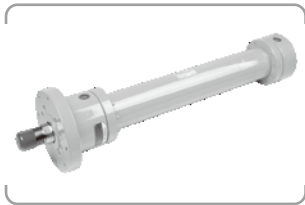


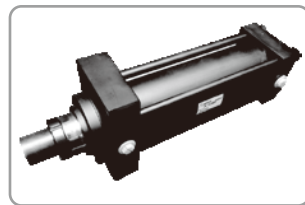
ISO SPECIFICATION CYLINDERS

SERIES Products Content



REG160 ISO 6020-1 hydraulic cylinders P345

Tie-rod
Hydraulic
Cylinder



SEG160 ISO 6020-2 hydraulic cylinders P364

Mold
Hydraulic
Cylinders

Swivel &
Clamp
Hydraulic
Cylinders



HEG250 ISO 6022 hydraulic cylinders P383

Booster
Cylinders
&
Unclamping
cylinders

ISO
Specifications
Cylinders

Round
Hydraulic
Cylinders

Specific
Hydraulic
Cylinders

Systems
&
Fittings

**REG160 ISO 6020-1
HYDRAULIC CYLINDERS**



- Compliant with ISO6020/1 specification
- Maximum working pressure is 16MPa (160kgf/cm²)
- Structure: Cover fix on flange plate with screw, and easy disassembly for maintenance
- Strictly control the machining accuracy, it has the advantages of low friction and long life
- Can be used in engineering design, such as steel, metallurgy, ships and other machines
- External dimensions similar to cylinders MMB of Paker's company

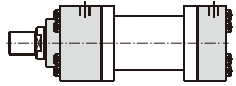
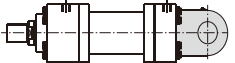
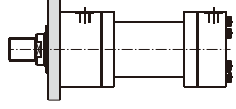
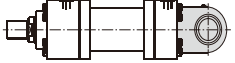
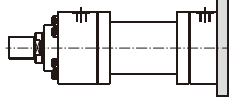
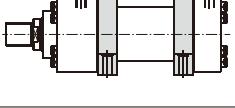
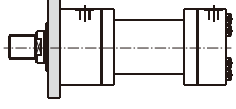
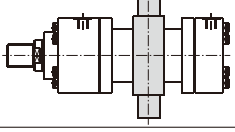
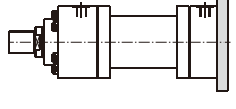
**THEORETICAL
OUTPUT TABLE**

		Bore (mm)													
		25	32	40	50	63	80	100	125	160	200	250	320		
Piston pressure area (cm ²)	Extend	4.9	8.0	12.6	19.6	31.2	50.3	78.5	122.7	201.1	314.2	490.9	804.2		
	Retract	Rod	Class C	3.4	5.5	8.8	13.5	21.0	34.4	53.9	84.2	137.4	219.1	336.9	549.8
			Class B	2.4	4.2	6.4	9.5	15.3	25.6	40.1	59.1	106.0	160.2	236.4	424.1
Theoretical output (kgf)	Pressure 70 (kgf/cm ²)	Extend	344	563	880	1374	2182	3519	5498	8590	14074	21991	34361	56297	
		Retract	Class C	236	385	614	943	1470	2405	3774	5896	9621	15339	23586	38485
	Class B		165	297	449	662	1069	1794	2804	4137	7422	11215	16548	29688	
	Pressure 160 (kgf/cm ²)	Extend	785	1287	2011	3142	4988	8042	12566	19635	32170	50265	78540	128680	
		Retract	Class C	539	880	1402	2156	3359	5498	8626	13477	21991	35060	53910	87965
	Class B		378	679	1025	1513	2443	4102	6409	9456	16965	25635	37825	67858	

TYPE

Type	Mark	Graphics	Dust cover	Heat resistance	Bore(mm)
Double acting cylinder	REG160-A		REG160-AH	REG160-AJ	25~320
Double rod cylinder	REG160-C		REG160-CH	REG160-CJ	
Double acting cylinder with adjustable stroke	REG160-D		REG160-DH	REG160-DJ	

INSTALLATION FORM

Mark	Type	Graphics	Mark	Type	Graphics
M00 (SD)	Basic		MP3 (CA)	Clevis (with bushing)	
MF1	Rod flange		MP5 (CAB)	Clevis (with ball bearing)	
MF2	Head flange		MS2 (LA)	Foot flange	
MF3	Rod flange (round)		MT4 (TC)	Mid trunnion	
MF4	Head flange (round)				

Tie-rod Hydraulic Cylinder

Mold Hydraulic Cylinders

Swivel & Clamp Hydraulic Cylinders

Booster Cylinders & Unclamping cylinders

ISO
Specifications Cylinders

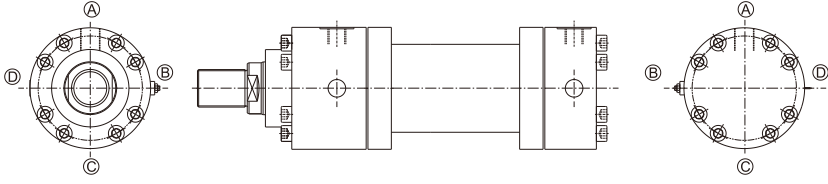
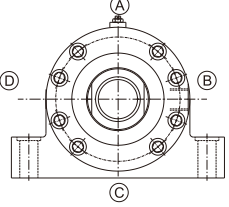
Round Hydraulic Cylinders

Specific Hydraulic Cylinders

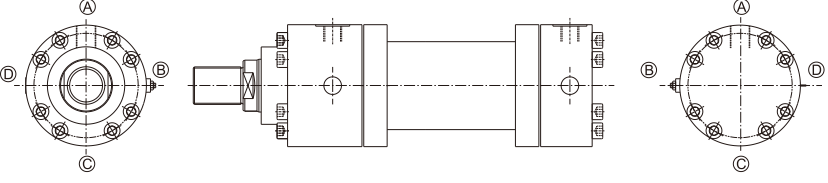
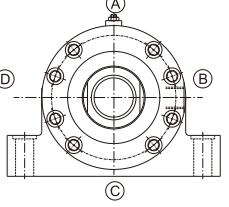
Systems & Fittings

PORT AND CUSHION POSITIONS

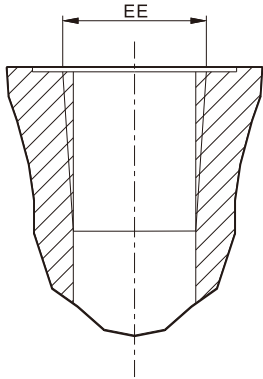
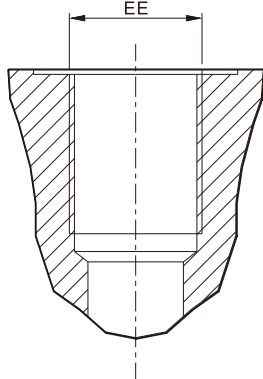
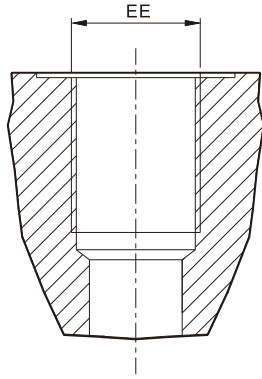
- Bore: Ø25~Ø160

M00(SD) Basic	MS2(LA) Foot flange
	
<p>M00(SD): Standard location A = input port B = cushion position D = check valve position</p>	
<p>MS2(LA): Representation : REG160A-MS2-C-100×200-B-A B = input port A = cushion position</p>	

- Bore: Ø200

M00(SD) Basic	MS2(LA) Foot flange
	
<p>M00(SD): Standard location A = input port B = buffer adjustment and position of check valve and escape vent</p>	
<p>MS2(LA): Representation : REG160A-MS2-C-100×200-B-A B = input port A = buffer adjustment and position of check valve and escape vent</p>	

SPEC. OF OIL INLET

Type	RC Taper	G Parallel	M Straight
Graphics			
Bore	Symbol	EE	EE
25	RC1/4	G1/4	M14x1.5
32	RC3/8	G3/8	M18x1.5
40	RC1/2	G1/2	M22x1.5
50			
63	RC3/4	G3/4	M27x2
80			
100	RC1	G1	M33x2
125			
160	RC1 1/4	G1 1/4	M42x2
200			
250	RC1 1/2	G1 1/2	M48x2.0
320	RC1 1/2	G1 1/2	M48x2.0

