

How to Order?

Series code	Cushion type	Type code	Bore	X	Stroke	Adjustable stroke	Magnet code	Tail type	Mounting type	Thread type
	C: Air cushion Blank: Rubber cushion		20 25 32 40	25 50 75 ...	10 20 30 40 50 75 100	Blank: No magnet S: with Magnet		Blank: Swiveling tail U: Flat tail CM: Round tail	Blank: No bracket LB FA SDB IJ YJ	Blank: G P: PT T: NPT
SM		Blank: Basic type D: Double -shaft type J: Double -shaft, adjustable stroke type SA: Single acting spring extend SB: Single acting spring return								

Order Example:

SM series double shaft adjustable stroke cylinder, air cushion, bore 32mm, stroke 25mm, adjustable stroke 20mm. with magnet, no bracket, round tail, PT thread.

ERP code is: SMCJ32x25-20-S-CM-P

Note: There are many mounting types, you can chose LB/FA/SDB/IJ/YJ

Specifications

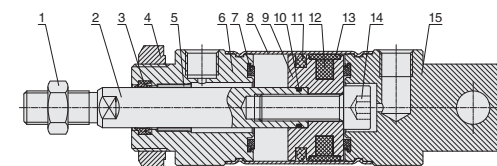
Bore size(mm)	20	25	32	40
Acting type	Double Acting/Single Acting			
Working medium	Clean Air(40 μ m filtration)			
Working pressure (MPa)	0.1~1.0(Double Acting) / 0.2~1.0(Single Acting)			
Guaranteed pressure (MPa)	1.5			
Working temperature (°C)	-20~80(Dry air)			
Speed range (mm/s)	50~800			
Cushion type	Bumper			
Barrel material	Stainless steel			
Mounting type	LB FA SDB IJ YJ			
Port size	G1/8			G1/4

● NPT、PT port size is optional.

Stroke

Bore (mm)		Standard stroke (mm)																		Max. stroke (mm)					
Double Acting	20	10	15	20	25	30	40	50	60	75	80	100	125	150	160	175	200	250	300	400	500	600	600		
	25~40	10	15	20	25	30	40	50	60	75	80	100	125	150	160	175	200	250	300	400	500	600	700		
Single Acting	20	10	15	20	25	30	40	50	60	75	80	100	125	150											150
	25~40	10	15	20	25	30	40	50	60	75	80	100	125	150											150

Internal structure

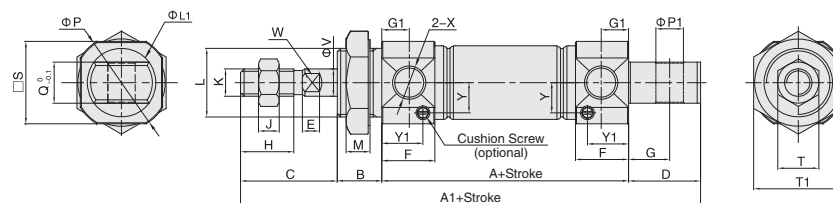


No.	Part name	Material
1	Nut	Carbon Steel
2	Piston rod	S45C hard chrome carbon steel
3	Piston rod seal	NBR
4	Nut	Carbon Steel
5	Self lubricating Bearing	Bronze Powder
6	Head cover	Aluminum Alloy
7	Anti-bump cushion	TPU
8	Barrel	Stainless steel
9	Piston	Aluminum Alloy
10	O-ring	NBR
11	Piston seal	NBR
12	Magnet	Plastic
13	Wear ring	PTFE
14	Hexagon screw	Carbon steel
15	Rear cover	Aluminum Alloy

