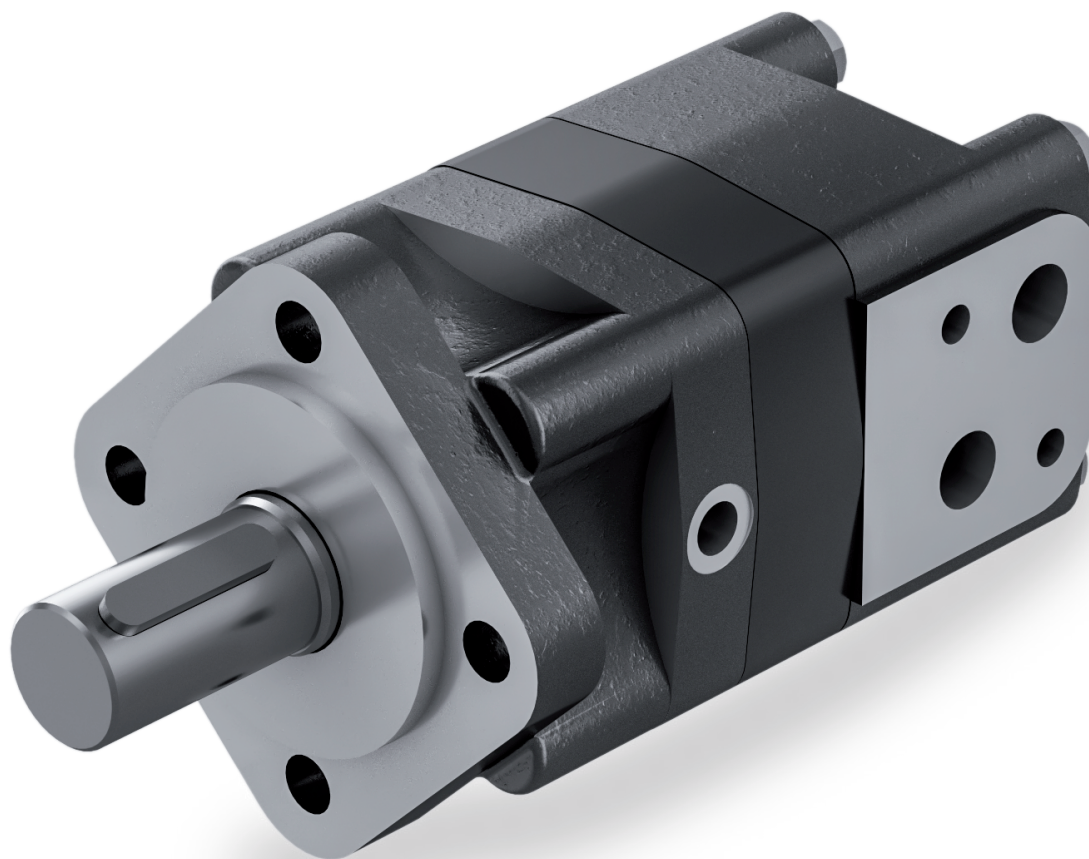
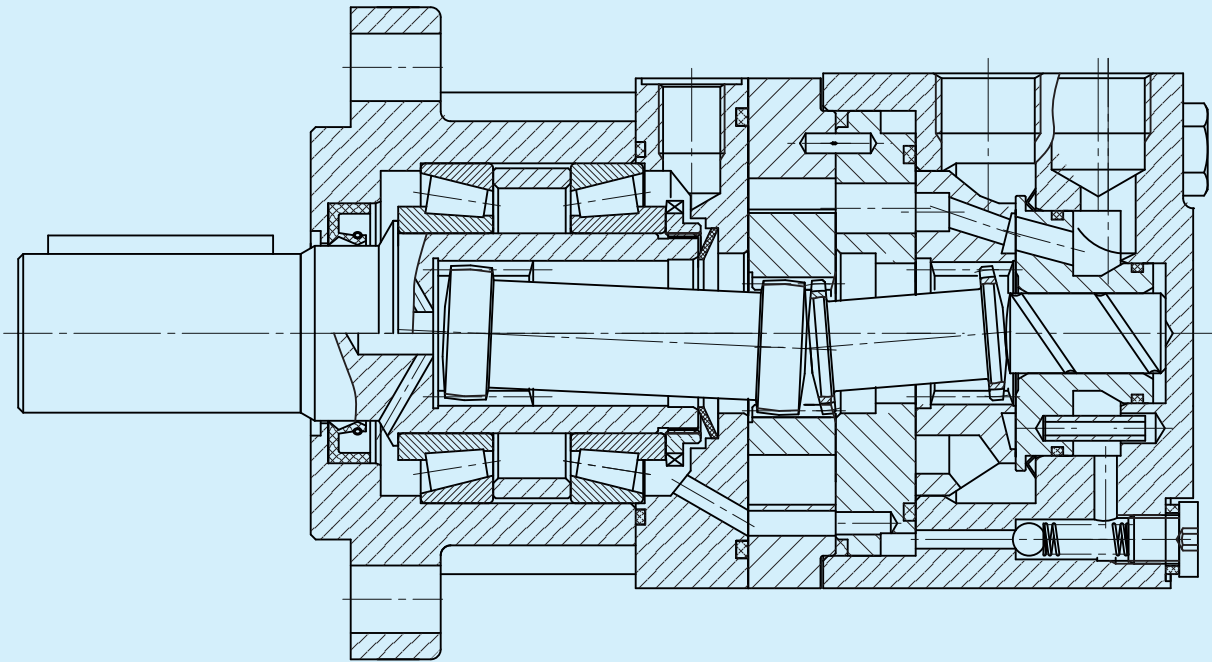


Roller motors with front distribution



Before use, carefully read the GENERAL INSTRUCTIONS FOR USE OF ORBITAL MOTORS.

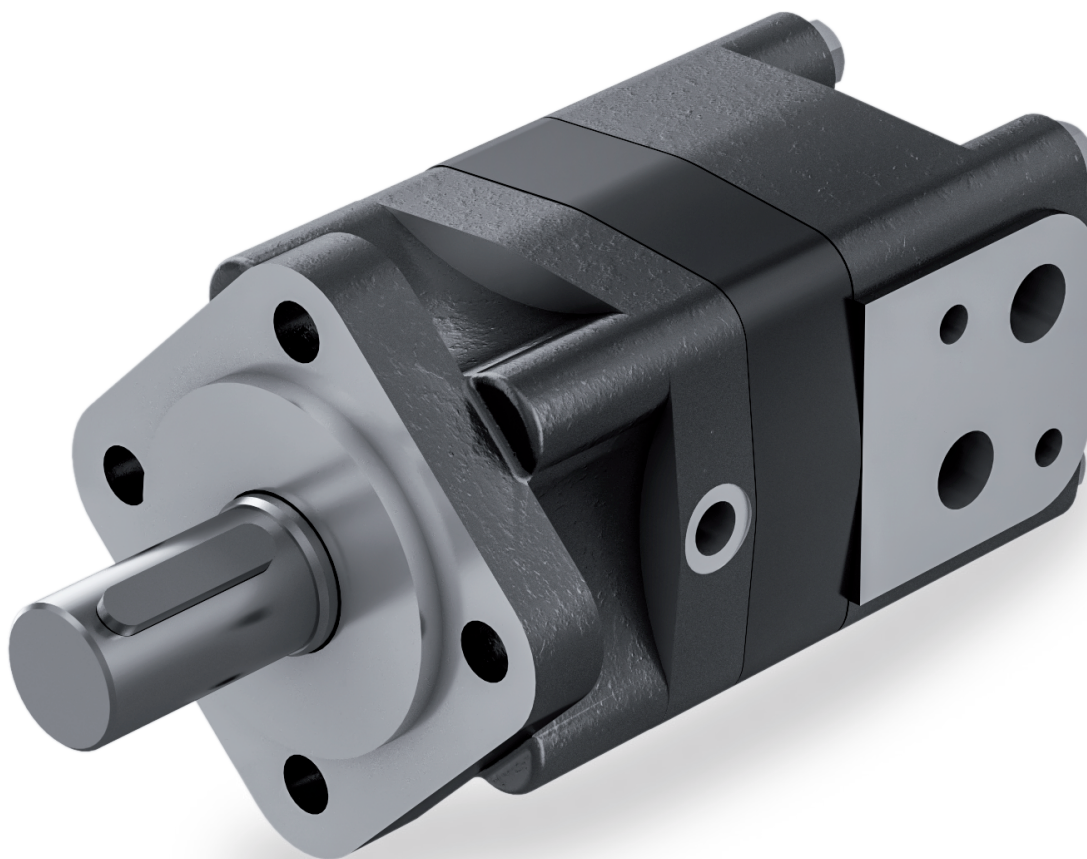


Roller motor with pressure-compensated disc valve distribution and tapered roller bearings, suitable for use where high radial and axial bearing capacities are required.

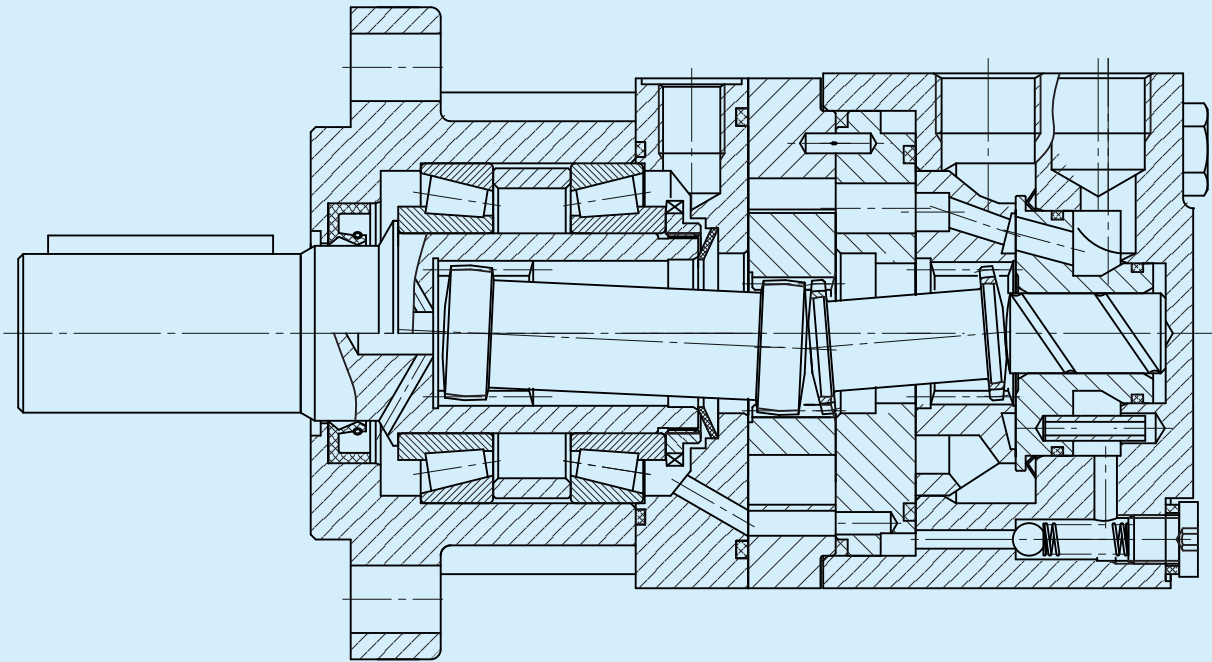
	Displacement	Pressure			Torque			Rotational speed	Max. flow rate	Max. output power	Weight
	cm <sup>3</sup> /rev	Continuous bar	Intermittent bar	Peak bar	Continuous Nm	Intermittent Nm	Peak Nm				
<b>080</b>	80.5	200	225	250	220	240	259	801	65	16	9.8
<b>100</b>	100.5	200	225	250	275	300	325	740	75	18	10
<b>125</b>	126.3	200	225	250	345	377	408	589	75	18	10.3
<b>160</b>	160.8	200	225	250	439	479	516	463	75	18	10.7
<b>200</b>	200.9	200	225	250	549	599	648	370	75	18	11.1
<b>250</b>	252.6	180	200	220	606	666	713	295	75	18	11.6
<b>315</b>	321.5	160	180	200	668	747	826	231	75	14	12.3
<b>400</b>	401.9	140	160	180	710	836	939	185	75	11	13.2

Intermittent conditions must not last more than 10% of each minute.  
Peak conditions must not last more than 1% of each minute.

## Roller motors with front distribution



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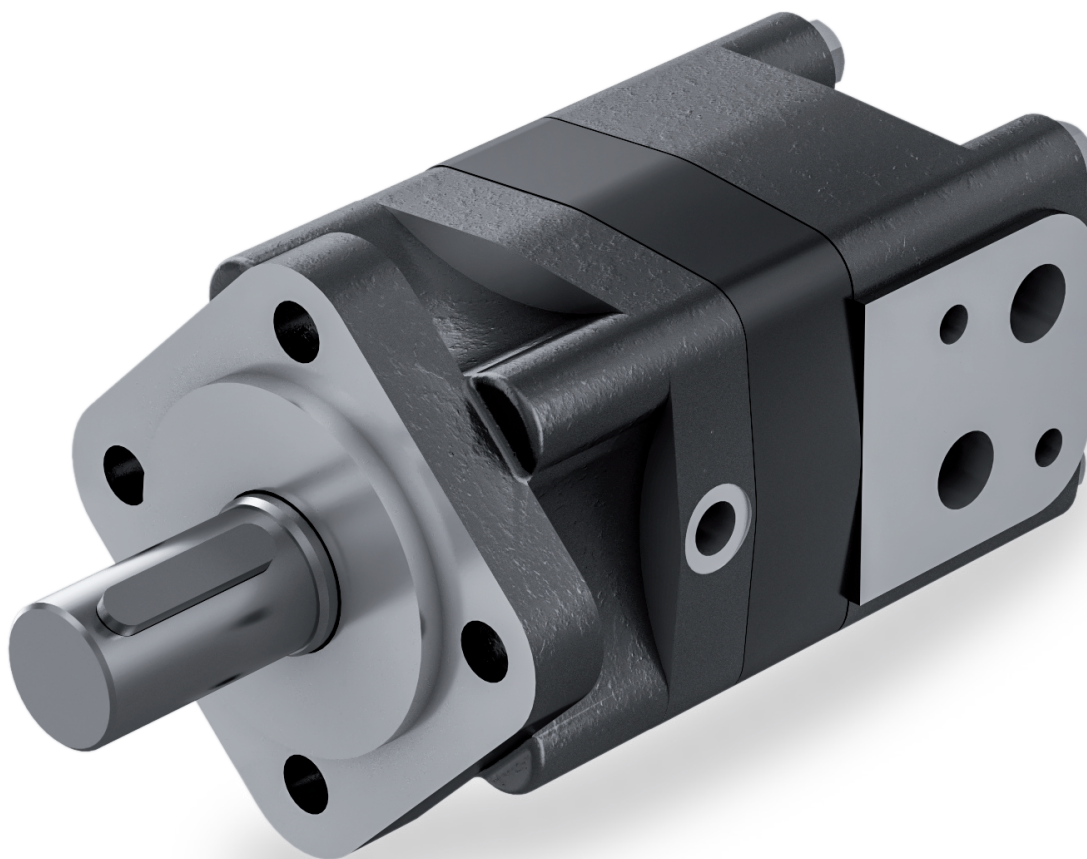


Roller motor with pressure-compensated disc valve distribution and tapered roller bearings, suitable for use where high radial and axial bearing capacities are required.

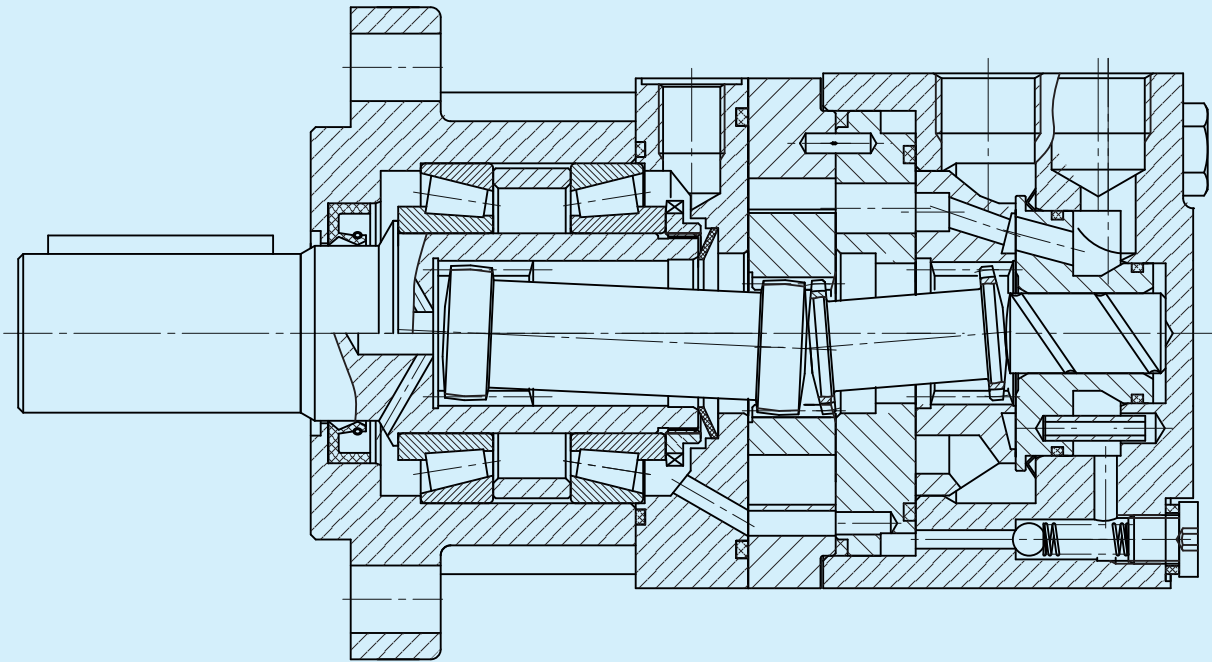
	Displacement		Pressure			Torque			Rotational speed	Max. flow rate	Max. output power	Weight
	cm <sup>3</sup> /rev	Continuous bar	Intermittent bar	Peak bar	Continuous Nm	Intermittent Nm	Peak Nm					
<b>080</b>	80.5	200	225	250	220	240	259	801	65	16	9.8	
<b>100</b>	100.5	200	225	250	275	300	325	740	75	18	10	
<b>125</b>	126.3	200	225	250	345	377	408	589	75	18	10.3	
<b>160</b>	160.8	200	225	250	439	479	516	463	75	18	10.7	
<b>200</b>	200.9	200	225	250	549	599	648	370	75	18	11.1	
<b>250</b>	252.6	180	200	220	606	666	713	295	75	18	11.6	
<b>315</b>	321.5	160	180	200	668	747	826	231	75	14	12.3	
<b>400</b>	401.9	140	160	180	710	836	939	185	75	11	13.2	

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## Roller motors with front distribution



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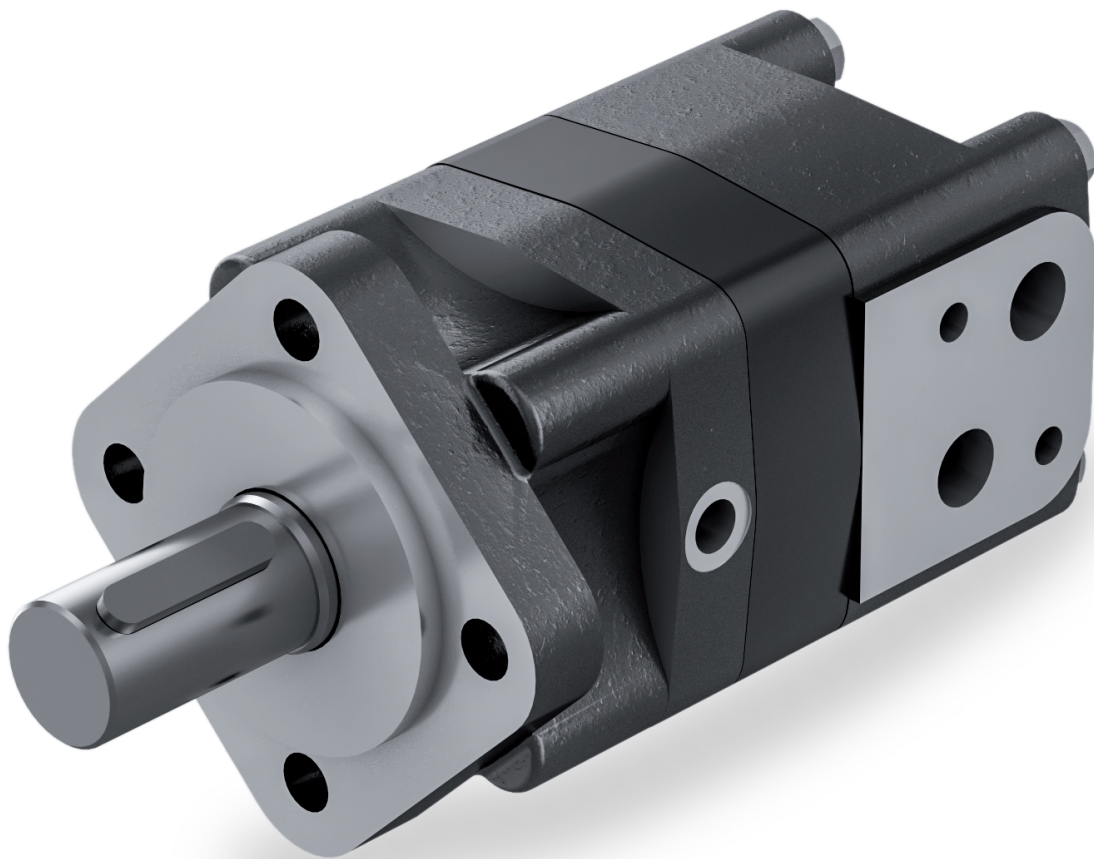


Roller motor with pressure-compensated disc valve distribution and tapered roller bearings, suitable for use where high radial and axial bearing capacities are required.

