

ESWR Magnetic Coupled Rodless Cylinder



ESWR

Magnetic Coupled Rodless Cylinder



Product Features

- Cylinder with non-rotational design, compact structure, and space-saving, compatible with various guidance systems;
- External inductive switch seat, simplifying the installation and adjustment of magnetic switches;
- Double mounting surfaces for the slider, providing users with a variety of installation options;
- Centralized piping design, simplifying the wiring process to reduce costs, ensuring system safety and ease of maintenance.

How to Order?

Series Code	Type Code	Cylinder Diameter	X	Stroke	Magnet Code	Thread Code
ESWR	Blank: Dual Side Piping Type	16		50	Blank: Non-Magnetic	Blank:G
	G: Centralized Piping Type	20		100		
		25		150	S: With Magnet	
		32		200		
				250		
					

Ordering Example: ESWR Series Cylinder, Type is Centralized Piping, Cylinder Diameter is 16, Stroke is 200, Thread is G Thread, ERP Code is: ESWRG16X200-S

Specifications

Cylinder Diameter (mm)	16	20	25	32
Actuation Type	Double-acting type			
Working Medium	Air (filtered through a filter net of 40 μm or larger)			
Minimum Operating Pressure	0.16MPa		0.15MPa	0.14MPa
Maximum Operating Pressure	0.7 MPa			
Guaranteed Pressure Resistance	1.05MPa			
Operating Temperature (° C)	-20~70 (non-freezing)			
Speed Range (mm/s)	50~500			
Stroke Tolerance Range (mm)	0~250 ^{+1.0} ₀	251~1000 ^{+1.4} ₀	1001~:	^{+1.8} ₀
Cushioning Method	Rubber cushioning at both ends			
Magnetic Holding Force (N)	140	200	360	550
Port Diameter	M5X0.8	G1/8		
Weight (0-stroke weight) kg	ESWR: 0.33 ESWRG: 0.329 Increase in mass by 0.046 for every 50mm of stroke	ESWR: 0.439 ESWRG: 0.437 Increase in mass by 0.086 for every 50mm of stroke	ESWR: 0.725 ESWRG: 0.726 Increase in mass by 0.075 for every 50mm of stroke	ESWR: 1.215 ESWRG: 1.211 Increase in mass by 0.073 for every 50mm of stroke

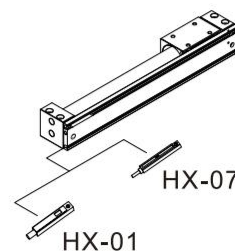
Stroke Table

Cylinder Diameter(mm)	Standard Stroke (mm)										Max. Stroke (mm)		
16	50	100	150	200	250	300	350	400	450	500	750		
20	100	150	200	250	300	350	400	450	500	600	700	800	1000
25	100	150	200	250	300	350	400	450	500	600	700	800	1200
32	100	150	200	250	300	350	400	450	500	600	700	800	1500

Optional Accessories

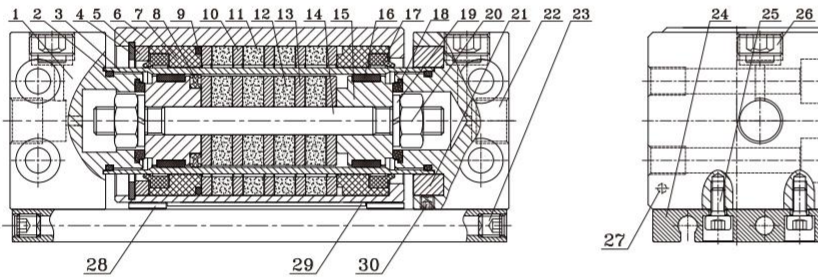
Note:
Cylinder diameters of 16 and 20 mm can only use the HX-07 series magnetic switches.

For cylinder diameters of 25 and 32 mm, please use the HX-07 or HX-01 series magnetic switches.