Tie-rod Hydraulic Cylinder

Mold Hydraulic Cylinders

Swivel & Clamp Hydraulic Cylinders

Booster Cylinders & Unclamping cylinders

ISO Specifications Cylinders

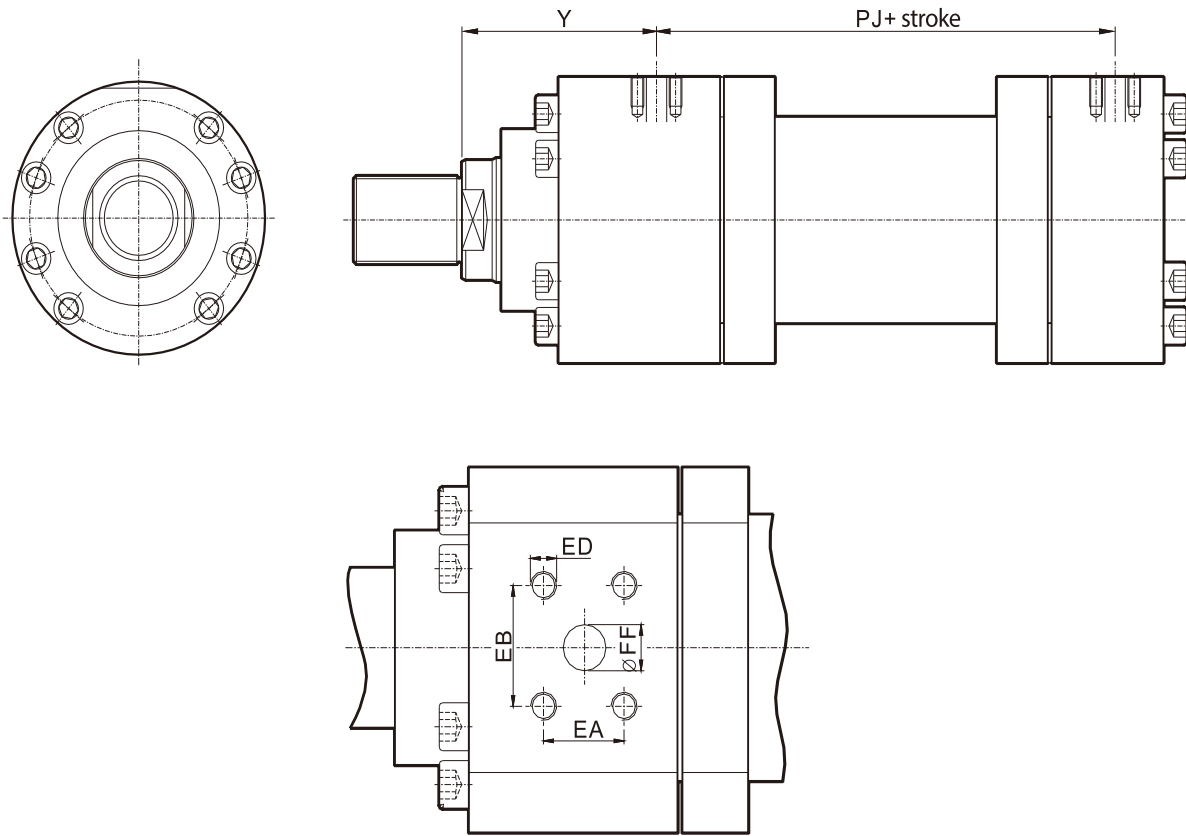
Round Hydraulic Cylinders

Specific Hydraulic Cylinders

Systems & Fittings

SPEC. OF OIL INLET

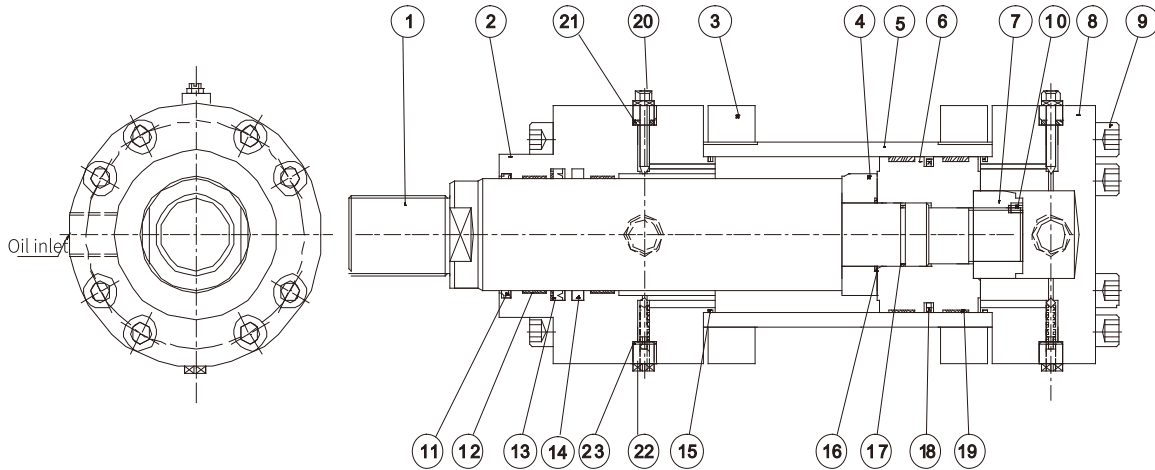
- MM: Rectangular flange (ISO6162)



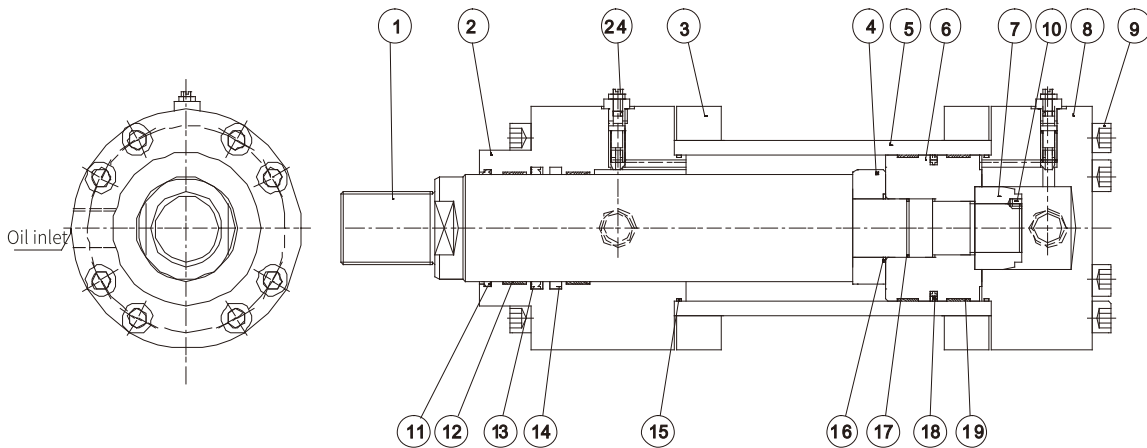
Bore	ISO 6162-1 (200-350 bar) (SAE 3000 PSI)					
	Y	PJ	FF	EB ± 0.25	EA ± 0.25	ED
50	72	111	13	38.1	17.5	M8x1.25
63	82	117	13	38.1	17.5	M8x1.25
80	91	134	13	38.1	17.5	M8x1.25
100	108	162	19	47.6	22.2	M10x1.5
125	121	174	19	47.6	22.2	M10x1.5
160	143	191	25	52.4	26.2	M10x1.5
200	190	224	25	52.4	26.2	M10x1.5
250	205	290	32	58.7	30.2	M10x1.5
320	250	358	32	58.7	30.2	M10x1.5

INTERNAL STRUCTURE AND PART NAMES

● Bore: Ø25~Ø160



● Bore: Ø200~Ø320



Item	Part name	Qty	Item	Part name	Qty
①	Piston rod	1	⑬	Rod cover seal	1
②	Rod cover	1	⑭	Rod cover plane seal(note2)	1
③	Tube flange	2	⑮	Cover O-ring	2
④	Rod cushion	1	⑯	Buffer O-ring	1
⑤	Tube	1	⑰	O-ring inside piston	1
⑥	Piston	1	⑱	Piston seal	2
⑦	Head buffer	1	⑲	Piston wear ring	2
⑧	Head cover	1	⑳	Cushion adjusting valve (Ø50~Ø160)	2
⑨	Steel screw	Note1	㉑	Cushion gasket (Ø50~Ø160)	2
⑩	Set screw	1	㉒	Check valve and escape valve (Ø50~Ø160)	2
⑪	Rod cover dust seal	1	㉓	Check valve O-ring (Ø50~Ø160)	2
⑫	Rod cover wear ring	2	㉔	Cushion and check valve (Ø200~Ø320)	2

Note 1: The number of steel screws is adjusted for different cylinder diameters.

Note 2: Front cover sleeve selection: ⑬ U-shaped sleeve is the standard specification if you need to choose ⑭ flat cover please specify.

