

SI Series ISO6431 Standard Cylinder



SI 50 x 100

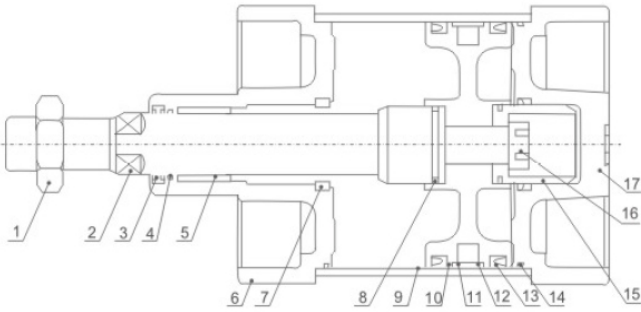


SIJ 50 x 100-25

Ordering Code

SI	×	50	×	50	—	25	—	S	—	<input type="checkbox"/>
Series Code SI:ISO6431 Standard Double Action Type SID:ISO6431 Standard Two Axis Double Action Type SIJ:ISO6431 Two Axis Stroke Adjust Type		Cylinder Bore 32mm-200mm		Stroke		Adjust Storke 25:25mm 50:50mm 75:75mm		Magnet Code Blank:Without Magnet S:With Magnet		Fixed Type Blank:Normal type LB:Front and back fixed type FA:Front cover fixed type(Front Flange Type) FB:Back cover fixed type(Back Flange Type) CA:Back cover fixed type (Single Earring) CB:Back cover fixed type(Double Earring) TC:Central trunnion type TC-M:Central trunnion type attaching foot seat

Internal structure



NO	Designation	NO	Designation
1	Piston Rod Nut	10	Piston
2	Piston rod	11	Wearing
3	Front cover seal ring	12	Magnet(Optional)
4	O-Ring	13	Piston O-Ring
5	Bearing	14	Pipe wall O-Ring
6	Front cover	15	Damping
7	Buffering O-Ring	16	Hex socket screw
8	Piston rod O-Ring	17	Back cover
9	Barrel		

Specification

Bore(mm)	32	40	50	63	80	100	125	160	200
Motion Pattern	Double Action								
Working Medium	Air								
Fixed Type	Normal type FA type FB type CA type CB type LB type TC type								
Working Pressure Range	0.1~0.9MPa								
Ensured Pressure Resistance	1.35MPa								
Operating Temperature Range	-5~70℃								
Operating Speed Range	50~800mm/s								
Buffer Type	Adjustable Buffer								
Buffer Stroke	24				32				
Port Size	G1/8"	G1/4"	G3/8"		G1/2"		G3/4"		

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Cylinder theory output

Cylinder inside Diameter	External Diameter of Piston Rod	Motion Pattern	Compression Area(cm ²)	Air Pressure(kgf/cm ²)								
				1	2	3	4	5	6	7	8	9
32	12	Double Action Press Side	8.04	8.04	16.08	24.12	32.16	40.20	48.24	56.28	64.32	72.36
		Pull Side	6.90	6.90	13.80	20.07	27.60	34.50	41.40	48.30	55.20	62.10
40	16	Double Action Press Side	12.56	12.56	25.12	37.68	50.24	62.80	75.36	87.92	100.24	113.04
		Pull Side	10.55	10.55	21.10	31.65	42.20	52.75	63.30	73.85	84.40	94.95
50	20	Double Action Press Side	19.63	19.63	39.26	58.89	78.52	98.15	117.78	137.41	157.04	176.67
		Pull Side	16.49	16.49	32.98	49.47	65.96	82.45	98.94	115.43	139.92	148.41
63	20	Double Action Press Side	31.17	31.17	62.34	93.51	124.68	155.85	187.02	218.19	249.36	280.53
		Pull Side	28.03	28.03	56.06	84.09	112.12	140.15	168.18	196.21	224.24	252.27
80	25	Double Action Press Side	50.26	50.26	100.52	150.78	201.04	251.30	301.56	351.82	402.08	452.34
		Pull Side	45.36	45.36	90.72	136.08	181.44	226.80	272.16	317.52	362.88	408.24
100	25	Double Action Press Side	78.53	78.53	157.06	235.59	314.12	392.65	471.18	549.71	628.24	706.77
		Pull Side	71.47	71.47	142.94	214.41	285.88	357.35	428.82	500.29	571.76	643.23
125	32	Double Action Press Side	122.72	122.72	245.44	368.16	490.88	613.60	736.32	859.04	981.76	1104.48
		Pull Side	114.68	114.68	229.36	344.04	458.72	573.40	688.08	802.76	917.44	1032.12
160	40	Double Action Press Side	201.06	201.06	402.12	603.18	804.24	1005.30	1206.36	1407.42	1608.48	1809.54
		Pull Side	188.49	188.49	376.98	565.47	753.96	942.45	1130.94	1319.43	1507.92	1696.41
200	40	Double Action Press Side	314.16	314.16	628.32	942.48	1256.64	1570.80	1884.96	2199.12	2513.28	2827.44
		Pull Side	301.57	301.57	603.14	904.71	1206.28	1507.80	1809.42	2100.99	2412.56	2714.13