Internal Structure

ESWR Dual pipe fitting type

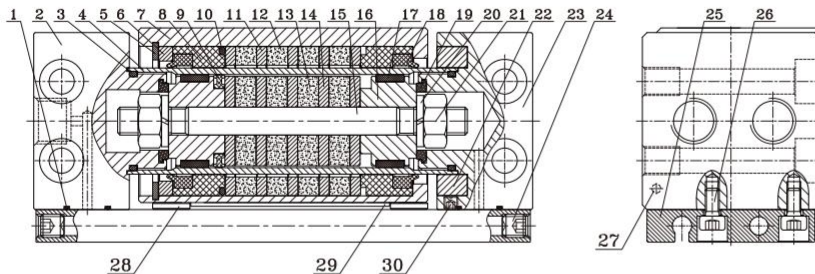


NO	Name	Materials
1	End Cover A	Aluminum Alloy
2	O-Ring	NBR
3	Cylinder Barrel	Stainless Steel
4	C-Clip for Counterbore (Reverse)	Spring Steel
5	Slider Stop	Aluminum Alloy
6	Slider	Aluminum Alloy
7	Wear Ring B	POM
8	Piston Seal	NBR
9	O-Ring	NBR
10	Slider Separator	Free-Cutting Steel
11	Integral Magnet	Sintered Neodymium Iron Boron
12	Integral Magnet	Sintered Neodymium Iron Boron
13	Cylinder Separator	Free-Cutting Steel
14	Connecting Rod	Stainless Steel
15	Piston	Aluminum Alloy

NO	Name	Materials
16	Wear Ring	POM
17	Scraper Ring	TPU
18	Anti-collision Gasket	TPU
19	Spring Washer	Stainless Steel
20	Hex Nut	Stainless Steel
21	Retaining Ring	Aluminum Alloy
22	End Cover B	Aluminum Alloy
23	Hex Socket Set Screw	Carbon Steel
24	Inductive Switch Seat	Aluminum Alloy
25	Hex Socket Head Cap Screw	Carbon Steel
26	Plug	Carbon Steel
27	Magnet	Sintered Neodymium Iron Boron
28	Spacer	POM
29	Demagnetization Plate	SPCC
30	Hex Socket Set Screw	Carbon Steel

Remarks:
For cylinder diameters of 25 and 32, parts (21) and (30) are not available.

ESWRG Centralized Piping Type



NO	Name	Materials
1	O-Ring	NBR
2	End Cover A	Aluminum Alloy
3	O-Ring	NBR
4	Cylinder Barrel	Stainless Steel
5	C-Clip for Counterbore (Reverse)	Spring Steel
6	Slider Stop	Aluminum Alloy
7	Slider	Aluminum Alloy
8	Wear Ring B	POM
9	Piston Seal	NBR
10	O-Ring	NBR
11	Slider Separator	Free-Cutting Steel
12	Integral Magnet	Sintered Neodymium Iron Boron
13	Integral Magnet	Sintered Neodymium Iron Boron
14	Cylinder Separator	Free-Cutting Steel
15	Connecting Rod	Stainless Steel

NO	Name	Materials
16	Piston	Aluminum Alloy
17	Wear Ring	POM
18	Scraper Ring	TPU
19	Anti-collision Gasket	TPU
20	Spring Washer	Stainless Steel
21	Hex Nut	Stainless Steel
22	Retaining Ring	Aluminum Alloy
23	End Cover B	Aluminum Alloy
24	Hex Socket Set Screw	Carbon Steel
25	Inductive Switch Seat	Aluminum Alloy
26	Hex Socket Head Cap Screw	Aluminum Alloy
27	Magnet	Sintered Neodymium Iron Boron
28	Spacer	POM
29	Demagnetization Plate	SPCC
30	Hex Socket Set Screw	Aluminum Alloy