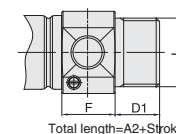
Main dimensions

SM Φ20~Φ40

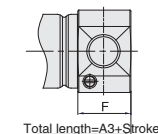
CA type



CM type



U type



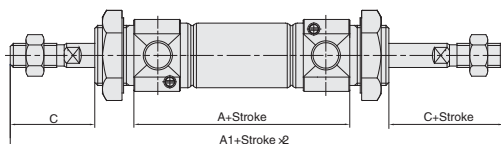
Bore/Sign	V	W	Y	Y1
20	8	6	8.8	12
25	10	8	10	11.5
32	12	10	12	11
40	16	14	16	18

Bore/Sign	A	A1	A2	A3	B	C	D	D1	E	F	G	G1	H	J	K	L	L1	M	P	P1	Q	S	T	T1	X
20	62	124	116	103	13	28	21	13	5	15.5	12	8	15.5	6	M8X1.25	M20X1.5	20	7	28	8	12	24	12	26	1/8"
25	62	128	120	107	13	32	21	13	5.5	15	12	8	19.5	6	M10X1.25	M26X1.5	22	8	33.5	8	12	30	17	32	1/8"
32	64	136	122	109	13	32	27	13	5.5	15	15	8	19.5	6	M10X1.25	M26X1.5	26	8	37.5	10	20	34.5	17	32	1/8"
40	88	165	154	138	16	34	27	16	7	22	15	11	21	8	M14X1.5	M32X2.0	32	9	46.5	10	20	42.5	19	41	1/4"

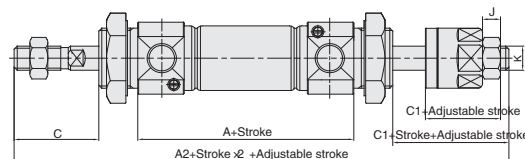
Note: With magnet and without magnet, the dimensions are same.

Main dimensions

SMD $\Phi 20-\Phi 40$



SMJ $\Phi 20-\Phi 40$



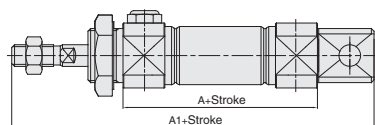
Bore/Sign	A	A1	A2	C	C1	J	K
20	62	144	141	28	25	6	M8X1.25
25	62	152	147	32	27	6	M10X1.25
32	64	154	149	32	27	6	M10X1.25
40	88	188	183	34	29	8	M14X1.5

Note: Unlabeled the same size as standard type.

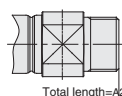
SMSB $\Phi 20-\Phi 40$



CA Type



CM Type



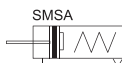
Total length=A2+Stroke

U Type

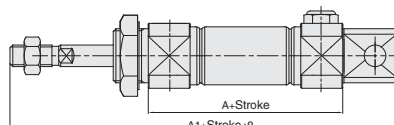


Total length=A3+Stroke

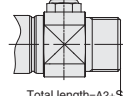
SMSA $\Phi 20-\Phi 40$



CA Type



CM Type



Total length=A2+Stroke x2

U Type



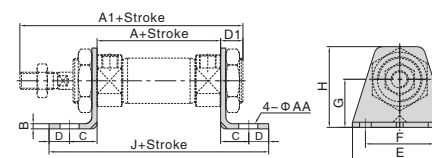
Total length=A3+Stroke x2

Bore/Sign	A			A1			A2			A3		
	0-50	51-100	101-150	0-50	51-100	101-150	0-50	51-100	101-150	0-50	51-100	101-150
20	87	112	137	149	174	199	141	166	191	128	153	178
25	87	112	137	153	178	203	145	170	195	132	157	182
32	89	114	139	161	186	211	147	172	197	134	159	184
40	113	138	163	190	215	240	179	204	229	163	188	213

Note: Unlabeled the same size as standard type.

