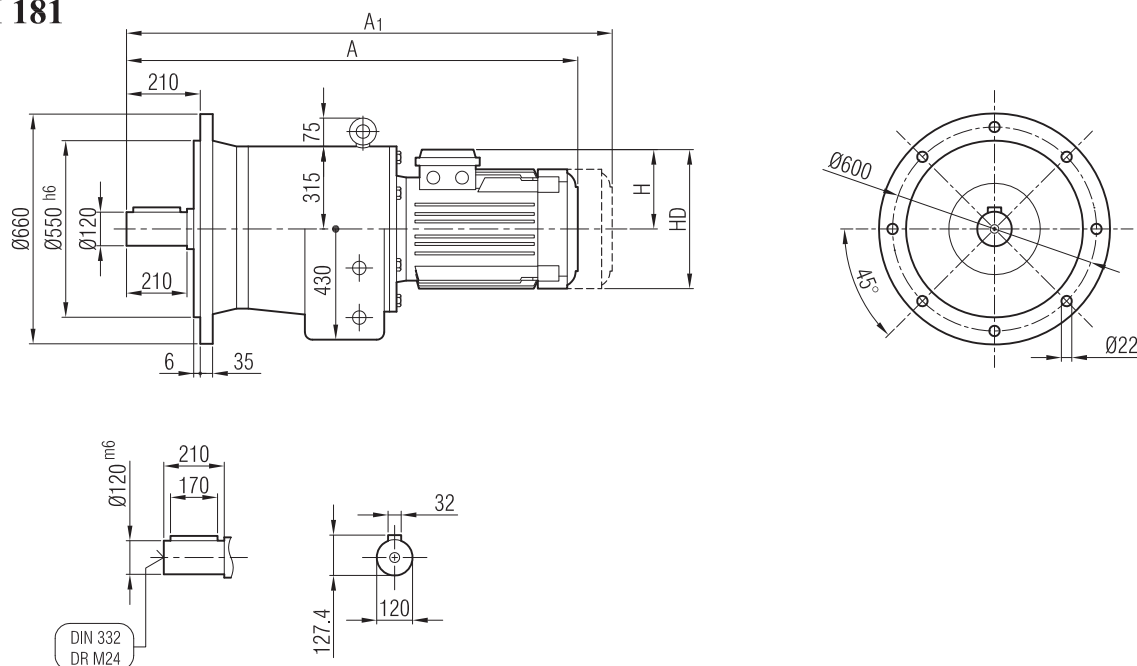




İRAM 181



İRFM 181



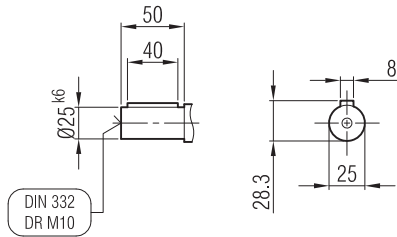
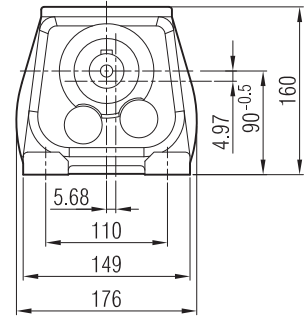
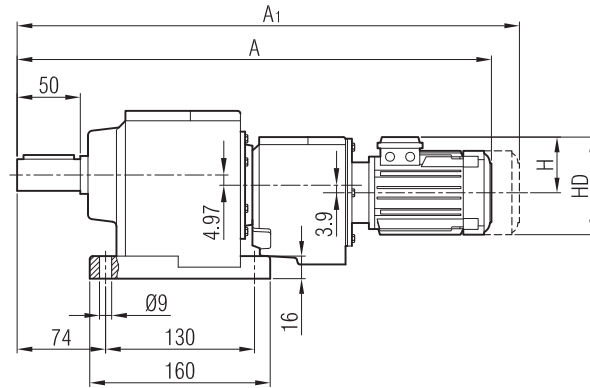
	100	112	132 S	132 M	160 M	160 L	180 M	180 L	200	225 S	225 M	250	280 S	280 M	315 S	315 M	315 L
A					1406	1406	1463	1501	1552	1572	1597	1650	1748	1748	1910	1910	1980
A ₁					-	-	-	-	-	-	-	-	-	-	-	-	-
H					225	225	248	248	275	285	285	322	350	350	510	510	510
HD					385	385	428	428	475	510	510	572	630	630	825	825	825

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse





İRAM 53 İR 42



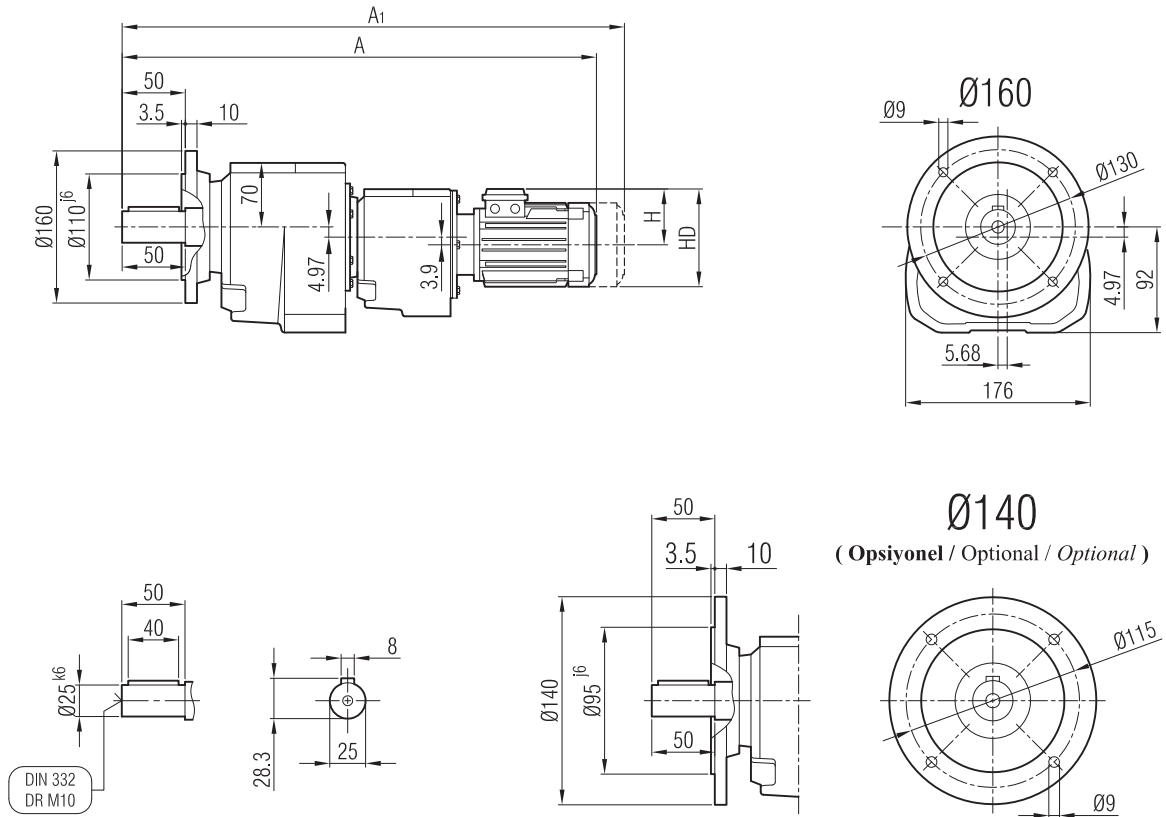
	56	63	71													
A		514	542													
A ₁		572	615													
H		99	111													
HD		162	182													

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse





İRFM 53 İR 42



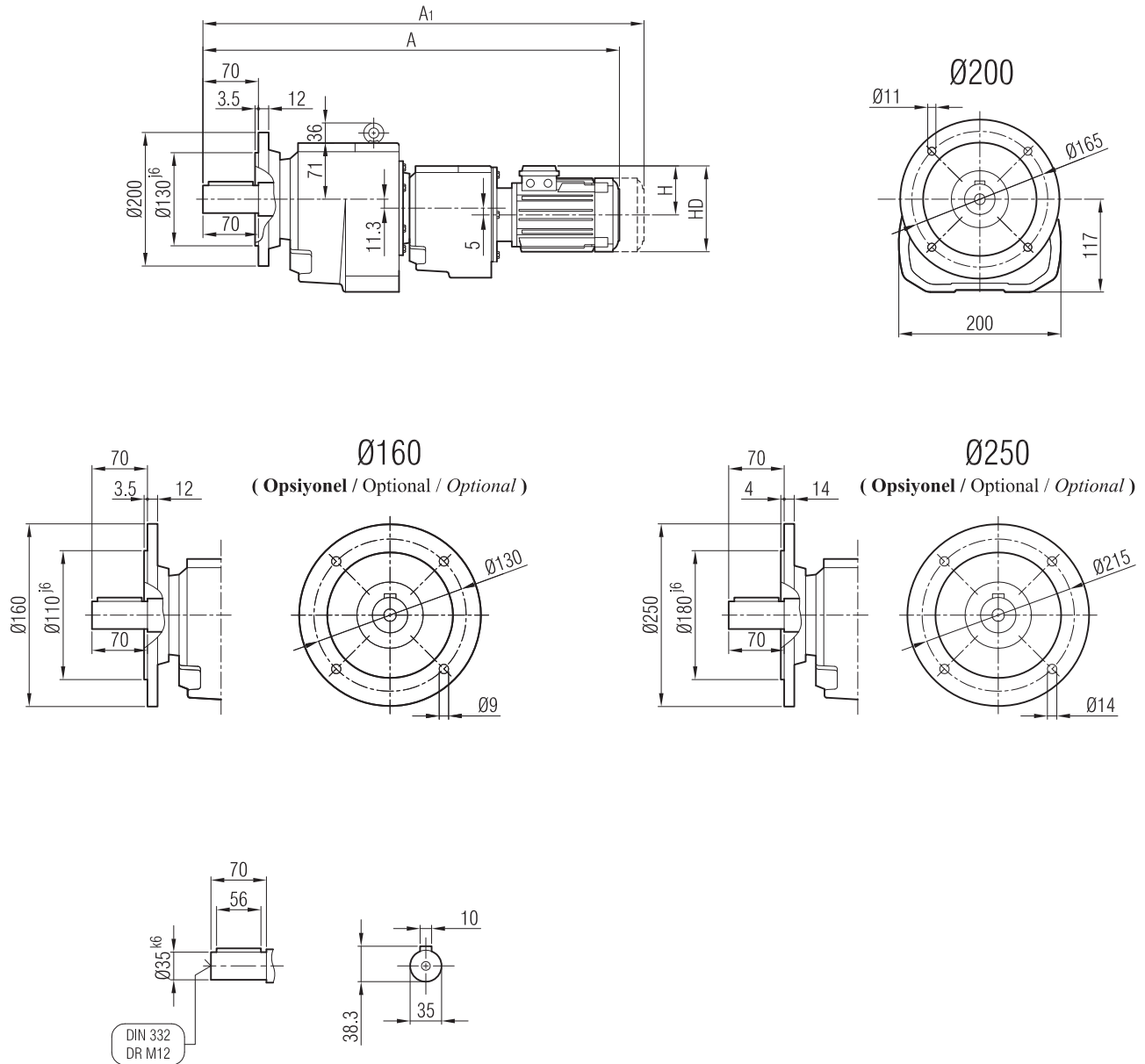
	56	63	71													
A		514	542													
A ₁		572	615													
H		99	111													
HD		162	182													

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse





İRFM 62 İR 52
İRFM 63 İR 52



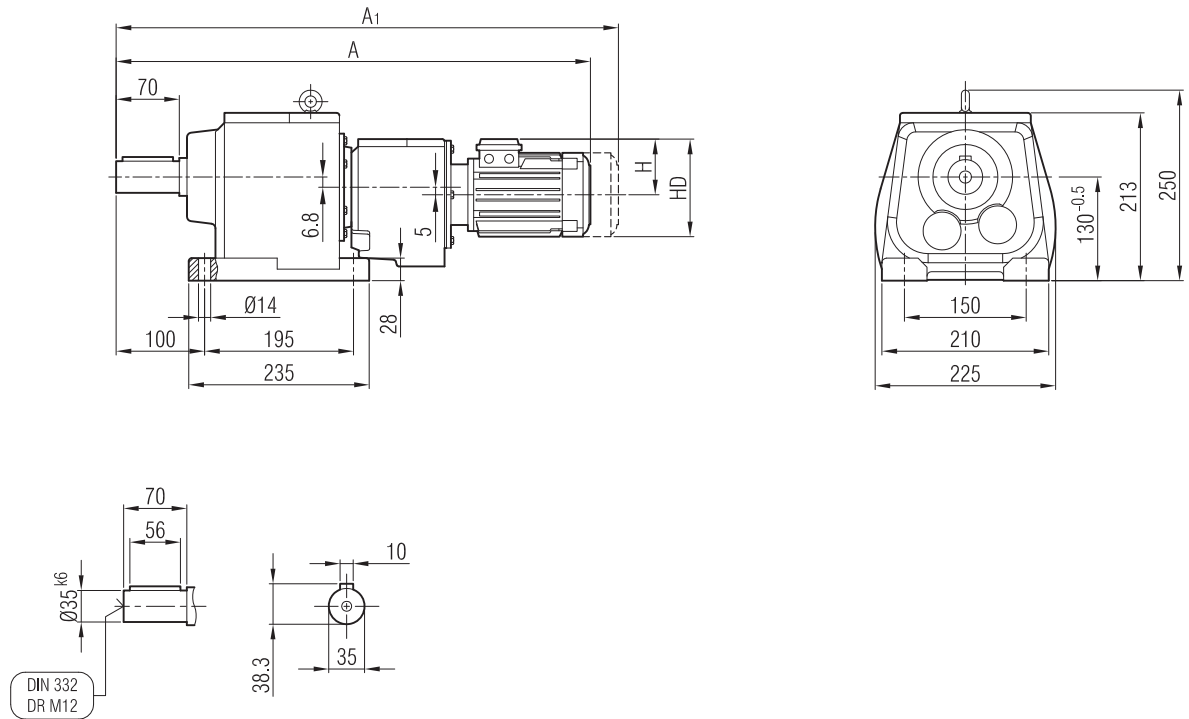
	56	63	71															
A		630	620															
A ₁		690	680															
H		99	111															
HD		162	182															

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse





İRAM 721 İR 53
İRAM 731 İR 52



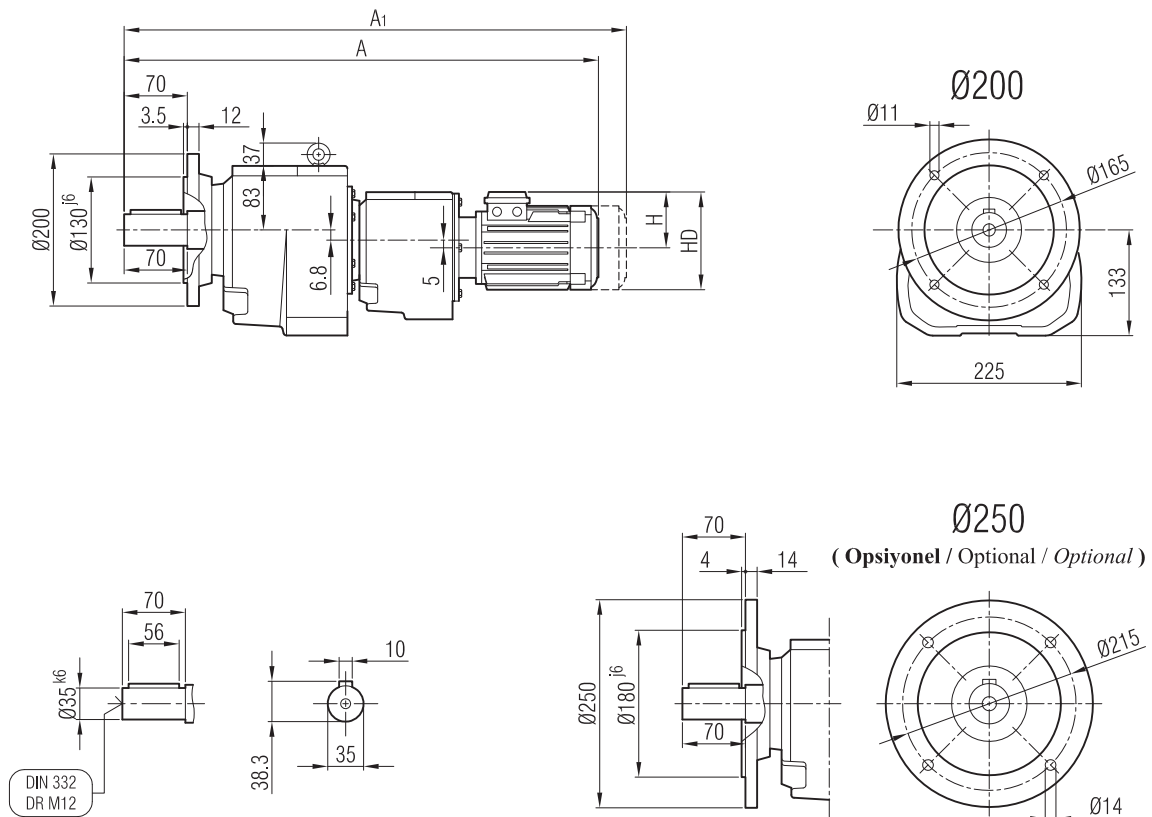
	56	63	71	80												
A		655	642	673												
A ₁		713	703	734												
H		99	111	118												
HD		162	182	198												

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse





İRFM 721 İR 53
İRFM 731 İR 52



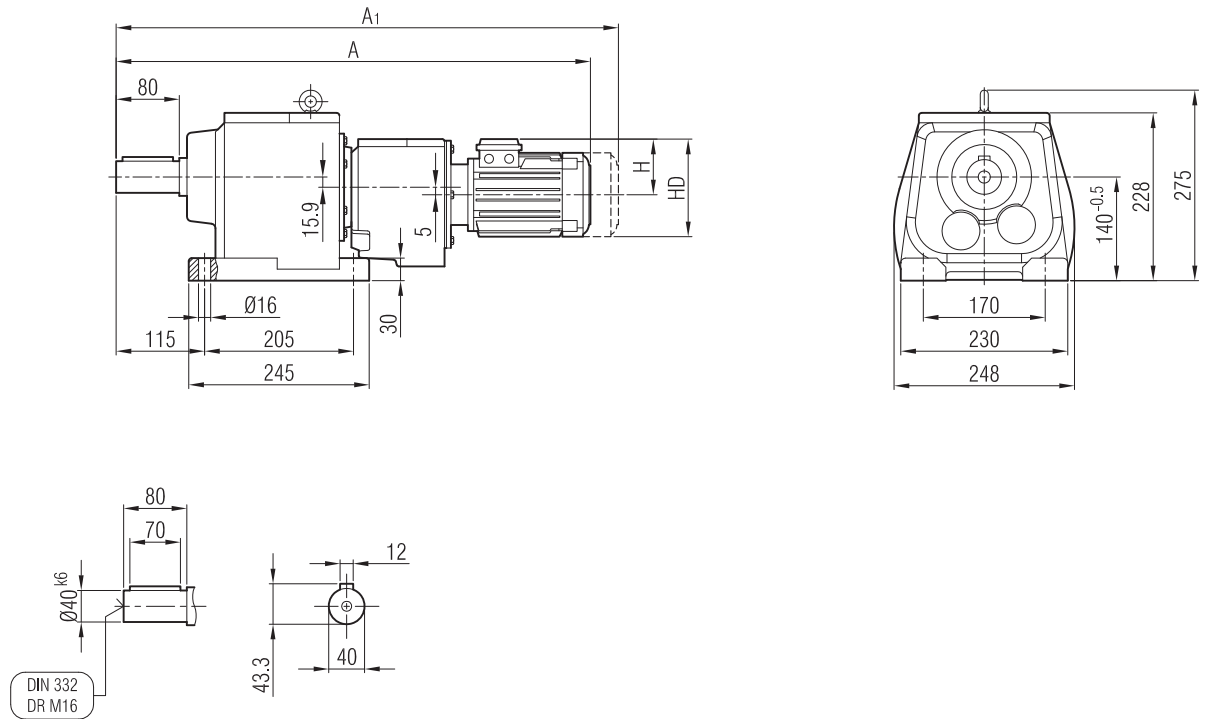
	56	63	71	80												
A		655	642	673												
A ₁		713	703	734												
H		99	111	118												
HD		162	182	198												

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse





İRAM 72 İR 52
İRAM 73 İR 52



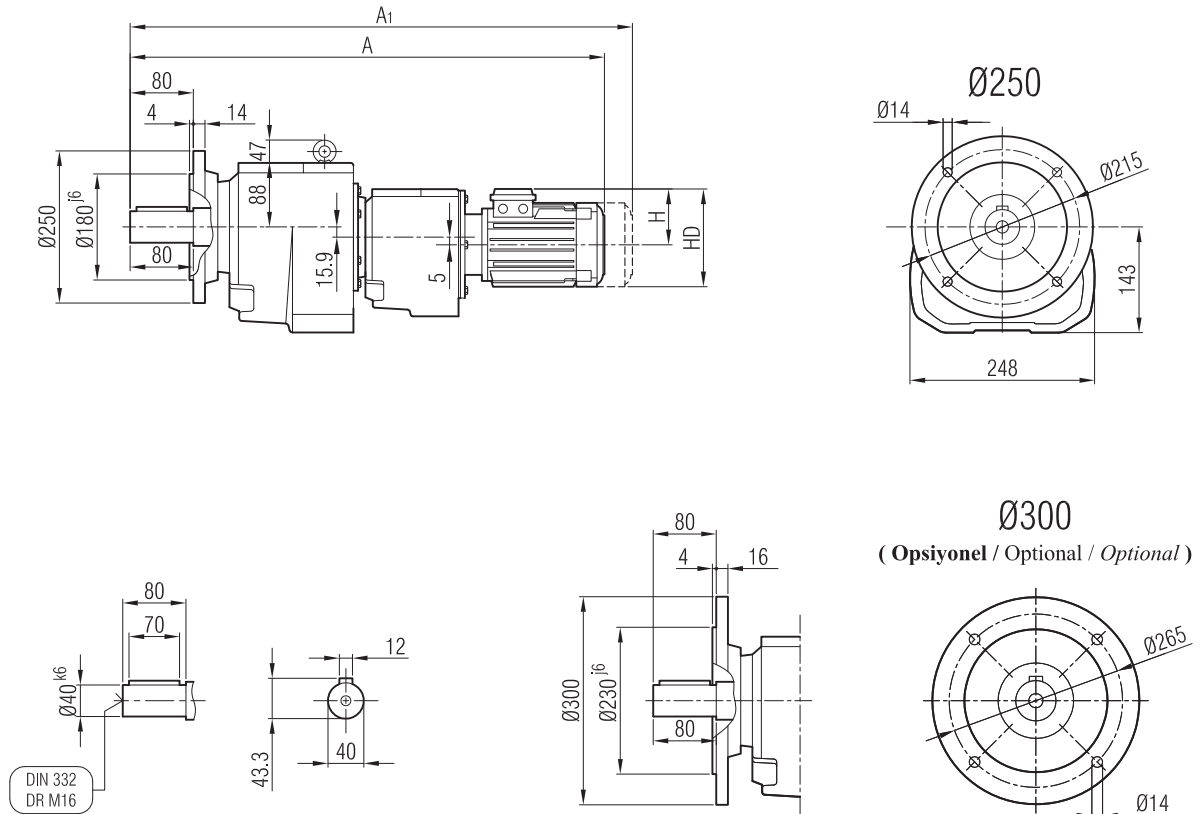
	56	63	71	80												
A		683	670	701												
A ₁		741	731	762												
H		99	111	118												
HD		162	182	198												

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse





İRFM 72 İR 52
İRFM 73 İR 52



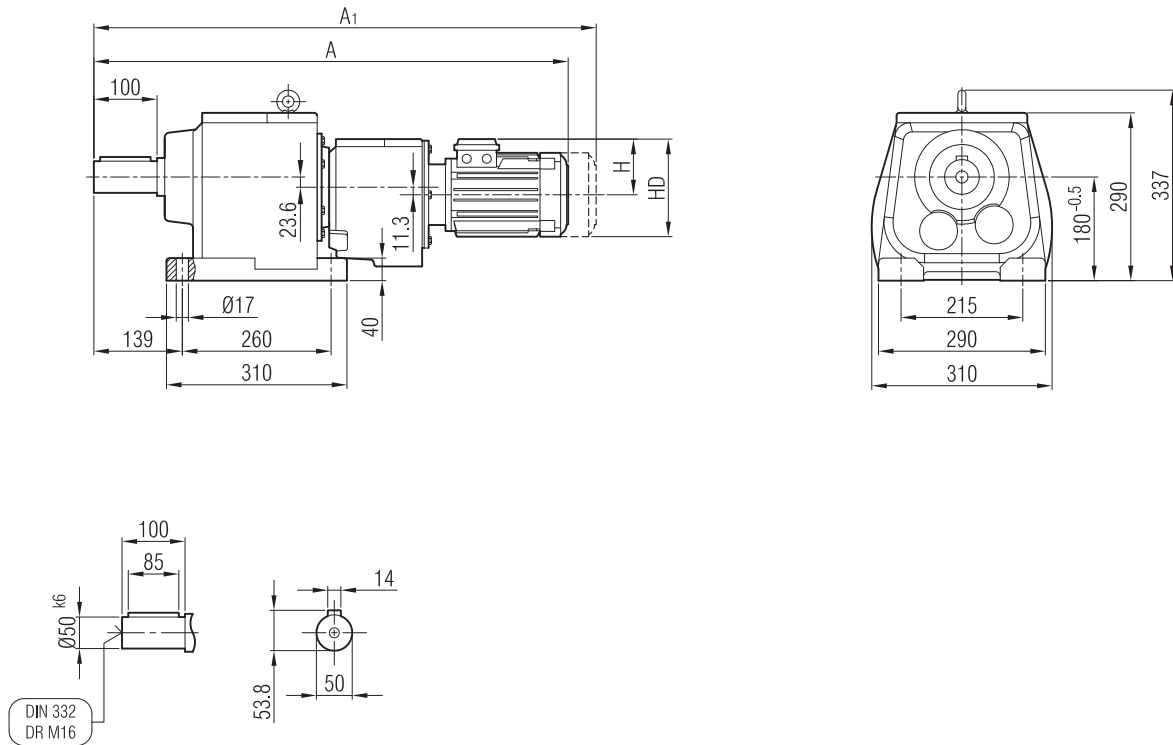
	56	63	71	80												
A		683	670	701												
A ₁		741	731	762												
H		99	111	118												
HD		162	182	198												

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse





İRAM 82 İR 63
İRAM 83 İR 63



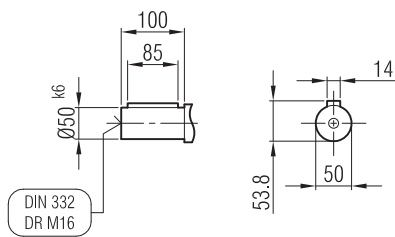
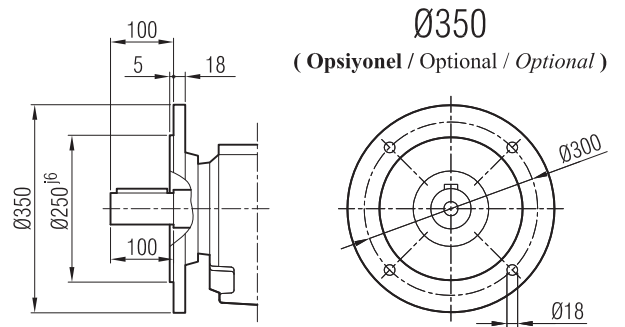
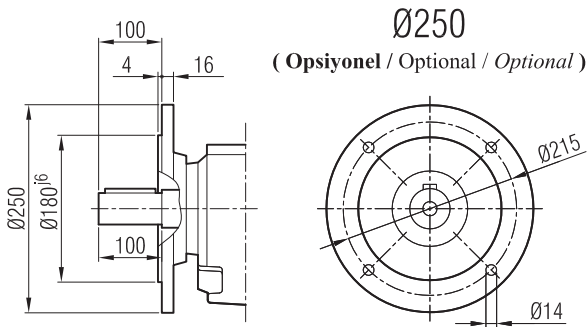
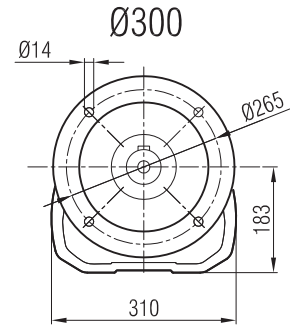
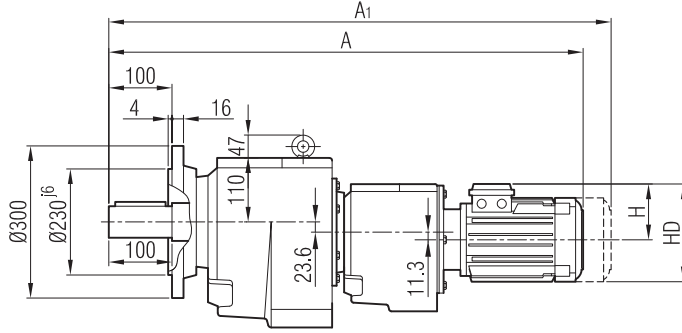
	56	63	71	80	90 S											
A		795	821	842	865											
A ₁		853	882	903	914											
H		99	111	118	132											
HD		162	182	198	222											

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse





İRFM 82 İR 63
İRFM 83 İR 63



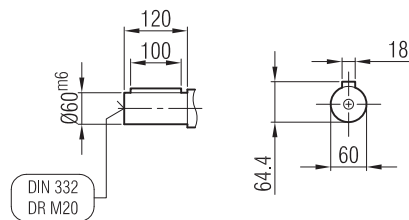
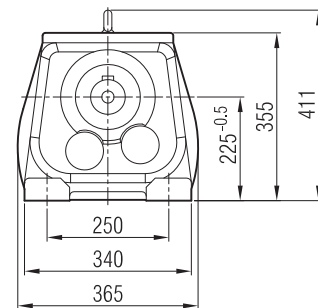
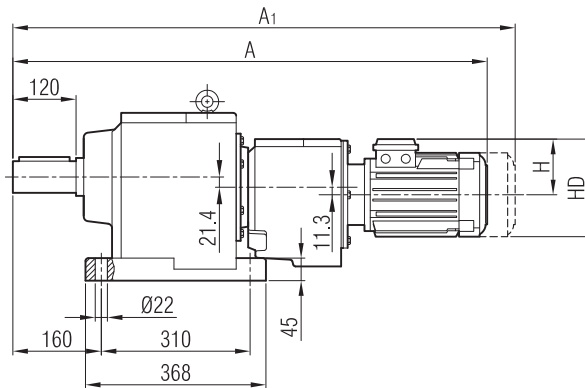
	56	63	71	80	90 S											
A		795	821	842	865											
A ₁		853	882	903	914											
H		99	111	118	132											
HD		162	182	198	222											

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse





İRAM 92 İR 62
İRAM 92 İR 63
İRAM 93 İR 62
İRAM 93 İR 63



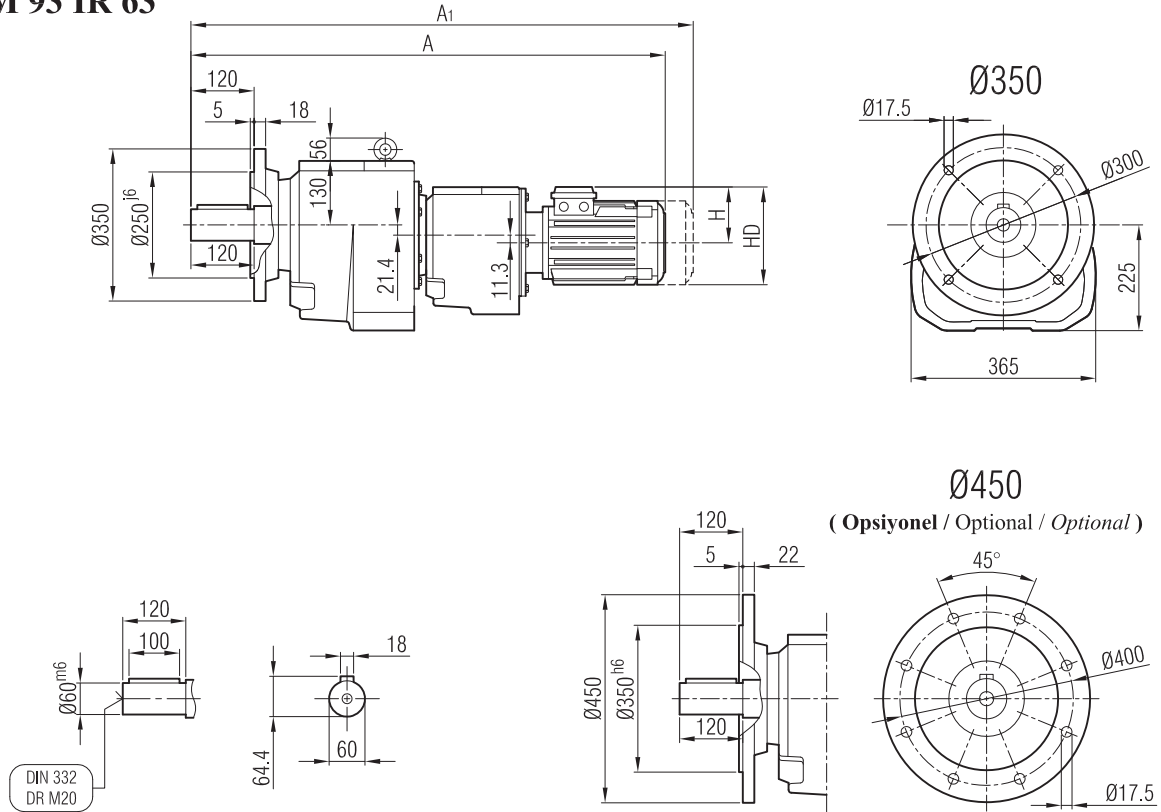
	56	63	71	80	90 S	90 L										
A		865	855	875	890	910										
A ₁		925	915	935	960	980										
H		99	111	118	132	132										
HD		162	182	198	222	222										

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse





İRFM 92 İR 62
İRFM 92 İR 63
İRFM 93 İR 62
İRFM 93 İR 63



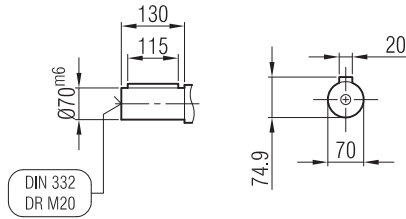
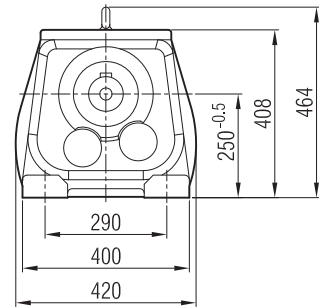
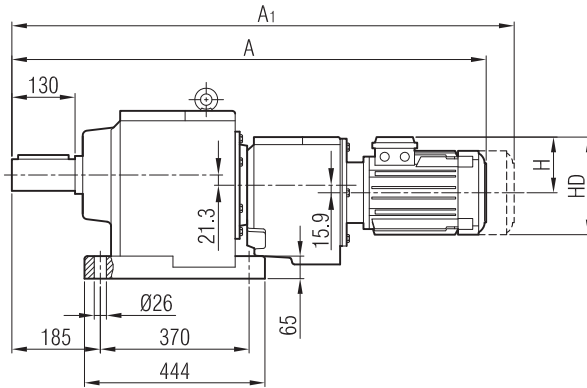
	56	63	71	80	90 S	90 L										
A		865	855	875	890	910										
A ₁		925	915	935	960	980										
H		99	111	118	132	132										
HD		162	182	198	222	222										

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse





İRAM 102 İR 72
İRAM 102 İR 73
İRAM 103 İR 72
İRAM 103 İR 73



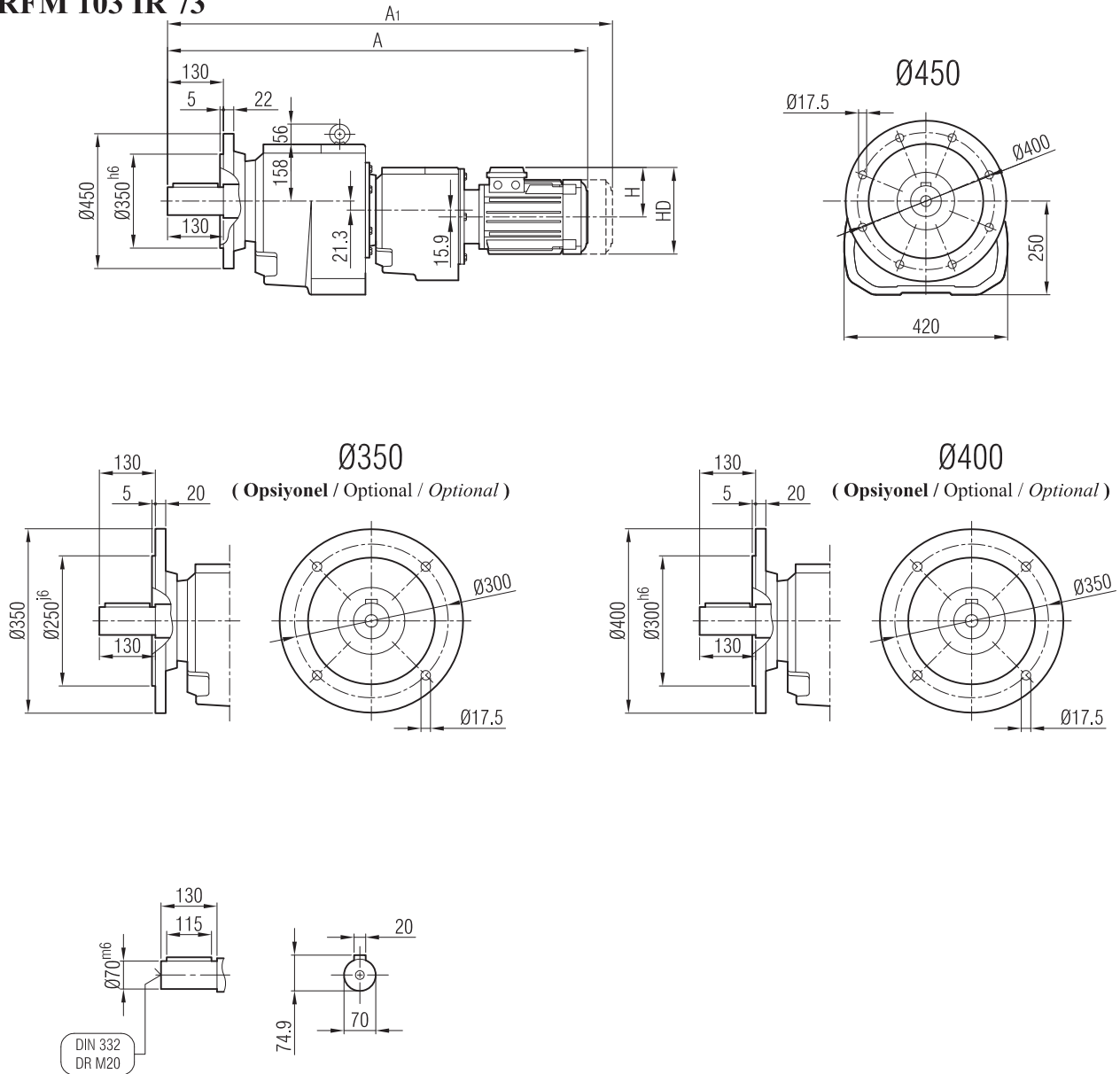
	56	63	71	80	90 S	90 L	100									
A			956	987	1000	1020	1054									
A ₁			1017	1048	1069	1089	1139									
H			111	118	132	132	141									
HD			182	198	222	222	241									

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse





İRFM 102 İR 72
İRFM 102 İR 73
İRFM 103 İR 72
İRFM 103 İR 73



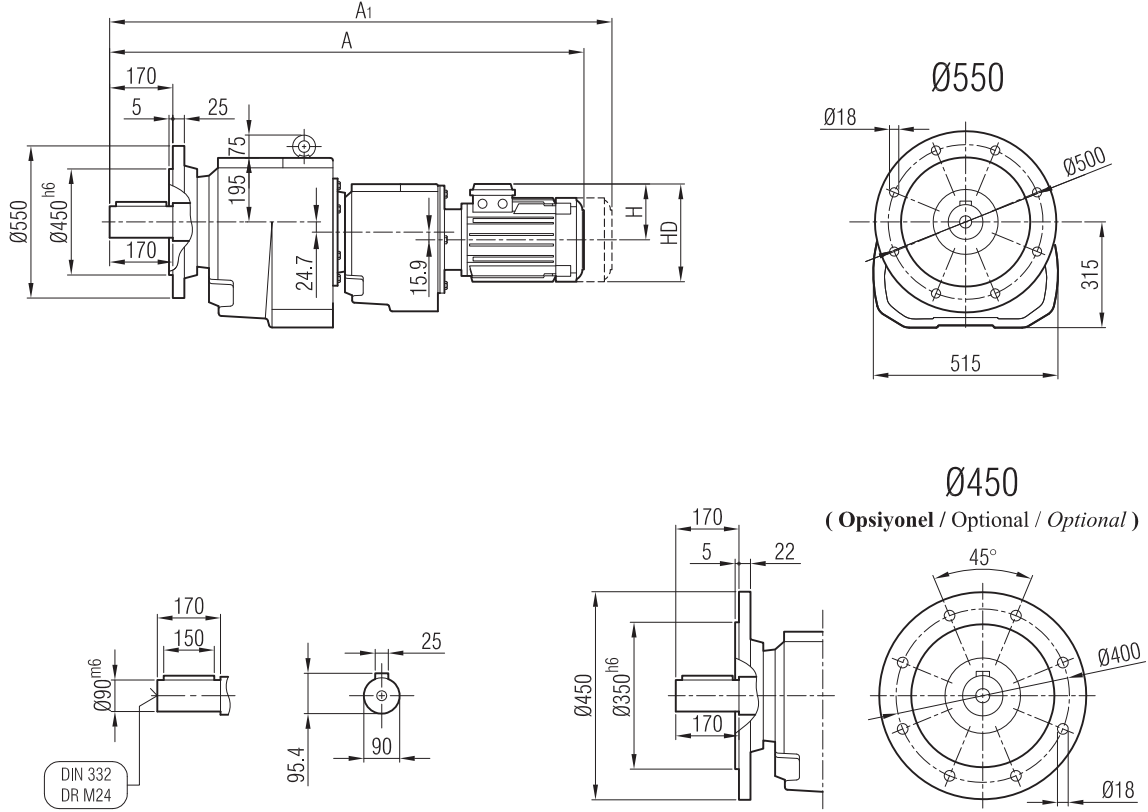
	56	63	71	80	90 S	90 L	100									
A			956	987	1000	1020	1054									
A ₁			1017	1048	1069	1089	1139									
H			111	118	132	132	141									
HD			182	198	222	222	241									

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse





İRFM 122 İR 73
İRFM 123 İR 72
İRFM 123 İR 73



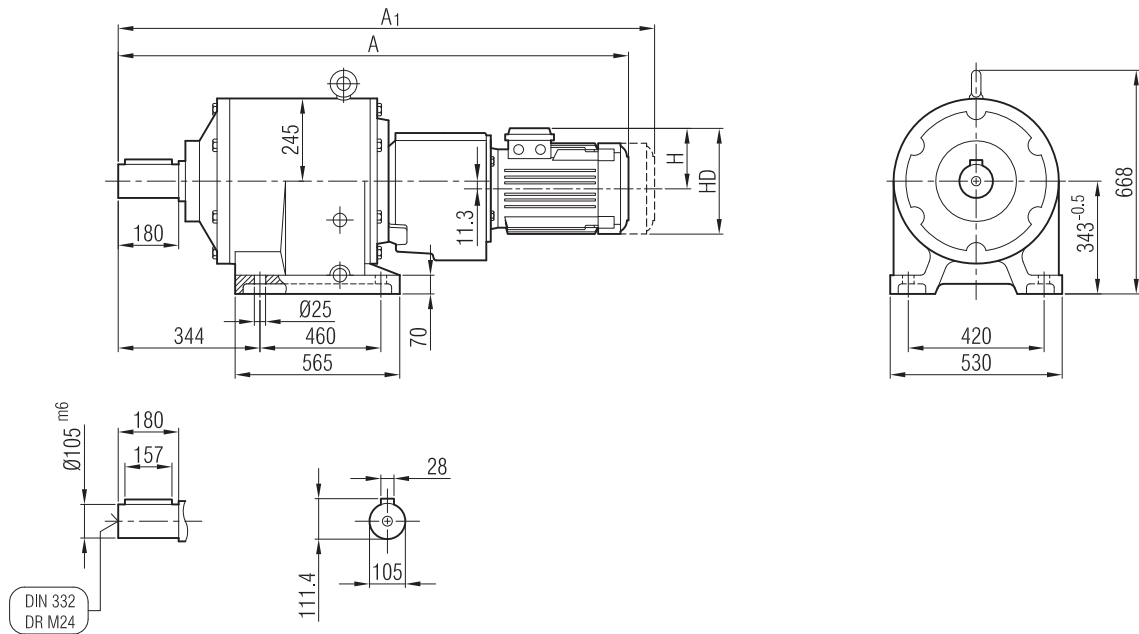
	56	63	71	80	90 S	90 L	100	112								
A			1108	1139	1163	1188	1230	1249								
A ₁			1181	1222	1248	1273	1332	1374								
H			111	118	132	132	141	149								
HD			182	198	222	222	241	261								

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

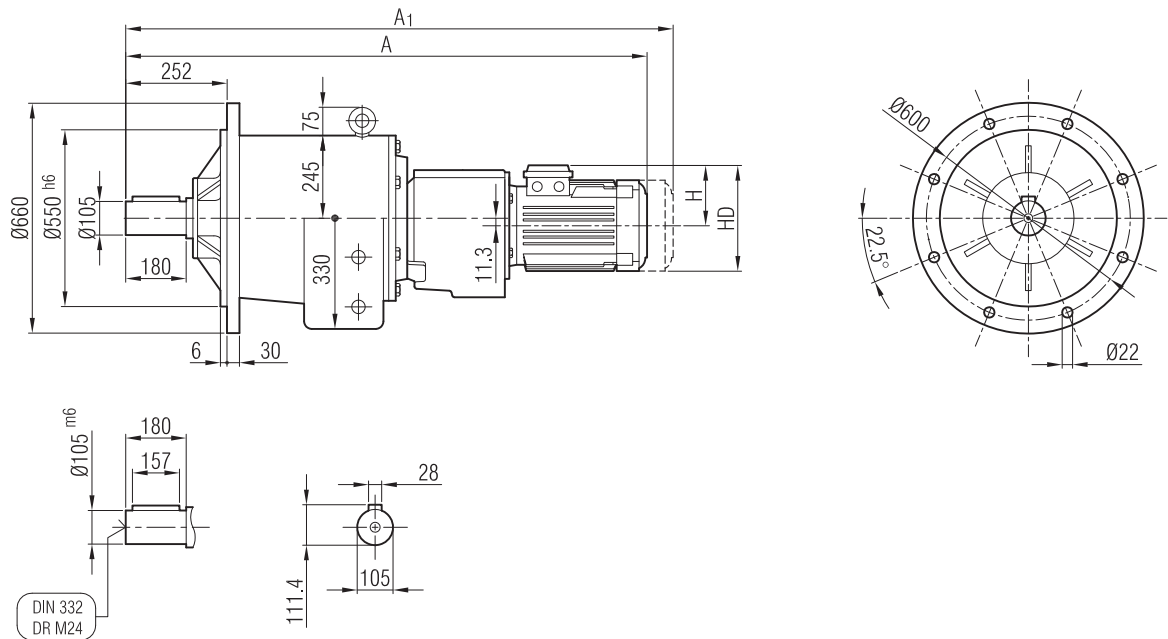




İRAM 151 İR 62
İRAM 151 İR 63



İRFM 151 İR 62
İRFM 151 İR 63



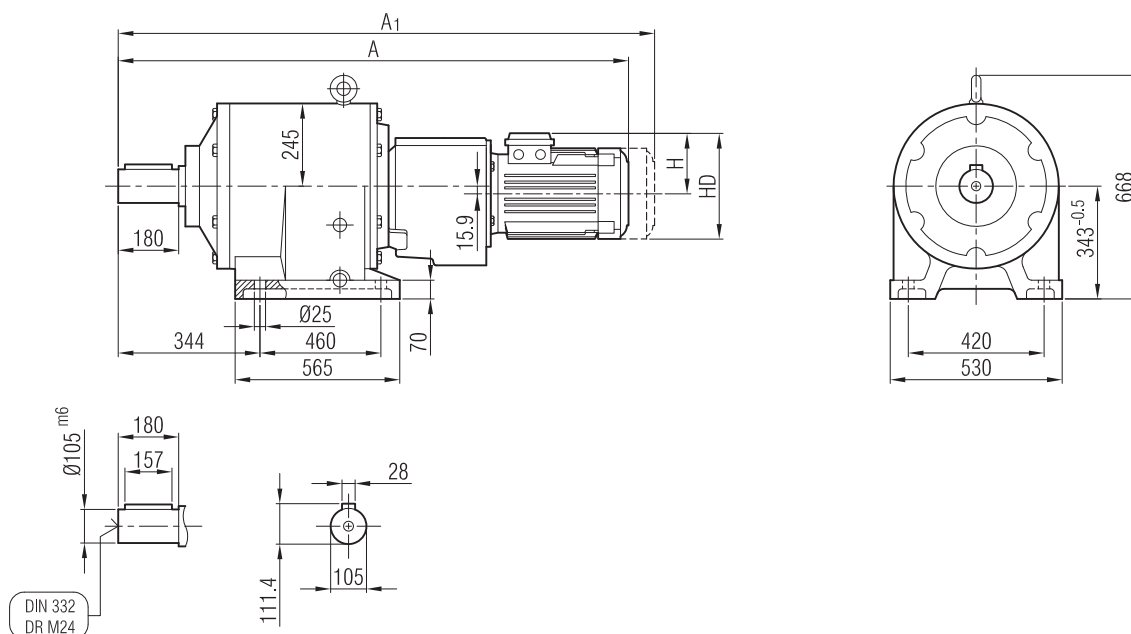
	56	63	71	80	90 S	90 L									
A				1194	1219	1244									
A ₁				1279	1302	1329									
H				118	132	132									
HD				198	222	222									

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

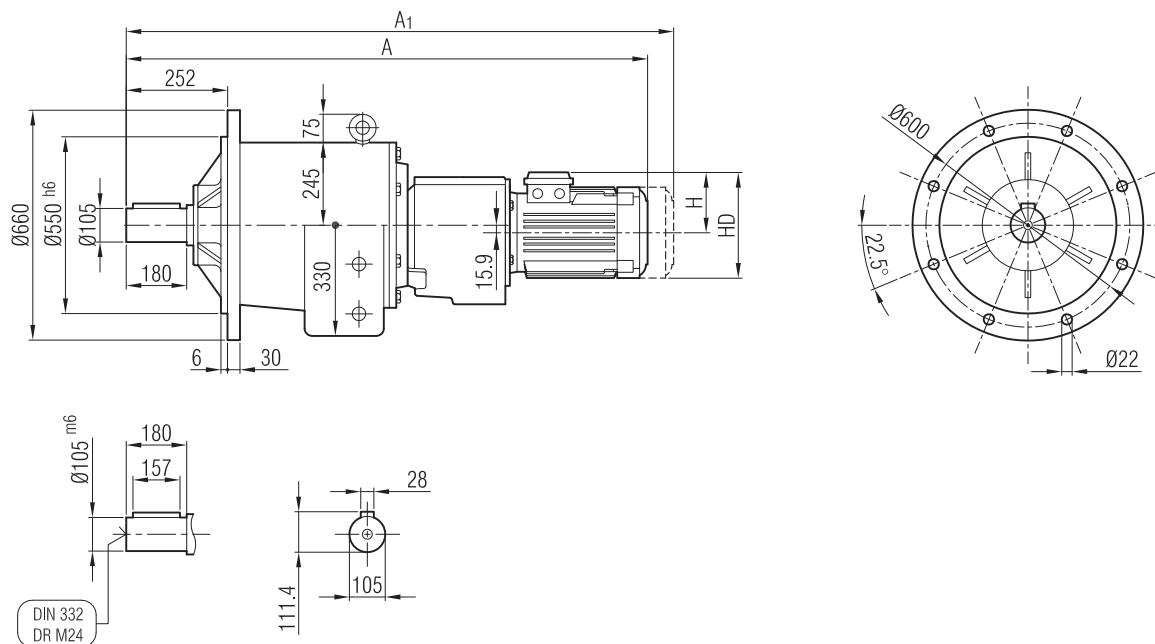




İRAM 151 İR 72
İRAM 151 İR 73



İRFM 151 İR 72
İRFM 151 İR 73



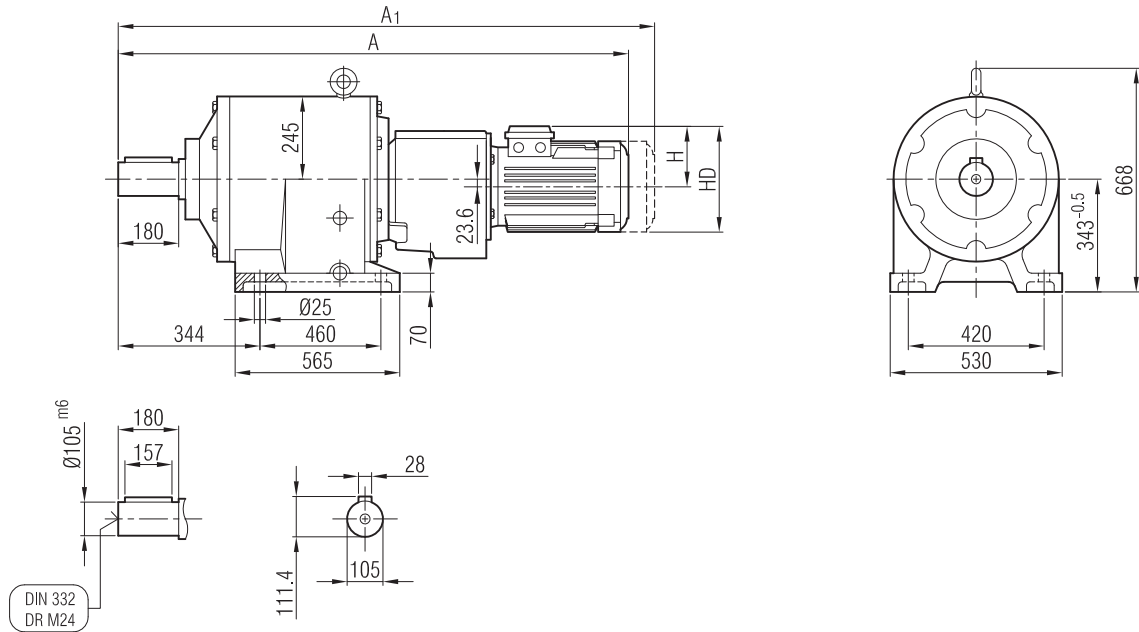
	56	63	71	80	90 S	90 L	100									
A							1320									
A1							1422									
H							141									
HD							241									

"A1" Ölçüsü Frenli Motorlar içindir.
Dimension "A1" is for motors with brake
Maß "A1" ist für Motoren mit Bremse

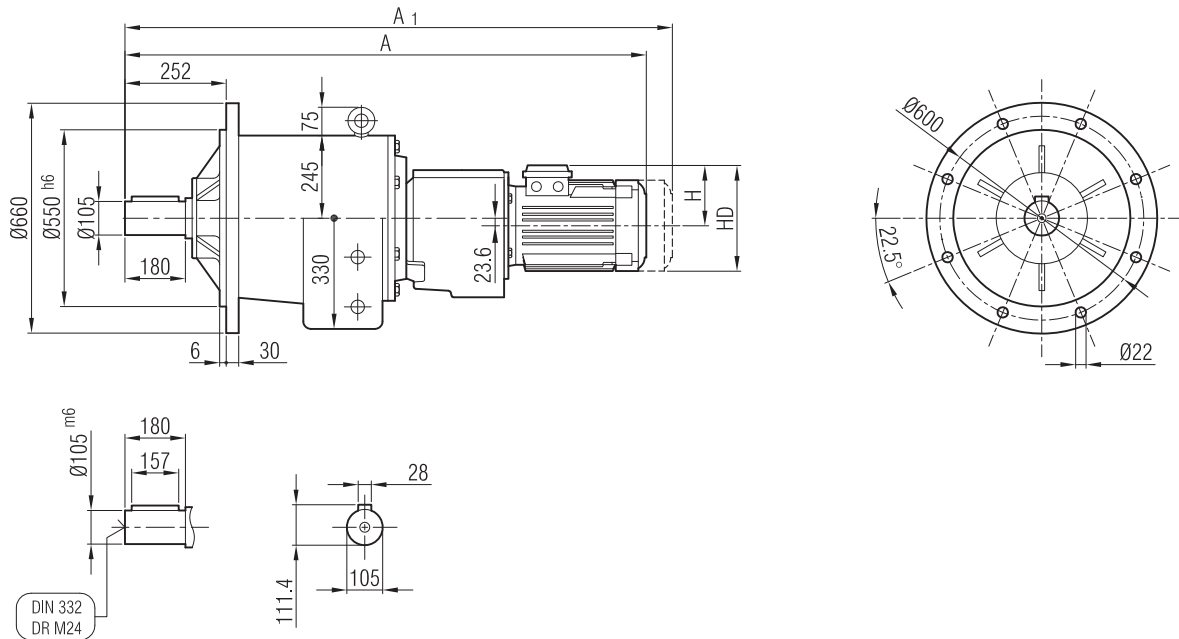




İRAM 151 İR 82
İRAM 151 İR 83



İRFM 151 İR 82
İRFM 151 İR 83



	56	63	71	80	90 S	90 L	100	112								
A								1390								
A ₁								1470								
H								149								
HD								261								

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse





IRAPM ...



