

Features

- 1. High quality of aluminum tube provides a long service life.
- 2. High quality of seals ensures leakage free.
- 3. Various sensors for option.
- 4. With adjustable cushions on both ends.



How to order

IC	32	B	50-SF	1	-	FA	-	Y
Type	Bore size	Magnet	Stroke	Sensor type	Number of sensor	Mounting parts		Rod end joint
IC :ISO15552 standard type	32 : ϕ 32	B :W/I magnet		Blank :W/O sensor	1 pc	Blank:W/O mounting parts		Blank:W/O rod end joint
ICD:Double piston rod type	40 : ϕ 40	C:W/O magnet		SF:LED in front	2 pcs	FA :Front flange		Y:Double knuckle joint
ICA:Stroke adjustable 25mm	50 : ϕ 50					FB :Rear flange		I :Single knuckle joint
ICB:Stroke adjustable 50mm	63 : ϕ 63					TC :Central trunnion (Tie-Rod)		P:Eyebolt floating joint
	80 : ϕ 80					CA :Male clevis		T:Basic floating joint
	100 : ϕ 100					CB :Female clevis		L:Axial foot type floating joint
						CR :Angular trunnion with female devis		F:Flange type floating joint
						LB :Foot mounting		

* For ϕ IC32~ ϕ IC100 non-rotated type, please contact our sales.

*Please refer to P3-179 ~ P3-180

How to order mounting parts

ZI	FA	-	32
IC series	Mounting parts		Bore size
	FA :Front flange		32 : ϕ 32
	FB :Rear flange		40 : ϕ 40
	TC :Central trunnion (Tie-Rod)		50 : ϕ 50
	CA :Male clevis		63 : ϕ 63
	CB :Female clevis		80 : ϕ 80
	CR :Angular trunnion with female devis		100 : ϕ 100
	LB :Foot mounting		

*Please refer to P3-11 ~ P3-13

How to order rod end joints

ZNF	Y	-	M10
	Rod end joint		Thread size
	Y:Double knuckle joint		M10 :M10xP1.25 (IC32)
	I :Single knuckle joint		M12 :M12xP1.25 (IC40)
	P:Eyebolt floating joint		M16 :M16xP1.5 (IC50 、 63)
	T:Basic floating joint		M20 :M20xP1.5 (IC80 、 100)
	L:Axial foot type floating joint		
	F:Flange type floating joint		

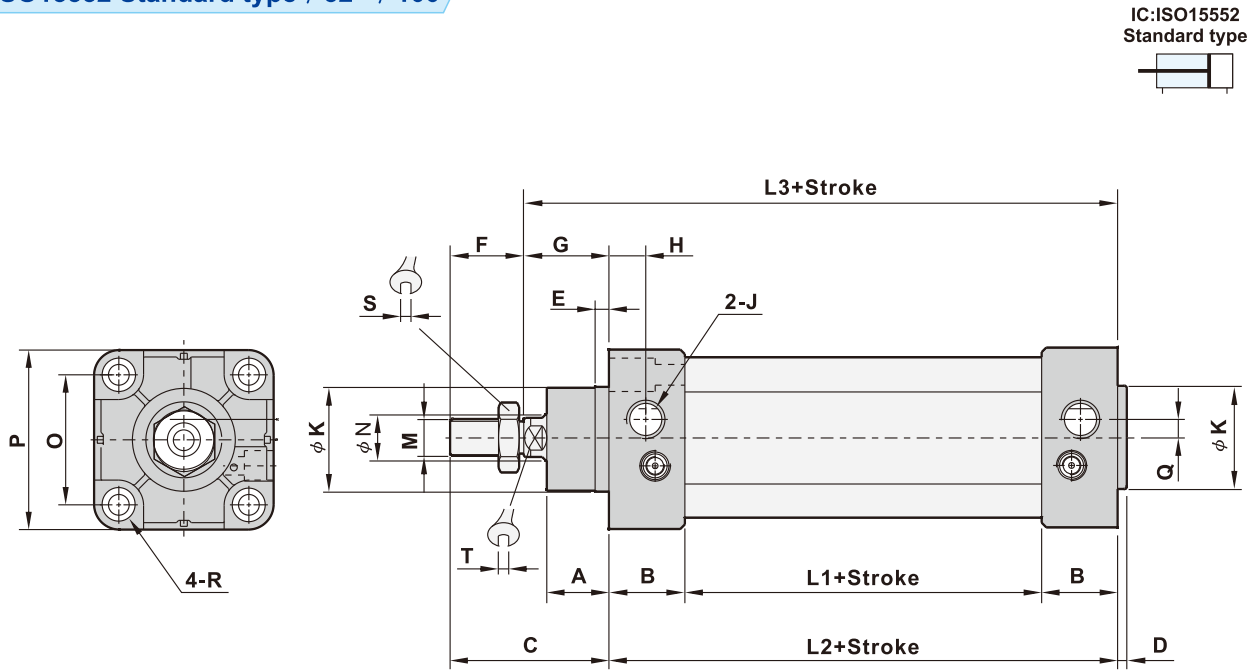
*Please refer to P3-177 ~ P3-178

Specifications

Bore size	ϕ 32	ϕ 40	ϕ 50	ϕ 63	ϕ 80	ϕ 100
Port size	1/8"	1/4"		3/8"		1/2"
Fluid	Compressed air					
Acting	Double acting					
Operating pressure range	1.5 ~ 9.5 kgf/cm ²					
Barrel material	Aluminum alloy					
Cushion	Built in					
Magnet	Option					
Ambient temperature	-5℃ ~ 60℃					
Piston speed	50~700mm/Sec.					