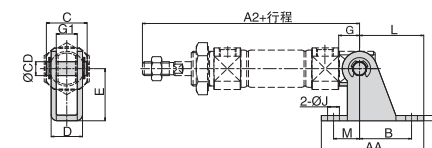
Accessory dimensions

LB Accessory



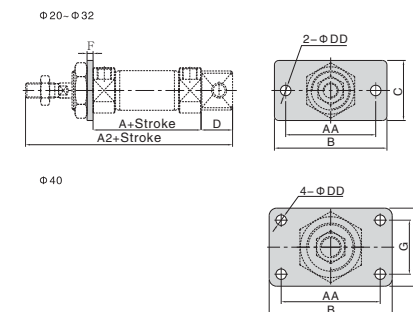
Bore/Sign	A	A1	AA	B	C	D	D1	E	F	G	H	J
20	62	116	7	3	20	8	13	55	40	25	40	118
25	62	120	7	3	20	8	13	55	40	28	47	118
32	64	122	7	3	20	8	13	55	40	28	47	120
40	88	154	7	3	23	10	16	75	55	30	54	154

SDB Accessory



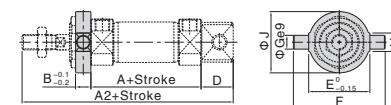
Bore/Sign	A2	AA	B	D	E	G	G1	CD	K	J	L	M
20	115	59	30	18.1	30	12	12.1	8	3	6.8	37	15
25	119	59	30	18.1	30	12	12.1	8	3	6.8	37	15
32	124	75	40	28.1	40	15	20.1	10	4	9	50	15
40	153	75	40	28.1	40	15	20.1	10	4	9	50	15

FA Accessory



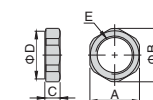
Bore/Sign	A	A2	AA	B	C	D	DD	F	G
20	62	124	60	75	34	21	7	4	-
25	62	128	60	75	40	21	7	4	-
32	64	136	60	75	40	27	7	4	-
40	88	165	66	82	52	27	7	5	36

TC Accessory



Bore/Sign	A	A2	B	D	E	F	G	H	J
20	62	124	10	21	32	52	8	12	32
25	62	128	10	21	40	60	9	12	40
32	64	136	10	27	40	60	9	12	40
40	88	165	11	27	53	77	10	14	53

TC Locking nut



Bore/Sign	A	B	C	D	E
20	26	28	7	25	M20 x1.5
25	32	34	8	31	M26 x1.5
32	32	34	8	31	M26 x1.5
40	41	45	9	40	M32 x2.0

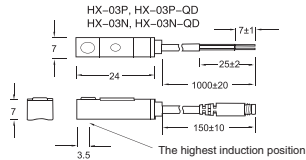
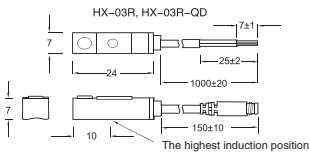


How to Order?

HX	-	03	-	R	-	H	-	2M	-	QD8
Product code		Series No.		Special model		No.:Standard sensitive		Wire length		Connection
Switch type				No.:Standard sensitive		B: NC type		No: Standard 1M		QD8: QD8 Male fitting
R:Two wire reed switch				H: High sensitive type		L: Low sensitive type		1.5M: 1.5M		
N: NPT type				X: No indicator type				2M: 2M		
P: PNP type								5M: 5M		

- Note: 1. Testing with standard magnet: $\Phi 15.5 \times \Phi 8 \times 5$ (Plastic magnet) ;
 2. Sine wave/X、Y、Z3 axial direction/ each axial direction three times/ each time 11ms;
 3. complex amplitude 1.5mm/10Hz~55Hz sweep frequency, last one minute/ each time X、Y、Z axial direction for one hour;
 4. 1-No/2-output short circuit protection/3=Power reverse connection protection/4=Surge absorption protection

Dimensions



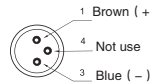
HX-03 be fixed by PBK steel belt



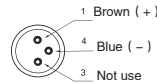
For $\Phi 6-\Phi 63$ round air cylinder

QD fitting wiring

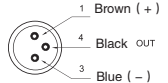
Two wires (QD)