Tie-rod Hydraulic Cylinder

Mold Hydraulic Cylinders

Swivel & Clamp Hydraulic Cylinders

Booster Cylinders & Unclamping cylinders

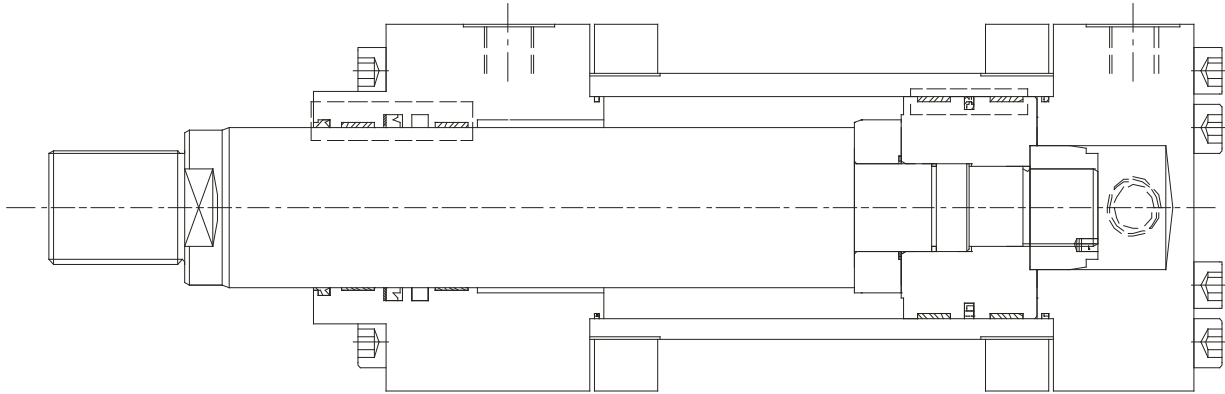
ISO Specifications Cylinders

Round Hydraulic Cylinders

Specific Hydraulic Cylinders

Systems & Fittings

SEAL SPECIFICATION



Rod seal :

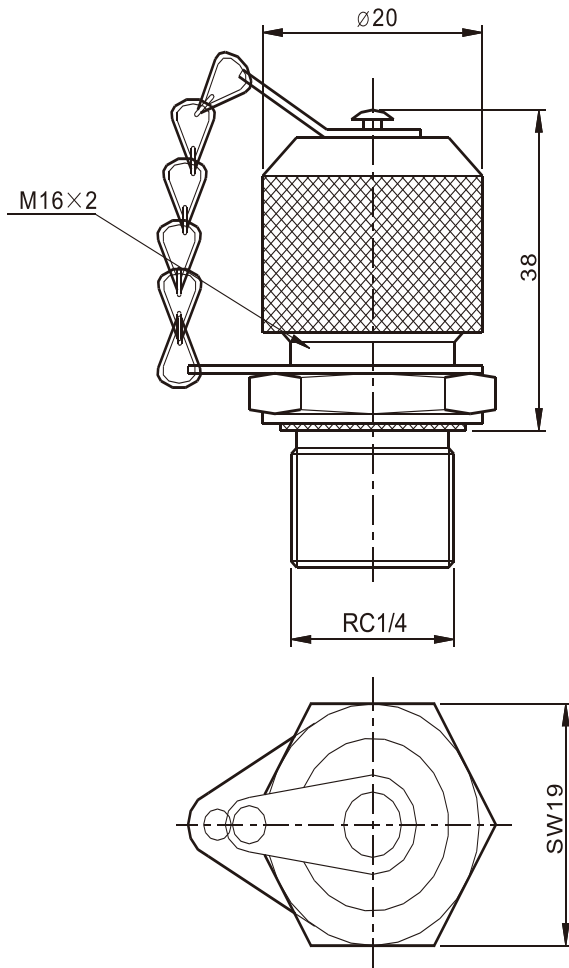
Standard seal	
Servo low friction seal	
V-seal	

Piston seal :

Servo low friction seal	
V-seal	

■ JUFAN provides a variety of oil seal forms, customers can choose the right oil seal according to the working condition, if there are other special requirements, you can call the company for consultation.

**AV-PRESSURE GAUGE AND
QUICK EXHAUST FITTING**



- This fitting is used for venting and pressure measurement
- When measuring the pressure, unscrew then install the pressure gauge, and measure the internal pressure of the cylinder
- This part can also be used for venting and can be used without disassembly.

Tie-rod Hydraulic Cylinder

Mold Hydraulic Cylinders

Swivel & Clamp Hydraulic Cylinders

Booster Cylinders & Unclamping cylinders

ISO Specifications Cylinders

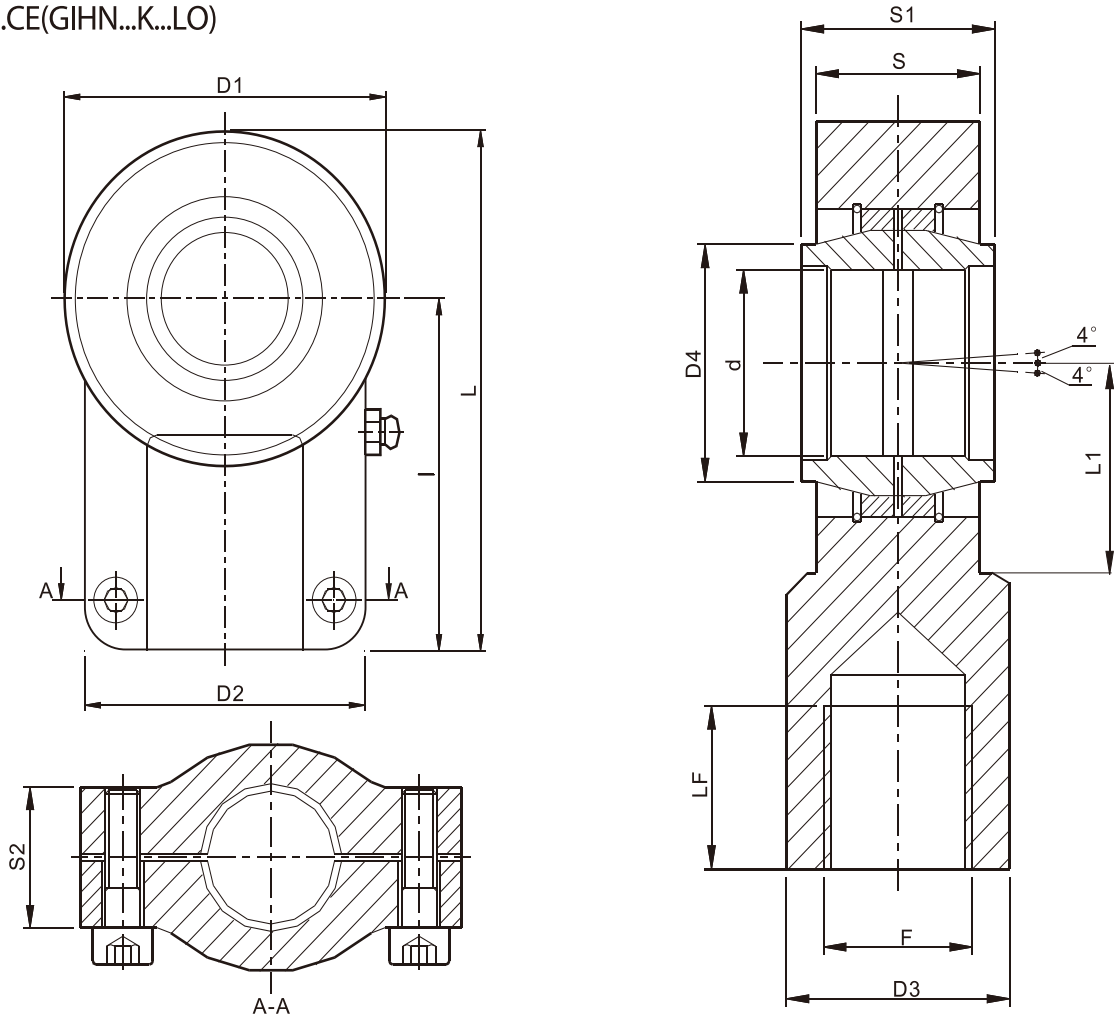
Round Hydraulic Cylinders

Specific Hydraulic Cylinders

Systems & Fittings

PR..CE BALL JOINT (COMPLIANCE WITH ISO-6982 OR DIN24338)

PR...CE(GIHN...K...LO)



Bore	Series	F	d	S1	I	LF	D1	D2	D3	D4	S	S2	L	L1
25	PR16CE	M14x1.5	16	16	44	19	40	40	21	20	13.8	15	64	20
32	PR20CE	M16x1.5	20	20	52	23	47	47	25	25	17.8	18.7	75	22
40	PR25CE	M20x1.5	25	25	65	29	59	54	30	30.5	21.9	19	96	27
50	PR32CE	M27x2	32	32	80	37	71	66	38	38	27.5	22	119	32
63	PR40CE	M33x2	40	40	97	46	90	80	47	46	33	27	146	41
80	PR50CE	M42x2	50	50	120	57	109	96	58	57	41	32	180	50
100	PR63CE	M48x2	63	63	140	64	132	114	70	71.5	53	38	212	62
125	PR80CE	M64x3	80	80	180	86	169	148	90	91	67	48	271	78
160	PR100CE	M80x3	100	100	212	96	211	178	110	113	86	64	323	98
200	PR125CE	M100x3	125	125	260	113	269	200	135	138	105	74	406	120
250	PR160CE	M125x4	160	160	310	126	326	250	165	177	130	82	488	150
320	PR200CE	M160x4	200	200	390	161	418	320	215	221	167	105	620	195

ORDER INDICATION

REG160	A		M00	C	100	200ST
Series	Type	Performance	Installation form	Shaft diameter	Bore	Stroke
ISO-6020/1 Round cylinders	A: Double acting cylinder	Blank = indicates standard H: Shaft with dust cover J: Heat/acid & alkali resistance	M00: Basic (SD)	C: C class	25:25mm	Customized
	C: Double rod cylinder		MF1: Rod flange (FA)	B: B class	32:32mm	
	D: Double acting cylinder with adjustable stroke		MF2: Head flange (FB)		40:40mm	
			MF3: Rod round flange (FC)		50:50mm	
			MF4: Head round flange (FD)		63:63mm	
			MP3: Clevis (CA)		80:80mm	
			MP5: Clevis + Ball joint (CA1)		100:100mm	
			MS2: Foot flange (LA)		125:125mm	
			MT4: Mid trunnion (TC)		160:160mm	
					200:200mm	
		250:250mm				
		320:320mm				