IRAFPM ...

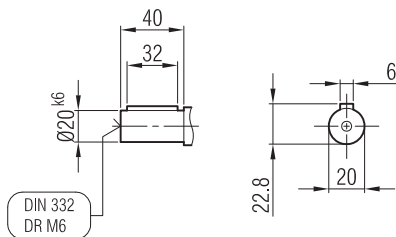
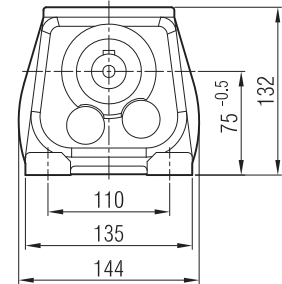
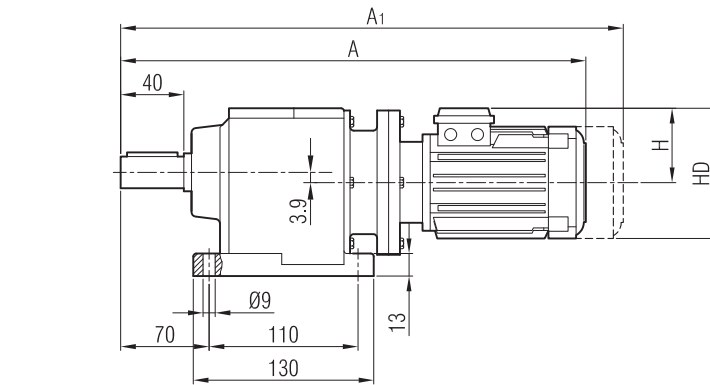


IRFPM ...

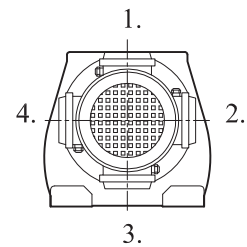




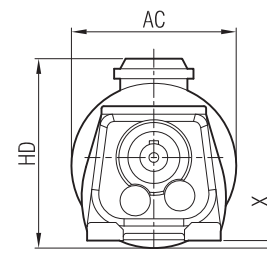
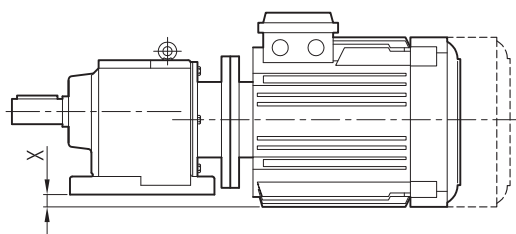
İRAPM 42
İRAPM 43



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80-90 Tip/Type/Typ



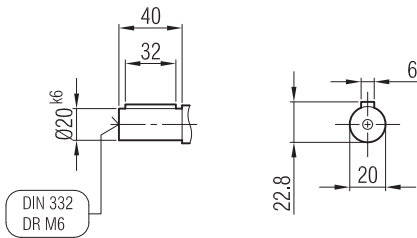
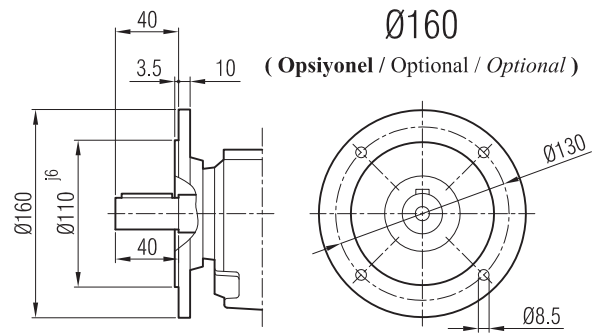
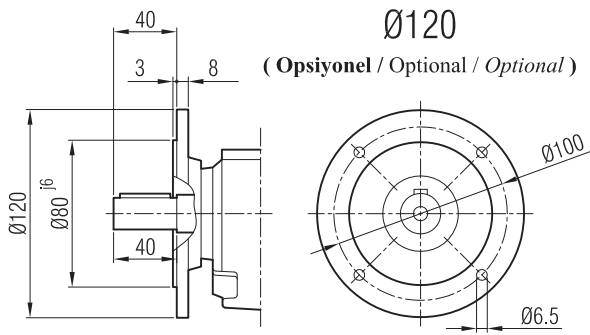
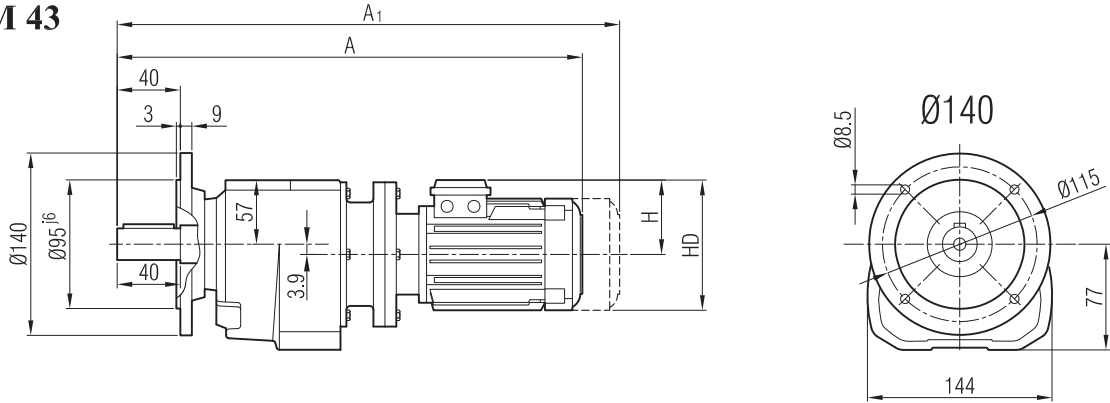
	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5											
A		397	432	453	467	483											
A ₁		455	505	536	552	568											
H		99	111	118	132	132											
HD		162	182	198	222	222											
AC		123	132	158	193	193											
X		-	-	29	29	29											

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

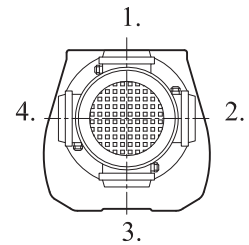




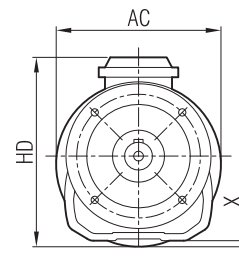
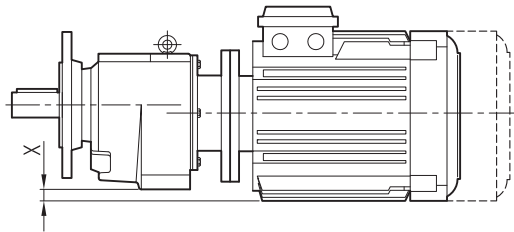
İRFPM 42
İRFPM 43



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80-90 Tip/Type/Typ



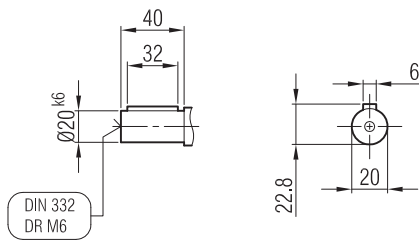
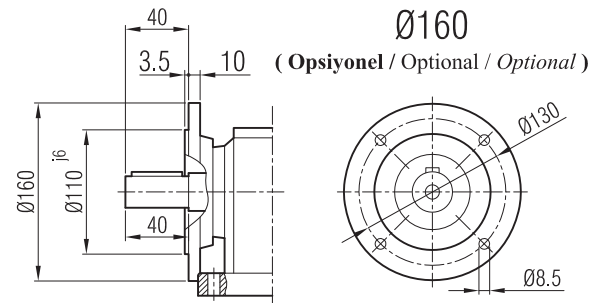
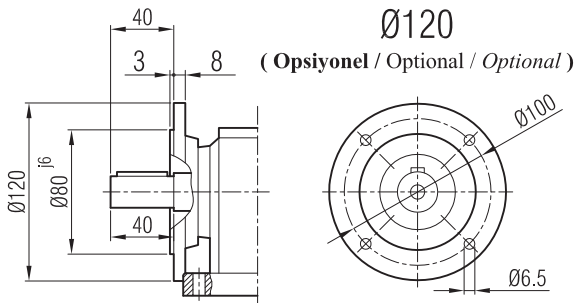
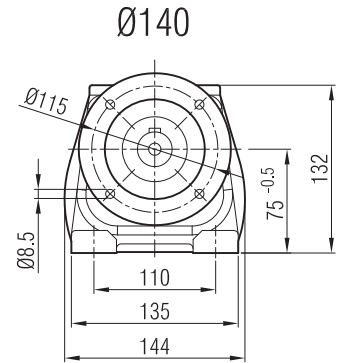
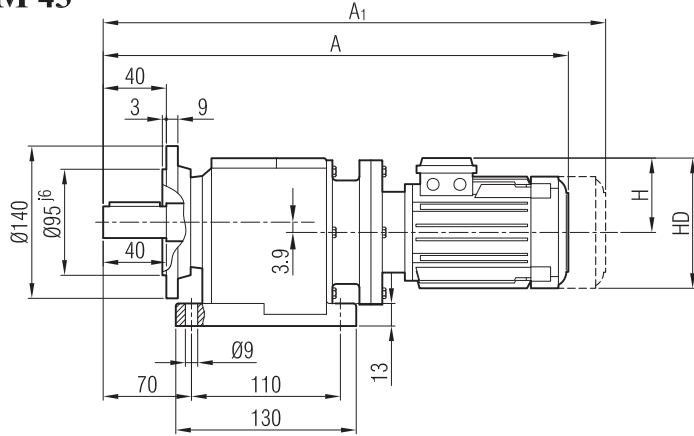
	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5										
A		397	432	453	467	483										
A ₁		455	505	536	552	568										
H		99	111	118	132	132										
HD		162	182	198	222	222										
AC		123	132	158	193	193										
X		-	-	27	27	27										

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

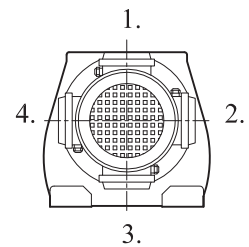




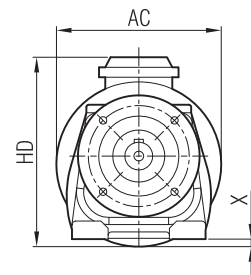
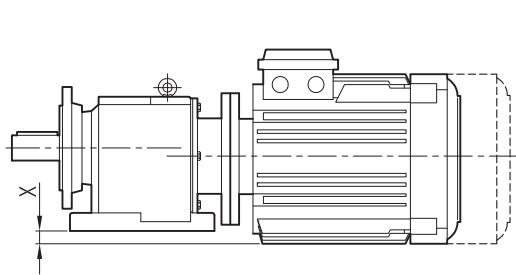
İRAFPM 42
İRAFPM 43



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80-90 **Tip/Type/Typ**



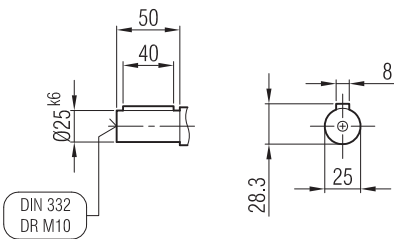
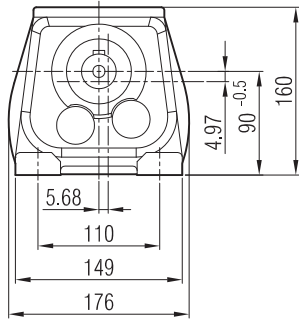
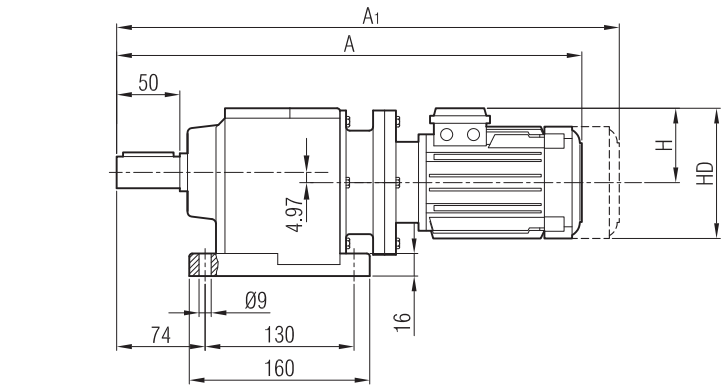
	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5											
A		397	432	453	467	483											
A ₁		455	505	536	552	568											
H		99	111	118	132	132											
HD		162	182	198	222	222											
AC		123	132	158	193	193											
X		-	-	29	29	29											

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

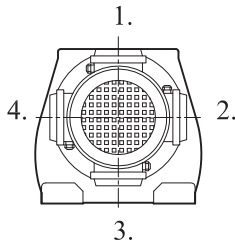




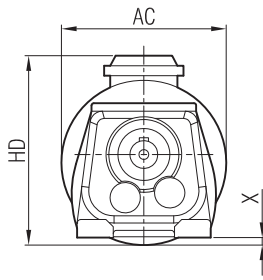
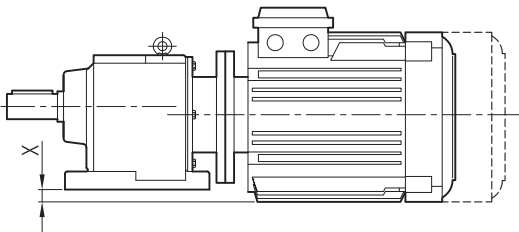
İRAPM 52
İRAPM 53



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80-90-100 Tip/Type/Typ



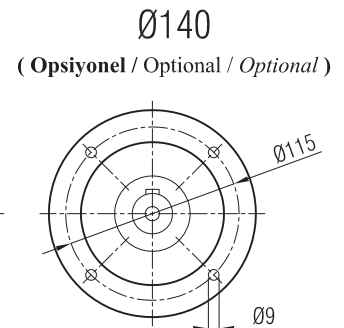
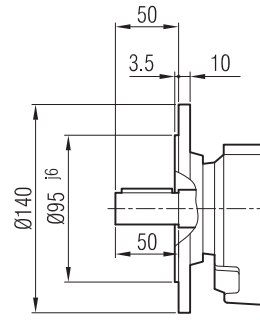
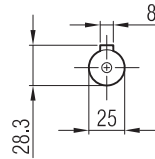
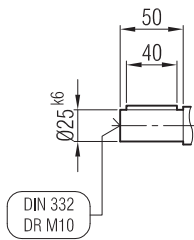
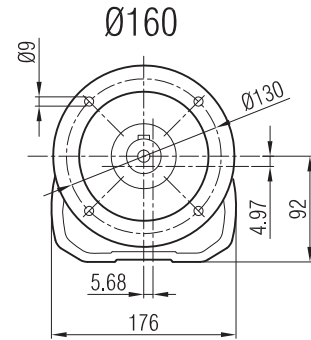
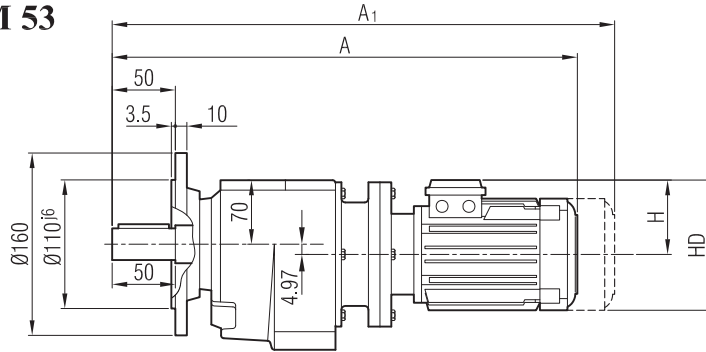
	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5									
A		430	465	483	497	522	573									
A ₁		488	538	566	582	607	663									
H		99	111	118	132	132	141									
HD		162	182	198	222	222	241									
AC		123	132	158	193	193	217									
X		-	-	-	15	15	40									

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

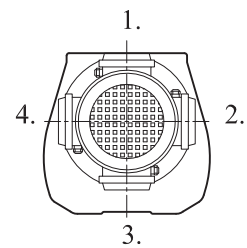




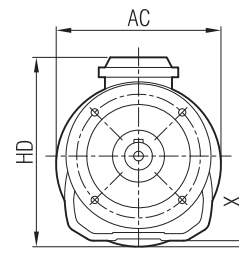
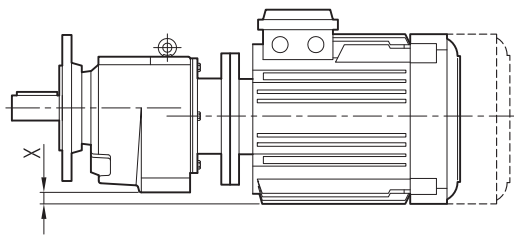
İRFPM 52
İRFPM 53



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80-90-100 Tip/Type/Typ



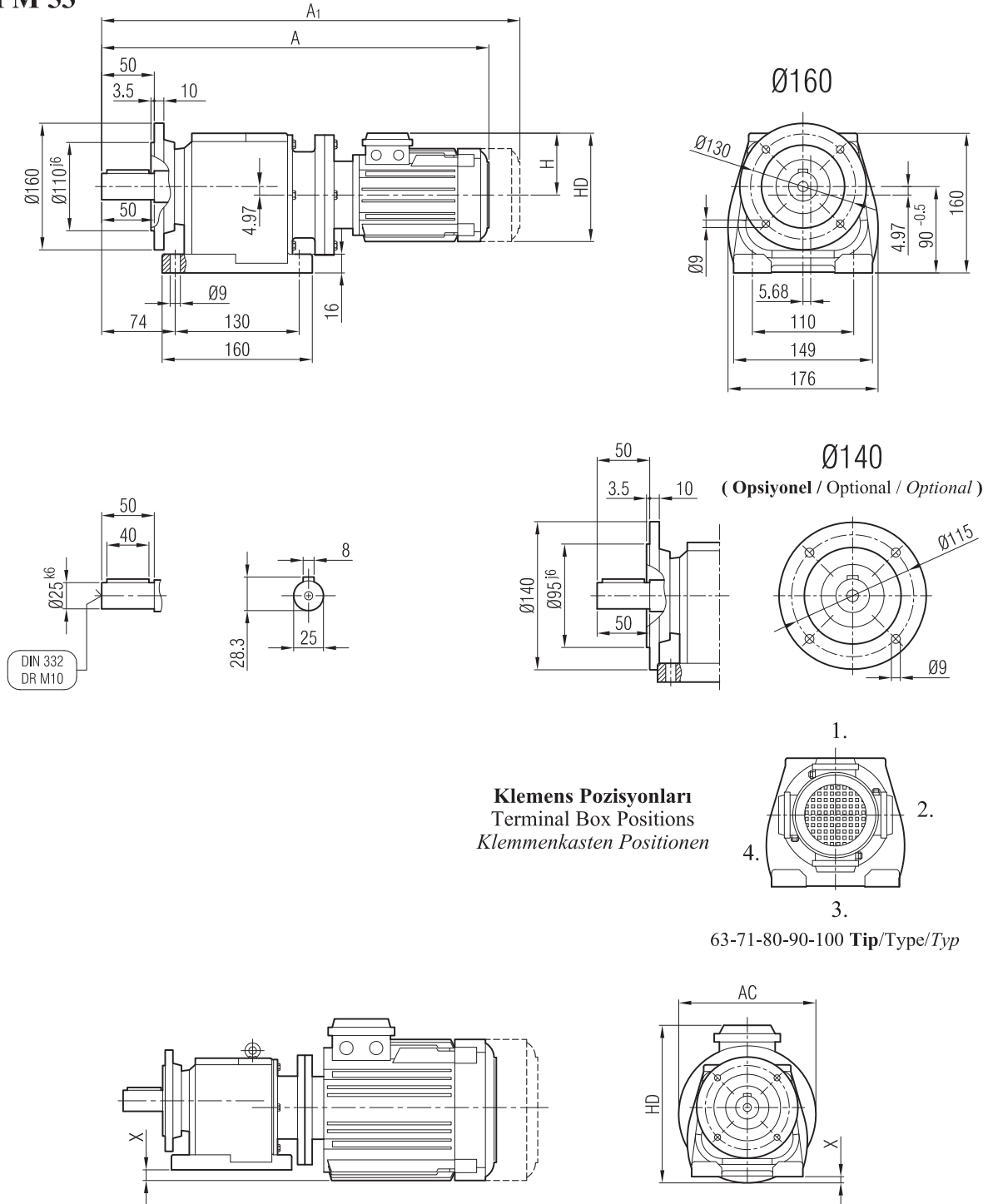
	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5									
A		430	465	483	497	522	573									
A ₁		488	538	566	582	607	663									
H		99	111	118	132	132	141									
HD		162	182	198	222	222	241									
AC		123	132	158	193	193	217									
X		-	-	-	13	13	38									

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse





İRAFPM 52
İRAFPM 53



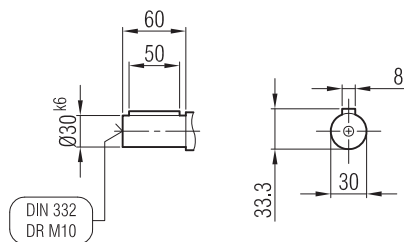
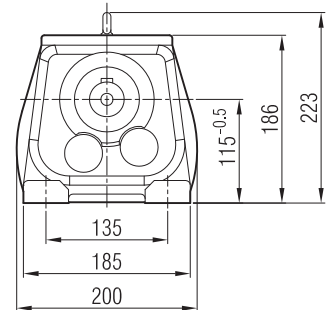
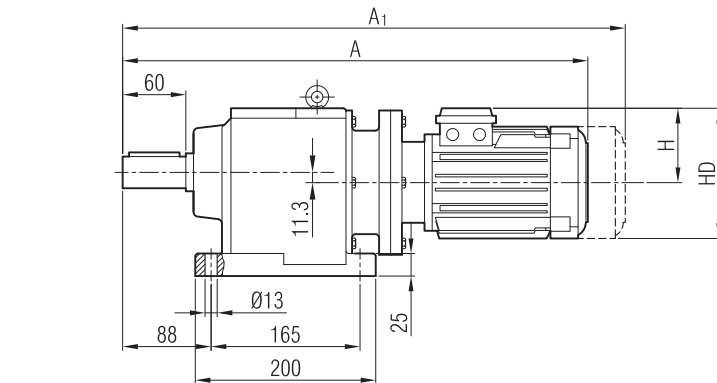
	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5										
A		430	465	483	497	522	573										
A ₁		488	538	566	582	607	663										
H		99	111	118	132	132	141										
HD		162	182	198	222	222	241										
AC		123	132	158	193	193	217										
X		-	-	-	15	15	40										

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse





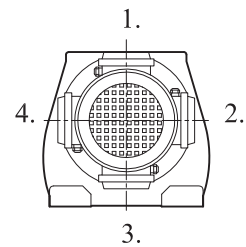
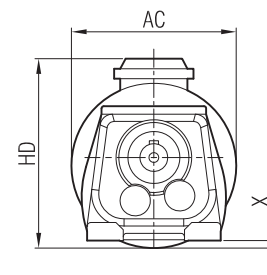
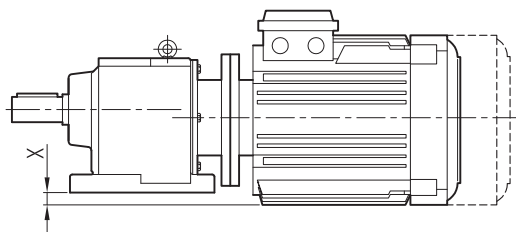
İRAPM 621
İRAPM 631



Klemens Pozisyonları

Terminal Box Positions

Klemmenkasten Positionen

63-71-80-90-100-112-132 **Tip**/Type/*Typ*

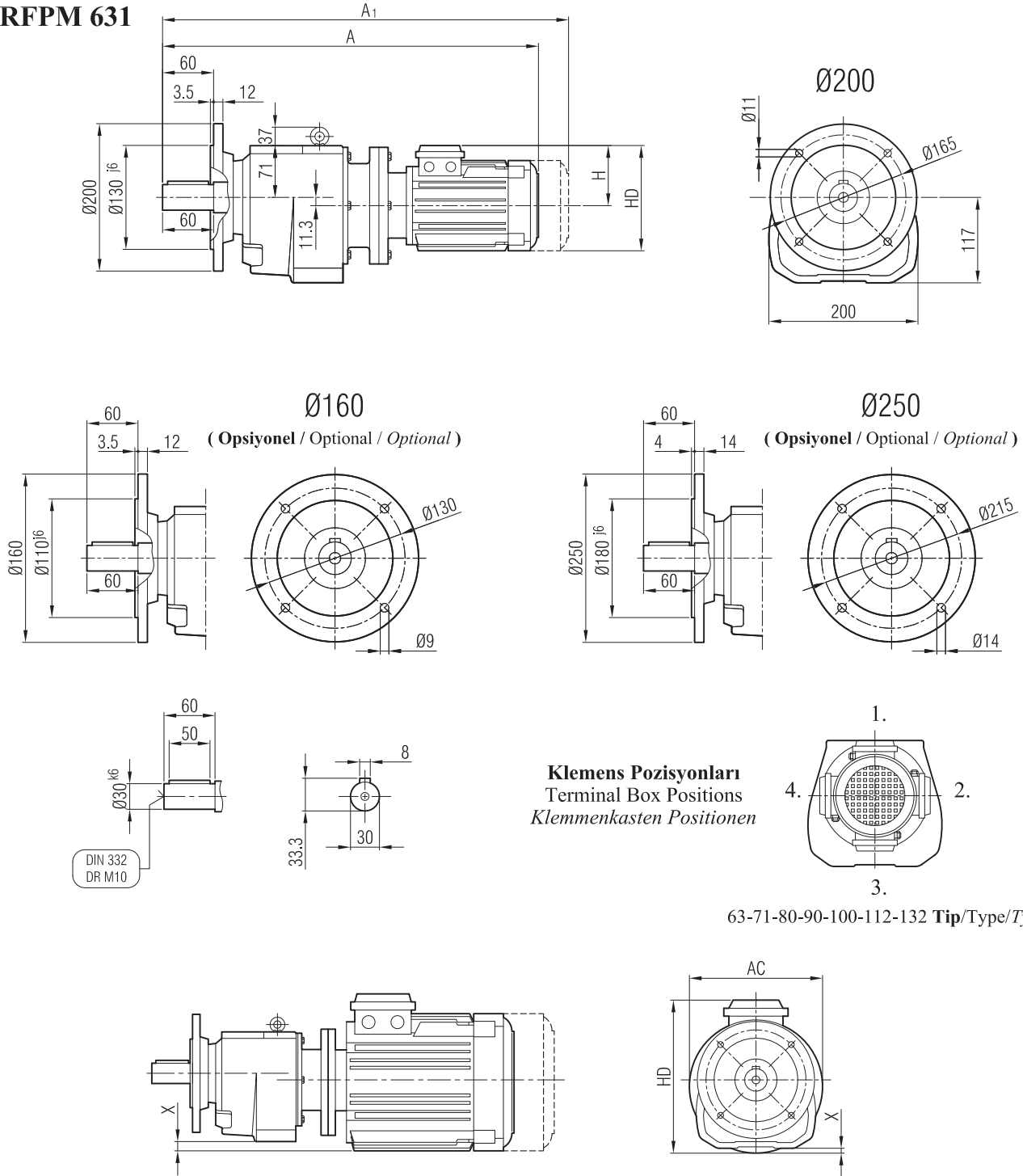
	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/ B5	132 S/ B5							
A		473	509	535	549	574	619	640	681							
A _i		531	582	618	634	659	709	765	823							
H		99	111	118	132	132	141	149	182							
HD		162	182	198	222	222	241	261	314							
AC		123	132	158	193	193	217	232	279							
X		-	-	-	-	-	22	22	47							

"A1" Ölçüsü Frenli Motorlar içindir.
Dimension "A1" is for motors with brake
Maß "A1" ist für Motoren mit Bremse





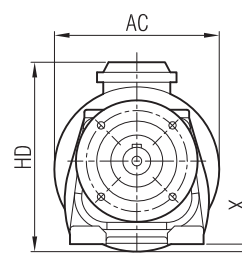
İRFPM 621
İRFPM 631



	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/ B5	132 S/ B5							
A		473	509	535	549	574	619	640	681							
A ₁		531	582	618	634	659	709	765	823							
H		99	111	118	132	132	141	149	182							
HD		162	182	198	222	222	241	261	314							
AC		123	132	158	193	193	217	232	279							
X		-	-	-	-	20	20	45	45							

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse



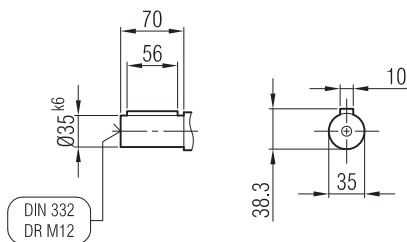
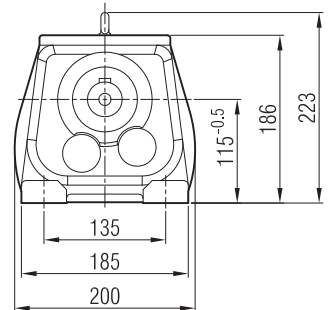
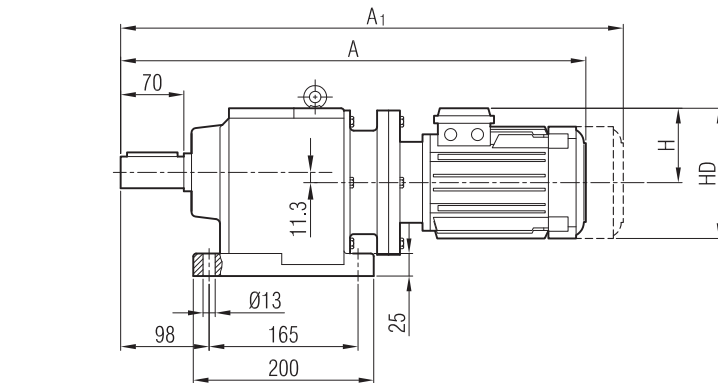


	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/ B5	132 S/ B5							
A		473	509	535	549	574	619	640	681							
A ₁		531	582	618	634	659	709	765	823							
H		99	111	118	132	132	141	149	182							
HD		162	182	198	222	222	241	261	314							
AC		123	132	158	193	193	217	232	279							
X		-	-	-	-	-	22	22	47							

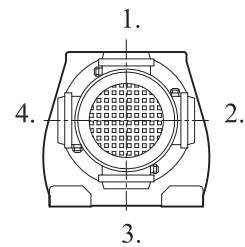




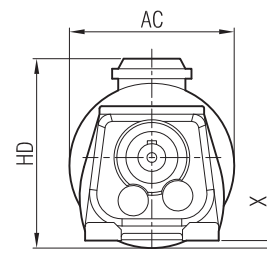
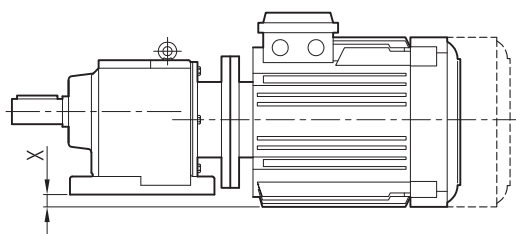
İRAPM 62
İRAPM 63



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80-90-100-112-132 **Tip/Type/Typ**



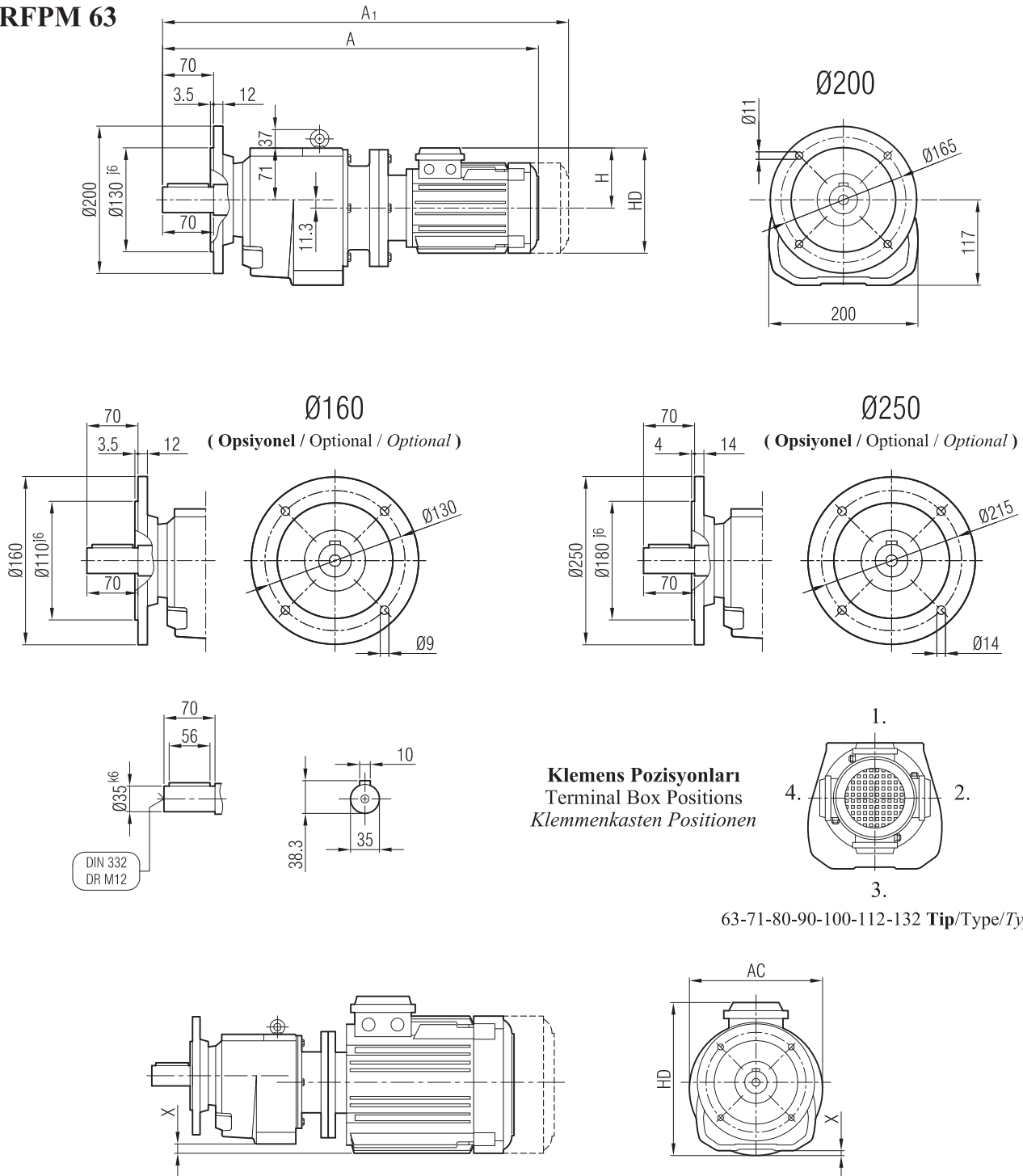
	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/ B5	132 S/ B5							
A		483	519	545	559	584	629	650	691							
A ₁		541	592	628	644	669	719	775	833							
H		99	111	118	132	132	141	149	182							
HD		162	182	198	222	222	241	261	314							
AC		123	132	158	193	193	217	232	279							
X		-	-	-	-	22	22	47	47							

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse





İRFPM 62
İRFPM 63



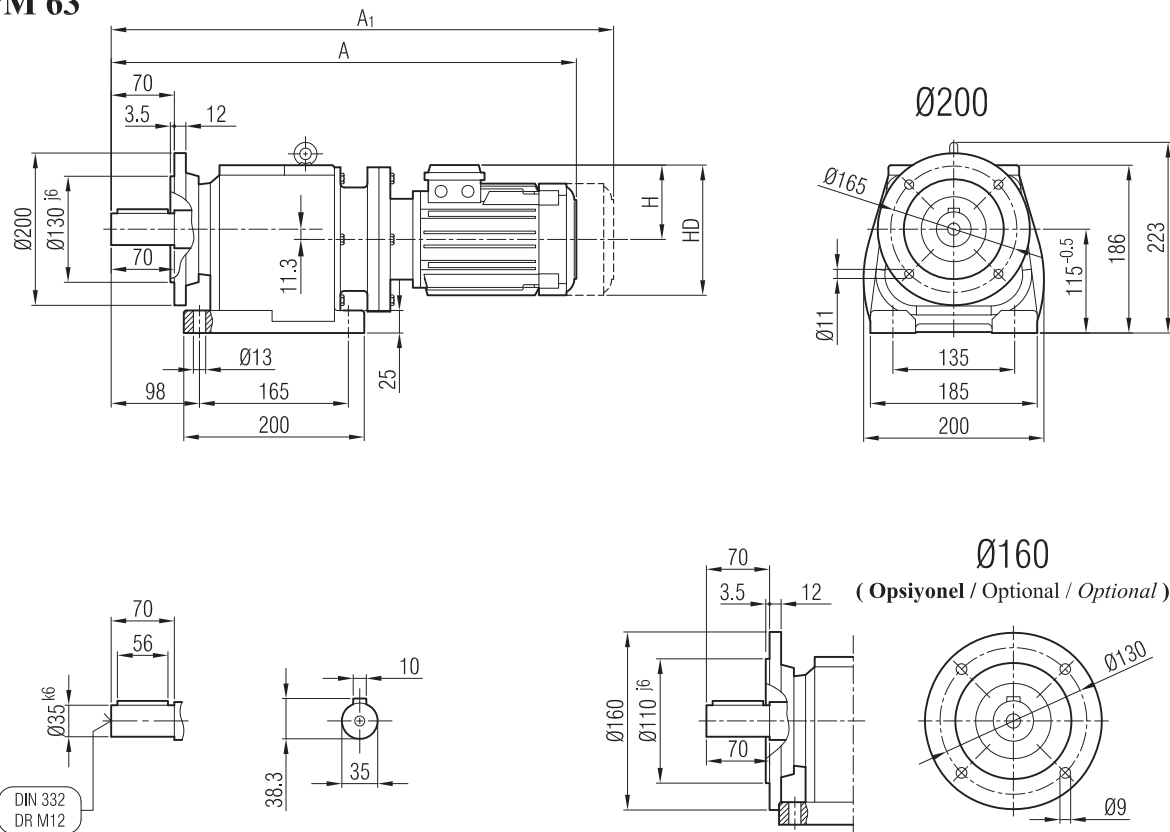
	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/ B5	132 S/ B5							
A		483	519	545	559	584	629	650	691							
A ₁		541	592	628	644	669	719	775	833							
H		99	111	118	132	132	141	149	182							
HD		162	182	198	222	222	241	261	314							
AC		123	132	158	193	193	217	232	279							
X		-	-	-	-	20	20	45	45							

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

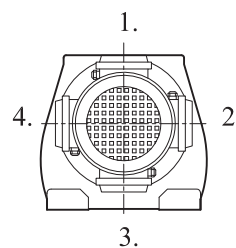




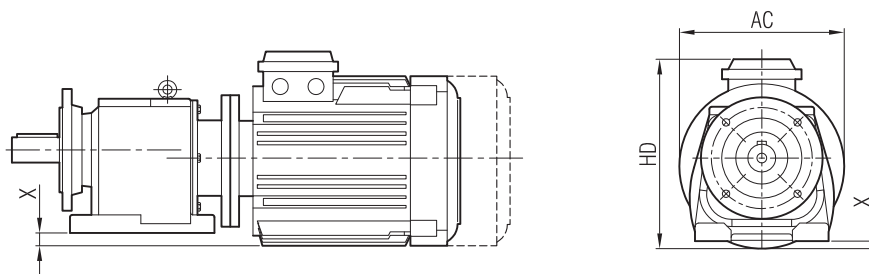
İRAFPM 62
İRAFPM 63



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



63-71-80-90-100-112-132 **Tip/Type/Typ**



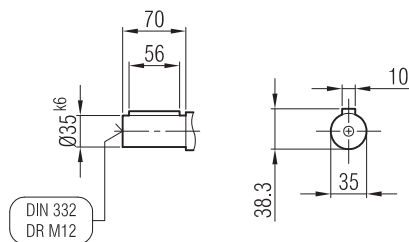
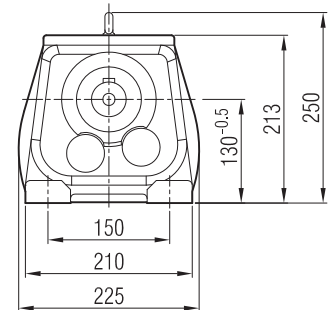
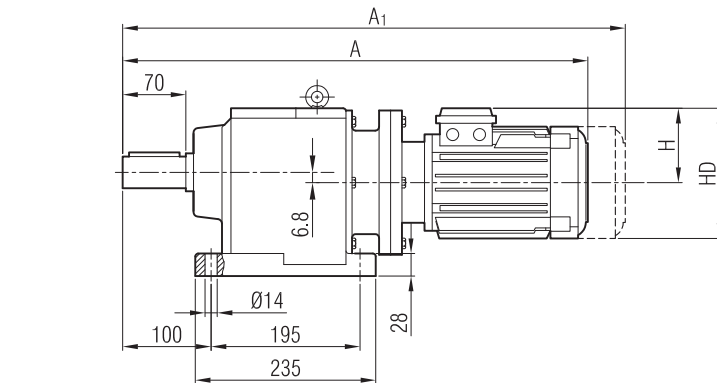
	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/ B5	132 S/ B5							
A		483	519	545	559	584	629	650	691							
A ₁		541	592	628	644	669	719	775	833							
H		99	111	118	132	132	141	149	182							
HD		162	182	198	222	222	241	261	314							
AC		123	132	158	193	193	217	232	279							
X		-	-	-	-	22	22	47	47							

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

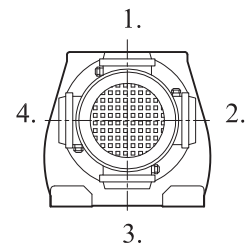




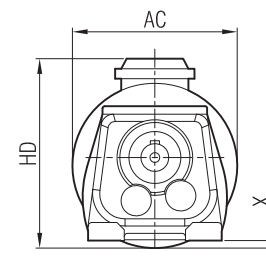
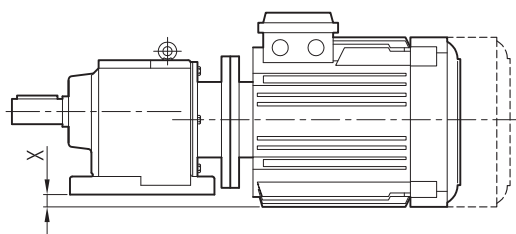
İRAPM 721
İRAPM 731



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90-100-112-132 **Tip/Type/Typ**



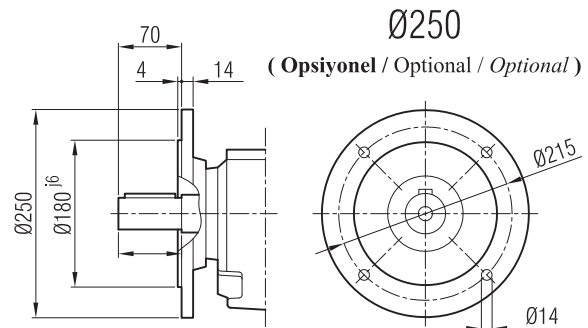
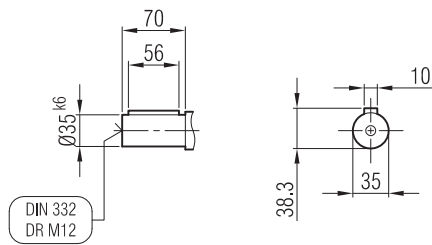
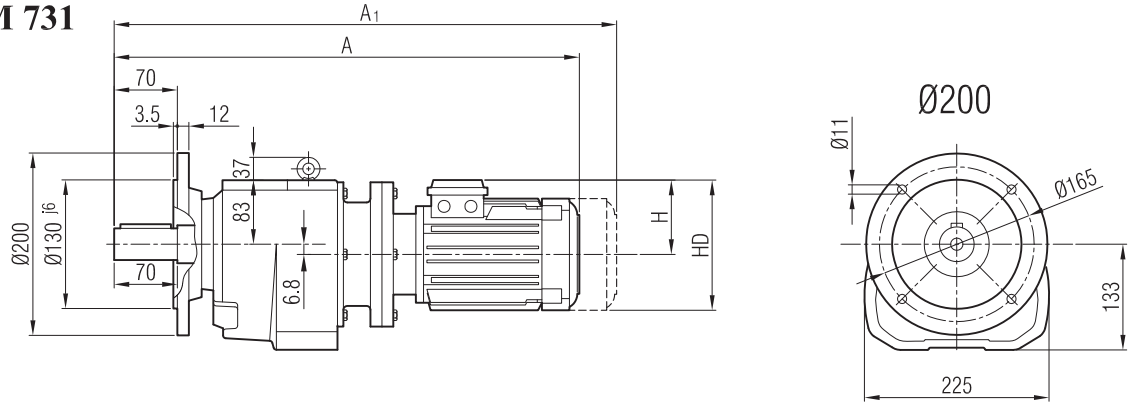
	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/ B5	132 S/B5	132 M/B5						
A			553	586	600	625	662	683	746	792						
A ₁			626	669	685	710	752	808	851	897						
H			111	118	132	132	141	149	182	182						
HD			182	198	222	222	241	261	314	314						
AC			132	158	193	193	217	232	279	279						
X			-	-	-	-	1.8	1.8	26.8	26.8						

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

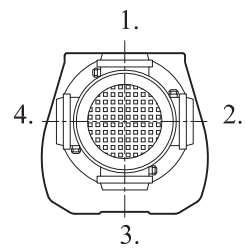




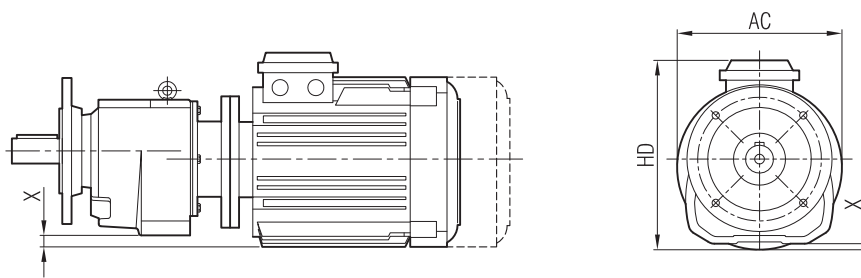
İRFPM 721
İRFPM 731



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90-100-132 Tip/Type/Typ



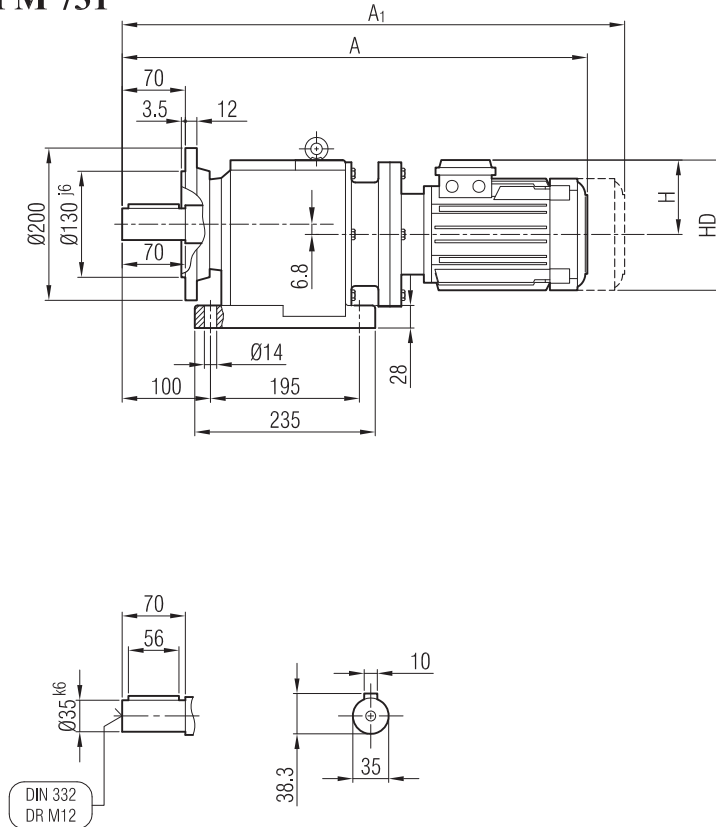
	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/ B5	132 S/B5	132 M/B5						
A			553	586	600	625	662	683	746	792						
A ₁			626	669	685	710	752	808	851	897						
H			111	118	132	132	141	149	182	182						
HD			182	198	222	222	241	261	314	314						
AC			132	158	193	193	217	232	279	279						
X			-	-	-	-	1.8	1.8	26.8	26.8						

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

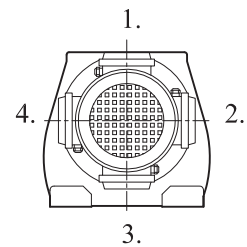




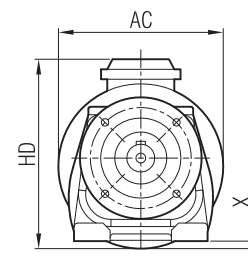
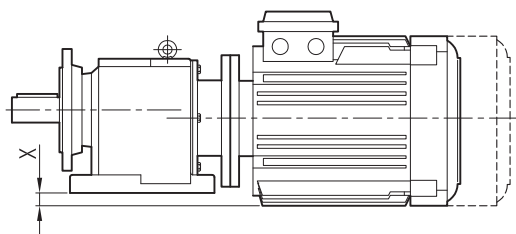
İRAFPM 721
İRAFPM 731



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90-100-112-132 **Tip/Type/Typ**



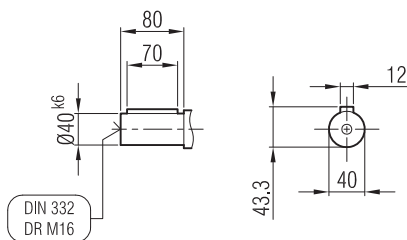
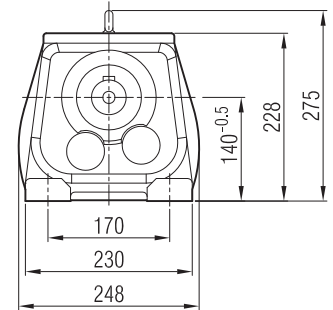
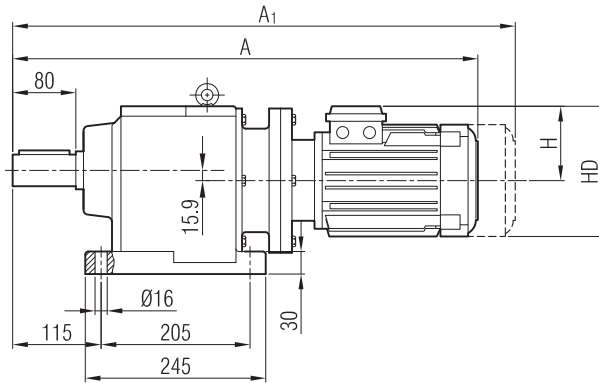
	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/ B5	132 S/B5	132 M/B5						
A			553	586	600	625	662	683	746	792						
A ₁			626	669	685	710	752	808	851	897						
H			111	118	132	132	141	149	182	182						
HD			182	198	222	222	241	261	314	314						
AC			132	158	193	193	217	232	279	279						
X			-	-	-	-	1.8	1.8	26.8	26.8						

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

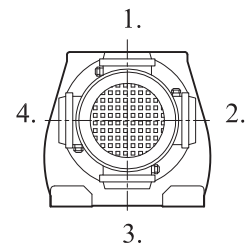




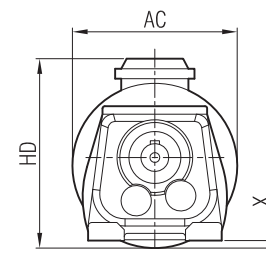
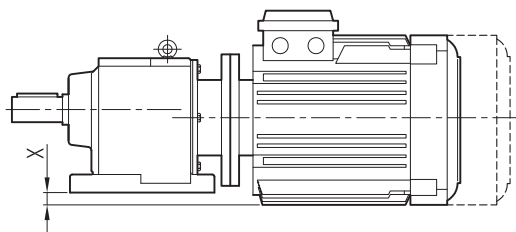
İRAPM 72
İRAPM 73



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90-100-112-132 **Tip/Type/Typ**



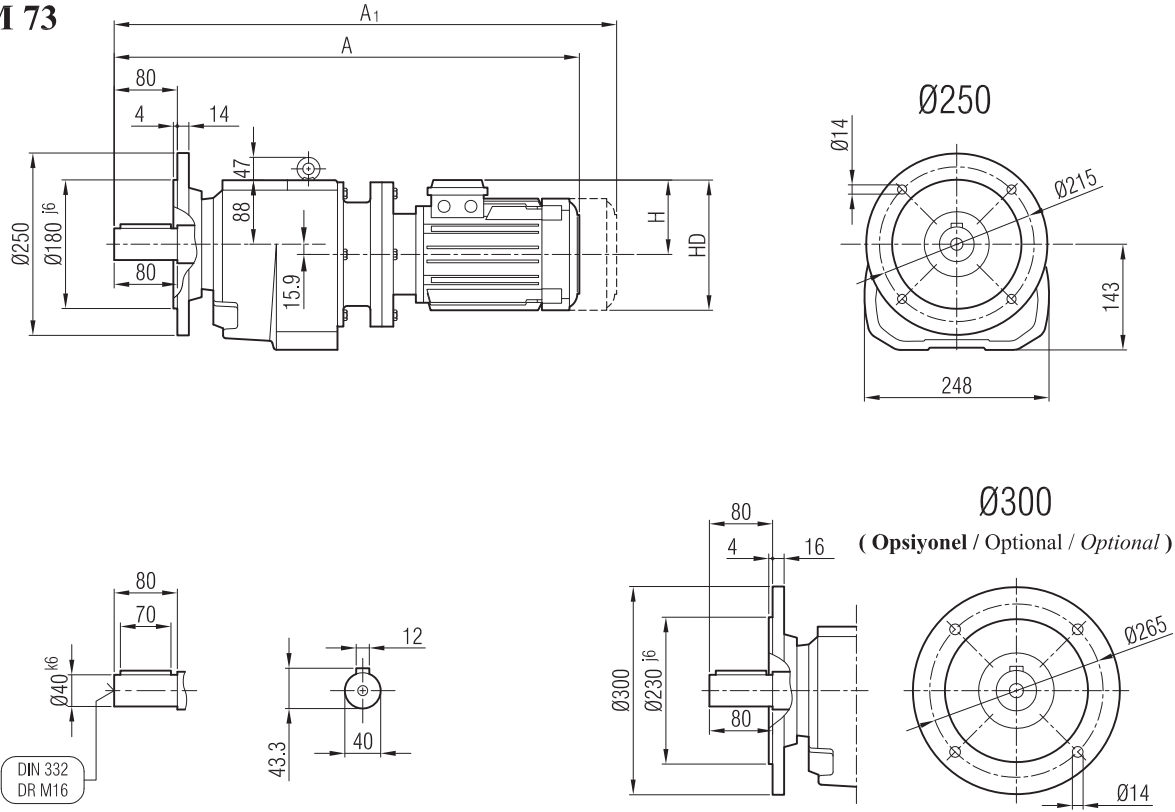
	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/ B5	132 S/B5	132 M/B5						
A			581	614	628	653	690	711	774	820						
A ₁			654	697	713	738	780	836	879	925						
H			111	118	132	132	141	149	182	182						
HD			182	198	222	222	241	261	314	314						
AC			132	158	193	193	217	232	279	279						
X			-	-	-	-	-	1	1	26						