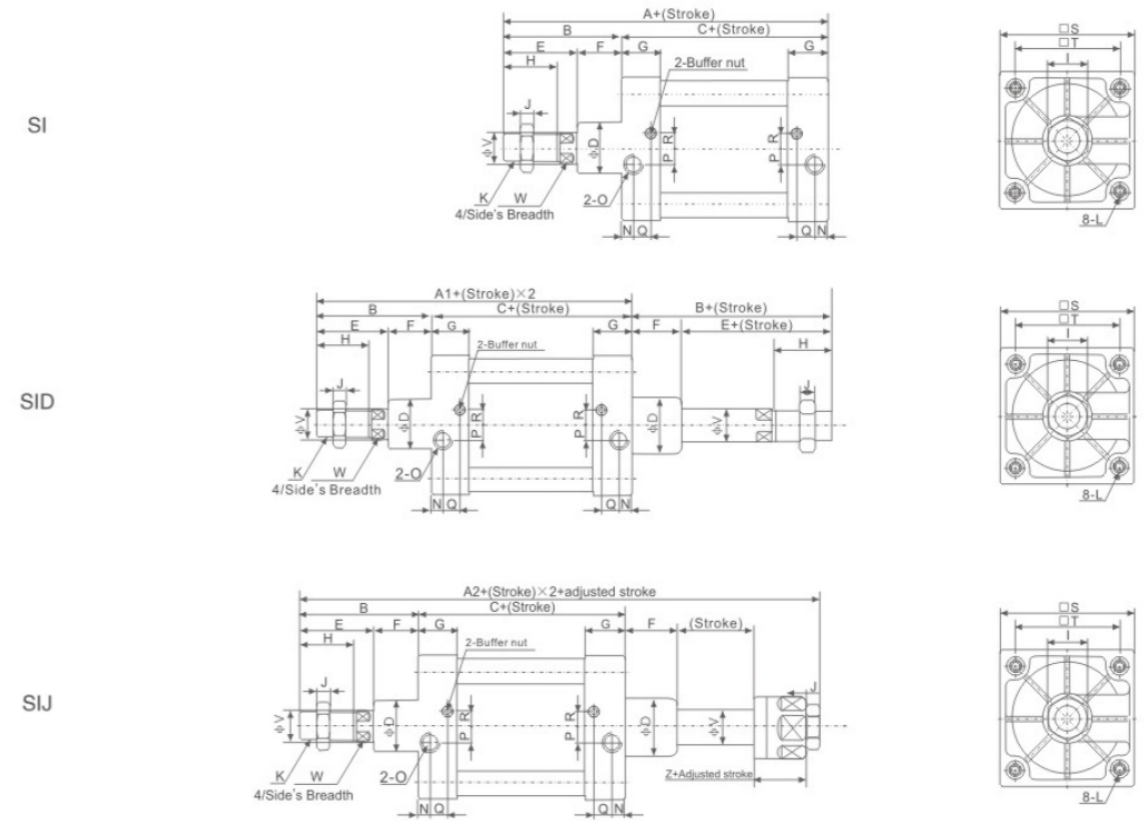
Stroke

Bore(mm)	Standard Stroke	Max.Stroke	Permissible Stroke
32	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500	1000	2000
40	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800	1200	2000
50	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1200	2000
63	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
80	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
100	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
125	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
160	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
200	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000

If you need special stroke, please Tell us, we can make according your require.

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Overall Dimensions



Dimension Sheet

Bore/Symbol	A	A1	A2	B	C	D	E	F	G	H	I	J	K	L
32	142	190	185	48	94	30	32	16	27.5	22	17	6	M10×1.25	M6
40	159	213	205	54	105	35	36	18	29	24	19	7	M12×1.25	M6
50	175	244	231	70	105	40	45	25	30	32	24	8	M16×1.5	M8