Dimensions

ISO15552 Standard type ϕ 32~ ϕ 100



IC:ISO15552
Standard type

Pneumatic Actuators

Standard

IC

ICE

ICL

TC

STC

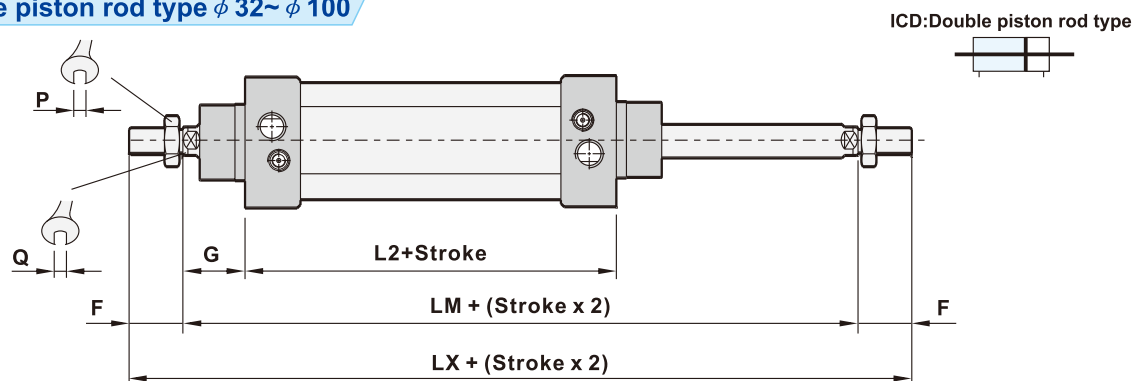
Bore size	A	B	C	D	E	F	G	H	J	K
ϕ 32	18	26	48	3	4.5	22	26	11.5	G 1/8	ϕ 30
ϕ 40	20.2	34	53.5	4	4.5	24	29.5	13.5	G 1/4	ϕ 34.5
ϕ 50	28	31	71	4	6	32	39	16	G 1/4	ϕ 39.7
ϕ 63	25.2	33	70.5	4	6	32	38.5	16	G 3/8	ϕ 44.7
ϕ 80	32.5	35.5	86	4	6	40	46	20.5	G 3/8	ϕ 44.7
ϕ 100	37	37	91	4.8	5.5	40	51	18	G 1/2	ϕ 54.8

(Unit: mm)

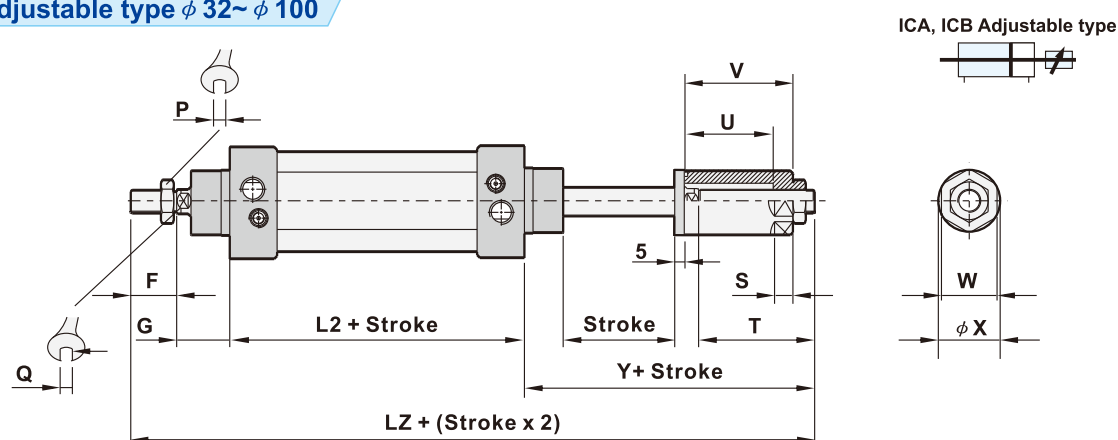
Bore size	L1	L2	L3	M	N	O	P	Q	R	S	T
ϕ 32	42	94	120	M10xP1.25	ϕ 12	32.5	47	4.3	M6	17	10
ϕ 40	37	105	134.5	M12xP1.25	ϕ 16	38	55	5.3	M6	19	13
ϕ 50	44	106	145	M16xP1.5	ϕ 20	46.5	65	7	M8	24	17
ϕ 63	55	121	159.5	M16xP1.5	ϕ 20	56.5	78	8	M8	24	17
ϕ 80	57	128	174	M20xP1.5	ϕ 25	72	95	9	M10	26	22
ϕ 100	64	138	189	M20xP1.5	ϕ 25	89	115	13.5	M10	26	22

■ Dimensions

ICD Double piston rod type $\phi 32 \sim \phi 100$



ICA, ICB Adjustable type $\phi 32 \sim \phi 100$



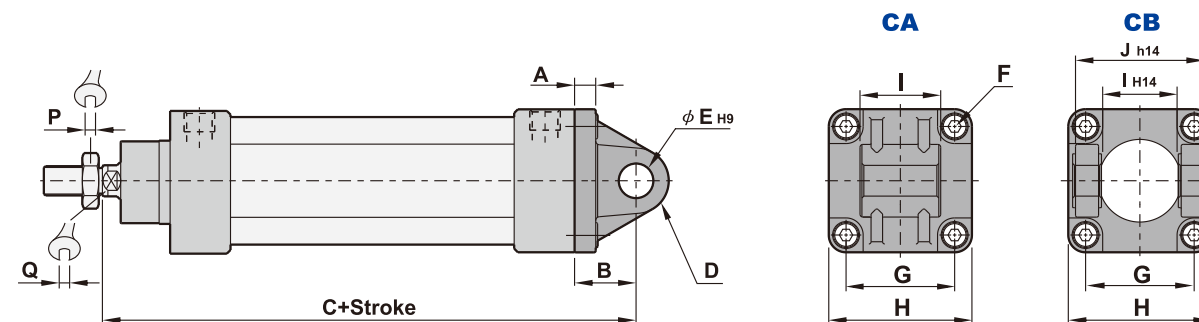
(Unit: mm)

Bore size	F	G	L2	LM	LX	LZ		P	Q	S
						ICA	ICB			
$\phi 32$	22	26	94	146	190	221.2	246.2	17	10	10
$\phi 40$	24	29.5	105	164	212	242.5	267.5	19	13	10
$\phi 50$	32	39	106	184	248	275.5	300.5	24	17	12
$\phi 63$	32	38.5	121	198	262	286.8	311.8	24	17	12
$\phi 80$	40	46	128	220	300	322.5	347.5	26	22	12
$\phi 100$	40	51	138	240	320	345.5	370.5	26	22	12

Bore size	T		U		V		W	X	Y	
	ICA	ICB	ICA	ICB	ICA	ICB			ICA	ICB
$\phi 32$	53.2	78.2	35	62	47	72	22	$\phi 25$	79.2	104.2
$\phi 40$	54.5	79.5	37	62	47	72	27	$\phi 30$	84	109
$\phi 50$	59.5	84.5	38	63	53	78	36	$\phi 40$	98.5	123.5
$\phi 63$	56.8	81.8	38	63	53	78	36	$\phi 40$	95.3	120.3
$\phi 80$	62.5	87.5	40	65	60	85	36	$\phi 40$	108.5	133.5
$\phi 100$	65.5	90.5	40	65	60	85	36	$\phi 40$	116.5	141.5

