

Hygienic Design Cylinder ISO Standard Type

HYC Series

ø32, ø40, ø50, ø63

CJ5
CG5
HY□
Water
Resistant

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.

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.)

Auto switch

Nil	Without auto switch
-----	---------------------

Refer to table below for selection of applicable auto switch.

Number of auto switches

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

Cylinder stroke

Refer to page 1098 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 1115 to 1119 for details.

Applicable Auto Switches/Refer to pages 1575 to 1701 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 auto switch	Grommet	Yes	3-wire (NPN)	24 V	5 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 1648 and 1649 for detailed specifications about the auto switch with pre-wired connector.

* Auto switch is shipped not assembled with the cylinder.

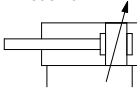
Note) The D-F6□ auto switch has an exterior configuration that reduces residual liquid; it does not feature improved water resistance.

D-□
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Technical
Data



Symbol

Air cushion



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 1099 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.)

Weight

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

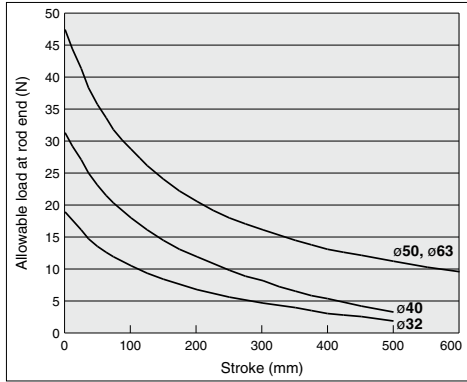
Bore size (mm)	Stroke (mm)											
	25	50	75	100	125	150	200	250	300	400	500	600
32	0.93	1.06	1.19	1.32	1.44	1.57	1.83	2.09	2.34	2.86	3.37	—
40	1.34	1.51	1.68	1.85	2.02	2.19	2.53	2.87	3.21	3.89	4.57	—
50	2.07	2.31	2.55	2.79	3.03	3.27	3.75	4.23	4.71	5.66	6.62	7.58
63	3.00	3.30	3.60	3.91	4.21	4.51	5.12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

Theoretical Output

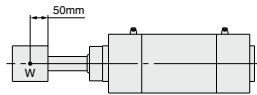
Unit: N

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

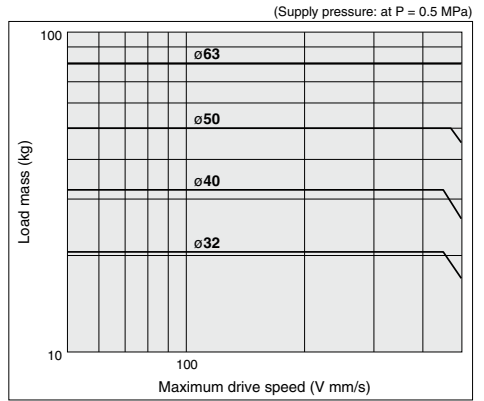
Allowable Load at Rod End



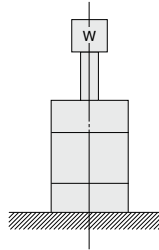
• A case where the center of gravity of the load rests 50 mm from the rod end.



Allowable Kinetic Energy



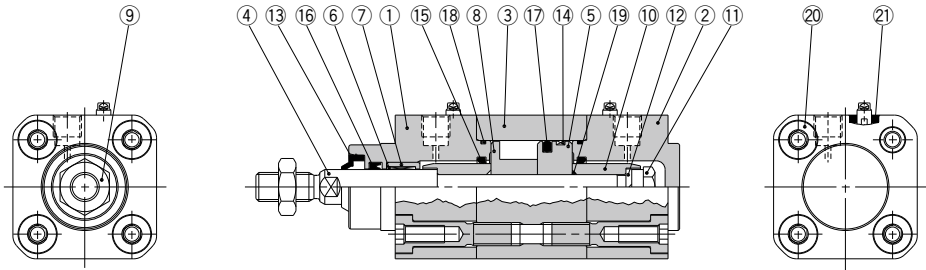
CJ5
CG5
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Water
Resistant



