

JEAL-R ROUND AUTO-LOCKING CYLINDERS



- Integrate mechanical lock and automatic lock, avoiding the use of auxiliary lock.
- Easy installation, suitable for mold industry with high pressure.
- All the seals adopt the specifications from well-known foreign brands, seal performance is good.
- Optional inductive proximity switch, cylinder action will be more accurate.
- Lower working pressure.
- Installation size compatible with French brands.

FEATURE

Bore	32、40、50、63、80
Mineral oil	Mineral oil (ISO-VG32)
Working pressure	210kgf/cm ² (21MPa)
Working temperature	-10℃ ~+200℃
Piston speed	Max 1m/s
Filtering criteria	NAS 7-9 or better

THEORETICAL FORCE

Bore (mm)	Shaft (mm)	Piston pressure area(c m ²)		Theoretical force (P=140kgf/c m ²)		Theoretical force (P=210kgf/c m ²)	
		Push	Pull	Push	Pull	Push	Pull
32	22	8.04	5.5	1126	770	1688	1155
40	28	12.56	8.04	1758	1126	2638	1688
50	36	19.63	12.56	2748	1758	4122	2638
63	45	31.16	18.61	4362	2605	6544	3908
80	56	50.24	30.62	7034	4287	10550	6430

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

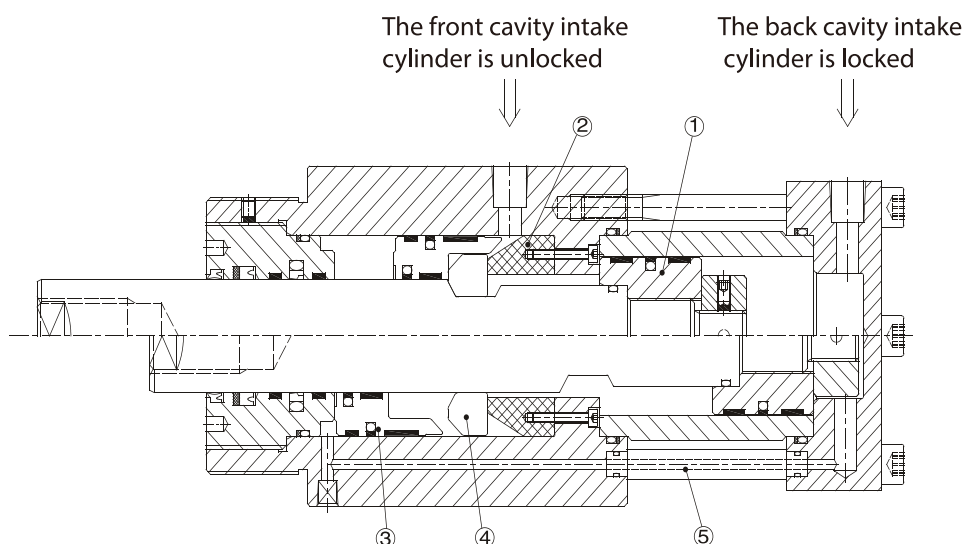
SEAL MATERIAL

Material Oil Symbol	(NBR)	(PU)	(FPM)
	1	2	3
Mineral	O	O	O
Water solution	O	X	O
Soluble	O	X	O
Phosphate ester	X	X	O
Temperature	-20°C ~ +80°C		-10°C ~ 150°C
Viscosity	20~400mm ² /s { cst }		