63	190	259	245	70	120	45	46	24	31	32	24	8	M16×1.5	M8
80	214	300	283	86	128	45	56	30	35	40	30	10	M20×1.5	M10
100	227	316	298	89	138	55	57	32	36	40	30	10	M20×1.5	M10
125	278	396	368	118	160	60	73	45	46	54	41	10	M27×2	M12
160	332	484	448	152	180	65	94	58	50	72	55	18	M36×2	M16
200	337	494	452	157	180	75	100	51	51	72	55	18	M36×2	M16

Bore/Symbol	N	O	P	Q	R	S	T	V	W	Z
32	13.5	G1/8"	4	7.5	7	47	32.5	12	10	21
40	16	G1/4"	6	8.5	9	53	38	16	13	21
50	15.5	G1/4"	8.5	7.5	7.5	65	46.5	20	17	23
63	16.5	G3/8"	7.5	8.5	9	75	56.5	20	17	23
80	16.5	G3/8"	11	8.5	13.5	95	72	25	22	29
100	18.5	G1/2"	13.5	9.5	14.5	115	89	25	22	29
125	23	G1/2"	14	12	14	140	110	32	28	35
160	25	G3/4"	15	12	20	180	140	40	36	40
200	25	G3/4"	15	12	20	220	175	40	36	40

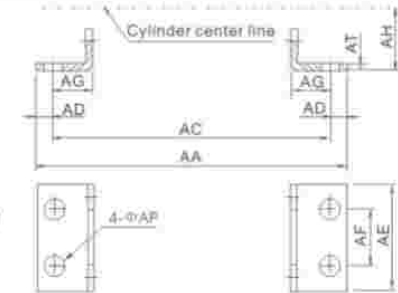


Cylinder Accessories

Cylinder accessories include the mounting parts to fix the air cylinder, made by aluminum or steel. They are available for Standard Cylinders and Mini Cylinders. Magnetism Switch are used as sensor which connected with PLC, to recognize the position of piston inside of air cylinder.

