

How to Order?

Series No	Type No	Bore X	Stroke	Magnet No	Thread type
EXSW	M: slide bearing	6 10 12 16 20 ...	25 50 75 ...	S : with magnet	Blank: G P : PT T : NPT

Order Example:  
EXSW series, Slide Bearing type, Bore 16mm, stroke 30mm ERP code is: EXSWM16X30-S

Specifications

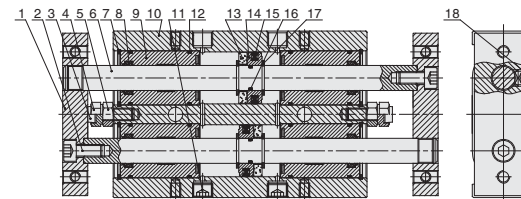
Bore(mm)	6	10	16	20	25	32
Acting type	Double Acting					
Working medium	Clean Air(40 μ m filtration)					
Working pressure (MPa)	0.1-1.0					
Guaranteed pressure (MPa)	1.5					
Working temperature (°C)	-20-80(Dry air)					
Speed range (mm/s)	30-500					
Cushion type	Bumper					
Stroke tolerance(mm)	+1.0 0					
Adjustable stroke(mm)	-5-0					
Non-rotating tolerance	± 0.1°		± 0.05°		± 0.03°	
Port size	M5 x0.8			G1/8		

● NPT, PT port size is optional.

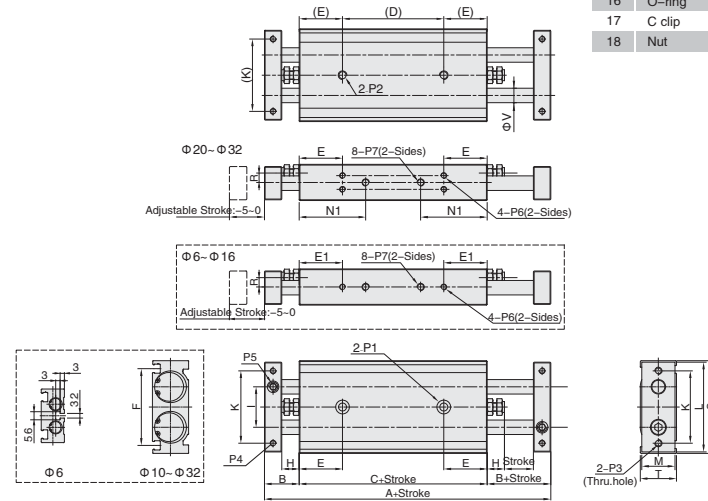
Bore size(mm)	Standard stock(mm)	Max.stoke(mm)
6	10 20 30 40 50	50
10	10 20 30 40 50 75 100	100
16-32	10 20 30 40 50 75 100 125 150	150

Note:The dimensions of non-std stroke cylinder has the same dimensions as the next longer stroke std. stroke cylinder.  
e.g. 55mm stroke cylinder has the same dimensions of 60 std. stroke cylinder.

Internal structure



Main Dimensions



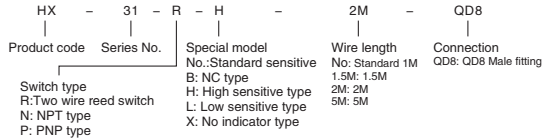
NO.	Part name	Material
1	Fixing plate	Aluminum alloy
2	Nut	Carbon steel
3	Bumper	POM
4	Adjustable nut	Carbon steel
5	Screw	Carbon steel
6	Piston rod	S45C hard chrome carbon steel
7	C clip	Spring steel
8	Wiper seal	NBR
9	Head cover	Aluminum alloy
10	Body	Aluminum alloy
11	Hex fix screw	Cu
12	O-ring	NBR
13	Magnet	Plastic
14	Piston	Aluminum alloy
15	Piston seal	NBR
16	O-ring	NBR
17	C clip	Spring steel
18	Nut	Carbon steel