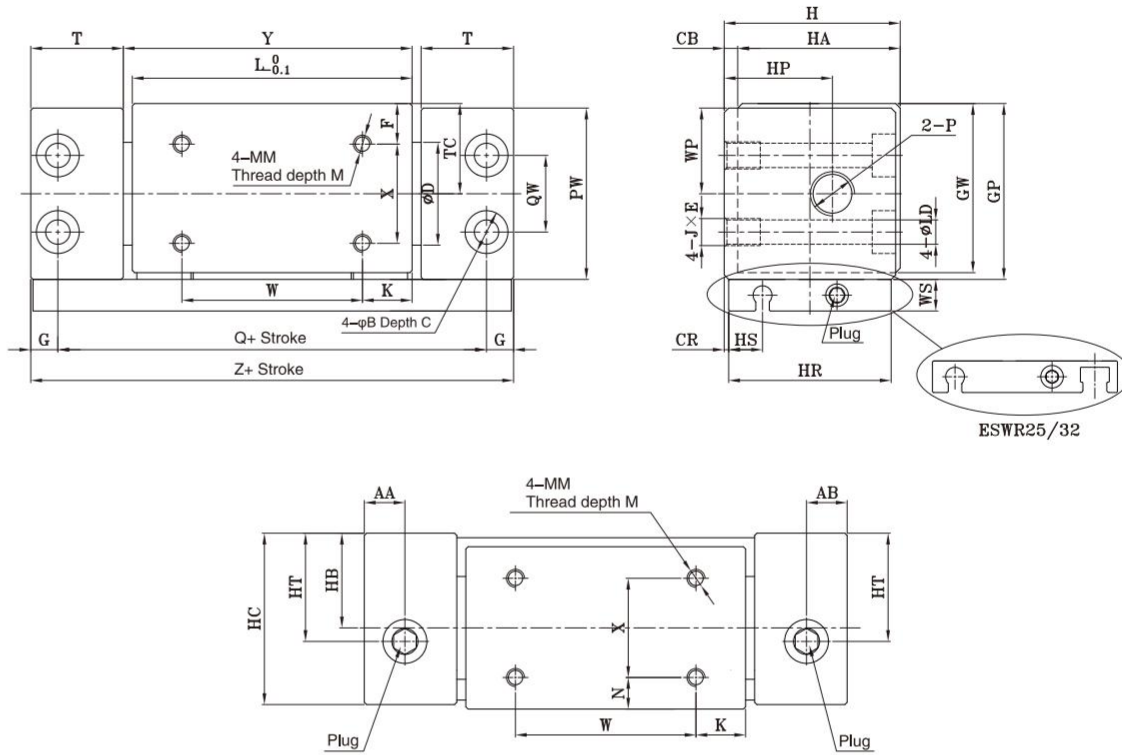
Remarks:
For cylinder diameters of 25 and 32, parts (22) and (30) are not available.