Tie-rod Hydraulic Cylinder

Mold Hydraulic Cylinders

Swivel & Clamp Hydraulic Cylinders

Booster Cylinders & Unclamping cylinders

ISO Specifications Cylinders

Round Hydraulic Cylinders

Specific Hydraulic Cylinders

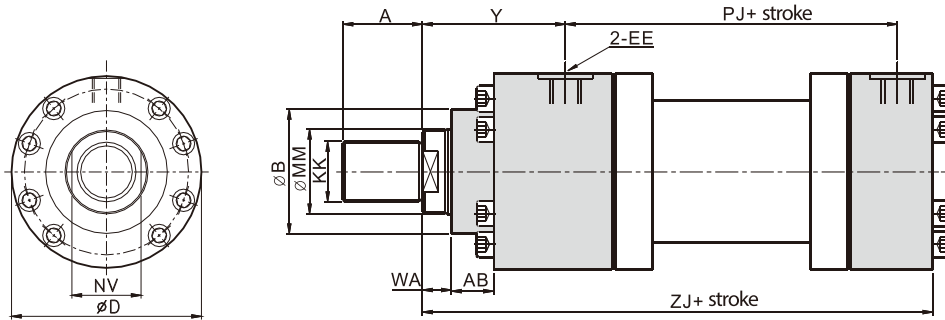
Systems & Fittings

					RC	
Shaft end joint	Cushion	Adjustable stroke	Port position	Cushion position	Spec. of oil inlet	Pressure joint
Blank = indicates standard (not attached) PR...CE ball joint (Compliance with ISO-6982 or DIN24338) Pls refer to P. 239	Blank = indicates standard (no cushion) B: Cushion on both ends R: Cushion on rod cover H: Cushion on head cover	▲ Unlimited adjustable length for double acting cylinder with adjustable stroke	Indicates standard: Same as external dimension Special type: Pls refer to P. 234	Pls refer to P. 234	RC: Taper G: Parallel M: Straight MM: Rectangle	Blank = indicates standard (not attached) AV: Pressure gauge and quick exhaust fitting

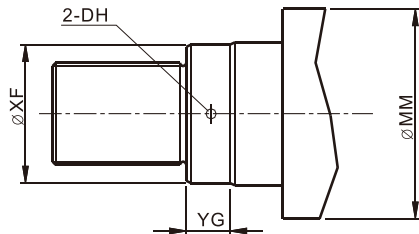
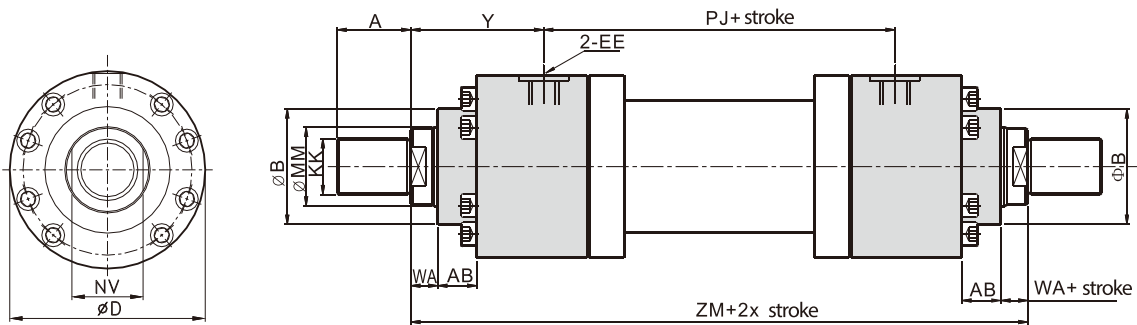
REG160	A	M00	32	100	B	Rod cover
Series	Type	Installation form	Bore	Stroke	Shaft diameter	Part name
ISO-6020/1 Round cylinders	A: Double acting cylinder	M00: Basic (SD)			C: C class	Refer to internal structure and part name
	C: Double rod cylinder	MF1: Rod flange (FA)			B: B class	
	D: Double acting cylinder with adjustable stroke	MF2: Head flange (FB)				
		MF3: Rod round flange (FC)				
		MF4: Head round flange (FD)				
		MP3: Clevis (CA)				
		MP5: Clevis + Ball joint (CA1)				
		MS2: Foot flange (LA)				
		MT4: Mid trunnion (TC)				

EXTERNAL DIMENSIONS

- M00(SD) Double acting(basic)



- M00(SD) Double rod(basic)



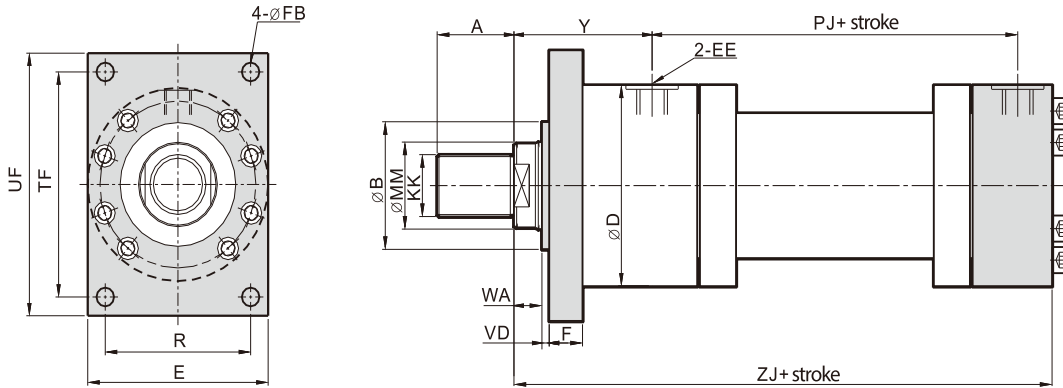
Bore ≥ 80mm

Symbol	MM		XF		DH		YG	
	C	B	C	B	C	B	C	B
Bore 125	-	90	-	87	-	10	20	
160	90	110	96	106	10	12	25	
200	110	140	121	136	12	12	30	
250	140	180	155	175	12	12	30	
320	180	220	195	214	12	14	35	

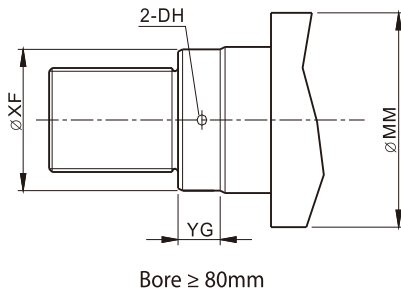
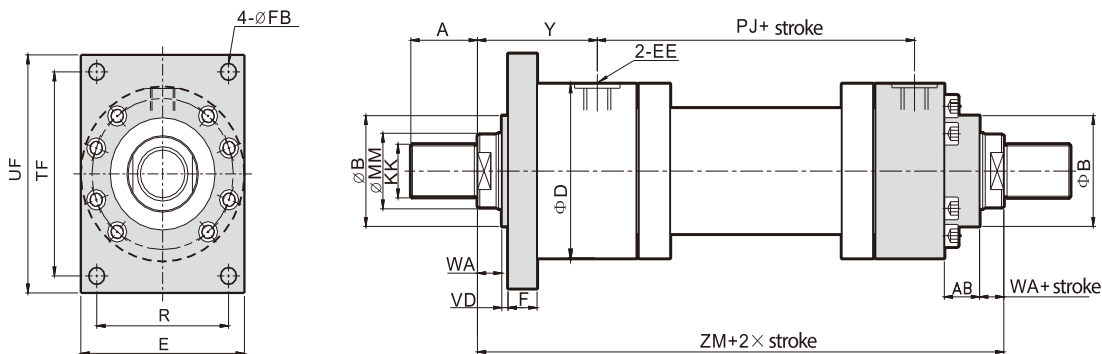
Bore	Rod class C				Rod class B				EE	B	ZJ	D	Y	PJ	WA	AB	ZM
	MM	KK	A	NV	MM	KK	A	NV									
25	14	M12x1.25	16	12	18	M14x1.5	18	14	RC1/4	32	150	56	58	77	13	15	178
32	18	M14x1.5	18	14	22	M16x1.5	22	17	RC3/8	40	170	67	64	89	13	19	201
40	22	M16x1.5	22	17	28	M20x1.5	28	22	RC1/2	50	190	78	71	97	13	19	221
50	28	M20x1.5	28	22	36	M27x2.0	36	28	RC1/2	60	205	95	72	111	14	24	243
63	36	M27x2.0	36	28	45	M33x2.0	45	36	RC3/4	70	224	116	82	117	16	29	269
80	45	M33x2.0	45	36	56	M42x2.0	56	46	RC3/4	85	250	130	91	134	18	36	304
100	56	M42x2.0	56	46	70	M48x2.0	63	60	RC1	106	300	158	108	162	20	37	357
125	70	M48x2.0	63	60	90	M64x3.0	85	-	RC1	132	325	192	121	174	23	37	416
160	90	M64x2.0	85	-	110	M80x3.0	95	-	RC11/4	160	370	238	143	191	25	41	436
200	110	M80x3.0	95	-	140	M100x3.0	112	-	RC11/4	200	450	285	190	224	30	45	525
250	140	M100x3.0	112	-	180	M125x4.0	125	-	RC11/2	250	550	365	205	290	32	64	646
320	180	M125x4.0	125	-	220	M160x4.0	160	-	RC2	320	660	455	250	358	37	71	768