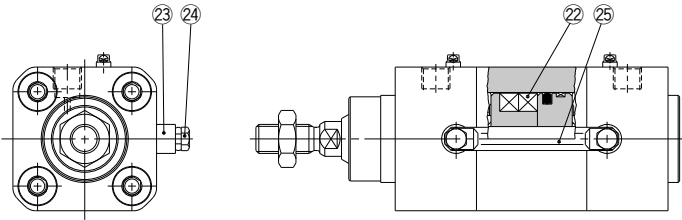
D-□
-X□
Technical
Data

HYC Series

Construction



Built-in magnet



Component Parts

No.	Description	Material	Qty.	Note
1	Rod cover	Aluminum alloy	1	Anodic oxide film
2	Head cover	Aluminum alloy	1	Anodic oxide film
3	Cylinder tube	Aluminum alloy	1	Anodic oxide film
4	Piston rod	Stainless steel	1	Hard chromium plated
5	Piston	Aluminum alloy	1	Chromated
6	Bushing	Resin	1	
7	Bushing retainer	Aluminum alloy	1	Chromated
8	Magnet holder	Aluminum alloy	1	Chromated
9	Rod end nut	Stainless steel	1	
10	Cushion ring	Steel	2	Zinc chromated
11	Piston nut	Stainless steel	1	
12	Spring washer	Steel	1	
13	Rod scraper	NBR	1	(FKM can be selected.)
14	Wearing	Resin	1	
15	Cushion seal	Resin	2	
16	Rod seal	NBR	1	(FKM can be selected.)
17	Piston seal	NBR	1	
18	Cylinder tube gasket	NBR	2	(FKM can be selected.)
19	Piston gasket	NBR	1	
20	Tie-rod bolt	Stainless steel	8	
21	Needle scraper	NBR	2	(FKM can be selected.)

No.	Description	Material	Qty.	Note
22	Magnet	—	2	(Only built-in magnet)
23	Switch rail base	Stainless steel	2	(Only built-in magnet)
24	Hexagon bolt	Stainless steel	2	(Only built-in magnet)
25	Switch rail	Stainless steel	1	(Only built-in magnet)

Replacement Parts: Seal Kit

Bore Size	Part no.	Set contents
32	HYCB32□-PS	Set of nos. above (15, 16, 17, 18 and 21)
40	HYCB40□-PS	
50	HYCB50□-PS	
63	HYCB63□-PS	

Place the seal material symbol in □.

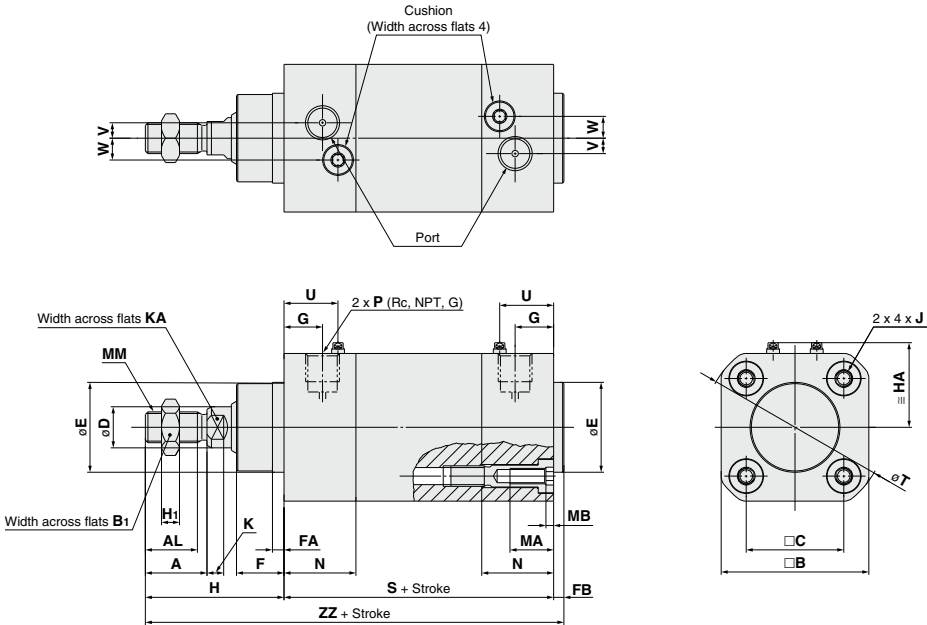
Symbol	Material
R	NBR
H	External FKM®

- * External seal: Rod seal, the tube gasket and needle scraper are made from FKM.
- * Seal kit includes (15, 16, 17, 18 and 21). Order the seal kit based on each bore size.
- * Since the seal kit does not include a grease pack, order it separately.