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Internal Structure

ESWR Dual pipe fitting type

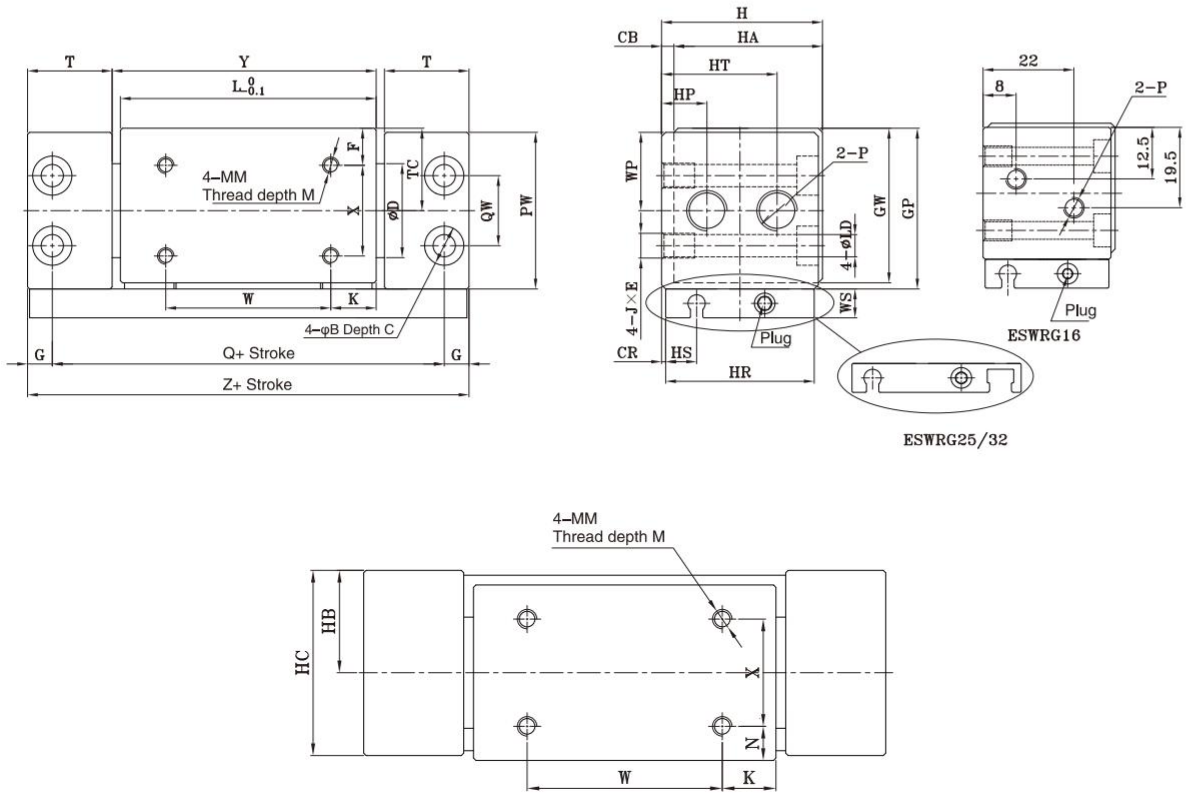


Model	AA	AB	B	C	CB	CR	D	F	G	GP	GW	H	HA	HB	HC	HP	HR	HS	HT	JXE	K
ESWR16	10.5	10.5	8	4.2	1	0.5	18	8	5	33	31.5	32	31	16	31	17	30	5.5	17	M5X0.8X7	14
ESWR20	9	8	9.5	5.2	3	1	22.8	9	6	39	37.5	39	36	21	38	24	36	7.5	24	M6X1X8	11
ESWR25	8.5	8.5	9.5	5.2	3	1	27.8	8.5	6	44	42.5	44	41	23.5	43	23.5	41	5	23.5	M6X1X8	15
ESWR32	10.5	10.5	11	6.5	3	2	33.6	10.5	7	55	53.5	55	52	29	54	29	51	5	29	M8X1.25X10	13

Model	L	LD	M	MM	N	PW	Q	QW	T	TC	W	WP	WS	X	Y	Z	P
ESWR16	53	4.3	5	M4X0.7	6	32	84	18	19	17	25	16	7	18	54.5	94	M5X0.8
ESWR20	62	5.4	5	M4X0.7	7	38	95	17	20.5	20	40	19	7	22	64	107	1/8"
ESWR25	70	5.4	6	M5X0.8	6.5	43	105	20	21.5	22.5	40	21.5	7	28	72	117	1/8"
ESWR32	76	7	7	M6X1	8.5	54	116	26	24	27	50	27	7	35	79	130	1/8"

Internal Structure

ESWRG Centralized Piping Type



ESWRG25/32

Model	B	C	CB	CR	D	F	G	GP	GW	H	HA	HB	HC	HP	HR	HS	HT	JXE	K
ESWRG16	8	4.2	1	0.5	18	8	5	33	31.5	32	31	16	31	-	30	5.5	-	M5X0.8X7	14
ESWRG20	9.5	5.2	3	1	22.8	9	6	39	37.5	39	36	21	38	11	36	7.5	28	M6X1X8	11
ESWRG25	9.5	5.2	3	1	27.8	8.5	6	44	42.5	44	41	23.5	43	14.5	41	5	33.5	M6X1X8	15
ESWRG32	11	6.5	3	2	33.6	10.5	7	55	53.5	55	52	29	54	20	51	5	40	M8X1.25X10	13

Model	L	LD	M	MM	N	PW	Q	QW	T	TC	W	WP	WS	X	Y	Z	P
ESWRG16	53	4.3	5	M4X0.7	6	32	84	18	19	17	25	-	7	18	54.5	94	M5X0.8
ESWRG20	62	5.4	5	M4X0.7	7	38	95	17	20.5	20	40	19	7	22	64	107	1/8"
ESWRG25	70	5.4	6	M5X0.8	6.5	43	105	20	21.5	22.5	40	21.5	7	28	72	117	1/8"
ESWRG32	76	7	7	M6X1	8.5	54	116	26	24	27	50	26	7	35	79	130	1/8"