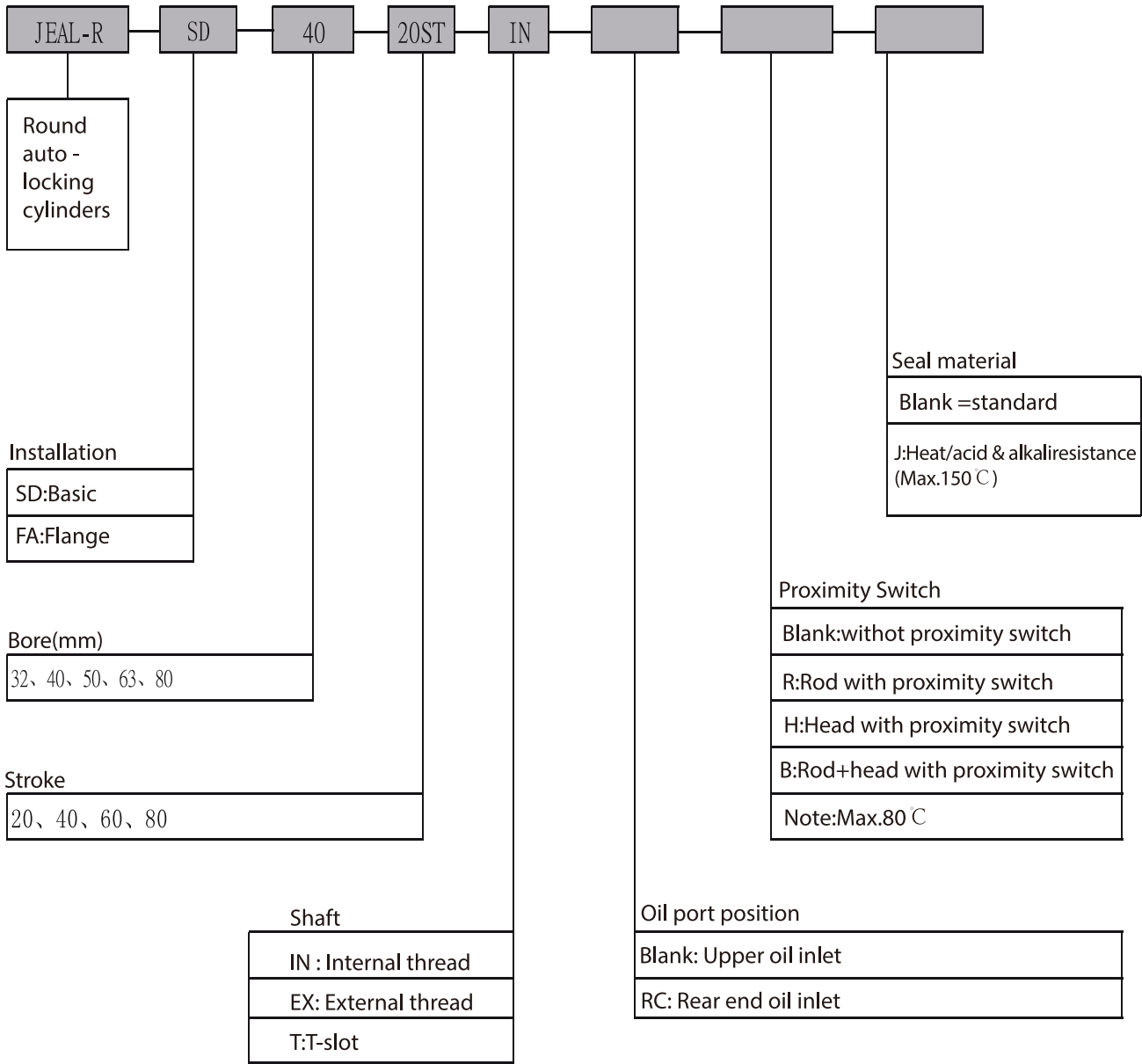
Note:

- 1、Mineral oil: ISO-VG32。
- 2、If mineral oil is used, there is no need to mark it. Our company will provide standard oil seal (NBR).
- 3、If phosphate ester oil is used or high temperature is applied, will shown as symbol 3.
- 4、Symbol O = ok, × = cannot be used.
- 5、Temperature of FPM must set below 150 °C when operate long time.

WORKING PRINCIPLE OF CYLINDER

The oil inlet of the back cover is fed, and the oil pushes the press block ③ through the oil inlet pipe ⑤ to tighten the self-locking block ④, while the oil pushes the piston ① forward. When the piston ① completes the stroke, the self-locking block ④ falls into the groove of the piston rod under the push of the press block ③, at this time the self-locking block ④ is locked in the radial and axial direction, the piston rod is also completely locked, and the cylinder is in a self-locking state, even if the oil pressure is removed, the piston rod will not recede. The oil inlet of the front cover is fed, the oil pushes the press block ③ forward, and pushes the piston ① back, and the self-locking block ④ returns to the initial position, at which time the cylinder is in the unlocked state.