■ Dimension of mounting parts

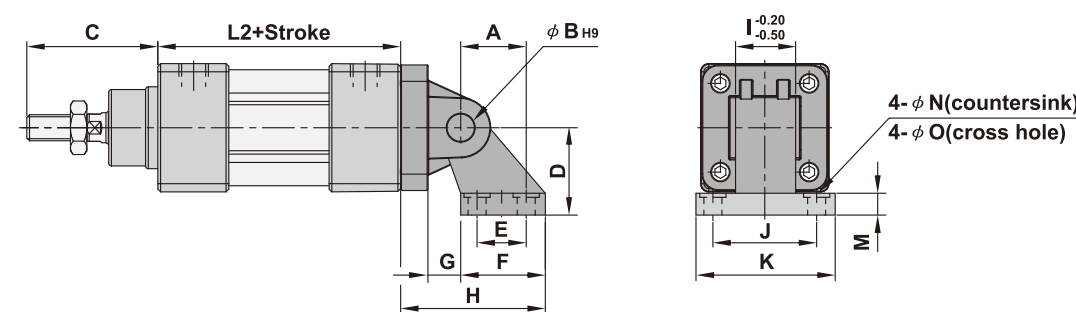
CA, CB Male & Female clevis



(Unit: mm)

Bore size	A		B	C	D	E	F	G	H	I	J	P	Q
	CA	CB											
$\phi 32$	10	10	22	142	R11	$\phi 10$	M6	32.5	46	$26^{+0.2}_{-0.6}$	45	17	10
$\phi 40$	10	10	25	160.8	R13	$\phi 12$	M6	38	54	$28^{+0.2}_{-0.6}$	52	19	13
$\phi 50$	13	13	28	170	R13	$\phi 12$	M8	46.5	64	$32^{+0.2}_{-0.6}$	60	24	17
$\phi 63$	13	13	33	190	R17	$\phi 16$	M8	56.5	77	$40^{+0.2}_{-0.6}$	70	24	17
$\phi 80$	15	15	35	210.8	R17	$\phi 16$	M10	72	94	$50^{+0.2}_{-0.6}$	90	26	22
$\phi 100$	15	15	40	230	R21	$\phi 20$	M10	89	114	$60^{+0.2}_{-0.6}$	110	26	22

CR Angular trunnion with female clevis

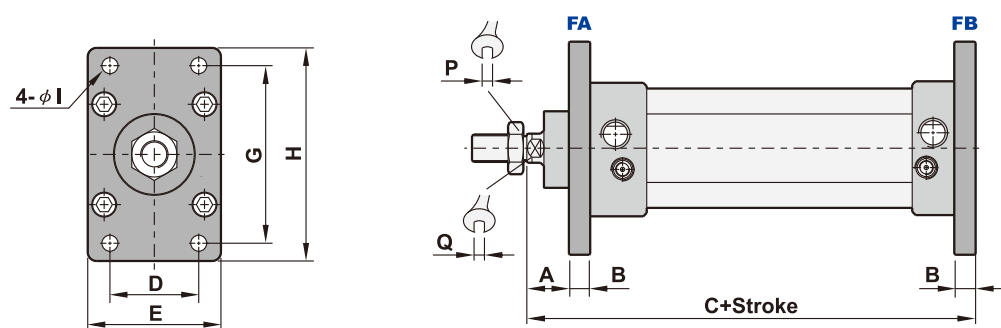


(Unit: mm)

Bore size	A	B	C	D	E	F	G	H	I	J	K	L2	M	N	O
$\phi 32$	21	$\phi 10$	48	32	18	31	10	50	26	38	51	94	8	-	$\phi 6.6$
$\phi 40$	24	$\phi 12$	53.5	36	22	35	12	56	28	41	54	105	10	-	$\phi 6.6$
$\phi 50$	33	$\phi 12$	71	45	30	45	13	68	32	50	65	106	12	-	$\phi 9$
$\phi 63$	37	$\phi 16$	70.5	50	35	50	17	77	40	52	67	120.2	12	-	$\phi 9$
$\phi 80$	47	$\phi 16$	86	63	40	60	19	93	50	66	86	128	14	$\phi 18$	$\phi 11$
$\phi 100$	55	$\phi 20$	91	71	50	70	22	106	60	76	96	138	15	$\phi 18$	$\phi 11$

■ Dimension of mounting parts

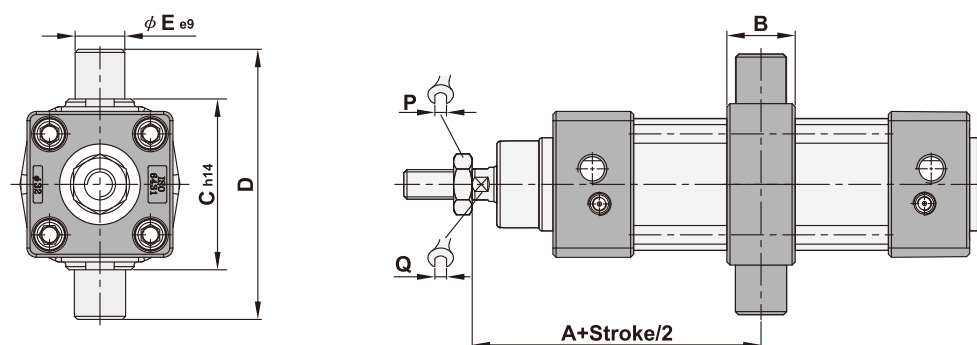
FA, FB Front & Rear flange



(Unit: mm)

Bore size	A	B	C	D	E	G	H	I	P	Q
φ 32	16	10	130	32	50	64	79	φ 7	17	10
φ 40	19.5	10	145	36	55	72	90	φ 9	19	13
φ 50	27	12	155	45	65	90	110	φ 9	24	17
φ 63	26.5	12	170	50	75	100	120	φ 9	24	17
φ 80	30	16	190	63	95	126	153	φ 12	26	22
φ 100	35	16	205	75	115	150	178	φ 14	26	22

TC Central trunnion



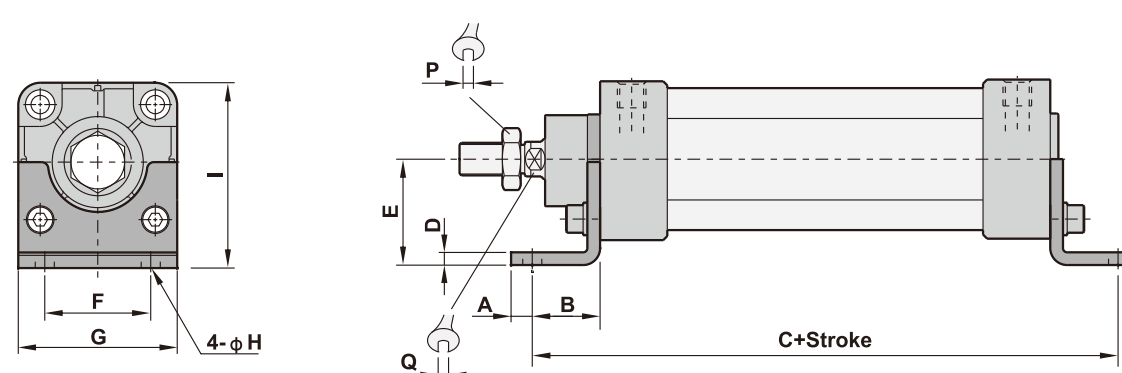
*WProfile barrel is changed to round barrel with 4 tie-rods for the order of ISO15552 standard cylinder with TC central trunnion
(Please contact your sales the change of position for TC central trunnion).