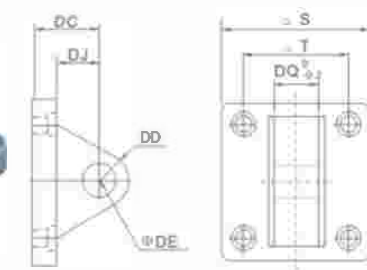


ISO Standard Cylinder Accessories



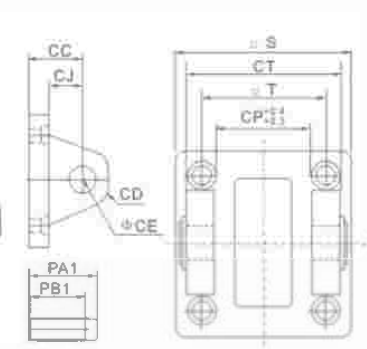
ISO-LB Type Foot Bracket

Symbol/Bore	32	40	50	63	80	100	125	160	200
AA	158	179	190	209	248	266	290	340	380
AC	142	161	170	185	210	228	250	300	320
AD	8	9	10	12	19	19	20	20	30
AE	47	53	65	75	95	115	140	180	220
AF	32	36	45	50	63	75	90	115	135
AG	24	28	32	32	41	45	45	60	70
AH	32	36	45	50	63	71	90	115	135
AP	7	9	9	9	12	14.5	16.5	18.5	24
AT	3	3	3	3	4	4	6	6	9



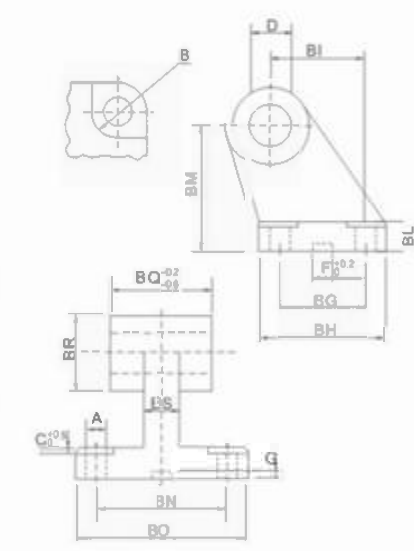
ISO-CA Type Single Earring

Symbol/Bore	32	40	50	63	80	100	125	160	200
S	47	53	65	75	95	115	140	180	220
T	325	38	46.5	56.5	72	89	110	140	175
DC	22	25	27	32	36	41	50	55	60
DD	9	12	12	15	15	20	25	30	30
DE	10	12	12	16	16	20	25	30	30
DJ	13	16	17	22	22	27	33	35.5	36
DQ	25.8	27.8	31.7	39.7	49.7	59.7	69.7	89.7	89.7



ISO-CB+Pin Type Double Earring

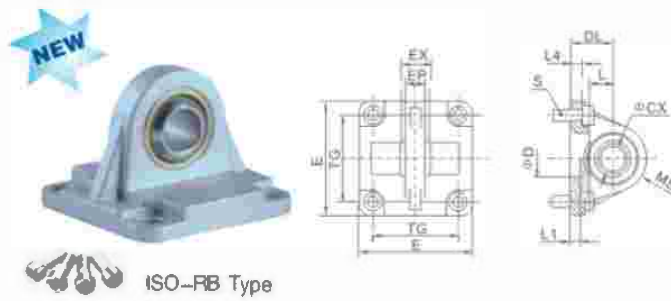
Symbol/Bore	32	40	50	63	80	100	125	160	200
CC	22	25	27	32	36	41	50	55	60
CD	9	12	12	15	15	20	25	30	30
CE	10	12	12	16	16	20	25	30	30
CJ	13	16	17	22	22	27	31	35.5	36
CP	26	28	32	40	50	60	70	90	90
CT	45	52	60	70	90	110	130	170	170
PA1	51	59	67	77	97	119	139	181	181
PB1	45.5	52.5	60.5	70.5	90.5	110.5	130.5	170.5	170.5
S	47	53	65	75	95	115	140	180	220
T	32.5	38	46.5	56.5	72	89	110	140	175