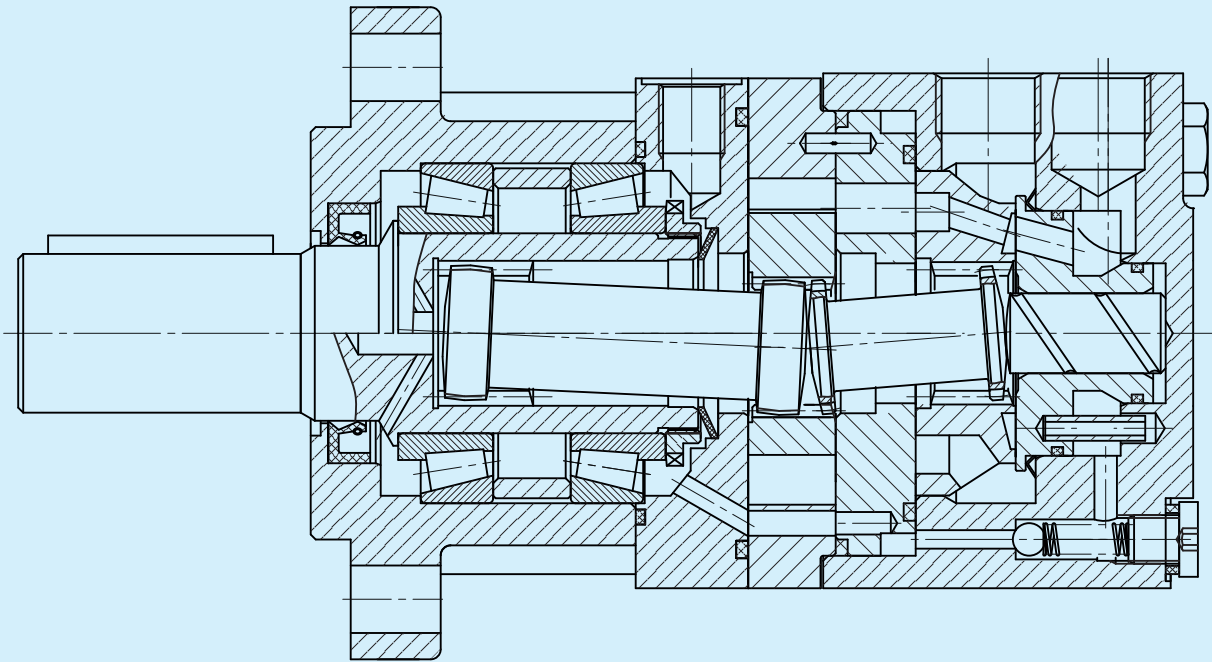
	Displacement		Pressure			Torque			Rotational speed	Max. flow rate	Max. output power	Weight
	cm <sup>3</sup> /rev	Continuous bar	Intermittent bar	Peak bar	Continuous Nm	Intermittent Nm	Peak Nm					
<b>080</b>	80.5	200	225	250	220	240	259	801	65	16	9.8	
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<b>315</b>	321.5	160	180	200	668	747	826	231	75	14	12.3	
<b>400</b>	401.9	140	160	180	710	836	939	185	75	11	13.2	

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## Roller motors with front distribution



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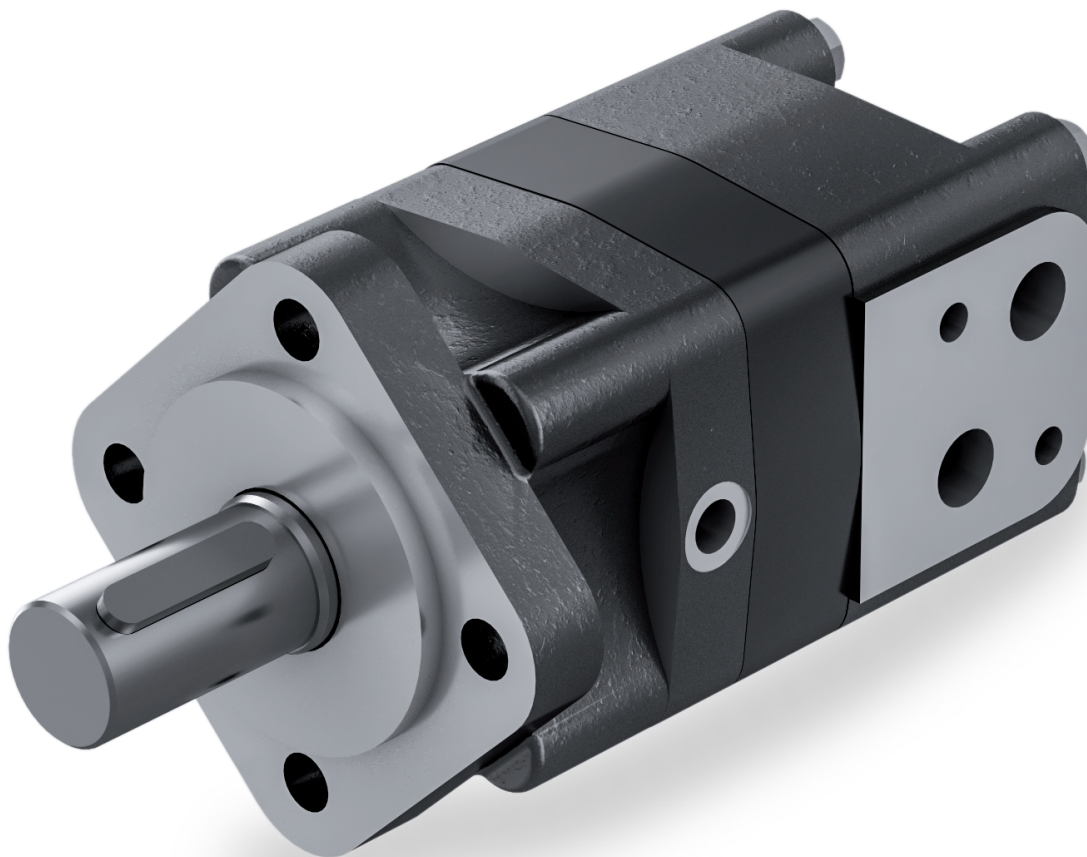
Roller motor with pressure-compensated disc valve distribution and tapered roller bearings, suitable for use where high radial and axial bearing capacities are required.

	Displacement		Pressure			Torque			Rotational speed	Max. flow rate	Max. output power	Weight
	cm <sup>3</sup> /rev	Continuous bar	Intermittent bar	Peak bar	Continuous Nm	Intermittent Nm	Peak Nm					
<b>080</b>	80.5	200	225	250	220	240	259	801	65	16	9.8	
<b>100</b>	100.5	200	225	250	275	300	325	740	75	18	10	
<b>125</b>	126.3	200	225	250	345	377	408	589	75	18	10.3	
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<b>200</b>	200.9	200	225	250	549	599	648	370	75	18	11.1	
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<b>315</b>	321.5	160	180	200	668	747	826	231	75	14	12.3	
<b>400</b>	401.9	140	160	180	710	836	939	185	75	11	13.2	

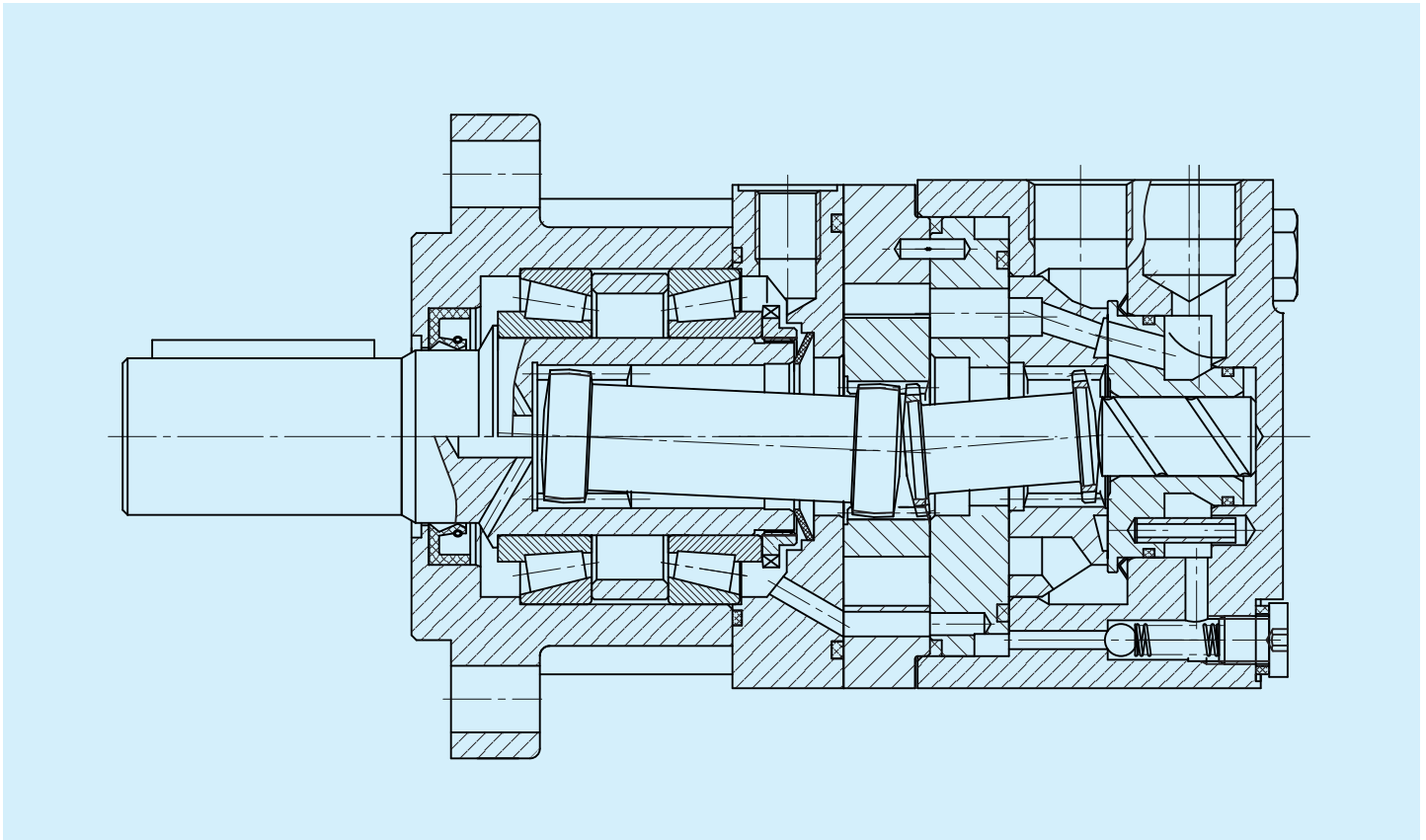
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## Roller motors with front distribution



Before use, carefully read the GENERAL INSTRUCTIONS FOR USE OF ORBITAL MOTORS.

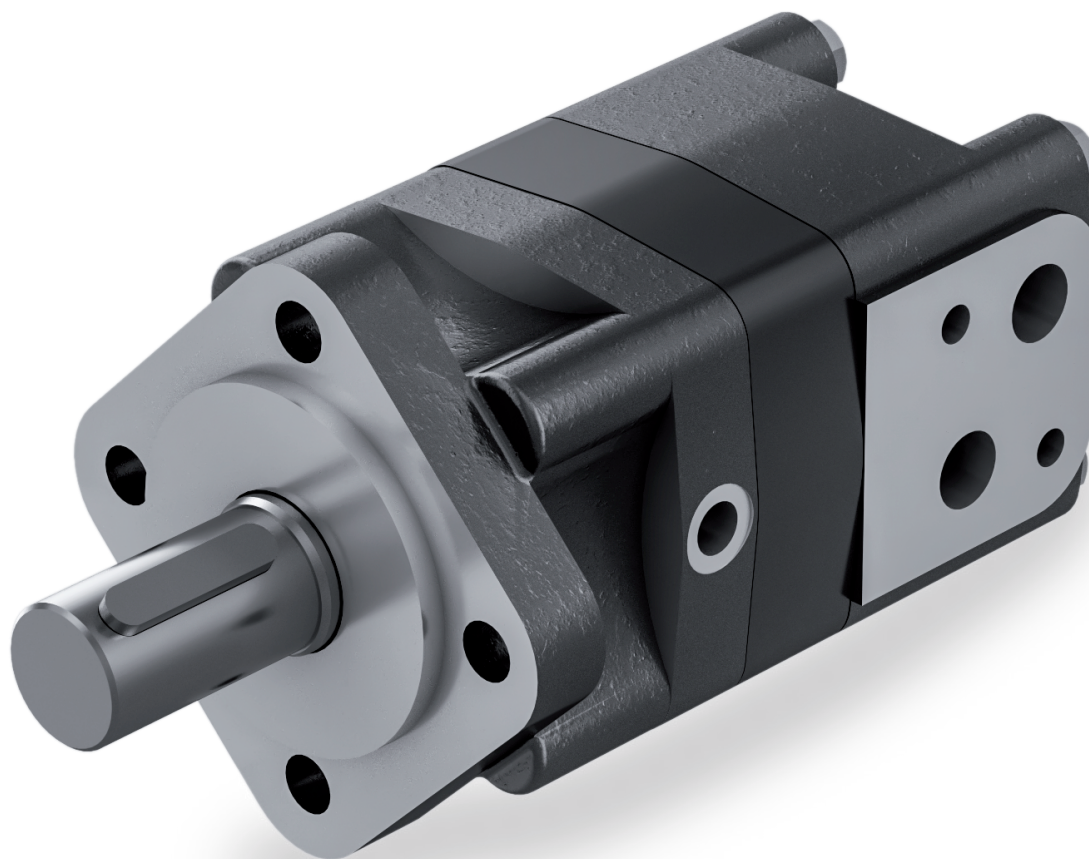


Roller motor with pressure-compensated disc valve distribution and tapered roller bearings, suitable for use where high radial and axial bearing capacities are required.

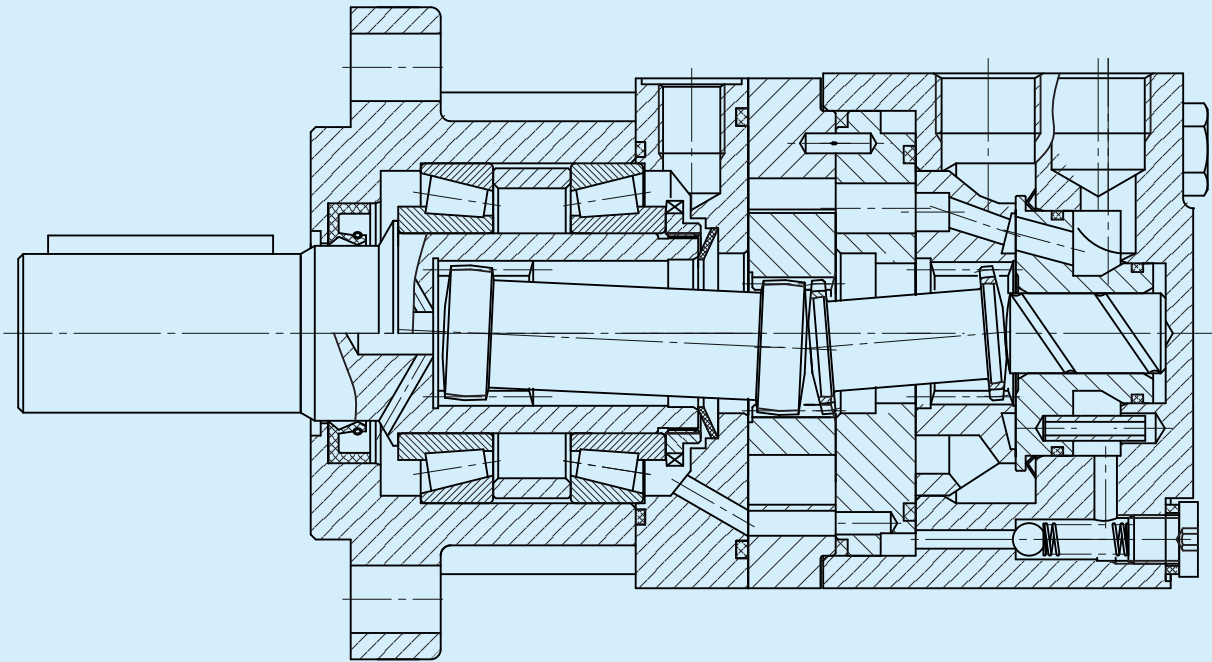
	Displacement		Pressure			Torque			Rotational speed	Max. flow rate	Max. output power	Weight
	cm <sup>3</sup> /rev	Continuous bar	Intermittent bar	Peak bar	Continuous Nm	Intermittent Nm	Peak Nm					
<b>080</b>	80.5	200	225	250	220	240	259	801	65	16	9.8	
<b>100</b>	100.5	200	225	250	275	300	325	740	75	18	10	
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<b>200</b>	200.9	200	225	250	549	599	648	370	75	18	11.1	
<b>250</b>	252.6	180	200	220	606	666	713	295	75	18	11.6	
<b>315</b>	321.5	160	180	200	668	747	826	231	75	14	12.3	
<b>400</b>	401.9	140	160	180	710	836	939	185	75	11	13.2	

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## Roller motors with front distribution



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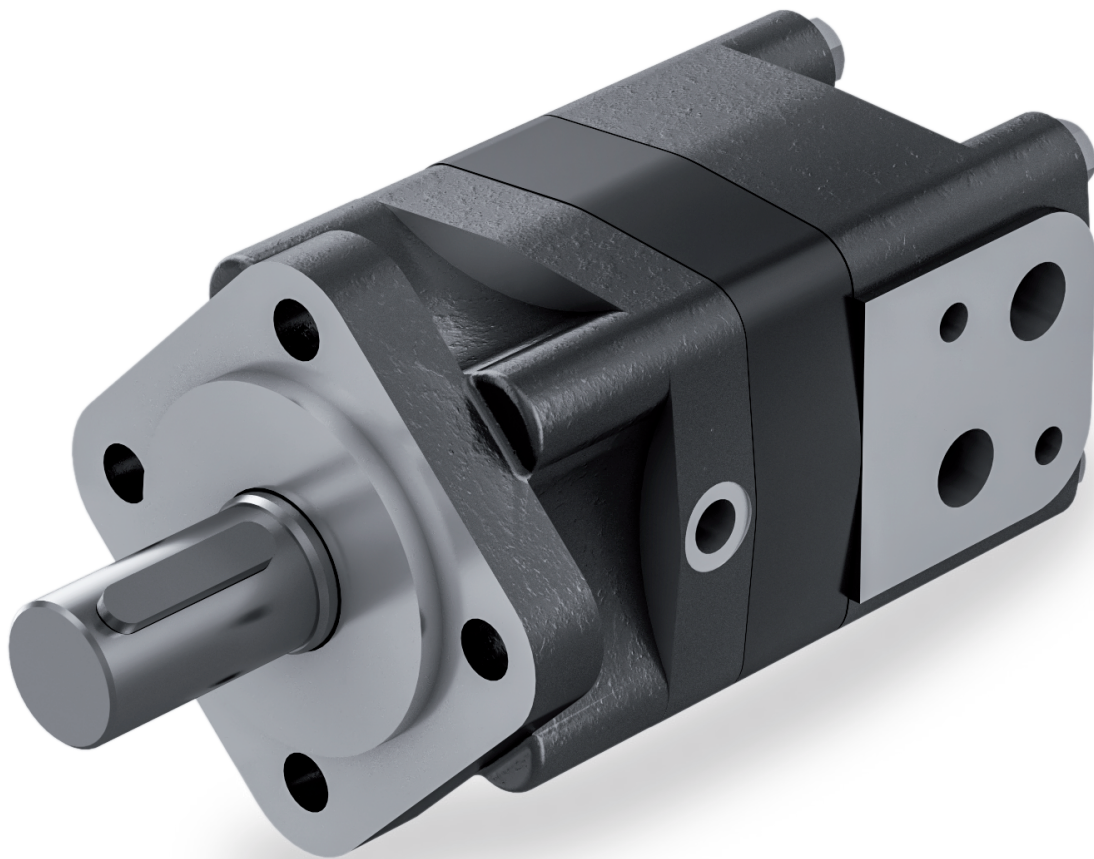


Roller motor with pressure-compensated disc valve distribution and tapered roller bearings, suitable for use where high radial and axial bearing capacities are required.