ORDER INDICATION



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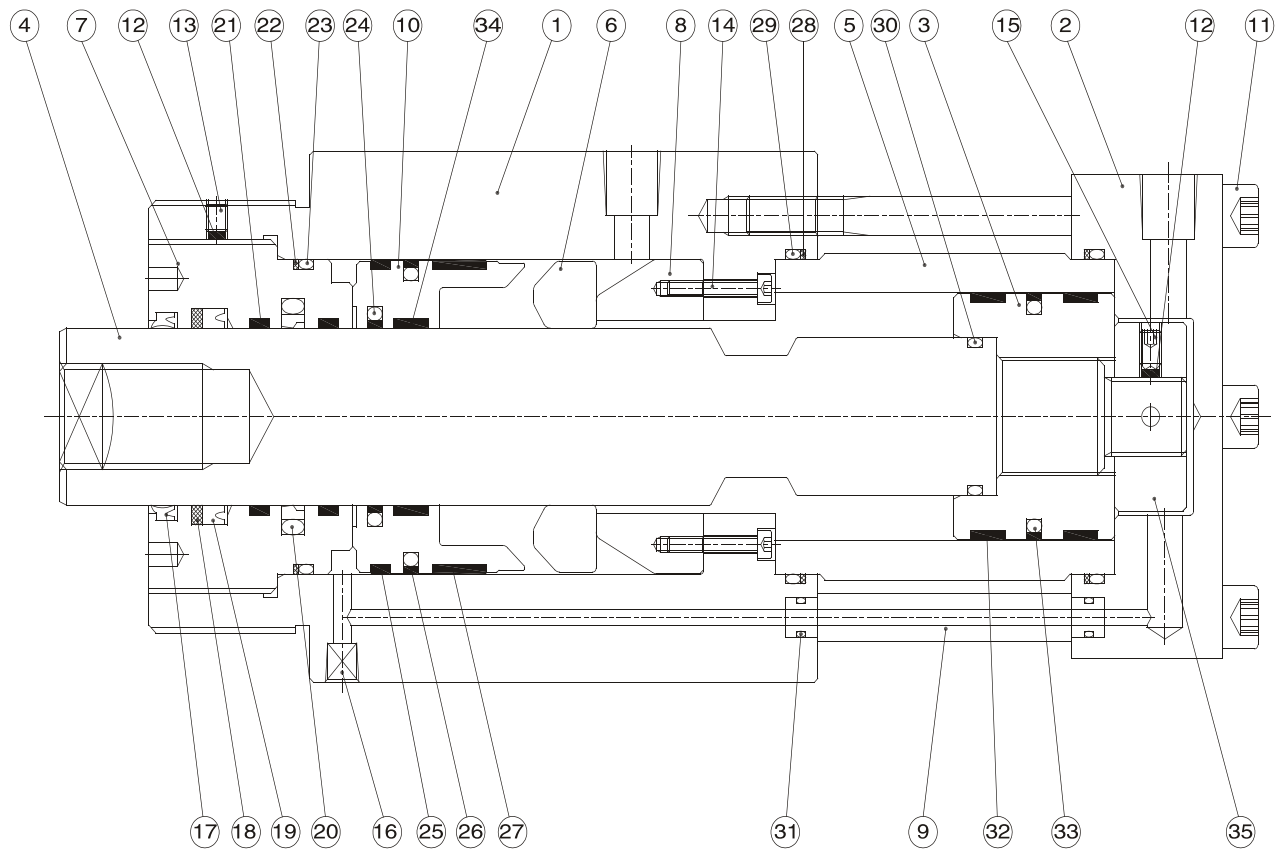
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INTERNAL STRUCTURE
AND PART NAMES



Item	Part name	Qty	Item	Part name	Qty	Item	Part name	Qty	Item	Part name	Qty
①	Rod cover	1	⑩	Block	1	⑲	U seal	1	⑳	Backup ring	2
②	Head cover	1	⑪	Internal hexagonal steel screw	6	⑳	Bush flat seal	1	㉑	O ring	2
③	Piston	1	⑫	Copper gasket	1	㉑	Wear ring	2	㉒	Rod O ring	1
④	Rod	1	⑬	Set screw	1	㉒	Bush back-up ring	1	㉓	O ring	2
⑤	Tube	1	⑭	Internal hexagonal steel screw	4	㉓	Seal O ring	1	㉔	Piston wear ring	2
⑥	Self-locking block	1	⑮	Set screw	1	㉔	Block flat seal	1	㉕	Piston flat seal	1
⑦	Bush	1	⑯	Throat plug	1	㉕	Block wear ring	1	㉖	Block wear ring	1
⑧	Stop block	1	⑰	Dust seal	1	㉖	Block flat seal	1	㉗	Inductive block	1
⑨	Oil guide pipe	1	⑱	Backup ring	1	㉗	Block wear ring	1			

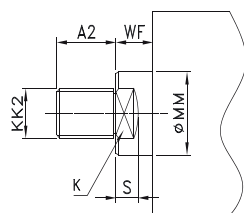
SEAL SPEC.