EXTERNAL DIMENSIONS

- MF1(FA) Double acting(rod flange)



- MF1(FA) Double rods(rod flange)



Symbol	MM		XF		DH		YG	
	C	B	C	B	C	B	C	B
Bore 125	-	90	-	87	-	10	20	
160	90	110	96	106	10	12	25	
200	110	140	121	136	12	12	30	
250	140	180	155	175	12	12	30	
320	180	220	195	214	12	14	35	

Bore	Rod class C				Rod class B				EE	B	FB	WA	ZJ	D	F	WC	VD	Y	PJ	R	E	TF	UF	ZM	AB
	MM	KK	A	NV	MM	KK	A	NV																	
25	14	M12x1.25	16	12	18	M14x1.5	18	14	RC1/4	32	6.6	13	150	56	12	16	3	58	77	28.7	60	69.2	85	296	15
32	18	M14x1.5	18	14	22	M16x1.5	22	17	RC3/8	40	9	13	170	67	16	16	3	64	89	35.2	70	85	105	201	19
40	22	M16x1.5	22	17	28	M20x1.5	28	22	RC1/2	50	9	13	190	78	16	16	3	71	97	40.6	80	98	115	221	19
50	28	M20x1.5	28	22	36	M27x2.0	36	28	RC1/2	60	11	14	205	95	20	18	4	72	111	48.2	100	116	140	243	24
63	36	M27x2.0	36	28	45	M33x2.0	45	36	RC3/4	70	13.5	16	224	116	25	20	4	82	117	55.5	120	134	160	269	29
80	45	M33x2.0	45	36	56	M42x2.0	56	46	RC3/4	85	17.5	18	250	130	32	22	4	91	134	63.1	135	153	185	304	36
100	56	M42x2.0	56	46	70	M48x2.0	63	60	RC1	106	22	20	300	158	32	25	5	108	162	76.5	160	185	225	357	37
125	70	M48x2.0	63	60	90	M64x3.0	85	-	RC1	132	22	23	325	192	32	28	5	121	174	90.2	195	217	255	285	37

Tie-rod Hydraulic Cylinder

Mold Hydraulic Cylinders

Swivel & Clamp Hydraulic Cylinders

Booster Cylinders & Unclamping cylinders

ISO Specifications Cylinders

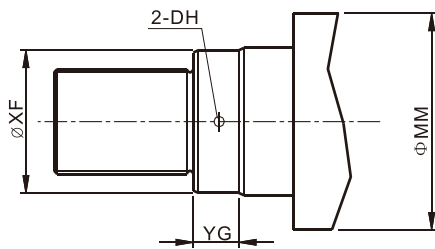
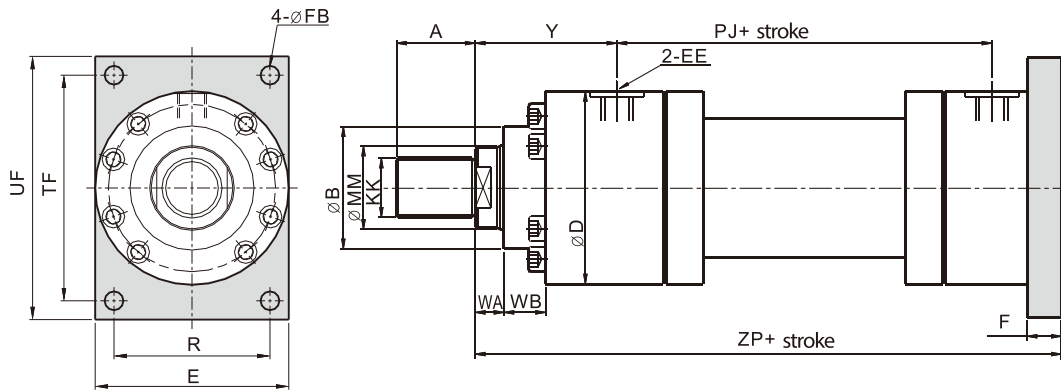
Round Hydraulic Cylinders

Specific Hydraulic Cylinders

Systems & Fittings

EXTERNAL DIMENSIONS

- MF2(FB) Double acting(head flange)



Symbol Bore	MM		XF		DH		YG	
	C	B	C	B	C	B	C	B
125	-	90	-	87	-	10	20	
160	90	110	96	106	10	12	25	
200	110	140	121	136	12	12	30	
250	140	180	155	175	12	12	30	
320	180	220	195	214	12	14	35	

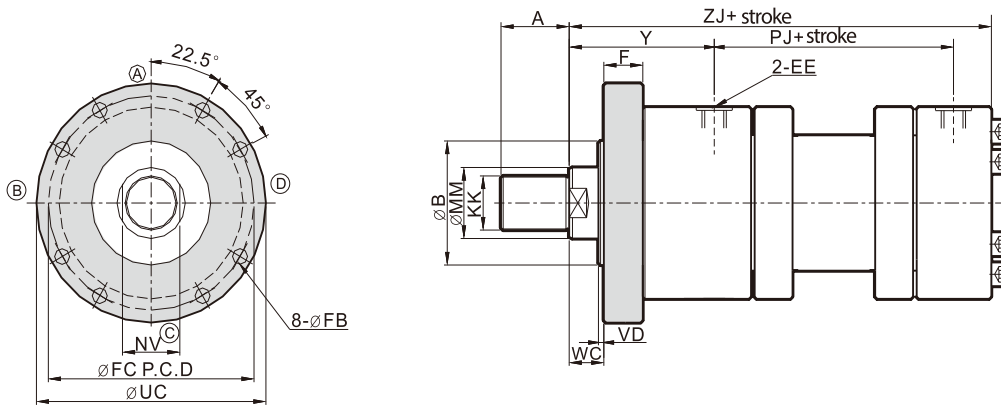
Bore ≥ 80mm

Bore	Rod class C				Rod class B				EE	B	D	Y	PJ	FB	WA	WB	F
	MM	KK	A	NV	MM	KK	A	NV									
25	14	M12x1.25	16	12	18	M14x1.5	18	14	RC1/4	32	56	58	77	6.6	13	15	12
32	18	M14x1.5	18	14	22	M16x1.5	22	17	RC3/8	40	67	64	89	9	13	19	16
40	22	M16x1.5	22	17	28	M20x1.5	28	22	RC1/2	50	78	71	97	9	13	19	16
50	28	M20x1.5	28	22	36	M27x2.0	36	28	RC1/2	60	95	72	111	11	14	24	20
63	36	M27x2.0	36	28	45	M33x2.0	45	36	RC3/4	70	116	82	117	13.5	16	29	25
80	45	M33x2.0	45	36	56	M42x2.0	56	46	RC3/4	85	130	91	134	17.5	18	36	32
100	56	M42x2.0	56	46	70	M48x2.0	63	60	RC1	106	158	108	162	22	20	37	32
125	70	M48x2.0	63	60	90	M64x3.0	85	-	RC1	132	192	121	174	22	23	37	32

Bore	R	E	TF	UF	ZP
25	28.7	60	69.2	85	162
32	35.2	70	85	105	186
40	40.6	80	98	115	206
50	48.2	100	116	140	225
63	55.5	120	134	160	249
80	63.1	135	153	185	282
100	76.5	160	185	225	332
125	90.2	195	217	255	357

EXTERNAL DIMENSIONS

- MF3(FA) Double acting(rod flange)(round)

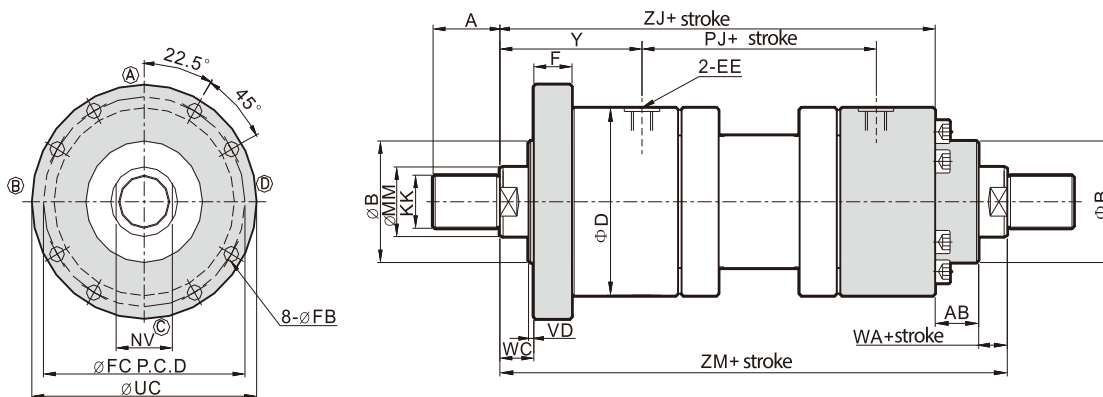


Tie-rod Hydraulic Cylinder

Mold Hydraulic Cylinders

Swivel & Clamp Hydraulic Cylinders

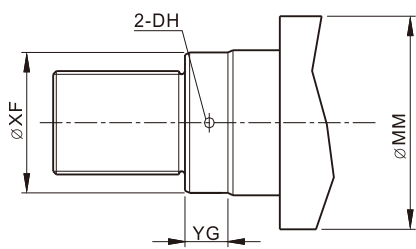
- MF3(FA) Double rods(rod flange)(round)