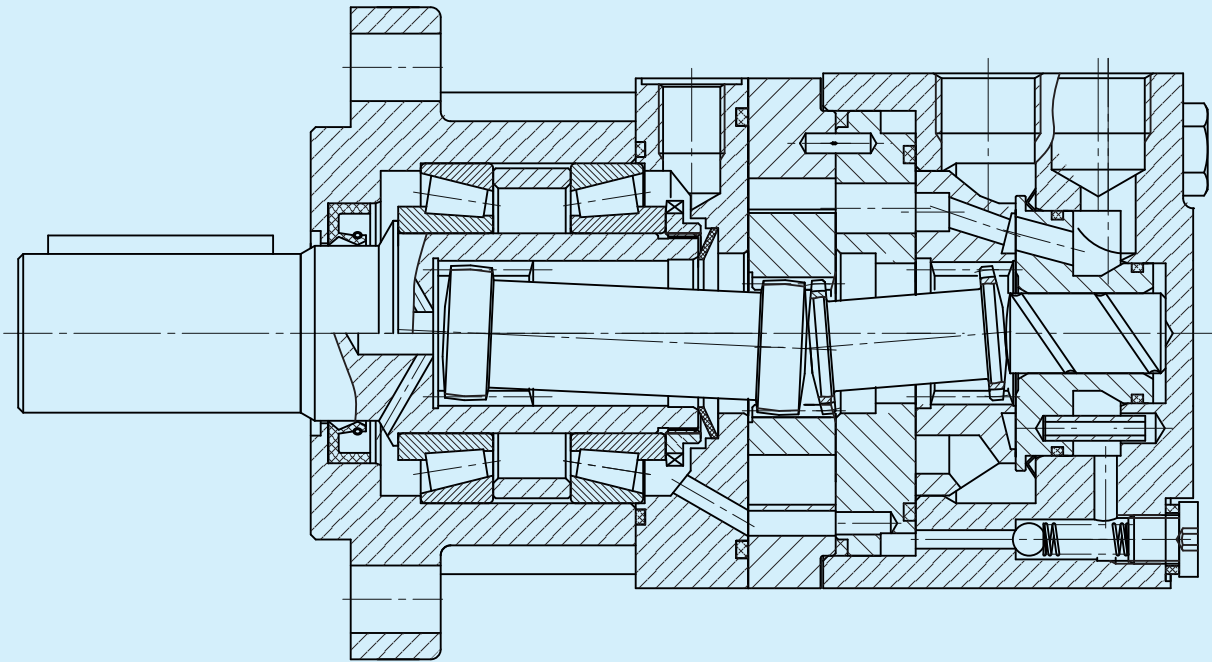
	Displacement		Pressure			Torque			Rotational speed	Max. flow rate	Max. output power	Weight
	cm <sup>3</sup> /rev	Continuous bar	Intermittent bar	Peak bar	Continuous Nm	Intermittent Nm	Peak Nm					
<b>080</b>	80.5	200	225	250	220	240	259	801	65	16	9.8	
<b>100</b>	100.5	200	225	250	275	300	325	740	75	18	10	
<b>125</b>	126.3	200	225	250	345	377	408	589	75	18	10.3	
<b>160</b>	160.8	200	225	250	439	479	516	463	75	18	10.7	
<b>200</b>	200.9	200	225	250	549	599	648	370	75	18	11.1	
<b>250</b>	252.6	180	200	220	606	666	713	295	75	18	11.6	
<b>315</b>	321.5	160	180	200	668	747	826	231	75	14	12.3	
<b>400</b>	401.9	140	160	180	710	836	939	185	75	11	13.2	

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## Roller motors with front distribution



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Roller motor with pressure-compensated disc valve distribution and tapered roller bearings, suitable for use where high radial and axial bearing capacities are required.

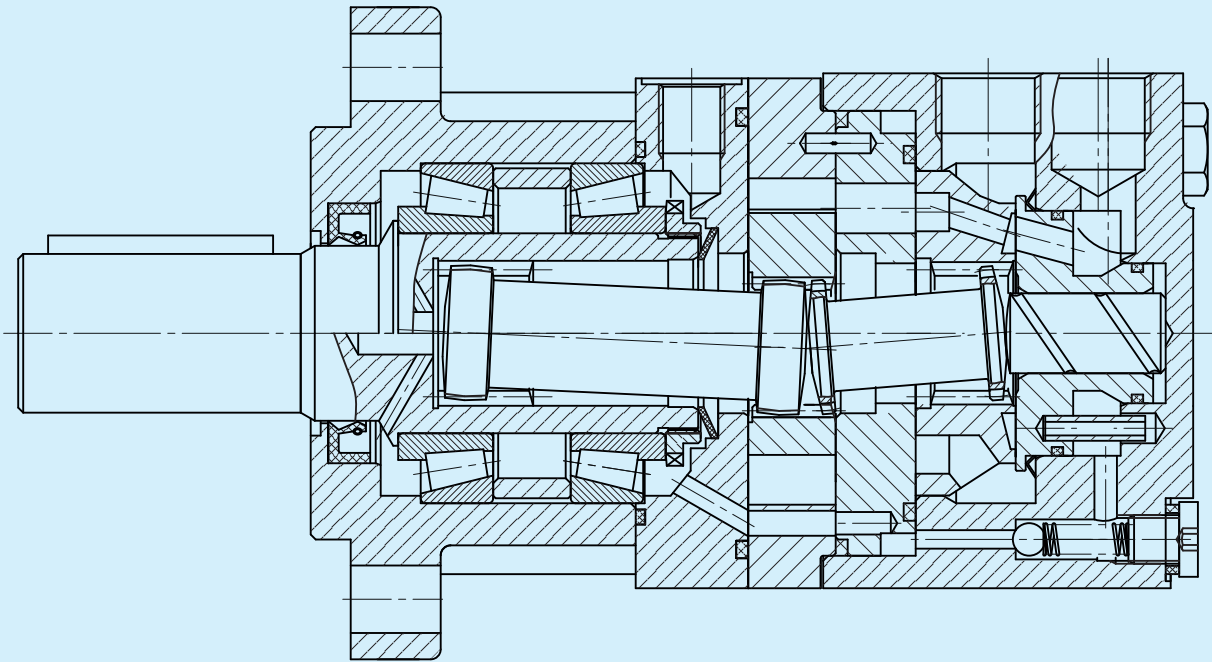
	Displacement		Pressure			Torque			Rotational speed	Max. flow rate	Max. output power	Weight
	cm <sup>3</sup> /rev	Continuous bar	Intermittent bar	Peak bar	Continuous Nm	Intermittent Nm	Peak Nm					
<b>080</b>	80.5	200	225	250	220	240	259	801	65	16	9.8	
<b>100</b>	100.5	200	225	250	275	300	325	740	75	18	10	
<b>125</b>	126.3	200	225	250	345	377	408	589	75	18	10.3	
<b>160</b>	160.8	200	225	250	439	479	516	463	75	18	10.7	
<b>200</b>	200.9	200	225	250	549	599	648	370	75	18	11.1	
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Roller motors with front distribution



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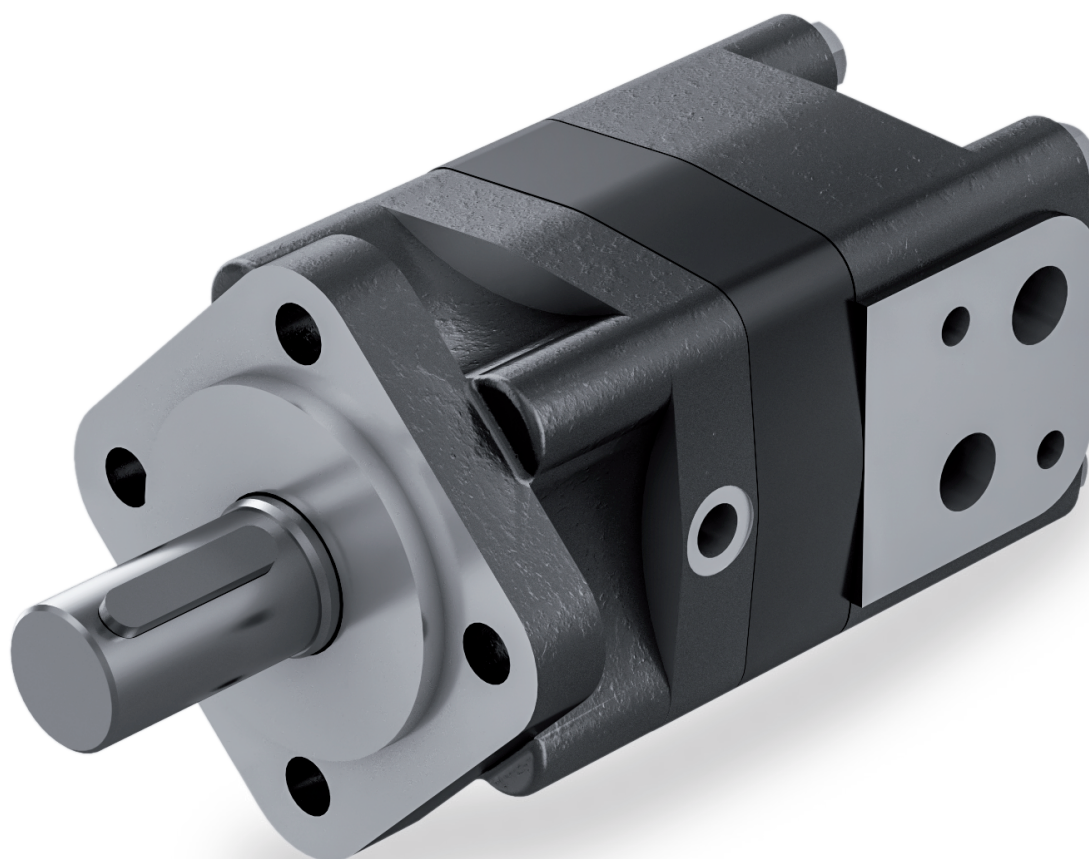
Roller motor with pressure-compensated disc valve distribution and tapered roller bearings, suitable for use where high radial and axial bearing capacities are required.

	Displacement		Pressure			Torque			Rotational speed	Max. flow rate	Max. output power	Weight
	cm <sup>3</sup> /rev	Continuous bar	Intermittent bar	Peak bar	Continuous Nm	Intermittent Nm	Peak Nm					
<b>080</b>	80.5	200	225	250	220	240	259	801	65	16	9.8	
<b>100</b>	100.5	200	225	250	275	300	325	740	75	18	10	
<b>125</b>	126.3	200	225	250	345	377	408	589	75	18	10.3	
<b>160</b>	160.8	200	225	250	439	479	516	463	75	18	10.7	
<b>200</b>	200.9	200	225	250	549	599	648	370	75	18	11.1	
<b>250</b>	252.6	180	200	220	606	666	713	295	75	18	11.6	
<b>315</b>	321.5	160	180	200	668	747	826	231	75	14	12.3	
<b>400</b>	401.9	140	160	180	710	836	939	185	75	11	13.2	

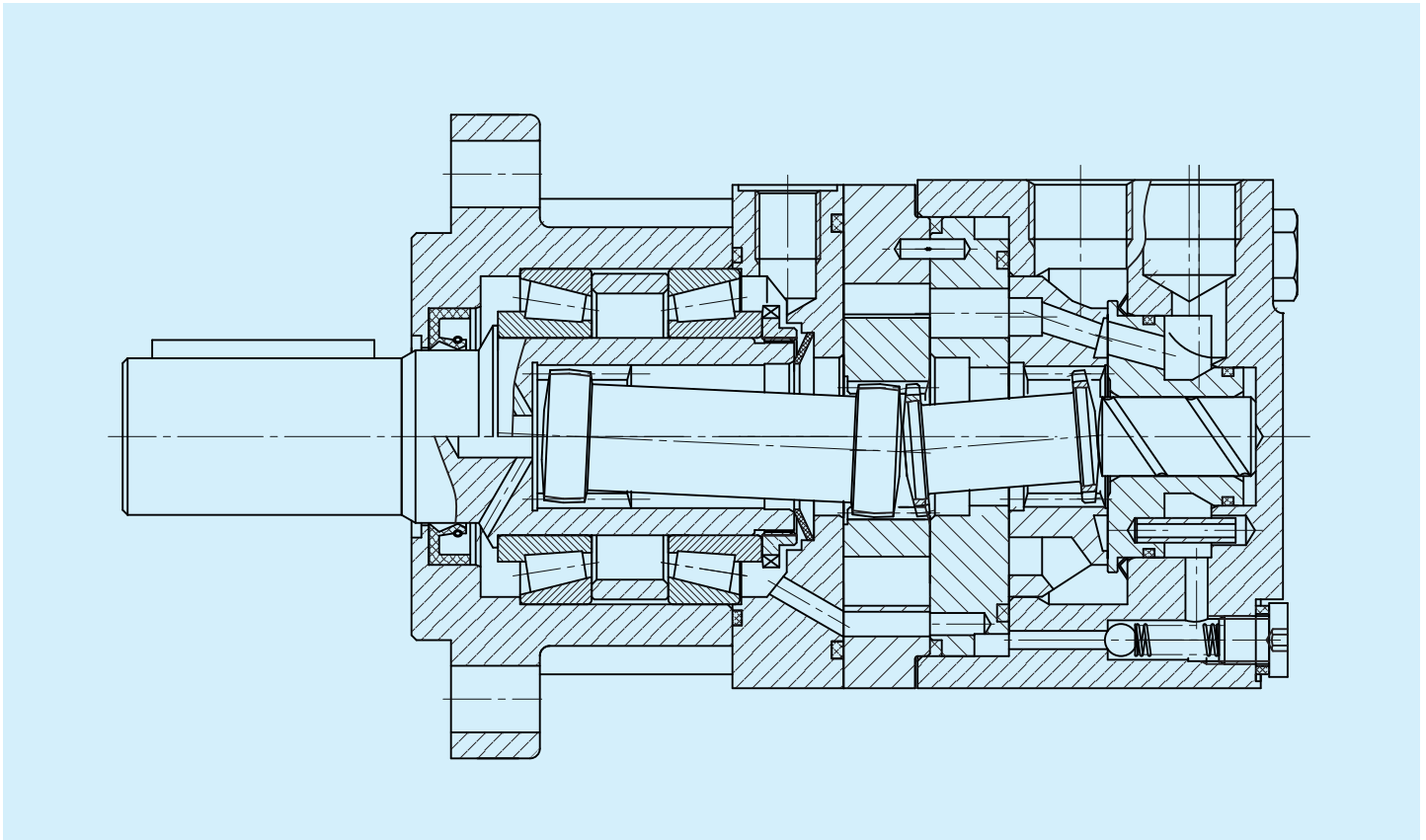
Intermittent conditions must not last more than 10% of each minute.  
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## Roller motors with front distribution



Before use, carefully read the GENERAL INSTRUCTIONS FOR USE OF ORBITAL MOTORS.

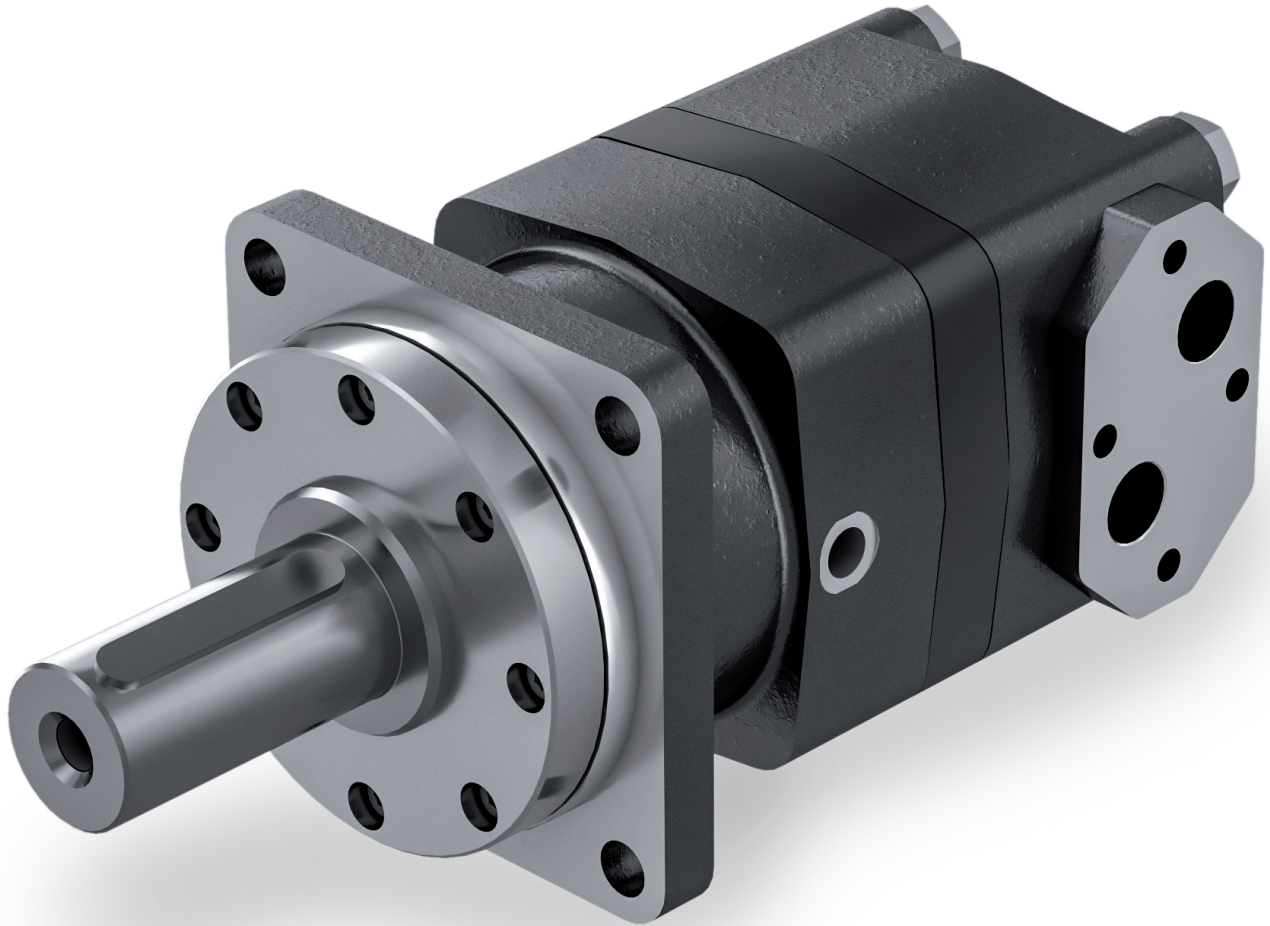


Roller motor with pressure-compensated disc valve distribution and tapered roller bearings, suitable for use where high radial and axial bearing capacities are required.