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

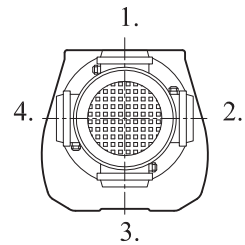




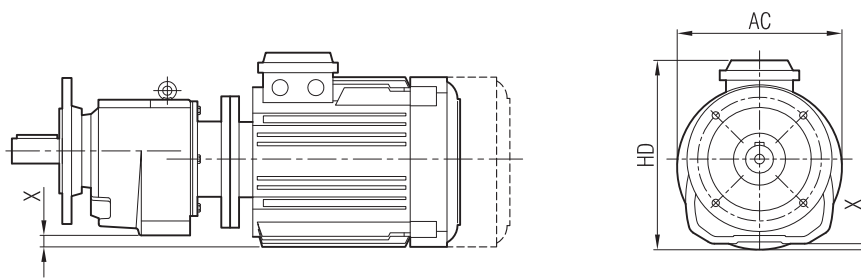
İRFPM 72
İRFPM 73



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90-100-112-132 Tip/Type/Typ



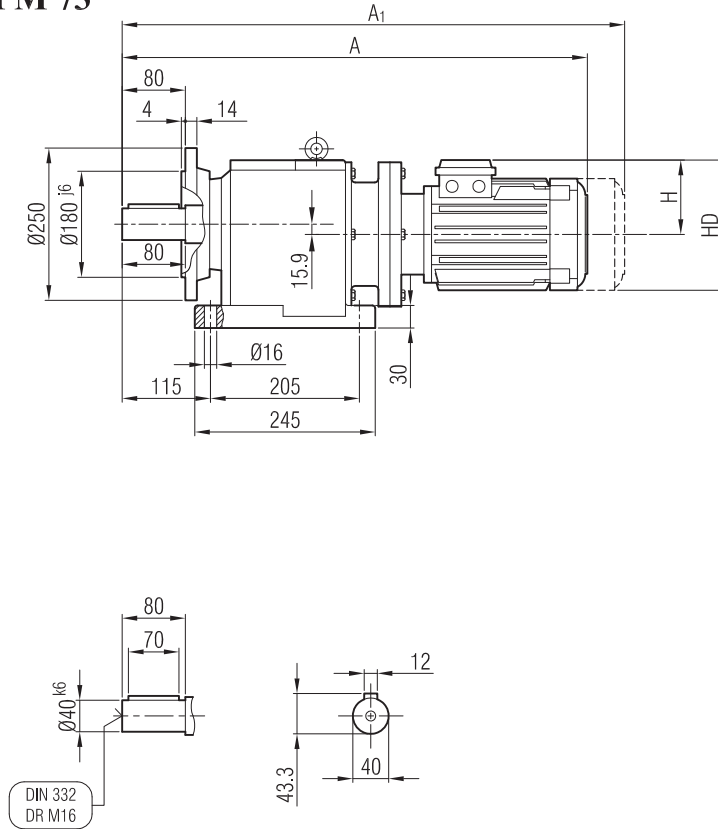
	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/ B5	132 S/B5	132 M/B5						
A			581	614	628	653	690	711	774	820						
A ₁			654	697	713	738	780	836	879	925						
H			111	118	132	132	141	149	182	182						
HD			182	198	222	222	241	261	314	314						
AC			132	158	193	193	217	232	279	279						
X			-	-	-	-	-	-	-	23						

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

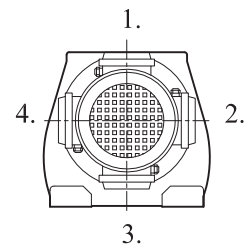




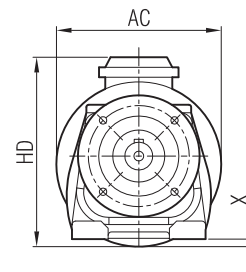
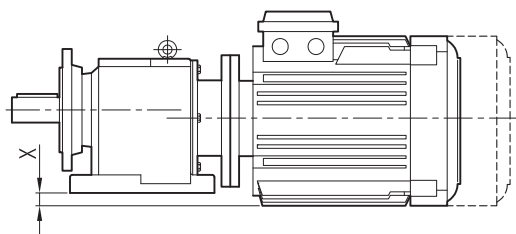
İRAFPM 72
İRAFPM 73



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



71-80-90-100-112-132 **Tip/Type/Typ**



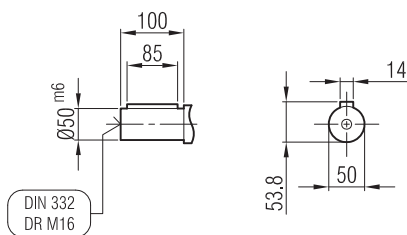
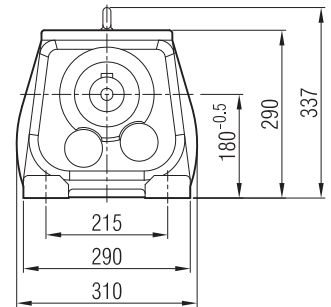
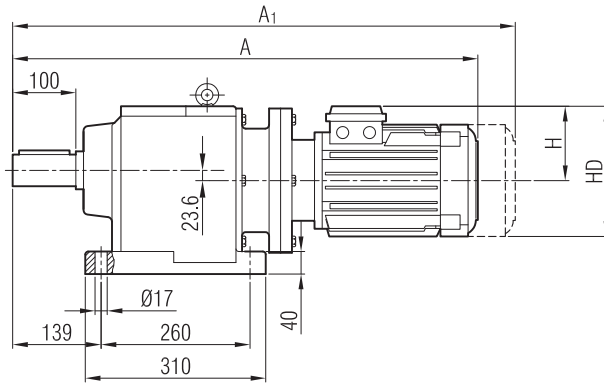
	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/ B5	132 S/B5	132 M/B5						
A			581	614	628	653	690	711	774	820						
A ₁			654	697	713	738	780	836	879	925						
H			111	118	132	132	141	149	182	182						
HD			182	198	222	222	241	261	314	314						
AC			132	158	193	193	217	232	279	279						
X			-	-	-	-	-	1	1	26						

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

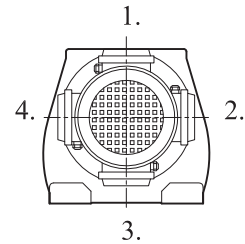




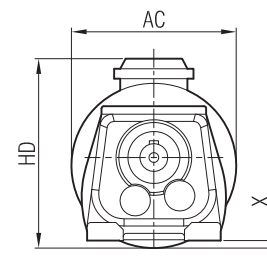
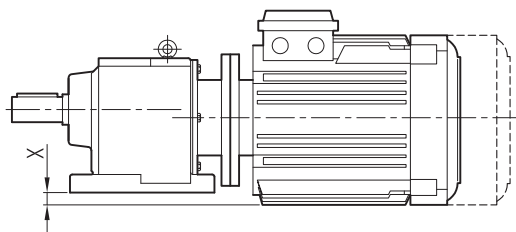
İRAPM 82
İRAPM 83



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



80-90-100-112-132-160-180 **Tip/Type/Typ**



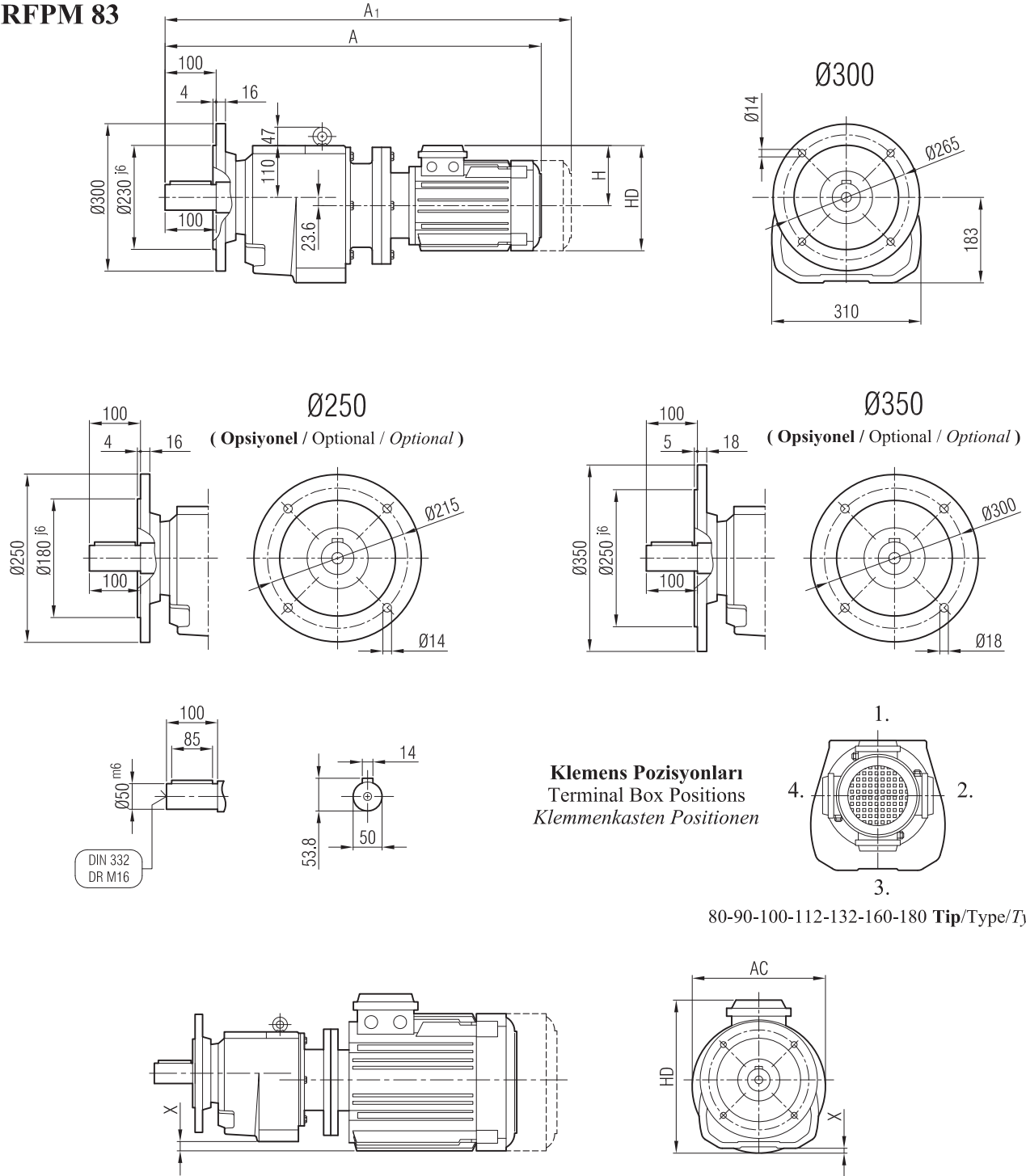
	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/ B5	132 S/B5	132 M/B5	160 M/B5	160 L/B5	180 M/B5	180 L/B5			
A				693	707	732	771	792	852	898	984	1028	1042	1080			
A ₁				776	792	817	861	917	957	1003	1104	1148	1162	1200			
H				118	132	132	141	149	182	182	225	225	248	248			
HD				198	222	222	241	261	314	314	385	385	428	428			
AC				158	193	193	217	232	279	279	325	325	370	370			
X				-	-	-	-	-	-	-	16	16	16	16			

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse





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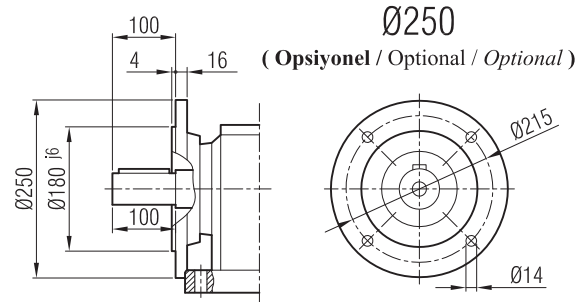
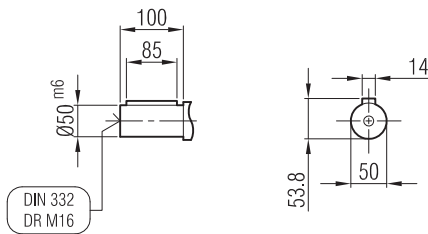
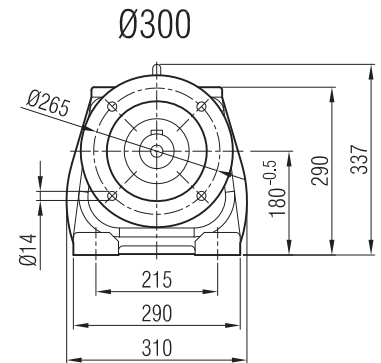
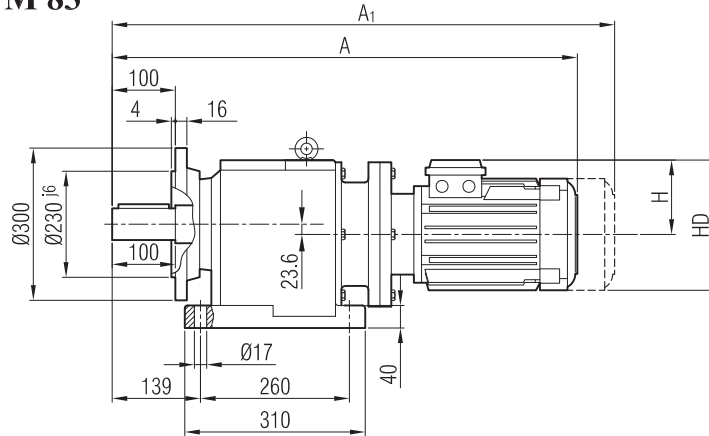
	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/ B5	132 S/B5	132 M/B5	160 M/B5	160 L/B5	180 M/B5	180 L/B5			
A				693	707	732	771	792	852	898	984	1028	1042	1080			
A ₁				776	792	817	861	917	957	1003	1104	1148	1162	1200			
H				118	132	132	141	149	182	182	225	225	248	248			
HD				198	222	222	241	261	314	314	385	385	428	428			
AC				158	193	193	217	232	279	279	325	325	370	370			
X				-	-	-	-	-	-	-	4	4	24	24			

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

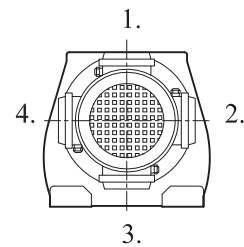




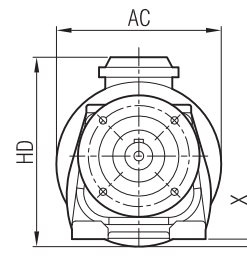
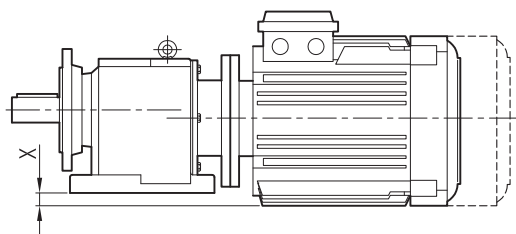
İRAFPM 82
İRAFPM 83



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



80-90-100-112-132-160-180 **Tip/Type/Typ**



	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/ B5	132 S/B5	132 M/B5	160 M/B5	160 L/B5	180 M/B5	180 L/B5			
A				693	707	732	771	792	852	898	984	1028	1042	1080			
A ₁				776	792	817	861	917	957	1003	1104	1148	1162	1200			
H				118	132	132	141	149	182	182	225	225	248	248			
HD				198	222	222	241	261	314	314	385	385	428	428			
AC				158	193	193	217	232	279	279	325	325	370	370			
X				-	-	-	-	-	-	-	4	4	24	24			

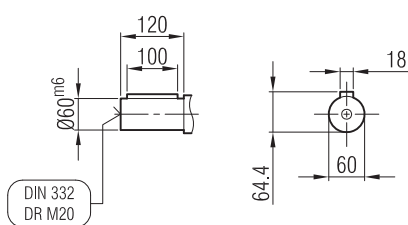
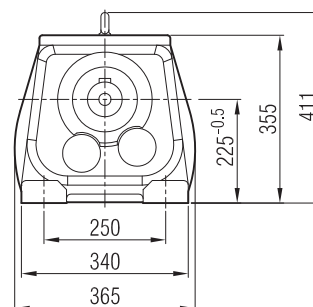
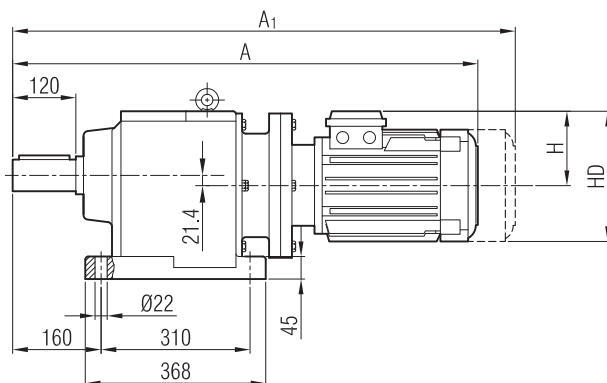
"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse



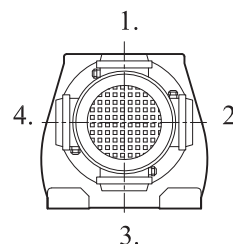


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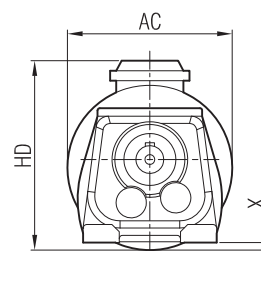
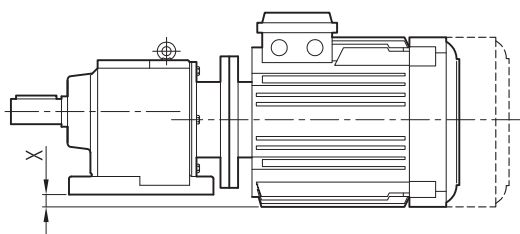
İRAPM 93



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



80-90-100-112-132-160-180-200 **Tip/Type/Typ**



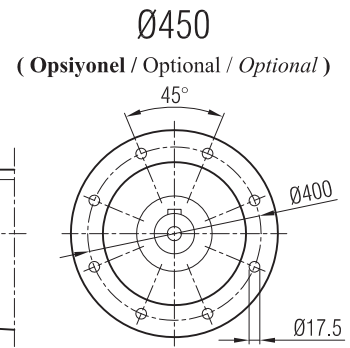
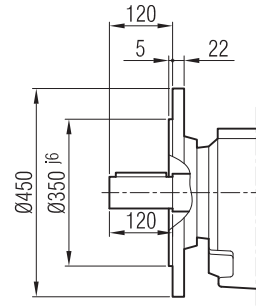
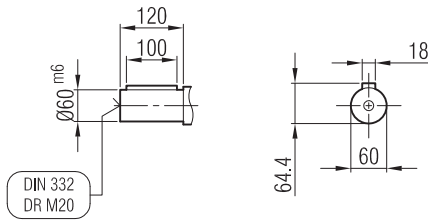
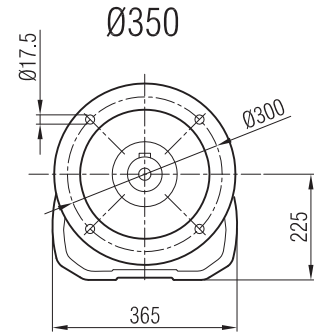
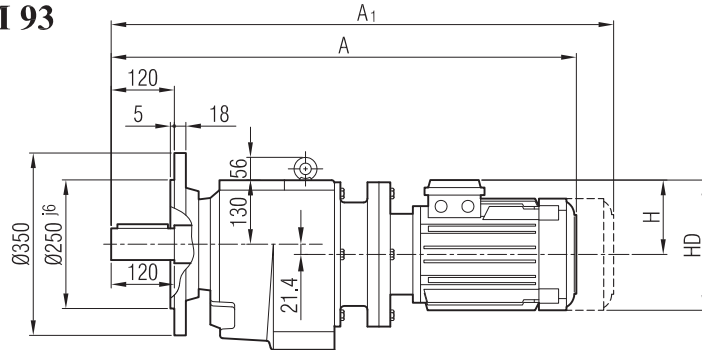
	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/ B5	132 S/B5	132 M/B5	160 M/B5	160 L/B5	180 M/B5	180 L/B5	200/B5		
A				745	759	784	825	846	922	968	1054	1098	1112	1150	1248		
A ₁				828	844	869	915	971	1027	1073	1174	1218	1232	1270	-		
H				118	132	132	141	149	182	182	225	225	248	248	275		
HD				198	222	222	241	261	314	314	385	385	428	428	425		
AC				158	193	193	217	232	279	279	325	325	370	370	415		
X				-	-	-	-	-	-	-	-	-	-	-	-		

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

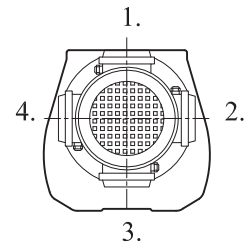




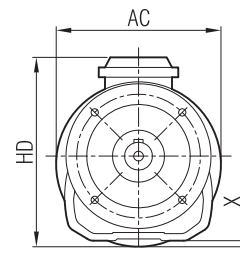
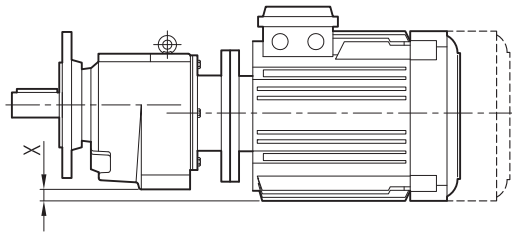
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İRFPM 93



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



80-90-100-112-132-160-180-200 **Tip/Type/Typ**



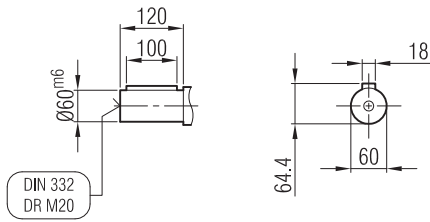
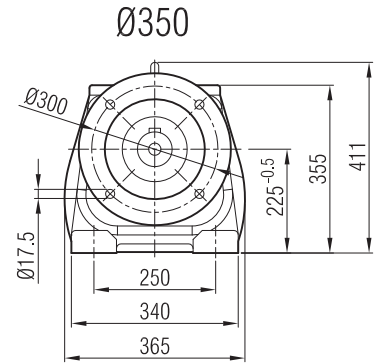
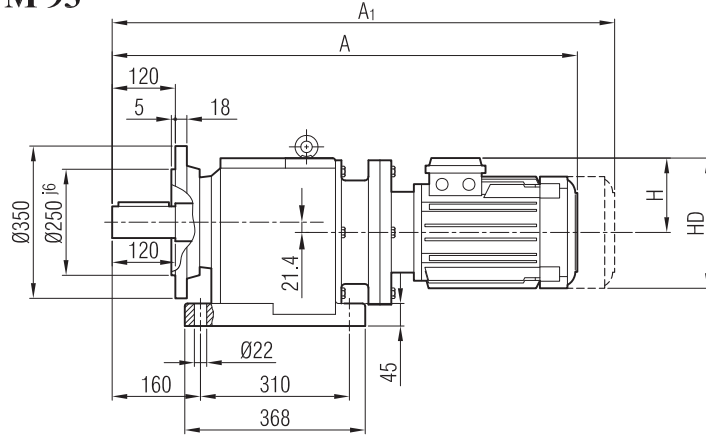
	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/ B5	132 S/B5	132 M/B5	160 M/B5	160 L/B5	180 M/B5	180 L/B5	200/B5		
A				745	759	784	825	846	922	968	1054	1098	1112	1150	1248		
A ₁				828	844	869	915	971	1027	1073	1174	1218	1232	1270	-		
H				118	132	132	141	149	182	182	225	225	248	248	275		
HD				198	222	222	241	261	314	314	385	385	428	428	425		
AC				158	193	193	217	232	279	279	325	325	370	370	415		
X				-	-	-	-	-	-	-	-	-	-	-	-		

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

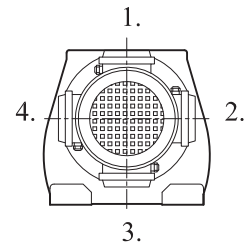




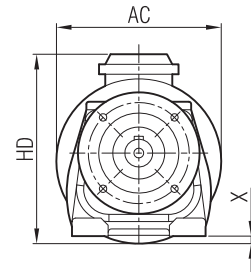
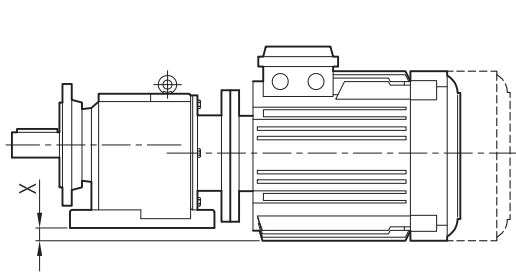
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Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



80-90-100-112-132-160-180-200 **Tip/Type/Typ**



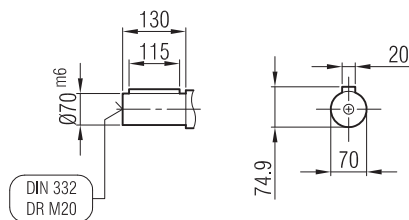
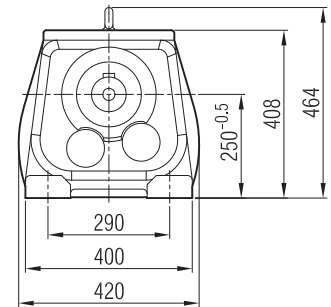
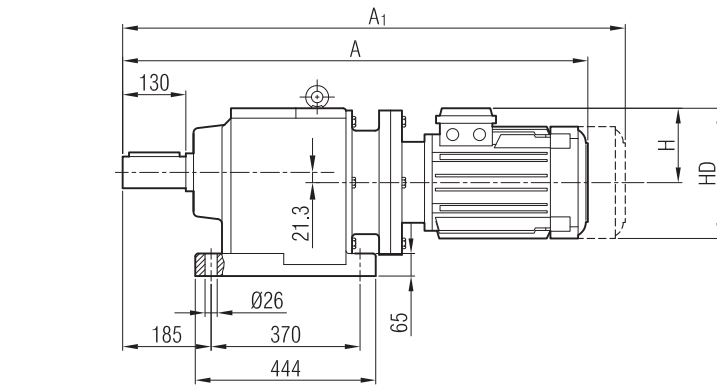
	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/ B5	132 S/B5	132 M/B5	160 M/B5	160 L/B5	180 M/B5	180 L/B5	200/B5		
A				745	759	784	825	846	922	968	1054	1098	1112	1150	1248		
A ₁				828	844	869	915	971	1027	1073	1174	1218	1232	1270	-		
H				118	132	132	141	149	182	182	225	225	248	248	275		
HD				198	222	222	241	261	314	314	385	385	428	428	425		
AC				158	193	193	217	232	279	279	325	325	370	370	415		
X				-	-	-	-	-	-	-	-	-	-	-	-		

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

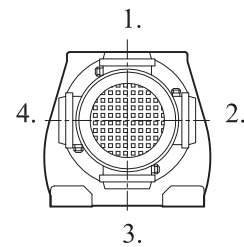




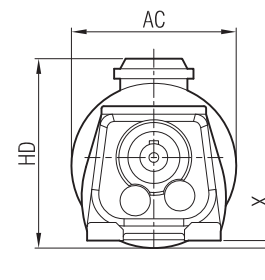
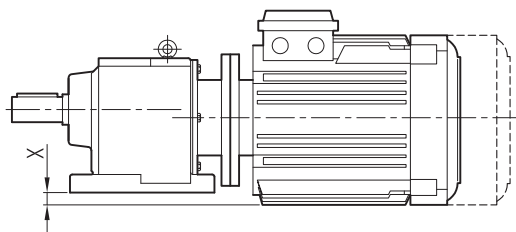
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İRAPM 103



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



100-112-132-160-180-200-225 **Tip/Type/Typ**



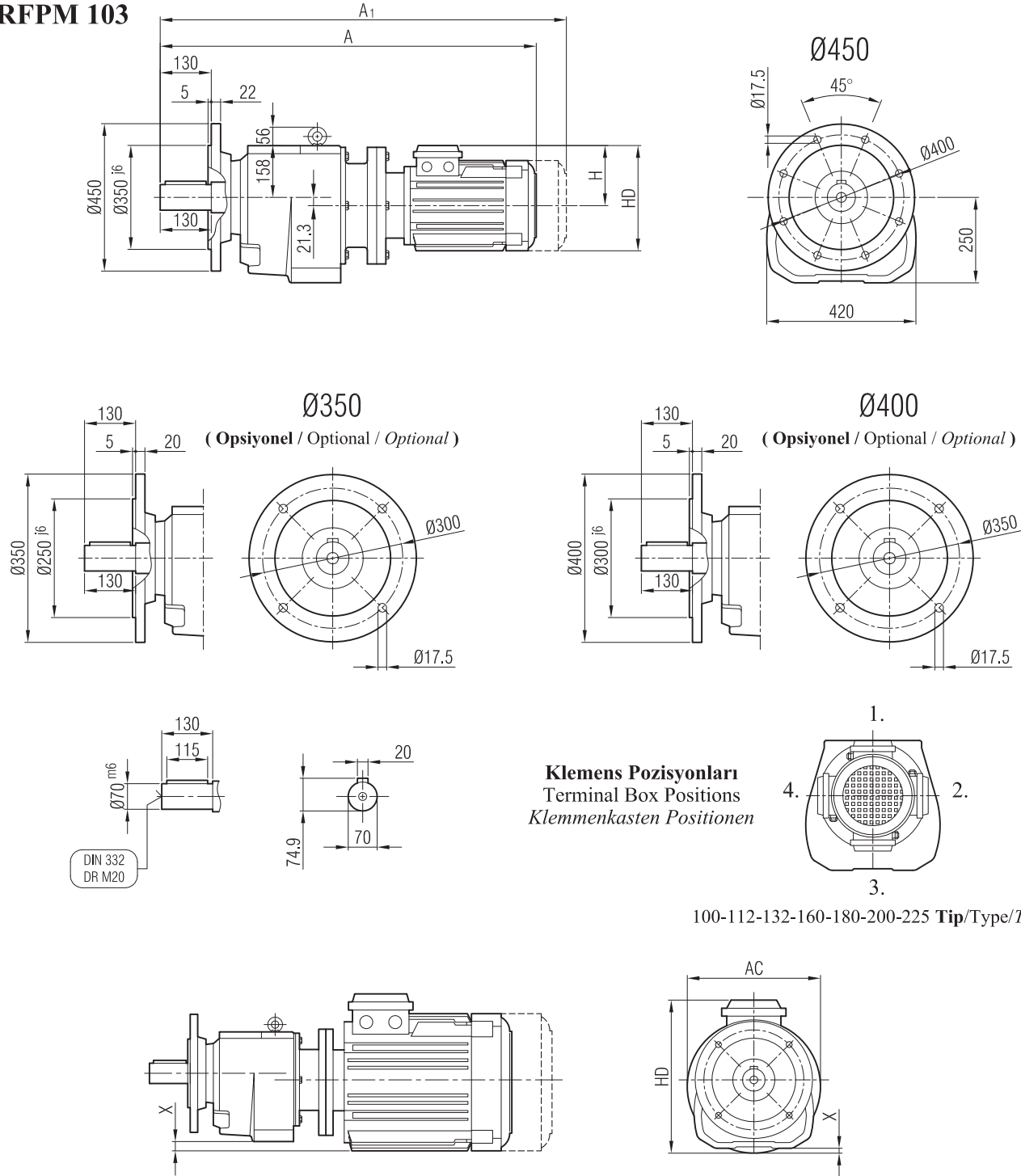
	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/ B5	132 S/B5	132 M/B5	160 M/B5	160 L/B5	180 M/B5	180 L/B5	200/B5	225 S/B5	225 M/B5
A							902	923	989	1035	1112	1156	1170	1208	1326	1351	1376
A ₁							992	1048	1094	1140	1232	1276	1290	1328	-	-	-
H							141	149	182	182	225	225	248	248	275	285	285
HD							241	261	314	314	385	385	428	428	425	510	510
AC							217	232	279	279	325	325	370	370	415	456	456
X							-	-	-	-	-	-	-	-	-	-	-

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse





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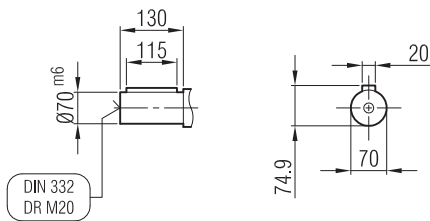
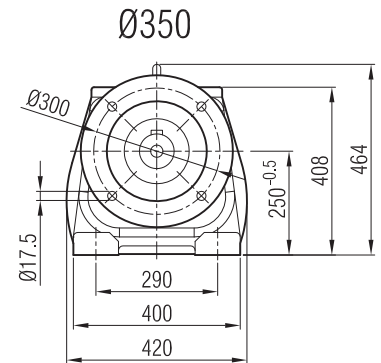
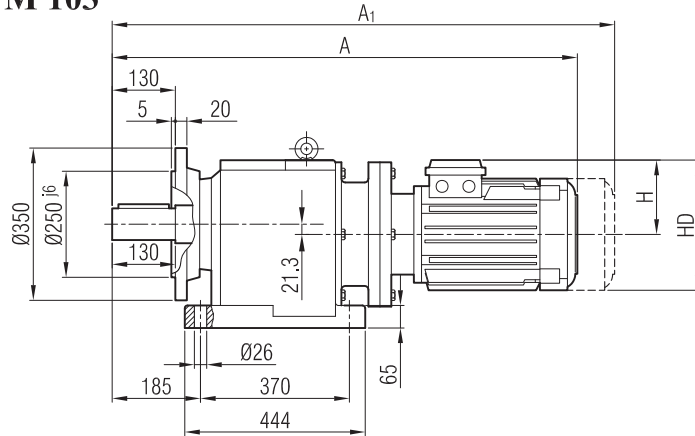
	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/ B5	132 S/B5	132 M/B5	160 M/B5	160 L/B5	180 M/B5	180 L/B5	200/B5	225 S/B5	225 M/B5
A							902	923	989	1035	1112	1156	1170	1208	1326	1351	1376
A ₁							992	1048	1094	1140	1232	1276	1290	1328	-	-	-
H							141	149	182	182	225	225	248	248	275	285	285
HD							241	261	314	314	385	385	428	428	425	510	510
AC							217	232	279	279	325	325	370	370	415	456	456
X							-	-	-	-	-	-	-	-	-	-	-

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

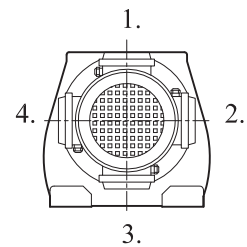




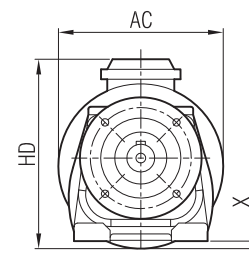
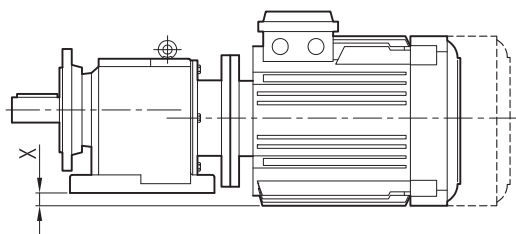
İRAFPM 102
İRAFPM 103



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



100-112-132-160-180-200-225 **Tip/Type/Typ**



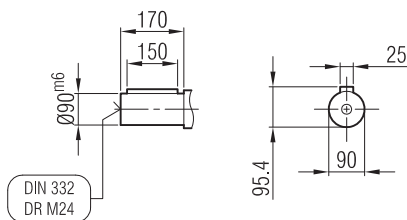
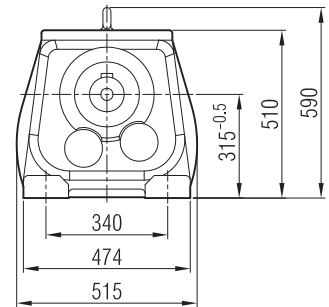
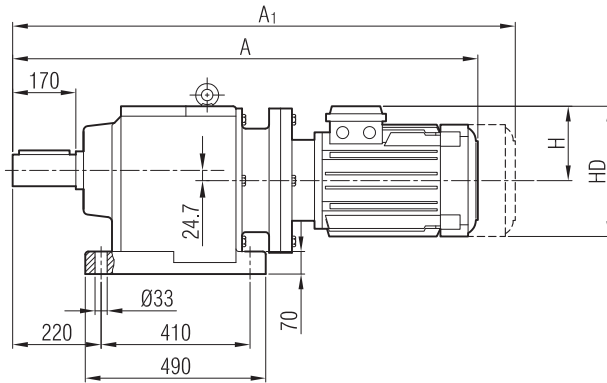
	56/B5	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/ B5	132 S/B5	132 M/B5	160 M/B5	160 L/B5	180 M/B5	180 L/B5	200/B5	225 S/B5	225 M/B5
A							902	923	989	1035	1112	1156	1170	1208	1326	1351	1376
A ₁							992	1048	1094	1140	1232	1276	1290	1328	-	-	-
H							141	149	182	182	225	225	248	248	275	285	285
HD							241	261	314	314	385	385	428	428	425	510	510
AC							217	232	279	279	325	325	370	370	415	456	456
X							-	-	-	-	-	-	-	-	-	-	-

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

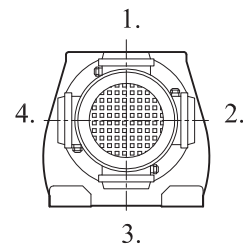




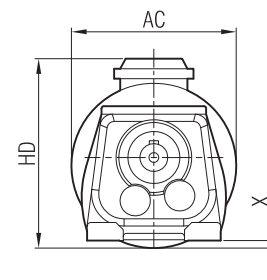
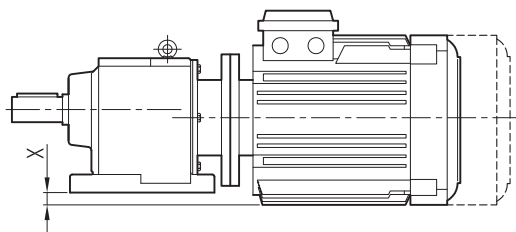
İRAPM 122
İRAPM 123



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



100-112-132-160-180-200-225-250 **Tip/Type/Typ**



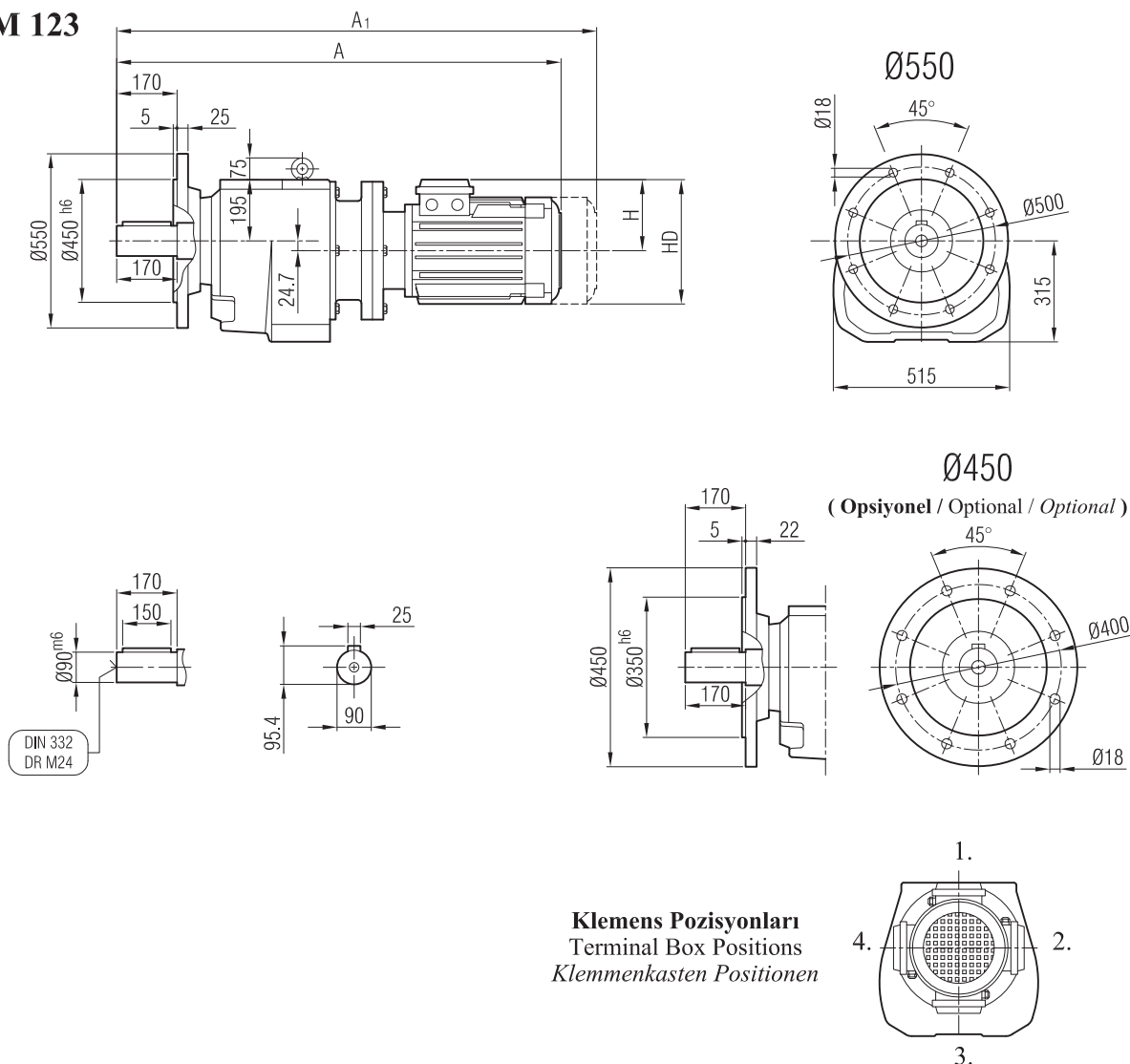
	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/ B5	132 S/B5	132 M/B5	160 M/B5	160 L/B5	180 M/B5	180 L/B5	200/B5	225 S/B5	225 M/B5	250/B5
A								1038	1084	1184	1228	1242	1280	1398	1423	1448	1526
A ₁								1180	1226	1374	1418	1437	1475	-	-	-	-
H								182	182	225	225	248	248	275	285	285	322
HD								314	314	385	385	428	428	425	510	510	572
AC								279	279	325	325	370	370	415	456	456	480
X								-	-	-	-	-	-	-	-	-	-

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse

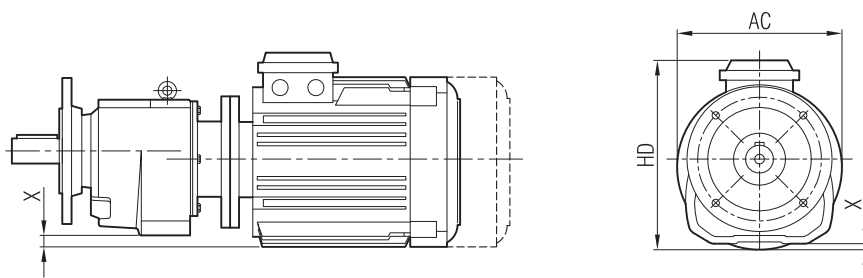




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İRFPM 123



100-112-132-160-180-200-225-250 **Tip**/Type/*Typ*

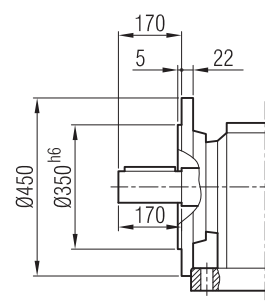
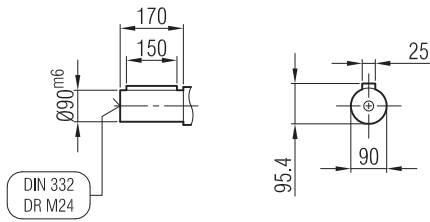
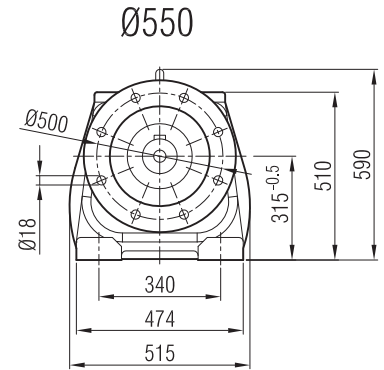
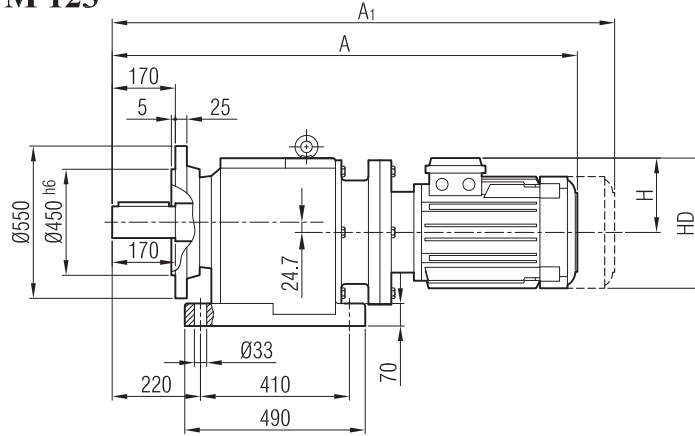
[illegible]

"A1" Ölçüsü Frenli Motorlar içindir.
Dimension "A1" is for motors with brake
Maß "A1" ist für Motoren mit Bremse

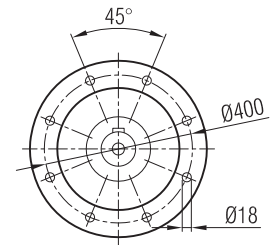




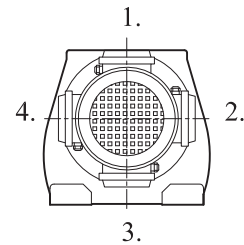
İRAFPM 122
İRAFPM 123



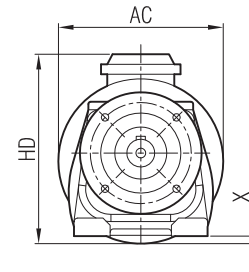
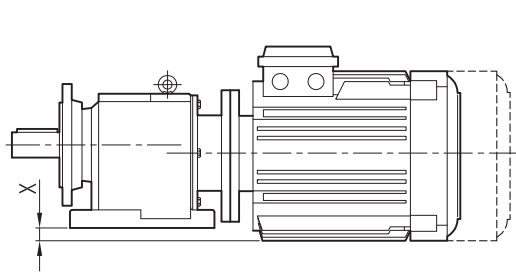
Ø450
(Opsiyonel / Optional / Optional)



Klemens Pozisyonları
Terminal Box Positions
Klemmenkasten Positionen



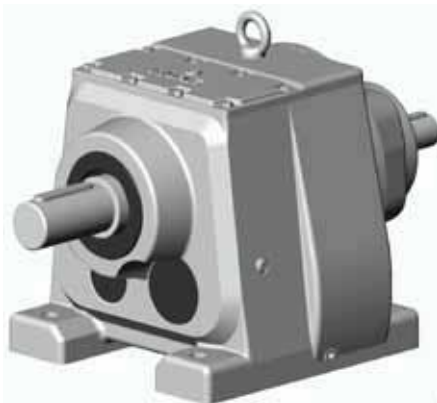
100-112-132-160-180-200-225-250 **Tip/Type/Typ**



	63/B5	71/B5	80/B5	90 S/B5	90 L/B5	100/B5	112/ B5	132 S/B5	132 M/B5	160 M/B5	160 L/B5	180 M/B5	180 L/B5	200/B5	225 S/B5	225 M/B5	250/B5
A								1038	1084	1184	1228	1242	1280	1398	1423	1448	1526
A ₁								1180	1226	1374	1418	1437	1475	-	-	-	-
H								182	182	225	225	248	248	275	285	285	322
HD								314	314	385	385	428	428	425	510	510	572
AC								279	279	325	325	370	370	415	456	456	480
X								-	-	-	-	-	-	-	-	-	-

"A₁" Ölçüsü Frenli Motorlar içindir.
Dimension "A₁" is for motors with brake
Maß "A₁" ist für Motoren mit Bremse





İRA ...



İRAF ...



İRF ...



İRA ... - ...



İRF ... - ...



İRA ... - ...



Monoblok Helisel Dişlili Redüktörler Güç ve Devir Tablosu

Monoblock Helical Gear Units Performance Tables

Monoblock Stirnradgetriebe Leistung und Drehzahlübersicht

n ₁ = 2800									d/d					
									r.p.m					
Servis Faktörü Service Factor Betriebsfaktor	S _f =1 S _f =1 S _f =1	P ₁	n ₂	İ	M ₂	F _{Q1}	F _{Q1/2}	Tip Type Typ						
		GÜÇ	Çıkış Devri	Tahvil	Çıkış Momenti	Rad. Yük	Rad. Yük							
		Power	Output Speeds	Ratio	Output Torque	Over Loads	Over Loads							
		Leistung	Abtriebswelle Drehzahlen	Übersetzung	Abtriebswelle Drehmomente	Querkräfte	Querkräfte							
		[kW]	[r.p.m]		[Nm]	[N]	[N]	kg						
150 Nm		4,3	265	10,55	150	475	2500	İRA İRF 52 İRAF	228	10				
		4,8	296	9,47	150	475	2500							
		5,1	315	8,88	150	475	2500							
		5,7	351	7,97	150	475	2500							
		6,3	391	7,17	150	475	2500							
		7,0	433	6,47	150	475	2500							
		7,8	481	5,82	150	475	2500							
		8,6	533	5,25	150	475	2500							
		9,0	557	5,03	150	475	2500							
		10,1	621	4,51	150	475	2500							
		11,2	690	4,06	150	475	2500							
		12,4	765	3,66	150	475	2500							
		13,7	846	3,31	150	475	2500							
300 Nm		12,8	394	7,10	300	590	4500	İRA İRF 621 İRAF	231	18				
		14,0	432	6,48	300	590	4500							
		15,1	467	5,99	300	590	4500							
		15,8	490	5,72	300	590	4500							
		17,0	526	5,32	300	590	4500							
		17,9	553	5,06	300	590	4500							
		20,2	624	4,49	300	590	4500							
		22,7	702	3,99	300	590	4500							
		24,4	755	3,71	300	590	4500							
		27,6	854	3,28	300	590	4500							
	410 Nm		17,5	394	7,10	410	590				4500	İRA İRF 62 İRAF	234	18
		19,1	432	6,48	410	590	4500							
		20,7	467	5,99	410	590	4500							
		21,7	490	5,72	410	590	4500							
		23,3	526	5,32	410	590	4500							
		24,5	553	5,06	410	590	4500							
		27,6	624	4,49	410	590	4500							
		31,1	702	3,99	410	590	4500							
		33,4	755	3,71	410	590	4500							
		37,8	854	3,28	410	590	4500							
870 Nm			43,3	461	6,074	870	1200	9000	İRA İRF 72 İRAF	240	39			
			47,9	510	5,494	870	1200	9000						
		52,6	561	4,995	870	1200	9000							
		58,5	623	4,497	870	1200	9000							
		64,8	690	4,059	870	1200	9000							



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Monoblock Helical Gear Units Performance Tables
Monoblock Stirnradgetriebe Leistung und Drehzahlübersicht



n₁ = 1400 d/d
r.p.m

Servis Faktörü Service Factor Betriebsfaktor		P ₁ GÜÇ Power Leistung	n ₂ Çıkış Devri Output Speeds Abtriebswelle Drehzahlen	İ Tahvil Ratio Übersetzung	M ₂ Çıkış Momenti Output Torque Abtriebswelle Drehmomente	F _{Q1} Rad. Yük Over Loads Querkräfte	F _{Q2} Rad. Yük Over Loads Querkräfte	Tip Type Typ		
		[kW]	[r.p.m]		[Nm]	[N]	[N]		kg	
85 Nm	S _f =1	0,16	17	81,366	85	390	2100	İRA İRF 43 İRAF	225	10
	S _f =1	0,19	20	70,053	85	390	2100			
	S _f =1	0,21	23	60,896	85	390	2100			
		0,24	26	53,331	85	390	2100			
		0,28	30	46,977	85	390	2100			
		0,31	33	41,849	85	390	2100			
		0,36	38	36,378	85	390	2100			
		0,41	44	31,859	85	390	2100			
		0,46	50	28,063	85	390	2100			
		0,50	53	26,193	85	390	2100			
		0,53	56	24,829	85	390	2000			
		0,58	62	22,615	85	390	2000			
		0,62	66	21,108	85	390	2000			
		0,65	70	20,009	85	390	2000			
		0,70	75	18,593	85	390	2000			
		0,73	79	17,763	85	390	1850			
		0,79	85	16,450	85	390	1850			
		0,82	89	15,806	85	390	1850			
		0,89	96	14,604	85	390	1850			
		0,93	99	14,087	85	390	1800			
		1,0	108	12,995	85	390	1800			
		1,1	121	11,581	85	390	1800			
		1,1	125	11,242	85	390	800	İRA İRF 42 İRAF	225	9
		1,3	142	9,845	85	390	800			
		1,5	161	8,672	85	390	800			
		1,7	182	7,673	85	390	750			
		1,9	204	6,872	85	390	750			
		2,1	230	6,080	85	390	750			
		2,3	253	5,538	85	390	750			
		2,4	259	5,398	85	390	750			
		2,6	286	4,900	85	390	750			
		2,7	291	4,803	85	390	750			
		3,0	322	4,350	85	390	750			
		3,0	327	4,280	85	390	750			
		3,3	362	3,870	85	390	750			
		3,7	406	3,449	85	390	750			
150 Nm		0,003	0,16	8598	150	390	4250	İRA İRF 53 İR 43	257	23
		0,003	0,19	7402	150	390	4250			
		0,004	0,22	6435	150	390	4250			
		0,004	0,26	5419	150	390	4250			
		0,005	0,30	4699	150	390	4250			
		0,006	0,34	4117	150	390	4250			
		0,007	0,42	3338	150	390	4250			
		0,008	0,47	2948	150	390	4250			
		0,009	0,52	2679	150	390	4250			
		0,010	0,60	2346	150	390	4250			
		0,012	0,67	2085	150	390	4250			
		0,013	0,75	1863	150	390	4250			
		0,015	0,85	1641	150	390	4250			
		0,016	0,96	1462	150	390	4250			
		0,019	1,10	1271	150	390	4250			



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Monoblok Helisel Dişlili Redüktörler Güç ve Devir Tablosu

Monoblock Helical Gear Units Performance Tables

Monoblock Stirnradgetriebe Leistung und Drehzahlübersicht

n ₁ = 1400										d/d	
										r.p.m	
Servis Faktörü Service Factor Betriebsfaktor	S _f =1 S _f =1 S _f =1	P ₁	n ₂	İ	M ₂	F _{Q1}	F _{Q1/2}	Tip Type Typ			
		GÜÇ	Çıkış Devri	Tahvil	Çıkış Momenti	Rad. Yük	Rad. Yük				
		Power	Output Speeds	Ratio	Output Torque	Over Loads	Over Loads				
		Leistung	Abtriebswelle Drehzahlen	Übersetzung	Abtriebswelle Drehmomente	Querkräfte	Querkräfte				
		[kW]	[r.p.m]		[Nm]	[N]	[N]				kg
150 Nm		0,02	1,0	1398	150	390	4250	İRA İRF	52 İR 43	257 258	23 25
		0,02	1,2	1204	150	390	4250				
		0,02	1,3	1046	150	390	4250				
		0,03	1,5	917	150	390	4250				
		0,03	1,7	809	150	390	4250				
		0,03	2,0	709	150	390	4250				
		0,04	2,2	630	150	390	4250				
		0,04	2,5	555	150	390	4250				
		0,05	2,8	496	150	390	4250				
		0,02	1,2	1188	150	390	4250	İRA İRF	53 İR 42	257 258	22 24
		0,02	1,3	1040	150	390	4250				
		0,03	1,5	916	150	390	4250				
		0,03	1,6	878	150	390	4250				
		0,03	1,8	772	150	390	4250				
		0,04	2,1	669	150	390	4250				
		0,04	2,4	586	150	390	4250				
		0,05	2,7	519	150	390	4250				
		0,06	3,3	421	150	390	4250				
		0,06	3,7	377	150	390	4250				
		0,07	4,2	333	150	390	4250				
		0,08	4,8	294	150	390	4250				
		0,09	5,2	267	150	390	4250				
		0,10	5,9	238	150	390	4250				
		0,12	7,3	193	150	390	4250				
		0,14	8,1	173	150	390	4250				
		0,16	9,2	152	150	390	4250				
		0,17	10	138	150	390	4250				
		0,19	11	125	150	390	4250				
		0,21	13	111	150	390	4250				
		0,25	15	95	150	390	4250				
		0,12	7,3	193	150	390	4250	İRA İRF	52 İR 42	257 258	22 24
		0,14	8,3	169	150	390	4250				
		0,16	9,5	148	150	390	4250				
		0,18	11	131	150	390	4250				
		0,20	12	116	150	390	4250				
		0,22	13	104	150	390	4250				
		0,25	15	93	150	390	4250	İRA İRF İRAF	53	228 229 230	16 18 19
		0,22	13	105,66	150	475	4250				
		0,26	16	88,98	150	475	4250				
		0,30	18	77,16	150	475	4250				
		0,34	21	67,60	150	475	4250				
		0,42	26	54,81	150	475	4250				
		0,48	29	48,41	150	475	4250				
		0,52	32	43,98	150	475	4250				
		0,59	36	39,09	150	475	4250				
		0,66	40	34,93	150	475	4250				
		0,73	45	31,33	150	475	4250				
		0,82	50	28,21	150	475	4250				
		0,90	55	25,46	150	475	4250				
		1,0	61	23,02	150	475	4250				
		1,1	64	21,88	150	475	4250				



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Monoblok Helisel Dişlili Redüktörler Güç ve Devir Tablosu