Booster Cylinders & Unclamping cylinders

ISO Specifications Cylinders

Round Hydraulic Cylinders



Bore ≥ 80mm

Symbol	MM		XF		DH		YG	
	C	B	C	B	C	B	C	B
Bore 125	-	90	-	87	-	10	20	
160	90	110	96	106	10	12	25	
200	110	140	121	136	12	12	30	
250	140	180	155	175	12	12	30	
320	180	220	195	214	12	14	35	

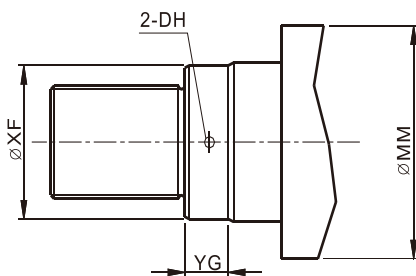
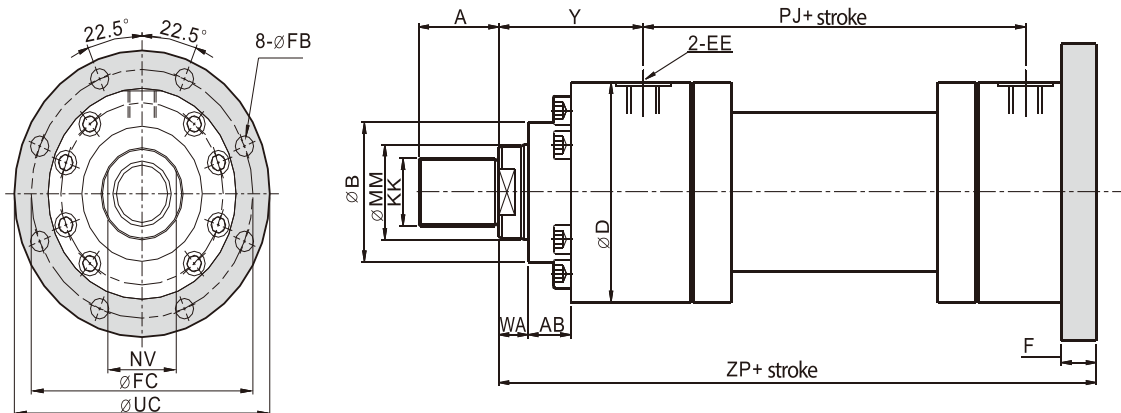
Specific Hydraulic Cylinders

Systems & Fittings

Bore	Rod class C				Rod class B				EE	B	FB	WA	ZJ	D	F	WC	VD	Y	PJ	FC	UC	ZM
	MM	KK	A	NV	MM	KK	A	NV														
25	14	M12x1.25	16	12	18	M14x1.5	18	14	RC1/4	32	6.6	13	150	56	12	16	3	58	77	75	90	302
32	18	M14x1.5	18	14	22	M16x1.5	22	17	RC3/8	40	9	13	170	67	16	16	3	64	89	92	110	201
40	22	M16x1.5	22	17	28	M20x1.5	28	22	RC1/2	50	9	13	190	78	16	16	3	71	97	106	125	221
50	28	M20x1.5	28	22	36	M27x2.0	36	28	RC1/2	60	11	14	205	95	20	18	4	72	111	126	150	243
63	36	M27x2.0	36	28	45	M33x2.0	45	36	RC3/4	70	13.5	16	224	116	25	20	4	82	117	145	170	269
80	45	M33x2.0	45	36	56	M42x2.0	56	46	RC3/4	85	17.5	18	250	130	32	22	4	91	134	165	195	304
100	56	M42x2.0	56	46	70	M48x2.0	63	60	RC1	106	22	20	300	158	32	25	5	108	162	200	240	357
125	70	M48x2.0	63	60	90	M64x3.0	85	-	RC1	132	22	23	325	192	32	28	5	121	174	235	275	285
160	90	M64x3.0	85	-	110	M80x3.0	95	-	RC11/4	160	22	25	370	238	36	30	5	143	191	280	320	436
200	110	M80x3.0	95	-	140	M100x3.0	112	-	RC11/4	200	26	30	450	285	40	35	5	190	224	340	385	525
250	140	M100x3.0	112	-	180	M125x4.0	125	-	RC11/2	250	33	32	550	365	56	40	8	205	290	420	490	646
320	180	M125x4.0	125	-	220	M160x4.0	160	-	RC2	320	39	37	660	455	63	45	8	250	358	520	600	768

EXTERNAL DIMENSIONS

- MF4(FB) Double acting(head flange)(round)



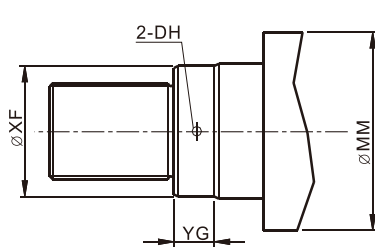
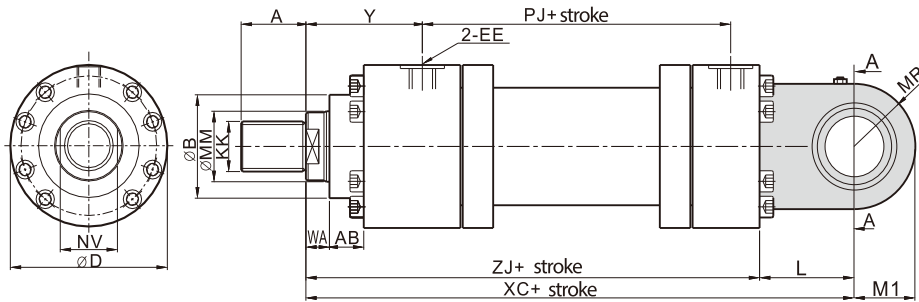
Bore ≥ 80mm

Symbol	MM		XF		DH		YG	
	C	B	C	B	C	B	C	B
Bore 125	-	90	-	87	-	10	20	
Bore 160	90	110	96	106	10	12	25	
Bore 200	110	140	121	136	12	12	30	
Bore 250	140	180	155	175	12	12	30	
Bore 320	180	220	195	214	12	14	35	

Bore	Rod class C				Rod class B				EE	B	D	Y	PJ	FB	WA	AB	F	FC	UC	ZP
	MM	KK	A	NV	MM	KK	A	NV												
25	14	M12x1.25	16	12	18	M14x1.5	18	14	RC1/4	32	56	58	77	6.6	13	15	12	75	90	162
32	18	M14x1.5	18	14	22	M16x1.5	22	17	RC3/8	40	67	64	89	9	13	19	16	92	110	186
40	22	M16x1.5	22	17	28	M20x1.5	28	22	RC1/2	50	78	71	97	9	13	19	16	106	125	206
50	28	M20x1.5	28	22	36	M27x2.0	36	28	RC1/2	60	95	72	111	11	14	24	20	126	150	225
63	36	M27x2.0	36	28	45	M33x2.0	45	36	RC3/4	70	116	82	117	13.5	16	29	25	145	170	249
80	45	M33x2.0	45	36	56	M42x2.0	56	46	RC3/4	85	130	91	134	17.5	18	36	32	165	195	282
100	56	M42x2.0	56	46	70	M48x2.0	63	60	RC1	106	158	108	162	22	20	37	32	200	240	332
125	70	M48x2.0	63	60	90	M64x3.0	85	-	RC1	132	192	121	174	22	23	37	32	235	275	357
160	90	M64x3.0	85	-	110	M80x3.0	95	-	RC11/4	160	238	143	191	22	25	41	36	280	320	406
200	110	M80x3.0	95	-	140	M100x3.0	112	-	RC11/4	200	285	190	224	26	30	45	40	340	385	490
250	140	M100x3.0	112	-	180	M125x4.0	125	-	RC11/2	250	365	205	290	33	32	64	56	420	490	606
320	180	M125x4.0	125	-	220	M160x4.0	160	-	RC2	320	455	250	358	39	37	71	63	520	600	723

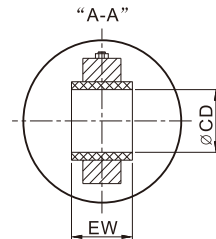
EXTERNAL DIMENSIONS

- MP3(CA) Double acting(clevis)



Bore ≥ 80mm

Symbol	MM		XF		DH		YG	
	C	B	C	B	C	B	C	B
Bore 125	-	90	-	87	-	10	20	
160	90	110	96	106	10	12	25	
200	110	140	121	136	12	12	30	
250	140	180	155	175	12	12	30	
320	180	220	195	214	12	14	35	