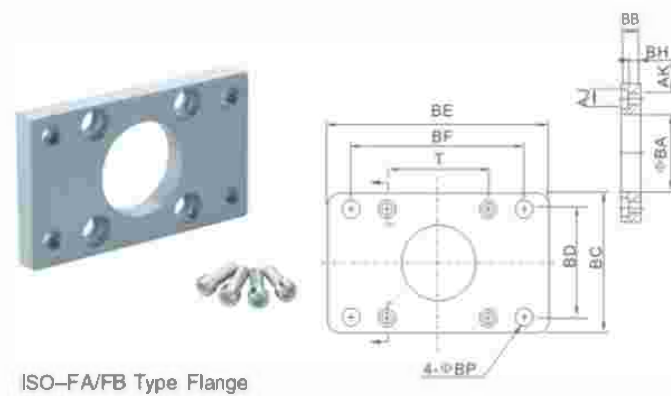
ISO-SDB Type

Symbol/Bore	32	40	50	63	80	100	125
A	6.6	6.6	9	9	11	11	14
B	11	11	15	15	18	18	20
BG	18	22	30	35	40	50	60
BH	31	35	45	50	60	70	90
BI	21	24	33	37	47	55	70
BL	8	10	12	14	14	17	20
BM	32	36	45	50	63	71	90
BN	38	41	50	52	66	76	94
BQ	51	54	65	67	86	96	124
BS	10	15	16	16	20	20	30
BR	20	22	26	30	30	38	45
C	1.6	1.6	1.6	1.6	2.5	2.5	3.2
D	10	12	12	16	16	20	25
F	10.5	10.5	10.5	10.5	10.5	10.5	10.5
G	3	3	3	3	3	3	3
BQ	26	28	32	40	50	60	70

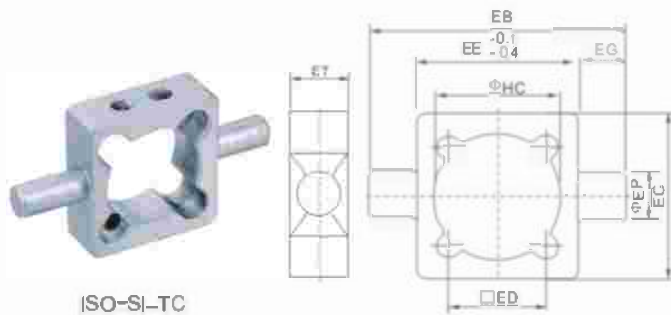
ISO Standard Cylinder Accessories



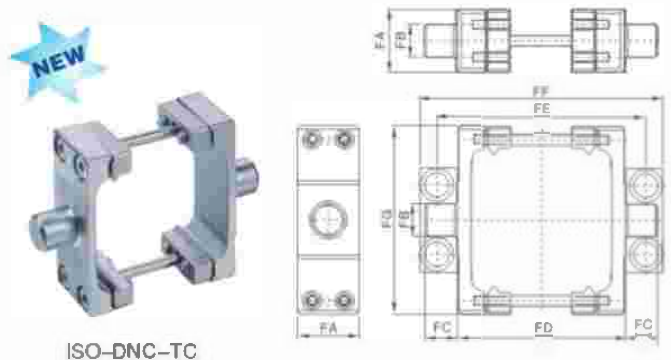
Symbol/Bore	32	40	50	63	80	100
TG	32.5	38	46.5	56.5	72	89
EX	10	12	16	16	20	20
DL	22	25	27	32	36	41
L	12	15	15	20	20	25
EX	14	16	21	21	25	25
EP	M6x20	M6x20	M8x20	M8x20	M10x25	M10x25
S	5.5	5.5	6.5	6.5	10	10
L4	5.5	5.5	6.5	6.5	10	10
D	30	35	40	45	45	55
L1	7	7	7	7	9	9
E	45	52	65	75	95	115
MS	16	16	21	23	28	30



Symbol/Bore	32	40	50	63	80	100	125	160	200
AJ	11	11	14	14	17	17	19	25	25
AK	7	7	9	9	11	11	13	17	17
BA	30.5	35.5	40.5	45.5	45.5	55.5	60.5	65.5	75.5
BB	10	10	12	12	16	16	20	20	25
BC	47	53	65	75	95	115	140	180	220
BD	32	36	45	50	63	75	90	115	135
BE	80	90	110	125	154	186	224	280	320
BF	64	72	90	100	126	150	180	230	270
BH	4	4	4	6	6	6	8	8	12
BP	7	9	9	9	12.5	14.5	16.5	18.5	24
T	325	38	46.5	56.5	72	89	110	140	175