(Unit: mm)

Bore size	A	B	C	D	E	P	Q
φ 32	73	17	55	74	φ 12	17	10
φ 40	82	22	63	95	φ 16	19	13
φ 50	92	22	76	107	φ 16	24	17
φ 63	99	28	88	130	φ 20	24	17
φ 80	110	34	114	150	φ 20	26	22
φ 100	120	40	132	182	φ 25	26	22

■ Dimension of mounting parts

LB Foot mounting



(Unit: mm)

Bore size	A	B	C	D	E	F	G	H	I	P	Q
φ 32	8	24	142	4	32	32	47	φ 7	56.5	17	10
φ 40	10	28	161	4	36	36	53	φ 9	63.5	19	13
φ 50	10	32	170	4	45	45	65	φ 9	77.5	24	17
φ 63	10	32	185	4	50	50	75	φ 9	87.5	24	17
φ 80	13	41	210	5	63	63	95	φ 12	110	26	22
φ 100	13	41	220	6	71	75	115	φ 14	127.5	26	22

■ How to order Repair kit

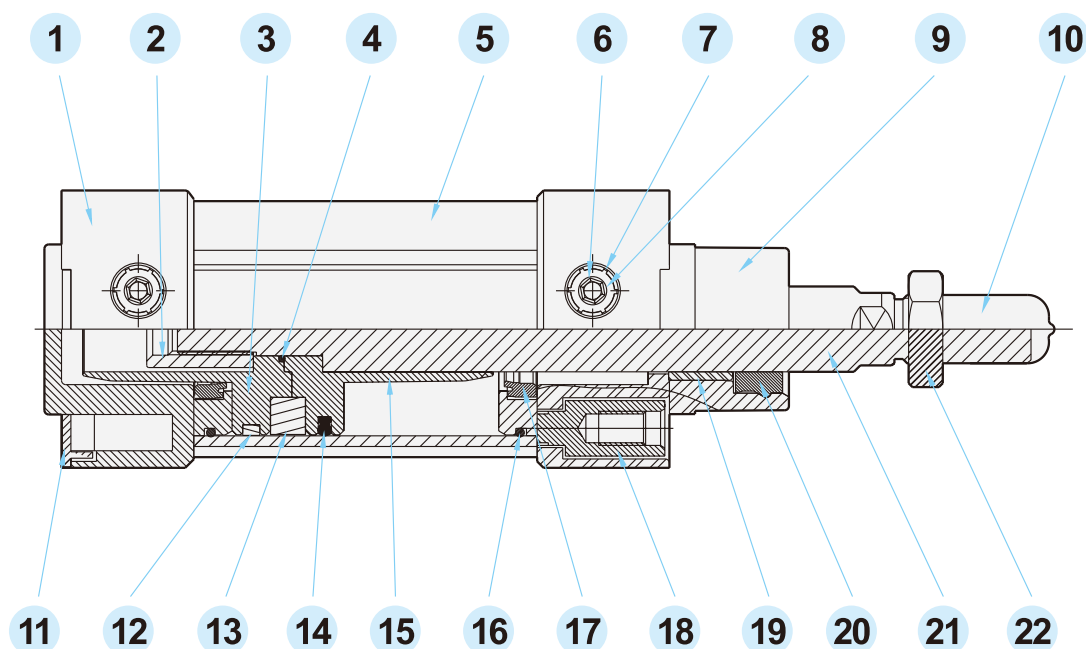
ZGCIN	—	32
Repair kit for IC Cylinder		Bore size
ZGCIN (IC)		32 : φ 32
ZGCINB (ICD. ICA. ICB)		40 : φ 40
		50 : φ 50
		63 : φ 63
		80 : φ 80
		100 : φ 100

■ Repair kit :

ZGCIN	
Description	Qty.
Rod seal	1
O-ring for cushion needle	2
O-ring for front/rear cover	2
Cushion	2
U-Piston seal	1

ZGCINB	
Description	Qty.
Rod seal	2
O-ring for cushion needle	2
O-ring for front/rear cover	2
Cushion	2
U-Piston seal	1

Material of parts



No.	Description	Material	Qty.	No.	Description	Material	Qty.
1	Rear cover	Aluminum alloy	1	12	Wear ring	Teflon+Graphite	1
2	Piston mounting nut	Brass+Ni	1	13	Magnet	Rubber	1
3	Rear piston	Aluminum alloy	1	14	U-Piston seal	NBR	1
4	O-ring	NBR	1	15	Front piston	Aluminum alloy	1
5	Barrel	Aluminum alloy	1	16	O-ring for front/rear cover	NBR	2
6	Cushion needle	Brass	1	17	Cushion	PU	2
7	Push on fastener	FeC	2	18	Fixing bolt	Fe+Ni	8
8	O-ring for cushion needle	NBR	2	19	Bushing	Brass	1
9	Front cover	Aluminum alloy	1	20	Rod seal	PU	1
10	Rubber cap	NBR	1	21	Piston rod	S45C+Cr	1
11	Rear plate	Plastic	1	22	Nut	Fe+Ni	1