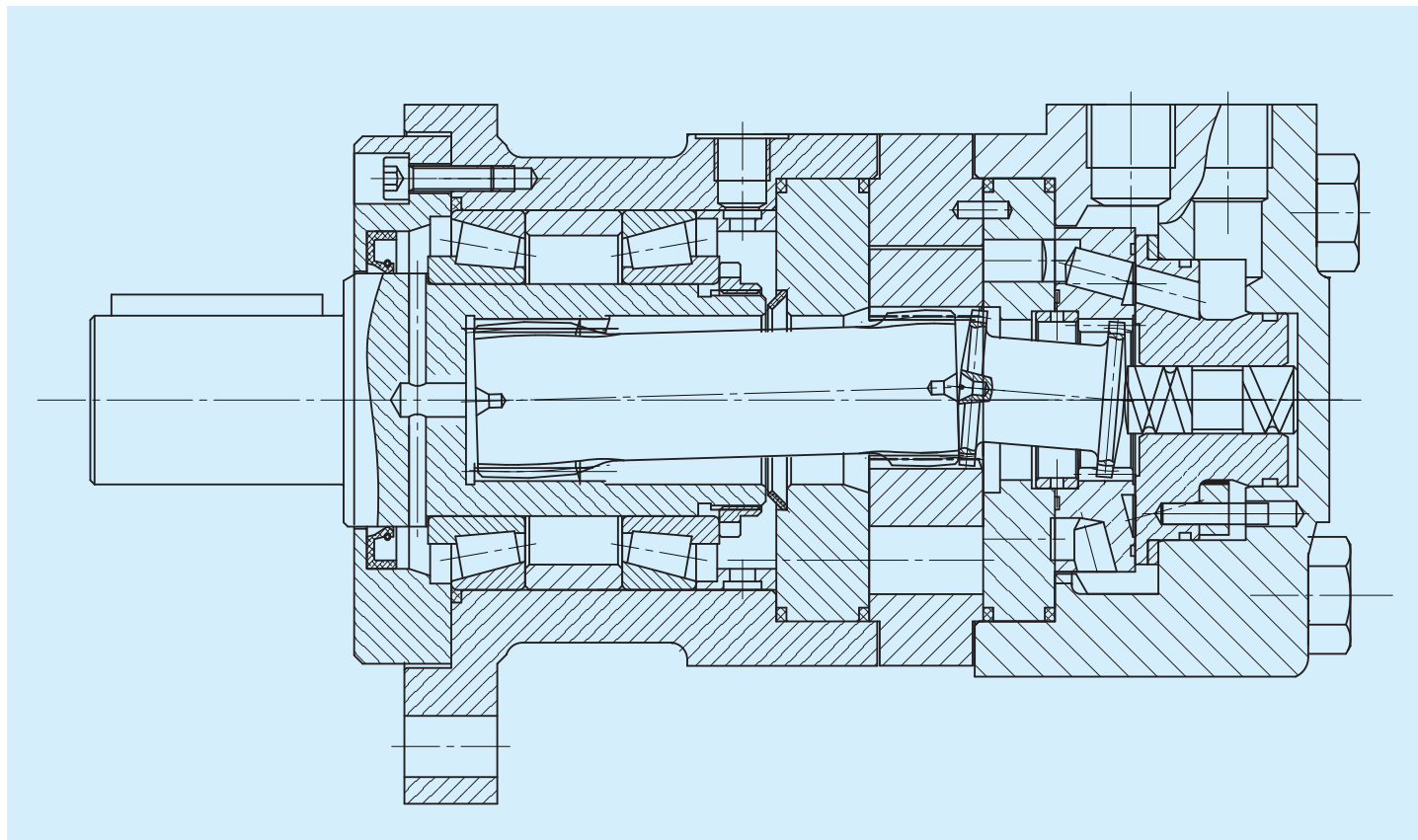
	Displacement		Pressure			Torque			Rotational speed	Max. flow rate	Max. output power	Weight
	cm <sup>3</sup> /rev	Continuous bar	Intermittent bar	Peak bar	Continuous Nm	Intermittent Nm	Peak Nm					
<b>080</b>	80.5	200	225	250	220	240	259	801	65	16	9.8	
<b>100</b>	100.5	200	225	250	275	300	325	740	75	18	10	
<b>125</b>	126.3	200	225	250	345	377	408	589	75	18	10.3	
<b>160</b>	160.8	200	225	250	439	479	516	463	75	18	10.7	
<b>200</b>	200.9	200	225	250	549	599	648	370	75	18	11.1	
<b>250</b>	252.6	180	200	220	606	666	713	295	75	18	11.6	
<b>315</b>	321.5	160	180	200	668	747	826	231	75	14	12.3	
<b>400</b>	401.9	140	160	180	710	836	939	185	75	11	13.2	

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## Roller motors with front distribution



Before use, carefully read the GENERAL INSTRUCTIONS FOR USE OF ORBITAL MOTORS.



Roller motor with pressure-compensated disc valve distribution and tapered roller bearings, suitable for use where very high radial and axial bearing capacities are required.

	Displacement	Pressure			Torque			Rotational speed min <sup>-1</sup>	Max. flow rate l/min	Max. output power kW	Weight kg
	cm <sup>3</sup> /rev	Continuous bar	Intermittent bar	Peak bar	Continuous Nm	Intermittent Nm	Peak Nm				
<b>160</b>	158.8	240	270	300	559	639	710	10-625	100	24.1	20.3
<b>200</b>	200.8	240	270	300	714	789	879	9-500	100	30	20.8
<b>250</b>	252.2	240	270	300	883	985	1093	8-400	100	30	21.4
<b>320</b>	317.5	230	260	290	1095	1227	1369	7-312	100	28.8	22.4
<b>400</b>	401.6	210	230	250	1255	1371	1490	6-250	100	25.3	23
<b>500</b>	535.5	180	200	230	1377	1521	1750	5-175	100	24.1	24

Intermittent conditions must not last more than 10% of each minute.  
Peak conditions must not last more than 1% of each minute.

## 160 158.8 cm<sup>3</sup>/rev

Flow rate l/min	Pressure bar						
	40	80	120	160	200	240	270
10	77 61	158 60	243 57	336 55	430 51	516 45	574 41
20	79 122	162 120	249 115	336 111	435 107	522 101	587 91
40	80 247	166 242	255 239	348 232	440 224	534 217	601 189
60	79 370	162 366	249 363	336 355	435 348	522 340	587 302
80	75 499	158 494	246 489	332 479	425 469	510 458	574 413
100	68 623	154 617	243 611	328 598	420 586	504 573	567 529
125	61 779	142 771	228 764	324 748	410 732	492 716	553 661

Torque Nm  
Rotational speed min<sup>-1</sup>

Pressure Continuous

Pressure Intermittent

## 200 200.8 cm<sup>3</sup>/rev

Flow rate l/min	Pressure bar						
	40	80	120	160	200	240	270
10	97 48	200 47	307 45	425 44	544 40	652 36	725 32
20	100 97	205 95	315 91	425 88	550 85	660 80	742 72
40	101 195	210 191	322 189	440 183	556 177	675 171	760 149
60	100 293	205 290	315 287	425 281	550 275	660 269	742 239
80	95 394	200 390	311 386	420 378	537 371	645 363	725 327
100	86 493	194 488	307 483	414 473	531 463	637 453	717 418
125	77 616	179 610	288 604	409 591	518 579	622 566	699 523

Torque Nm  
Rotational speed min<sup>-1</sup>

Pressure Continuous

Pressure Intermittent

## 250 252.2 cm<sup>3</sup>/rev

Flow rate l/min	Pressure bar						
	40	80	120	160	200	240	270
10	122 38	251 38	386 36	533 35	683 32	819 29	911 26
20	125 77	257 75	395 72	533 70	691 67	829 63	932 57
40	127 155	263 152	405 151	553 146	699 141	848 136	954 119
60	125 233	257 231	395 228	533 224	691 219	829 214	932 190
80	119 314	251 311	390 308	527 301	675 295	810 289	911 260
100	108 393	244 389	386 385	520 377	667 369	800 361	900 333
125	96 491	225 486	361 481	514 471	651 461	781 451	878 416

Torque Nm  
Rotational speed min<sup>-1</sup>

Pressure Continuous

Pressure Intermittent

## 320 317.5 cm<sup>3</sup>/rev

Flow rate l/min	Pressure bar						
	40	80	120	160	200	230	260
10	154 31	315 30	485 29	671 28	859 26	988 23	1104 20
20	158 61	324 60	497 57	671 55	870 54	1000 50	1130 45
40	160 123	332 121	510 120	696 116	880 112	1023 108	1157 94
60	158 185	324 183	497 181	671 178	870 174	1000 170	1130 151
80	150 249	315 247	491 244	663 239	849 234	977 229	1104 207
100	135 312	307 309	485 306	655 299	839 293	965 287	1091 265
125	121 390	283 386	455 382	647 374	819 366	942 358	1065 331

Torque Nm  
Rotational speed min<sup>-1</sup>

Pressure Continuous

Pressure Intermittent

## 400 401.6 cm<sup>3</sup>/rev

Flow rate l/min	Pressure bar						
	30	60	100	140	180	210	230
10	146 24	299 24	512 23	743 22	978 20	1141 18	1235 16
20	150 48	307 47	524 45	743 44	990 42	1155 40	1265 36
40	152 98	315 96	537 95	770 92	1001 89	1182 86	1294 75
60	150 146	307 145	524 143	743 140	990 137	1166 134	1265 120
80	142 197	299 195	518 193	734 189	967 185	1142 181	1235 163
100	129 247	292 244	512 242	725 237	955 232	1115 227	1221 209
125	115 308	269 305	480 302	716 296	932 289	1088 283	1191 261

Torque Nm  
Rotational speed min<sup>-1</sup>

Pressure Continuous

Pressure Intermittent

## 500 535.3 cm<sup>3</sup>/rev

Flow rate l/min	Pressure bar						
	30	60	90	120	160	180	200
10	194 18	399 18	614 17	849 16	1159 15	1304 13	1432 12
20	199 36	409 35	629 34	849 33	1173 32	1319 30	1466 27
40	202 73	419 72	644 71	880 69	1187 67	1350 64	1500 149
60	199 110	409 109	629 108	849 105	1173 103	1319 101	1466 90
80	189 148	399 146	621 145	839 142	1146 139	1289 136	1432 123
100	171 185	389 183	614 181	829 177	1132 174	1273 170	1415 157
125	153 231	358 229	575 227	818 222	1105 217	1243 212	1381 196

Torque Nm  
Rotational speed min<sup>-1</sup>

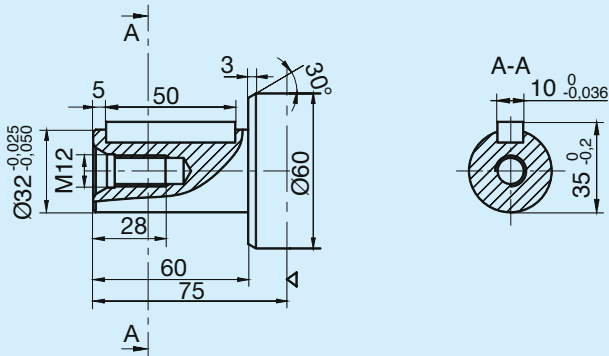
Pressure Continuous

Pressure Intermittent

**OZ 4Y**

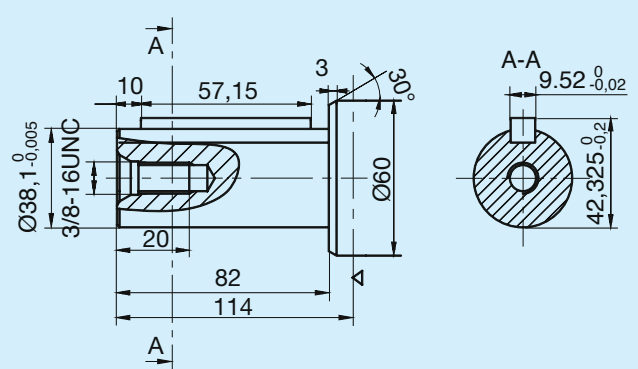
**4P1** Ø32 key DIN 6885 A 10x8x50

Max. torque 770 Nm



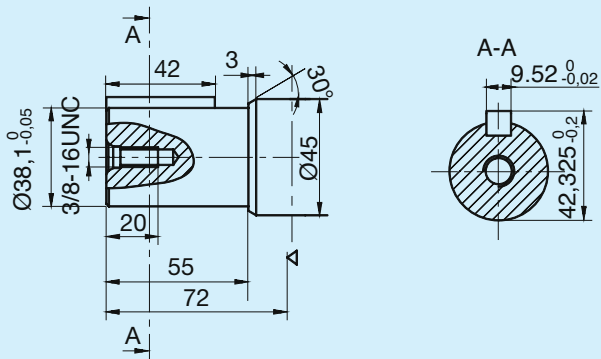
**P11** 1 1/2" key BS46 3/8"x3/8"x2 1/4"

Max. torque 1300 Nm



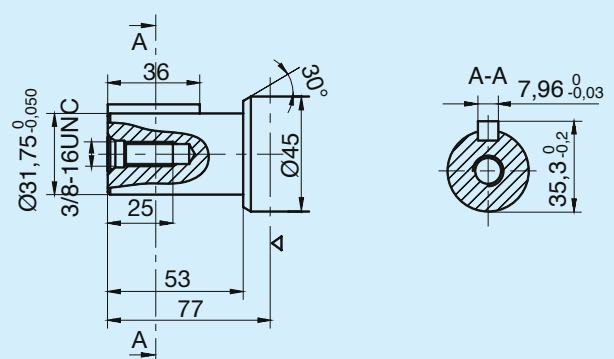
**P12** 1 1/2" key BS46 3/8"x3/8"x2 1/4"

Max. torque 1300 Nm



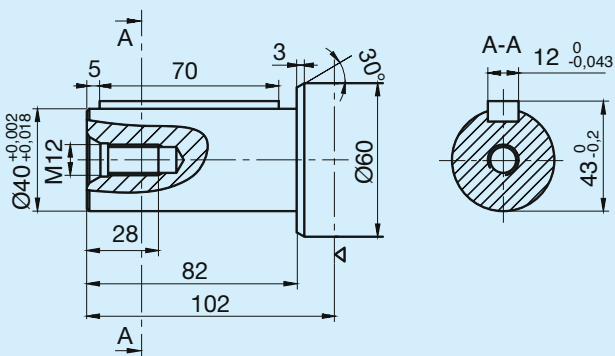
**P13** 1 1/4" key SAE J744 5/16"x5/16"x1 7/16"

Max. torque 770 Nm



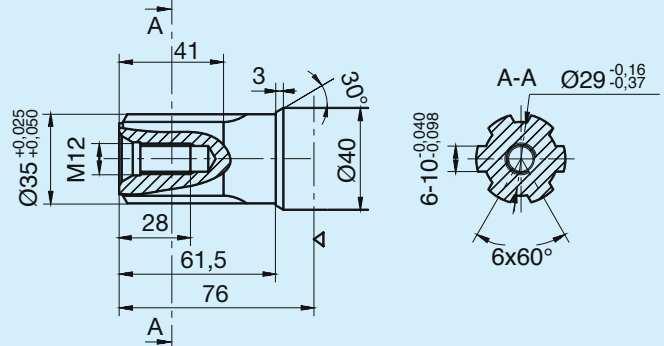
**4P3** Ø40 key DIN 6885 A 12x8x70

Max. torque 1377 Nm



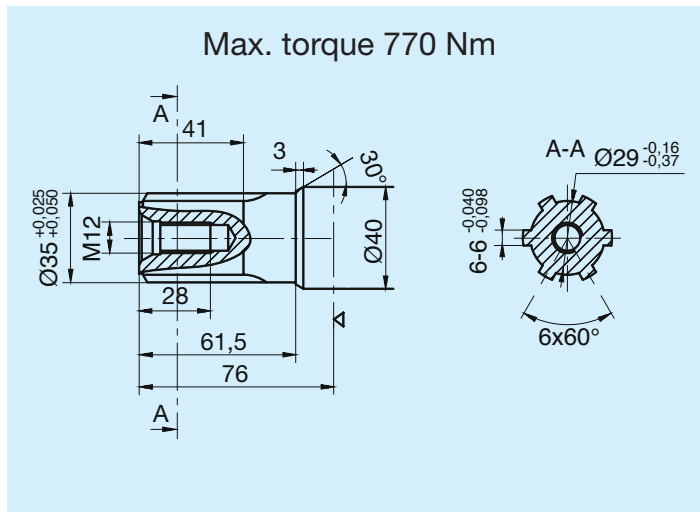
**4H4** UNI 8953 6x28x34

Max. torque 770 Nm

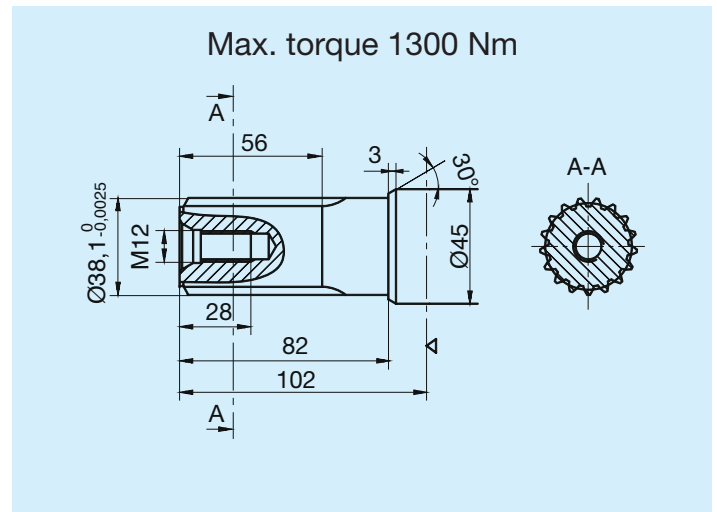


The shafts come with anti-corrosion treatment as standard.