Item	⑰	⑱	⑲	⑳	㉑	㉒	㉓	㉔	㉕
Name	Dust seal	Back-up ring	U seal	Bush flat seal	Wear ring /joint	Bush back-up ring	Bush O ring	Block flat seal	Block wear ring
Bore Qty	1	1	1	1	2/1	1	1	1	1
32	22x30x6	22x30x2	22x30x5	22x32.7x3.2	MB2208DU	40x45x1.25	G40	22x32.7x4.2	45x50x5.6
40	28x36x6	28x36x3	28x36x5	28x38.7x3.2	MB2810DU	55x60x1.25	G55	28x38.7x4.2	58x63x5.6
50	36x44x6.5	36x46x3	36x46x6	36x46.7x4.2	36x41x5.6	60x65x1.25	G60	36x46.7x4.2	58x63x5.6
63	45x53x6.5	45x55x3	45x55x6	45x60.1x6.3	45x50x5.6	75x80x1.25	G75	45x60.1x4.2	75x80x5.6
80	56x64x6.5	56x66x3	56x66x6	56x71.1x6.3	56x61x9.7	90x95x1.25	G90	56x71.1x6.3	95x100x9.7

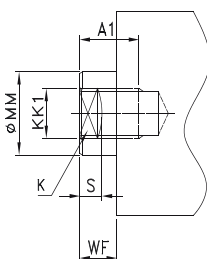
Item	㉖	㉗	㉘	㉙	㉚	㉛	㉜	㉝	㉞
Name	Block flat seal	Block wear ring	Back-up ring	O ring	Rod O ring	O ring	Piston wear ring	Piston flat seal	Block wear ring
Bore Qty	1	1	2	2	1	2	2	1	1
32	39x50x4.2	45x50x5.6	45x50x1.25	G45	P14	P7	27x32x5.6	24.5x32x3.2	22x27x5.6
40	52x63x4.2	58x63x9.7	55x60x1.25	G55	P20	P7	35x40x5.6	29x40x4.2	28x33x5.6
50	52x63x4.2	58x63x9.7	65x75x1.25	G65	G25	P7	45x50x9.7	39x50x4.2	36x41x5.6
63	69x80x4.2	75x80x15	80x85x1.25	G80	G35	P7	58x63x9.7	52x63x4.2	45x50x9.7
80	89x100x4.2	95x100x15	95x100x1.25	G95	G45	P9	75x80x15	69x80x4.2	56x61x9.7

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CylindersSwivel &
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cylindersISO
Specifications
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Hydraulic
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Hydraulic
CylindersSystems
&
Fittings