Stroke table

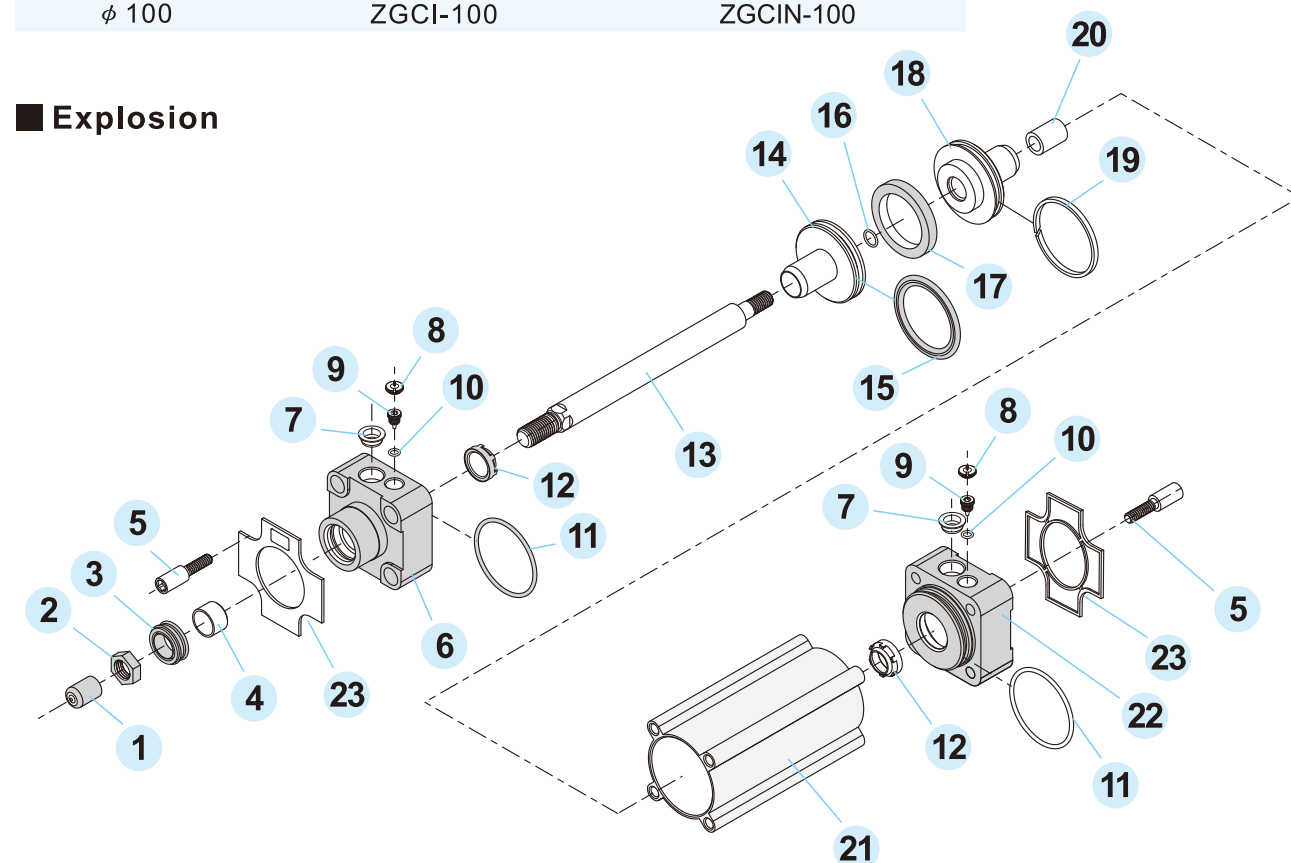
Bore size	Acting	Standard stroke(mm)	Max. Standard stroke(mm)
$\phi 32 \sim \phi 100$	Double acting	25 ~ 1000	1800

Note: Please contact our sales for non-standard stroke.

How to order Cylinder kit / Repair kit

Bore size	Cylinder kit	Repair kit
$\phi 32$	ZGCI-32	ZGCIN-32
$\phi 40$	ZGCI-40	ZGCIN-40
$\phi 50$	ZGCI-50	ZGCIN-50
$\phi 63$	ZGCI-63	ZGCIN-63
$\phi 80$	ZGCI-80	ZGCIN-80
$\phi 100$	ZGCI-100	ZGCIN-100

Explosion



No.	Description	Qty.	No.	Description	Qty.
1	Rubber cap	1	13	Piston rod	1
2	Rod nut	1	14	Front piston	1
3	Front seal	1	15	U-Piston seal	1
4	Bushing	1	16	O-ring	1
5	Fixing bolt	8	17	Rubber magnet	1
6	Front cover	1	18	Rear piston	1
7	Port plug	2	19	Wear ring	1
8	Fixing nut	2	20	Piston mounting nut	1
9	Cushion needle	2	21	Aluminum barrel	1
10	O-ring	2	22	Rear cover	1
11	Front cover o-ring	2	23	Rear plate	1
12	Cushion seal	2			

Features

- 1. Identical to ISO6430 standard.
- 2. High quality of aluminum tube provides a long service life.
- 3. High quality of seals ensures leakage free.
- 4. Various sensors for option.
- 5. With adjustable cushions on both ends.



How to order

TC	32	B	50-SF	1	-	FA	-	Y
Type	Bore size	Magnet	Stroke	Sensor type	Number of sensor	Mounting parts		Rod end joint
TC :ISO6430 standard type	32 : ϕ 32	B:W/I magnet		Blank:W/O sensor	1 pc	Blank:W/O mounting parts		Blank:W/O rod end joint
TCD:Double piston rod type	40 : ϕ 40	C:W/O magnet		SF:LED in front	2 pcs	FA :Front flange		Y:Double knuckle joint
TCA:Stroke adjustable 25mm	50 : ϕ 50					FB :Rear flange		I :Single knuckle joint
TCB:Stroke adjustable 50mm	63 : ϕ 63					CA :Male clevis		P:Eyebolt floating joint
	80 : ϕ 80					CB :Female clevis		T:Basic floating joint
	100 : ϕ 100					LB :Foot mounting		L:Axial foot type floating joint
								F:Flange type floating joint

* For ϕ TC32~ ϕ TC100 non-rotated type, please contact our sales.
*Please refer to P3-179 ~ P3-180

How to order mounting parts

ZT	FA	-	32
TC series	Mounting parts		Bore size
	FA :Front flange		32 : ϕ 32
	FB :Rear flange		40 : ϕ 40
	CA :Male clevis		50 : ϕ 50
	CB :Female clevis		63 : ϕ 63
	LB :Foot mounting		80 : ϕ 80
			100 : ϕ 100

*Please refer to P3-22 ~ P3-23

How to order rod end joints

ZNF	Y	-	M10
	Rod end joint		Thread size
	Y:Double knuckle joint		M10 :M10xP1.25 (TC32)
	I :Single knuckle joint		M12 :M12xP1.25 (TC40)
	P:Eyebolt floating joint		M16 :M16xP1.5 (TC50 、 63)
	T:Basic floating joint		M20 :M20xP1.5 (TC80 、 100)
	L:Axial foot type floating joint		
	F:Flange type floating joint		