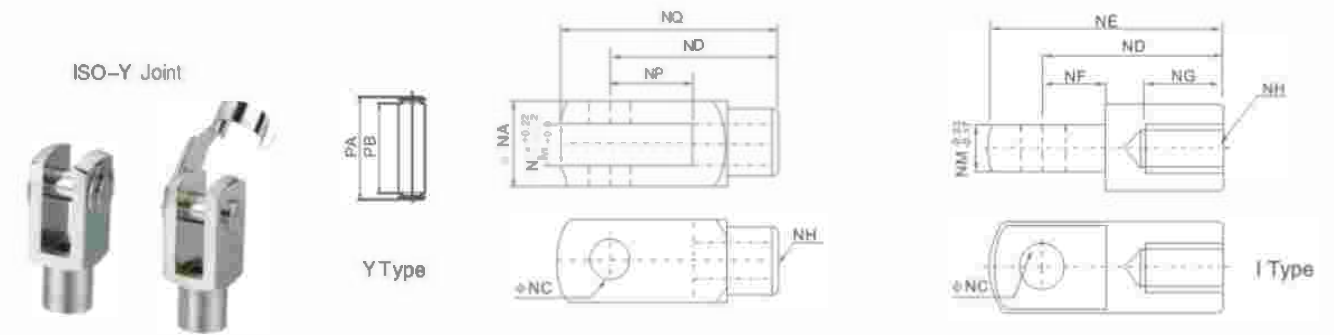


Symbol/Bore	32	40	50	63	80	100
EB	100	113	125	140	160	182
EC	53	63	75	90	105	128
ED	32.5	38	46.5	56.5	72	89
EE	52	63	75	90	110	128
EG	25	25	25	25	25	25
EP	12	16	16	20	20	25
ET	20	22	22	28	28	34
HC	37	45	55	68	87	107.5

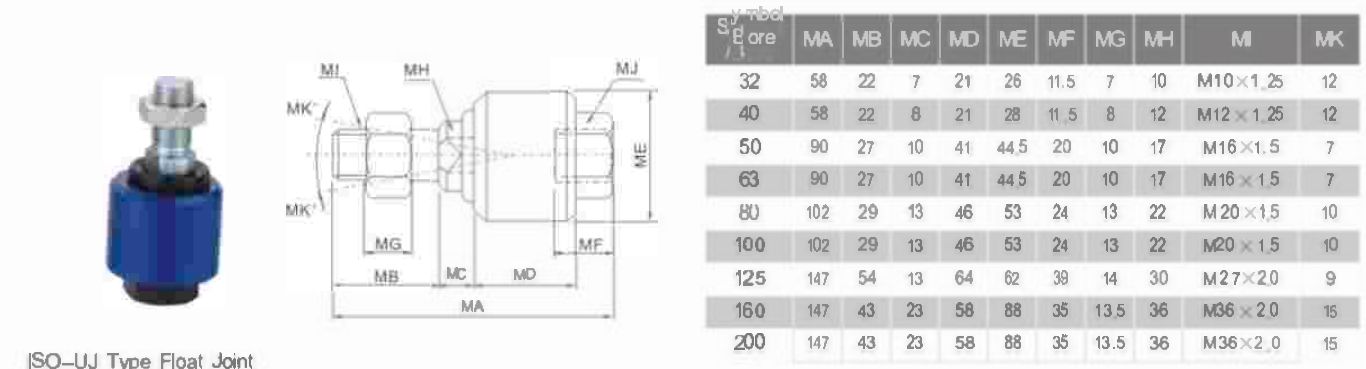


Symbol/Bore	32	40	50	63	80	100	125
FA	30	32	34	41	44	48	50
FB	12	16	16	20	20	25	25
FC	12	16	16	20	20	25	25
FD	50	63	75	90	110	132	160
FE	71	87	99	116	136	164	192
FF	86	105	117	136	156	189	217
FG	65	75	95	105	130	145	175