**4H5** UNI 8953 6x28x34

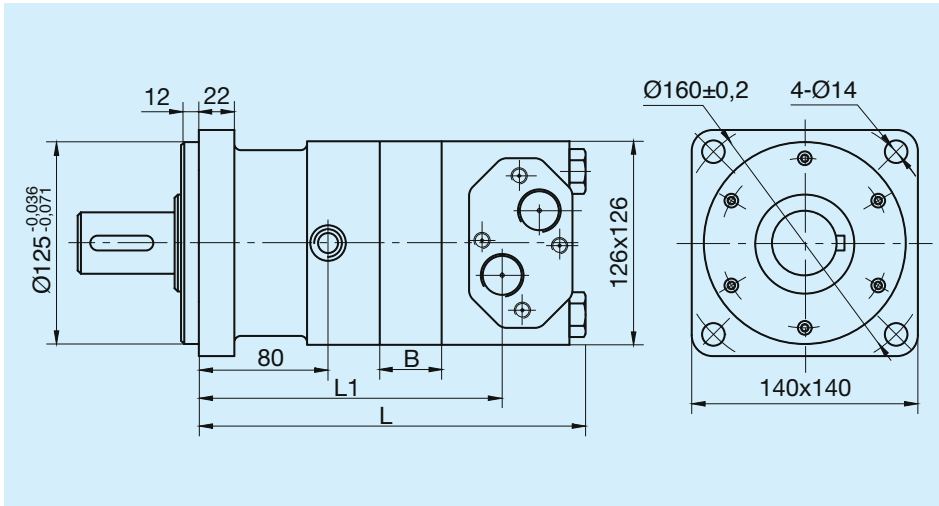


**4K3** ANSI-B92.1 1 1/2" DP12/24 30° Z17



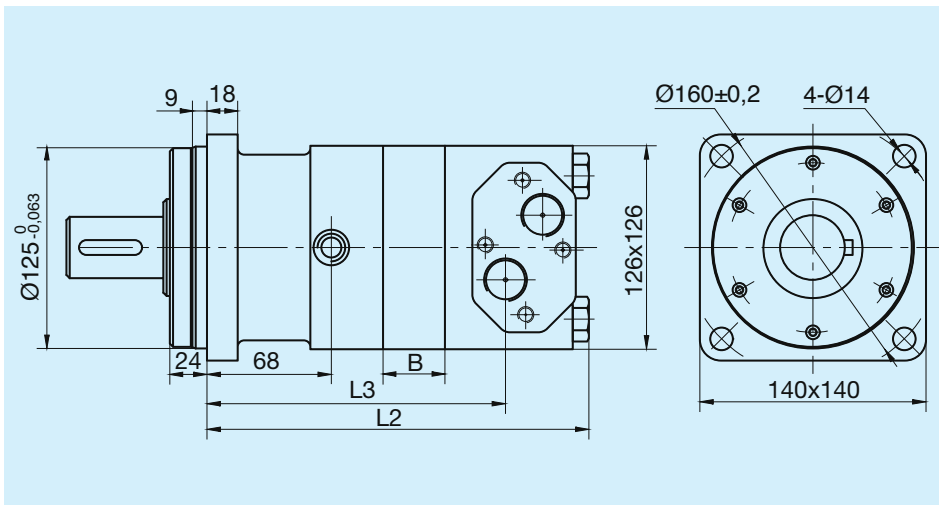
The shafts come with anti-corrosion treatment as standard.

## DA Standard D



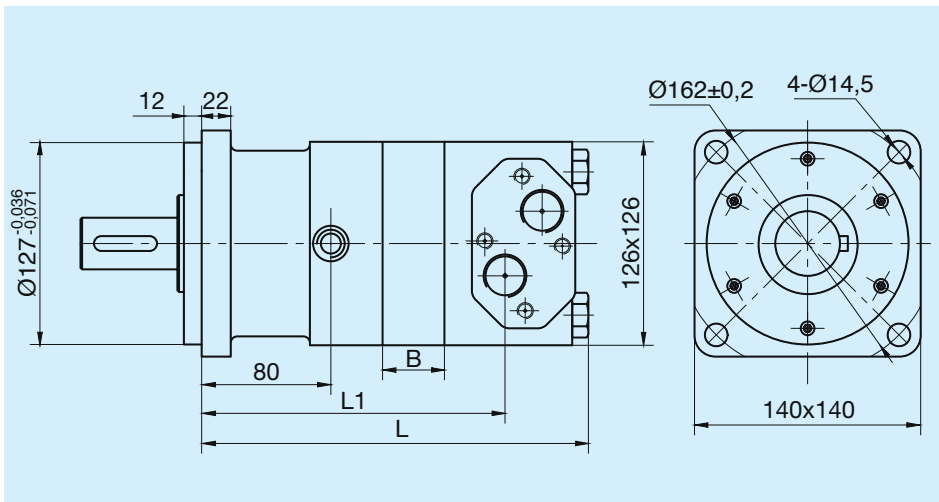
Type	L mm	L1 mm	B mm
4Y 160	213	163	12
4Y 200	217.5	167	16.5
4Y 250	223	173	22
4Y 320	230	180	29
4Y 400	239	189	38
4Y 500	257.5	207	56.5

## A4 ISO 3019 Ø125



Type	B mm	L2 mm	L3 mm
4Y 160	12	201	150
4Y 200	16.5	205.5	155
4Y 250	22	211	160
4Y 320	29	218	167
4Y 400	38	227	176
4Y 500	56.5	245.5	195

## A7 SAE C 4 holes



Type	L mm	L1 mm	B mm
4Y 160	213	163	12
4Y 200	217.5	167	16.5
4Y 250	223	173	22
4Y 320	230	180	29
4Y 400	239	189	38
4Y 500	257.5	207	56.5

The flanges come with anti-corrosion treatment as standard.



**4Y0** With lateral ports

	Port <b>A-B</b>	Hole <b>C</b>	Port <b>T</b>
	3/4" BSPP	M10	1/4" BSPP

**4Y3** With lateral ports

	Port <b>A-B</b>	Hole <b>C</b>	Port <b>T</b>
	M27x2	M10	M14x1.5

**4Y4** With lateral ports

	Port <b>A-B</b>	Hole <b>C</b>	Port <b>T</b>
	M22x1.5	M10	M14x1.5

### Y48 With lateral ports

Port  
A-B

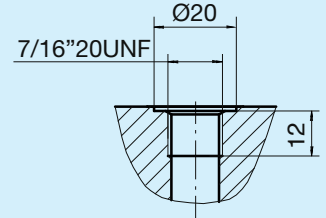
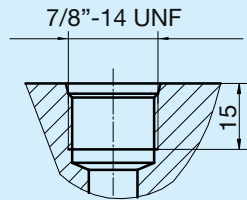
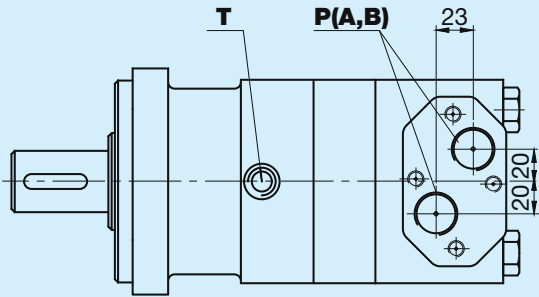
7/8"-14 UNF

Hole  
C

---

Port  
T

7/16"-20 UNF



### Y41 With lateral ports

Port  
A-B

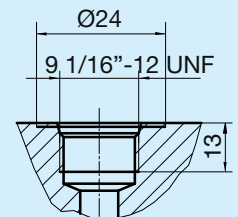
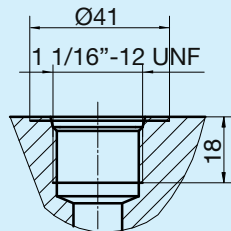
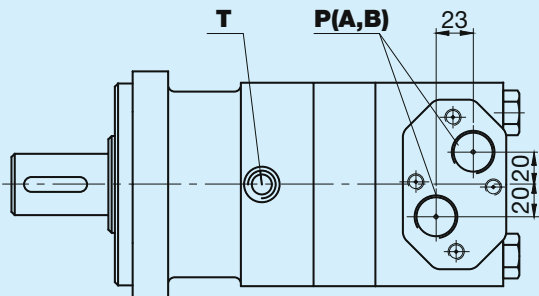
1-1/16"-12 UNF

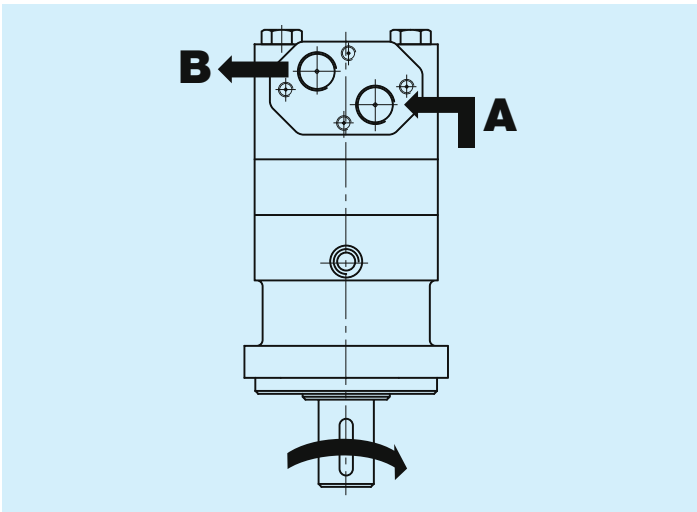
Hole  
C

---

Port

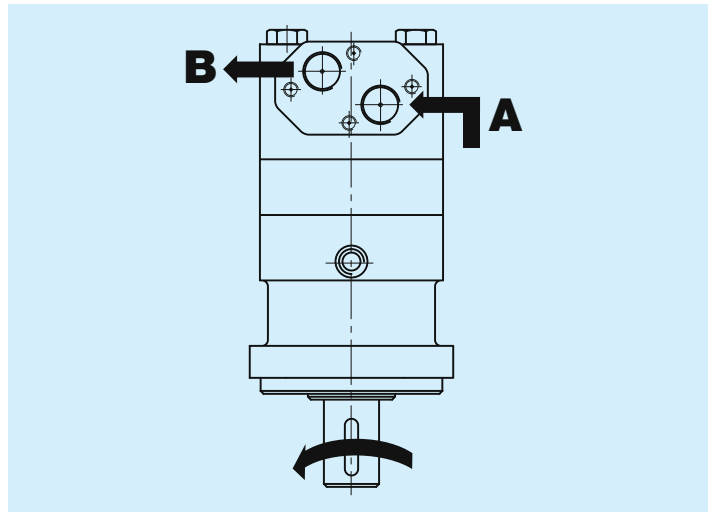
9/16"-18 UNF



**0** Standard

When facing the motor shaft, rotation is:

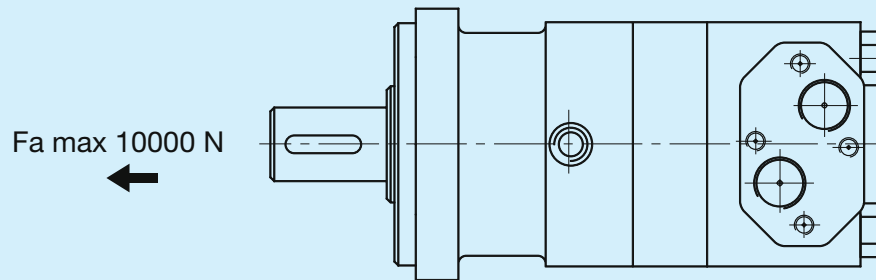
- Clockwise, when port A is pressurised
- Counterclockwise, when port B is pressurised.

**L** Reverse

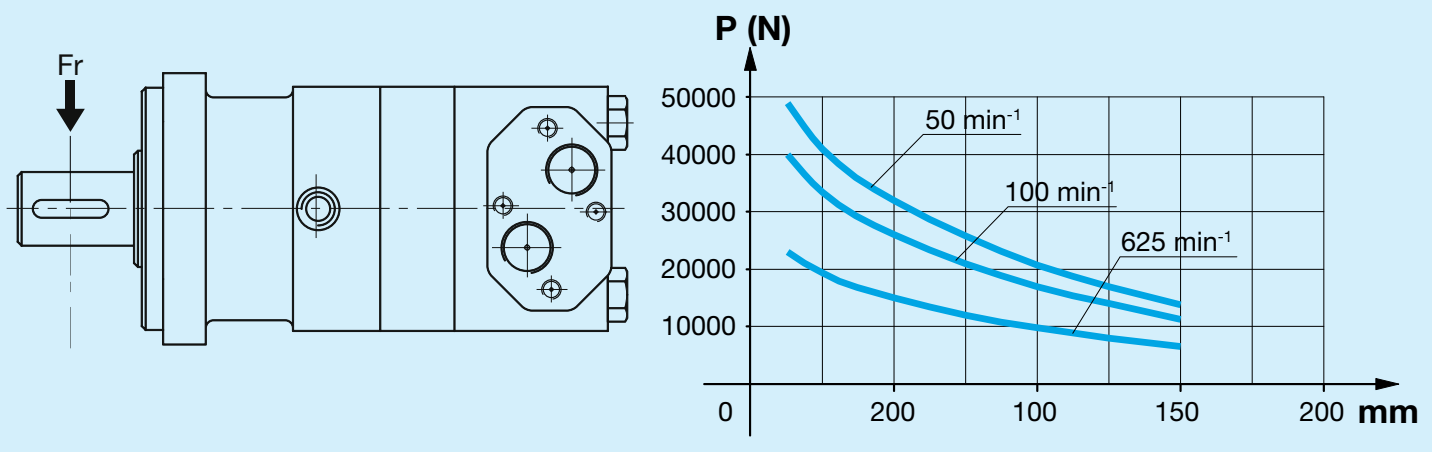
When facing the motor shaft, rotation is:

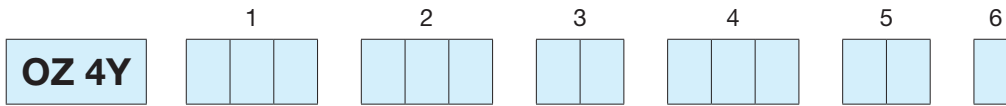
- Counterclockwise, when port A is pressurised
- Clockwise, when port B is pressurised.

### Axial load



### Radial load





1	Displacement	
	<b>160</b> 158.8 cm <sup>3</sup> /rev	<b>250</b> 252.2 cm <sup>3</sup> /rev
	<b>200</b> 200.8 cm <sup>3</sup> /rev	<b>320</b> 317.5 cm <sup>3</sup> /rev
		<b>400</b> 401.6 cm <sup>3</sup> /rev
		<b>500</b> 535.3 cm <sup>3</sup> /rev

2	Shaft profile			
	<b>4P1</b> Cylindrical Ø32 Key DIN6885 A 10x8x50	<b>P12</b> Cylindrical 1 1/2" - Key BS46 3/8"x3/8"x2 1/4"	<b>4P3</b> Cylindrical Ø40 Key DIN 6885 A 12x8x70	<b>4H5</b> Grooved UNI 8953 6x28x34
	<b>P11</b> Cylindrical 1 1/2" - Key BS46 3/8"x3/8"x2 1/4"	<b>P13</b> Cylindrical 1 1/4" - Key SAE J744 5/16"x5/16"x1 7/16"	<b>4H4</b> Grooved UNI 8953 8x32x36 6x28x34	<b>4K3</b> Grooved ANSI B92.1 - 1 1/2" DP12/24 30° Z17

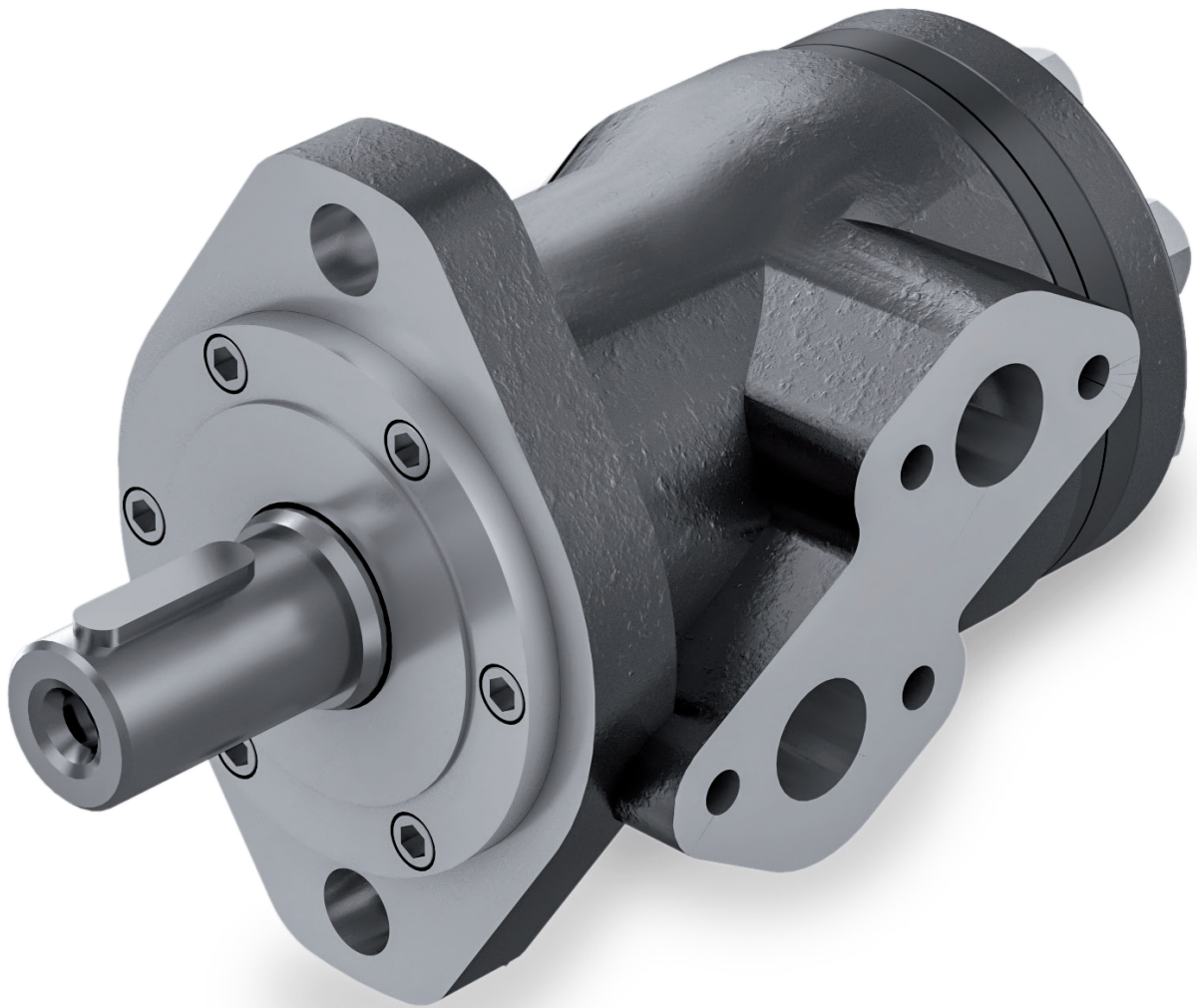
3	Flanges		
	<b>DA</b> Standard D	<b>A4</b> ISO 3019 Ø125	<b>A7</b> SAE C 4 holes

4	Thread ports A-B, T		
	<b>4Y0</b> BSPP 3/4" Drain port BSPP 1/4"	<b>4Y4</b> M22x1.5 (15) Drain port M14x1.5 7/8"	<b>Y41</b> 1" 1/16 - 12UNF Drain port 9/16" - 18UNF
	<b>4Y3</b> M27x2 Drain port M14x1.5	<b>Y48</b> 7/8" - 14UNF Drain port 7/16" - 20UNF	