Bore	Rod class C				Rod class B				EE	B	ZJ	D	WA	AB	Y	PJ	M1
	MM	KK	A	NV	MM	KK	A	NV									
25	14	M12x1.25	16	12	18	M14x1.5	18	14	RC1/4	32	150	56	13	15	58	77	16
32	18	M14x1.5	18	14	22	M16x1.5	22	17	RC3/8	40	170	67	13	19	64	89	20
40	22	M16x1.5	22	17	28	M20x1.5	28	22	RC1/2	50	190	78	13	19	71	97	25
50	28	M20x1.5	28	22	36	M27x2.0	36	28	RC1/2	60	205	95	14	24	72	111	32
63	36	M27x2.0	36	28	45	M33x2.0	45	36	RC3/4	70	224	116	16	29	82	117	40
80	45	M33x2.0	45	36	56	M42x2.0	56	46	RC3/4	85	250	130	18	36	91	134	50
100	56	M42x2.0	56	46	70	M48x2.0	63	60	RC1	106	300	158	20	37	108	162	63
125	70	M48x2.0	63	60	90	M64x3.0	85	-	RC1	132	325	192	23	37	121	174	71
160	90	M64x3.0	85	-	110	M80x3.0	95	-	RC11/4	160	370	238	25	41	143	191	90
200	110	M80x3.0	95	-	140	M100x3.0	112	-	RC11/4	200	450	285	30	45	190	224	112
250	140	M100x3.0	112	-	180	M125x4.0	125	-	RC11/2	250	550	365	32	64	205	290	160
320	180	M125x4.0	125	-	220	M160x4.0	160	-	RC2	320	660	455	37	71	250	358	200

Bore	L	CD	MR	XC	EW
25	28	12	16	178	12
32	36	16	20	206	16
40	41	20	25	231	20
50	52	25	32	257	25
63	65	32	40	289	32
80	82	40	50	332	40
100	95	50	63	395	50
125	103	63	71	428	63
160	135	80	90	505	80
200	165	100	112	615	100
250	223	125	160	773	125
320	270	160	200	930	160

Tie-rod Hydraulic Cylinder

Mold Hydraulic Cylinders

Swivel & Clamp Hydraulic Cylinders

Booster Cylinders & Unclamping cylinders

ISO Specifications Cylinders

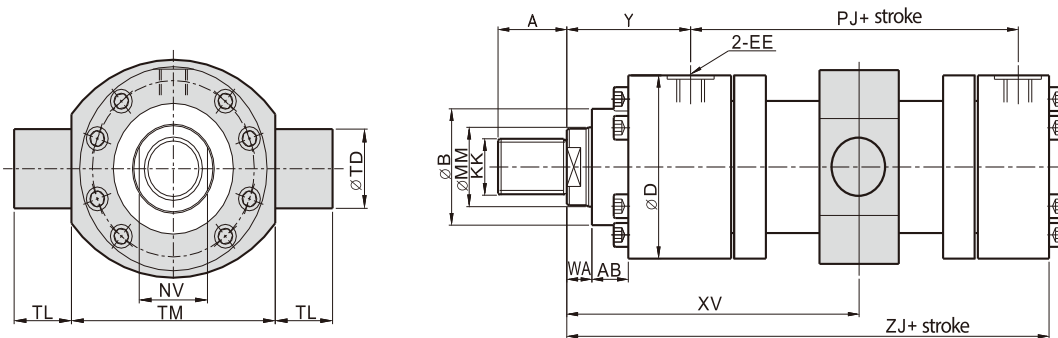
Round Hydraulic Cylinders

Specific Hydraulic Cylinders

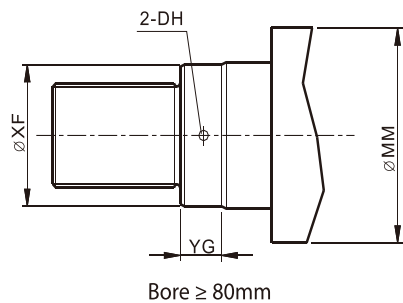
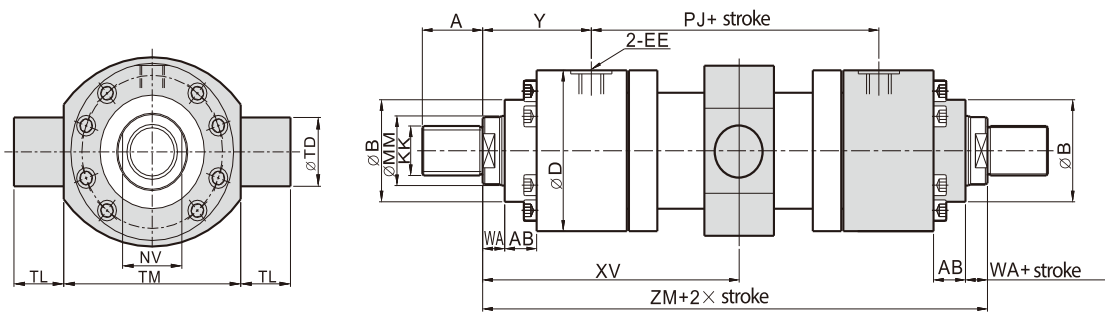
Systems & Fittings

EXTERNAL DIMENSIONS

- MT4(TC) Double acting(mid trunnion)



- MT4(TC) Double rods (mid trunnion)

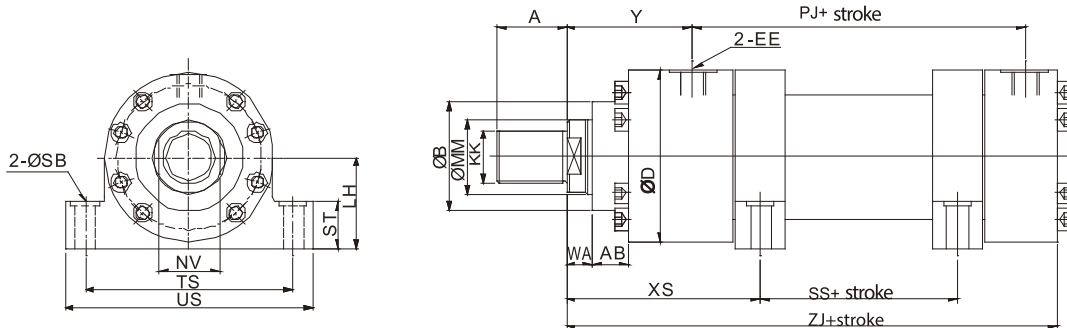


Symbol	MM		XF		DH		YG	
	C	B	C	B	C	B	C	B
Bore 125	-	90	-	87	-	10	20	
Bore 160	90	110	96	106	10	12	25	
Bore 200	110	140	121	136	12	12	30	
Bore 250	140	180	155	175	12	12	30	
Bore 320	180	220	195	214	12	14	35	

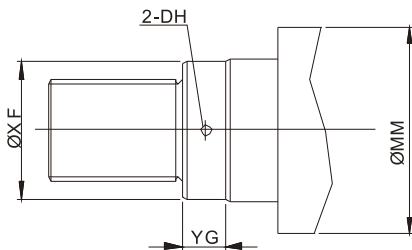
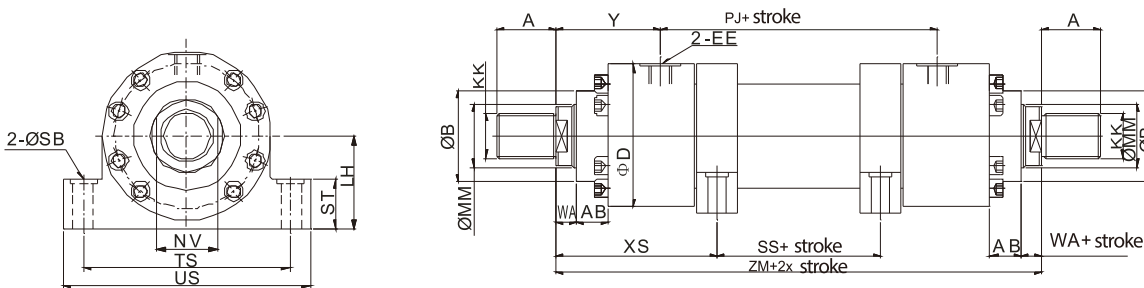
Bore	Rod class C				Rod class B				EE	B	ZJ	D	Y	PJ	WA	AB	TM	TL	TD	XV	ZM
	MM	KK	A	NV	MM	KK	A	NV													
25	14	M12x1.25	16	12	18	M14x1.5	18	14	RC1/4	32	150	56	58	77	13	15	63	10	12	can be customized	178
32	18	M14x1.5	18	14	22	M16x1.5	22	17	RC3/8	40	170	67	64	89	13	19	75	12	16		201
40	22	M16x1.5	22	17	28	M20x1.5	28	22	RC1/2	50	190	78	71	97	13	19	90	16	20		221
50	28	M20x1.5	28	22	36	M27x2.0	36	28	RC1/2	60	205	95	72	111	14	24	105	20	25		243
63	36	M27x2.0	36	28	45	M33x2.0	45	36	RC3/4	70	224	116	82	117	16	29	120	25	32		269
80	45	M33x2.0	45	36	56	M42x2.0	56	46	RC3/4	85	250	130	91	134	18	36	135	32	40		304
100	56	M42x2.0	56	46	70	M48x2.0	63	60	RC1	106	300	158	108	162	20	37	160	40	50		357
125	70	M48x2.0	63	60	90	M64x3.0	85	-	RC1	132	325	192	121	174	23	37	195	50	63		285
160	90	M64x3.0	85	-	110	M80x3.0	95	-	RC11/4	160	370	238	143	191	25	41	240	63	80		436
200	110	M80x3.0	95	-	140	M100x3.0	112	-	RC11/4	200	450	285	190	224	30	45	295	80	100		525
250	140	M100x3.0	112	-	180	M125x4.0	125	-	RC11/2	250	550	365	205	290	32	64	370	100	125		646
320	180	M125x4.0	125	-	220	M160x4.0	160	-	RC2	320	660	455	250	358	37	71	470	125	160		768