Monoblock Helical Gear Units Performance Tables

Monoblock Stirnradgetriebe Leistung und Drehzahlübersicht

		n ₁ = 1400						d/d	
		P ₁	n ₂	i	M ₂	F _{Q1}	F _{Q1/2}	r.p.m	
Servis Faktörü	S _f =1	GÜÇ	Çıkış Devri	Tahvil	Çıkış Momenti	Rad. Yük	Rad. Yük	Tip	
Service Factor	S _f =1	Power	Output Speeds	Ratio	Output Torque	Over Loads	Over Loads	Type	
Betriebsfaktor	S _f =1	Leistung	Abtriebswelle Drehzahlen	Übersetzung	Abtriebswelle Drehmomente	Querkräfte	Querkräfte	Typ	
		[kW]	[r.p.m]		[Nm]	[N]	[N]		kg
150 Nm		1,2	71	19,69	150	475	4250	İRA	
		1,3	79	17,77	150	475	4250	İRF 53	228 16
		1,4	87	16,07	150	475	4250	İRAF	229 18
									230 19
		1,3	81	17,18	150	475	3500		
		1,5	93	15,05	150	475	3500		
		1,7	105	13,29	150	475	3500		
		1,9	119	11,81	150	475	3500		
		2,1	133	10,55	150	475	3500		
		2,4	148	9,47	150	475	3500		
		2,6	158	8,88	150	475	3500		
		2,8	176	7,97	150	475	3500		
		3,2	195	7,17	150	475	3500		
		3,5	216	6,47	150	475	3500	İRA	228 15
		3,9	241	5,82	150	475	3500	İRF 52	229 17
		4,3	267	5,25	150	475	3500	İRAF	230 18
		4,5	278	5,03	150	475	3500		
		5,0	310	4,51	150	475	3500		
		5,6	345	4,06	150	475	3500		
		6,2	383	3,66	150	475	3500		
		6,8	423	3,31	150	475	3500		
		7,4	459	3,05	150	475	3500		
		7,8	483	2,90	150	475	3500		
		8,8	545	2,57	150	475	3500		
300 Nm		0,36	11	127,94	300	590	7000		
		0,39	12	119,40	300	590	7000		
		0,48	15	96,27	300	590	7000		
		0,52	16	87,81	300	590	7000		
		0,55	17	83,37	300	590	7000		
		0,65	20	70,96	300	590	7000		
		0,75	23	61,03	300	590	7000		
		0,89	27	51,65	300	590	7000		
		1,0	30	46,79	300	590	7000	İRA	231 29
		1,1	33	42,55	300	590	7000	İRF 631	232 34
		1,3	39	35,74	300	590	7000	İRAF	233 35
		1,5	47	29,85	300	590	7000		
		1,8	56	25,16	300	590	7000		
		2,1	65	21,50	300	590	7000		
		2,2	68	20,53	300	590	7000		
		2,5	77	18,18	300	590	7000		
		3,0	90	15,59	300	590	7000		
		3,3	101	13,81	300	590	7000		
		3,4	104	13,47	300	590	4500		
		3,7	115	12,20	300	590	4500		
		4,1	126	11,10	300	590	4500		
		4,5	139	10,07	300	590	4500		
		4,8	150	9,35	300	590	4500		
		5,3	165	8,51	300	590	4500	İRA	231 24
		5,9	182	7,67	300	590	4500	İRF 621	232 29
		6,4	197	7,10	300	590	4500	İRAF	233 30
		7,0	216	6,48	300	590	4500		
		7,6	234	5,99	300	590	4500		
		7,9	245	5,72	300	590	4500		
		8,5	263	5,32	300	590	4500		





								n ₁ = 1400		d/d r.p.m	
Servis Faktörü Service Factor Betriebsfaktor	S _f =1 S _f =1 S _f =1	P ₁	n ₂	i	M ₂	F _{Q1}	F _{Q1/2}	Tip Type Typ			kg
		GÜÇ	Çıkış Devri	Tahvil	Çıkış Momenti	Rad. Yük	Rad. Yük				
		Power	Output Speeds	Ratio	Output Torque	Over Loads	Over Loads				
		Leistung	Abtriebswelle Drehzahlen	Übersetzung	Abtriebswelle Drehmomente	Querkräfte	Querkräfte				
		[kW]	[r.p.m]		[Nm]	[N]	[N]				
410 Nm		0,10	2,3	622	410	475	7000	İRA İRF 63 İR 52		259 260	48 53
		0,11	2,3	614	410	475	7000				
		0,11	2,5	566	410	475	7000				
		0,12	2,6	538	410	475	7000				
		0,14	2,9	475	410	475	7000				
		0,14	3,1	449	410	475	7000				
		0,16	3,5	397	410	475	7000				
		0,17	3,7	379	410	475	7000				
		0,19	4,2	335	410	475	7000				
		0,23	4,9	286	410	475	7000				
		0,24	5,1	273	410	475	7000				
		0,27	5,8	242	410	475	7000				
		0,30	6,5	215	410	475	7000				
		0,34	7,4	190	410	475	7000				
		0,28	6,0	232	410	475	7000	İRA İRF 62 İR 52		259 260	43 48
		0,30	6,7	210	410	475	7000				
		0,33	7,3	191	410	475	7000				
		0,36	7,8	179	410	475	7000				
		0,37	8,1	173	410	475	7000				
		0,39	8,6	162	410	475	7000				
		0,40	8,7	161	410	475	7000				
		0,43	9,5	148	410	475	7000				
		0,44	9,6	146	410	475	7000				
		0,48	10,4	134	410	475	7000				
		0,49	11	127,94	410	590	7000	İRA İRF 63 İRAF		234 235 236	29 34 35
		0,53	12	119,40	410	590	7000				
		0,65	15	96,27	410	590	7000				
		0,72	16	87,81	410	590	7000				
		0,75	17	83,37	410	590	7000				
		0,89	20	70,96	410	590	7000				
		1,0	23	61,03	410	590	7000				
		1,2	27	51,65	410	590	7000				
		1,3	30	46,79	410	590	7000				
		1,5	33	42,55	410	590	7000				
		1,8	39	35,74	410	590	7000				
		2,1	47	29,85	410	590	7000				
		2,5	56	25,16	410	590	7000				
		2,9	65	21,50	410	590	7000				
		3,1	68	20,53	410	590	7000				
		3,5	77	18,18	410	590	7000				
		4,0	90	15,59	410	590	7000				
		4,6	101	13,81	410	590	7000				
		4,1	93	15,13	410	590	4500	İRA İRF 62 İRAF		234 235 236	24 29 30
		4,6	104	13,47	410	590	4500				
		5,1	115	12,20	410	590	4500				
		5,6	126	11,10	410	590	4500				
		6,1	139	10,07	410	590	4500				
		6,6	150	9,35	410	590	4500				
		7,3	165	8,51	410	590	4500				
		8,1	182	7,67	410	590	4500				
		8,7	197	7,10	410	590	4500				
		9,6	216	6,48	410	590	4500				



Monoblok Helisel Dişlili Redüktörler Güç ve Devir Tablosu

Monoblock Helical Gear Units Performance Tables

Monoblock Stirnradgetriebe Leistung und Drehzahlübersicht

							n ₁ = 1400		d/d
		P ₁	n ₂	i	M ₂	F _{Q1}	F _{Q1/2}		
Servis Faktörü	S _f = 1	GÜÇ	Çıkış Devri	Tahvil	Çıkış Momenti	Rad. Yük	Rad. Yük	Tip	
Service Factor	S _f = 1	Power	Output Speeds	Ratio	Output Torque	Over Loads	Over Loads	Type	
Betriebsfaktor	S _f = 1	Leistung	Abtriebswelle Drehzahlen	Übersetzung	Abtriebswelle Drehmomente	Querkräfte	Querkräfte	Typ	
		[kW]	[r.p.m]		[Nm]	[N]	[N]		kg
410 Nm		10,3	234	5,99	410	590	4500	İRA İRF 62 İRAF	234 24 235 29 236 30
		10,8	245	5,72	410	590	4500		
		11,6	263	5,32	410	590	4500		
		12,2	277	5,06	410	590	4500		
		13,8	312	4,49	410	590	4500		
		15,5	351	3,99	410	590	4500		
		16,7	377	3,71	410	590	4500		
		18,9	427	3,28	410	590	4500		
		21,3	481	2,91	410	590	4500		
		23,9	541	2,59	410	590	4500		
		25,3	573	2,44	410	590	4500		
600 Nm		0,006	0,09	16071	600	475	10100	İRA İRF 731 İR 53	261 51 262 54
		0,007	0,10	14258	600	475	10100		
		0,008	0,11	12326	600	475	10100		
		0,009	0,13	10380	600	475	10100		
		0,011	0,16	9001	600	475	10100		
		0,012	0,18	7782	600	475	10100		
		0,014	0,20	6862	600	475	10100		
		0,016	0,23	6012	600	475	10100		
		0,018	0,26	5301	600	475	10100		
		0,022	0,33	4299	600	475	10100		
		0,025	0,37	3796	600	475	10100		
		0,028	0,41	3450	600	475	10100		
		0,031	0,46	3068	600	475	10100		
		0,035	0,51	2747	600	475	10100		
		0,039	0,57	2443	600	475	10100		
		0,04	0,54	2613	600	475	10100	İRA İRF 731 İR 52	261 50 262 53
		0,04	0,60	2318	600	475	10100		
		0,05	0,70	2004	600	475	10100		
		0,05	0,80	1756	600	475	10100		
		0,06	0,92	1518	600	475	10100		
		0,07	1,0	1339	600	475	10100		
		0,08	1,2	1180	600	475	10100		
		0,09	1,3	1050	600	475	10100		
		0,10	1,5	940	600	475	10100		
		0,11	1,7	836	600	475	10100		
		0,13	1,9	749	600	475	10100		
		0,14	2,1	674	600	475	10100		
		0,16	2,3	600	600	475	10100		
		0,18	2,6	530	600	475	10100		
		0,20	3,0	468	600	475	10100		
		0,23	3,4	416	600	475	10100		
		0,26	3,8	372	600	475	10100		
		0,28	4,2	333	600	475	10100		
		0,32	4,7	300	600	475	10100		
		0,36	5,2	267	600	475	10100		
		0,40	5,9	238	600	475	10100		
		0,44	6,5	214	600	475	10100		
		0,47	7,0	201	600	475	10100		
		0,52	7,7	183	600	475	10100		
		0,59	8,6	162	600	475	10100		
		0,65	9,6	146	600	475	10100		





n ₁ = 1400								d/d r.p.m			
Servis Faktörü Service Factor Betriebsfaktor	S _f =1 S _f =1 S _f =1	P ₁	n ₂	İ	M ₂	F _{Q1}	F _{Q1/2}	Tip Type Typ		kg	
		GÜÇ	Çıkış Devri	Tahvil	Çıkış Momenti	Rad. Yük	Rad. Yük				
		Power	Output Speeds	Ratio	Output Torque	Over Loads	Over Loads				
		Leistung	Abtriebswelle Drehzahlen	Übersetzung	Abtriebswelle Drehmomente	Querkräfte	Querkräfte				
		[kW]	[r.p.m]		[Nm]	[N]	[N]				
600 Nm		0,05	0,75	1872	600	475	10100	İRA İRF	721 İR 53	261 262	49 52
		0,06	0,85	1640	600	475	10100				
		0,07	0,97	1446	600	475	10100				
		0,07	1,1	1286	600	475	10100				
		0,08	1,2	1172	600	475	10100				
		0,09	1,4	1035	600	475	10100				
		0,10	1,5	921	600	475	10100				
		0,11	1,7	825	600	475	10100				
		0,13	1,9	743	600	475	10100				
		0,14	2,1	675	600	475	10100				
		0,16	2,3	604	600	475	10100				
		0,18	2,6	533	600	475	10100				
		0,19	2,9	491	600	475	10100				
		0,20	2,9	480	600	475	10100				
		0,22	3,3	423	600	475	10100				
		0,24	3,6	390	600	475	10100				
		0,28	4,1	344	600	475	10100				
		0,31	4,6	306	600	475	10100				
		0,35	5,1	274	600	475	10100				
		0,39	5,7	245	600	475	10100				
		0,43	6,3	221	600	475	10100				
		0,48	7,0	199	600	475	10100				
		0,53	7,8	180	600	475	10100				
		0,58	8,6	163	600	475	10100				
		0,64	9,5	148	600	475	10100				
		0,22	3,4	417	600	475	10100	İRA İRF	721 İR 52	261 262	48 51
		0,26	3,8	365	600	475	10100				
		0,29	4,3	322	600	475	10100				
		0,33	4,9	287	600	475	10100				
		0,36	5,5	256	600	475	10100				
		0,41	6,2	226	600	475	10100				
		0,46	7,0	201	600	475	10100				
		0,52	7,8	180	600	475	10100				
		0,58	8,6	162	600	475	10100				
		0,64	9,7	145	600	475	10100				
		0,61	9,2	152,090	600	1000	10100	İRA İRF İRAF	731	237 238 239	39 42 45
		0,68	10	134,933	600	1000	10100				
		0,79	12	116,652	600	1000	10100				
		0,91	14	100,847	600	1000	10100				
		1,0	16	88,932	600	1000	10100				
		1,2	18	78,425	600	1000	10100				
		1,3	20	69,746	600	1000	9700				
		1,5	22	62,455	600	1000	9700				
		1,7	25	55,543	600	1000	9700				
		1,9	28	49,737	600	1000	9700				
		2,1	31	44,791	600	1000	9700				
		2,3	35	39,887	600	1000	9500				
		2,6	40	35,224	600	1000	9500				
		2,9	45	31,308	600	1000	9500				
		3,3	50	27,971	600	1000	9250				
		3,7	56	25,095	600	1000	9250				
		4,1	62	22,590	600	1000	9250				



i.Mak® Monoblok Helisel Dişlili Redüktörler Güç ve Devir Tablosu
Monoblock Helical Gear Units Performance Tables
Monoblock Stirnradgetriebe Leistung und Drehzahlübersicht



n₁ = 1400 d/d
r.p.m

Servis Faktörü Service Factor Betriebsfaktor		P ₁ GÜÇ Power Leistung	n ₂ Çıkış Devri Output Speeds Abtriebswelle Drehzahlen	İ Tahvil Ratio Übersetzung	M ₂ Çıkış Momenti Output Torque Abtriebswelle Drehmomente	F _{Q1} Rad. Yük Over Loads Querkräfte	F _{Q2} Rad. Yük Over Loads Querkräfte	Tip Type Typ		
		[kW]	[r.p.m]		[Nm]	[N]	[N]		kg	
600 Nm		2,9	44	31,622	600	1000	7500	İRA İRF 721 İRAF	237	37
		3,2	50	28,055	600	1000	7500			
		3,7	58	24,254	600	1000	7500			
		4,2	65	21,388	600	1000	7500			
		4,8	74	19,021	600	1000	7250			
		5,3	82	17,033	600	1000	7250			
		5,9	91	15,339	600	1000	7250			
		6,6	102	13,731	600	1000	7250			
		7,5	115	12,126	600	1000	7250			
		8,1	125	11,172	600	1000	7250			
		9,2	142	9,866	600	1000	7000			
		10,3	160	8,769	600	1000	7000			
		11,6	179	7,834	600	1000	7000			
		12,9	199	7,029	600	1000	7000			
		14,3	221	6,327	600	1000	7000			
		15,9	245	5,710	600	1000	7000			
		17,6	271	5,164	600	1000	7000			
		19,4	299	4,677	600	1000	7000			
		21,4	330	4,240	600	1000	7000			
		23,8	368	3,809	600	1000	7000			
		26,4	407	3,438	600	1000	7000			
		29,2	450	3,109	600	1000	7000			
		32,2	497	2,816	600	1000	7000			
		35,5	548	2,553	600	1000	7000			
870 Nm		0,01	0,09	16321	870	475	12100	İRA İRF 73 İR 53	263	49
		0,01	0,10	14110	870	475	12100			
		0,01	0,10	13744	870	475	12100			
		0,01	0,12	11919	870	475	12100			
		0,01	0,13	10947	870	475	12100			
		0,01	0,14	10304	870	475	12100			
		0,01	0,15	9654	870	475	12100			
		0,02	0,16	8586	870	475	12100			
		0,02	0,18	7688	870	475	12100			
		0,02	0,22	6474	870	475	12100			
		0,02	0,25	5674	870	475	12100			
		0,03	0,26	5287	870	475	12100			
		0,03	0,32	4423	870	475	12100			
		0,04	0,35	3989	870	475	12100			
		0,04	0,40	3522	870	475	12100			
		0,04	0,44	3153	870	475	12100			
		0,05	0,50	2817	870	475	12100			
		0,06	0,55	2527	870	475	12100			
		0,07	0,66	2106	870	475	12100			
		0,07	0,69	2017	870	475	12100			
		0,07	0,74	1882	870	475	12100			
		0,08	0,82	1703	870	475	12100			
		0,09	0,92	1520	870	475	12100			
		0,10	0,99	1410	870	475	12100	İRA İRF 73 İR 52	263	48
		0,11	1,1	1265	870	475	12100			
		0,12	1,2	1187	870	475	12100			
		0,14	1,4	981	870	475	12100			
		0,15	1,5	921	870	475	12100			
		0,16	1,6	865	870	475	12100			



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Monoblock Helical Gear Units Performance Tables
Monoblock Stirnradgetriebe Leistung und Drehzahlübersicht



		n ₁ = 1400						d/d r.p.m			
Servis Faktörü Service Factor Betriebsfaktor	S _f =1 S _f =1 S _f =1	P ₁	n ₂	i	M ₂	F _{Q1}	F _{Q1/2}	Tip Type Typ		kg	
		GÜÇ	Çıkış Devri	Tahvil	Çıkış Momenti	Rad. Yük	Rad. Yük				
		Power	Output Speeds	Ratio	Output Torque	Over Loads	Over Loads				
		Leistung	Abtriebswelle Drehzahlen	Übersetzung	Abtriebswelle Drehmomente	Querkräfte	Querkräfte				
		[kW]	[r.p.m]		[Nm]	[N]	[N]				
870 Nm		0,17	1,7	812	870	475	12100	İRA İRF	73 İR 52	263	48
		0,18	1,8	769	870	475	12100			264	51
		0,19	1,9	722	870	475	12100				
		0,21	2,2	648	870	475	12100				
		0,24	2,4	576	870	475	12100				
		0,29	3,0	473	870	475	12100	İRA İRF	72 İR 53	263	47
		0,33	3,3	420	870	475	12100			264	50
		0,42	4,3	326	870	475	12100				
		0,47	4,8	291	870	475	12100				
		0,53	5,4	261	870	475	12100				
		0,86	9	154,461	870	1200	12100	İRA İRF İRAF	73		
		1,0	10	133,534	870	1200	12100				
		1,3	14	103,604	870	1200	12100				
		1,5	15	91,364	870	1200	12100				
		1,6	17	81,252	870	1200	12100				
		1,8	19	72,759	870	1200	12100				
		2,0	21	65,524	870	1200	12100				
		2,2	24	59,416	870	1200	12100				
		2,5	27	52,470	870	1200	12100			240	37
		2,9	30	46,636	870	1200	12100			241	40
		3,2	34	41,667	870	1200	12100			242	43
		3,6	37	37,382	870	1200	12100				
		4,3	45	31,160	870	1200	12100				
		4,8	50	27,840	870	1200	12100				
		5,3	56	24,977	870	1200	12100				
		5,9	62	22,484	870	1200	12100				
		6,6	69	20,293	870	1200	12100				
		7,3	76	18,352	870	1200	12100				
		8,0	84	16,622	870	1200	12100				
		8,9	93	15,068	870	1200	12100				
		9,72	104	13,526	870	1200	9000	İRA İRF İRAF	72	240	35
		10,9	116	12,022	870	1200	9000			241	38
		12,2	130	10,740	870	1200	9000			242	41
		14,1	150	9,337	870	1200	9000				
		15,8	168	8,333	870	1200	9000				
		17,6	187	7,476	870	1200	9000				
		19,5	208	6,730	870	1200	9000				
		21,6	230	6,074	870	1200	9000				
		23,9	255	5,494	870	1200	9000				
		26,3	280	4,995	870	1200	9000				
		29,2	311	4,497	870	1200	9000				
		32,4	345	4,059	870	1200	9000				
		35,8	381	3,670	870	1200	9000				
		39,5	421	3,324	870	1200	9000				
		43,6	464	3,014	870	1200	9000				
		48,1	512	2,733	870	1200	9000				
		51,1	545	2,571	870	1200	9000				
1500 Nm		0,01	0,08	18231	1500	590	17000	İRA İRF	83 İR 63	265	101
		0,02	0,09	15217	1500	590	17000			266	106
		0,02	0,10	13984	1500	590	17000				
		0,02	0,11	12302	1500	590	17500				
		0,02	0,13	10968	1500	590	17500				



i.Mak® Monoblok Helisel Dişlilı Redüktörler Güç ve Devir Tablosu
Monoblock Helical Gear Units Performance Tables
Monoblock Stirnradgetriebe Leistung und Drehzahlübersicht



n₁ = 1400 d/d
r.p.m

Servis Faktörü Service Factor Betriebsfaktor	S _f =1 S _f =1 S _f =1	P ₁	n ₂	İ	M ₂	F _{Q1}	F _{Q1/2}	Tip Type Typ		kg	
		GÜÇ	Çıkış Devri	Tahvil	Çıkış Momenti	Rad. Yük	Rad. Yük				
		Power	Output Speeds	Ratio	Output Torque	Over Loads	Over Loads				
		Leistung	Abtriebswelle Drehzahlen	Übersetzung	Abtriebswelle Drehmomente	Querkräfte	Querkräfte				
		[kW]	[r.p.m]		[Nm]	[N]	[N]				
1500 Nm		0,03	0,16	8893	1500	590	17500	İRA İRF	83 İR 63	265 266	101 106
		0,03	0,18	7902	1500	590	17500				
		0,03	0,20	7092	1500	590	17500				
		0,04	0,22	6393	1500	590	17500				
		0,04	0,26	5484	1500	590	17500				
		0,05	0,28	4922	1500	590	17500				
		0,05	0,32	4437	1500	590	17500				
		0,06	0,35	4015	1500	590	17500				
		0,07	0,39	3593	1500	590	17500				
		0,07	0,43	3239	1500	590	17500				
		0,08	0,48	2930	1500	590	17500				
		0,09	0,53	2659	1500	590	17500				
		0,10	0,58	2419	1500	590	17500				
		0,11	0,63	2205	1500	590	17500				
		0,12	0,70	2013	1500	590	17500				
		0,13	0,76	1840	1500	590	17500				
		0,16	0,95	1481	1500	590	17500				
		0,18	1,03	1353	1500	590	17500				
		0,13	0,79	1778	1500	590	17500	İRA İRF	82 İR 63	265 266	111 116
		0,15	0,89	1580	1500	590	17500				
		0,17	0,99	1418	1500	590	17500				
		0,18	1,1	1308	1500	590	17500				
		0,19	1,1	1279	1500	590	17500				
		0,20	1,2	1162	1500	590	17500				
		0,20	1,2	1157	1500	590	17500				
		0,23	1,3	1050	1500	590	17500				
		0,23	1,3	1043	1500	590	17500				
		0,25	1,5	940	1500	590	17500				
		0,28	1,6	850	1500	590	17500				
		0,31	1,8	772	1500	590	17500				
		0,33	1,9	723	1500	590	17500				
		0,36	2,1	653	1500	590	17500				
		0,40	2,4	590	1500	590	17500				
		0,44	2,6	535	1500	590	17500				
		0,49	2,9	487	1500	590	17500				
		0,59	3,5	405	1500	590	17500				
		0,66	3,9	359	1500	590	17500				
		0,76	4,5	314	1500	590	17500				
		0,80	4,7	295	1500	590	17500				
		0,89	5,3	265	1500	590	17500				
		0,99	5,8	240	1500	590	17500				
0,92	5,6	250,50	1500	1550	17500	İRA İRF İRAF	83	243 244 245	79 84 86		
1,0	6,3	221,16	1500	1550	17500						
1,1	6,7	208,58	1500	1550	17500						
1,2	7,5	186,71	1500	1550	17500						
1,4	8,3	168,34	1500	1550	17500						
1,5	9,2	152,68	1500	1550	17500						
1,7	10	139,19	1500	1550	17500						
1,8	11	127,44	1500	1550	17500						
2,0	12	117,12	1500	1550	17500						
2,2	14	103,03	1500	1550	17500						
2,5	15	91,85	1500	1550	17500						
2,8	17	82,47	1500	1550	17500						



Monoblok Helisel Dişlili Redüktörler Güç ve Devir Tablosu

Monoblock Helical Gear Units Performance Tables

Monoblock Stirnradgetriebe Leistung und Drehzahlübersicht

								n ₁ = 1400		d/d
		P ₁	n ₂	i	M ₂	F _{Q1}	F _{Q1/2}	r.p.m		
Servis Faktörü Service Factor Betriebsfaktor	S _f =1 S _f =1 S _f =1	GÜÇ	Çıkış Devri	Tahvil	Çıkış Momenti	Rad. Yük	Rad. Yük	Tip Type Typ		
		Power	Output Speeds	Ratio	Output Torque	Over Loads	Over Loads			
		Leistung	Abtriebswelle Drehzahlen	Übersetzung	Abtriebswelle Drehmomente	Querkräfte	Querkräfte			
		[kW]	[r.p.m]		[Nm]	[N]	[N]	kg		
1500 Nm		3,1	19	74,47	1500	1550	17500	İRA İRF 83 İRAF	243	79
		3,5	21	66,18	1500	1550	17500			
		3,9	24	59,39	1500	1550	17500			
		4,3	26	53,54	1500	1550	17500			
		4,8	29	48,44	1500	1550	17500			
		5,0	30	45,93	1500	1550	17500			
		5,6	34	41,22	1500	1550	17500			
		6,2	38	37,16	1500	1550	17500			
		6,8	42	33,62	1500	1550	17500			
		7,6	47	30,08	1500	1550	17500			
		8,5	52	27,12	1500	1550	17500			
		9,4	57	24,54	1500	1550	17500			
		10,3	63	22,27	1500	1550	17500			
		11,4	69	20,26	1500	1550	17500			
		12,5	76	18,47	1500	1550	17500			
		13,6	83	16,86	1500	1550	17500			
		14,9	91	15,41	1500	1550	17500			
		15,2	94	14,89	1500	1550	13000			
		17,1	106	13,23	1500	1550	13000			
		19,1	118	11,87	1500	1550	13000			
		21,2	131	10,70	1500	1550	13000			
		23,4	145	9,68	1500	1550	13000			
		25,8	159	8,79	1500	1550	13000			
		27,5	170	8,24	1500	1550	13000			
		30,5	188	7,43	1500	1550	13000			
		33,7	208	6,72	1500	1550	13000			
		37,2	230	6,10	1500	1550	13000			
		40,8	252	5,55	1500	1550	13000			
		44,8	277	5,06	1500	1550	13000			
		49,1	303	4,62	1500	1550	13000			
		53,7	332	4,22	1500	1550	13000			
		56,0	346	4,05	1500	1550	13000			
		61,4	379	3,69	1500	1550	13000			
		67,3	415	3,37	1500	1550	13000			
		73,6	455	3,08	1500	1550	13000			
		77,5	478	2,93	1500	1550	13000			
		84,8	524	2,67	1500	1550	13000			
		95,5	590	2,37	1500	1550	13000			
2800 Nm		0,02	0,06	22852	2800	590	25000	İRA İRF 93 İR 63	267	151
		0,02	0,07	20623	2800	590	25000			
		0,02	0,07	18725	2800	590	25000			
		0,02	0,08	18426	2800	590	25000			
		0,03	0,08	17911	2800	590	25000			
		0,03	0,08	16707	2800	590	25000			
		0,03	0,08	16629	2800	590	25000			
		0,03	0,09	15663	2800	590	25000			
		0,03	0,09	15160	2800	590	25000			
		0,03	0,09	15098	2800	590	25000			
		0,03	0,10	14679	2800	590	25000			
		0,03	0,10	14410	2800	590	25000			
		0,03	0,10	13583	2800	590	25000			
		0,03	0,11	13137	2800	590	25000			
		0,03	0,11	13037	2800	590	25000			



Monoblok Helisel Dişlili Redüktörler Güç ve Devir Tablosu

Monoblock Helical Gear Units Performance Tables

Monoblock Stirnradgetriebe Leistung und Drehzahlübersicht

								n ₁ = 1400		d/d	
										r.p.m	
Servis Faktörü Service Factor Betriebsfaktor	S _f =1 S _f =1 S _f =1	P ₁	n ₂	İ	M ₂	F _{Q1}	F _{Q1/2}	Tip Type Typ			
		GÜÇ	Çıkış Devri	Tahvil	Çıkış Momenti	Rad. Yük	Rad. Yük				
		Power	Output Speeds	Ratio	Output Torque	Over Loads	Over Loads				
		Leistung	Abtriebswelle Drehzahlen	Übersetzung	Abtriebswelle Drehmomente	Querkräfte	Querkräfte				
		[kW]	[r.p.m]		[Nm]	[N]	[N]				
2800 Nm		0,04	0,11	12258	2800	590	25000	İRA İRF	93 İR 63	267 268	151 161
		0,04	0,12	11681	2800	590	25000				
		0,04	0,12	11577	2800	590	25000				
		0,04	0,13	11130	2800	590	25000				
		0,04	0,13	10542	2800	590	25000				
		0,04	0,14	10288	2800	590	25000				
		0,05	0,15	9565	2800	590	25000				
		0,05	0,15	9309	2800	590	25000				
		0,05	0,15	9206	2800	590	25000				
		0,05	0,16	8565	2800	590	25000				
		0,05	0,17	8198	2800	590	25000				
		0,06	0,17	8006	2800	590	25000				
		0,06	0,18	7808	2800	590	25000				
		0,06	0,19	7366	2800	590	25000				
		0,06	0,19	7224	2800	590	25000				
		0,07	0,20	6881	2800	590	25000				
		0,07	0,21	6715	2800	590	25000				
		0,07	0,22	6420	2800	590	25000				
		0,07	0,23	6115	2800	590	25000				
		0,08	0,24	5918	2800	590	25000				
		0,08	0,24	5745	2800	590	25000				
		0,08	0,26	5472	2800	590	25000				
		0,09	0,27	5259	2800	590	25000				
		0,09	0,27	5169	2800	590	25000				
		0,09	0,29	4872	2800	590	25000				
		0,10	0,30	4706	2800	590	25000				
		0,10	0,30	4673	2800	590	25000				
		0,10	0,33	4294	2800	590	25000				
		0,11	0,33	4241	2800	590	25000				
		0,11	0,33	4190	2800	590	25000				
		0,12	0,36	3862	2800	590	25000				
		0,12	0,38	3693	2800	590	25000				
		0,13	0,40	3525	2800	590	25000				
		0,14	0,43	3225	2800	590	25000				
		0,15	0,47	2956	2800	590	25000				
	0,11	0,35	3954	2800	590	25000	İRA İRF	93 İR 62	267 268	146 156	
	0,12	0,38	3688	2800	590	25000					
	0,12	0,39	3582	2800	590	25000					
	0,13	0,42	3341	2800	590	25000					
	0,14	0,43	3241	2800	590	25000					
	0,15	0,48	2936	2800	590	25000					
	0,15	0,49	2878	2800	590	25000					
	0,17	0,54	2607	2800	590	25000					
	0,19	0,60	2336	2800	590	25000					
	0,21	0,66	2108	2800	590	25000					
	0,23	0,73	1914	2800	590	25000					
	0,28	0,87	1601	2800	590	25000					
	0,30	0,95	1473	2800	590	25000					
	0,33	1,0	1343	2800	590	25000					
	0,37	1,2	1183	2800	590	25000					
	0,42	1,3	1052	2800	590	25000					
	0,47	1,5	941	2800	590	25000					
	0,53	1,7	838	2800	590	25000					
	0,60	1,9	739	2800	590	25000					



Monoblok Helisel Dişlili Redüktörler Güç ve Devir Tablosu

Monoblock Helical Gear Units Performance Tables

Monoblock Stirnradgetriebe Leistung und Drehzahlübersicht

n ₁ = 1400								d/d r.p.m			
Servis Faktörü Service Factor Betriebsfaktor	S _f =1 S _f =1 S _f =1	P ₁	n ₂	İ	M ₂	F _{Q1}	F _{Q1/2}	Tip Type Typ			
		GÜÇ	Çıkış Devri	Tahvil	Çıkış Momenti	Rad. Yük	Rad. Yük				
		Power	Output Speeds	Ratio	Output Torque	Over Loads	Over Loads				
		Leistung	Abtriebswelle Drehzahlen	Übersetzung	Abtriebswelle Drehmomente	Querkräfte	Querkräfte				
		[kW]	[r.p.m]		[Nm]	[N]	[N]	kg			
2800 Nm		0,67	2,1	656	2800	590	25000	İRA İRF	93 İR 62	267 268	146 156
		0,75	2,4	587	2800	590	25000				
		0,84	2,7	528	2800	590	25000				
		0,93	2,9	478	2800	590	25000				
		1,0	3,2	434	2800	590	25000				
		1,1	3,5	398	2800	590	25000				
		1,2	3,9	360	2800	590	25000				
		1,3	4,2	330	2800	590	25000				
		1,5	4,6	302	2800	590	25000				
		1,6	5,1	275	2800	590	25000				
		1,8	5,6	251	2800	590	25000				
		1,9	6,1	230	2800	590	25000				
		2,1	6,7	210	2800	590	25000				
		1,38	4,4	315	2800	590	25000	İRA İRF	92 İR 62	267 268	126 136
		1,57	5,1	277	2800	590	25000				
		1,77	5,7	247	2800	590	25000				
		1,97	6,3	221	2800	590	25000				
		1,5	4,8	293,46	2800	2500	25000	İRA İRF İRAF	93	246 247 248	133 143 153
		1,6	5,1	273,73	2800	2500	25000				
		1,8	5,8	240,50	2800	2500	25000				
		2,0	6,6	213,60	2800	2500	25000				
		2,2	7,3	191,38	2800	2500	25000				
		2,5	8,1	172,72	2800	2500	25000				
		2,7	8,9	156,82	2800	2500	25000				
		3,3	11	131,17	2800	2500	25000				
		3,6	12	120,68	2800	2500	25000				
		3,9	13	110,02	2800	2500	25000				
		4,4	14	96,96	2800	2500	25000				
		5,0	16	86,16	2800	2500	25000				
		5,6	18	77,10	2800	2500	25000				
		6,3	20	68,65	2800	2500	25000				
		7,1	23	60,50	2800	2500	25000				
		8,0	26	53,76	2800	2500	25000				
		8,9	29	48,11	2800	2500	25000				
		9,9	32	43,29	2800	2500	25000				
		11,0	36	39,13	2800	2500	25000				
		12,1	39	35,52	2800	2500	25000				
		13,3	43	32,34	2800	2500	25000				
		14,5	47	29,52	2800	2500	25000				
		15,9	52	27,01	2800	2500	25000				
		17,3	57	24,76	2800	2500	25000				
		18,1	60	23,38	2800	2500	20000	İRA İRF İRAF	92	246 247 248	163 173 183
		20,5	68	20,60	2800	2500	20000				
		23,1	76	18,31	2800	2500	20000				
		25,8	85	16,38	2800	2500	20000				
		28,7	95	14,74	2800	2500	20000				
		31,8	105	13,32	2800	2500	20000				
		38,4	127	11,01	2800	2500	20000				
		42,1	139	10,05	2800	2500	20000				
		46,0	152	9,20	2800	2500	20000				
		50,9	168	8,31	2800	2500	20000				
		56,1	186	7,54	2800	2500	16000				
		61,6	204	6,87	2800	2500	16000				



Monoblok Helisel Dişlili Redüktörler Güç ve Devir Tablosu

Monoblock Helical Gear Units Performance Tables

Monoblock Stirnradgetriebe Leistung und Drehzahlübersicht

		n ₁ = 1400					d/d	
		P ₁	n ₂	i	M ₂	F _{Q1}	F _{Q2}	
Servis Faktörü	S _f =1	GÜÇ	Çıkış Devri	Tahvil	Çıkış Momenti	Rad. Yük	Rad. Yük	Tip
Service Factor	S _f =1	Power	Output Speeds	Ratio	Output Torque	Over Loads	Over Loads	Type
Betriebsfaktor	S _f =1	Leistung	Abtriebswelle Drehzahlen	Übersetzung	Abtriebswelle Drehmomente	Querkräfte	Querkräfte	Typ
		[kW]	[r.p.m]		[Nm]	[N]	[N]	kg
2800 Nm		67,5	223	6,27	2800	2500	16000	İRA İRF 92 İRAF
		73,7	244	5,74	2800	2500	16000	
		80,4	266	5,26	2800	2500	16000	
		95,5	316	4,43	2800	2500	16000	
		103,7	343	4,08	2800	2500	16000	
		112,8	373	3,75	2800	2500	16000	
		118,2	391	3,58	2800	2500	16000	
		140,1	464	3,02	2800	2500	16000	
		152,4	504	2,78	2800	2500	16000	
		165,6	548	2,55	2800	2500	16000	
		172,7	571	2,45	2800	2500	16000	
4300 Nm		0,03	0,06	22099	4300	1200	34000	İRA İRF 103 İR 73
		0,04	0,07	18788	4300	1200	34000	
		0,04	0,08	16845	4300	1200	34000	
		0,05	0,09	15213	4300	1200	34000	
		0,05	0,10	13823	4300	1200	34000	
		0,05	0,11	12625	4300	1200	34000	
		0,06	0,12	11581	4300	1200	34000	
		0,07	0,14	10325	4300	1200	34000	
		0,08	0,15	9118	4300	1200	34000	
		0,09	0,17	8104	4300	1200	34000	
		0,10	0,19	7241	4300	1200	34000	
		0,11	0,22	6496	4300	1200	34000	
		0,12	0,24	5848	4300	1200	34000	
		0,13	0,27	5278	4300	1200	34000	
		0,14	0,29	4790	4300	1200	34000	
		0,16	0,33	4230	4300	1200	34000	
		0,18	0,37	3760	4300	1200	34000	
		0,21	0,42	3359	4300	1200	34000	
		0,23	0,46	3014	4300	1200	34000	
		0,25	0,52	2713	4300	1200	34000	
		0,28	0,57	2448	4300	1200	34000	
		0,25	0,51	2733	4300	1200	34000	
		0,28	0,58	2413	4300	1200	34000	
		0,32	0,65	2145	4300	1200	34000	
		0,35	0,73	1916	4300	1200	34000	
		0,42	0,86	1635	4300	1200	34000	
		0,47	0,96	1460	4300	1200	34000	
		0,52	1,1	1311	4300	1200	34000	
		0,58	1,2	1180	4300	1200	34000	
		0,62	1,3	1103	4300	1200	34000	
		0,69	1,4	986	4300	1200	34000	
		0,77	1,6	884	4300	1200	34000	
		0,85	1,8	796	4300	1200	34000	
		0,95	1,9	718	4300	1200	34000	
		1,05	2,2	650	4300	1200	34000	
		1,18	2,4	575	4300	1200	34000	
		0,58	1,2	1173	4300	1200	34000	
		0,65	1,3	1046	4300	1200	34000	
		0,74	1,5	923	4300	1200	34000	
		0,83	1,7	821	4300	1200	34000	
		0,93	1,9	733	4300	1200	34000	
		0,58	1,2	1173	4300	1200	34000	
		0,65	1,3	1046	4300	1200	34000	
		0,74	1,5	923	4300	1200	34000	
		0,83	1,7	821	4300	1200	34000	
		0,93	1,9	733	4300	1200	34000	



i.Mak® Monoblok Helisel Dişlili Redüktörler Güç ve Devir Tablosu
Monoblock Helical Gear Units Performance Tables
Monoblock Stirnradgetriebe Leistung und Drehzahlübersicht



n₁ = 1400 d/d
r.p.m

Servis Faktörü Service Factor Betriebsfaktor	S _f =1 S _f =1 S _f =1	P ₁	n ₂	İ	M ₂	F _{Q1}	F _{Q12}	Tip Type Typ		kg		
		GÜÇ	Çıkış Devri	Tahvil	Çıkış Momenti	Rad. Yük	Rad. Yük					
		Power	Output Speeds	Ratio	Output Torque	Over Loads	Over Loads					
		Leistung	Abtriebswelle Drehzahlen	Übersetzung	Abtriebswelle Drehmomente	Querkräfte	Querkräfte					
		[kW]	[r.p.m]		[Nm]	[N]	[N]					
4300 Nm		1,0	2,1	658	4300	1200	34000	İRA İRF 103 İRF 72	İR 72	269 270	213 216	
		1,1	2,4	592	4300	1200	34000					
		1,3	2,6	535	4300	1200	34000					
		1,4	2,9	485	4300	1200	34000					
		1,6	3,3	428	4300	1200	34000					
		1,8	3,7	381	4300	1200	34000					
		2,0	4,1	340	4300	1200	34000					
		2,2	4,6	305	4300	1200	34000					
		2,5	5,1	275	4300	1200	34000					
		2,7	5,6	248	4300	1200	34000					
		2,8	5,9	239	4300	1200	34000	İRA İRF 102 İRF 72	İR 72	269 270	206 209	
		3,2	6,6	211	4300	1200	34000					
		3,6	7,4	188	4300	1200	34000					
		4,0	8,3	168	4300	1200	34000					
		2,6	5,5	256,048	4300	3750	30000	İRA İRF 103 İRAF				
		2,9	6,2	225,112	4300	3750	30000					
		3,2	6,7	207,689	4300	3750	30000					
		3,6	7,6	184,584	4300	3750	30000					
		4,0	8,5	165,496	4300	3750	30000					
		4,7	10	140,701	4300	3750	30000					
		5,2	11	126,151	4300	3750	30000					
		5,8	12	113,930	4300	3750	30000					
		6,4	14	103,519	4300	3750	30000					
		7,0	15	94,544	4300	3750	30000					
		7,6	16	86,727	4300	3750	30000					
		8,5	18	77,321	4300	3750	30000					
		9,7	21	68,283	4300	3750	30000					
		10,9	23	60,691	4300	3750	30000					
		12,2	26	54,223	4300	3750	30000					
		13,6	29	48,648	4300	3750	30000					
		15,1	32	43,792	4300	3750	30000					
		16,7	35	39,525	4300	3750	30000					
		18,4	39	35,870	4300	3750	30000					
		20,8	44	31,677	4300	3750	30000					
		23,4	50	28,155	4300	3750	30000					
		26,2	56	25,155	4300	3750	30000					
		29,2	62	22,568	4300	3750	30000					
		32,5	69	20,316	4300	3750	30000					
		36,0	76	18,336	4300	3750	30000					
		39,8	84	16,582	4300	3750	30000					
		43,9	93	15,019	4300	3750	30000					
		36,7	79	17,692	4300	3750	25000	İRA İRF 102 İRAF	102		249 250 251	200 203 225
		41,6	90	15,624	4300	3750	25000					
		46,8	101	13,887	4300	3750	25000					
		52,4	113	12,407	4300	3750	25000					
		61,4	132	10,585	4300	3750	25000					
		68,7	148	9,457	4300	3750	25000					
		76,6	165	8,485	4300	3750	25000					
		85,1	183	7,638	4300	3750	25000					
		90,9	196	7,144	4300	3750	25000					
		101,8	219	6,382	4300	3750	25000					
		113,5	244	5,726	4300	3750	25000					
		126,1	272	5,154	4300	3750	21000					



Monoblok Helisel Dişlili Redüktörler Güç ve Devir Tablosu

Monoblock Helical Gear Units Performance Tables

Monoblock Stirnradgetriebe Leistung und Drehzahlübersicht

n ₁ = 1400								d/d r.p.m		
Servis Faktörü Service Factor Betriebsfaktor	S _f =1 S _f =1 S _f =1	P ₁	n ₂	İ	M ₂	F _{Q1}	F _{Q1/2}	Tip Type Typ		
		GÜÇ	Çıkış Devri	Tahvil	Çıkış Momenti	Rad. Yük	Rad. Yük			
		Power	Output Speeds	Ratio	Output Torque	Over Loads	Over Loads			
		Leistung	Abtriebswelle Drehzahlen	Übersetzung	Abtriebswelle Drehmomente	Querkräfte	Querkräfte			
		[kW]	[r.p.m]		[Nm]	[N]	[N]	kg		
4300 Nm		139,7	301	4,652	4300	3750	21000	İRA İRF İRAF	102	249 200 250 203 251 225
		154,4	333	4,207	4300	3750	21000			
		174,5	376	3,723	4300	3750	21000			
		193,4	417	3,360	4300	3750	21000			
		213,8	461	3,039	4300	3750	21000			
		236,1	509	2,752	4300	3750	19000			
		260,4	561	2,495	4300	3750	19000			
		287,1	619	2,263	4300	3750	19000			
8000 Nm		0,04	0,04	32309	8000	1200	52000	İRA İRF	123 İR 73	271 334 272 336
		0,04	0,05	28749	8000	1200	52000			
		0,05	0,05	25807	8000	1200	52000			
		0,06	0,06	23337	8000	1200	52000			
		0,07	0,07	18918	8000	1200	52000			
		0,07	0,08	17260	8000	1200	52000			
		0,08	0,09	15494	8000	1200	52000			
		0,10	0,10	13395	8000	1200	52000			
		0,11	0,12	12113	8000	1200	52000			
		0,11	0,13	11190	8000	1200	52000			
		0,13	0,14	10209	8000	1200	52000			
		0,14	0,15	9165	8000	1200	52000			
		0,15	0,17	8288	8000	1200	52000			
		0,16	0,18	7928	8000	1200	52000			
		0,20	0,22	6426	8000	1200	52000			
		0,22	0,24	5863	8000	1200	52000			
		0,24	0,27	5263	8000	1200	52000			
		0,27	0,29	4759	8000	1200	52000			
		0,32	0,35	3975	8000	1200	52000			
		0,37	0,40	3498	8000	1200	52000			
		0,41	0,45	3104	8000	1200	52000			
		0,46	0,50	2773	8000	1200	52000			
		0,31	0,34	4059	8000	1200	52000	İRA İRF	122 İR 73	271 334 272 336
		0,34	0,38	3671	8000	1200	52000			
		0,36	0,40	3509	8000	1200	52000			
		0,40	0,44	3173	8000	1200	52000			
		0,48	0,53	2650	8000	1200	52000			
		0,53	0,58	2399	8000	1200	52000			
		0,58	0,65	2170	8000	1200	52000			
		0,70	0,77	1812	8000	1200	52000			
		0,79	0,88	1594	8000	1200	52000			
		0,92	1,0	1379	8000	1200	52000			
		1,01	1,1	1247	8000	1200	52000			
	1,2	1,3	1042	8000	1200	52000	İRA İRF	123 İR 72	271 332 272 334	
	1,4	1,5	916	8000	1200	52000				
	1,6	1,7	813	8000	1200	52000				
	1,7	1,9	726	8000	1200	52000				
	1,9	2,1	652	8000	1200	52000				
	2,1	2,3	603	8000	1200	52000				
	0,45	0,49	2829	8000	1200	52000				
	0,50	0,56	2517	8000	1200	52000				
	0,56	0,62	2260	8000	1200	52000				
	0,62	0,69	2043	8000	1200	52000				
	0,76	0,84	1657	8000	1200	52000				
	0,84	0,93	1511	8000	1200	52000				





n ₁ = 1400								d/d r.p.m			
Servis Faktörü Service Factor Betriebsfaktor	S _f =1 S _f =1 S _f =1	P ₁	n ₂	i	M ₂	F _{Q1}	F _{Q2}	Tip Type Typ			
		GÜÇ	Çıkış Devri	Tahvil	Çıkış Momenti	Rad. Yük	Rad. Yük				
		Power Leistung	Output Speeds Abtriebswelle Drehzahlen	Ratio Übersetzung	Output Torque Abtriebswelle Drehmomente	Over Loads Querkräfte	Over Loads Querkräfte				
		[kW]	[r.p.m]		[Nm]	[N]	[N]			kg	
8000 Nm		0,93	1,0	1357	8000	1200	52000	İRA İRF	123 İR 72	271 272	332 334
		1,0	1,1	1227	8000	1200	52000				
		1,2	1,4	1025	8000	1200	52000				
		1,4	1,6	902	8000	1200	52000				
		1,6	1,8	800	8000	1200	52000				
		1,8	2,0	715	8000	1200	52000				
		2,0	2,2	642	8000	1200	52000				
		2,2	2,4	579	8000	1200	52000				
		2,3	2,5	550	8000	1200	52000				
		2,6	2,9	488	8000	1200	52000				
		2,9	3,2	436	8000	1200	52000				
		3,2	3,6	392	8000	1200	52000				
		3,6	4,0	354	8000	1200	52000				
		4,0	4,4	320	8000	1200	52000				
		4,3	4,8	291	8000	1200	52000				
		4,8	5,3	265	8000	1200	52000				
		5,2	5,8	242	8000	1200	52000				
		5,7	6,3	221	8000	1200	52000				
		6,3	7,0	201	8000	1200	52000				
		6,9	7,7	183	8000	1200	52000				
		7,6	8,4	167	8000	1200	52000				
		3,7	4,2	335	8000	1200	52000	İRA İRF	122 İR 72	271 272	326 328
		3,9	4,4	321	8000	1200	52000				
		4,6	5,2	268	8000	1200	52000				
		5,3	5,9	236	8000	1200	52000				
		5,9	6,7	210	8000	1200	52000				
		6,7	7,5	187	8000	1200	52000				
		7,4	8,3	168	8000	1200	52000				
		8,0	9,0	155	8000	1200	52000				
		5,9	6,7	209,172	8000	3750	41000	İRA İRF İRAF	123	252 253 254	323 325 353
		6,6	7,5	186,123	8000	3750	41000				
		7,3	8,4	167,082	8000	3750	41000				
		8,1	9,3	151,088	8000	3750	41000				
		10,0	11	122,480	8000	3750	41000				
		11,0	13	111,746	8000	3750	41000				
		12,2	14	100,314	8000	3750	41000				
		13,5	15	90,712	8000	3750	41000				
		16,2	18	75,766	8000	3750	41000				
		18,4	21	66,672	8000	3750	41000				
		20,7	24	59,160	8000	3750	39700				
		23,2	26	52,849	8000	3750	39700				
		25,8	29	47,474	8000	3750	39700				
		28,6	33	42,840	8000	3750	39700				
		30,2	34	40,700	8000	3750	39700				
		34,0	39	36,114	8000	3750	39700				
		38,0	43	32,262	8000	3750	39700				
		42,3	48	28,980	8000	3750	39700				
		46,9	54	26,151	8000	3750	39700				
	51,8	59	23,687	8000	3750	39700					
	57,0	65	21,522	8000	3750	39700					
	62,6	71	19,604	8000	3750	39700					
	68,6	78	17,894	8000	3750	39700					



Monoblok Helisel Dişlili Redüktörler Güç ve Devir Tablosu

Monoblock Helical Gear Units Performance Tables

Monoblock Stirnradgetriebe Leistung und Drehzahlübersicht

		n ₁ = 1400					d/d	
		P ₁	n ₂	i	M ₂	F _{Q1}	F _{Q1/2}	
Servis Faktörü	S _f = 1	GÜÇ	Çıkış Devri	Tahvil	Çıkış Momenti	Rad. Yük	Rad. Yük	Tip
Service Factor	S _f = 1	Power	Output Speeds	Ratio	Output Torque	Over Loads	Over Loads	Type
Betriebsfaktor	S _f = 1	Leistung	Abtriebswelle Drehzahlen	Übersetzung	Abtriebswelle Drehmomente	Querkräfte	Querkräfte	Typ
		[kW]	[r.p.m]		[Nm]	[N]	[N]	kg
8000 Nm		46,0	53	26,282	8000	3750	45000	
		50,9	59	23,766	8000	3750	45000	
		60,9	71	19,850	8000	3750	45000	
		69,2	80	17,468	8000	3750	45000	
		78,0	90	15,500	8000	3750	45000	
		87,3	101	13,846	8000	3750	45000	
		97,2	113	12,438	8000	3750	45000	
		105,2	122	11,495	8000	3750	45000	
		118,5	137	10,200	8000	3750	45000	
		132,7	154	9,112	8000	3750	45000	İRA
		147,7	171	8,185	8000	3750	45000	İRF 122
		156,5	181	7,724	8000	3750	45000	İRAF
		174,2	202	6,938	8000	3750	45000	
		193,1	224	6,261	8000	3750	45000	
		213,1	247	5,671	8000	3750	45000	
		234,6	272	5,153	8000	3750	45000	
		257,5	298	4,694	8000	3750	45000	
		282,2	327	4,284	8000	3750	45000	
		308,6	357	3,917	8000	3750	45000	
		337,2	391	3,585	8000	3750	45000	
		368,1	426	3,284	8000	3750	45000	
10500 Nm		0,41	0,34	4099,41	10500	590	69000	
		0,49	0,40	3469,26	10500	590	69000	
		0,54	0,45	3097,86	10500	590	69000	
		0,66	0,55	2552,42	10500	590	69000	
		0,71	0,59	2390,20	10500	590	69000	
		0,81	0,67	2076,56	10500	590	69000	
		0,84	0,70	2005,04	10500	590	69000	
		0,94	0,78	1790,46	10500	590	69000	
		1,00	0,83	1690,37	10500	590	69000	İRA
		1,1	0,93	1509,47	10500	590	69000	İRF 151 İR
		1,2	1,0	1444,14	10500	590	69000	İRF 63
		1,3	1,1	1289,63	10500	590	69000	
		1,3	1,1	1289,59	10500	590	69000	
		1,6	1,3	1049,16	10500	590	69000	
		1,7	1,5	963,50	10500	590	69000	
		1,9	1,6	868,43	10500	590	69000	
		2,0	1,6	860,38	10500	590	69000	
		2,4	2,0	699,98	10500	590	69000	
		3,6	3,0	471,36	10500	590	69000	
		2,1	1,7	808,20	10500	590	69000	İRA
		2,5	2,1	665,88	10500	590	69000	İRF 151 İR
		2,9	2,4	571,65	10500	590	69000	İRF 62
		3,4	2,9	489,45	10500	590	69000	
		2,9	2,4	586,63	10500	1200	69000	İRA
		3,5	2,9	485,57	10500	1200	69000	İRF 151 İR
		3,9	3,2	436,68	10500	1200	69000	İRF 73
		4,7	3,9	359,13	10500	1200	69000	
		5,5	4,6	306,48	10500	1200	69000	
		1,6	1,4	1012,06	10500	1200	69000	İRA
		2,1	1,7	807,34	10500	1200	69000	İRF 151 İR
		2,2	1,9	747,36	10500	1200	69000	İRF 72



i.Mak® Monoblok Helisel Dişlili Redüktörler Güç ve Devir Tablosu
Monoblock Helical Gear Units Performance Tables
Monoblock Stirnradgetriebe Leistung und Drehzahlübersicht



n ₁ = 1400								d/d r.p.m			
Servis Faktörü Service Factor Betriebsfaktor	S _f =1 S _f =1 S _f =1	P ₁	n ₂	İ	M ₂	F _{Q1}	F _{Q1/2}	Tip Type Typ			
		GÜÇ	Çıkış Devri	Tahvil	Çıkış Momenti	Rad. Yük	Rad. Yük				
		Power	Output Speeds	Ratio	Output Torque	Over Loads	Over Loads				
		Leistung	Abtriebswelle Drehzahlen	Übersetzung	Abtriebswelle Drehmomente	Querkräfte	Querkräfte				
		[kW]	[r.p.m]		[Nm]	[N]	[N]	kg			
10500 Nm		2,3	1,9	735,26	10500	1200	69000	İRA 151 İRF 72	274 506 274 508		
		2,8	2,4	586,53	10500	1200	69000				
		3,4	2,9	485,49	10500	1200	69000				
		4,1	3,5	403,65	10500	1200	69000				
		4,4	3,7	376,84	10500	1200	69000				
		6,0	5,0	278,72	10500	1200	69000				
		6,8	5,7	244,45	10500	1200	69000				
		2,8	2,4	590,59	10500	1550	69000				
		3,5	2,9	479,79	10500	1550	69000				
		3,8	3,2	431,48	10500	1550	69000				
		3,9	3,3	429,06	10500	1550	69000				
		4,7	3,9	355,15	10500	1550	69000				
		5,7	4,8	292,73	10500	1550	69000				
		5,7	4,8	288,93	10500	1550	69000				
		6,8	5,7	244,27	10500	1550	69000				
		8,2	6,9	201,67	10500	1550	69000				
		9240-10400 Nm		15,8	15	90,36	9300	5000	60000	İRA 151 İRF 151	255 488 255 495
				21,2	21	67,16	9300	5000	60000		
				23,8	23	59,97	9300	5000	60000		
29,1	29			48,79	9250	5000	60000				
39,5	35			40,39	10400	5000	60000				
43,5	39			36,32	10300	5000	60000				
48,1	43			32,85	10300	5000	60000				
52,9	47			29,87	10300	5000	60000				
58,5	51			27,27	10400	5000	60000				
63,6	56			24,83	10300	5000	60000				
69,7	62			22,67	10300	5000	60000				
76,1	67			20,77	10300	5000	60000				
82,8	73			19,08	10300	5000	60000				
83,7	75			18,79	10250	5000	60000				
92,5	82			17,00	10250	5000	60000				
105,3	93			15,00	10300	5000	60000				
119,1	106			13,20	10250	5000	60000				
140,2	123			11,38	10400	5000	60000				
18330 Nm				17	8,5	165,41	18330	6000	85000		
		19	9,6	145,39	18330	6000	85000				
		23	11	121,76	18330	6000	85000				
		37	19	75,30	18330	6000	85000				
		41	21	67,93	18330	6000	85000				
		61	31	45,73	18330	6000	85000				
		74	37	37,96	18330	6000	85000				
		82	41	34,32	18330	6000	85000				
		99	49	28,45	18330	6000	85000				
		108	54	26,05	18330	6000	85000				
		130	65	21,69	18330	6000	85000				
		153	76	18,34	18330	6000	85000				
		181	90	15,54	18330	6000	85000				
		215	107	13,09	18330	6000	85000				