Grease for food part no.: GR-H-010 (10 g)
Standard grease part no.: GR-S-010 (10 g)

Construction

Without auto switch: HYCB32 to 63



CJ5
CG5

HY□

Water
Resistant

		(mm)																											
Bore size	Stroke range	A	AL	B	B ₁	C	D	E ^{ø11}	F	FA	FB	G	H	H ₁	MA	MB	J	K	KA	MM	N	P	S	T	U	V	W	HA	ZZ
32	500 or less	22	18	50	17	32.5	12	30	16	5	4	14	48	6	16	3.2	M6 x 1	6	10	M10 x 1.25	28	1/8	94	62	21	6	6.5	30	146
40	500 or less	24	20	58	19	38	16	35	18.5	4.5	4	15	54	7	16	3.2	M6 x 1	6.5	13	M12 x 1.25	28	1/4	105	71	21	6	8.5	34	163
50	600 or less	32	27	70	24	46.5	20	40	23	5	4	17	69	10	16	4.2	M8 x 1.25	8	16	M16 x 1.5	32	1/4	106	88	25	8	11	40	179
63	600 or less	32	27	84	24	56.5	20	45	23	5	4	17	69	10	16	4.2	M8 x 1.25	8	16	M16 x 1.5	32	3/8	121	102	25	10	9	47	194

Note 1) Refer to pages 1115 to 1119 for details about the rod end nut, mounting bracket and accessory bracket.
 Note 2) When the unit is installed, ensure that dirt does not collect in the rod end (threaded portion).

D-□

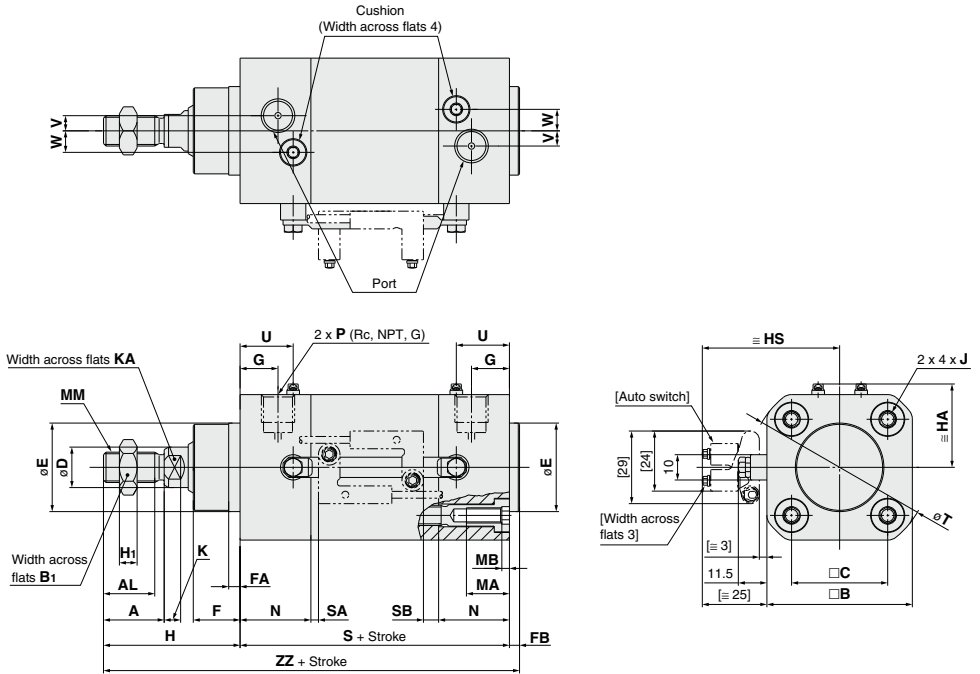
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Technical
Data