EXTERNAL DIMENSIONS

- MS2(LA) Double acting(foot flange)



- MS2(LA) Double rods(foot flange)



Bore ≥ 80mm

Symbol	MM		XF		DH		YG	
	C	B	C	B	C	B	C	B
Bore 125	-	90	-	87	-	10	20	
160	90	110	96	106	10	12	25	
200	110	140	121	136	12	12	30	
250	140	180	155	175	12	12	30	
320	180	220	195	214	12	14	35	

Bore	Rod class C				Rod class B				EE	B	ZJ	D	Y	PJ	WA	AB	XS	SS	ST	LH	SB	TS	US	ZM
	MM	KK	A	NV	MM	KK	A	NV																
25	14	M12x1.25	16	12	18	M14x1.5	18	14	RC1/4	32	150	56	58	77	13	15	-	-	-	-	9	-	-	178
32	18	M14x1.5	18	14	22	M16x1.5	22	17	RC3/8	40	170	67	64	89	13	19	-	-	-	-	11	-	-	201
40	22	M16x1.5	22	17	28	M20x1.5	28	22	RC1/2	50	190	78	71	97	13	19	106	24	20	48	11	110	130	221
50	28	M20x1.5	28	22	36	M27x2.0	36	28	RC1/2	60	205	95	72	111	14	24	116	26	25	52	14	120	145	243
63	36	M27x2.0	36	28	45	M33x2.0	45	36	RC3/4	70	224	116	82	117	16	29	123	33	25	62	18	145	180	269
80	45	M33x2.0	45	36	56	M42x2.0	56	46	RC3/4	85	250	130	91	134	18	36	136	42	30	70	22	170	210	304
100	56	M42x2.0	56	46	70	M48x2.0	63	60	RC1	106	300	158	108	162	20	37	164	49	35	82	26	200	245	357
125	70	M48x2.0	63	60	90	M64x3.0	85	-	RC1	132	325	192	121	174	23	37	180	55	35	100	33	245	300	285
160	90	M64x3.0	85	-	110	M80x3.0	95	-	RC11/4	160	370	238	143	191	25	41	206	66	45	142	33	320	400	436
200	110	M80x3.0	95	-	140	M100x3.0	112	-	RC11/4	200	450	285	190	224	30	45	257	90	50	170	36	400	500	525
250	140	M100x3.0	112	-	180	M125x4.0	125	-	RC11/2	250	550	365	205	290	32	64	283	125	60	195	45	480	570	646
320	180	M125x4.0	125	-	220	M160x4.0	160	-	RC2	320	660	455	250	358	37	71	350	156	70	245	52	580	680	768

Tie-rod Hydraulic Cylinder

Mold Hydraulic Cylinders

Swivel & Clamp Hydraulic Cylinders

Booster Cylinders & Unclamping cylinders

ISO Specifications Cylinders

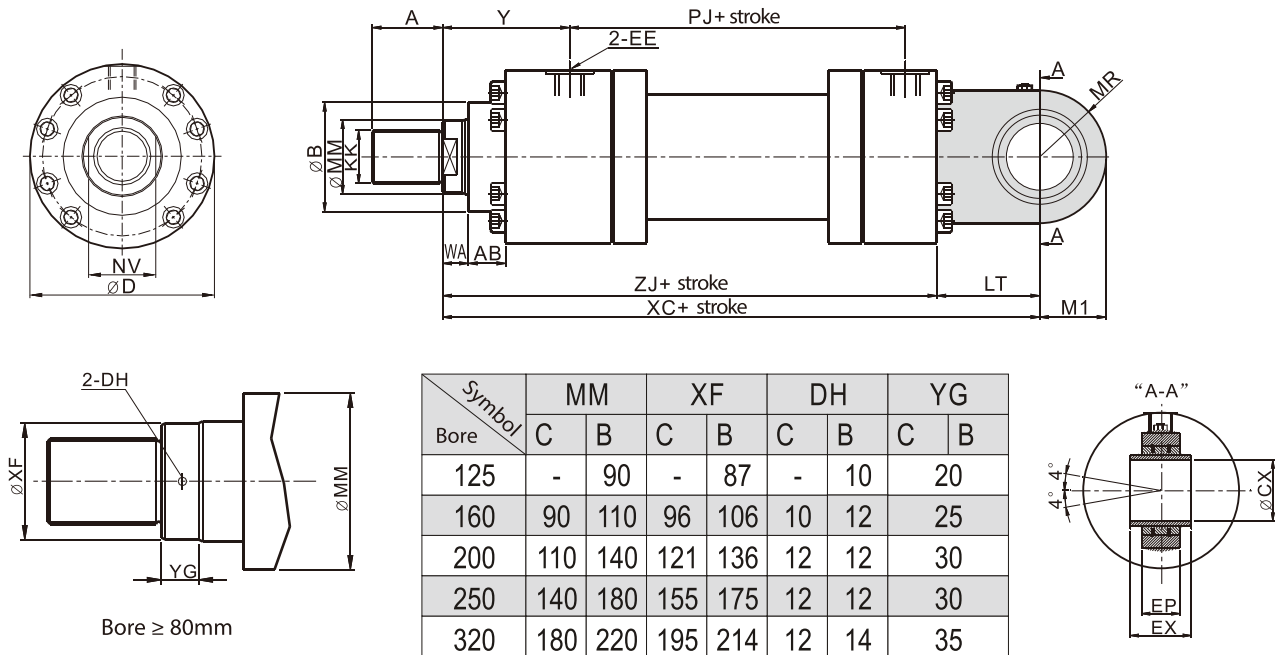
Round Hydraulic Cylinders

Specific Hydraulic Cylinders

Systems & Fittings

EXTERNAL DIMENSIONS

- MP5(CAB) Double acting(clevis)(with ball bearing)



Symbol	MM		XF		DH		YG	
	C	B	C	B	C	B	C	B
Bore 125	-	90	-	87	-	10	20	
160	90	110	96	106	10	12	25	
200	110	140	121	136	12	12	30	
250	140	180	155	175	12	12	30	
320	180	220	195	214	12	14	35	

Bore	Rod class C				Rod class B				EE	B	ZJ	D	WA	AB	Y	PJ	M1
	MM	KK	A	NV	MM	KK	A	NV									
25	14	M12x1.25	16	12	18	M14x1.5	18	14	RC1/4	32	150	56	13	15	58	77	16
32	18	M14x1.5	18	14	22	M16x1.5	22	17	RC3/8	40	170	67	13	19	64	89	20
40	22	M16x1.5	22	17	28	M20x1.5	28	22	RC1/2	50	190	78	13	19	71	97	25
50	28	M20x1.5	28	22	36	M27x2.0	36	28	RC1/2	60	205	95	14	24	72	111	32
63	36	M27x2.0	36	28	45	M33x2.0	45	36	RC3/4	70	224	116	16	29	82	117	40
80	45	M33x2.0	45	36	56	M42x2.0	56	46	RC3/4	85	250	130	18	36	91	134	50
100	56	M42x2.0	56	46	70	M48x2.0	63	60	RC1	106	300	158	20	37	108	162	63
125	70	M48x2.0	63	60	90	M64x3.0	85	-	RC1	132	325	192	23	37	121	174	71
160	90	M64x3.0	85	-	110	M80x3.0	95	-	RC11/4	160	370	238	25	41	143	191	90
200	110	M80x3.0	95	-	140	M100x3.0	112	-	RC11/4	200	450	285	30	45	190	224	112
250	140	M100x3.0	112	-	180	M125x4.0	125	-	RC11/2	250	550	365	32	64	205	290	160
320	180	M125x4.0	125	-	220	M160x4.0	160	-	RC2	320	660	455	37	71	250	358	200

Bore	LT	CX	MR	XC	EP	EX
25	28	12	16	178	10.6	12
32	36	16	20	206	14	16
40	41	20	25	231	18	20
50	52	25	32	257	22	25
63	65	32	40	289	27	32
80	82	40	50	332	35	40
100	95	50	63	395	40	50
125	103	63	71	428	52	63
160	135	80	90	505	66	80
200	165	100	112	615	84	100
250	223	125	160	773	102	125
320	270	160	200	930	130	160