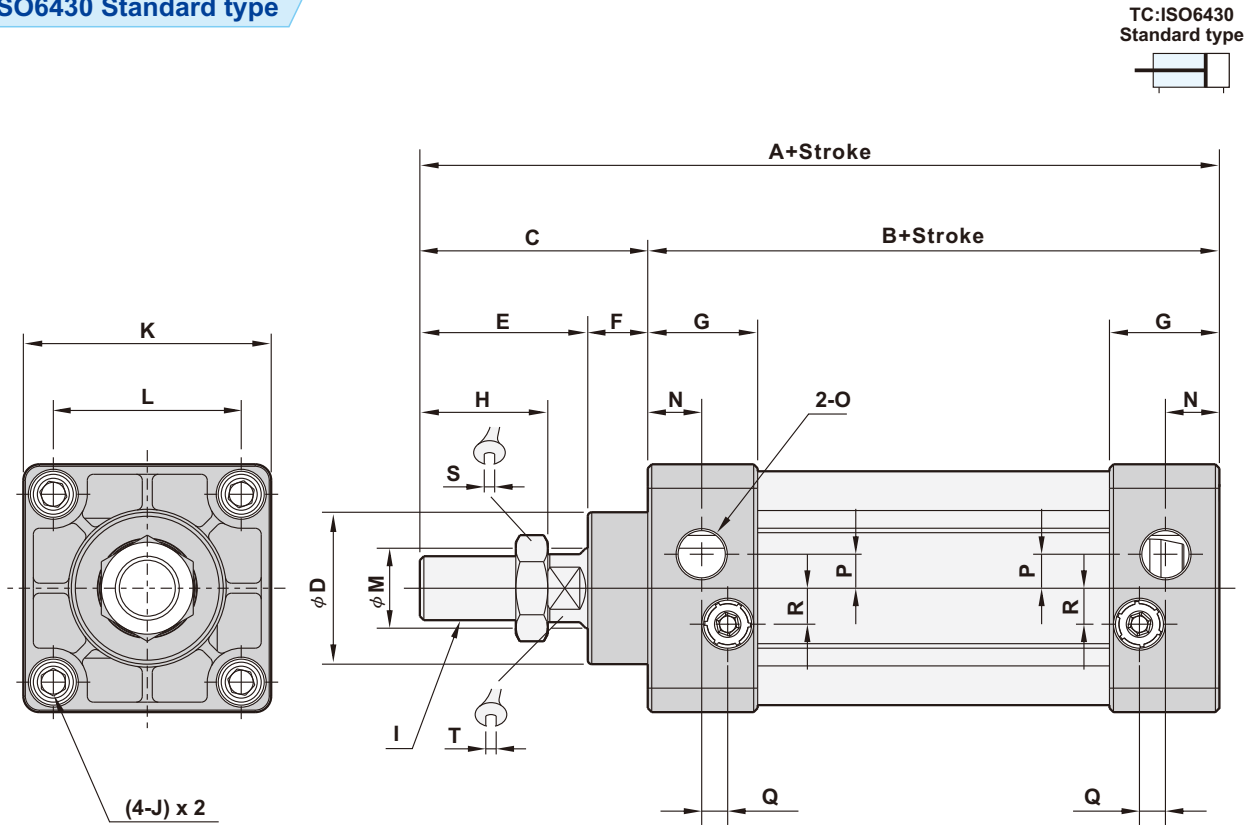
*Please refer to P3-177 ~ P3-178

Specifications

Bore size	ϕ 32	ϕ 40	ϕ 50	ϕ 63	ϕ 80	ϕ 100
Port size	1/8"	1/4"		3/8"		1/2"
Fluid	Compressed air					
Acting	Double acting					
Operating pressure range	1.5 ~ 9.5 kgf/cm ²					
Barrel material	Aluminum alloy					
Cushion	Built in					
Magnet	Option					
Ambient temperature	-5℃ ~ 60℃					
Piston speed	50~700mm/Sec.					

Dimensions

ISO6430 Standard type

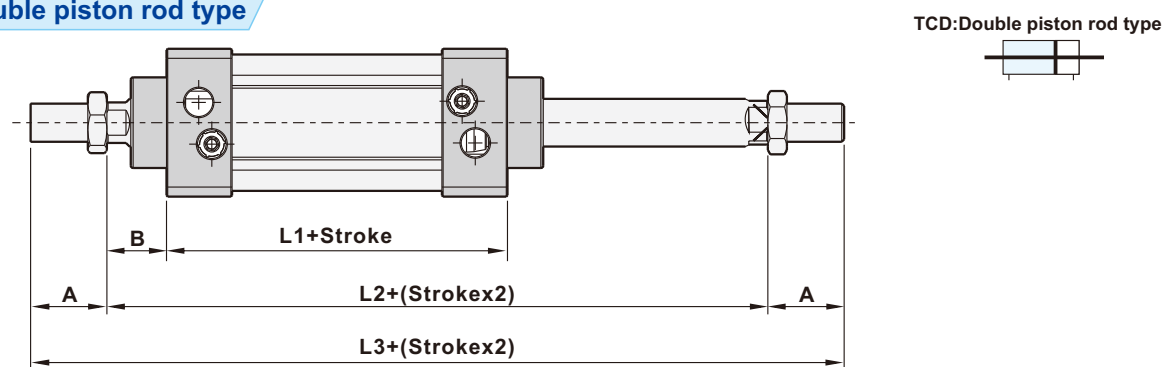


(Unit: mm)										
Bore size	A	B	C	D	E	F	G	H	I	J
ϕ 32	140	93	47	ϕ 28	32	15	27.5	22	M10xP1.25	M6xP1.0
ϕ 40	142	93	49	ϕ 32	34	15	27.5	24	M12xP1.25	M6xP1.0
ϕ 50	150	93	57	ϕ 34	42	15	27.5	32	M16xP1.5	M6xP1.0
ϕ 63	153	96	57	ϕ 34	42	15	29	32	M16xP1.5	M8xP1.25
ϕ 80	183	108	75	ϕ 47	54	21	33	40	M20xP1.5	M10xP1.5
ϕ 100	189	114	75	ϕ 47	54	21	33	40	M20xP1.5	M10xP1.5