HYC Series

Construction

With auto switch: HYDCB32 to 63



(mm)

Bore size	Stroke range	A	AL	B	B ₁	C	D	E ^{ø11}	F	FA	FB	G	H	H ₁	MA	MB	J	K	KA	MM	N	P	S	T	U	V	W	SA
32	500 or less	22	18	50	17	32.5	12	30	16	5	4	14	48	6	16	3.2	M6 x 1	6	10	M10 x 1.25	28	1/8	94	62	21	6	6.5	7.5
40	500 or less	24	20	58	19	38	16	35	18.5	4.5	4	15	54	7	16	3.2	M6 x 1	6.5	13	M12 x 1.25	28	1/4	105	71	21	6	8.5	12
50	600 or less	32	27	70	24	46.5	20	40	23	5	4	17	69	10	16	4.2	M8 x 1.25	8	16	M16 x 1.5	32	1/4	106	88	25	8	11	9
63	600 or less	32	27	84	24	56.5	20	45	23	5	4	17	69	10	16	4.2	M8 x 1.25	8	16	M16 x 1.5	32	3/8	121	102	25	10	9	19

Bore size	SB	HS	HA	ZZ
32	16.5	50	30	146
40	23	54	34	163
50	19	60	40	179
63	24	67	47	194

Note 1) The [] value denotes dimensions with the auto switch D-F6□ mounted, which is dedicated to the Hygienic Design Cylinder.

Note 2) Refer to pages 1115 to 1119 for details about the rod end nut, mounting bracket and accessory bracket.

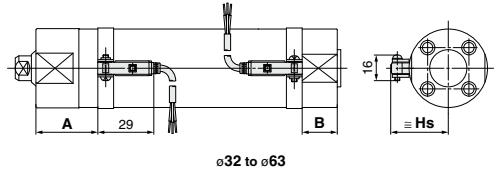
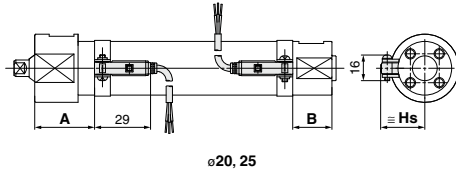
Note 3) When the unit is installed, ensure that dirt does not collect in the rod end (threaded portion).

Auto Switch Mounting 1

Auto Switch Proper Mounting Position (Detection at stroke end) and Its Mounting Height

HYB

D-H7BA

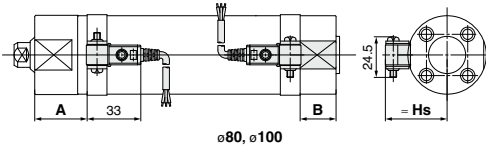


CJ5
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HY□

Water
Resistant

D-G5BA



Bore size	D-H7BA			D-G5BA		
	A	B	Hs	A	B	Hs
20	29	19.5	24.5	—	—	—
25	29	19.5	27	—	—	—
32	30	20.5	30.5	—	—	—
40	34.5	22.5	35	—	—	—
50	42	27.5	40.5	—	—	—
63	42	27.5	47.5	—	—	—
80	—	—	—	48	32	59
100	—	—	—	48	32	69.5

Note) The above values are a guide in the stroke end detection of the mounting position of the auto switch. Please adjust in an actual setting after confirming the operating state of the auto switch.

Operating Range

Auto switch model	Bore size							
	20	25	32	40	50	63	80	100
D-H7BA	4	4	4.5	5	6	6.5	—	—
D-G5BA	—	—	—	—	—	—	6.5	7

* Since this is a guideline including hysteresis, it is not meant to be guaranteed. There may be substantial variation depending on the surrounding environment (assuming approximately ±30% dispersion).

Minimum Stroke of Auto Switch Mounting

Auto switch model	1 pc.	2 pcs.
D-H7BA	10	15
D-G5BA	10	15

Auto Switch Mounting Bracket/Part No.

