

Hygienic Design Cylinder ISO Standard Type

Series *HYC*

Ø32, Ø40, Ø50, Ø63

How to Order

HYCB 32 [] R - 500 F

With auto switch **HYDCB 32 [] R - 500 F - F6B []**

With auto switch (Built-in magnet and switch rail)

Bore size

32	32 mm
40	40 mm
50	50 mm
63	63 mm

Port thread type

Nil	Rc
TN	NPT
TF	G

Sealant material

R	NBR
H	External FKM ^{Note)}

Note) External seal material: Rod scraper, tube gasket, rod seal and needle scraper are made from FKM.

Number of auto switches

Nil	2 pcs.
S	1 pc.
n	"n" pcs.

Auto switch

Nil	Without auto switch
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Refer to table below for selection of applicable auto switch.

Grease

Nil	Standard grease (for non-food)
F	Grease for food

Note) Select grease for food for use in a water dispersion environment or when washing a product with water. (Water resistance is insufficient with standard grease.)

Cylinder stroke

Refer to the next page for the standard stroke.

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) HYDCB40R-300F

< Mounting bracket > Foot, flange, single clevis, double clevis, and clevis pin
< Option parts > Plug bolt
Please place an order for above mentioned parts separately, please refer to pages 885 to 889 for details.

Applicable Auto Switches/Refer to page 1312 for detailed auto switch specifications.

Type	Electrical entry	Indicator light	Wiring (Output)	Load voltage		Auto switch model	Lead wire length (m)*			Pre-wired connector	Applicable load	
				DC			0.5 (Nil)	3 (L)	5 (Z)			
Solid state switch	Grommet	Yes	3-wire (NPN)	24 V	5 V 12 V	F6N	●	●	○	○	IC circuit	Relay, PLC
			3-wire (PNP)		12 V	F6P	●	●	○	○		
			2-wire	12 V	F6B	●	●	○	○	—		

* Lead wire length symbols 0.5 m.....Nil (Example) F6B
3 m.....L (Example) F6BL
5 m.....Z (Example) F6BZ

* Auto switches marked with a "○" symbol are produced upon receipt of orders.

• Refer to pages 1328 and 1329 for detailed specifications about the auto switch with pre-wired connector.

* Auto switch is shipped not assembled with the cylinder.

CJ5
CG5

HY□

C□
M□

D-□

-X□

Individual
-X□

Technical
data



Specifications

Bore size (mm)	32	40	50	63
Action	Double acting, Single rod			
Fluid	Air			
Minimum operating pressure	0.15 MPa			
Maximum operating pressure	1.0 MPa			
Proof pressure	1.5 MPa			
Ambient and operating fluid temperature	Without auto switch 0°C to 70°C			
	With auto switch 0°C to 60°C			
Lubrication	Not required			
Piston speed	50 to 500 mm/s (With pressure at 1.0 MPa) ^{Note)}			
Cushion	Air cushion			
Stroke length tolerance	250 mm ^{+1.0} ₀ mm or less, 251 to 600 mm ^{+1.4} ₀ mm			
Piston rod material	Stainless steel 304 / Hard chrome plated			

Note) Use a cylinder below the allowable kinetic energy. Refer to page 869 for the allowable kinetic energy.

Standard Stroke

Bore size (mm)	Standard stroke (mm)
32	25, 50, 75, 100, 125, 150, 200, 250, 300, 400, 500
40	25, 50, 75, 100, 125, 150, 200, 250, 300, 400, 500
50	25, 50, 75, 100, 125, 150, 200, 250, 300, 400, 500, 600
63	25, 50, 75, 100, 125, 150, 200, 250, 300, 400, 500, 600

* Intermediate strokes of 1 mm each can be produced. (The spacer is not used.)

Mass

Without auto switch

Unit: kg

Bore size (mm)	Stroke (mm)											
	25	50	75	100	125	150	200	250	300	400	500	600
32	0.89	1.02	1.14	1.26	1.38	1.50	1.75	1.99	2.23	2.72	3.21	—
40	1.30	1.46	1.62	1.79	1.95	2.11	2.44	2.77	3.09	3.75	4.40	—
50	2.03	2.26	2.50	2.73	2.96	3.20	3.66	4.13	4.59	5.52	6.45	7.38
63	2.95	3.25	3.54	3.84	4.13	4.43	5.02	5.61	6.21	7.39	8.57	9.76

With auto switch (Built-in magnet and switch rail)

Unit: kg

Bore size (mm)	Stroke (mm)											
	25	50	75	100	125	150	200	250	300	400	500	600
32	0.93	1.06	1.19	1.32	1.44	1.57	1.83	2.09	2.34	2.86	3.37	—
40	1.34	1.51	1.68	1.85	2.02	2.19	2.53	2.87	3.21	3.89	4.57	—
50	2.07	2.31	2.55	2.79	3.03	3.27	3.75	4.23	4.71	5.66	6.62	7.58
63	3.00	3.30	3.60	3.91	4.21	4.51	5.12	5.72	6.33	7.54	8.75	9.96

Theoretical Output

Unit: N

Bore size (mm)	Operating direction	Operating pressure (MPa)		
		0.3	0.5	0.7
32	IN	207	346	484
	OUT	241	402	563
40	IN	318	530	742
	OUT	378	630	882
50	IN	495	825	1160
	OUT	588	980	1370
63	IN	840	1400	1960
	OUT	936	1560	2180