Monoblok Helisel Dişlili Redüktörler Güç ve Devir Tablosu

Monoblock Helical Gear Units Performance Tables

Monoblock Stirnradgetriebe Leistung und Drehzahlübersicht

n ₁ = 900									d/d		
									r.p.m		
Servis Faktörü Service Factor Betriebsfaktor	S _f =1 S _f =1 S _f =1	P ₁	n ₂	İ	M ₂	F _{Q1}	F _{Q1/2}	Tip Type Typ			
		GÜÇ	Çıkış Devri	Tahvil	Çıkış Momenti	Rad. Yük	Rad. Yük				
		Power	Output Speeds	Ratio	Output Torque	Over Loads	Over Loads				
		Leistung	Abtriebswelle Drehzahlen	Übersetzung	Abtriebswelle Drehmomente	Querkräfte	Querkräfte				
		[kW]	[r.p.m]		[Nm]	[N]	[N]				
85 Nm		0,16	17	53,331	85	390	2100	İRA	43	225	9
		0,18	19	46,977	85	390	2100	İRF		226	10
								İRAF		227	10
150 Nm		0,14	8,5	105,66	150	475	4250	İRA	53	228	11
		0,17	10	88,98	150	475	4250	İRF		229	11
		0,19	12	77,16	150	475	4250	İRAF		230	13
300 Nm		0,23	7,0	127,94	300	590	4500	İRA	631	231	19
		0,25	7,5	119,40	300	590	4500	İRF		232	19
		0,31	9,3	96,27	300	590	4500	İRAF		233	19
		0,34	10	87,81	300	590	4500			233	21
410 Nm		0,32	7,0	127,94	410	590	7300	İRA	63	234	19
		0,34	7,5	119,40	410	590	7300	İRF		235	19
		0,42	9,3	96,27	410	590	7300	İRAF		236	19
		0,46	10	87,81	410	590	7300			236	21
600 Nm		0,39	5,9	152,090	600	1000	10100	İRA	731	237	40
		0,44	6,7	134,933	600	1000	10100	İRF		238	43
		0,51	7,7	116,652	600	1000	10100	İRAF		239	46
		0,59	8,9	100,847	600	1000	10100			239	46
870 Nm		0,56	5,8	154,46	870	1200	12100	İRA	73	240	41
		0,64	6,7	133,53	870	1200	12100	İRF		241	44
		0,83	8,7	103,60	870	1200	12100	İRAF		242	47
		0,94	10	91,36	870	1200	12100			242	47
1500 Nm		0,59	3,6	250,50	1500	1550	17500	İRA	83	243	84
		0,67	4,1	221,16	1500	1550	17500	İRF		244	83
		0,71	4,3	208,58	1500	1550	17500	İRAF		245	83
		0,79	4,8	186,71	1500	1550	17500			245	90
		0,88	5,3	168,34	1500	1550	17500			245	90
2800 Nm		0,94	3,1	293,46	2800	2500	25000	İRA	93	246	155
		1,0	3,3	273,73	2800	2500	25000	İRF		247	155
		1,1	3,7	240,50	2800	2500	25000	İRAF		248	155
		1,3	4,2	213,60	2800	2500	25000			248	157
4300 Nm		1,7	3,5	256,04	4300	3750	34000	İRA İRF İRAF	103	249	207
		1,9	4,0	225,11	4300	3750	34000				
		2,0	4,3	207,68	4300	3750	34000				
		2,3	4,9	184,58	4300	3750	34000				
		2,6	5,4	165,49	4300	3750	34000				
		3,0	6,4	140,70	4300	3750	34000				
		3,4	7,1	126,15	4300	3750	34000				
8000 Nm		4,2	4,8	186,123	8000	3750	45000	İRA İRF İRAF	123	252	323
		4,7	5,4	167,082	8000	3750	45000				
		5,2	6,0	151,088	8000	3750	45000				
		6,4	7,3	122,480	8000	3750	45000				
		7,1	8,1	111,746	8000	3750	45000				
		7,9	9,0	100,314	8000	3750	45000				
		8,7	10	90,712	8000	3750	45000				
		10,4	12	75,766	8000	3750	45000				
10500 Nm		0,26	0,22	4099,41	10500	590	69000	İRA İRF	151 İR 63	273	487
		0,42	0,35	2552,42	10500	590	69000				
		0,61	0,50	1790,46	10500	590	69000				
		0,88	0,73	1228,05	10500	590	69000				
		1,1	0,89	1016,50	10500	590	69000				



Monoblok Helisel Dişlili Redüktörler Güç ve Devir Tablosu

Monoblock Helical Gear Units Performance Tables

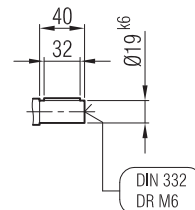
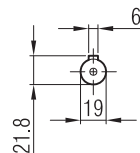
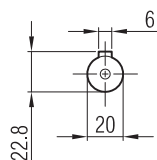
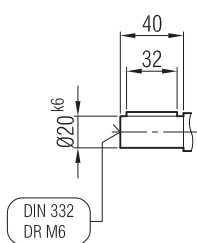
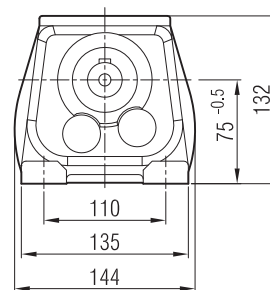
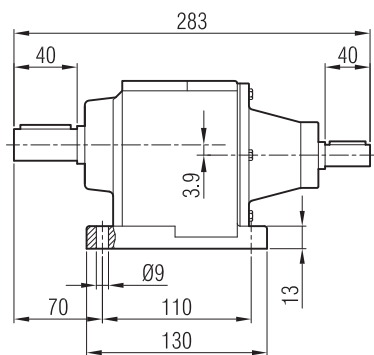
Monoblock Stirnradgetriebe Leistung und Drehzahlübersicht

n ₁ = 700										d/d
										r.p.m
Servis Faktörü Service Factor Betriebsfaktor	S _f =1 S _f =1 S _f =1	P ₁	n ₂	İ	M ₂	F _{Q1}	F _{Q1/2}	Tip Type Typ		
		GÜÇ	Çıkış Devri	Tahvil	Çıkış Momenti	Rad. Yük	Rad. Yük			
		Power	Output Speeds	Ratio	Output Torque	Over Loads	Over Loads			
		Leistung	Abtriebswelle Drehzahlen	Übersetzung	Abtriebswelle Drehmomente	Querkräfte	Querkräfte			
		[kW]	[r.p.m]		[Nm]	[N]	[N]			
600 Nm	0,30	4,6	152,090	600	1000	10100	İRA İRF 731 İRAF	237	40	
	0,34	5,2	134,933	600	1000	10100		238	43	
								239	46	
1500 Nm	0,46	2,8	250,50	1500	1550	17500	İRA İRF 83 İRAF	243	84	
	0,52	3,2	221,16	1500	1550	17500		244	83	
	0,55	3,4	208,58	1500	1550	17500		245	90	
2800 Nm	0,73	2,4	293,46	2800	2500	25000	İRA İRF 93 İRAF	246	155	
	0,78	2,6	273,73	2800	2500	25000		247	155	
	0,89	2,9	240,50	2800	2500	25000		248	157	
4300 Nm	1,3	2,7	256,04	4300	3750	34000	İRA İRF 103 İRAF	249	207	
	1,5	3,1	225,11	4300	3750	34000		250	210	
	1,6	3,4	207,68	4300	3750	34000		251	232	
	1,8	3,8	184,58	4300	3750	34000				
	2,0	4,2	165,49	4300	3750	34000				
	2,3	5,0	140,70	4300	3750	34000				
8000 Nm	3,3	3,8	186,123	8000	3750	45000	İRA İRF 123 İRAF	252	323	
	3,7	4,2	167,082	8000	3750	45000		253	325	
	4,1	4,6	151,088	8000	3750	45000		254	353	
	5,0	5,7	122,480	8000	3750	45000				
	5,5	6,3	111,746	8000	3750	45000				
	6,1	7,0	100,314	8000	3750	45000				
	6,8	7,7	90,712	8000	3750	45000				
	8,1	9,2	75,766	8000	3750	45000				
10500 Nm	0,13	0,11	6466,41	10500	590	69000	İRA İRF 151 İR İRF 63	273	487	
	0,18	0,15	4766,77	10500	590	69000		273	485	
	0,20	0,16	4256,64	10500	590	69000				
	0,23	0,19	3660,46	10500	590	69000				
	0,29	0,24	2858,32	10500	590	69000				
	0,39	0,33	2144,03	10500	590	69000				
	0,41	0,34	2076,56	10500	590	69000				
	0,48	0,40	1743,35	10500	590	69000				
	0,65	0,54	1298,44	10500	590	69000				
	0,70	0,58	1205,72	10500	590	69000				



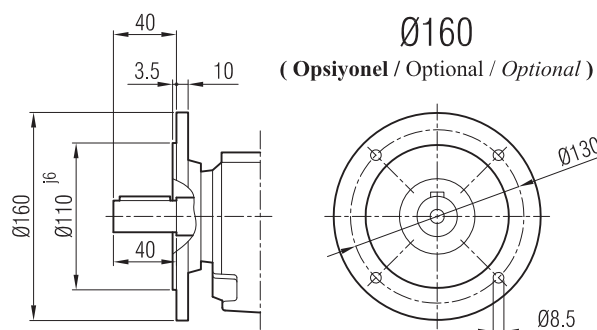
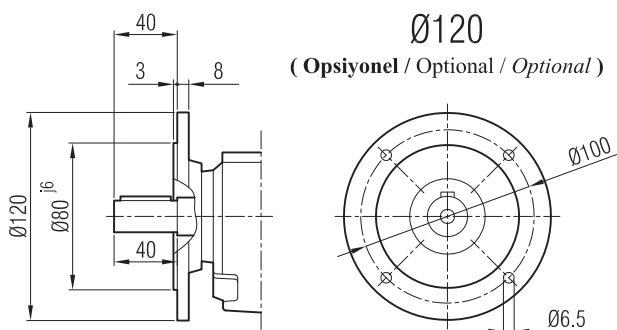
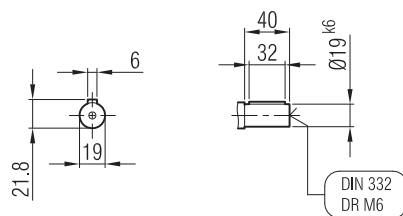
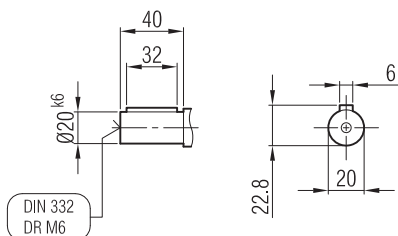
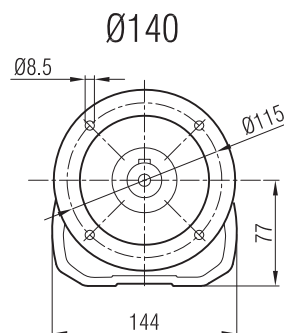
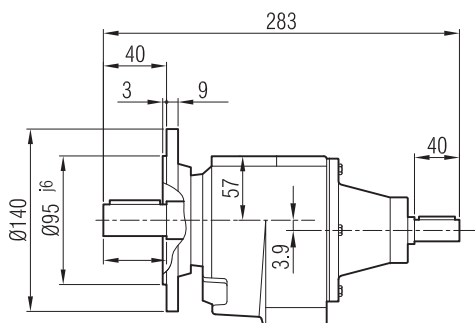


İRA 42
İRA 43



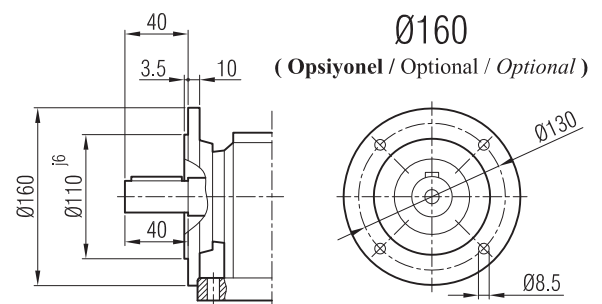
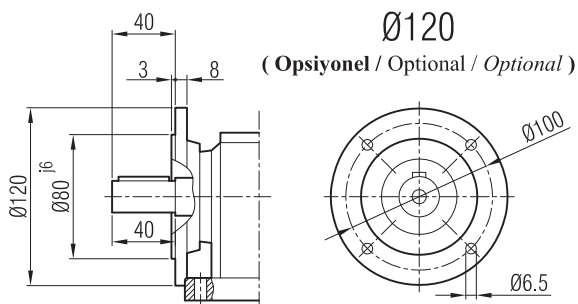
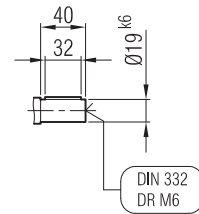
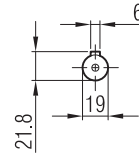
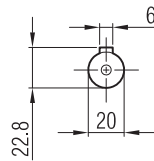
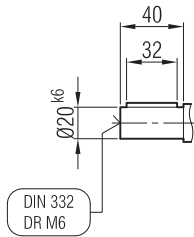
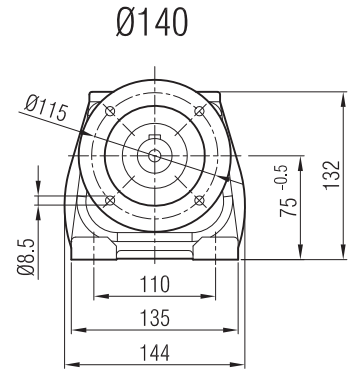
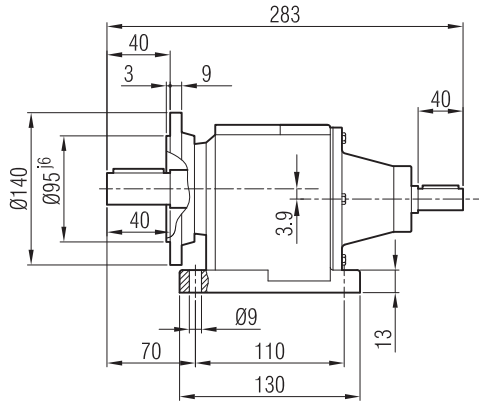


İRF 42
İRF 43



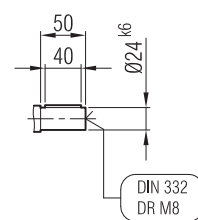
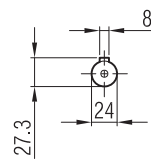
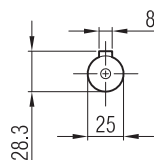
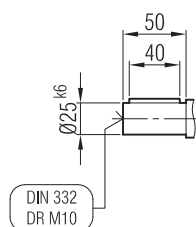
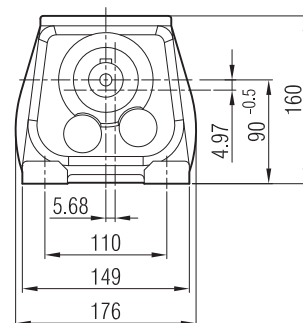
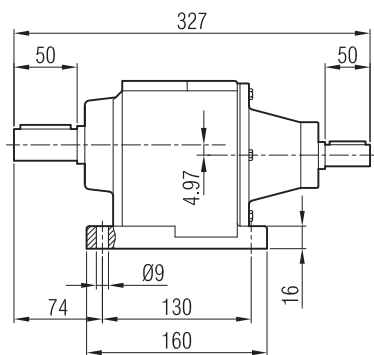


İRAF 42
İRAF 43



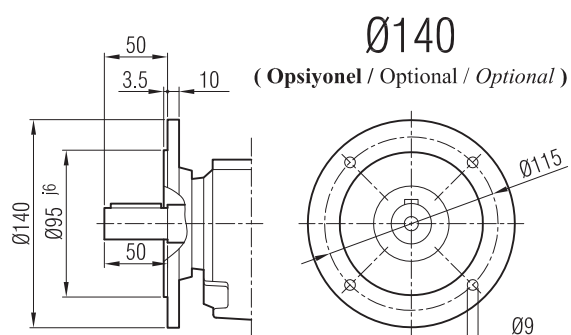
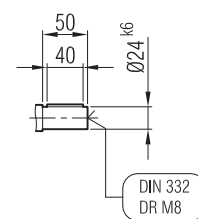
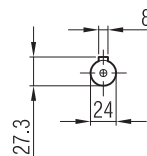
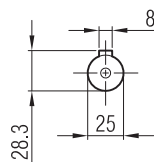
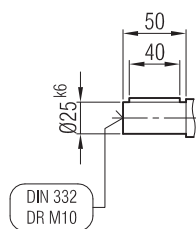
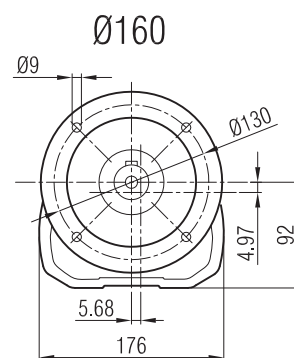
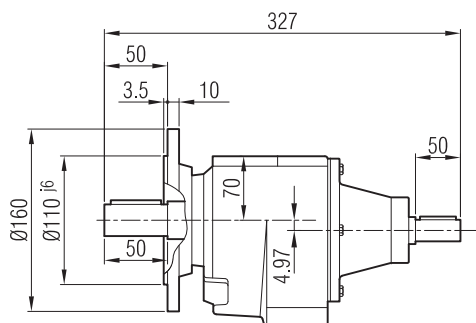


İRA 52
İRA 53



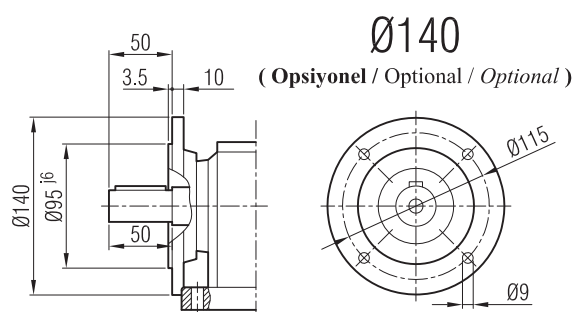
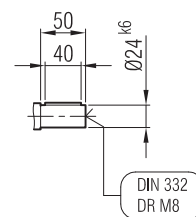
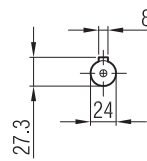
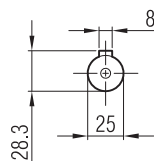
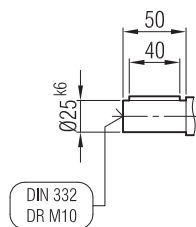
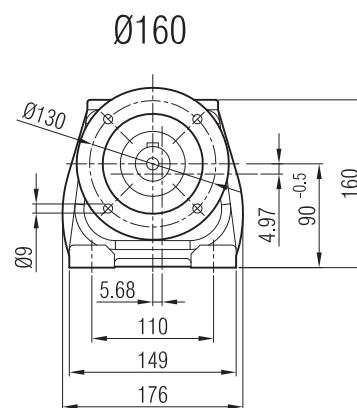
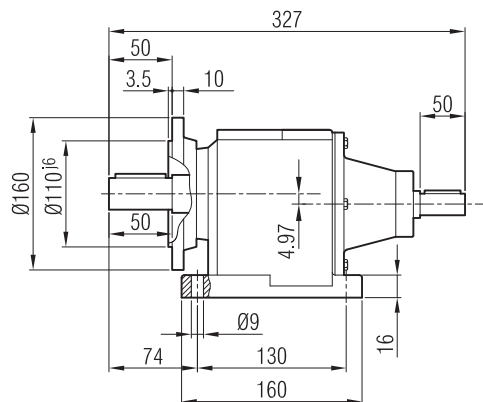


İRF 52
İRF 53



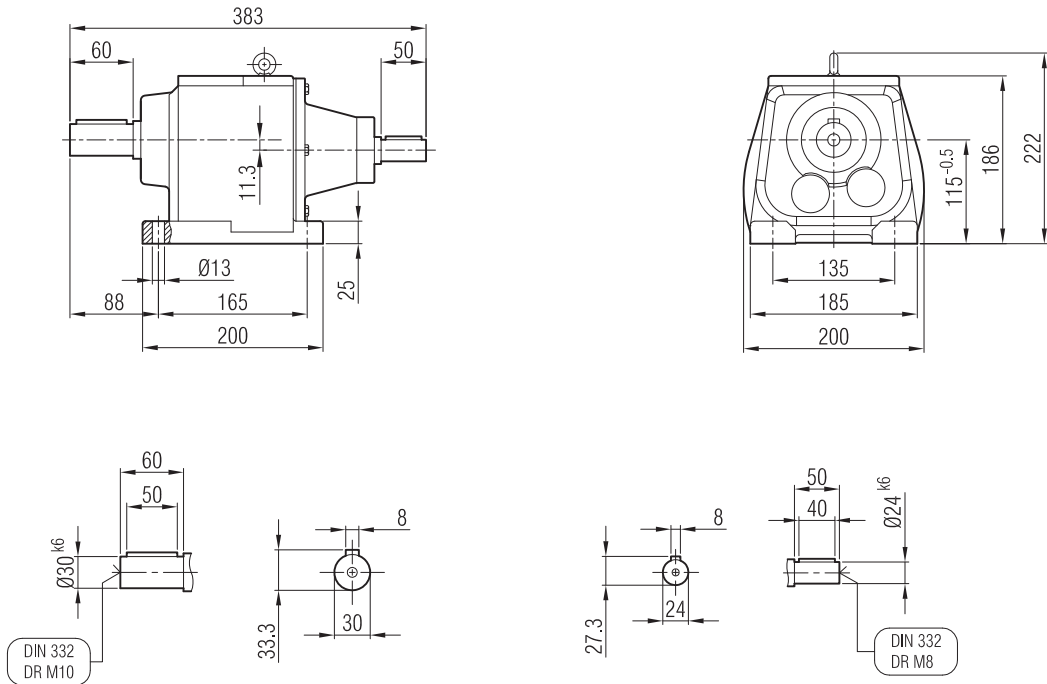


İRAF 52
İRAF 53



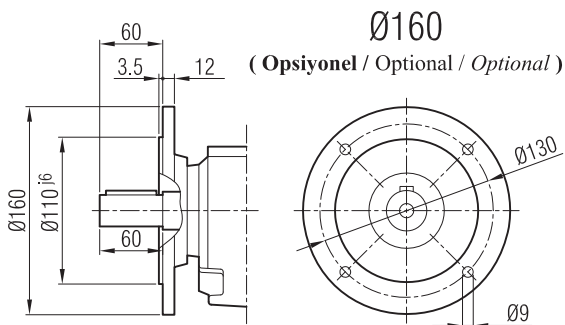
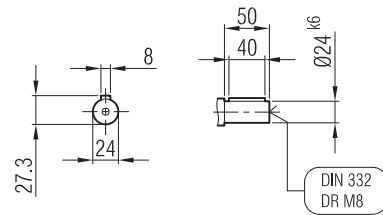
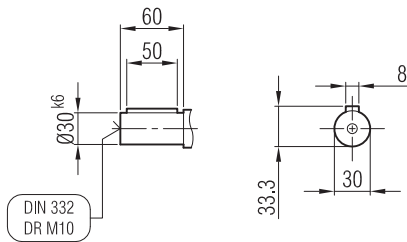
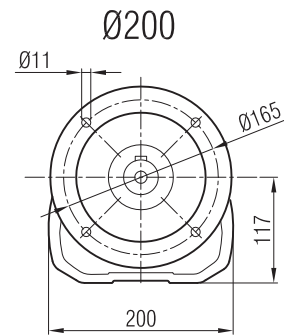
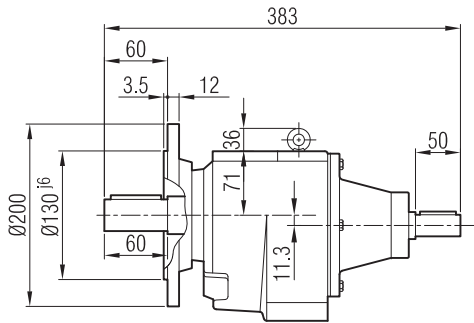


İRA 621
İRA 631

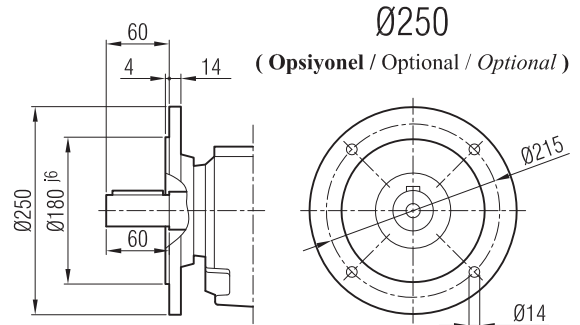




İRF 621
İRF 631



Ø160
(Opsiyonel / Optional / Optional)

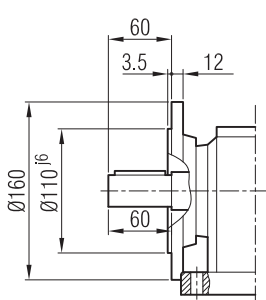
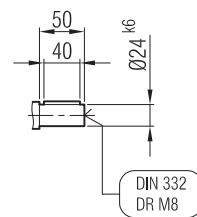
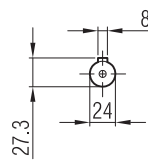
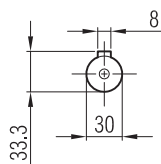
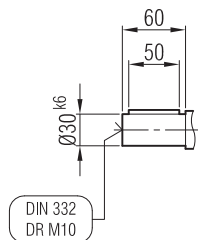
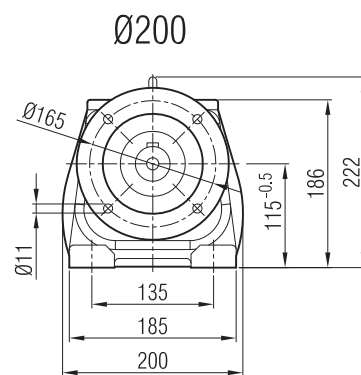
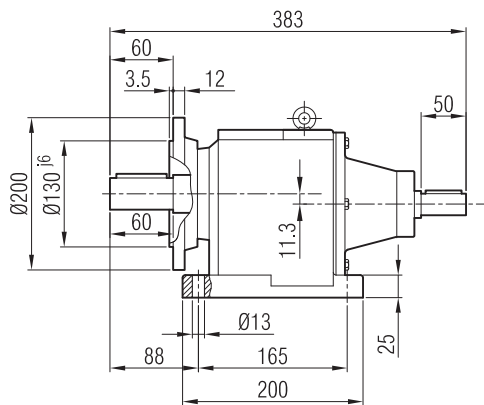


Ø250
(Opsiyonel / Optional / Optional)

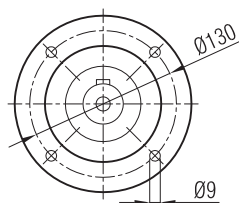




İRAF 621
İRAF 631

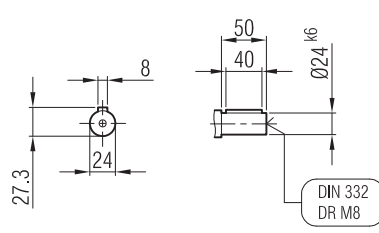
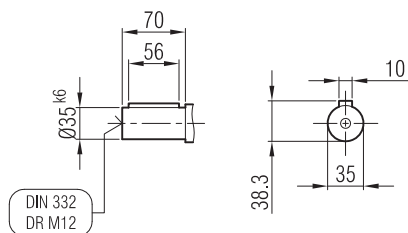
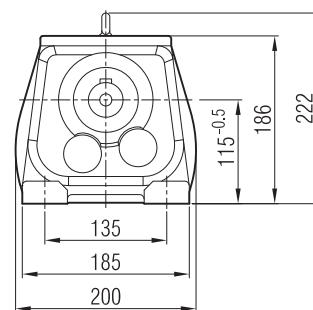
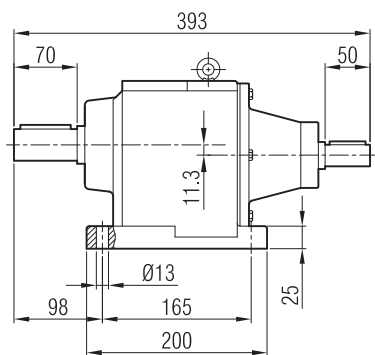


Ø160
(Opsiyonel / Optional / Optional)



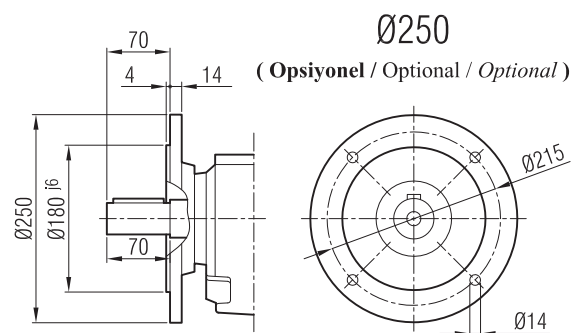
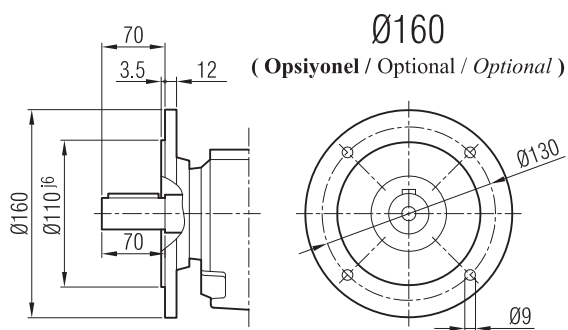
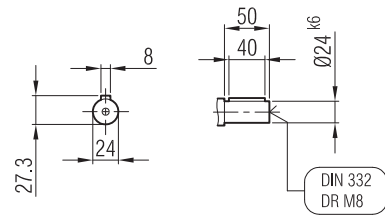
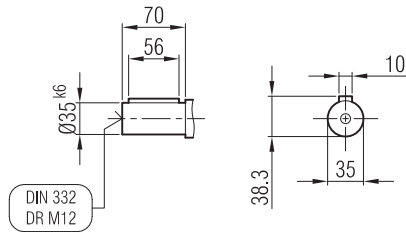
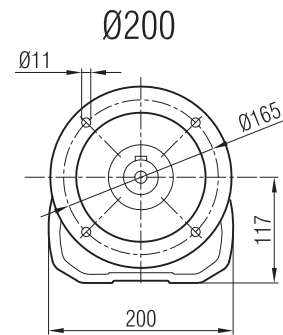
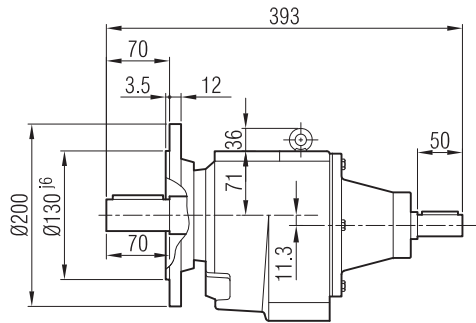


İRA 62
İRA 63



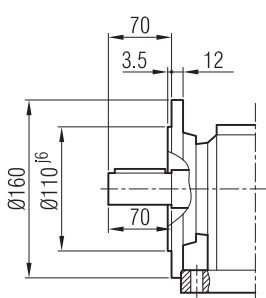
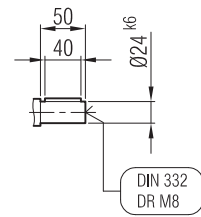
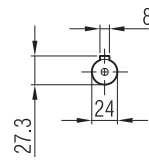
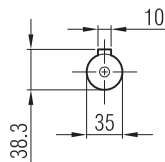
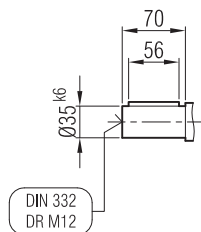
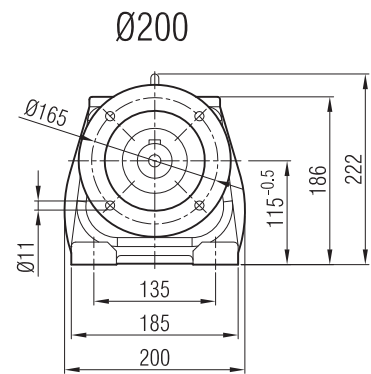
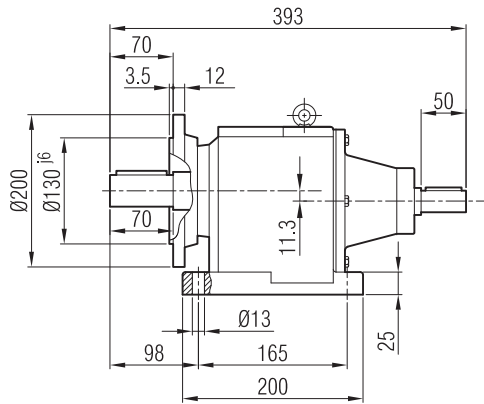


İRF 62
İRF 63

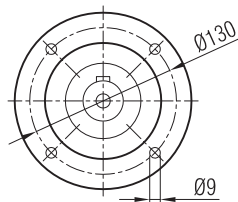




İRAF 62
İRAF 63

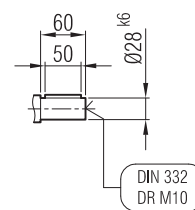
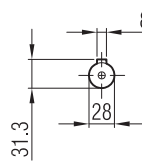
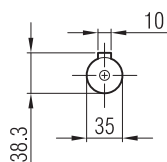
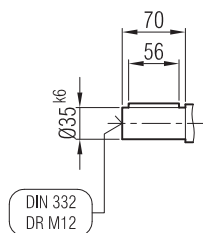
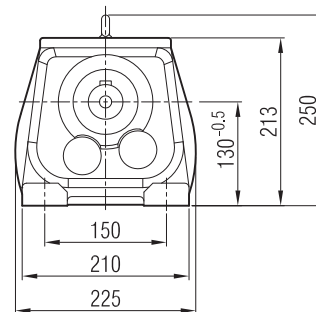
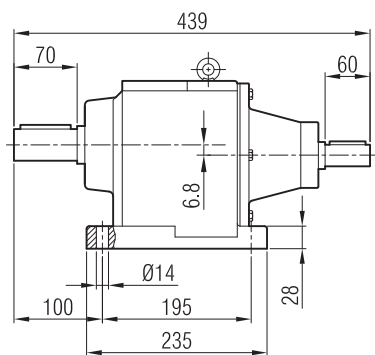


Ø160
(Opsiyonel / Optional / Optional)



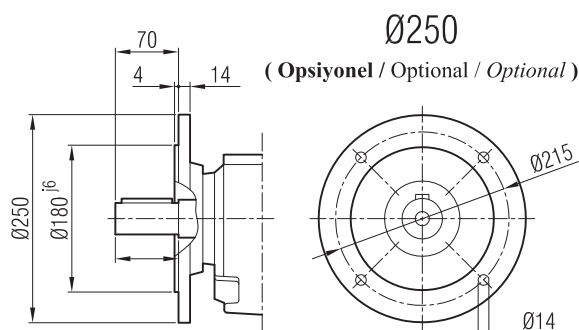
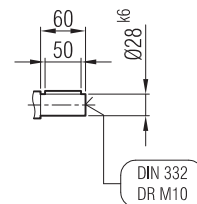
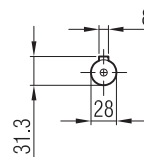
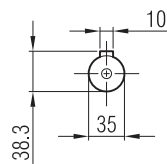
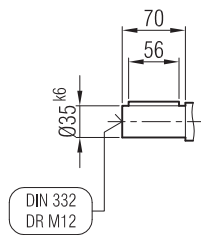
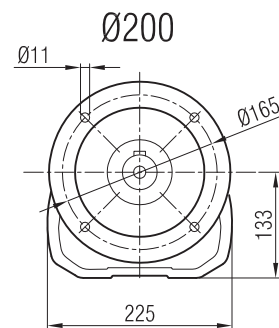
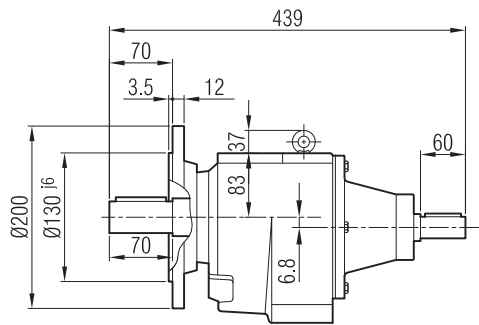


IRA 721
IRA 731



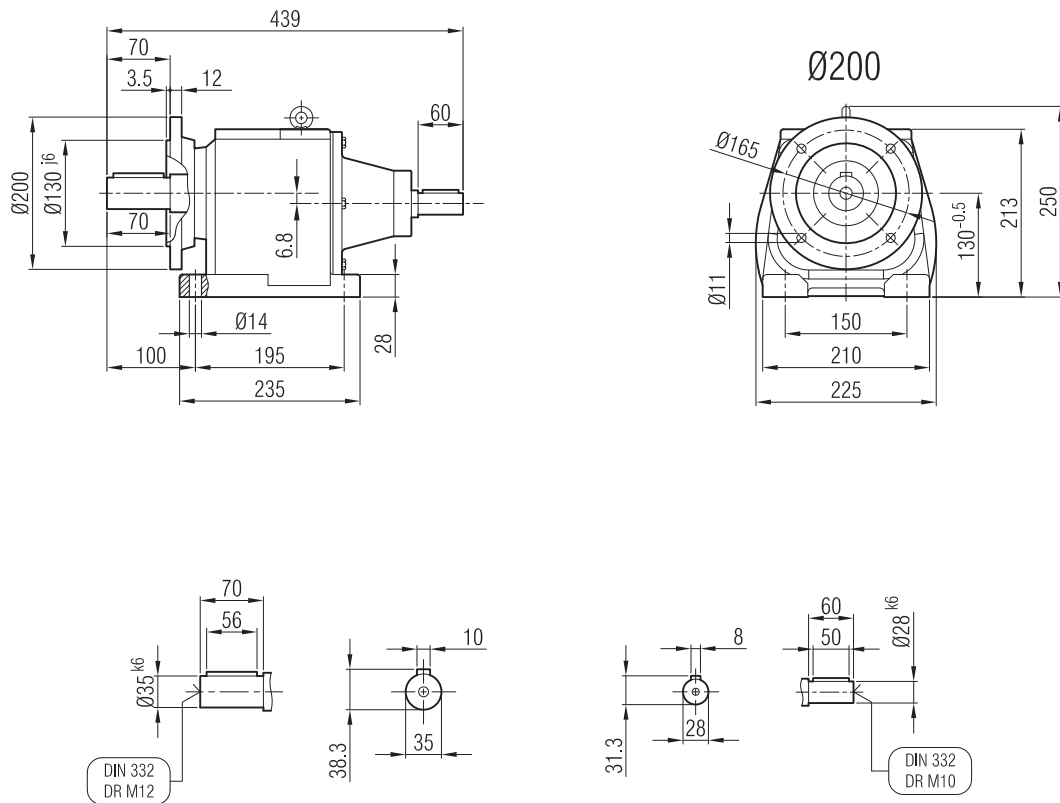


İRF 721
İRF 731



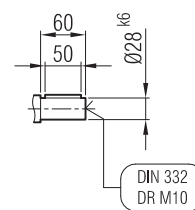
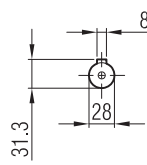
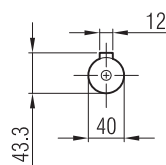
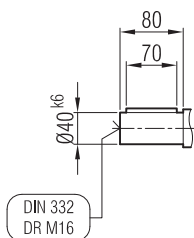
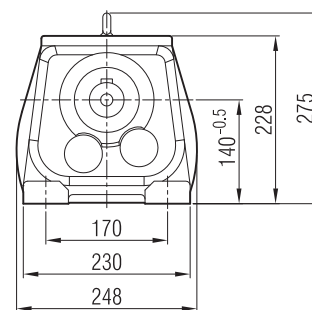
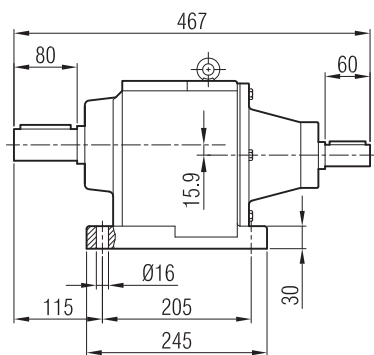


İRAF 721
İRAF 731



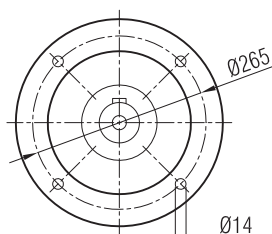
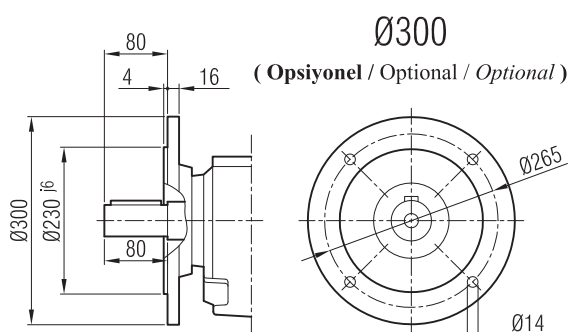
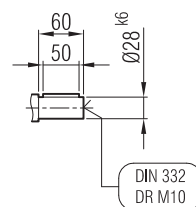
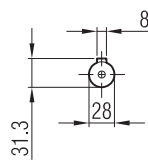
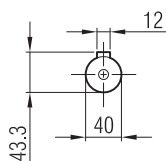
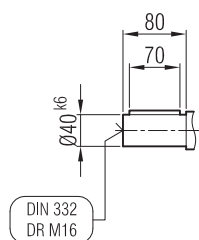
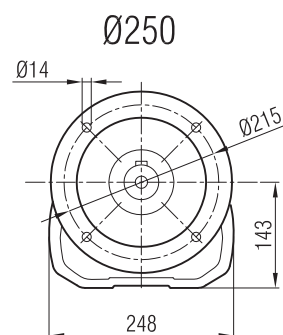
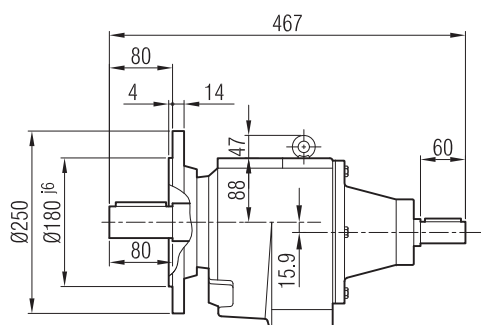


İRA 72
İRA 73





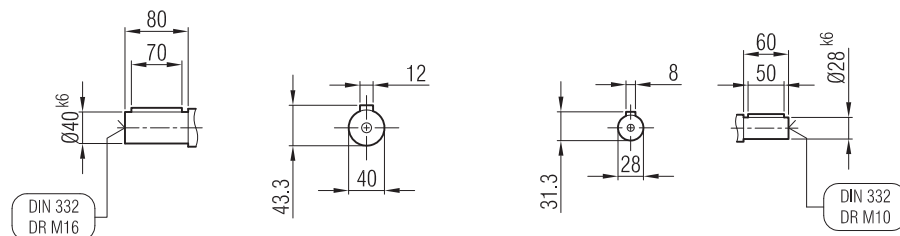
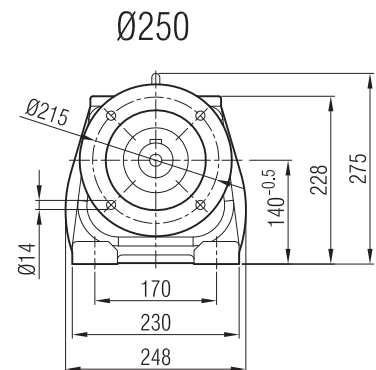
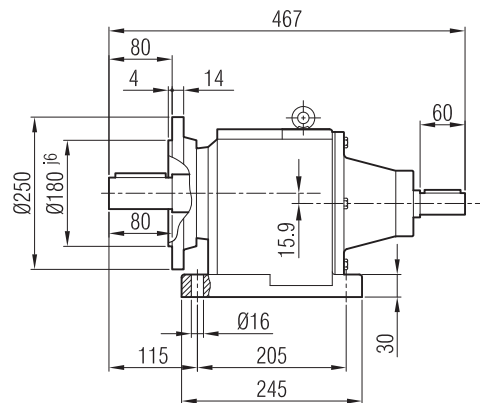
İRF 72
İRF 73





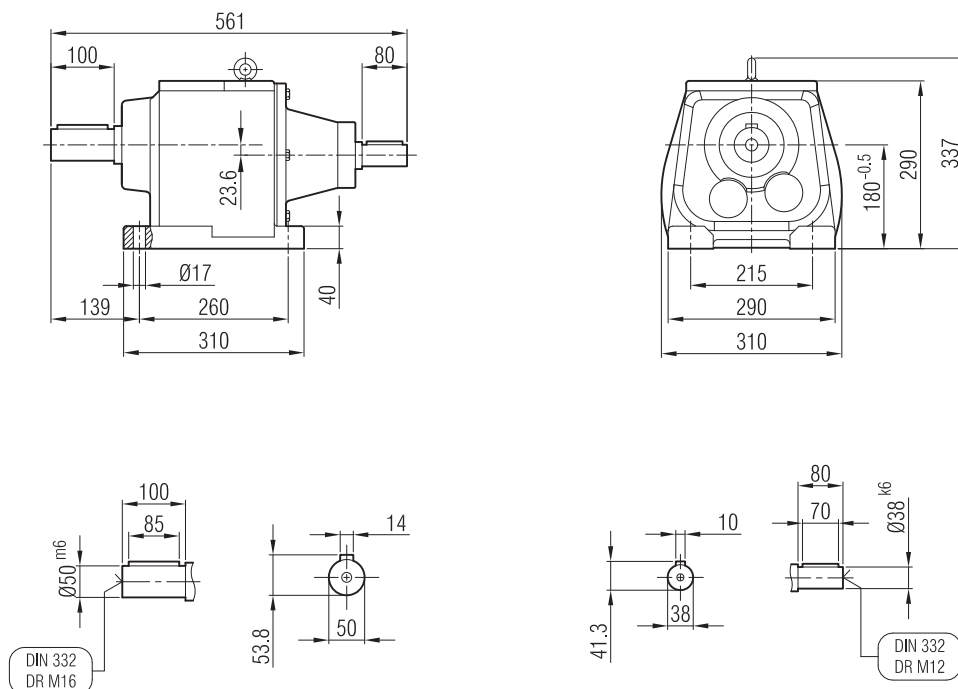
IRAF 72

IRAF 73



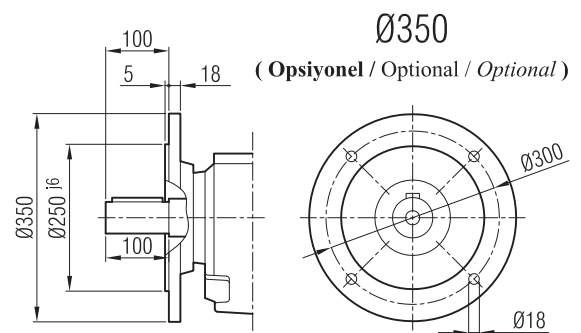
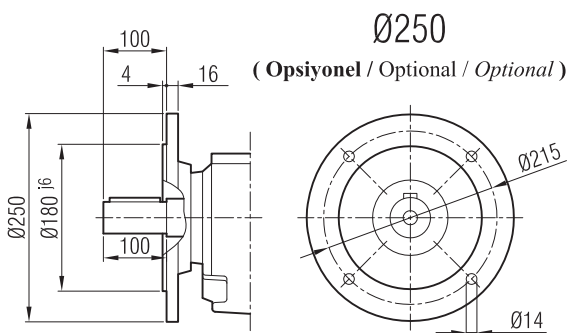
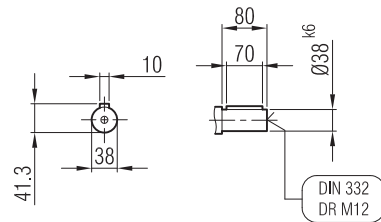
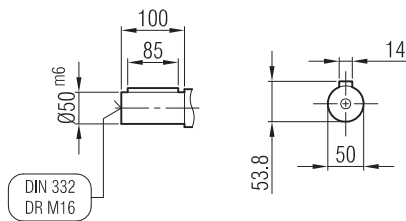
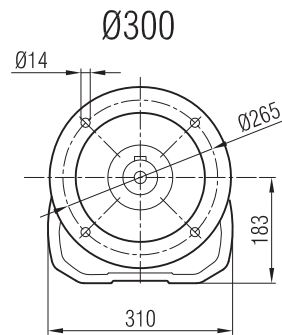
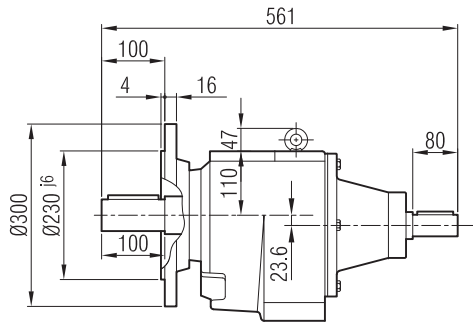


İRA 82
İRA 83



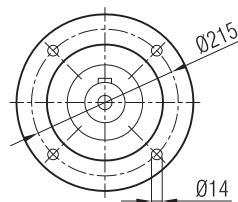
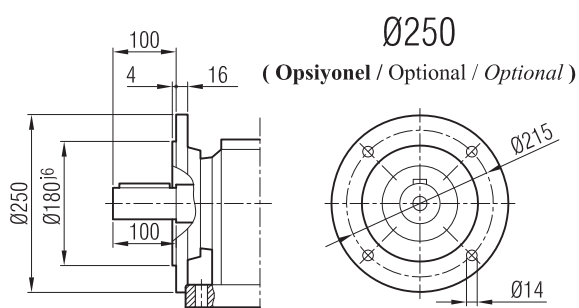
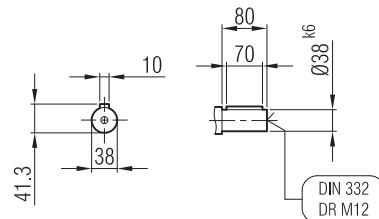
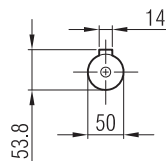
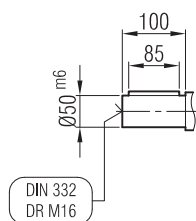
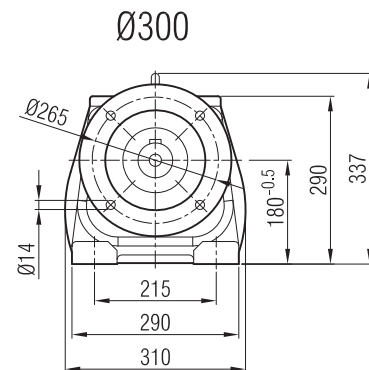
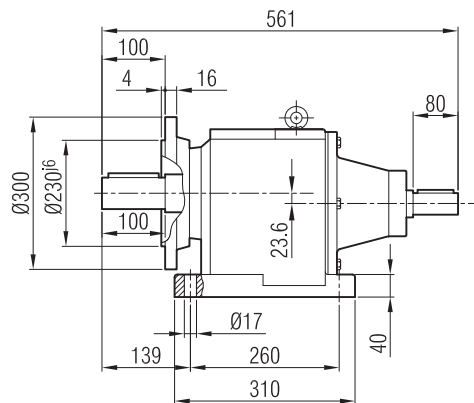


İRF 82
İRF 83



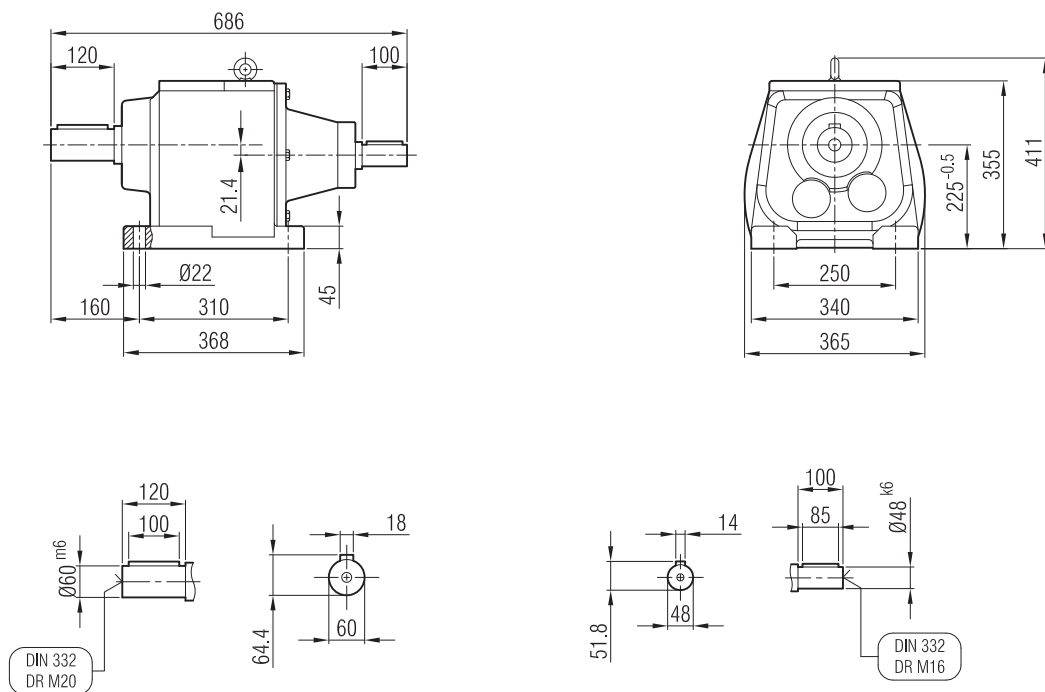


İRAF 82
İRAF 83



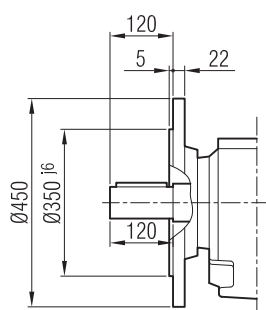
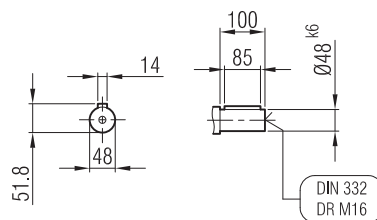
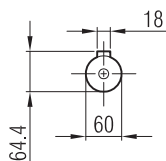
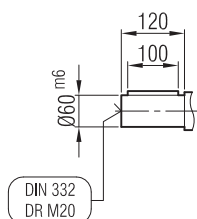
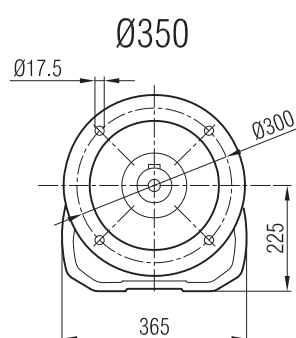
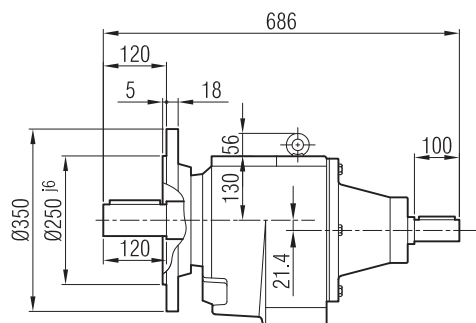


İRA 92
İRA 93

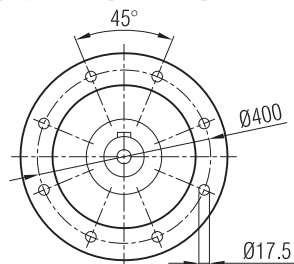




İRF 92
İRF 93



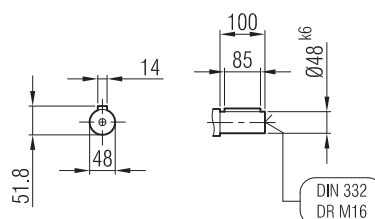
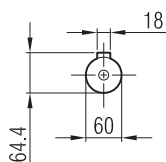
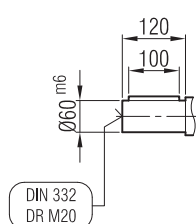
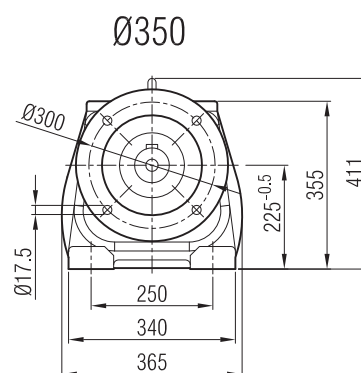
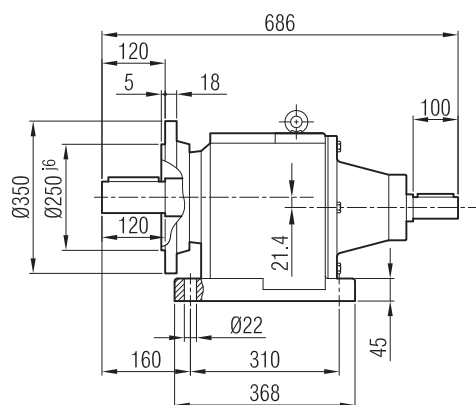
Ø450
(Opsiyonel / Optional / Optional)