Auto switch model	Bore size (mm)							
	20	25	32	40	50	63	80	100
D-H7BA	BMA2-020AS	BMA2-025AS	BMA2-032AS	BMA2-040AS	BMA2-050AS	BMA2-063AS	—	—
D-G5BA	—	—	—	—	—	—	BA-08 (+)	BA-10 (+)

* When the auto switch bracket above is ordered as a single unit, steel screws are included. When assembling, use the stainless steel screws attached to the auto switches shown below.
Stainless steel mounting screw kit

BBA3: for D-G5BA

• The D-G5BA auto switch is set on the cylinder with the stainless steel screws above when shipped. When an auto switch is shipped independently, BBA3 is attached.

Note 1) Refer to pages 1681 and 1682 for the details of BBA3.

Note 2) The stainless steel screws supplied with the D-H7BA auto switch cannot be used for the D-G5BA.

• Refer to pages 1681 and 1682 for auto switch mounting.

D-□

-X□

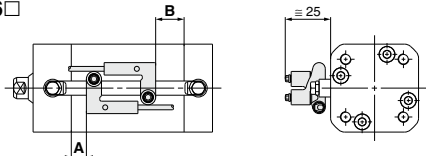
Technical
Data

Auto Switch Mounting 2

Auto Switch Proper Mounting Position (Detection at stroke end) and Its Mounting Height

HYQ series

D-F6□

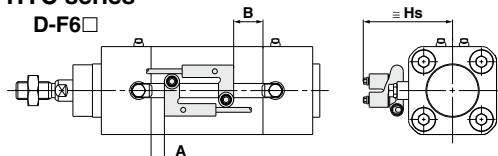


Bore size	(mm)	
	A	B
20	6.5	10.5
25	6.5	11
32	8.5	16
40	10.5	16
50	10.5	17
63	9	18

Note) The above values are a guide in the stroke end detection of the mounting position of the auto switch. Please adjust in an actual setting after confirming the operating state of the auto switch.

HYC series

D-F6□

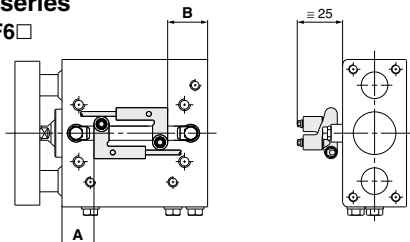


Bore size	(mm)		
	A	B	Hs
32	7.5	16.5	50
40	12	23	54
50	9	19	60
63	19	24	67

Note) The above values are a guide in the stroke end detection of the mounting position of the auto switch. Please adjust in an actual setting after confirming the operating state of the auto switch.

HYG series

D-F6□



Bore size	A	(mm)			
		B			
		30 st or less	31 to 50 st	51 to 100 st	Over 101 st
20	16	22.5	32.5	52.5	72.5
25	17	25.5	35.5	55.5	75.5
32	22.5	36.5	46.5	61.5	76.5
40	21	38	48	63	78
50	21	45	55	70	85
63	23.5	42.5	52.5	67.5	82.5

Note) The above values are a guide in the stroke end detection of the mounting position of the auto switch. Please adjust in an actual setting after confirming the operating state of the auto switch.

Operating Range

Unit: Operating range [mm]

Auto switch model	Series	Bore size					
		20	25	32	40	50	63
D-F6□	HYQ	7	6	7.5	7.5	7.5	7.5
	HYC	—	—	7.5	7.5	7.5	7.5
	HYG	7	7	8	7.5	7.5	7.5

Note) Since this is a guideline including hysteresis, it is not meant to be guaranteed. There may be substantial variation depending on the surrounding environment (assuming approximately ±30% dispersion).

Minimum Stroke of Auto Switch Mounting

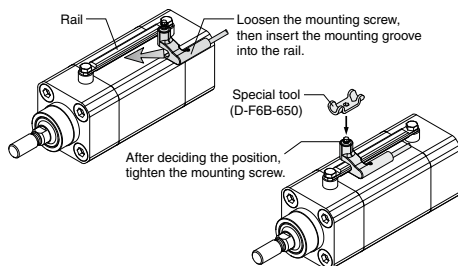
Auto switch model	Series	1 pc.	2 pcs.
		D-F6□	HYQ, HYC
	HYG	10	15

Auto Switch Mounting (HYQ, HYC, HYG common)

Proper tightening torque

When the mounting screw is tightened, use a special tool (D-F6B-650) or torque wrench.