Bore/Sign	A	B	C	E	E1	F	H	I	K	L	M	N1	R	S	T	V	W
6	83	13.5	56	13	10	25.8	8	16	28	35	14	24.5	4.5	37	16	4	-
10	116	17	82	20	20	36.5	9	20	35	44	15	30	3.5	46	17	6	-
16	133	19	95	25	25	47.5	9	25	45	56	18	38	5	58	20	8	-
20	158	24	110	30	30	53	12	28	50	62	23	46	6.5	64	25	10	9.5
25	160	24	112	30	30	64	12	35	60	78	28	43	9	80	30	12	13
32	193	30	133	30	30	76	14	44	75	96	36	53	11.5	98	38	16	20

Bore/Sign	P1	P2	P3	P4	P5	P6	P7
6	Φ6.5 Dp:3.3; Thru.hole:Φ3.4	-	M3X0.5	M3X0.5	M3X0.5	M3X0.5 Dp:4.5	M5X0.8
10	Φ6.5 Dp:3.3; Thru.hole:Φ3.4	M4X0.7 Dp:7	M4X0.7	M3X0.5	M5X0.8	M3X0.5 Dp:5	M5X0.8
16	Φ8 Dp:4.4; Thru.hole:Φ4.3	M5X0.8 Dp:8	M5X0.8	M4X0.7	M6X1.0	M4X0.7 Dp:5	M5X0.8
20	Φ9.5 Dp:5.3; Thru.hole:Φ5.2	M6X1.0 Dp:10	M5X0.8	M4X0.7 Dp:6	M8X1.25	M4X0.7 Dp:5.5	M5X0.8
25	Φ11 Dp:6.3; Thru.hole:Φ6.8	M8X1.25 Dp:12	M6X1.0	M5X0.8 Dp:7.5	M8X1.25	M5X0.8 Dp:7	1/8"
32	Φ11 Dp:6.3; Thru.hole:Φ6.8	M8X1.25 Dp:12	M6X1.0	M5X0.8 Dp:8	M10X1.5	M5X0.8 Dp:7	1/8"

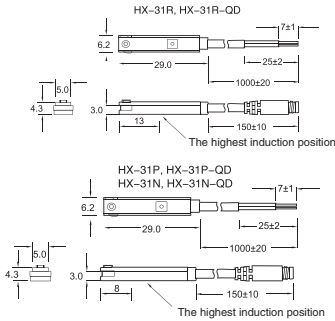


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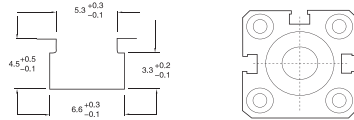


- Note: 1. Testing with standard magnet:  $\Phi 15.5 \times \Phi 8 \times 5t$  ( Plastic magnet ) ;  
 2. Sine wave/X、Y、Z 3 axial direction/ each axial direction three times/ each time 11ms;  
 3. complex amplitude 1.5mm/10Hz-55Hz sweep frequency, last one minute/ each time X、Y、Z axial direction for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

## Dimensions

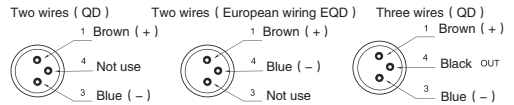


## Installation of HX-31



Suitable for FVBC air cylinder

## QD fitting wiring



## Specification

Type	HX-31R	HX-31N	HX31-P	HX-31RP
Connect Diagram				
Parameter				
Wiring method	2-Wire Type	3-Wire Type		3-Wire Type
Switching logic	SPST Normally Open	Solid State Output, Normally Open		SPST Normally Open
Sensor type	Reed switch	NPN type ( Input )	PNP type ( Output )	Reed switch
Operating voltage	5 - 240V DC/AC	5 - 30V DC		10-30V DC/AC
Max. switching current	100mA max.	100mA max.		500mA max.
Contact rating	10W max.	3W max.		10W max.
Current consumption	None	8 mA @24V DC max.		10 mA @24V DC max.
Voltage drop	3.5V max.	1.5V max.		0.1V @ 100mA max.
Leakage current	None	0.01mA		None
Indicator	Red LED	Red LED	Yellow LED	Yellow LED
Max. exchange frequency	200Hz	1000Hz		200Hz
Temperature range		10 - 70°C		
Shock	30G	50G		30G
Vibration		9G		
Enclosure classification		IEC 529 IP67 (NEMA 6)		
Protection circuit	None	Output short circuit protection		None
Cable	3.2Φ、2C, Gray color, oil resistance PVC	Power reverse connection protection		None
		3.2Φ、3C, Gray color, oil resistance PVC		