Two wires (European wiring EQD)



Three wires (QD)



Specification

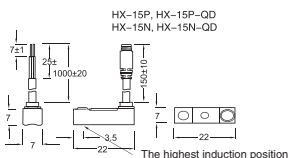
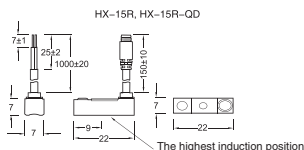
Type	HX-03R	HX-03N	HX-03P
Connect Diagram			
Parameter			
Wiring method	2-Wire Type	3-Wire Type	
Switching logic	SPST Normally Open	Solid State Output, Normally Open	
Sensor type	Reed switch	NPN type (Input) PNP type (Output)	
Operating voltage	5 - 240V DC/AC	5 - 30V DC	
Max. switching current	100mA	200mA	
Contact rating	10W	6W	
Current consumption	None	20mA max @ 24V	
Voltage drop	3.0V	0.5V max @ 200mA	
Leakage current	None	0.01mA	
Indicator	Red LED	Red LED	Green LED
Max. exchange frequency	200Hz	1000Hz	
Temperature range		-10 ~ 70℃	
Shock	30G		50G
Vibration		9G	
Enclosure classification		IEC 529 IP67 (NEMA 6)	
Protection circuit	None	Power reverse connection protection Surge absorption protection	
Cable	2.8Φ, 2C, Gray color, oil resistance PVC		2.8Φ, 3C, Black color, oil resistance PVC

How to Order?

HX	-	15	-	R	-	H	-	2M	-	QD8
Product code		Series No.		Special model			Wire length		Connection	
Switch type		R: Two wire reed switch		No.: Standard sensitive			No.: Standard 1M		QD8: QD8 Male fitting	
N: NPT type		P: PNP type		B: NC type			1.5M: 1.5M			
				H: High sensitive type			2M: 2M			
				L: Low sensitive type			5M: 5M			
				X: No indicator type						

Note: 1. Testing with standard magnet: $\Phi 15.5 \times \Phi 8 \times 5$ (Plastic magnet) ;
2. Sine wave/X, Y, Z3 axial direction/ each axial direction three times/ each time 11ms;
3. complex amplitude 1.5mm/10Hz~55Hz sweep frequency, last one minute/ each time X, Y, Z axial direction for one hour;
4. 1=No/2=output short circuit protection/3=Power reverse connection protection/4=Surge absorption protection

Dimensions

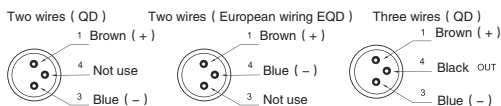


HX-15 be fixed by PBK steel belt



For $\Phi 6-\Phi 63$ round air cylinder

QD fitting wiring



Specification

Type	HX-15R	HX-15N	HX-15P
Connect Diagram			
Parameter			
Wiring method	2-Wire Type	3-Wire Type	
Switching logic	SPST Normally Open	Solid State Output, Normally Open	
Sensor type	Reed switch	NPN type (Input)	PNP type (Output)
Operating voltage	5 - 240V DC/AC	5 - 30V DC	
Max. switching current	100 mA max.	200 mA max.	
Contact rating	10 W max.	6 W max.	
Current consumption	None	20mA @ 24V DC max	
Voltage drop	3.0V max.	0.5V @ 200mA max	
Leakage current	None	0.01mA max.	
Indicator	Green LED	Red LED	
Max. exchange frequency	200Hz	1000Hz	
Temperature range		-10 ~ 70℃	
Shock	30G		50G
Vibration		9G	
Enclosure classification		IEC 529 IP67 (NEMA 6)	
Protection circuit	None	Power reverse connection protection Surge absorption protection	
Cable	2.8Φ, 2C, Gray color, oil resistance PVC	2.8Φ, 3C, Black color, oil resistance PVC	