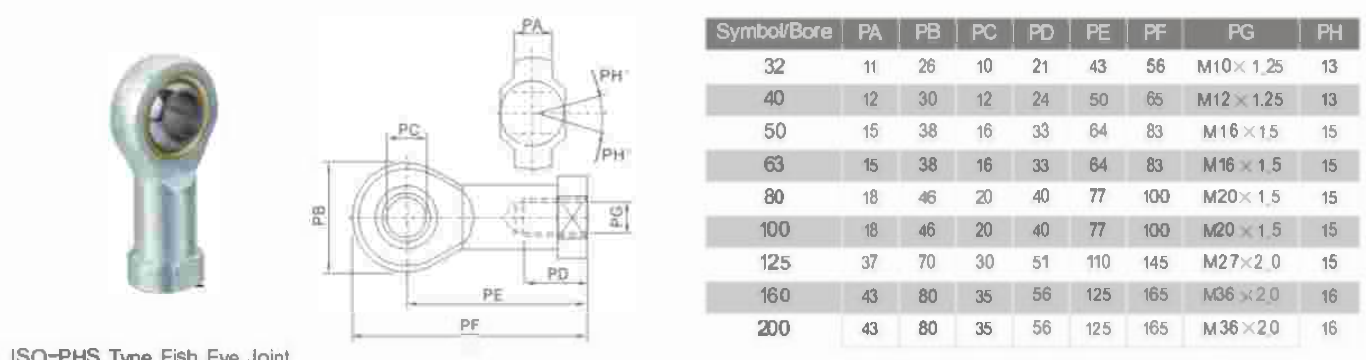
ISO Standard Cylinder Accessories



Symbol/Bore	32	40	50	63	80	100	125	160	200
NA	19	25.4	32	32	44.4	44.4	55	70	70
NC	10	12	16	16	20	20	30	35	35
ND	40	48	64	64	80	80	110	144	144
NE	52	67	89	89	112	112	155	201	201
NF	15	24	32	32	40	40	50	50	55
NG	20	20	23	23	30	30	56	72	72
NH	M10x1.25	M12x1.25	M16x1.5	M16x1.5	M20x1.5	M20x1.5	M27x2.0	M36x2.0	M36x2.0
NM	10	12	16	16	20	20	30	35	35
NP	20	24	32	32	40	40	54	72	72
NQ	52	62	83	83	105	105	148	191	191
PA	26.2	32.8	39.3	39.3	53.3	53.3	64	80	80
PB	20	26.5	33	33	45	45	55.6	70.6	70.6



Symbol/Bore	MA	MB	MC	MD	ME	MF	MG	MH	MI	MK
32	58	22	7	21	26	11.5	7	10	M10x1.25	12
40	58	22	8	21	28	11.5	8	12	M12x1.25	12
50	90	27	10	41	44.5	20	10	17	M16x1.5	7
63	90	27	10	41	44.5	20	10	17	M16x1.5	7
80	102	29	13	46	53	24	13	22	M20x1.5	10
100	102	29	13	46	53	24	13	22	M20x1.5	10
125	147	54	13	64	62	38	14	30	M27x2.0	9
160	147	43	23	58	88	35	13.5	36	M36x2.0	15
200	147	43	23	58	88	35	13.5	36	M36x2.0	15



Symbol/Bore	PA	PB	PC	PD	PE	PF	PG	PH
32	11	26	10	21	43	56	M10x1.25	13
40	12	30	12	24	50	65	M12x1.25	13
50	15	38	16	33	64	83	M16x1.5	15
63	15	38	16	33	64	83	M16x1.5	15
80	18	46	20	40	77	100	M20x1.5	15
100	18	46	20	40	77	100	M20x1.5	15
125	37	70	30	51	110	145	M27x2.0	15
160	43	80	35	56	125	165	M36x2.0	16
200	43	80	35	56	125	165	M36x2.0	16