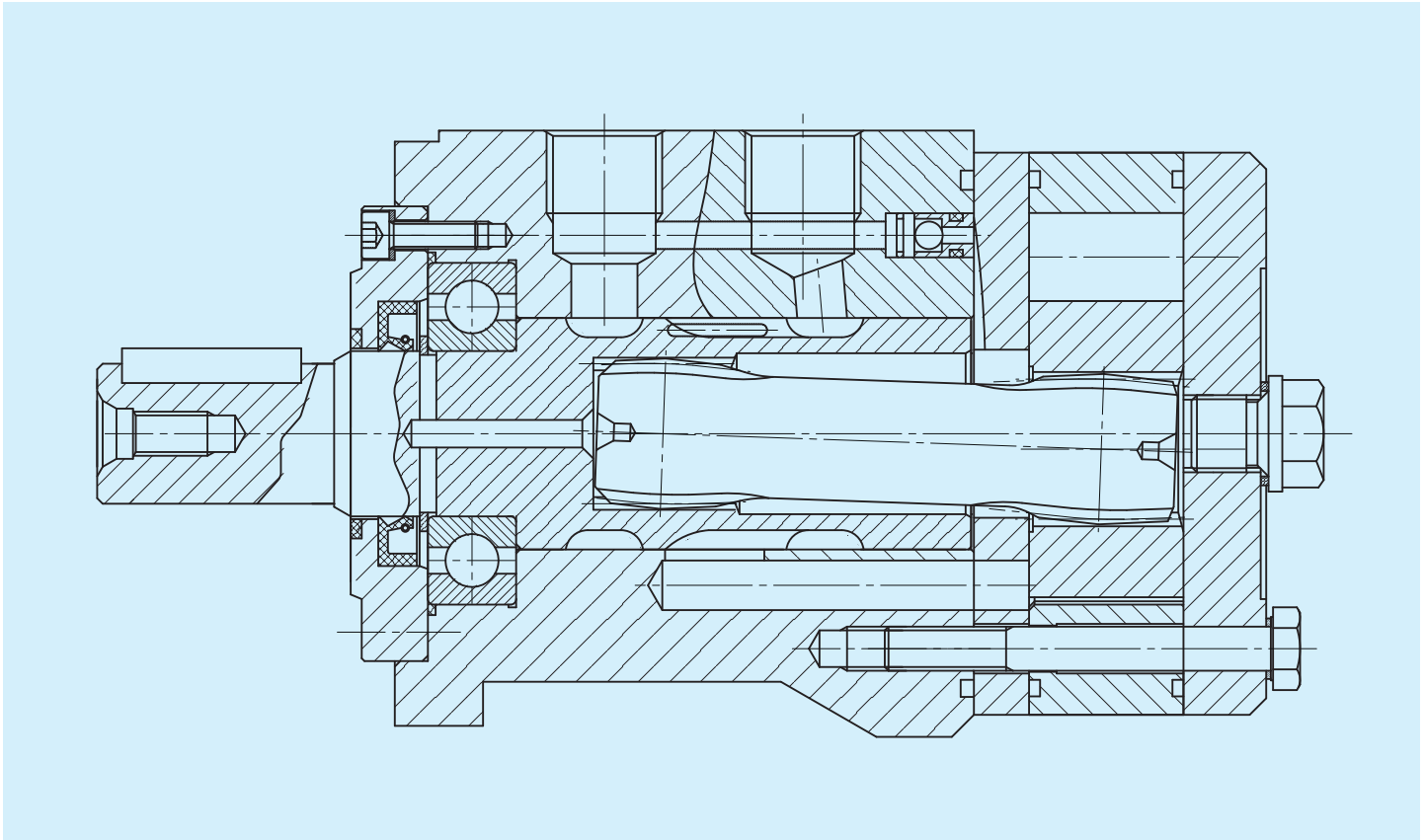
5	Special options
	<b>00</b> None

6	Direction of rotation of shafts	
	<b>0</b> Standard	<b>L</b> Reverse

## Roller motors with radial distribution



Before use, carefully read the GENERAL INSTRUCTIONS FOR USE OF ORBITAL MOTORS.



Compact roller motor with radial distribution and ball or roller bearings, suitable for use where high efficiency, smooth rotation and good starting torque are required.

	Displacement		Pressure			Torque			Rotational speed min <sup>-1</sup>	Max. flow rate l/min	Max. output power kW	Weight kg
	cm <sup>3</sup> /rev	Continuous bar	Intermittent bar	Peak bar	Continuous Nm	Intermittent Nm	Peak Nm					
<b>050</b>	51.7	175	200	220	110	135	144	10-775	40	8.9	6.9	
<b>080</b>	80.5	175	200	220	189	216	225	10-750	60	14.8	7.3	
<b>100</b>	100.5	175	200	220	236	270	281	10-600	60	14.8	7.4	
<b>125</b>	126.3	175	200	220	296	338	353	10-475	60	14.8	7.7	
<b>160</b>	160.8	175	200	220	378	433	450	10-375	60	14.8	7.9	
<b>200</b>	200.9	175	190	200	450	486	511	10-300	60	14	8.4	
<b>250</b>	252.6	140	160	180	470	540	579	10-240	60	12	8.9	
<b>315</b>	321.5	120	140	150	485	573	614	10-190	60	9.6	9.4	
<b>400</b>	401.9	100	120	140	500	614	710	10-160	60	8.4	11.4	

Intermittent conditions must not last more than 10% of each minute.  
Peak conditions must not last more than 1% of each minute.

## 050 51.7 cm<sup>3</sup>/rev

Flow rate l/min	Pressure bar								
	50	70	90	100	120	140	160	175	200
5	34 94	44 85	58 77	65 77	75 72	88 50			
10	35 188	45 179	61 167	68 163	79 154	94 137	114 119	119 98	141 77
15	34 285	48 279	62 271	72 263	87 252	100 232	112 213	122 187	142 147
20	34 379	46 377	60 367	68 363	82 348	95 332	111 304	125 272	138 207
30	32 578	45 571	59 563	66 556	79 544	94 533	108 502	121 467	136 365
40	30 762	44 760	57 755	65 752	78 740	91 726	107 702	120 678	132 584
45	29 858	40 855	56 851	64 847	77 837	89 817	104 798	120 772	119 669
50	25 952	38 942	52 927	59 908	72 882	84 854	98 834	113 803	98 761

Torque Nm  
Rotational speed min<sup>-1</sup>

Pressure  
Continuous

Pressure  
Intermittent

## 080 80.5 cm<sup>3</sup>/rev

Flow rate l/min	Pressure bar								
	50	70	90	100	120	140	160	175	200
5	48 61	58 58	84 52	106 46	129 40				
10	50 122	74 116	96 112	106 108	126 106	145 99	170 60		
20	54 243	76 239	100 231	109 219	131 206	152 192	174 176	193 152	221 140
30	50 362	72 358	96 356	104 350	128 349	148 335	172 325	191 300	222 230
40	45 484	70 480	95 478	104 476	125 470	146 468	171 440	188 438	217 322
50	41 610	68 608	91 606	101 603	122 600	145 598	168 550	186 520	215 444
60	35 726	65 723	88 720	97 718	120 710	142 700	164 698	182 680	212 590
70	30 845	58 834	81 820	93 802	114 789	136 767	158 754	175 730	201 662
75	19 910	48 895	76 881	88 867	108 852	132 830	151 806	168 787	182 717

Torque Nm  
Rotational speed min<sup>-1</sup>

Pressure  
Continuous

Pressure  
Intermittent

## 100 100.5 cm<sup>3</sup>/rev

Flow rate l/min	Pressure bar								
	50	70	90	100	120	140	160	175	200
5	64 49	90 48	118 46	134 42	154 38				
10	65 96	93 94	122 93	134 91	155 80	185 60	214 48		
20	62 192	93 188	121 184	135 178	153 171	186 168	215 158	225 146	267 131
30	61 296	90 294	118 290	130 290	150 288	185 282	213 270	227 258	270 225
40	58 387	88 380	115 369	126 361	147 356	184 348	211 338	224 320	265 305
50	56 484	86 479	108 472	123 463	146 452	183 445	209 428	221 418	259 392
60	54 583	84 567	109 569	121 555	145 540	181 536	207 529	218 527	255 482
70	46 680	80 872	97 662	110 650	138 640	178 635	201 620	212 606	234 582
75	32 728	75 720	90 710	106 695	130 681	169 667	195 650	204 634	212 611

Torque Nm  
Rotational speed min<sup>-1</sup>

Pressure  
Continuous

Pressure  
Intermittent

## 125 126.3 cm<sup>3</sup>/rev

Flow rate l/min	Pressure bar								
	50	70	90	100	120	140	160	175	200
5	74 37	106 32	140 27	163 21					
10	81 78	114 77	152 74	172 59	200 45	220 29	250 20		
20	80 157	114 156	150 154	170 151	200 146	221 142	254 120	292 114	332 102
30	78 232	112 230	149 228	169 222	198 220	220 218	252 199	290 178	330 152
40	77 312	111 311	147 307	168 300	196 298	218 284	250 278	288 262	325 221
50	62 391	105 388	143 384	165 380	195 372	223 362	254 346	287 341	321 281
60	52 470	98 468	136 464	160 459	191 448	220 434	250 428	282 420	313 384
70	41 548	90 544	130 540	156 541	187 538	215 535	242 530	278 514	302 443
75	32 586	79 583	126 578	148 570	180 560	208 546	234 532	262 527	298 486

Torque Nm  
Rotational speed min<sup>-1</sup>

Pressure  
Continuous

Pressure  
Intermittent



## 160 160.8 cm<sup>3</sup>/rev

Flow rate l/min	Pressure bar								
	50	70	90	100	120	140	160	175	200
5	100 30	142 26	188 21	207 19					
10	104 61	146 59	191 55	211 49	245 42	282 32	330 25		
20	102 122	148 119	194 114	218 109	251 105	290 100	338 92	368 86	430 78
30	96 183	141 181	186 179	215 176	248 166	288 158	335 144	364 139	421 121
40	87 244	136 240	180 238	206 233	248 229	286 219	330 200	358 189	412 162
50	70 304	126 298	172 291	198 287	238 281	278 274	320 262	353 257	404 231
60	58 370	111 367	168 359	191 354	232 346	274 338	319 333	350 329	394 289
70	47 426	104 422	160 418	190 415	228 403	267 393	301 381	338 365	384 351
75	34 457	91 450	150 442	180 432	221 426	261 418	291 405	328 398	373 369

Torque Nm  
Rotational speed min<sup>-1</sup>

Pressure  
Continuous

Pressure  
Intermittent

## 200 200.9 cm<sup>3</sup>/rev

Flow rate l/min	Pressure bar								
	50	70	90	100	120	140	160	175	190
5	129 24	176 22	230 18	256 13					
10	133 49	182 47	236 45	261 43	310 38	352 33	398 24		
20	131 98	181 96	232 94	256 92	308 88	354 83	400 74	444 64	486 56
30	126 146	176 141	229 138	252 135	308 128	353 123	398 111	442 102	474 92
40	112 195	168 190	224 183	248 178	304 170	350 162	393 158	440 151	461 127
50	94 244	154 240	220 236	243 230	294 224	343 222	392 220	438 219	449 197
60	78 293	144 289	213 281	236 276	287 271	339 269	389 265	436 263	437 243
70	67 341	135 338	206 334	228 328	277 325	336 321	375 318	420 300	425 272
75	58 366	125 361	197 357	220 353	270 346	321 342	360 333	401 324	418 315

Torque Nm  
Rotational speed min<sup>-1</sup>

Pressure  
Continuous

Pressure  
Intermittent

## 250 252.6 cm<sup>3</sup>/rev

Flow rate l/min	Pressure bar						
	50	70	90	100	120	140	160
5	172 19	240 18	300 17	338 16			
10	173 39	242 37	308 34	340 30	401 25		
20	170 78	238 76	301 74	339 72	402 69	469 61	544 52
30	160 116	231 114	298 111	330 109	398 103	457 95	521 84
40	141 155	221 152	298 149	327 145	394 140	448 132	501 122
50	122 194	206 190	287 186	321 181	382 177	441 172	489 158
60	109 232	199 230	286 224	320 219	375 215	440 211	476 198
70	86 272	176 269	262 266	298 260	353 257	420 252	463 243
75	60 291	163 287	254 282	286 278	345 272	414 268	448 252

Torque Nm  
Rotational speed min<sup>-1</sup>

Pressure  
Continuous

Pressure  
Intermittent

## 315 321.5 cm<sup>3</sup>/rev

Flow rate l/min	Pressure bar						
	30	50	70	90	100	120	140
5	110 14	199 12					
10	108 31	190 30	272 29	360 28	400 26	482 23	542 20
20	110 61	196 60	279 59	356 57	398 55	485 52	544 49
30	106 91	186 90	270 89	355 86	390 84	481 81	530 77
40	100 122	179 120	262 117	350 114	382 110	475 107	516 98
50	92 153	175 151	258 149	346 147	373 144	468 138	501 130
60	90 184	168 182	250 180	342 178	372 176	456 174	498 161
70	77 214	158 210	241 208	333 205	358 203	442 198	473 190
75	66 230	132 228	212 221	303 218	332 210	432 201	458 192

Torque Nm  
Rotational speed min<sup>-1</sup>

Pressure  
Continuous

Pressure  
Intermittent

**RY 400** 401.9 cm<sup>3</sup>/rev

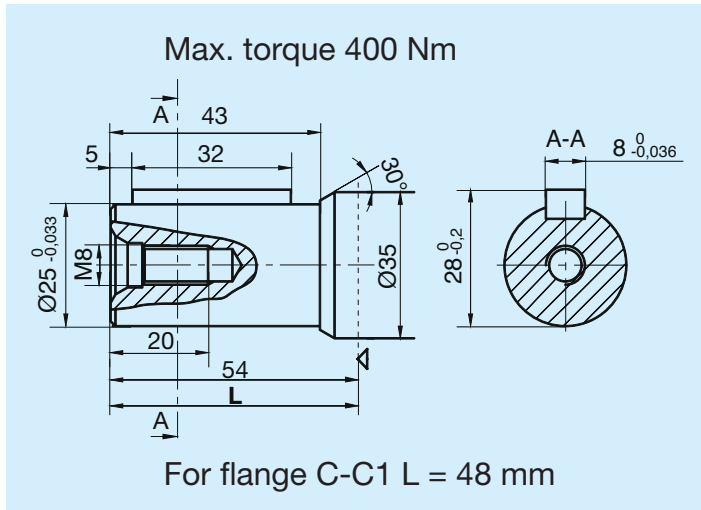
Flow rate l/min	Pressure bar					
	30	50	70	90	100	120
5	152 <b>12</b>					
10	154 <b>24</b>	239 <b>21</b>	349 <b>17</b>			
20	150 <b>49</b>	236 <b>46</b>	340 <b>43</b>	441 <b>41</b>	500 <b>39</b>	614 <b>35</b>
30	146 <b>74</b>	233 <b>72</b>	331 <b>70</b>	438 <b>67</b>	493 <b>65</b>	606 <b>60</b>
40	140 <b>98</b>	227 <b>97</b>	321 <b>95</b>	421 <b>92</b>	481 <b>90</b>	598 <b>85</b>
50	132 <b>122</b>	222 <b>120</b>	315 <b>118</b>	408 <b>116</b>	473 <b>114</b>	583 <b>105</b>
60	128 <b>146</b>	219 <b>144</b>	312 <b>142</b>	400 <b>140</b>	467 <b>139</b>	568 <b>134</b>
70	110 <b>170</b>	211 <b>168</b>	301 <b>166</b>	385 <b>163</b>	462 <b>162</b>	553 <b>156</b>
75	98 <b>182</b>	203 <b>179</b>	292 <b>176</b>	375 <b>174</b>	449 <b>167</b>	545 <b>163</b>

Torque Nm  
Rotational speed min<sup>-1</sup>

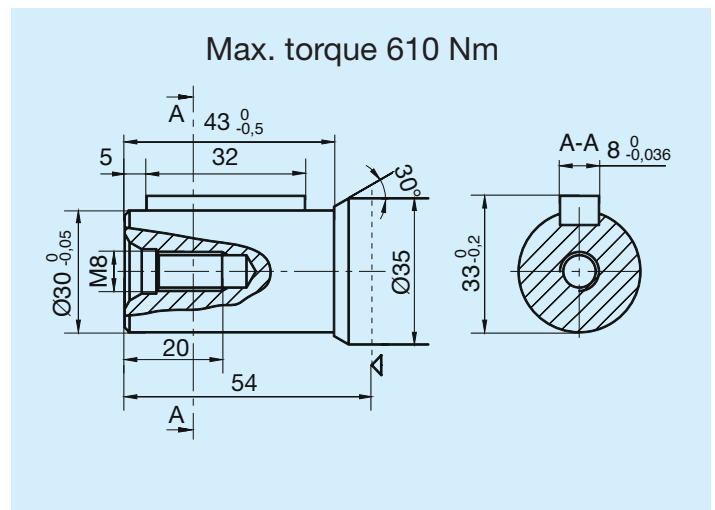
Pressure  
Continuous

Pressure  
Intermittent

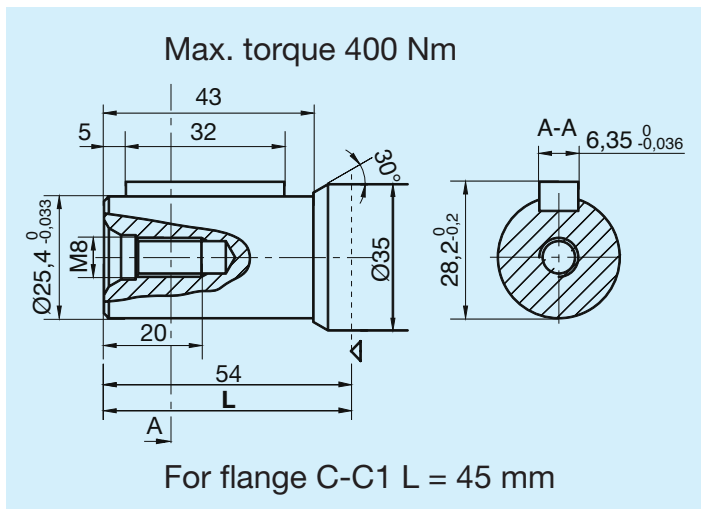
**AP1** Ø25 key DIN 6885 A 8x7x32



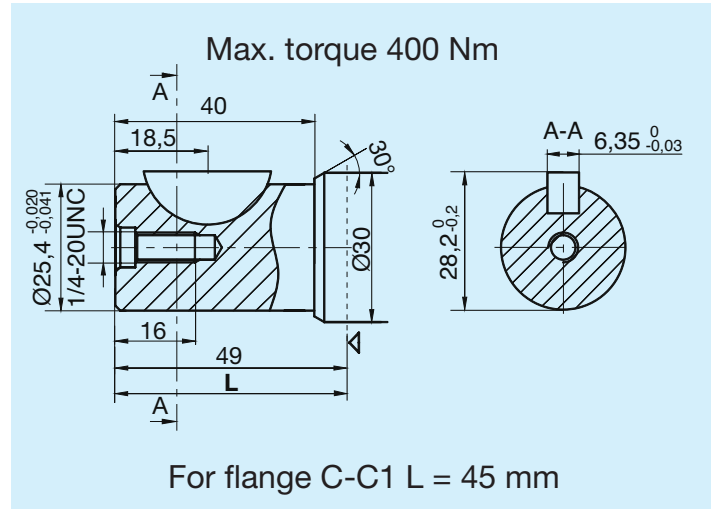
**AP2** Ø30 key DIN 6885 A 8x7x32



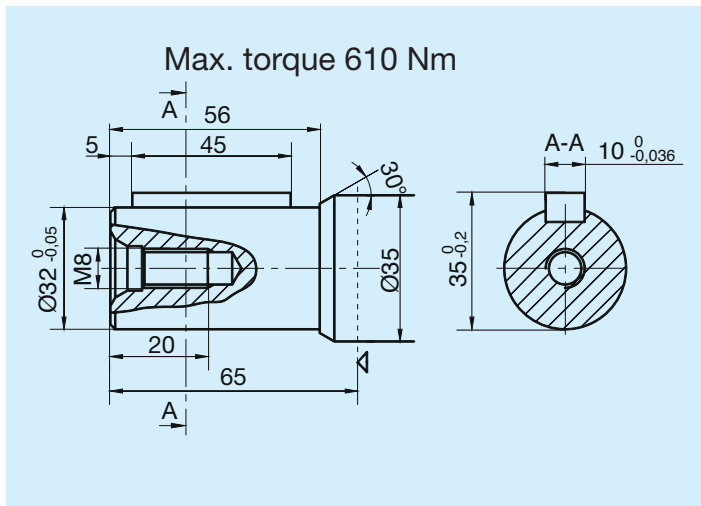
**AP3** 1" EU key BS46 1/4"x1/4"x1 1/4"