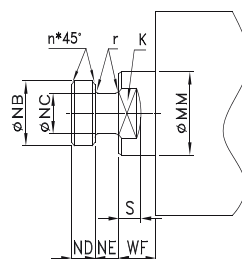
TYPE OF PISTON ROD SHAFT END



IN:Internal thread



EX:External thread

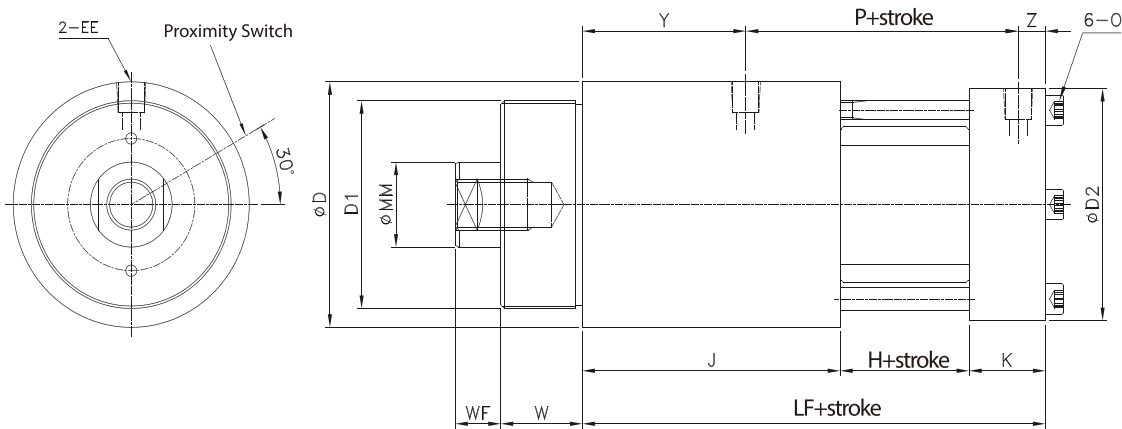


T:T-slot

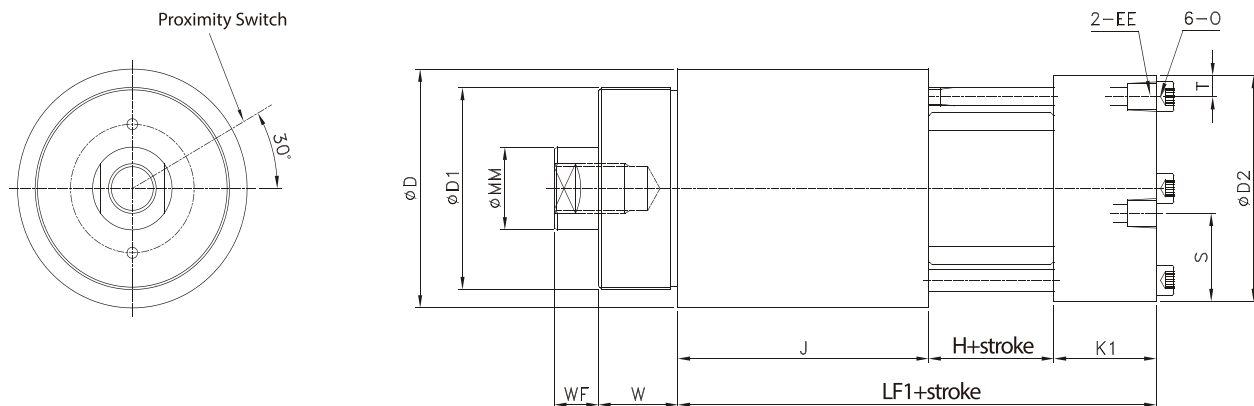
Symbol	MM	K	KK1	KK2	NB	A1	NC	ND	NE	n	r	S	WF	A2
Bore														
32	22	17	M12	M12	18	20	10	8	8	1	1	10	14	20
40	28	22	M16	M16	22	25	14	10	10	1	1	12	16	25
50	36	30	M20	M20	28	30	18	13	13	2	2	12	21	30
63	45	36	M27	M27	35	40	22	16	16	2	2	15	25	40
80	56	46	M30	M30	45	40	28	20	20	2	2	15	28	50