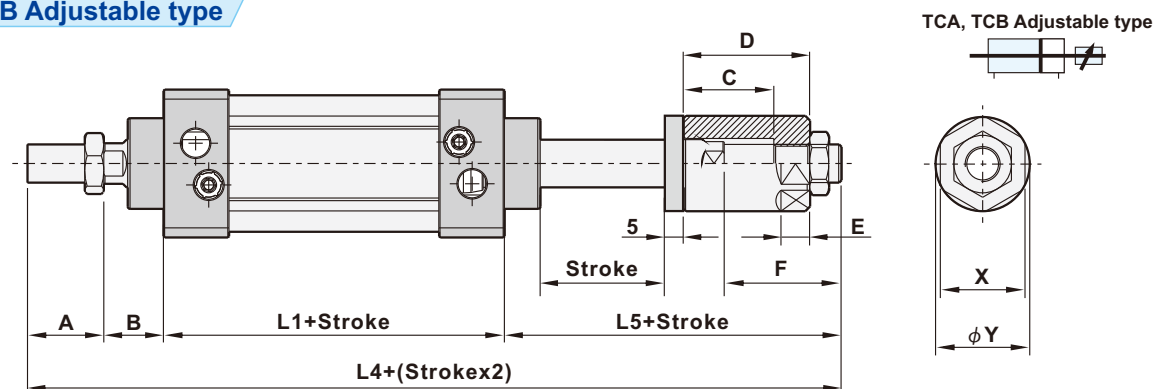
Bore size	K	L	M	N	O	P	Q	R	S	T
ϕ 32	45	33	ϕ 12	13.75	G 1/8	3.5	6.5	7	17	10
ϕ 40	50	37	ϕ 16	13.5	G 1/4	6	6	7	19	13
ϕ 50	62	47	ϕ 20	13.5	G 1/4	8.5	5.5	9	24	17
ϕ 63	75	56	ϕ 20	14.5	G 3/8	8.5	5.5	9	24	17
ϕ 80	94	70	ϕ 25	16.5	G 3/8	10	7.5	14	26	22
ϕ 100	112	84	ϕ 25	16.5	G 1/2	11	7.5	14	26	22

■ Dimensions

TCD Double piston rod type



TCA, TCB Adjustable type



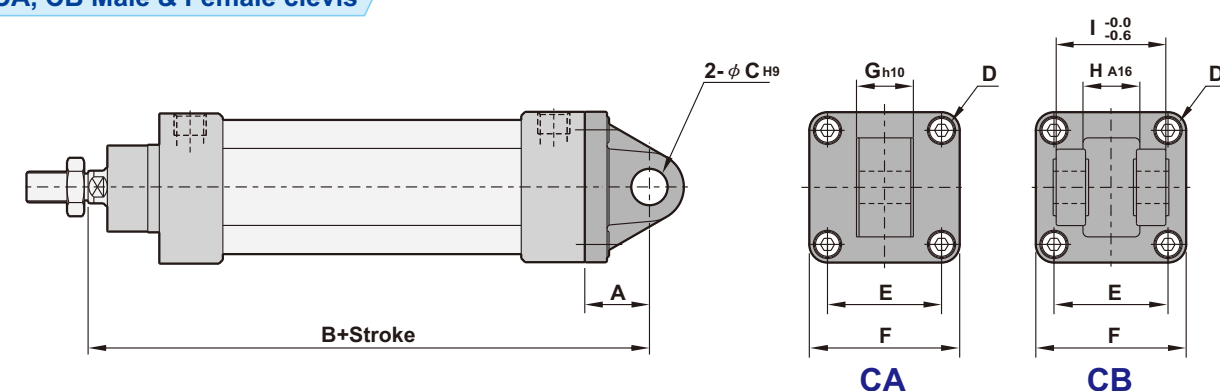
(Unit: mm)

Bore size	A	B	C		D		E	F	
			TCA	TCB	TCA	TCB		TCA	TCB
φ 32	22	25	35	62	47	72	10	49	74
φ 40	24	25	37	62	47	72	10	50	75
φ 50	32	25	38	63	53	78	12	57	82
φ 63	32	25	38	63	53	78	12	57	82
φ 80	40	35	40	65	60	85	12	62	87
φ 100	40	35	40	65	60	85	12	62	88

Bore size	L1	L2	L3	L4		L5		X	Y
				TCA	TCB	TCA	TCB		
φ 32	93	143	187	214	239	74	99	22	φ 25
φ 40	93	143	191	217	242	75	100	27	φ 30
φ 50	93	143	207	232	257	82	107	36	φ 40
φ 63	96	146	210	235	260	82	107	36	φ 40
φ 80	108	178	258	280	305	97	122	36	φ 40
φ 100	114	184	264	286	312	97	123	36	φ 40

■ Dimension of mounting parts

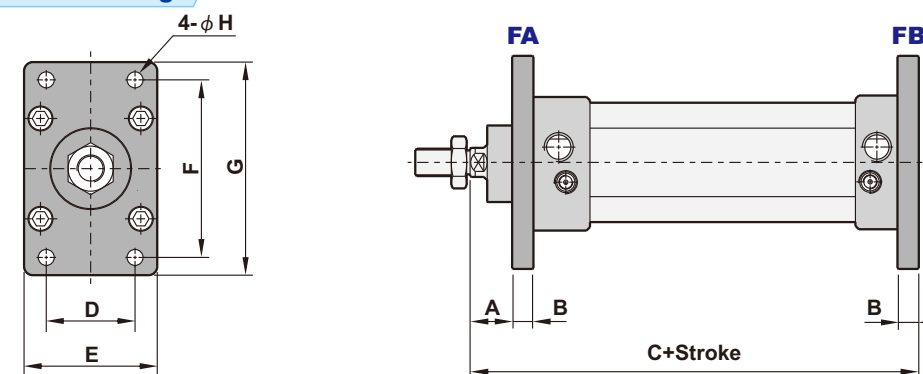
CA, CB Male & Female clevis



(Unit: mm)

Bore size	A		B		C	D	E	F	G	H	I
	CA	CB	CA	CB							
φ 32	34	19	152	137	φ 12	M6XP1.0	33	48	16	16.3	32
φ 40	34	19	152	137	φ 14	M6XP1.0	37	50	20	20.3	44
φ 50	34	19	152	137	φ 14	M6XP1.0	47	62	20	20.3	52
φ 63	34	19	155	140	φ 14	M8XP1.25	56	75	20	20.3	52
φ 80	48	32	191	175	φ 20	M10XP1.5	70	94	32	32.3	64
φ 100	48	32	197	181	φ 20	M10XP1.5	84	112	32	32.3	64