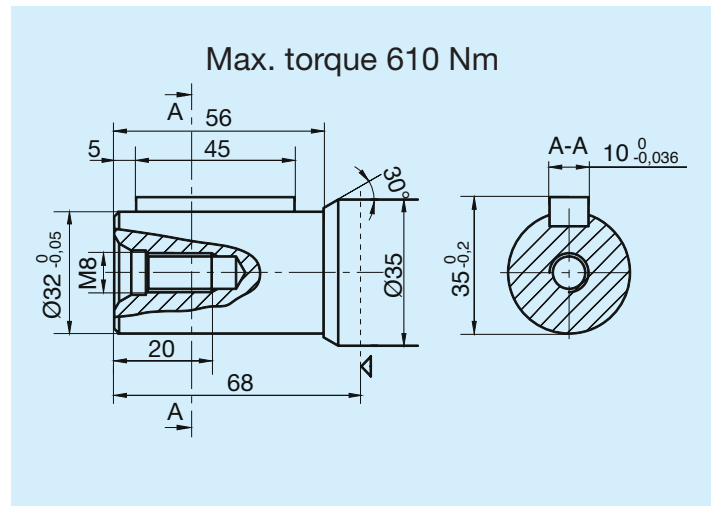
**AP4** 1" US key BS46 1 1/4"



**AP5** Ø32 key DIN 6885 A 10x8x45

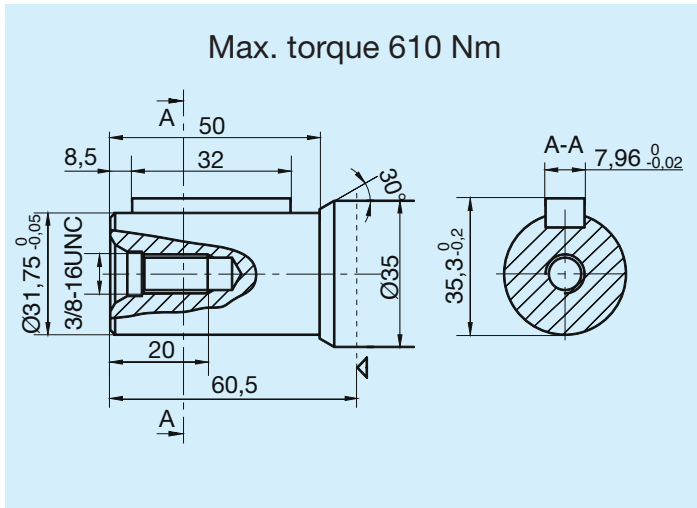


**P52** Ø32 key DIN 6885 A 10x8x45

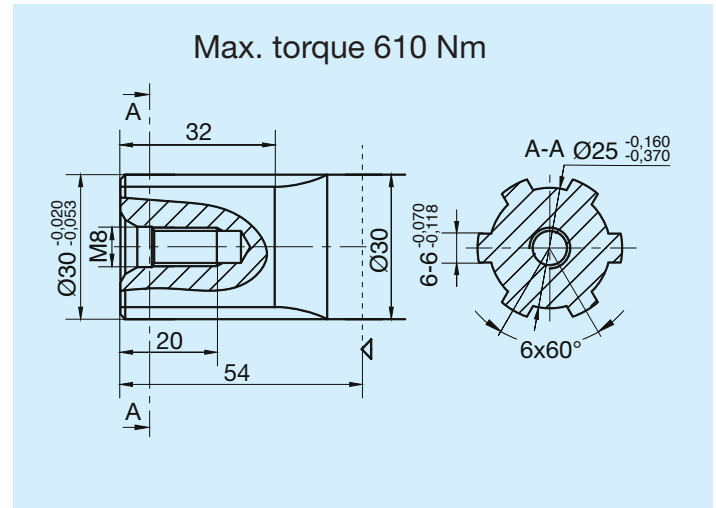


The shafts come with anti-corrosion treatment as standard.

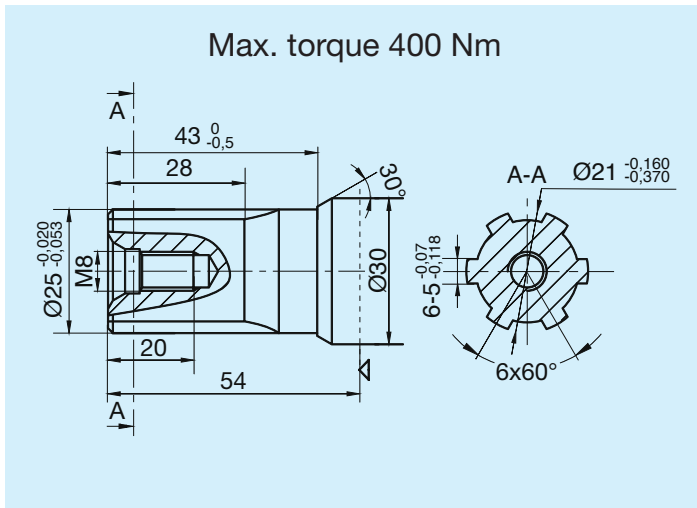
**AP6** 1 1/4" key BS46 5/16"x5/16"x1 1/4"



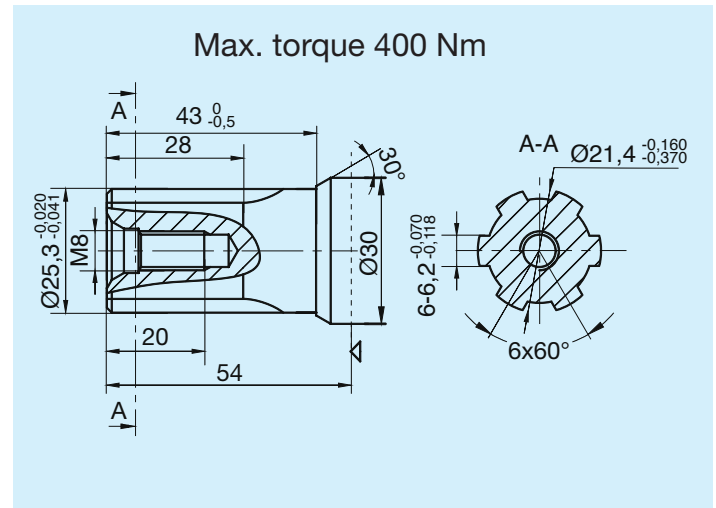
**AH1** UNI 8953 6x26x30



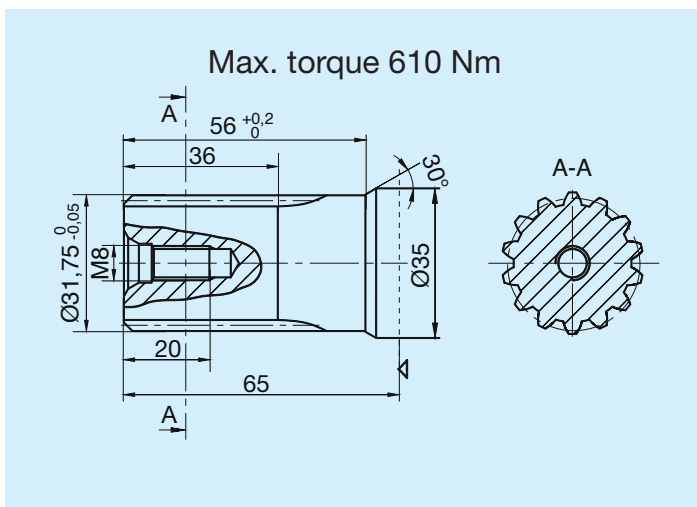
**AH2** UNI 8953 6x21x25



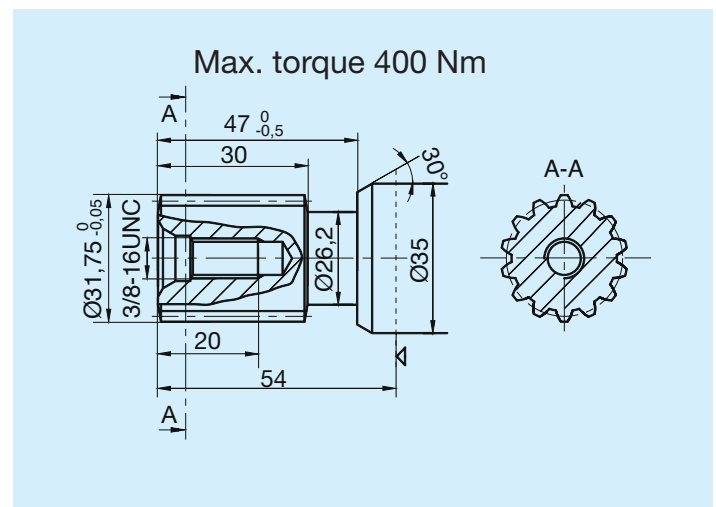
**AH3** SAE 6 B (BS2059)



**K13** ANSI-B92.1 DP12/24 30° Z14

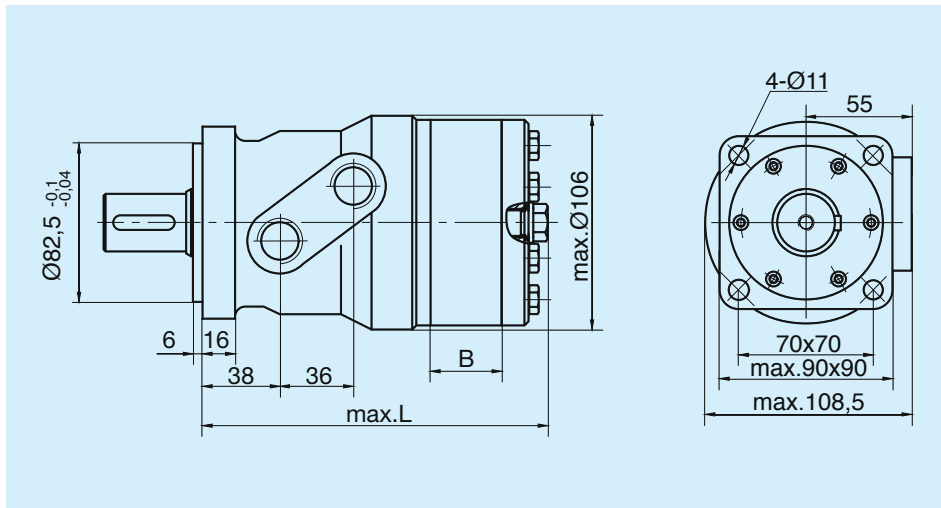


**K14** ANSI-B92.1 DP12/24 30° Z14



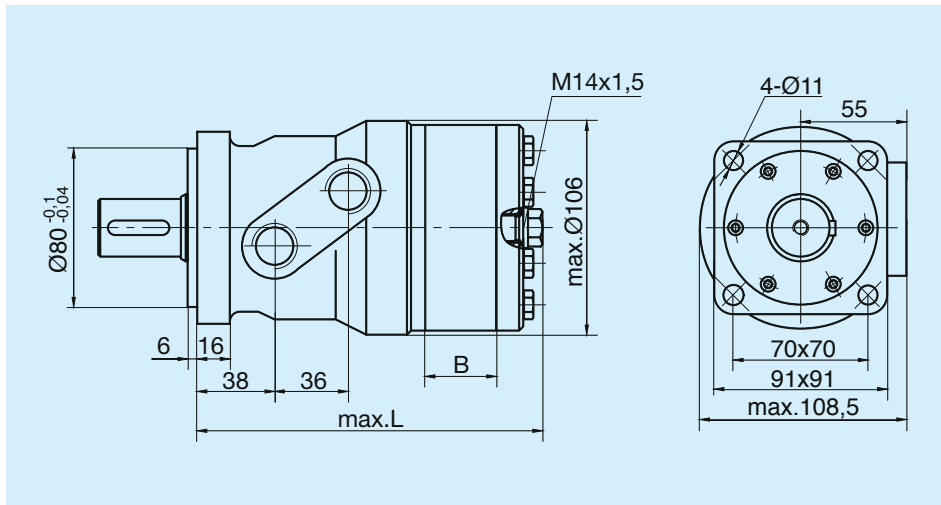
The shafts come with anti-corrosion treatment as standard.

## A0 SAE A 4 holes



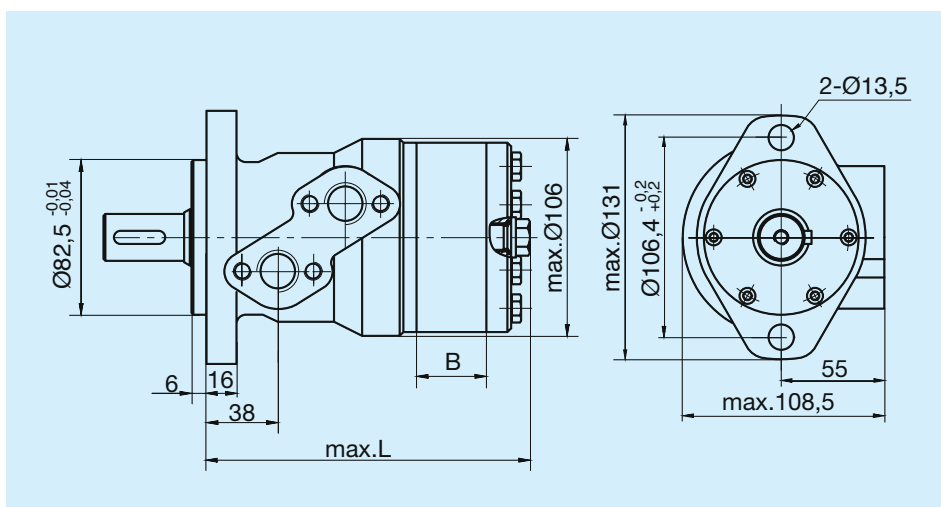
Type	L mm	L1 mm	B mm
RY 050	143	151	9
RY 080	148	156	14
RY 100	151.5	159.5	17.5
RY 125	156	164	22
RY 160	162	170	28
RY 200	169	177	35
RY 250	178	186	44
RY 315	190	198	56
RY 400	204	212	70

## A1 ISO 3019 Ø80



Type	L mm	L1 mm	B mm
RY 050	143	151	9
RY 080	148	156	14
RY 100	151.5	159.5	17.5
RY 125	156	164	22
RY 160	162	170	28
RY 200	169	177	35
RY 250	178	186	44
RY 315	190	198	56
RY 400	204	212	70

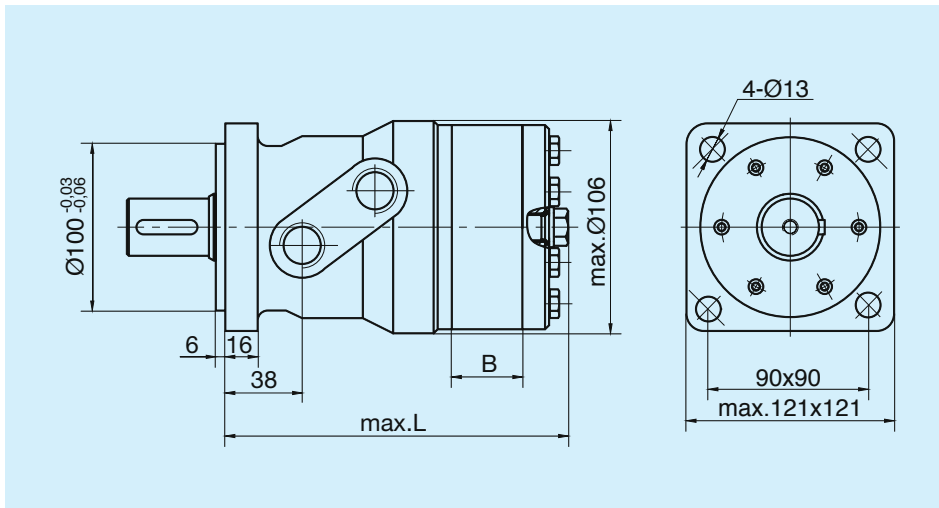
## A2 SAE A 2 holes



Type	L mm	L1 mm	B mm
RY 050	143	151	9
RY 080	148	156	14
RY 100	151.5	159.5	17.5
RY 125	156	164	22
RY 160	162	170	28
RY 200	169	177	35
RY 250	178	186	44
RY 315	190	198	56
RY 400	204	212	70

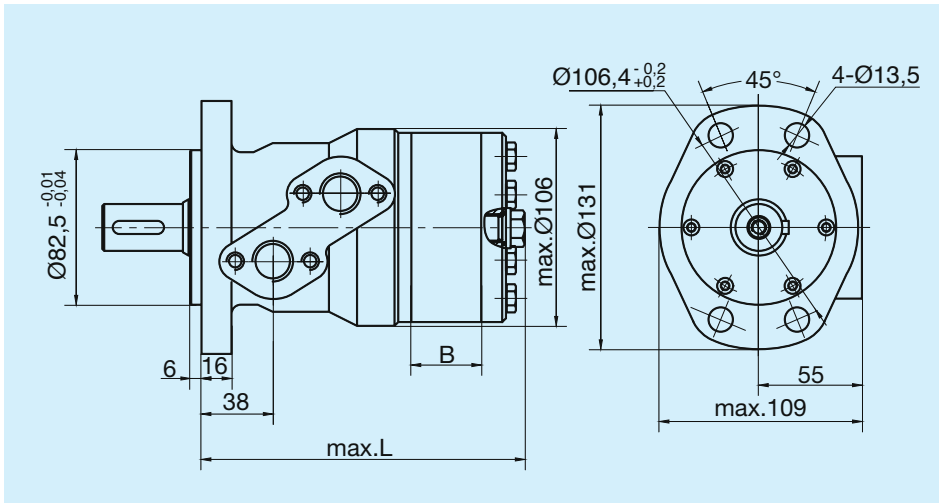
The flanges come with anti-corrosion treatment as standard.