EXTERNAL DIMENSIONS-SD BASIC

●JEAL-R Upper oil inlet type



●JEAL-R-RC Rear oil inlet type

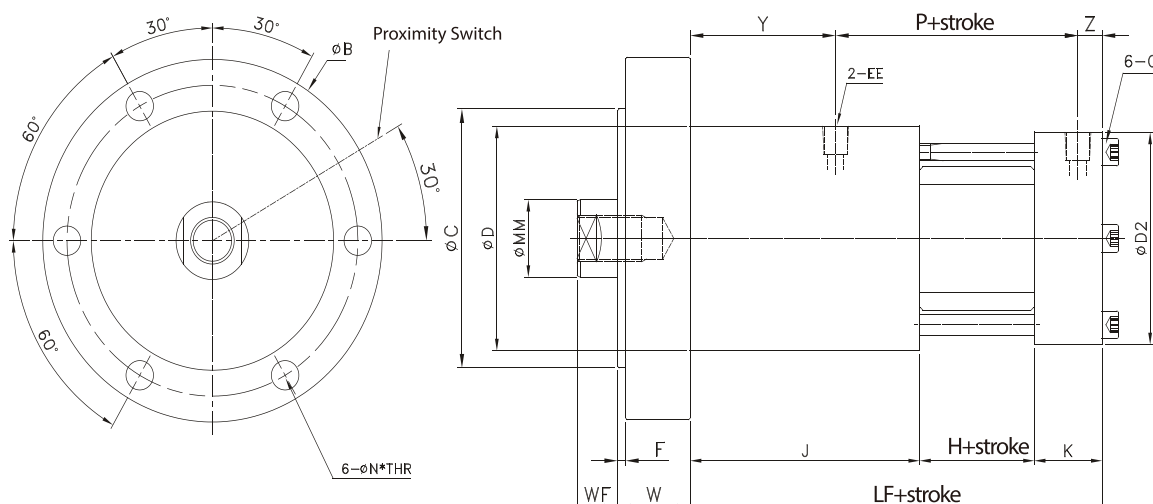


Symbol Bore	MM	D1	D	W	EE	Y	Z	P	WF	K	H	J	LF	LF1	O	T	S	K1	D2
32	22	M70×2.0	97	30	RC1/4	60	10	65	14	28	10	97	135	148	M6	10	39	41	87
40	28	M85×2.0	110	30	RC1/4	67	11	69	16	29	12	106	147	162	M8	11	40	44	98
50	36	M90×2.0	118	40	RC3/8	71	12	82	21	32	19	114	165	180	M8	12	42	47	108
63	45	M110×2.0	135	45	RC3/8	90	15	100	25	42	21	142	205	221	M10	12	47	58	123
80	56	M140×2.0	160	60	RC1/2	93	20	115	28	50	29	149	228	244	M12	14	50	66	147

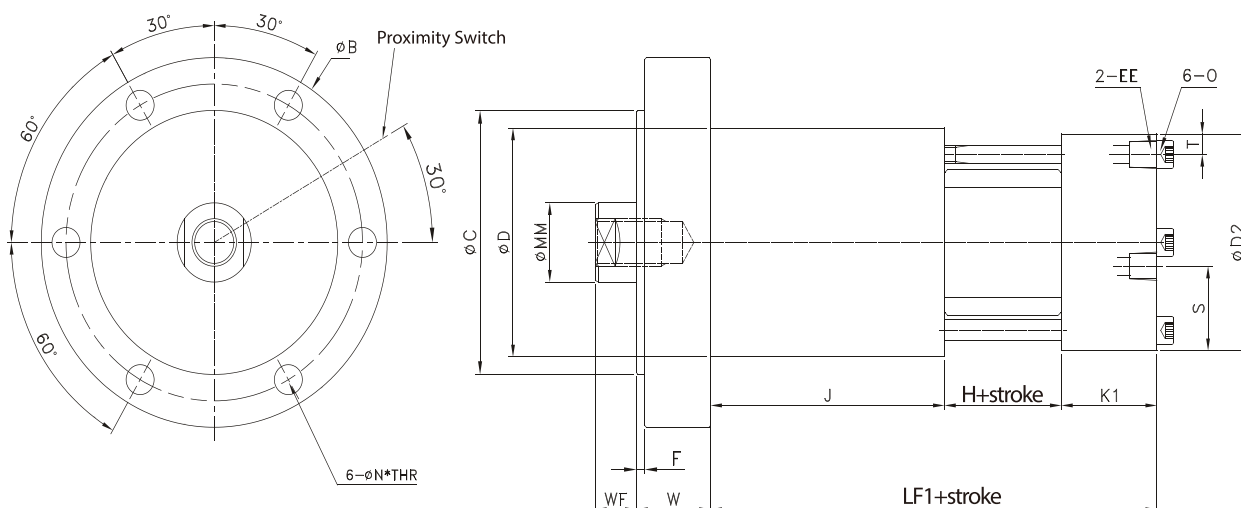
- ⚠ Note: ⚡ Standard stroke:20,40,60,80
 ⚡ The body size is shared with EX/T.
 ⚡ Reserves the right to change technology.

EXTERNAL DIMENSIONS-FA FOOT FLANGE

●JEAL-R-FA Upper oil inlet type



●JEAL-R-FA-RC Rear oil inlet type



Symbol	MM	D	W	EE	Y	Z	P	WF	K	H	J	LF	LF1	O	F	N	B	C	T	S	K1	D2
Bore																						
32	22	97	30	RC1/4	60	10	65	14	28	10	97	135	148	M6	3	11	135	92	10	39	41	87
40	28	110	30	RC1/4	67	11	69	16	29	12	106	147	162	M8	3	13	150	105	11	40	44	98
50	36	118	40	RC3/8	71	12	82	21	32	19	114	165	180	M8	3	13	170	125	12	42	47	108
63	45	135	45	RC3/8	90	15	100	25	42	21	142	205	221	M10	5	17	210	150	12	47	58	123
80	56	160	60	RC1/2	93	20	115	28	50	29	149	228	244	M12	5	17	240	165	14	50	66	147

⚠ Note: ✖ Standard stroke:20,40,60,80

✖ The body size is shared with EX/T.

✖ Reserves the right to change technology.

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