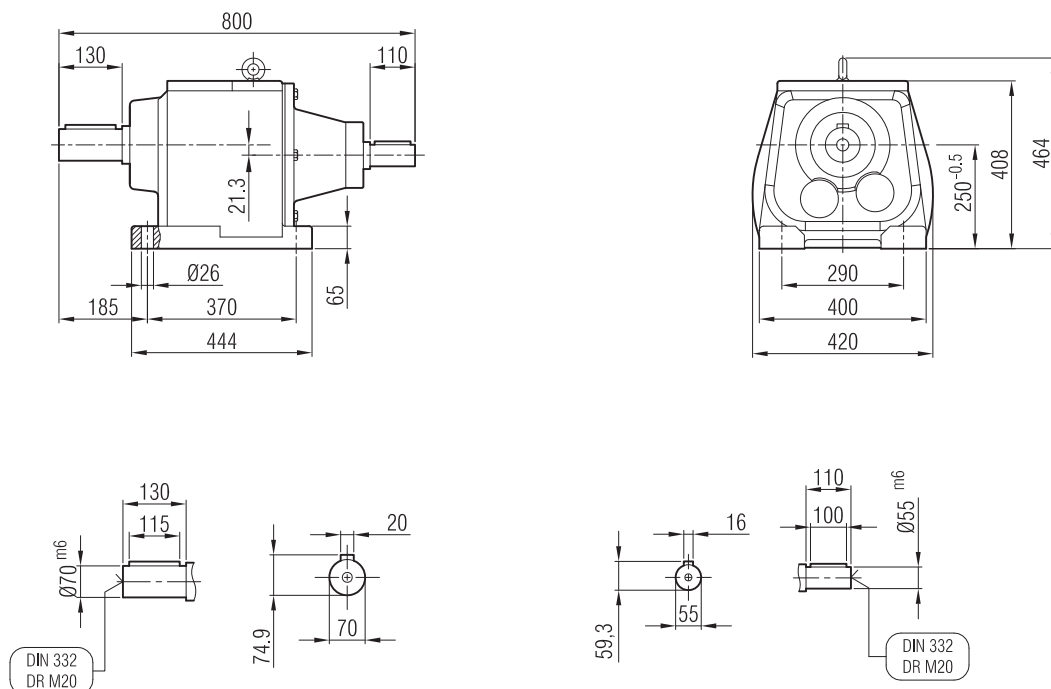
IRAF 92

IRAF 93



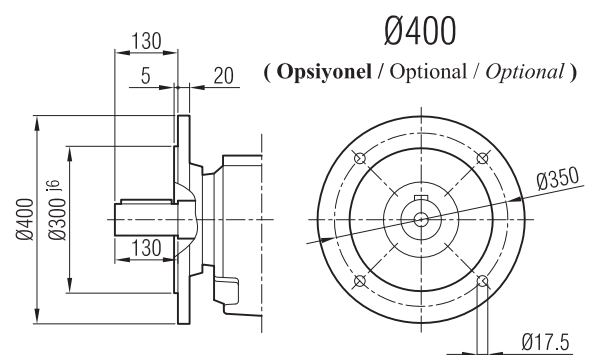
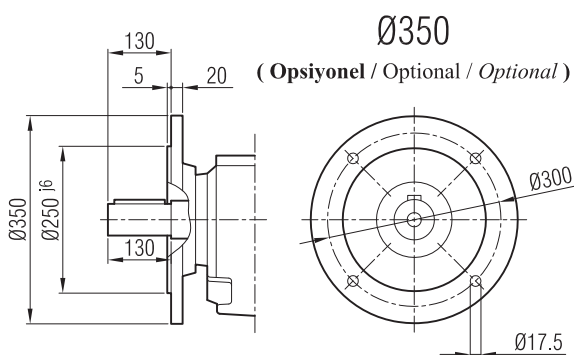
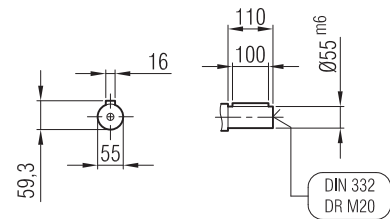
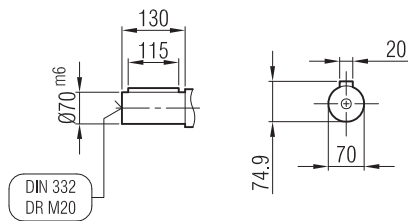
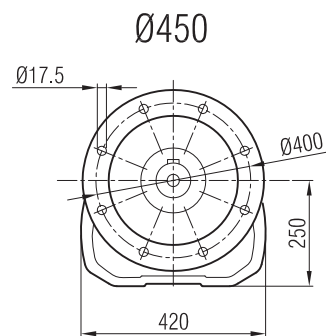
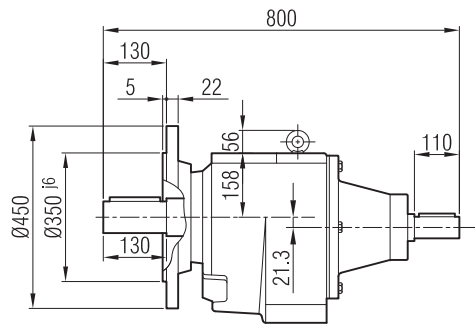


İRA 102
İRA 103





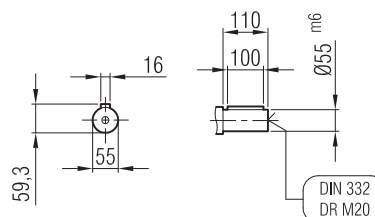
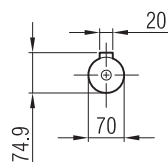
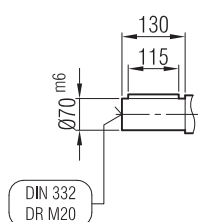
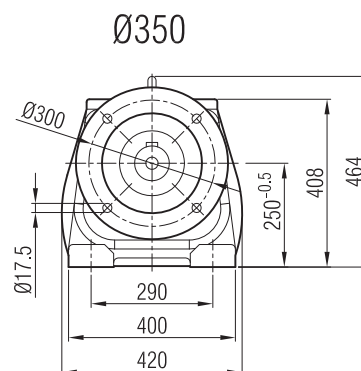
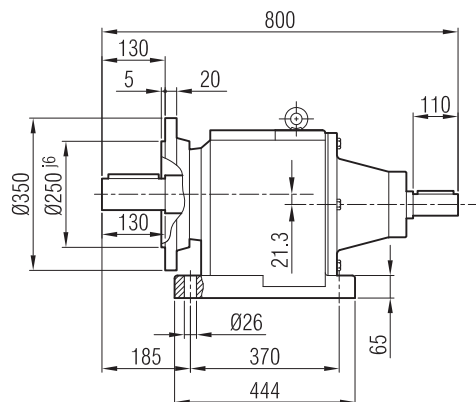
İRF 102
İRF 103





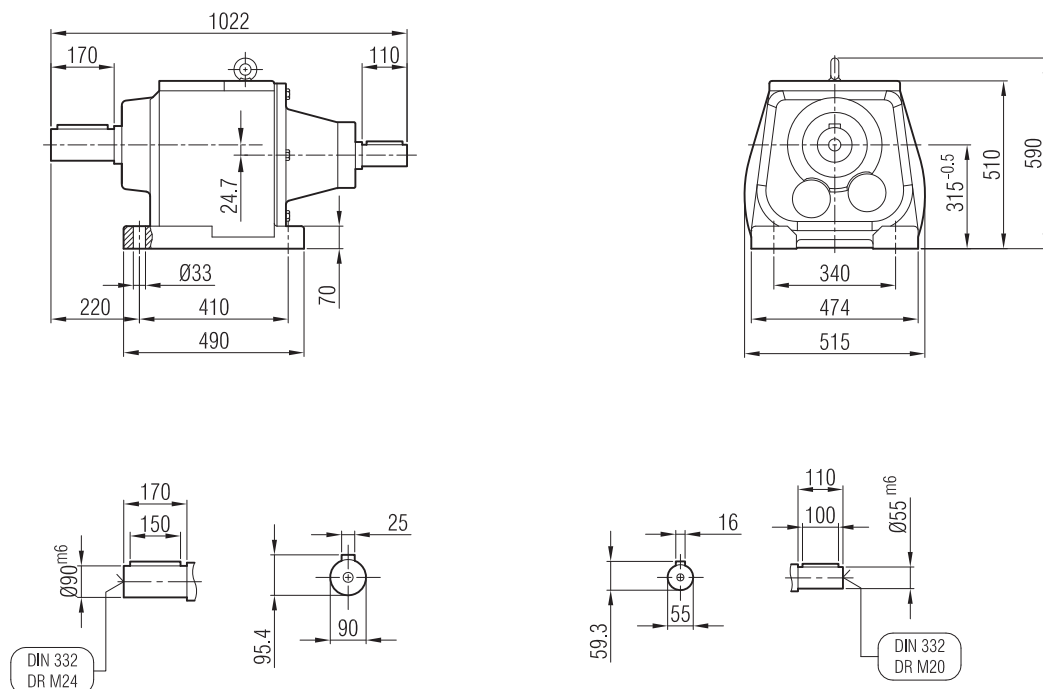
IRAF 102

IRAF 103



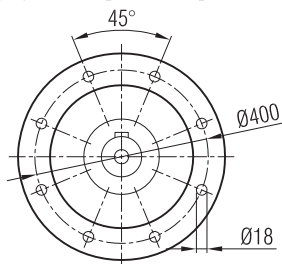
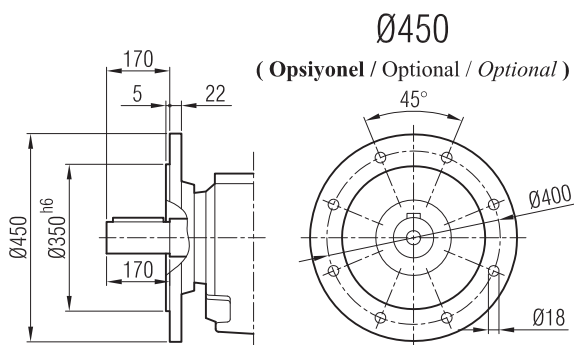
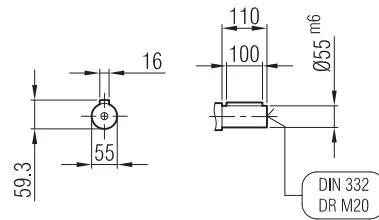
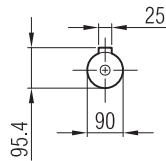
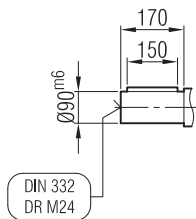
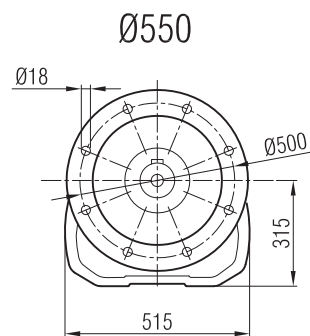
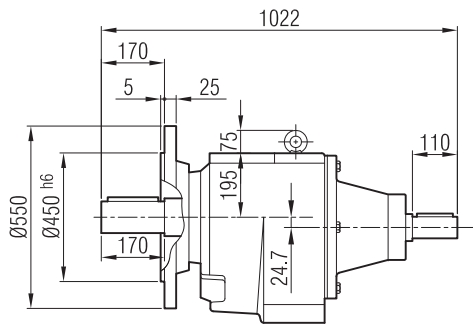


İRA 122
İRA 123



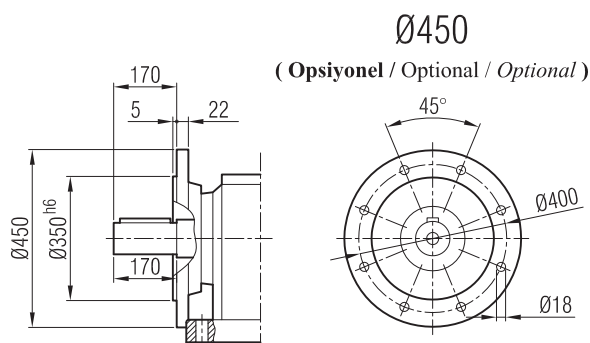
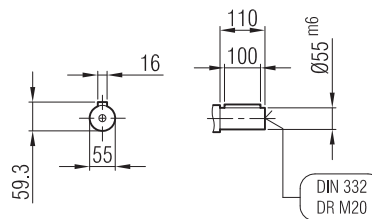
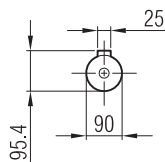
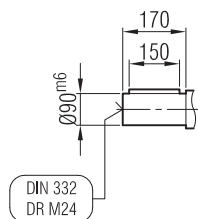
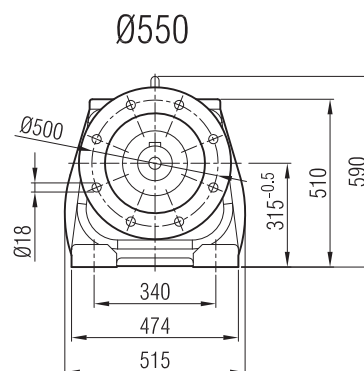
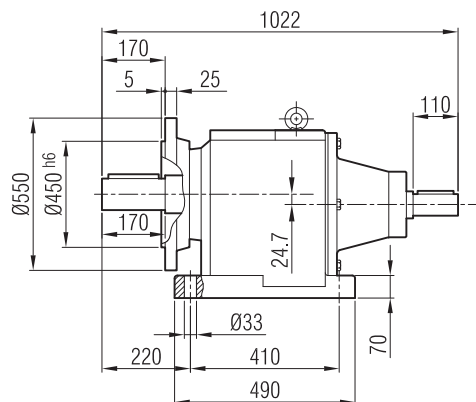


İRF 122
İRF 123



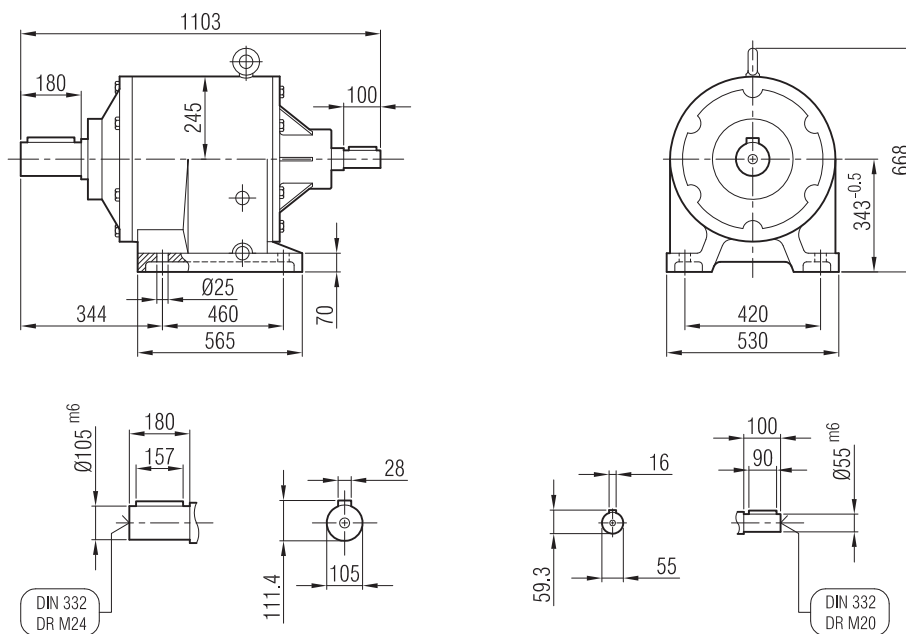


İRAF 122
İRAF 123

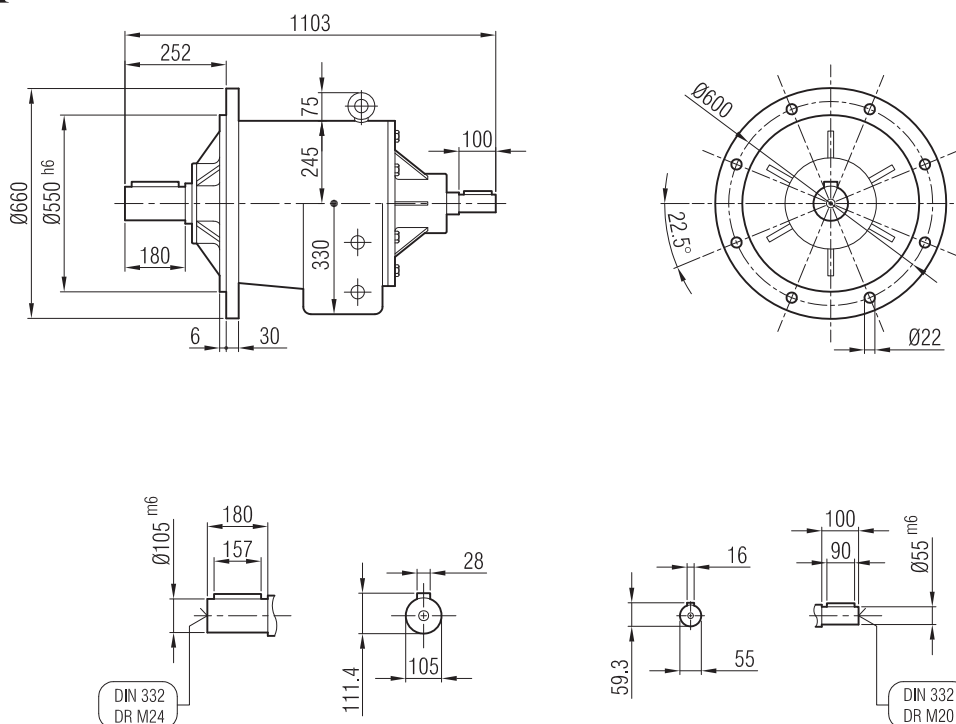




İRA 151

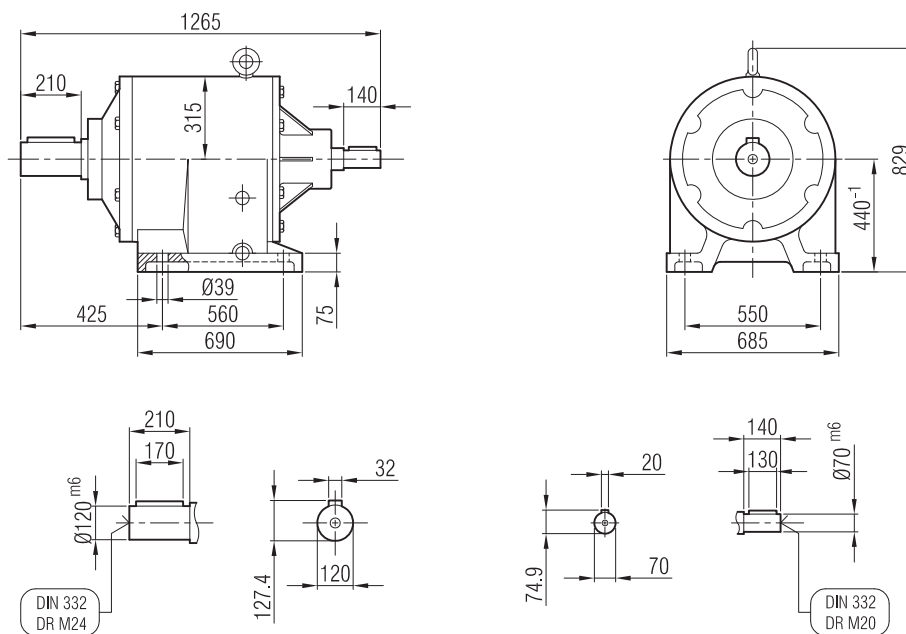


İRF 151

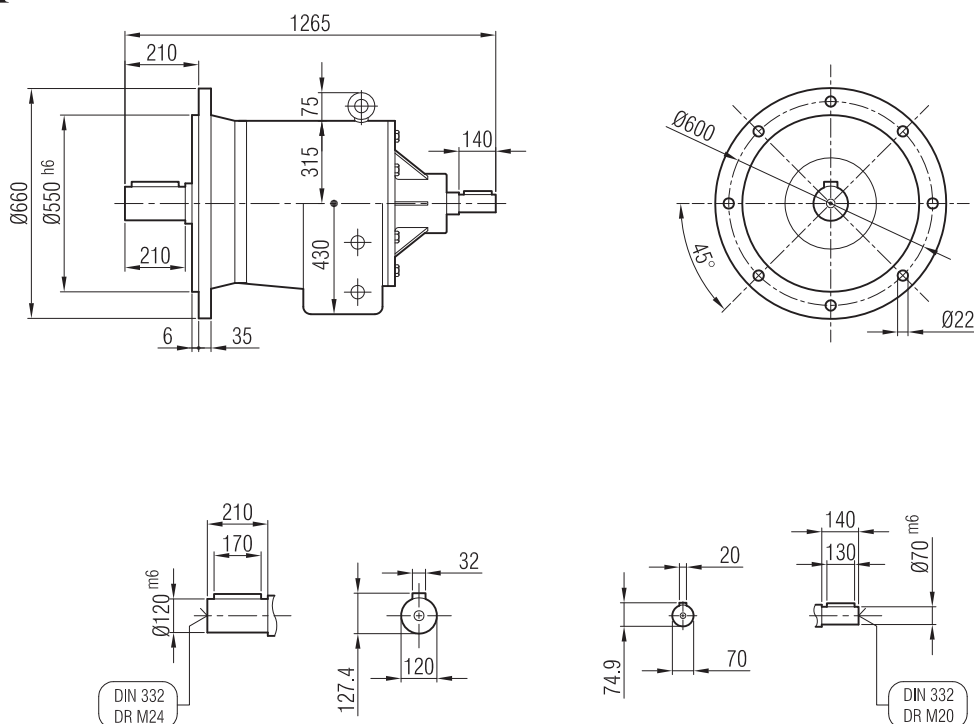




İRA 181

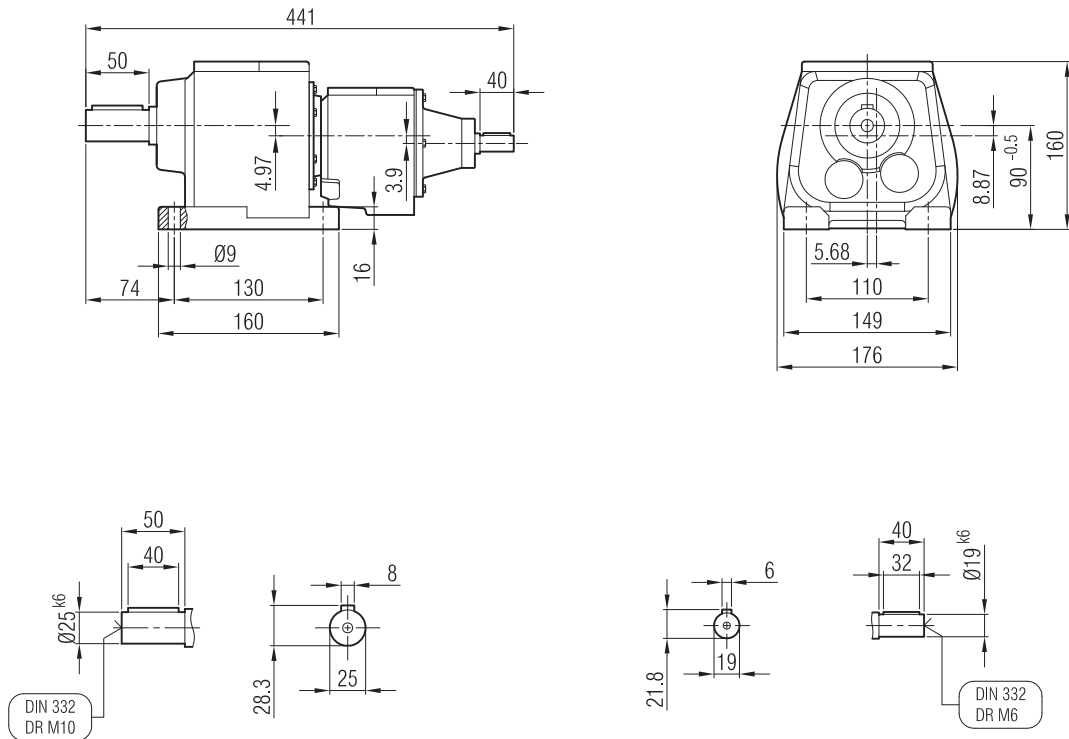


İRF 181





İRA 52 İR 42
İRA 52 İR 43
İRA 53 İR 42
İRA 53 İR 43



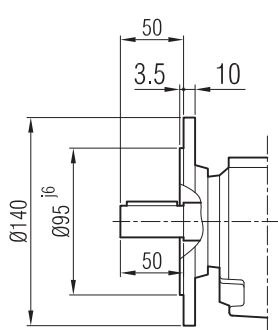
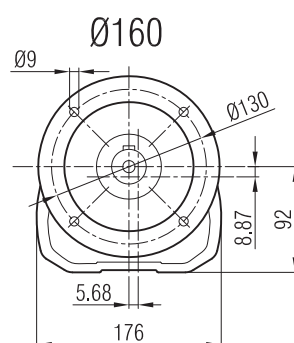
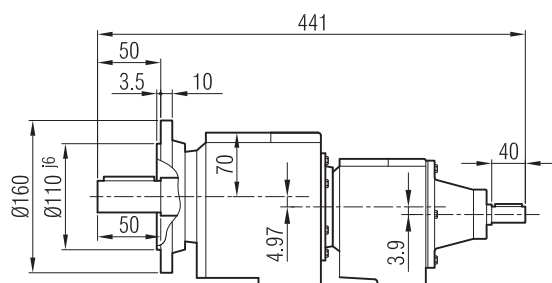


İRF 52 İR 42

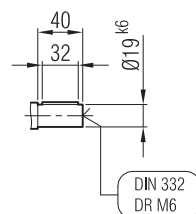
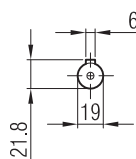
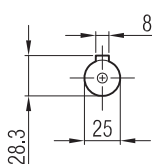
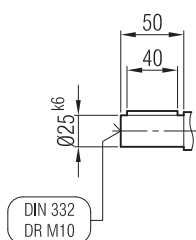
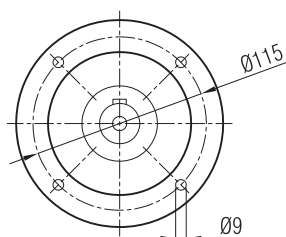
İRF 52 İR 43

İRF 53 İR 42

İRF 53 İR 43



Ø140
(Opsiyonel / Optional / Optional)

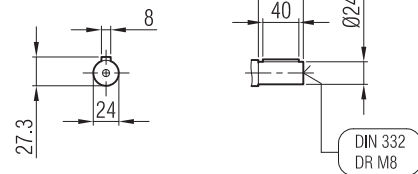
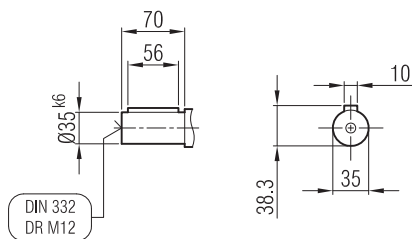
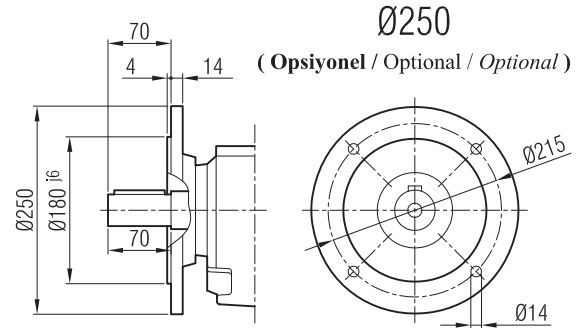
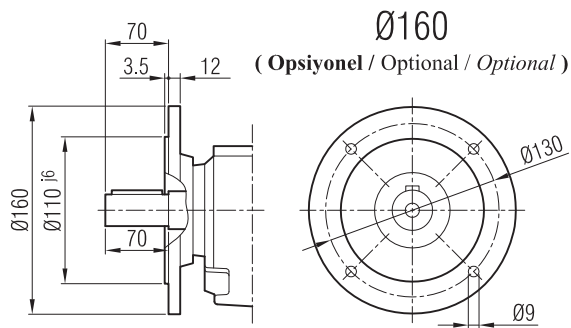
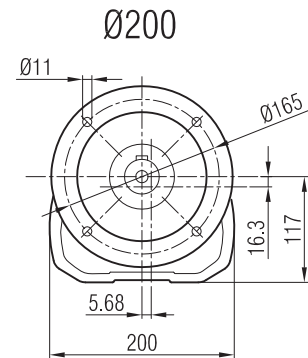
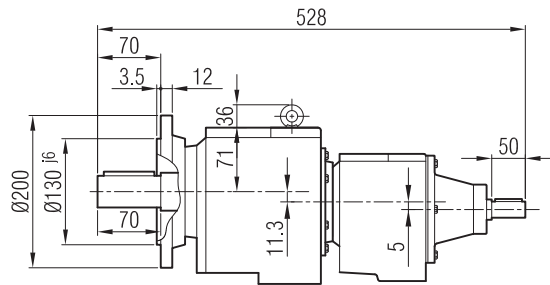




İRF 62 İR 52

İRF 63 İR 52

İRF 63 İR 53



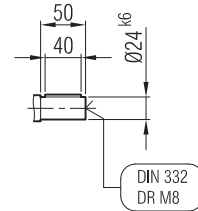
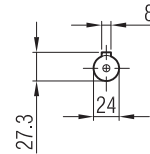
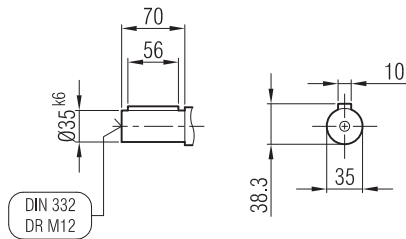
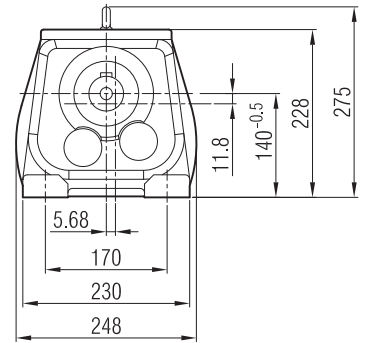
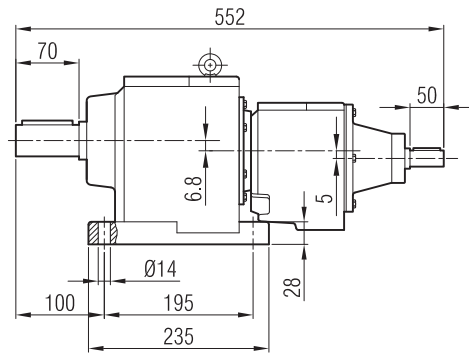


İRA 721 İR 52

İRA 721 İR 53

İRA 731 İR 52

İRA 731 İR 53



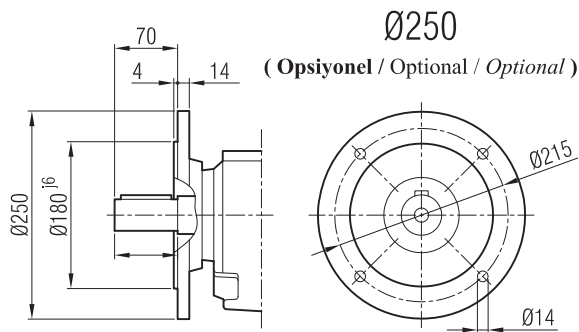
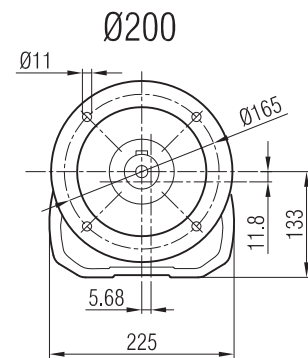
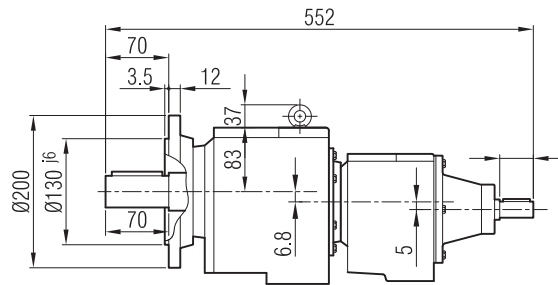


İRF 721 İR 52

İRF 721 İR 53

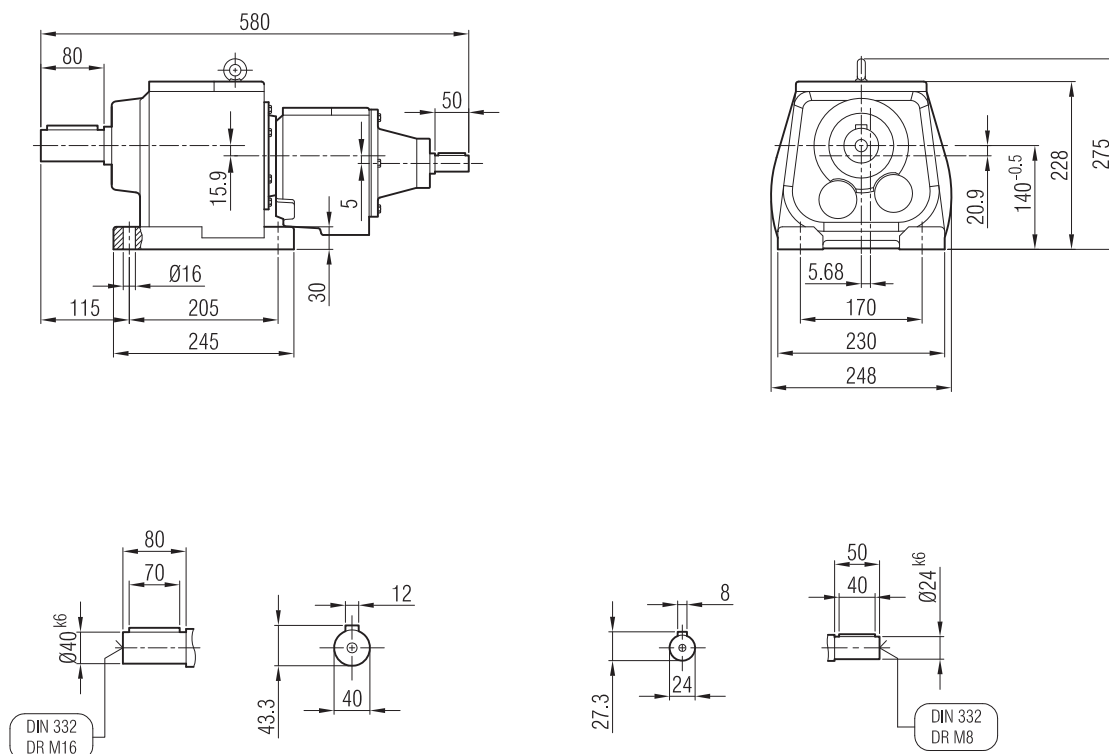
İRF 731 İR 52

İRF 731 İR 53





İRA 72 İR 53
İRA 73 İR 52
İRA 73 İR 53

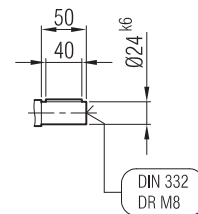
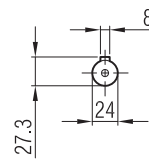
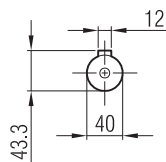
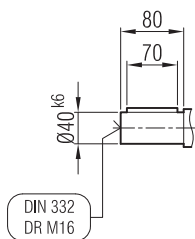
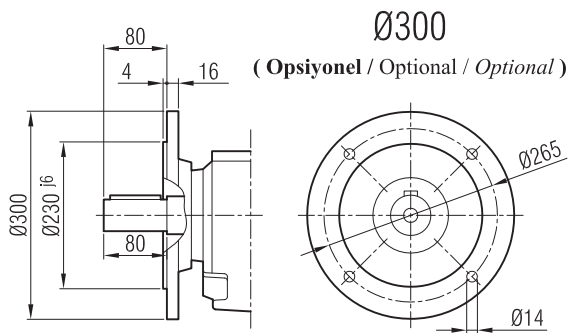
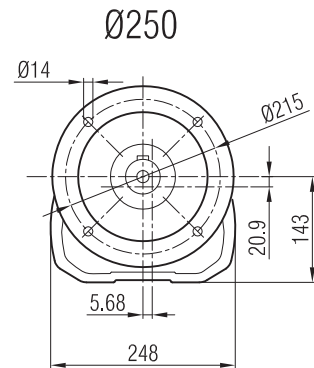
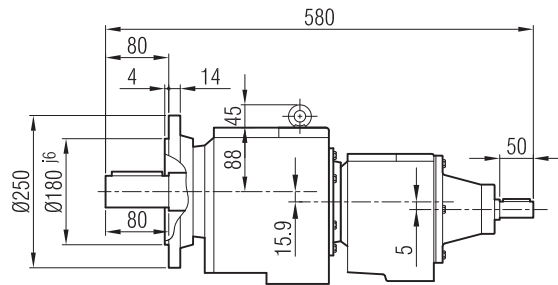




İRF 72 İR 53

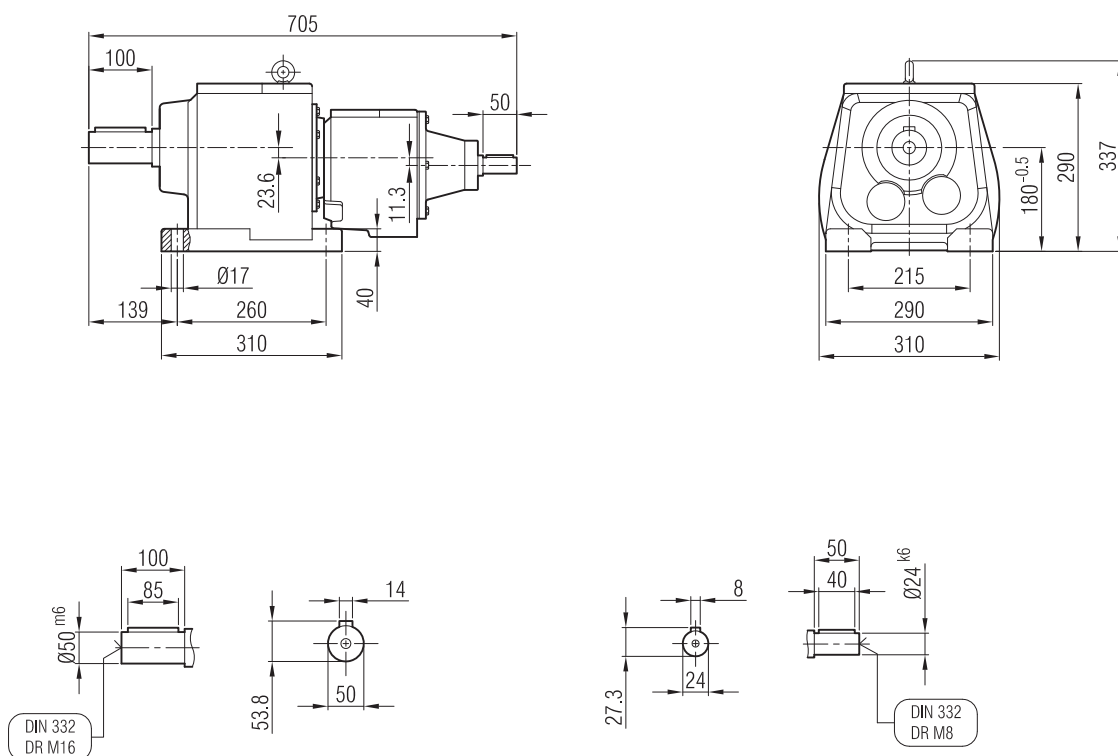
İRF 73 İR 52

İRF 73 İR 53



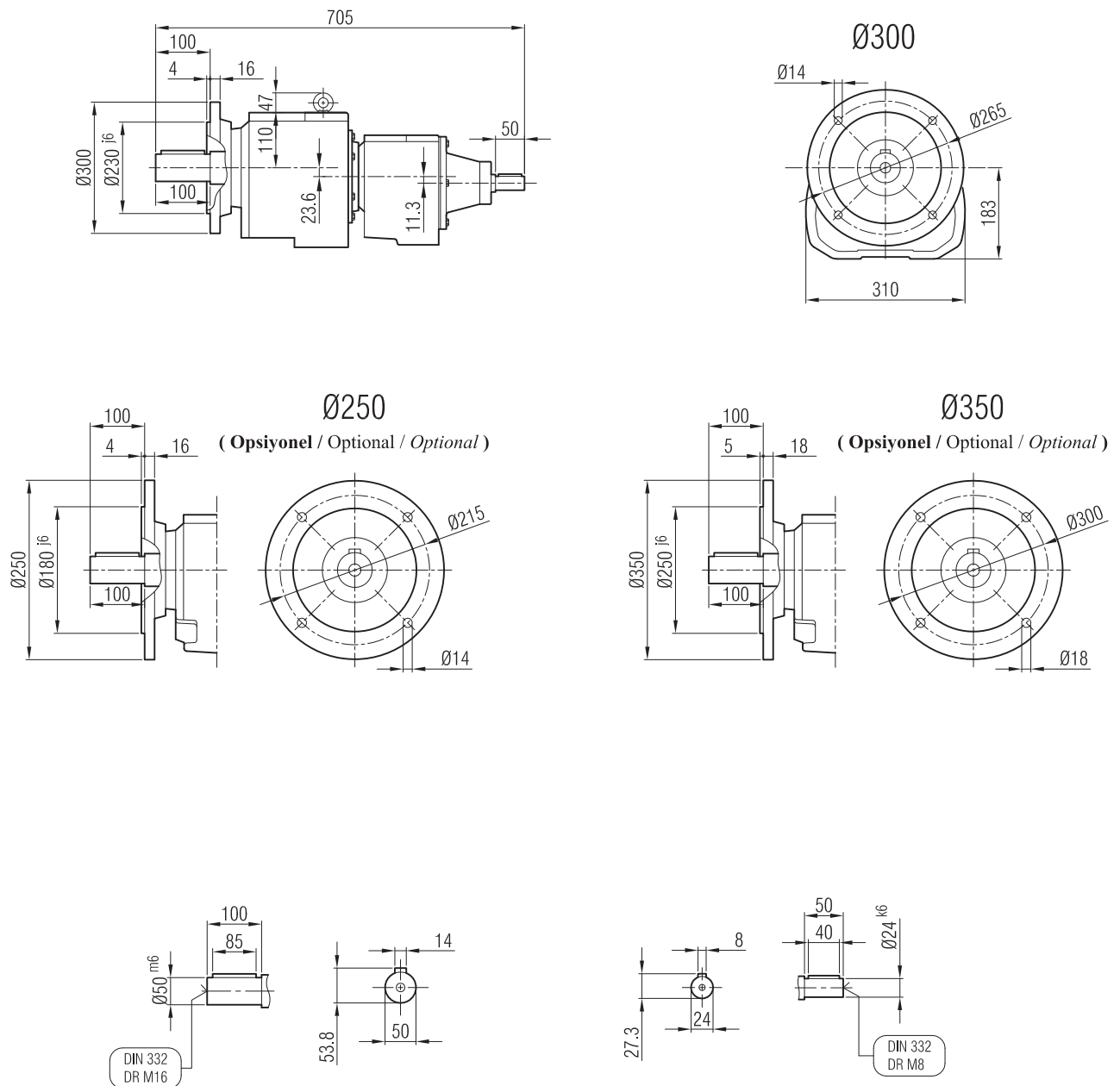


İRA 82 İR 63
İRA 83 İR 63



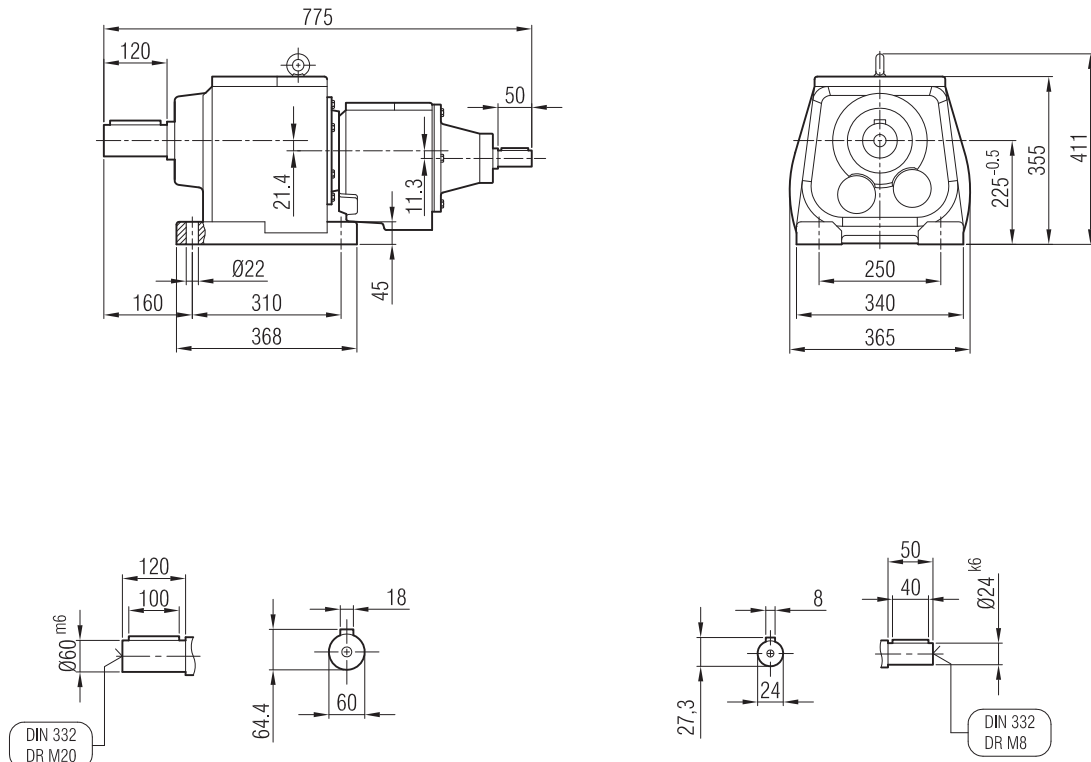


İRF 82 İR 63
İRF 83 İR 63





İRA 92 İR 62
İRA 93 İR 62
İRA 93 İR 63

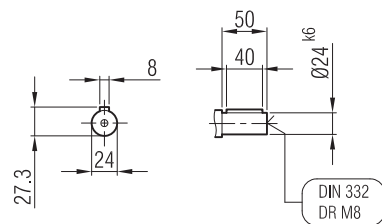
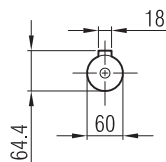
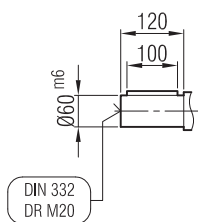
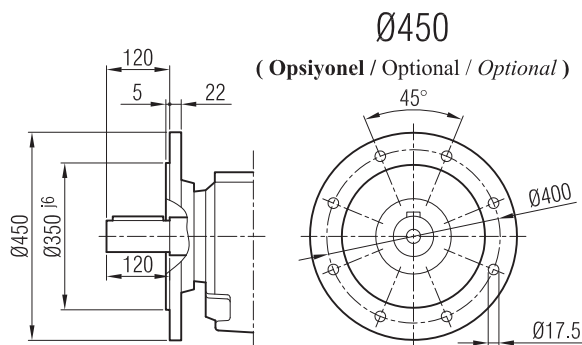
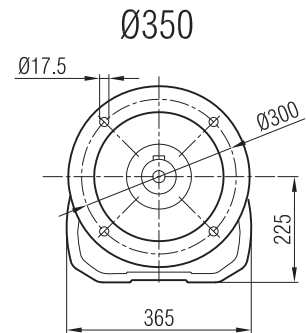
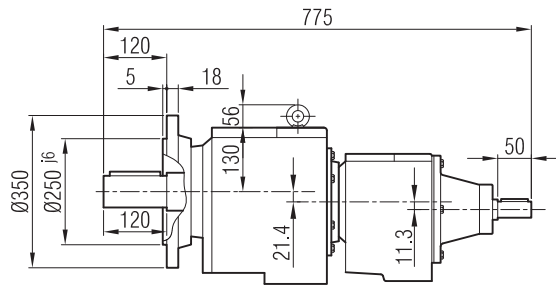




İRF 92 İR 62

İRF 93 İR 62

İRF 93 İR 63



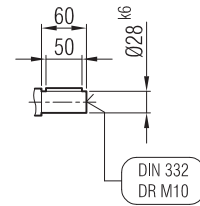
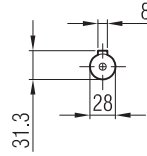
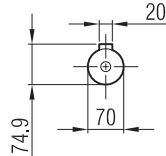
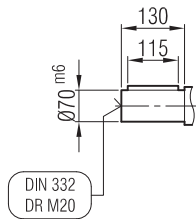
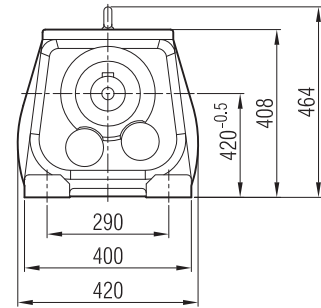
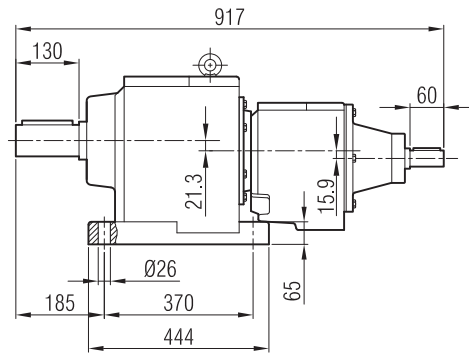


İRA 102 İR 72

İRA 102 İR 73

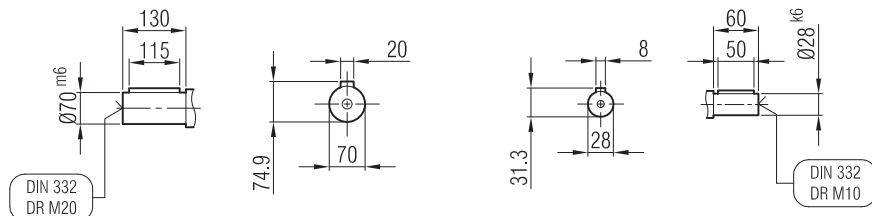
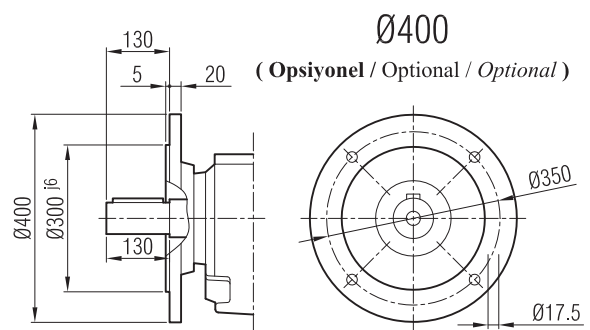
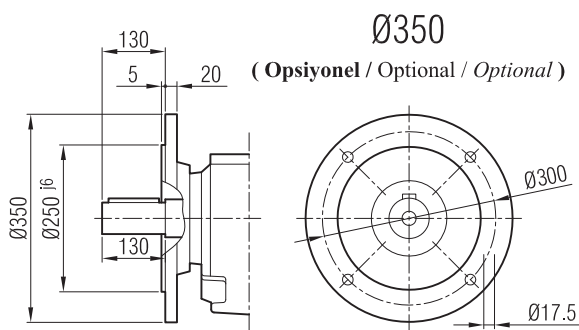
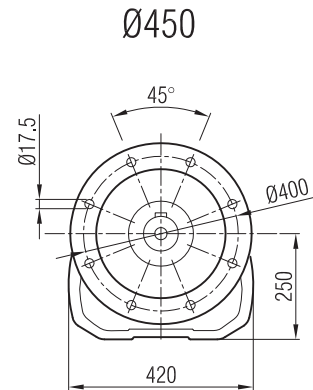
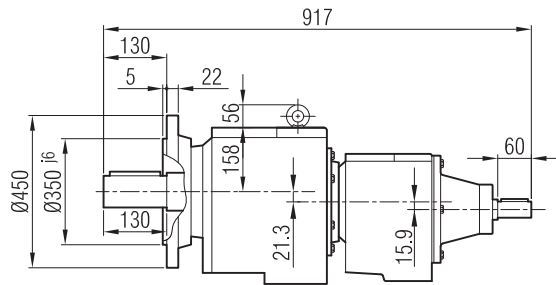
İRA 103 İR 72

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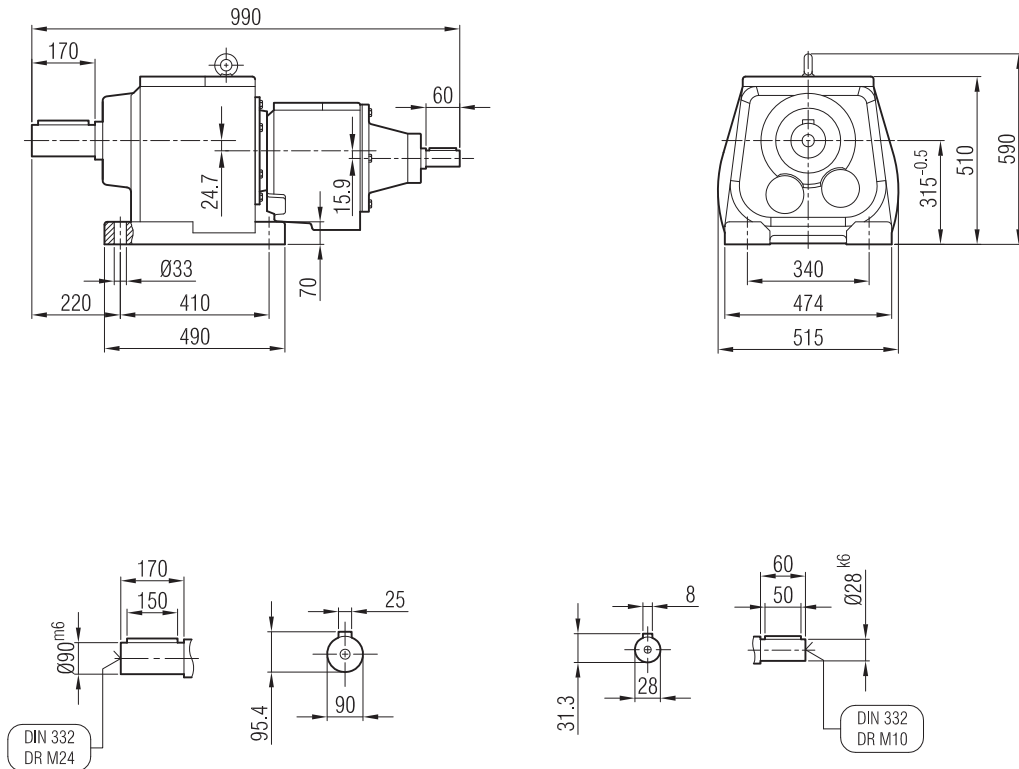


İRA 122 İR 72

İRA 122 İR 73

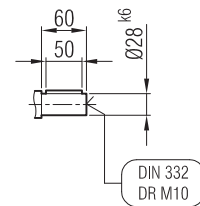
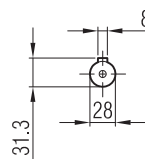
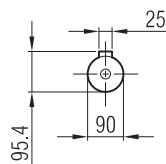
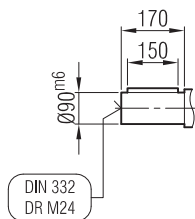
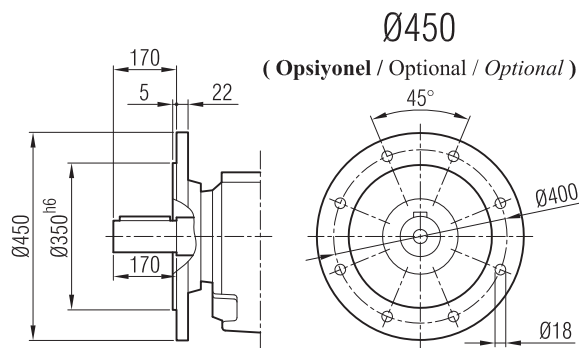
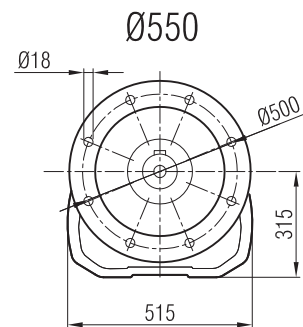
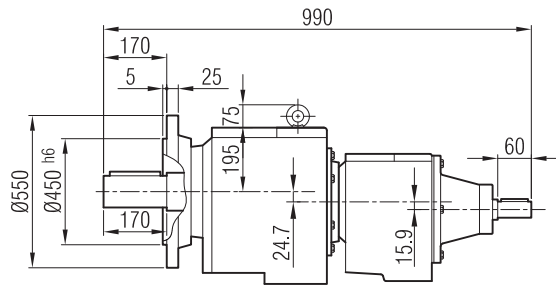
İRA 123 İR 72