## A3 ISO 3019 Ø100



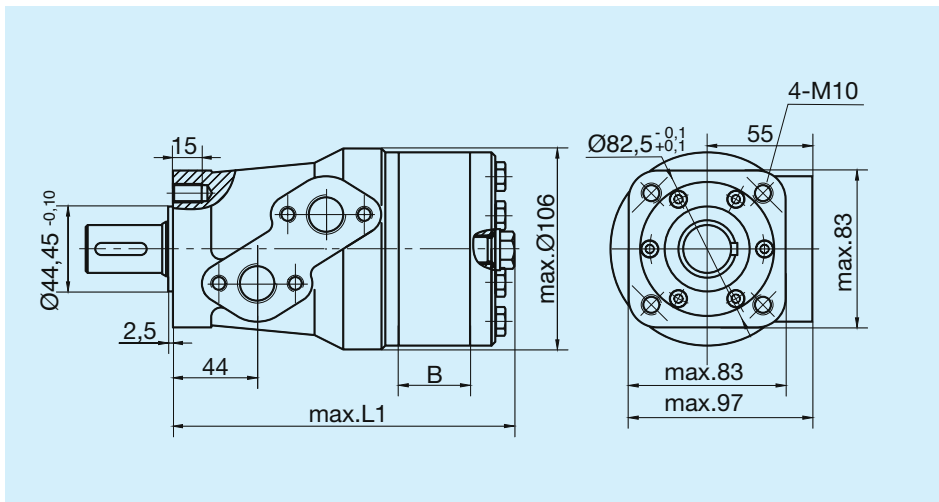
Type	L mm	L1 mm	B mm
RY 050	143	151	9
RY 080	148	156	14
RY 100	151.5	159.5	17.5
RY 125	156	164	22
RY 160	162	170	28
RY 200	169	177	35
RY 250	178	186	44
RY 315	190	198	56
RY 400	204	212	70

## AV Magneto 4 holes



Type	L mm	L1 mm	B mm
RY 050	143	151	9
RY 080	148	156	14
RY 100	151.5	159.5	17.5
RY 125	156	164	22
RY 160	162	170	28
RY 200	169	177	35
RY 250	178	186	44
RY 315	190	198	56
RY 400	204	212	70

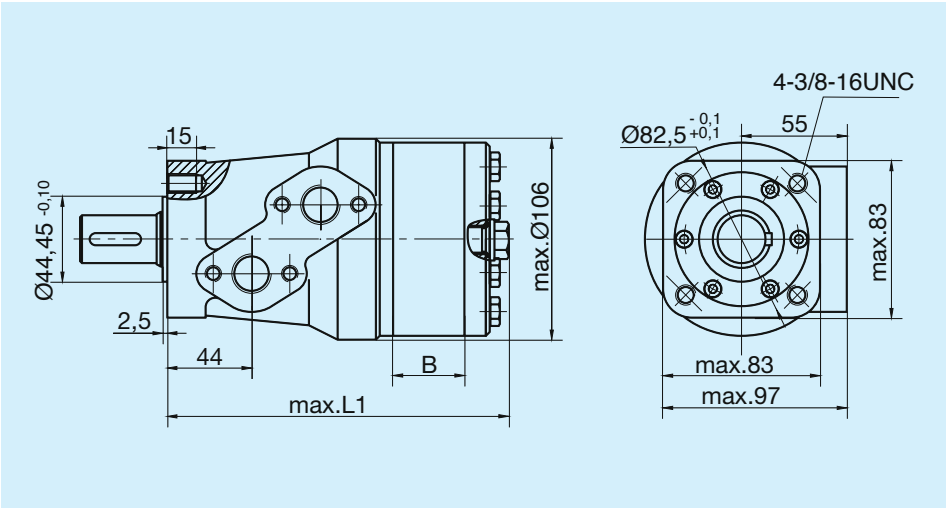
## C0 M56C EU



Type	L mm	L1 mm	B mm
RY 050	143	151	9
RY 080	148	156	14
RY 100	151.5	159.5	17.5
RY 125	156	164	22
RY 160	162	170	28
RY 200	169	177	35
RY 250	178	186	44
RY 315	190	198	56
RY 400	204	212	70

The flanges come with anti-corrosion treatment as standard.

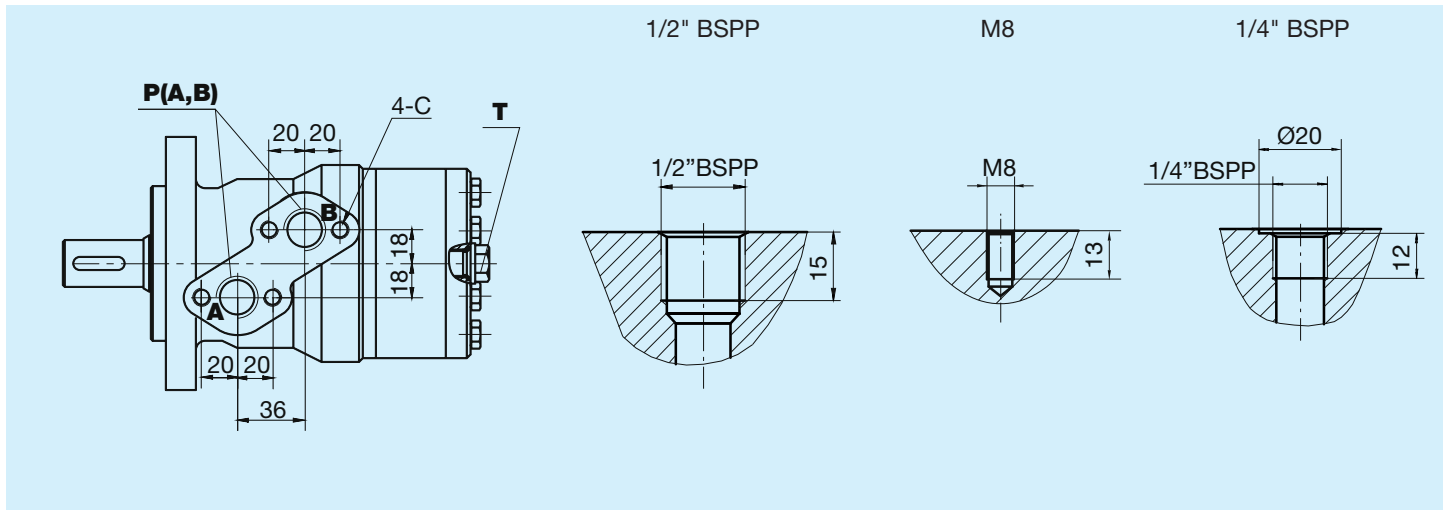
**C1** M56C US



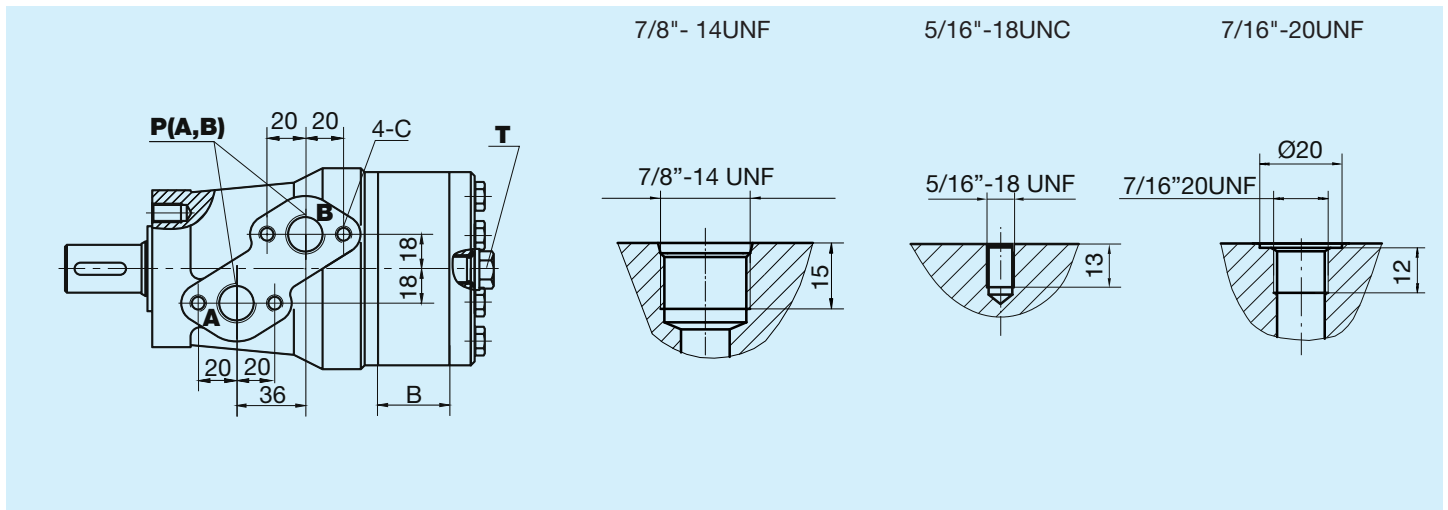
Type	L mm	L1 mm	B mm
RY 050	143	151	9
RY 080	148	156	14
RY 100	151.5	159.5	17.5
RY 125	156	164	22
RY 160	162	170	28
RY 200	169	177	35
RY 250	178	186	44
RY 315	190	198	56
RY 400	204	212	70

The flanges come with anti-corrosion treatment as standard.

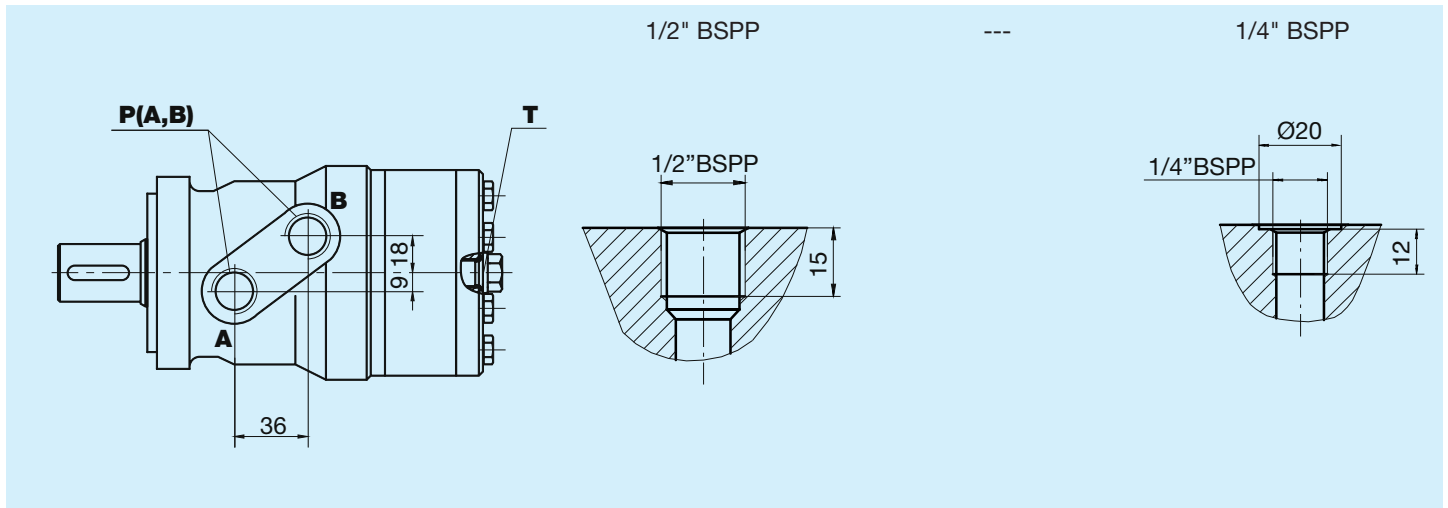
**Y10** With lateral ports



**Y15** With lateral ports



**Y01** With lateral ports



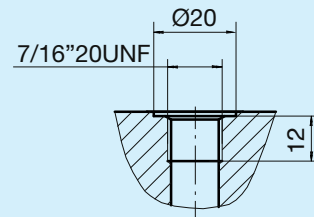
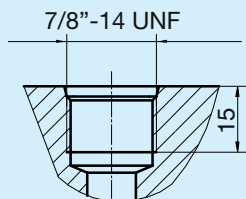
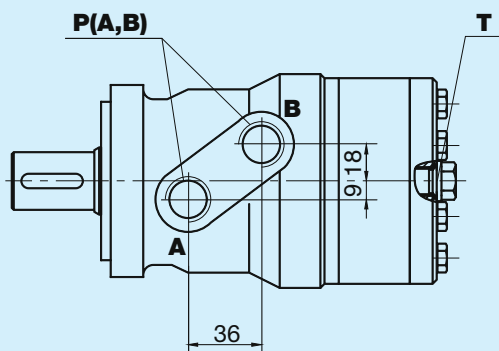


## Y01 With lateral ports

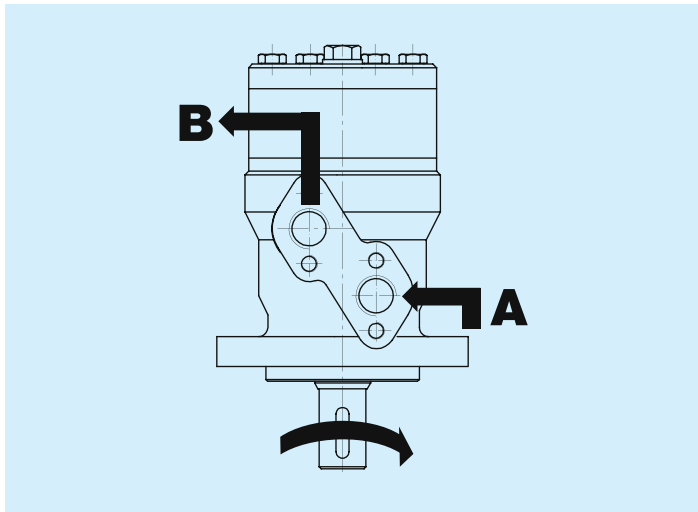
Port  
**A-B**  
7/8"-14UNF

Hole  
**C**  
---

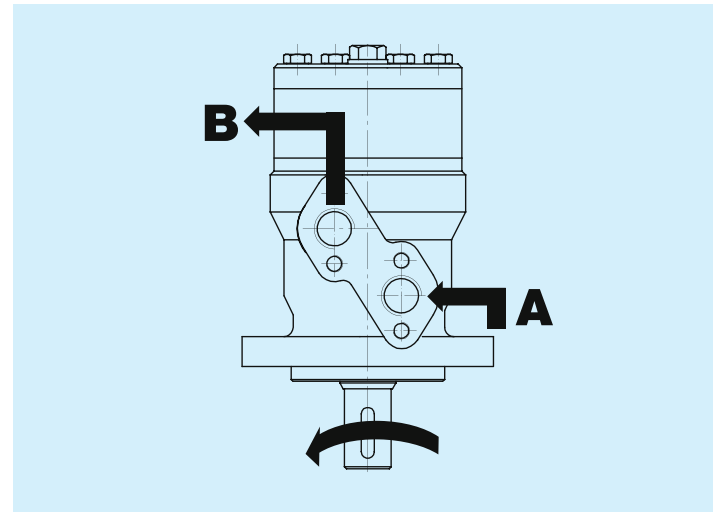
Port  
**T**  
7/16"-20UNF



## 0 Standard



## L Reverse



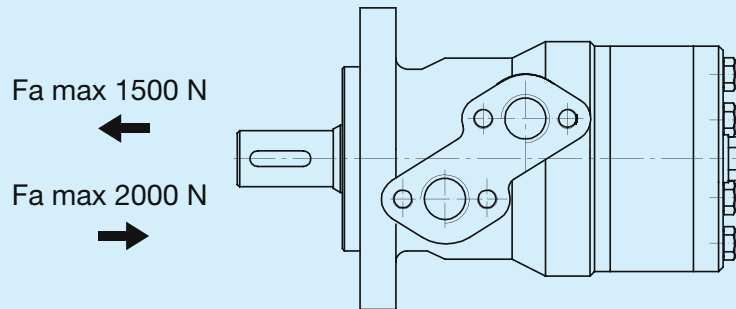
When facing the motor shaft, rotation is:

- Clockwise, when port A is pressurised
- Counterclockwise, when port B is pressurised.

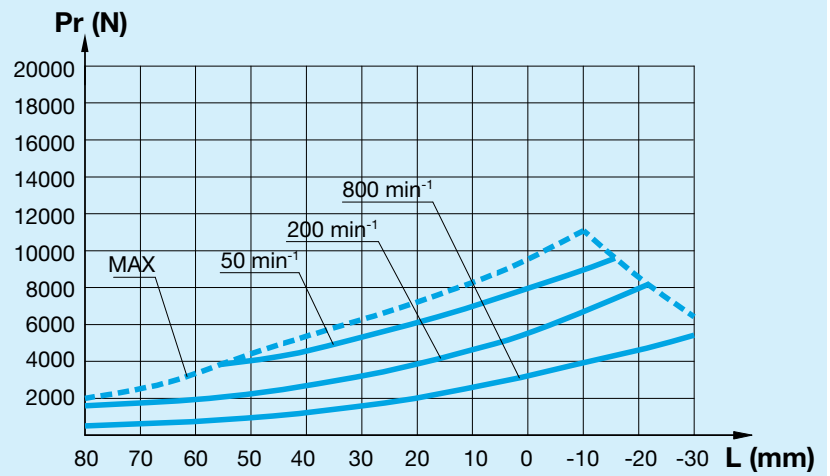
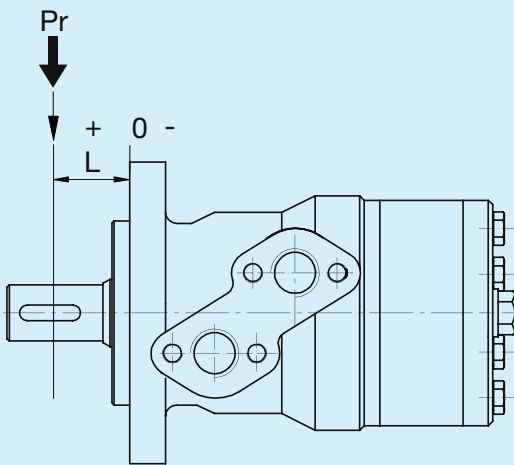
When facing the motor shaft, rotation is:

- Counterclockwise, when port A is pressurised
- Clockwise, when port B is pressurised.

### Axial load



### Radial load





1	Displacement	
<b>050</b>	51.7 cm <sup>3</sup> /rev	<b>100</b> 100.5 cm <sup>3</sup> /rev
<b>080</b>	80.5 cm <sup>3</sup> /rev	<b>125</b> 126.3 cm <sup>3</sup> /rev
<b>160</b>	160.8 cm <sup>3</sup> /rev	<b>200</b> 200.9 cm <sup>3</sup> /rev
<b>250</b>	252.6 cm <sup>3</sup> /rev	<b>315</b> 321.5 cm <sup>3</sup> /rev
<b>400</b>	401.9 cm <sup>3</sup> /rev	

2	Shaft profile						
<b>AP1</b>	Cylindrical Ø25 Key DIN 6885 A 8x7x32	<b>AP4</b>	Cylindrical 1" US version Key BS46 1/4"x1/4"x11/4"	<b>AP6</b>	Cylindrical 1" 1/4, Key BS46 5/16"x5/16"x11/4"	<b>AH3</b>	Grooved SAE 6 B (BS2059)
<b>AP2</b>	Cylindrical Ø30 Key DIN 6885 A 8x7x32	<b>AP5</b>	Cylindrical Ø32 Key DIN6885 A 10x8x45	<b>AH1</b>	Grooved UNI 8953 6x26x30	<b>K13</b>	Grooved ANSI-B92. 1 DP12/24 30°- Z14 Reinforced
<b>AP3</b>	Cylindrical 1" EU version Key BS46 1/4"x1/4"x11/4"	<b>P52</b>	Cylindrical Ø32 key DIN6885 A 10x8x45	<b>AH2</b>	Grooved UNI 8953 6x21x25	<b>K14</b>	Grooved ANSI-B92.1 DP12/24 30°- Z14

3	Flanges						
<b>A0</b>	SAE A 4 holes	<b>A2</b>	SAE A 2 holes	<b>AV</b>	Magneto 4 holes	<b>C1</b>	M56C US version
<b>A1</b>	ISO 3019 Ø80	<b>A3</b>	ISO 3019 Ø100	<b>C0</b>	M56C EU version		

4	Thread ports A-B, T						
<b>Y10</b>	1/2" BSPP Drain port 1/4" BSPP	<b>Y15</b>	7/8"-14UNF(15) Drain port 7/16"-20UNF	<b>Y01</b>	1/2" BSPP Drain port 1/4" BSPP	<b>Y05</b>	7/8"-14UNF(15) Drain port 7/16"-20UNF

5	Special options	
<b>00</b>	None	

6	Direction of rotation of shafts	
<b>0</b>	Standard	<b>L</b> Reverse