FA, FB Front & Rear flange

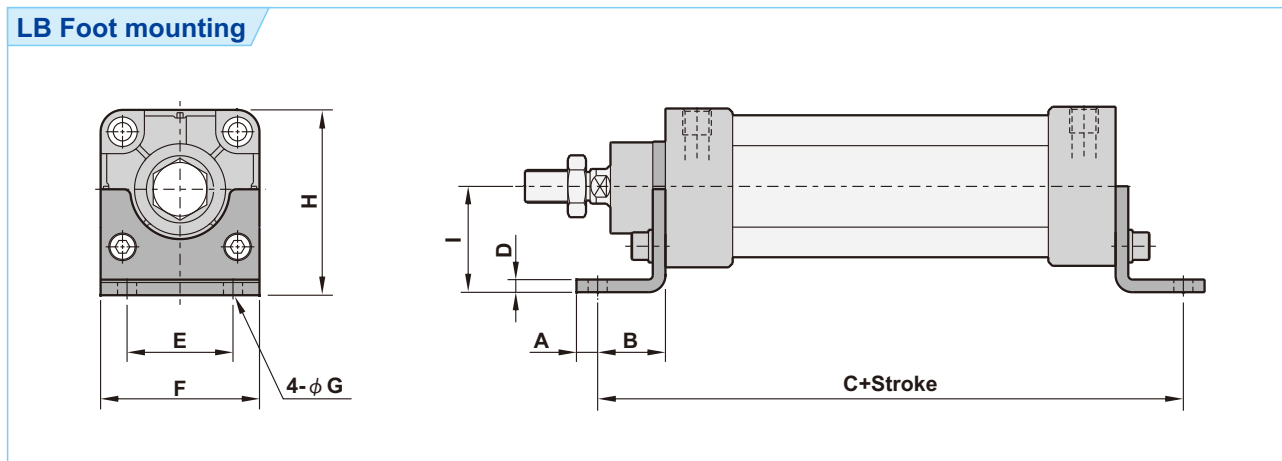


(Unit: mm)

Bore size	A	B	C	D	E	F	G	H
φ 32	15	10	128	33	47	58	72	φ 7
φ 40	15	10	128	36	52	70	84	φ 7
φ 50	15	10	128	47	65	86	104	φ 9
φ 63	13	12	133	56	76	98	116	φ 9
φ 80	19	16	159	70	95	119	143	φ 12
φ 100	19	16	165	84	115	138	162	φ 12

Dimension of mounting parts

LB Foot mounting



(Unit: mm)

Bore size	A	B	C	D	E	F	G	H	I
φ 32	9.5	20.5	134	3	33	50	φ 9	50.5	28
φ 40	14.5	23.5	140	3	37	57	φ 12	55	30
φ 50	12	28	149	3	47	68	φ 12	67.5	36.5
φ 63	13	31	158	3	56	80	φ 12	78.5	41
φ 80	16	30	168	4	70	97	φ 14	96	49
φ 100	18	30	174	4	84	112	φ 14	113	57

How to order Repair kit

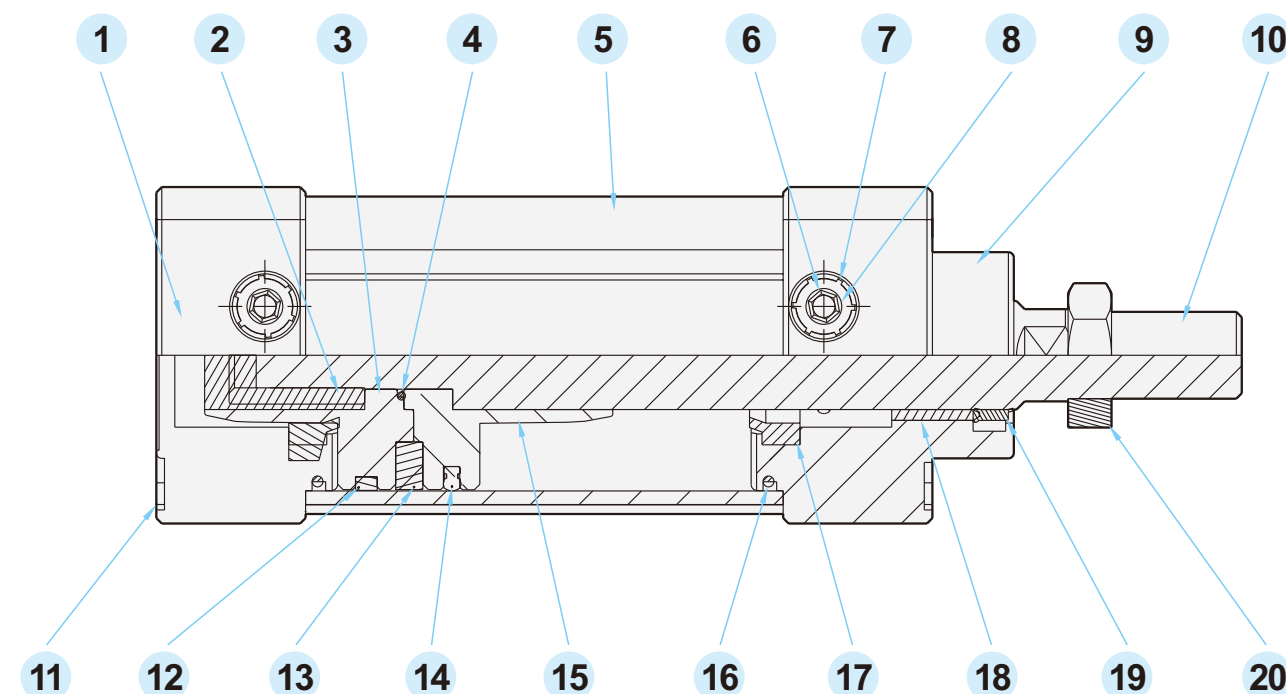
ZGCTN	—	32
Repair kit for TC Cylinder		Bore size
ZGCTN (TC)		32 : φ 32
ZGCTNB (TCD. TCA. TCB)		40 : φ 40
		50 : φ 50
		63 : φ 63
		80 : φ 80
		100 : φ 100

Repair kit :

ZGCTN	
Description	Qty.
Rod seal	1
O-ring for cushion needle	2
O-ring for front/rear cover	2
Cushion	2
U-Piston seal	1

ZGCTNB	
Description	Qty.
Rod seal	2
O-ring for cushion needle	2
O-ring for front/rear cover	2
Cushion	2
U-Piston seal	1

Material of parts



No.	Description	Material	Qty.	No.	Description	Material	Qty.
1	Rear cover	Aluminum alloy	1	11	Fixing bolt	Fe+Ni	8
2	Piston mounting nut	Brass+Ni	1	12	Wear ring	Teflon+Graphite	1
3	Rear piston	Aluminum alloy	1	13	Magnet	Rubber	1
4	O-ring	NBR	1	14	U-Piston seal	NBR	1
5	Barrel	Aluminum alloy	1	15	Front piston	Aluminum alloy	1
6	Cushion needle	Brass	2	16	O-ring for front/rear cover	NBR	2
7	Push on fastener	FeC	2	17	Cushion	PU	2
8	O-ring for cushion needle	NBR	2	18	Bushing	Brass	1
9	Front cover	Aluminum alloy	1	19	Rod seal	PU	1
10	Piston rod	S45C+Cr	1	20	Nut	Fe+Ni	1

Stroke table

Bore size	Acting	Standard stroke(mm)	Max. Standard stroke(mm)
φ 32 ~ φ 100	Double acting	25 ~ 1000	1800

Note: Please contact our sales for non-standard stroke.