İRA 123 İR 73





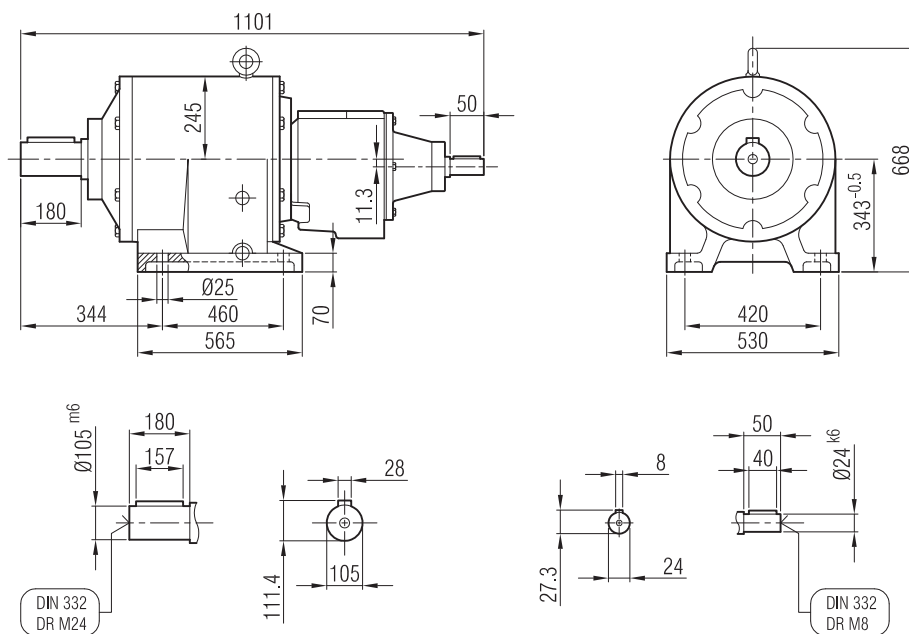
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İRF 122 İR 73
İRF 123 İR 72
İRF 123 İR 73





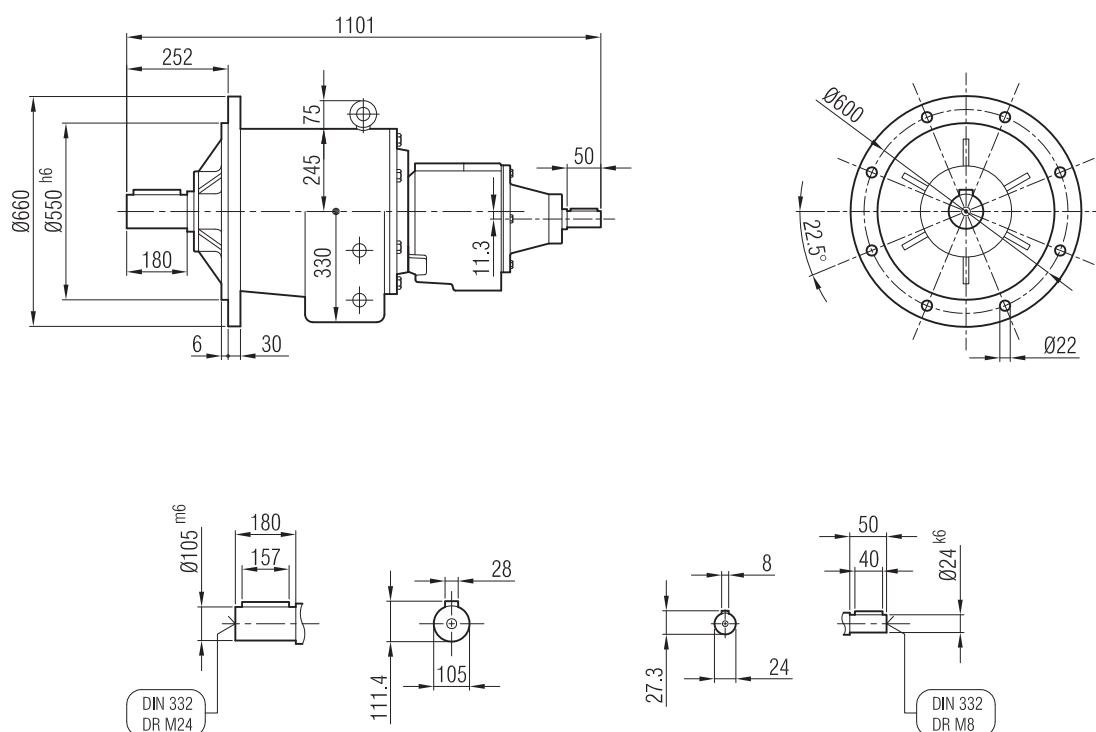
İRA 151 İR 62

İRA 151 İR 63



İRF 151 İR 62

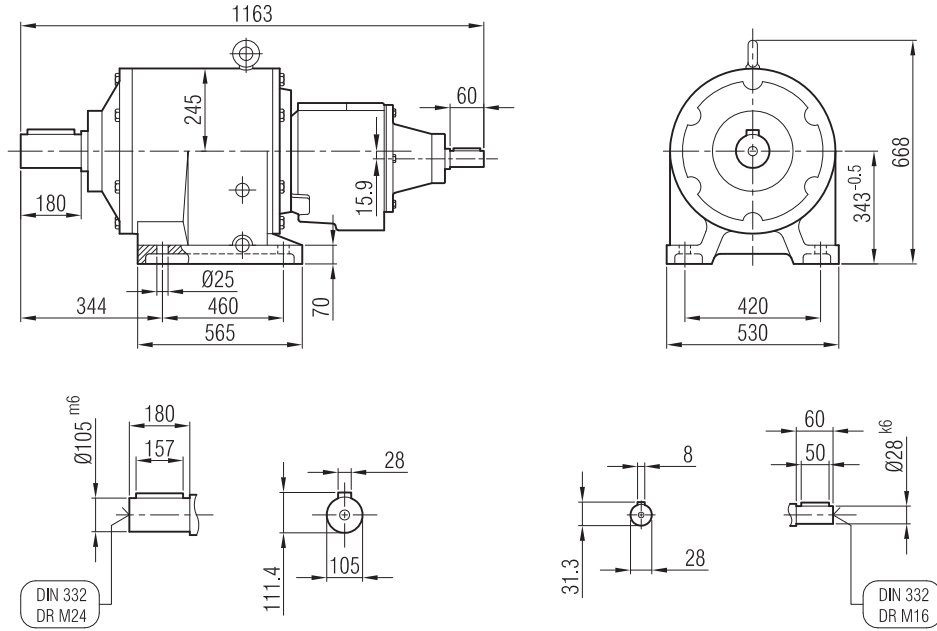
İRF 151 İR 63





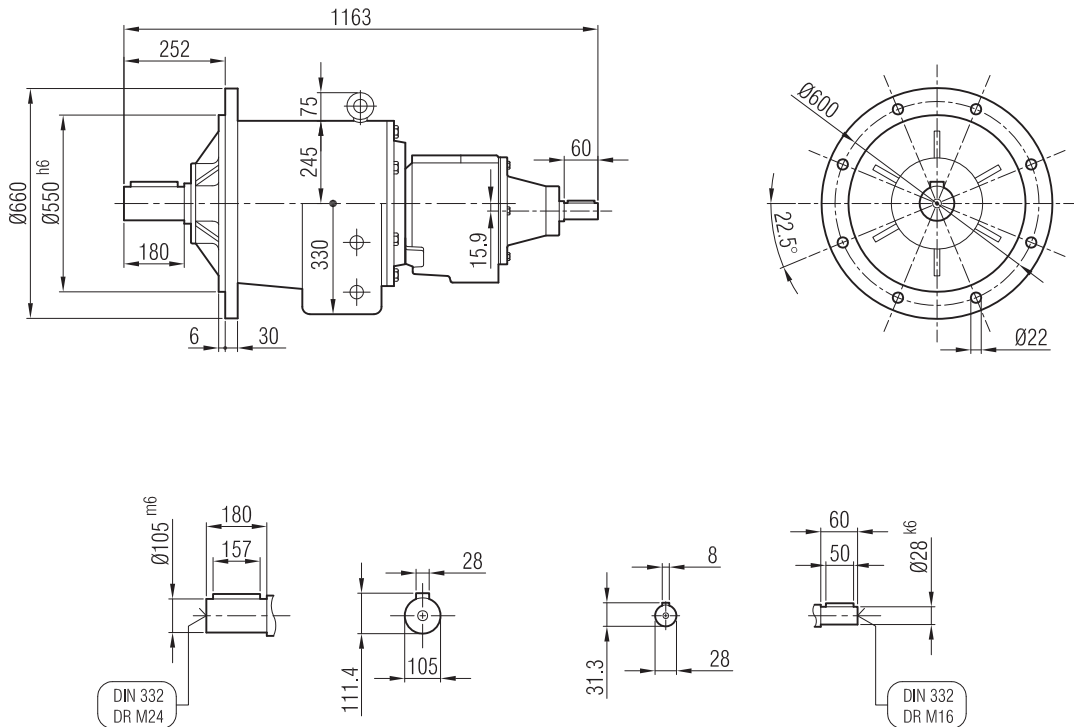
İRA 151 İR 72

İRA 151 İR 73



İRF 151 İR 72

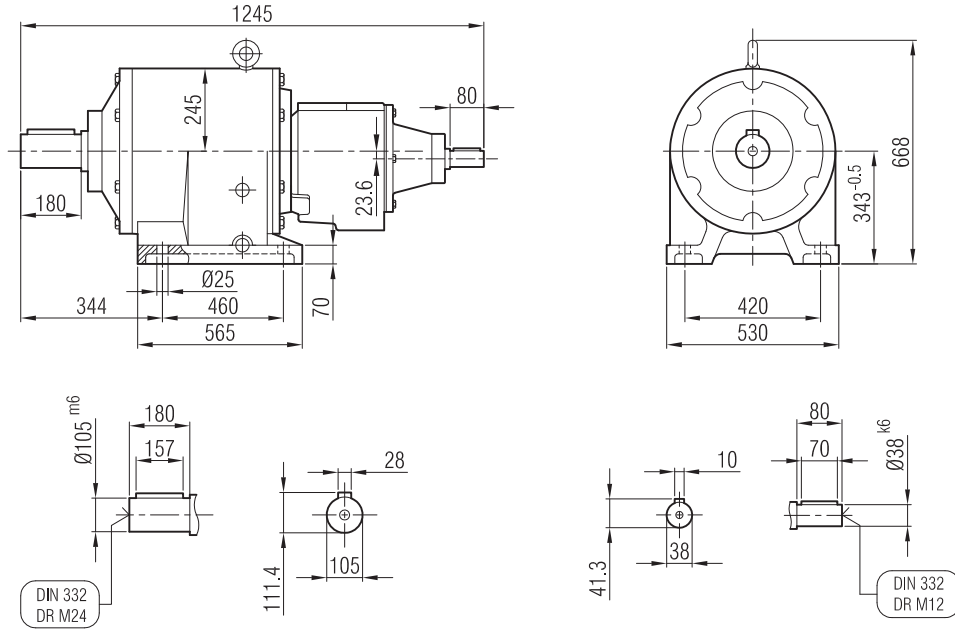
İRF 151 İR 73





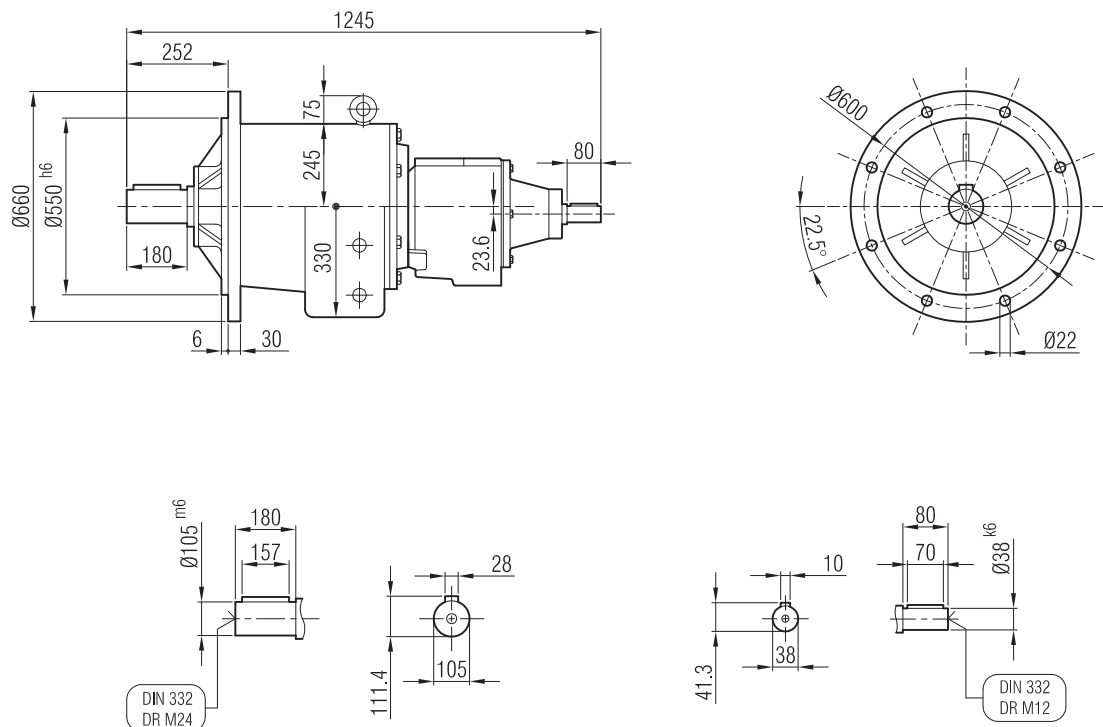
İRA 151 İR 82

İRA 151 İR 83



İRF 151 İR 82

İRF 151 İR 83





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IRAFP ...



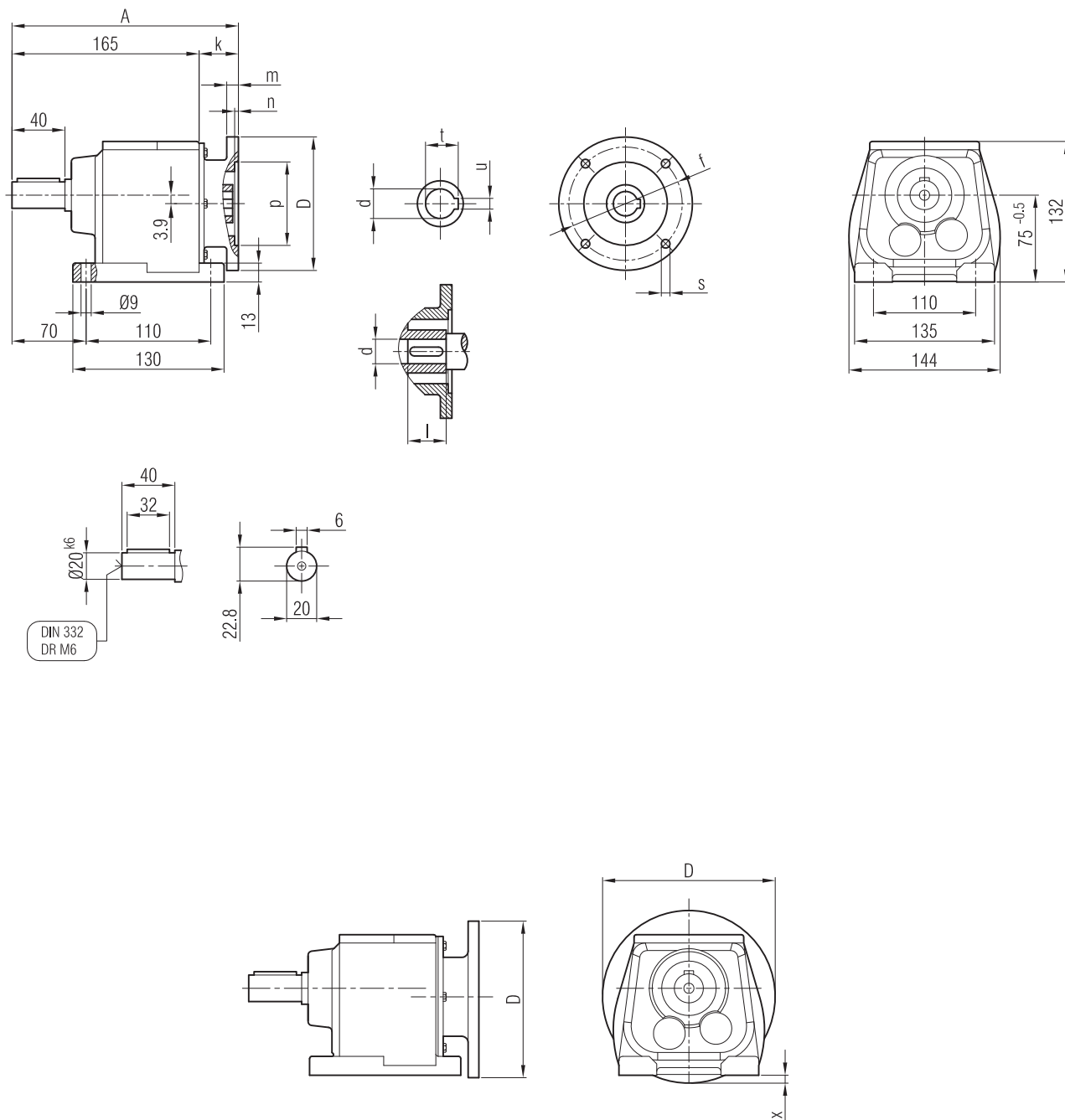
IRFP ...





İRAP 42

İRAP 43

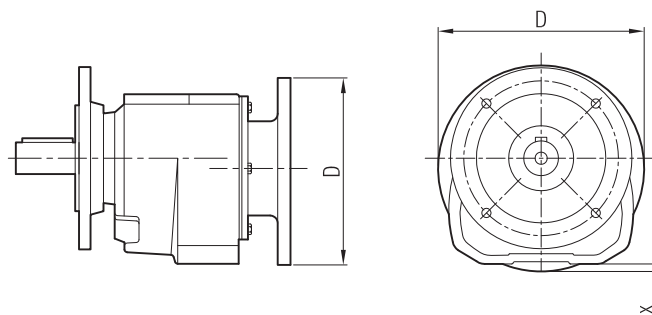
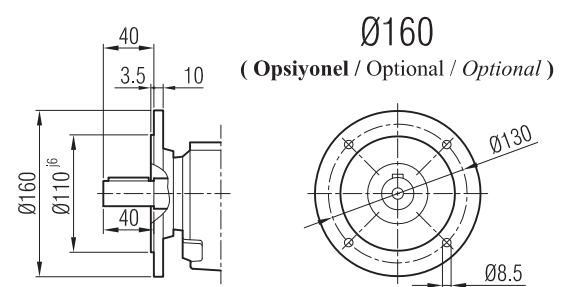
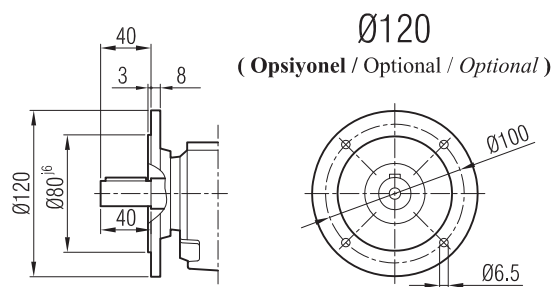
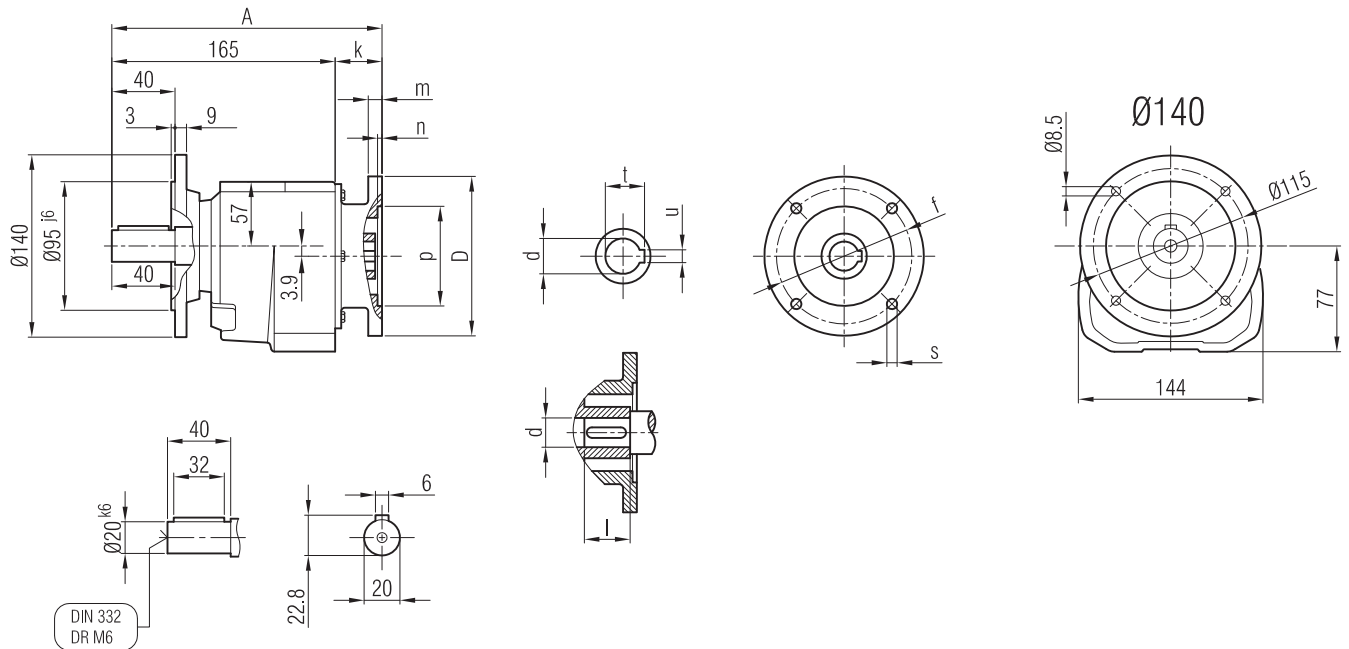


	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u	x				
63/B5	200.5	95	115	140	M8	35.5	8	4	11	23	12.8	4	-				
71/B5	209	110	130	160	M8	44	9	4	14	30	16.3	5	-				
80/B5	211	130	165	200	M10	46	12	5	19	40	21.8	6	29				
90/B5	211	130	165	200	M10	46	12	5	24	50	27.3	8	29				





İRFP 42
İRFP 43

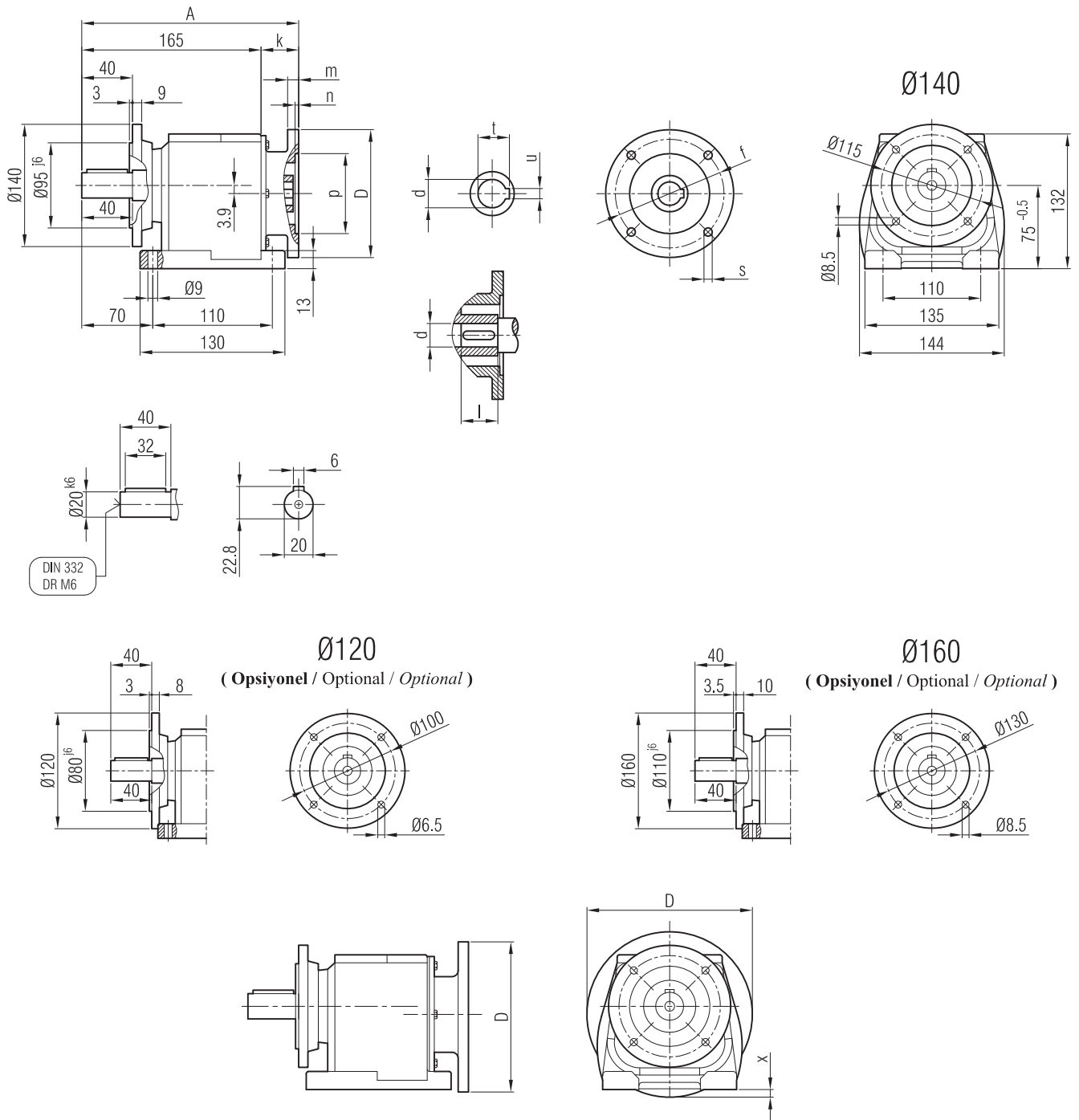


	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u	x				
63/B5	200.5	95	115	140	M8	35.5	8	4	11	23	12.8	4	-				
71/B5	209	110	130	160	M8	44	9	4	14	30	16.3	5	-				
80/B5	211	130	165	200	M10	46	12	5	19	40	21.8	6	27				
90/B5	211	130	165	200	M10	46	12	5	24	50	27.3	8	27				





İRAFP 42
İRAFP 43

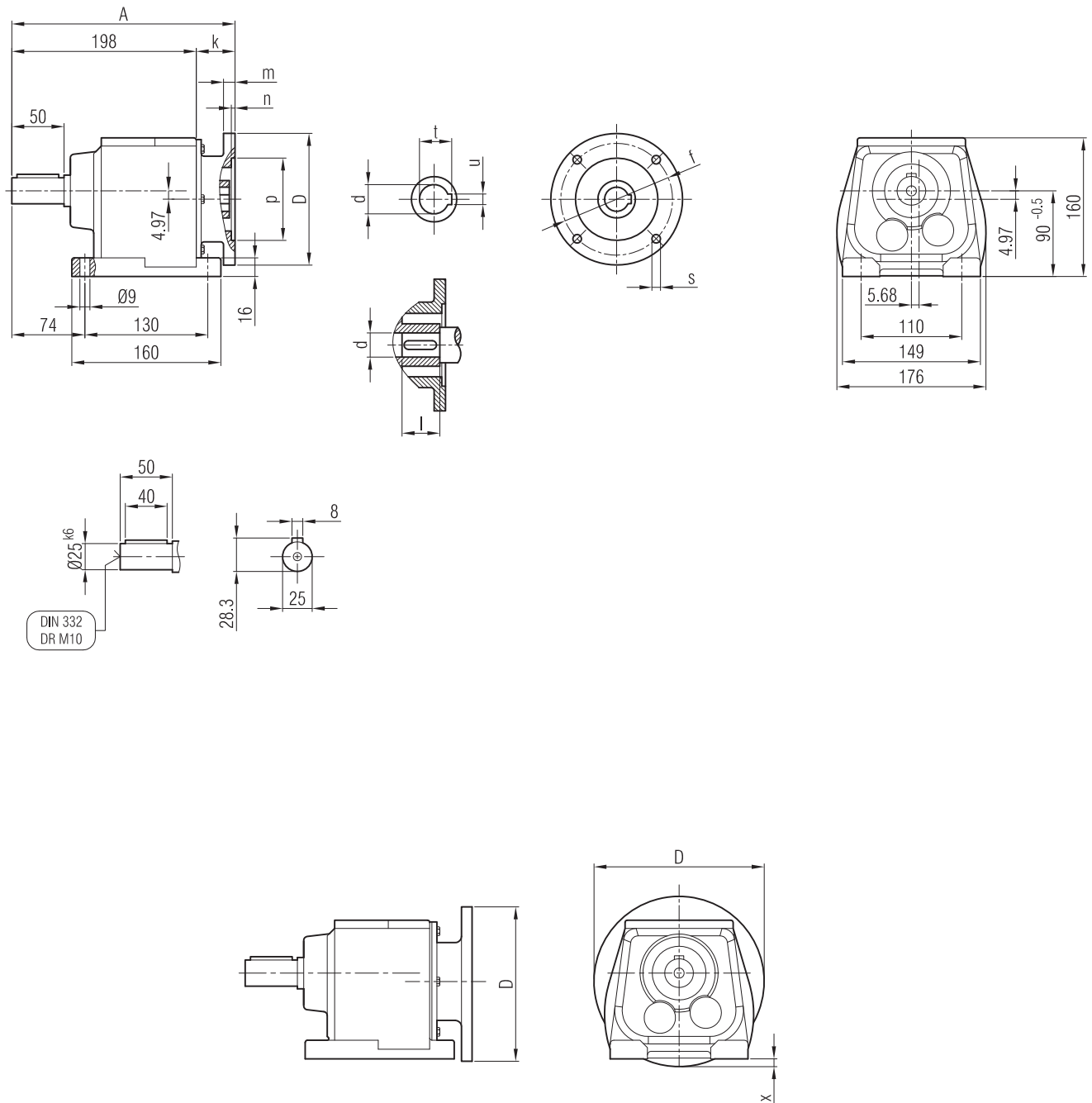


	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u	x				
63/B5	200.5	95	115	140	M8	35.5	8	4	11	23	12.8	4	-				
71/B5	209	110	130	160	M8	44	9	4	14	30	16.3	5	-				
80/B5	211	130	165	200	M10	46	12	5	19	40	21.8	6	29				
90/B5	211	130	165	200	M10	46	12	5	24	50	27.3	8	29				





İRAP 52
İRAP 53

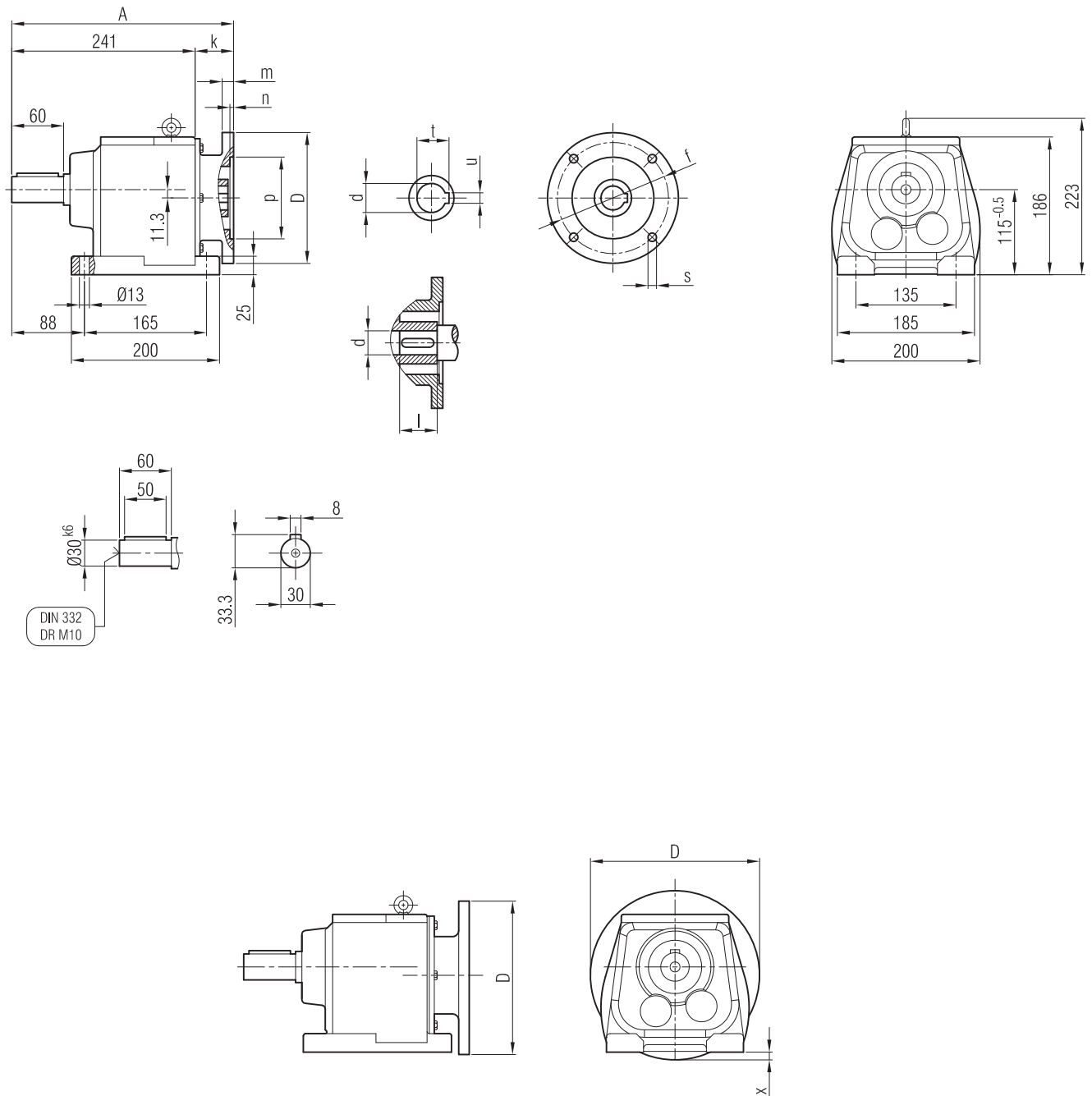


	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u	x				
63/B5	233.5	95	115	140	M8	35.5	8	4	11	23	12.8	4	-				
71/B5	242	110	130	160	M8	44	9	4	14	30	16.3	5	-				
80/B5	244	130	165	200	M10	46	12	5	19	40	21.8	6	15				
90/B5	244	130	165	200	M10	46	12	5	24	50	27.3	8	15				
100/B5	258	180	215	250	M12	60	14	5	28	60	31.3	8	40				





İRAP 621
İRAP 631



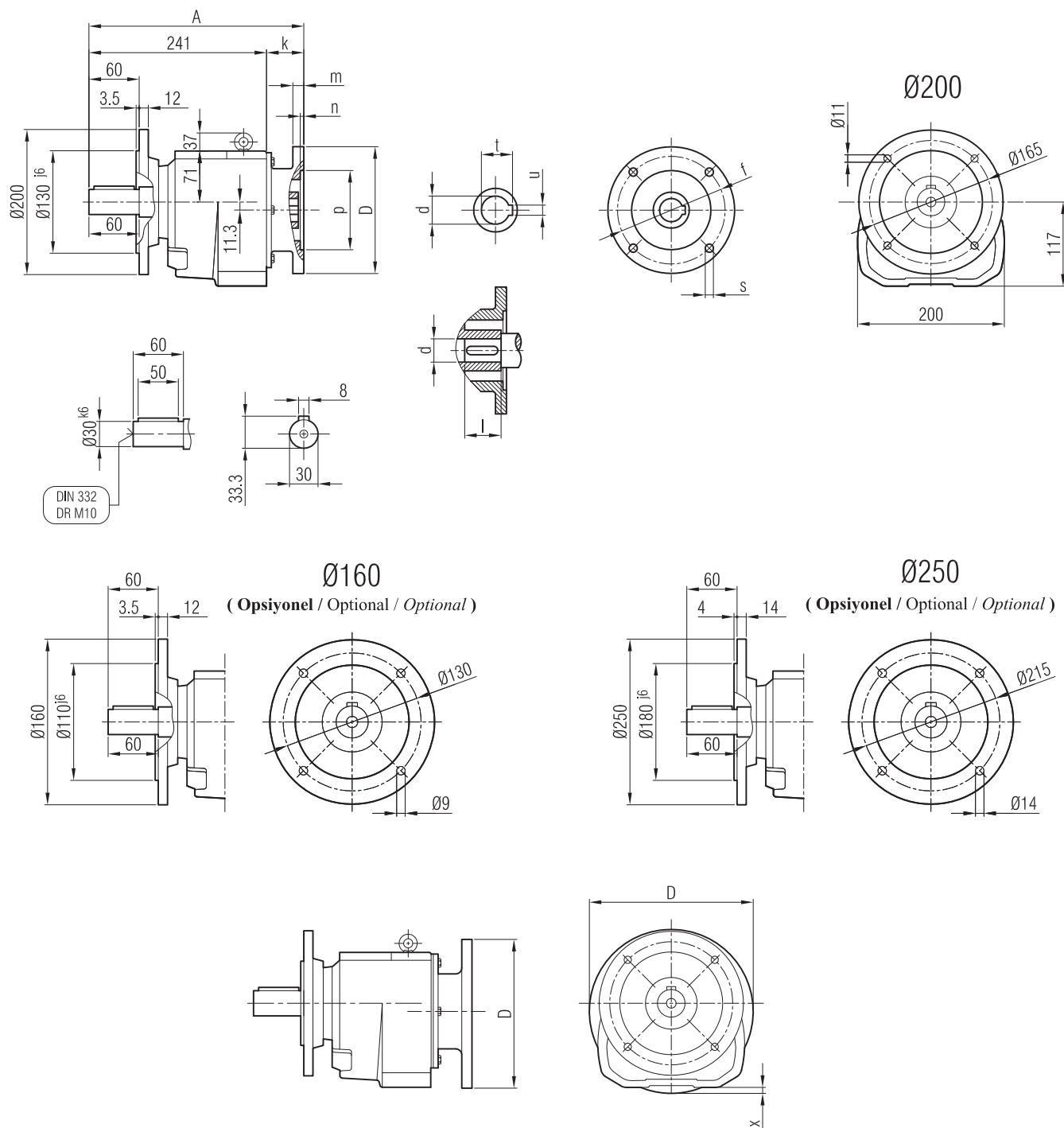
	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u	x				
63/B5	276.5	95	115	140	M8	35,5	8	4	11	23	12.8	4	-				
71/B5	286	110	130	160	M8	45	9	4	14	30	16.3	5	-				
80/B5	291	130	165	200	M10	50	12	5	19	40	21.8	6	-				
90/B5	291	130	165	200	M10	50	12	5	24	50	27.3	8	-				
100/B5	304	180	215	250	M12	63	14	5	28	60	31.3	8	22				
112/B5	304	180	215	250	M12	63	14	5	28	60	31.3	8	22				
132/B5	320	230	265	300	M12	79	17	6	38	60	41.3	10	47				





IRFP 621

IRFP 631

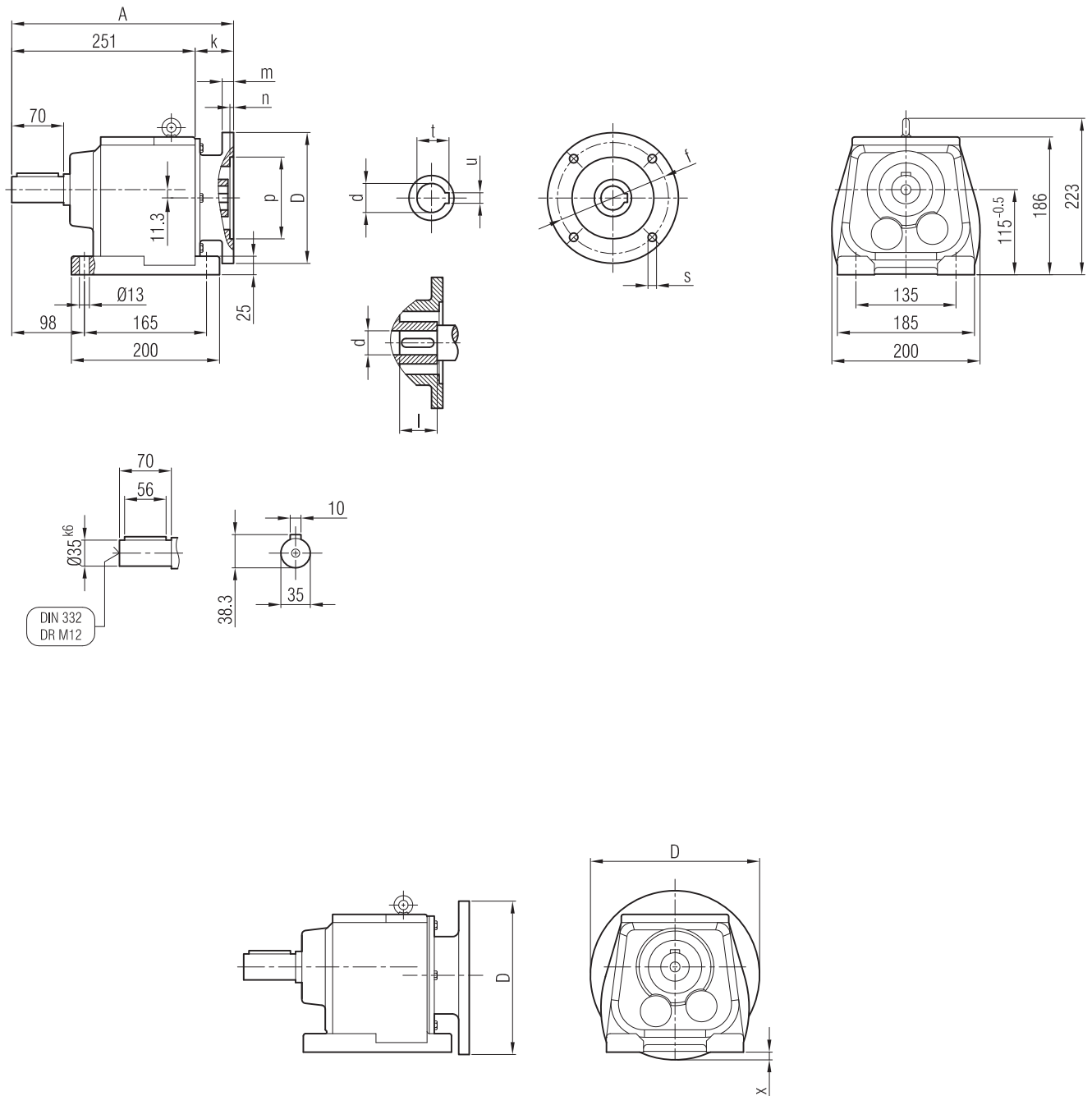


	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u	x			
63/B5	276.5	95	115	140	M8	35,5	8	4	11	23	12.8	4	-			
71/B5	286	110	130	160	M8	45	9	4	14	30	16.3	5	-			
80/B5	291	130	165	200	M10	50	12	5	19	40	21.8	6	-			
90/B5	291	130	165	200	M10	50	12	5	24	50	27.3	8	-			
100/B5	304	180	215	250	M12	63	14	5	28	60	31.3	8	20			
112/B5	304	180	215	250	M12	63	14	5	28	60	31.3	8	20			
132/B5	320	230	265	300	M12	79	17	6	38	60	41.3	10	45			





İRAP 62
İRAP 63

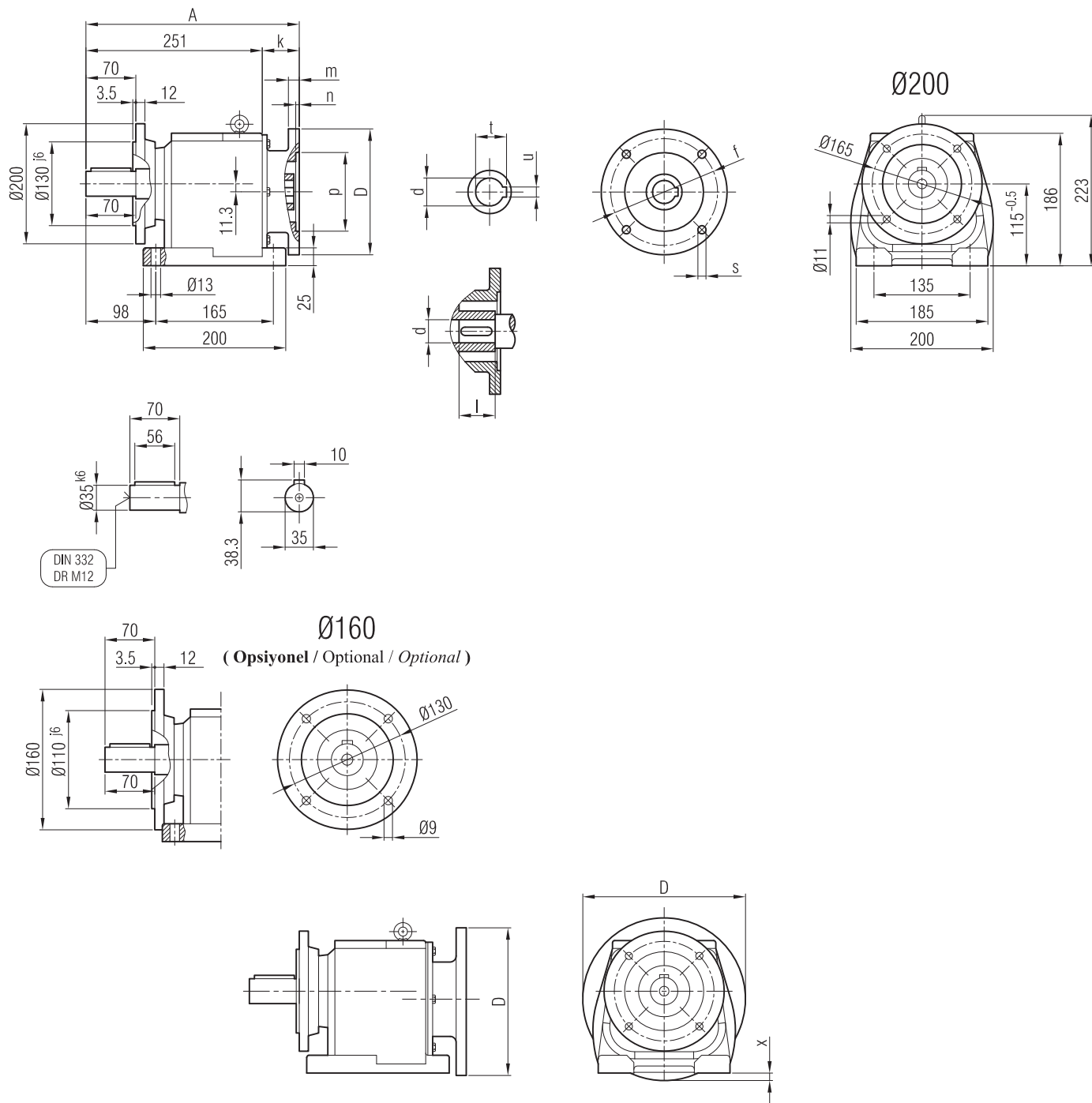


	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u	x				
63/B5	286.5	95	115	140	M8	35,5	8	4	11	23	12.8	4	-				
71/B5	296	110	130	160	M8	45	9	4	14	30	16.3	5	-				
80/B5	301	130	165	200	M10	50	12	5	19	40	21.8	6	-				
90/B5	301	130	165	200	M10	50	12	5	24	50	27.3	8	-				
100/B5	314	180	215	250	M12	63	14	5	28	60	31.3	8	22				
112/B5	314	180	215	250	M12	63	14	5	28	60	31.3	8	22				
132/B5	330	230	265	300	M12	79	17	6	38	60	41.3	10	47				





İRAFP 62
İRAFP 63

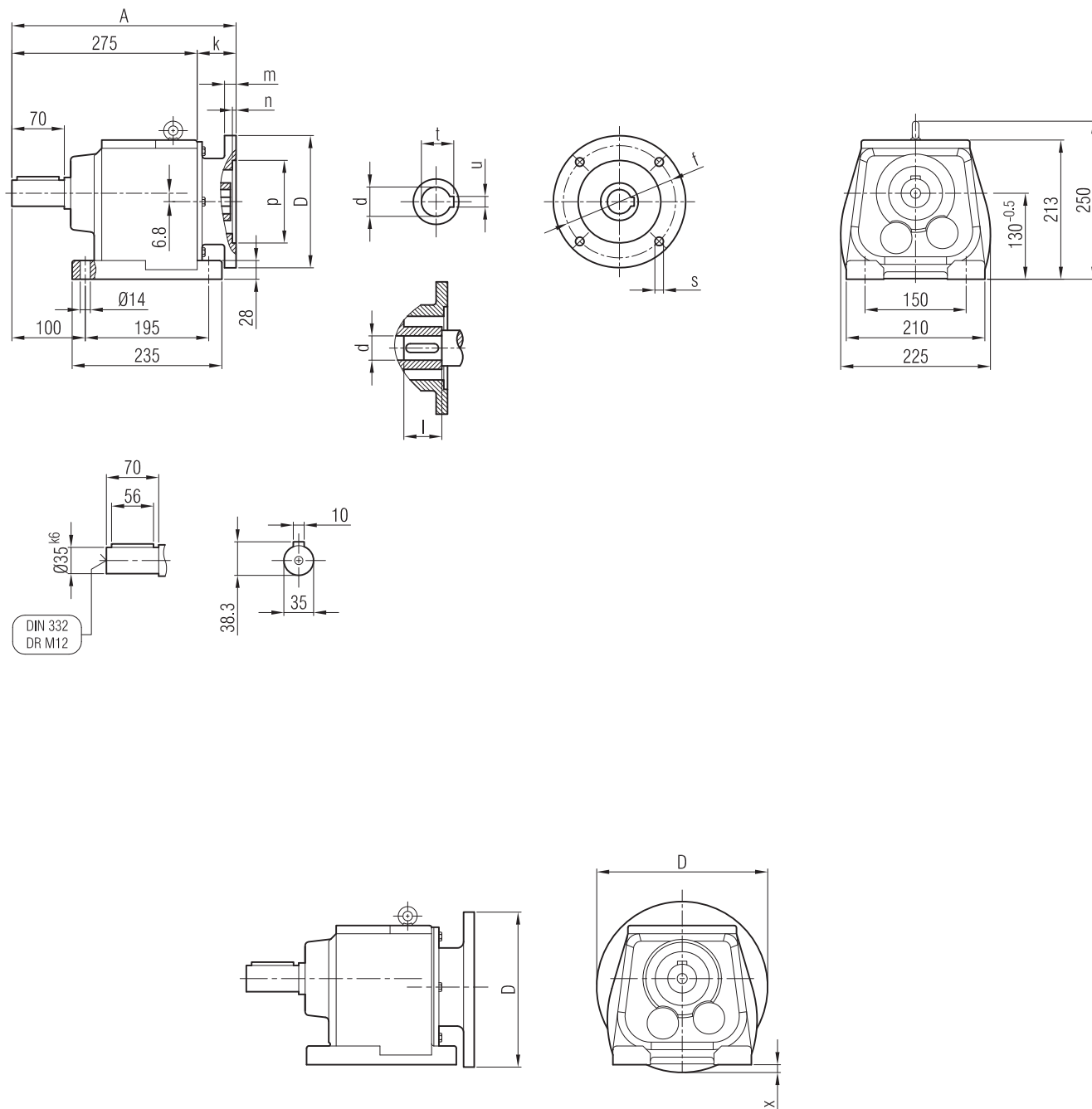


	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u	x				
63/B5	286.5	95	115	140	M8	35.5	8	4	11	23	12.8	4	-				
71/B5	296	110	130	160	M8	45	9	4	14	30	16.3	5	-				
80/B5	301	130	165	200	M10	50	12	5	19	40	21.8	6	-				
90/B5	301	130	165	200	M10	50	12	5	24	50	27.3	8	-				
100/B5	314	180	215	250	M12	63	14	5	28	60	31.3	8	22				
112/B5	314	180	215	250	M12	63	14	5	28	60	31.3	8	22				
132/B5	330	230	265	300	M12	79	17	6	38	60	41.3	10	47				





İRAP 721
İRAP 731

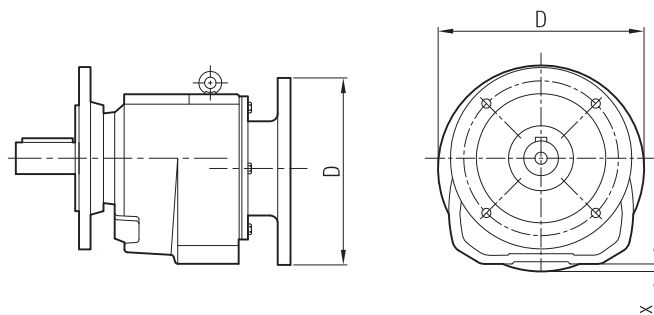
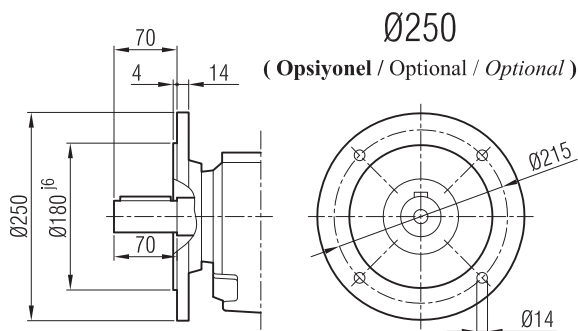
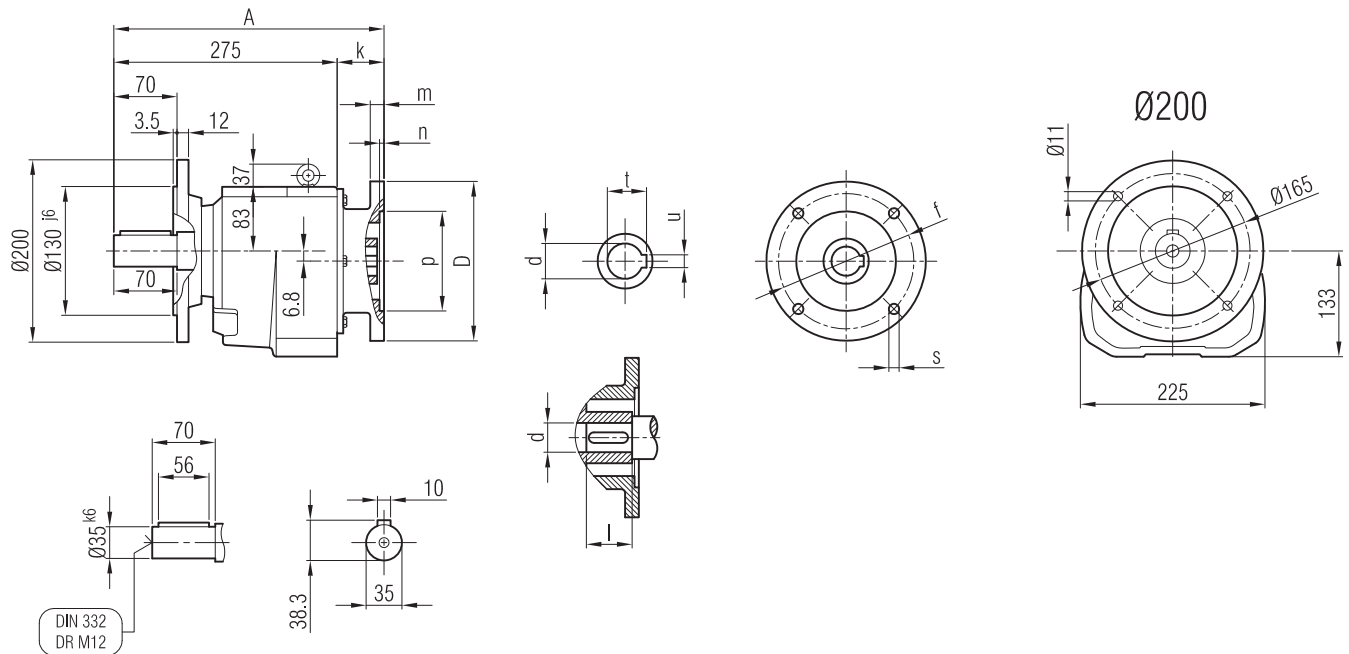


	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u	x				
71/B5	330	110	130	160	M8	55	10	4	14	30	16.3	5	-				
80/B5	342	130	165	200	M10	67	12	5	19	40	21.8	6	-				
90/B5	342	130	165	200	M10	67	12	5	24	50	27.3	8	-				
100/B5	346.5	180	215	250	M12	71.5	14	5	28	60	31.3	8	1.8				
112/B5	346.5	180	215	250	M12	71.5	14	5	28	60	31.3	8	1.8				
132/B5	370.5	230	265	300	M12	95.5	17	5	38	80	41.3	10	26.8				





İRFP 721
İRFP 731

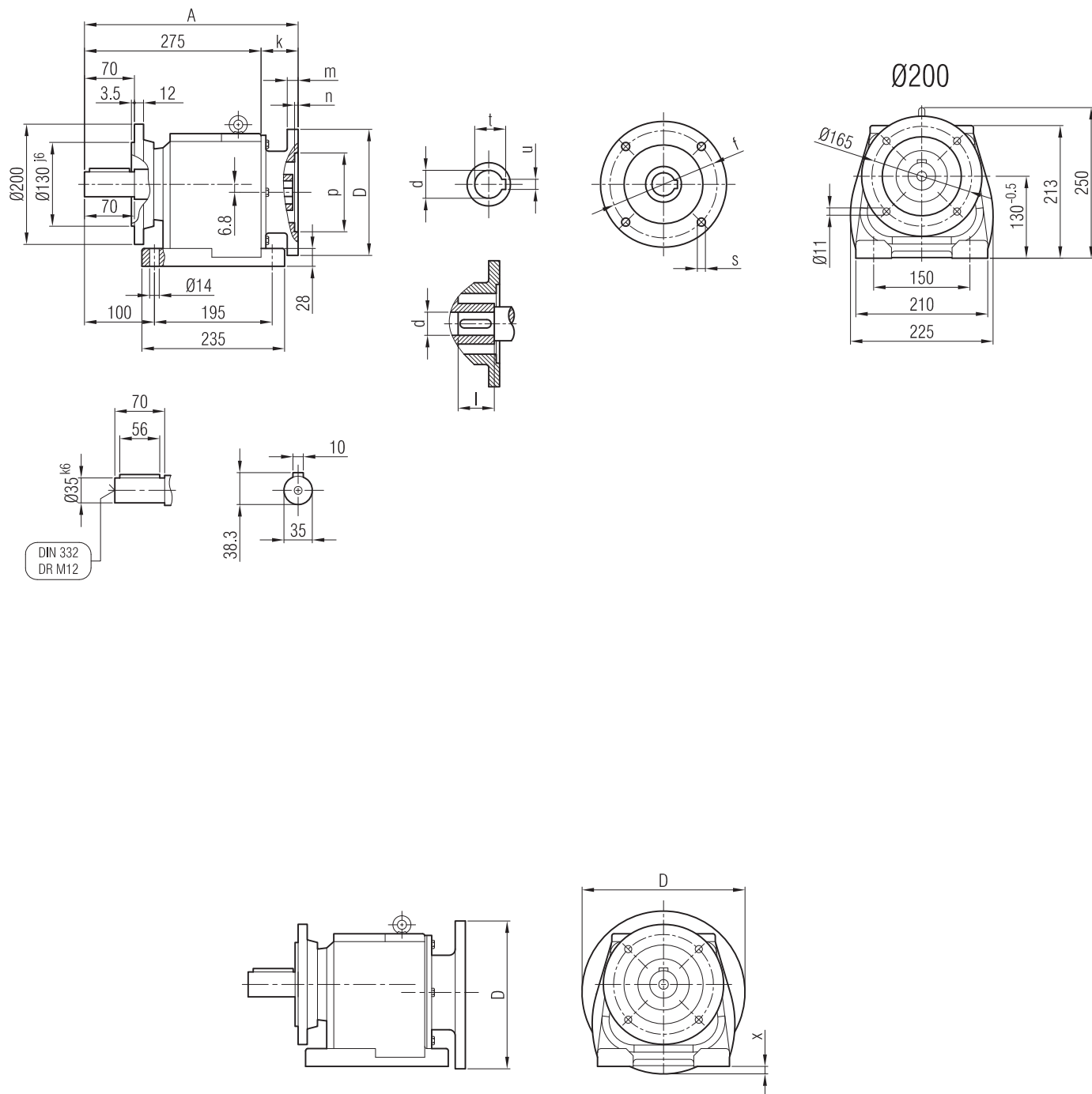


	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u	x				
71/B5	330	110	130	160	M8	55	10	4	14	30	16.3	5	-				
80/B5	342	130	165	200	M10	67	12	5	19	40	21.8	6	-				
90/B5	342	130	165	200	M10	67	12	5	24	50	27.3	8	-				
100/B5	346.5	180	215	250	M12	71.5	14	5	28	60	31.3	8	-				
112/B5	346.5	180	215	250	M12	71.5	14	5	28	60	31.3	8	-				
132/B5	370.5	230	265	300	M12	95.5	17	5	38	80	41.3	10	23.8				





İRAFP 721
İRAFP 731

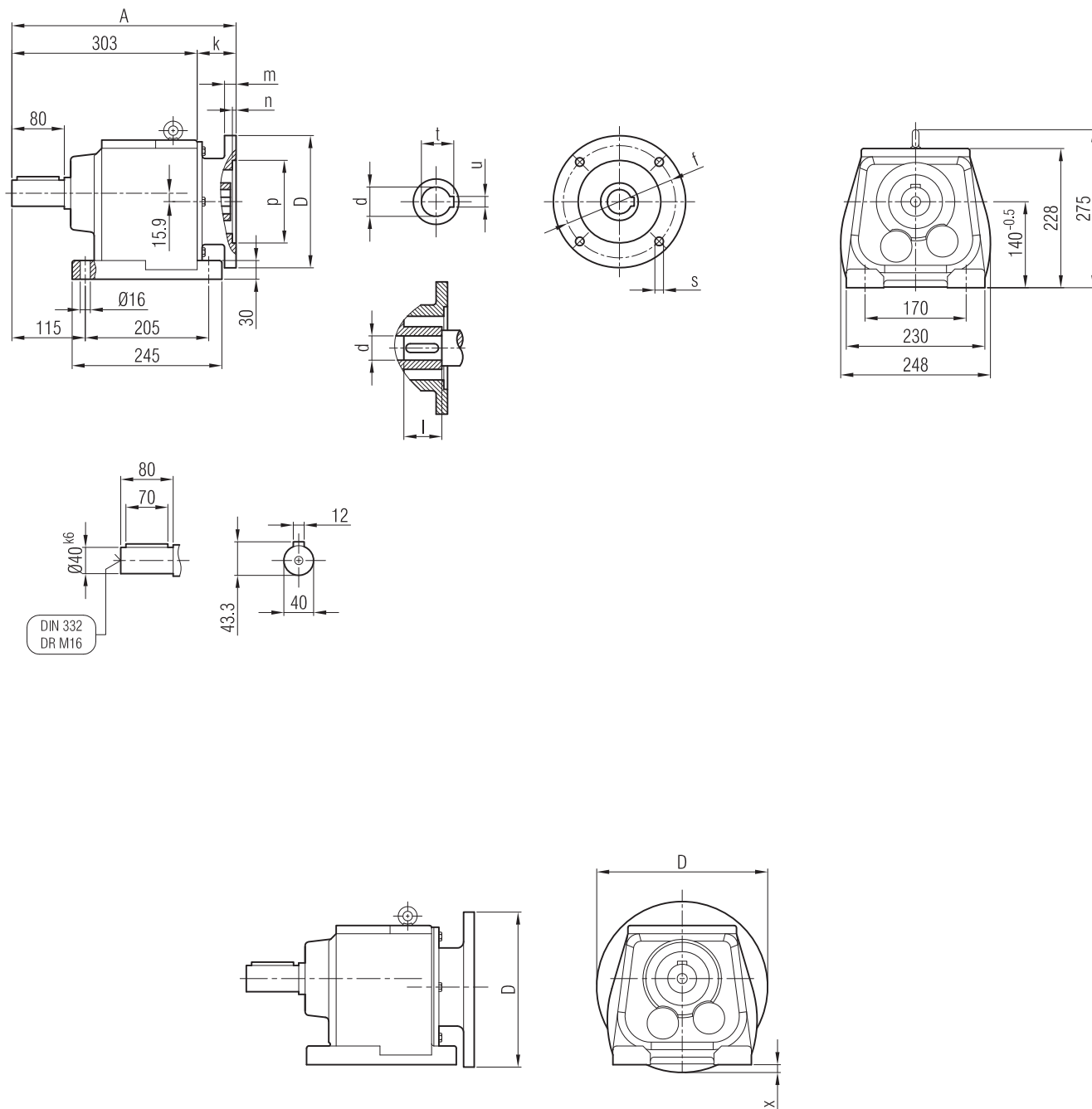


	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u	x				
71/B5	330	110	130	160	M8	55	10	4	14	30	16.3	5	-				
80/B5	342	130	165	200	M10	67	12	5	19	40	21.8	6	-				
90/B5	342	130	165	200	M10	67	12	5	24	50	27.3	8	-				
100/B5	346.5	180	215	250	M12	71.5	14	5	28	60	31.3	8	1.8				
112/B5	346.5	180	215	250	M12	71.5	14	5	28	60	31.3	8	1.8				
132/B5	370.5	230	265	300	M12	95.5	17	5	38	80	41.3	10	26.8				





İRAP 72
İRAP 73

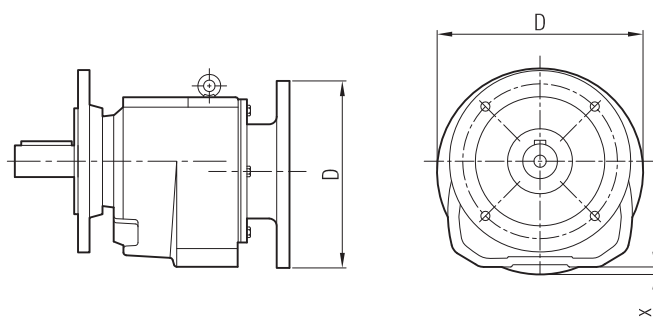
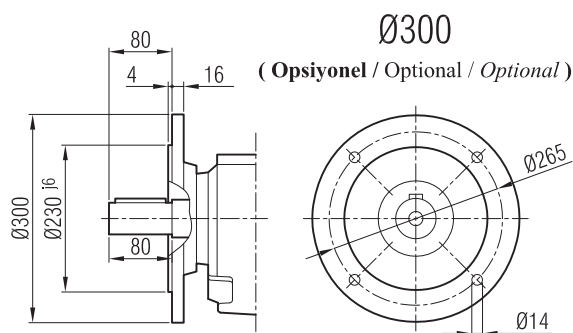
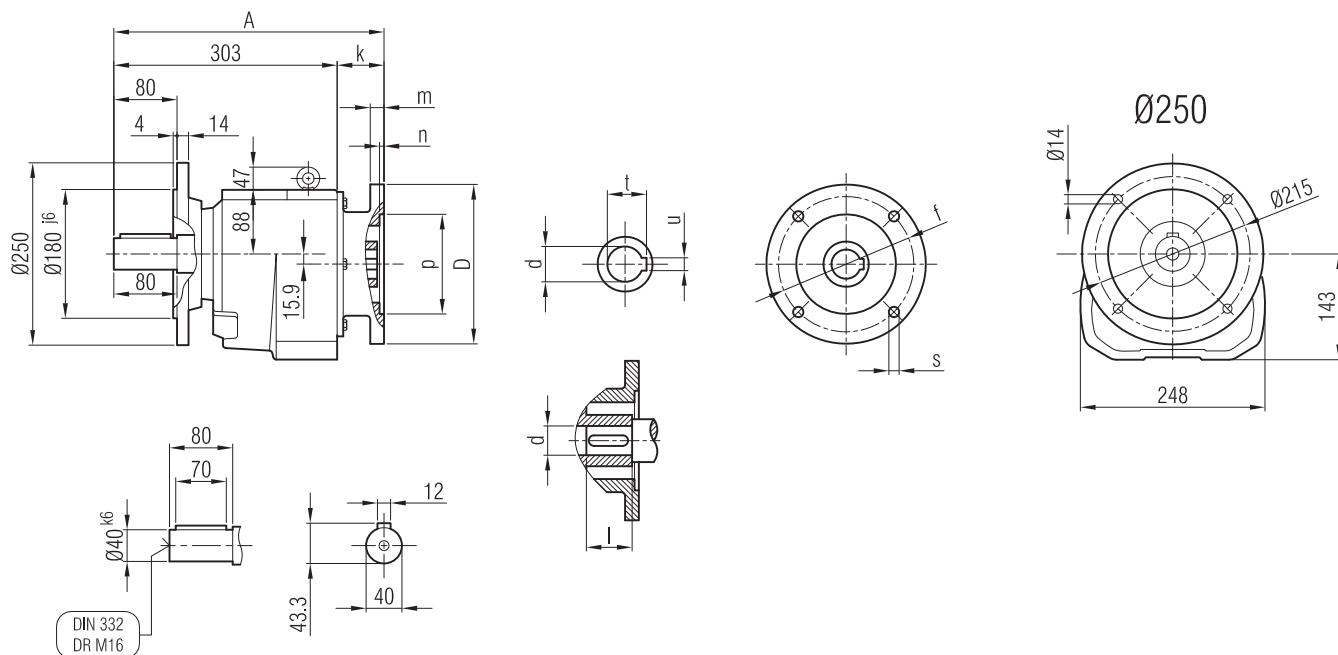


	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u	x				
71/B5	358	110	130	160	M8	55	10	4	14	30	16.3	5	-				
80/B5	370	130	165	200	M10	67	12	5	19	40	21.8	6	-				
90/B5	370	130	165	200	M10	67	12	5	24	50	27.3	8	-				
100/B5	374.5	180	215	250	M12	71.5	14	5	28	60	31.3	8	1				
112/B5	374.5	180	215	250	M12	71.5	14	5	28	60	31.3	8	1				
132/B5	398.5	230	265	300	M12	95.5	17	5	38	80	41.3	10	26				





İRFP 72
İRFP 73

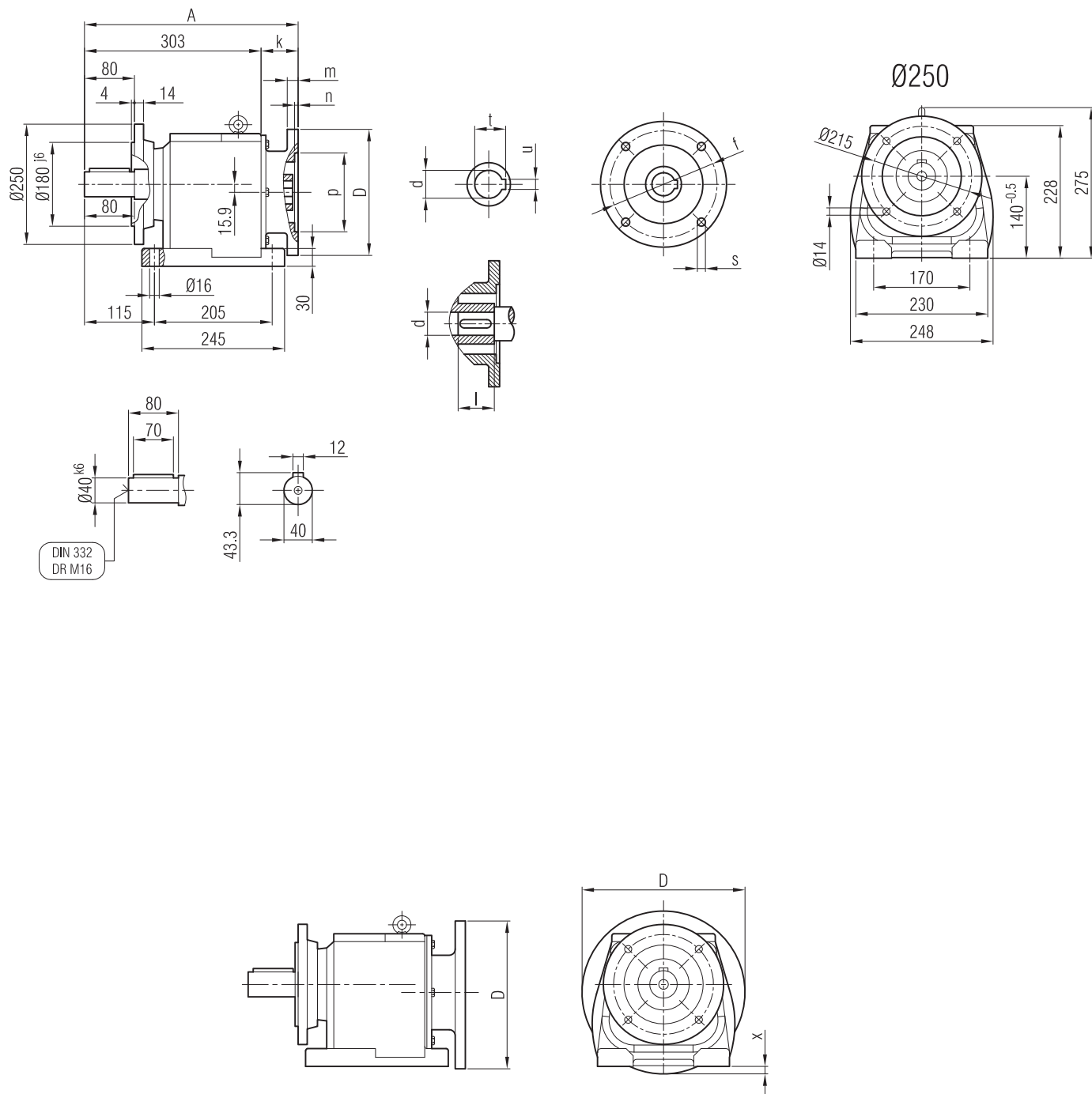


	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u	x				
71/B5	358	110	130	160	M8	55	10	4	14	30	16.3	5	-				
80/B5	370	130	165	200	M10	67	12	5	19	40	21.8	6	-				
90/B5	370	130	165	200	M10	67	12	5	24	50	27.3	8	-				
100/B5	374.5	180	215	250	M12	71.5	14	5	28	60	31.3	8	-				
112/B5	374.5	180	215	250	M12	71.5	14	5	28	60	31.3	8	-				
132/B5	398.5	230	265	300	M12	95.5	17	5	38	80	41.3	10	23				





İRAFP 72
İRAFP 73

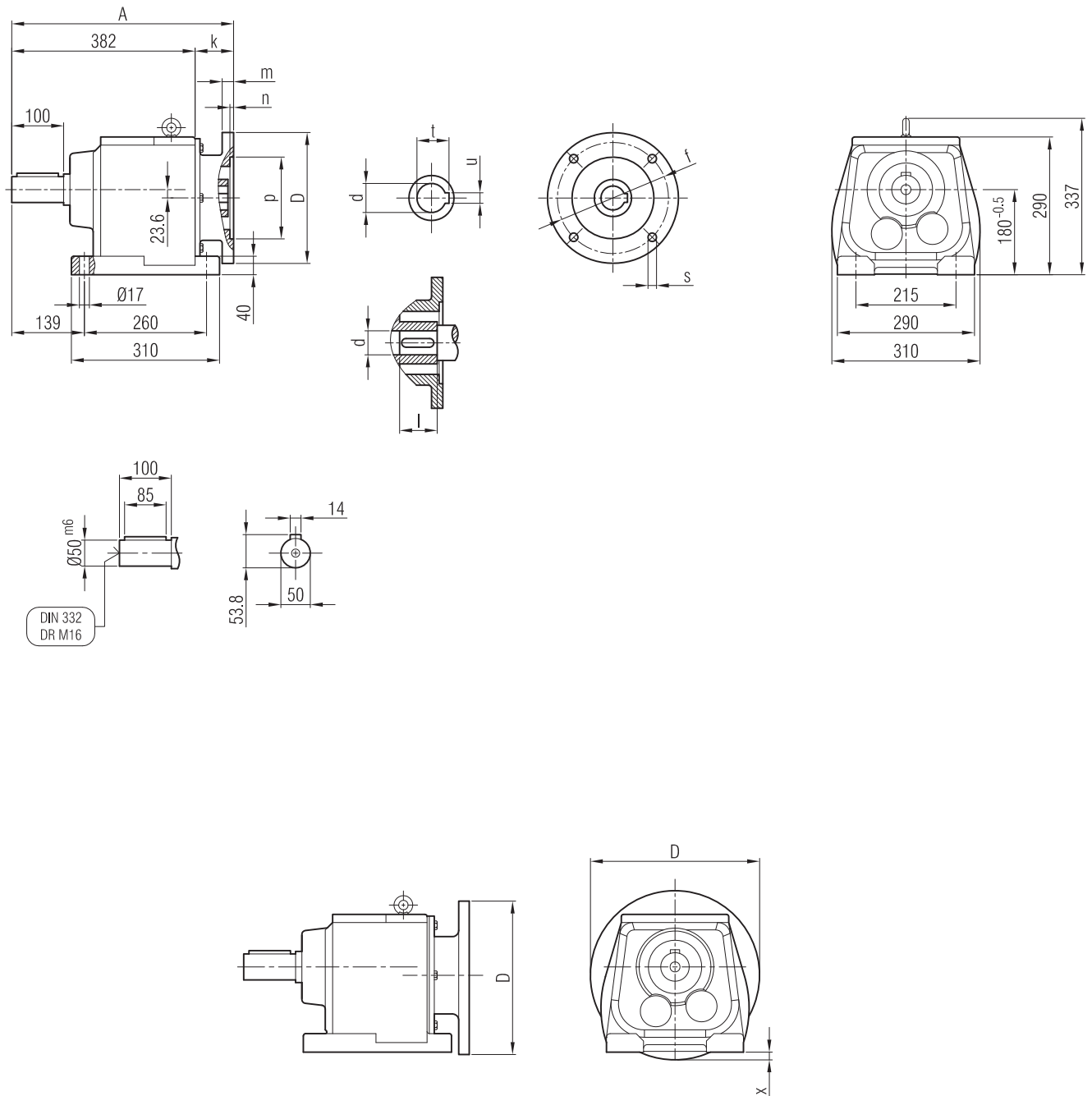


	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u	x				
71/B5	358	110	130	160	M8	55	10	4	14	30	16.3	5	-				
80/B5	370	130	165	200	M10	67	12	5	19	40	21.8	6	-				
90/B5	370	130	165	200	M10	67	12	5	24	50	27.3	8	-				
100/B5	374.5	180	215	250	M12	71.5	14	5	28	60	31.3	8	1				
112/B5	374.5	180	215	250	M12	71.5	14	5	28	60	31.3	8	1				
132/B5	398.5	230	265	300	M12	95.5	17	5	38	80	41.3	10	26				





İRAP 82
İRAP 83

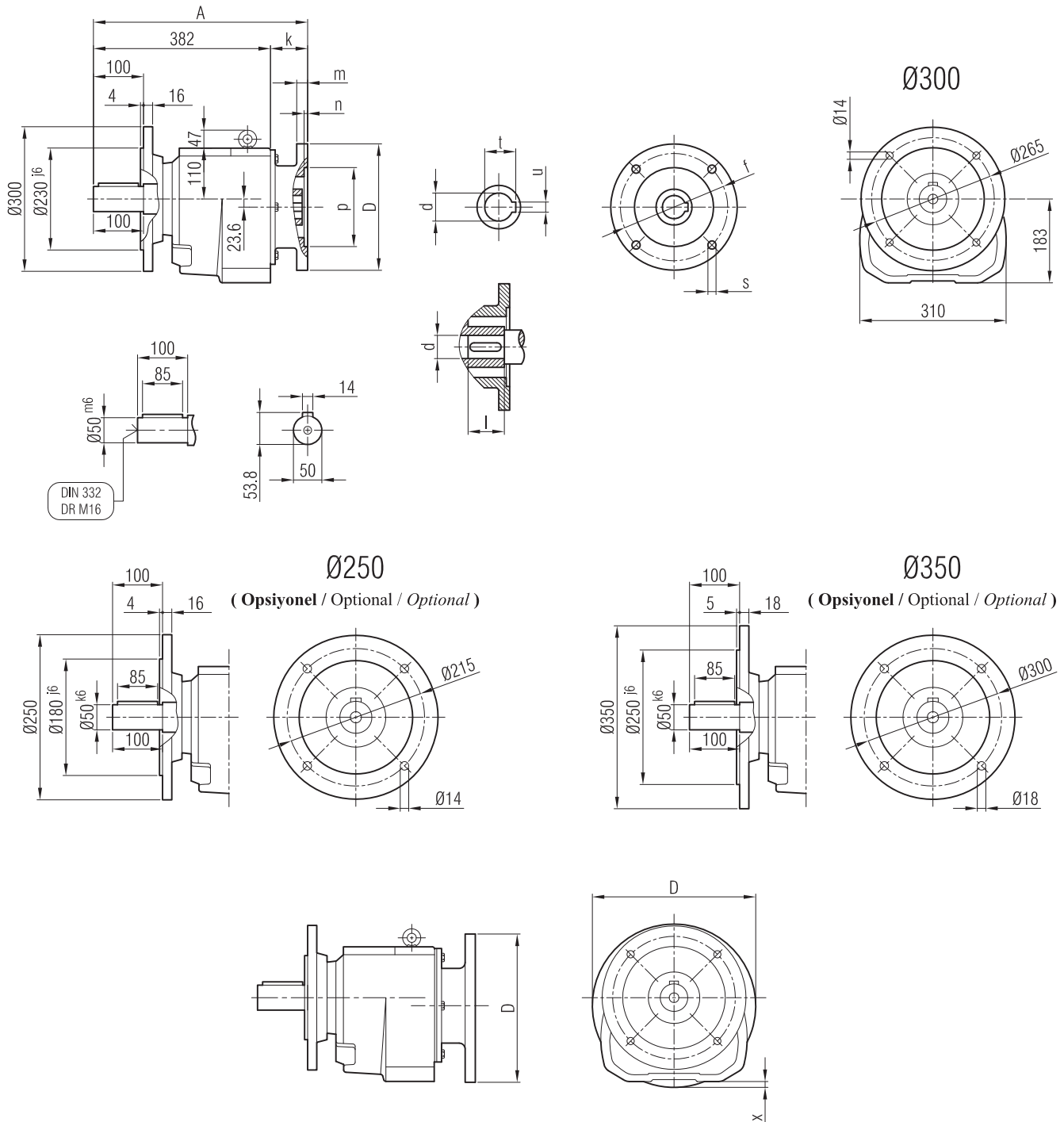


	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u	x				
80/B5	449	130	165	200	M10	67	12	5	19	40	21.8	6	-				
90/B5	449	130	165	200	M10	67	12	5	24	50	27.3	8	-				
100/B5	456	180	215	250	M12	74	14	5	28	60	31.3	8	-				
112/B5	456	180	215	250	M12	74	14	5	28	60	31.3	8	-				
132/B5	477	230	265	300	M12	95	17	6	38	80	41.3	10	-				
160/B5	493	250	300	350	M14	111	18	6.5	42	110	45.3	12	19				
180/B5	493	250	300	350	M14	111	18	6.5	48	110	51.8	14	19				





İRFP 82
İRFP 83

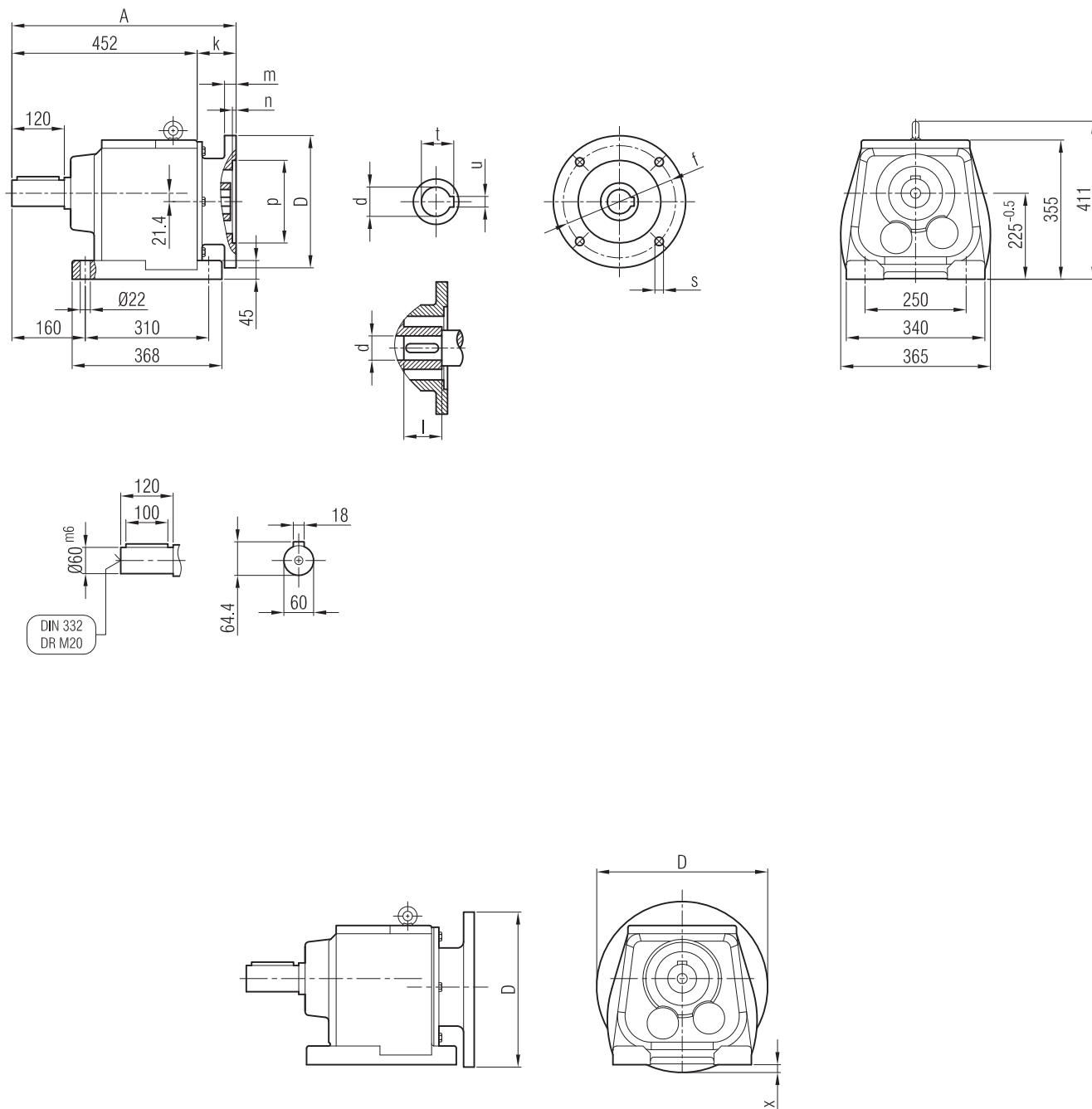


	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u	x				
80/B5	449	130	165	200	M10	67	12	5	19	40	21.8	6	-				
90/B5	449	130	165	200	M10	67	12	5	24	50	27.3	8	-				
100/B5	456	180	215	250	M12	74	14	5	28	60	31.3	8	-				
112/B5	456	180	215	250	M12	74	14	5	28	60	31.3	8	-				
132/B5	477	230	265	300	M12	95	17	6	38	80	41.3	10	-				
160/B5	493	250	300	350	M14	111	18	6.5	42	110	45.3	12	16				
180/B5	493	250	300	350	M14	111	18	6.5	48	110	51.8	14	16				





İRAP 92
İRAP 93

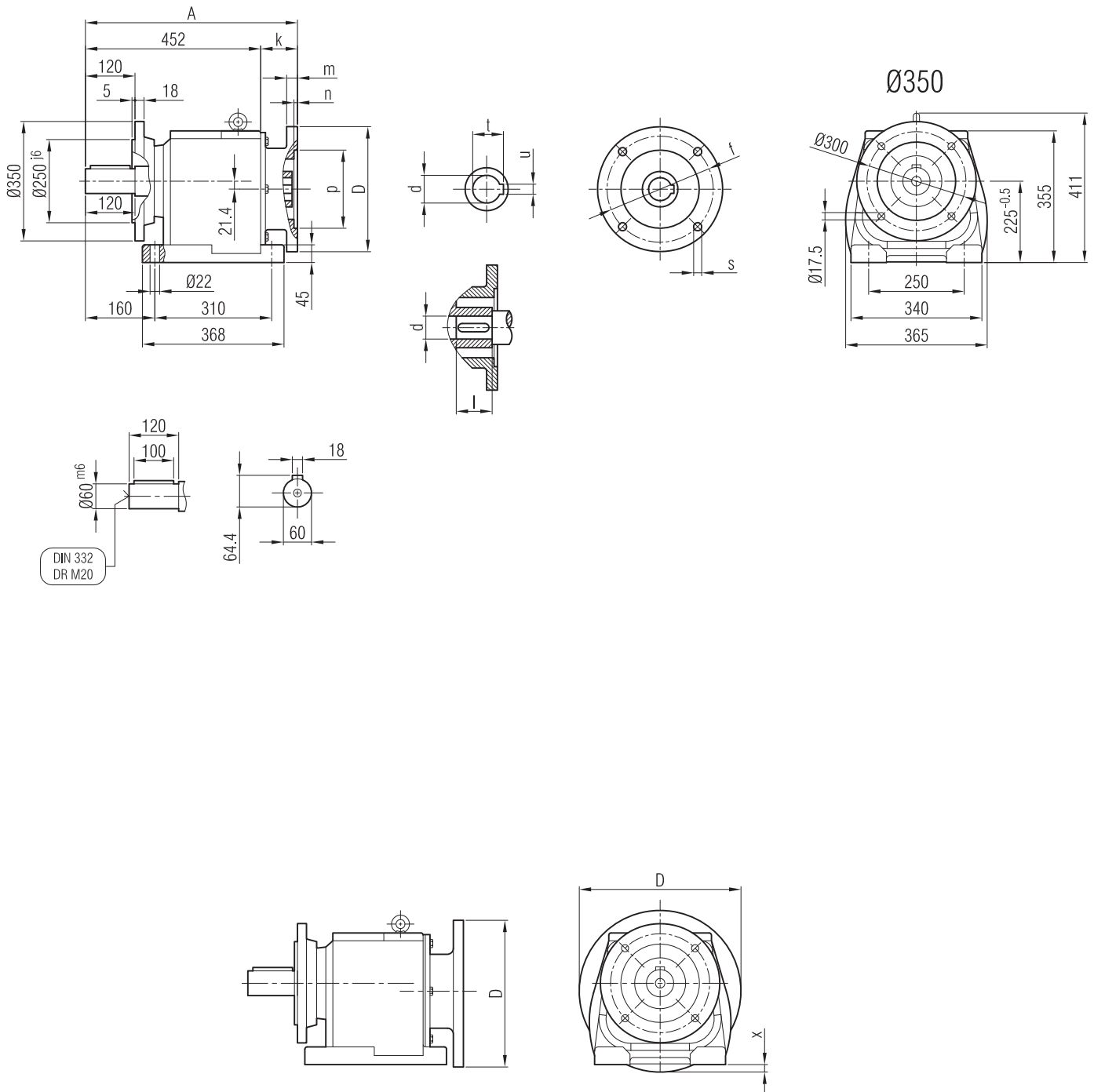


	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u	x				
80/B5	501	130	165	200	M10	49	12	5	19	40	21.8	6	-				
90/B5	501	130	165	200	M10	49	12	5	24	50	27.3	8	-				
100/B5	510	180	215	250	M12	58	14	5	28	60	31.3	8	-				
112/B5	510	180	215	250	M12	58	14	5	28	60	31.3	8	-				
132/B5	547	230	265	300	M12	95	17	6	38	80	41.3	10	-				
160/B5	563	250	300	350	M14	111	18	6.5	42	110	45.3	12	-				
180/B5	563	250	300	350	M14	111	18	6.5	48	110	51.8	14	-				
200/B5	611	300	350	400	M16	159	20	6.5	55	110	59.3	16	-				





İRAFP 92
İRAFP 93

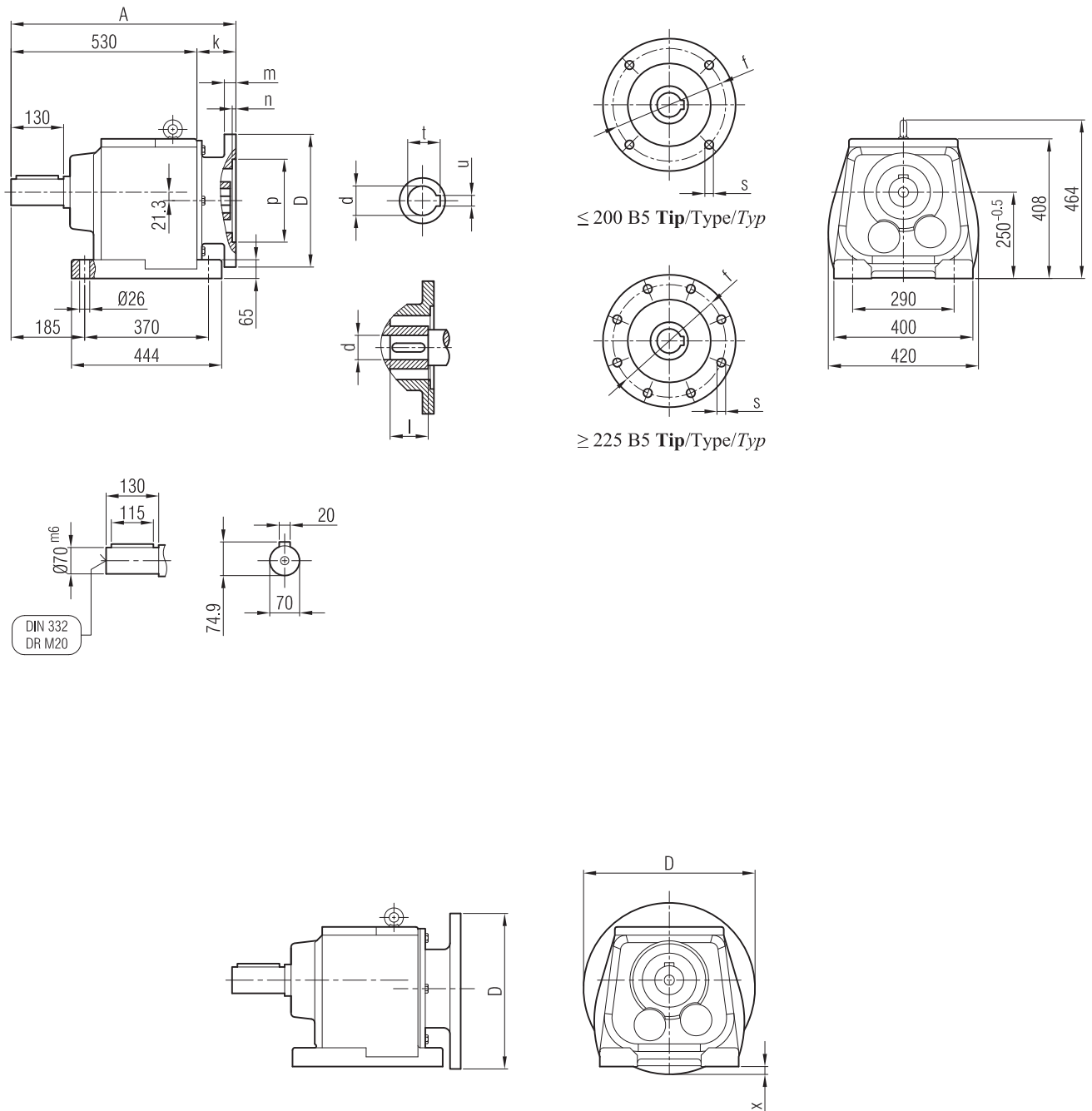


	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u	x				
80/B5	501	130	165	200	M10	49	12	5	19	40	21.8	6	-				
90/B5	501	130	165	200	M10	49	12	5	24	50	27.3	8	-				
100/B5	510	180	215	250	M12	58	14	5	28	60	31.3	8	-				
112/B5	510	180	215	250	M12	58	14	5	28	60	31.3	8	-				
132/B5	547	230	265	300	M12	95	17	6	38	80	41.3	10	-				
160/B5	563	250	300	350	M14	111	18	6.5	42	110	45.3	12	-				
180/B5	563	250	300	350	M14	111	18	6.5	48	110	51.8	14	-				
200/B5	611	300	350	400	M16	159	20	6.5	55	110	59.3	16	-				





İRAP 102
İRAP 103

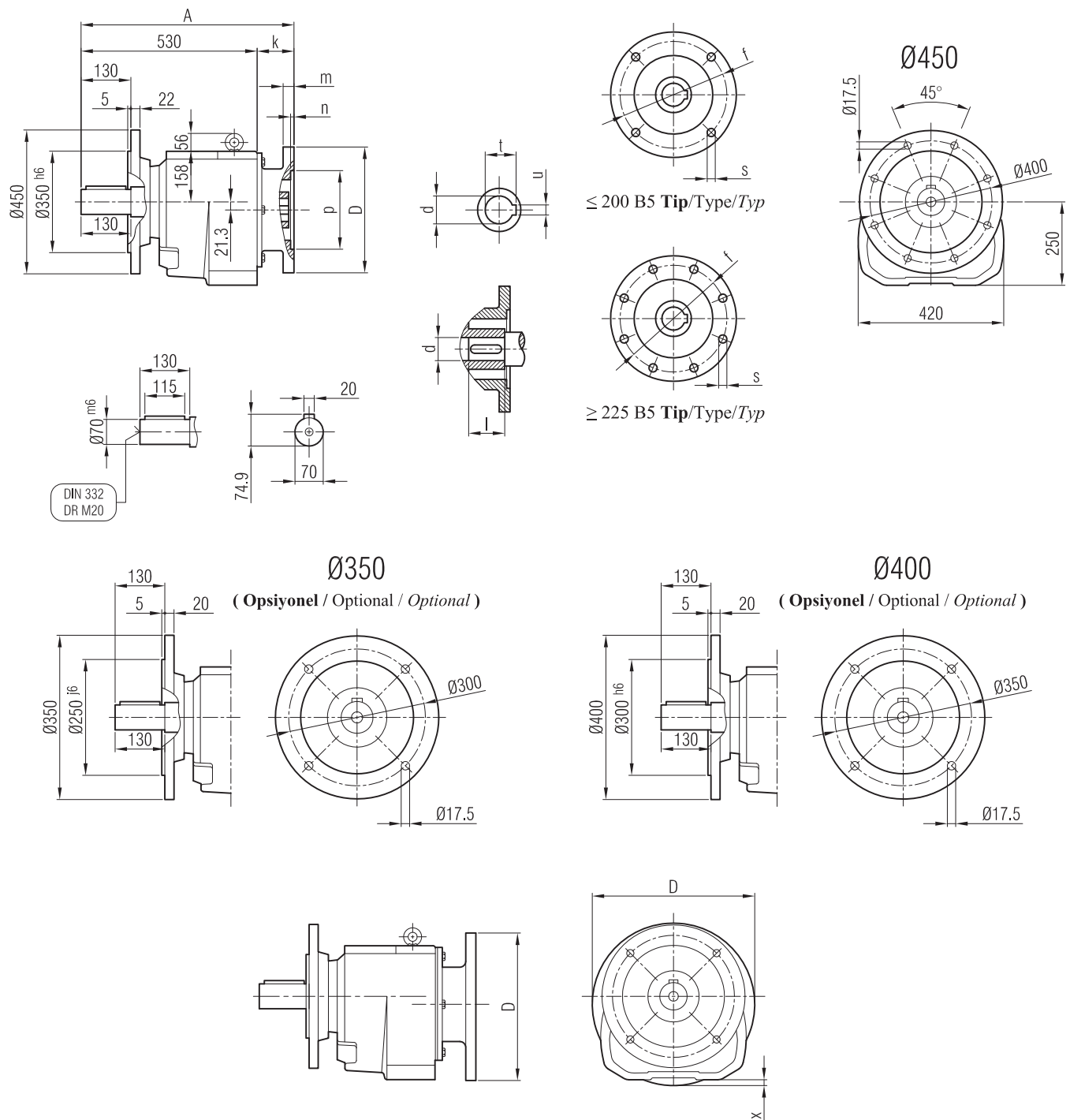


	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u	x				
100/B5	587	180	215	250	M12	57	15	5	28	60	31.3	8	-				
112/B5	587	180	215	250	M12	57	15	5	28	60	31.3	8	-				
132/B5	614	230	265	300	M14	84	17	6	38	80	41.3	10	-				
160/B5	621	250	300	350	M14	91	18	6.5	42	110	45.3	12	-				
180/B5	621	250	300	350	M14	91	18	6.5	48	110	51.8	14	-				
200/B5	689	300	350	400	M16	159	20	6.5	55	110	59.3	16	-				
225/B5	696	350	400	450	M16	166	24	6.5	60	140	64.4	18	-				





İRFP 102
İRFP 103

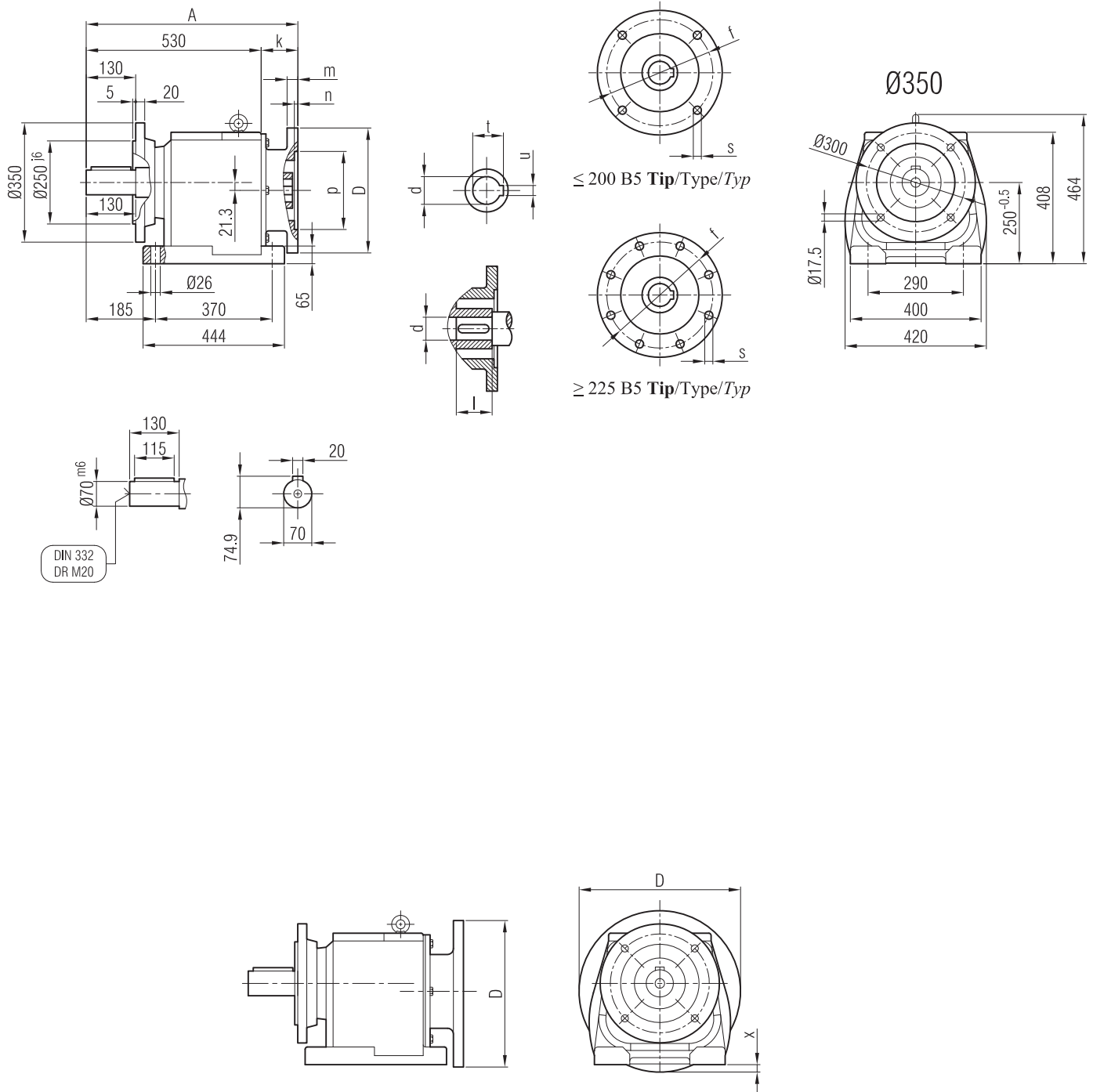


	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u	x				
100/B5	587	180	215	250	M12	57	15	5	28	60	31.3	8	-				
112/B5	587	180	215	250	M12	57	15	5	28	60	31.3	8	-				
132/B5	614	230	265	300	M14	84	17	6	38	80	41.3	10	-				
160/B5	621	250	300	350	M14	91	18	6.5	42	110	45.3	12	-				
180/B5	621	250	300	350	M14	91	18	6.5	48	110	51.8	14	-				
200/B5	689	300	350	400	M16	159	20	6.5	55	110	59.3	16	-				
225/B5	696	350	400	450	M16	166	24	6.5	60	140	64.4	18	-				





İRAFP 102
İRAFP 103

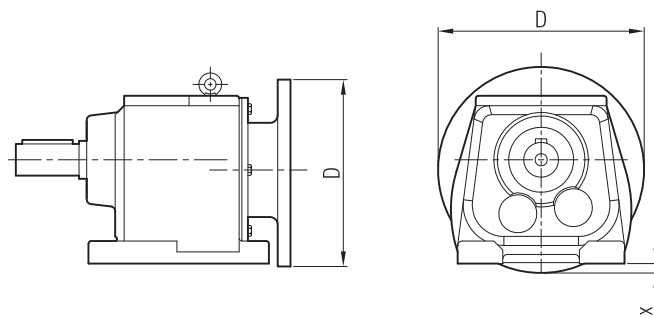
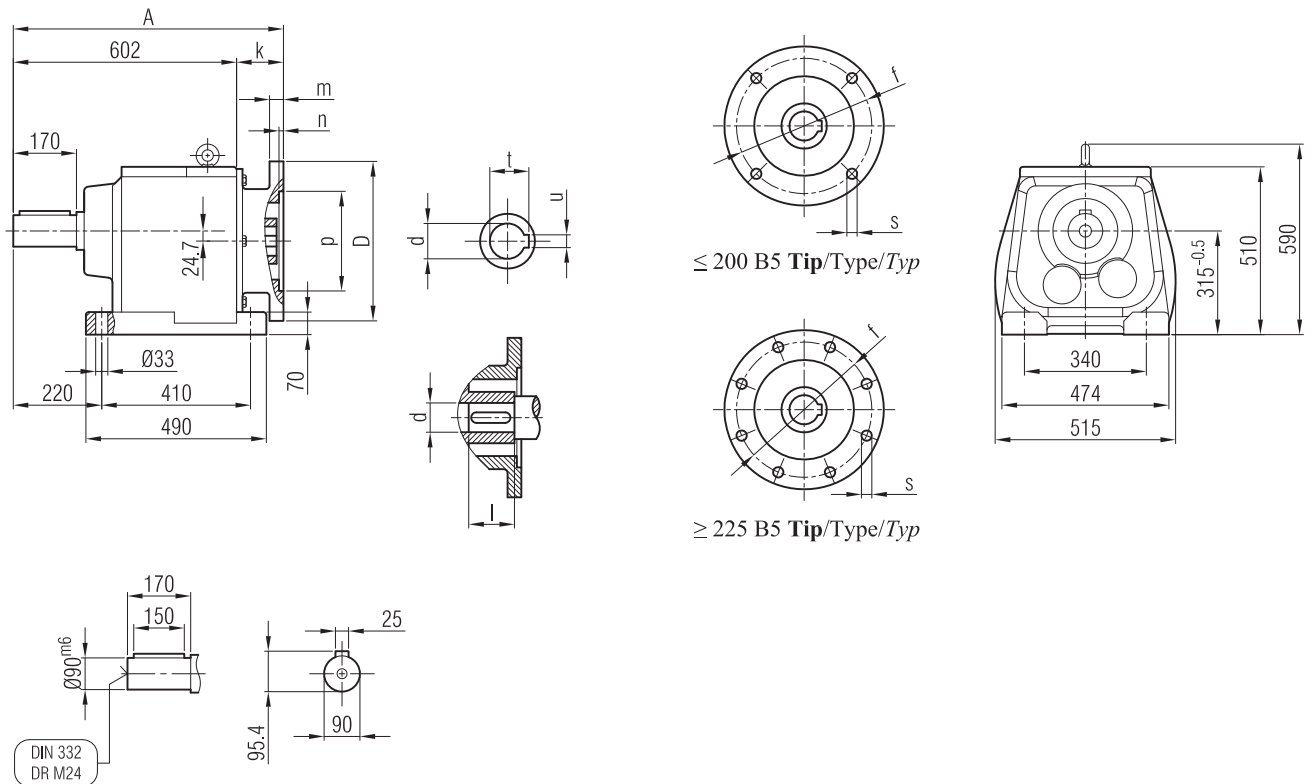


	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u	x				
100/B5	587	180	215	250	M12	57	15	5	28	60	31.3	8	-				
112/B5	587	180	215	250	M12	57	15	5	28	60	31.3	8	-				
132/B5	614	230	265	300	M14	84	17	6	38	80	41.3	10	-				
160/B5	621	250	300	350	M14	91	18	6.5	42	110	45.3	12	-				
180/B5	621	250	300	350	M14	91	18	6.5	48	110	51.8	14	-				
200/B5	689	300	350	400	M16	159	20	6.5	55	110	59.3	16	-				
225/B5	696	350	400	450	M16	166	24	6.5	60	140	64.4	18	-				





İRAP 122
İRAP 123

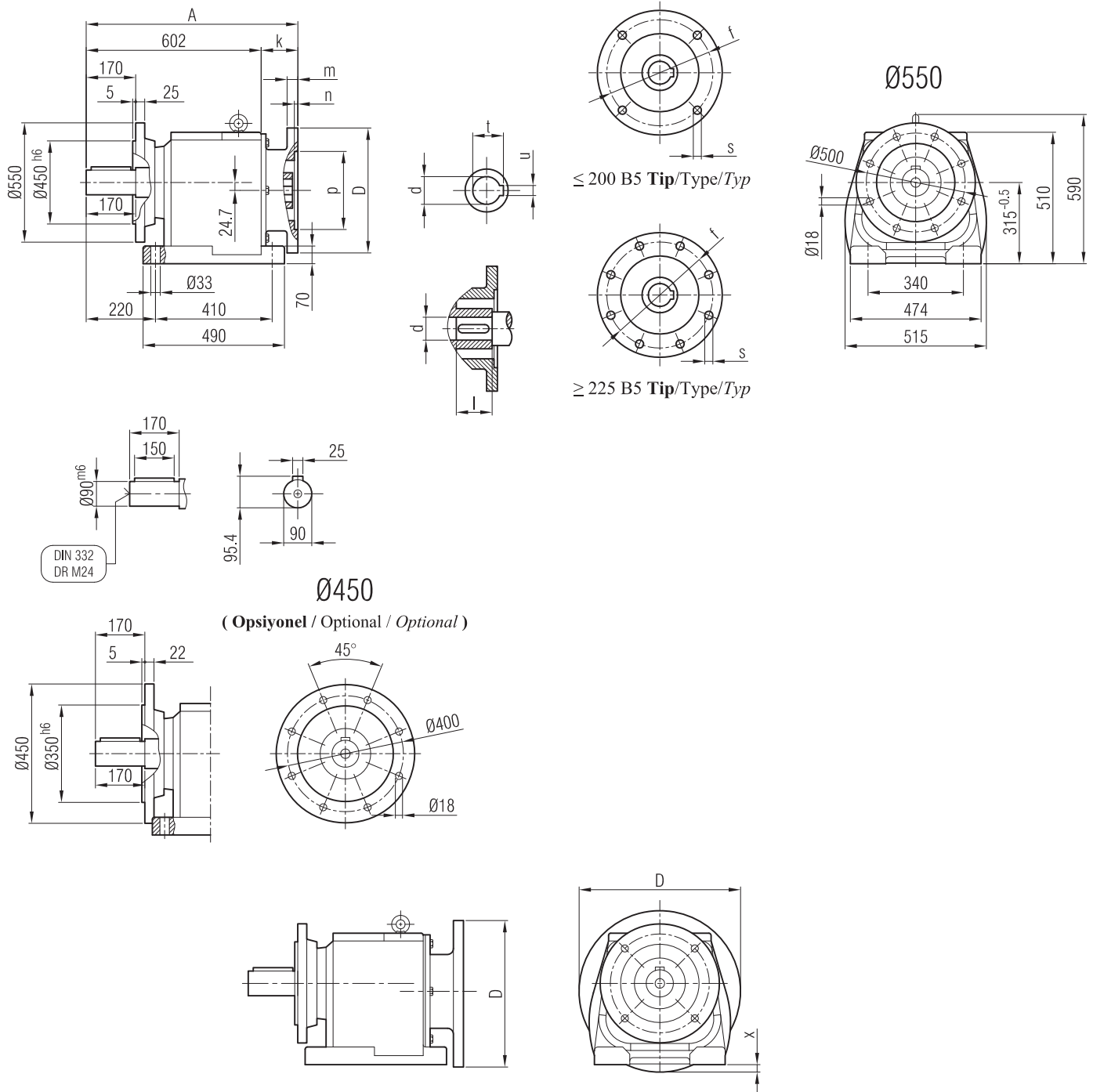


	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u	x				
132/B5	663	230	265	300	M14	61	17	6	38	80	41.3	10	-				
160/B5	693	250	300	350	M14	91	18	6.5	42	110	45.3	12	-				
180/B5	693	250	300	350	M14	91	18	6.5	48	110	51.8	14	-				
200/B5	761	300	350	400	M16	159	20	6.5	55	110	59.3	16	-				
225/B5	770	350	400	450	M16	168	22	6.5	60	140	64.4	18	-				
250/B5	770	450	500	550	M16	168	22	6.5	65	140	69.4	18	-				





İRAFP 122
İRAFP 123



	A	Øp	Øf	ØD	s	k	m	n	Ød	l	t	u	x				
132/B5	663	230	265	300	M14	61	17	6	38	80	41.3	10	-				
160/B5	693	250	300	350	M14	91	18	6.5	42	110	45.3	12	-				
180/B5	693	250	300	350	M14	91	18	6.5	48	110	51.8	14	-				
200/B5	761	300	350	400	M16	159	20	6.5	55	110	59.3	16	-				
225/B5	770	350	400	450	M16	168	22	6.5	60	140	64.4	18	-				
250/B5	770	450	500	550	M16	168	22	6.5	65	140	69.4	18	-				