The tightening torque of the M3 mounting screw should be 0.8 to 1.4 N·m.



Tighten the screw within the following torque range when the auto switch mounting rail is installed during maintenance.

Screw size	Tightening torque (N·m)
M4	1.1 to 1.9

Tighten the screw within the following torque range when the auto switch is installed on the mounting rail.

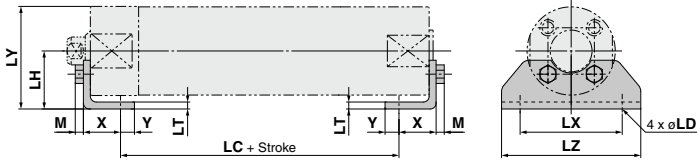
Tightening torque (N·m)
0.8 to 1.4

HY□ Series

Mounting Brackets

Foot Bracket

HYB series

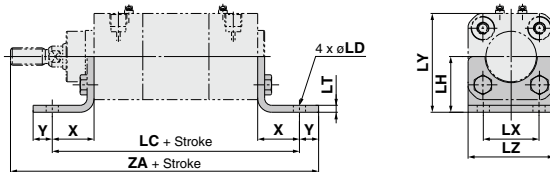


Foot bracket material: Stainless steel
Mounting bolt material: Stainless steel (mm)

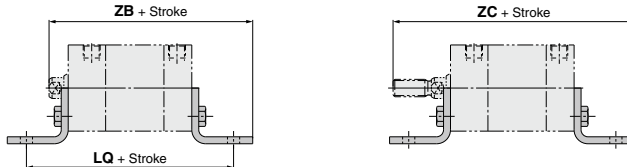
Bore size	Bracket part no.	Weight (kg)	X	Y	LD	LH	LC	LT	LX	LY	LZ	M	Mounting bolt
32	CG-L032SUS	0.06	16	6	7.2	25	45	3	44	44	60	3.5	M5 x 0.8
40	CG-L040SUS	0.08	16.5	6.5	7.2	30	51	3	54	53.5	75	4	M6 x 1.0
50	CG-L050SUS	0.17	21.5	11.5	10	40	55	4	66	69	90	5.5	M8 x 1.25
63	CG-L063SUS	0.23	21.5	11.5	12	45	55	4	82	81	110	7	M10 x 1.5
80	CG-L080SUS	0.36	28	17	12	55	60	4	100	99.5	130	7	M10 x 1.5
100	CG-L100SUS	0.69	30	15	14	70	60	6	120	125	160	8	M12 x 1.75

Note 1) Order two foot brackets per cylinder. One mounting bracket is attached with two foot brackets and four mounting bolts.
Note 2) Contact SMC for HYB ø20, ø25.

HYC series



HYQ series



Foot bracket material: Stainless steel
Mounting bolt material: Stainless steel (mm)

Bore size	Bracket part no.	Weight (g)	X	Y	LD	LH	LC	LT	LX	LY	LZ	HYC	HYQ			HYDQ			Mounting bolt
													ZA	LQ	ZB	ZC	LQ	ZB	
32	HY-L032SUS	100	24	11	7	32	142	4	32	57	49.5	177	109	107	129	124	122	144	M6 x 1 x 18L
40	HY-L040SUS	120	28	10	9	36	161	4	36	65	57.5	198	121.5	115.5	139.5	136.5	130.5	154.5	M6 x 1 x 18L
50	HY-L050SUS	210	32	11	9	45	170	5	45	80	69	218	140.5	133.5	165.5	155.5	148.5	180.5	M8 x 1.25 x 20L
63	HY-L063SUS	260	32	11	9	50	185	5	50	92	84	233	141	134	166	156	149	181	M8 x 1.25 x 20L

Note 1) One mounting bracket is attached with one foot bracket and two mounting bolts.
Note 2) Two foot brackets per cylinder should be ordered.
Note 3) Contact SMC for HYQ ø20, ø25.

CJ5
CG5

HY□

Water
Resistant

D-□

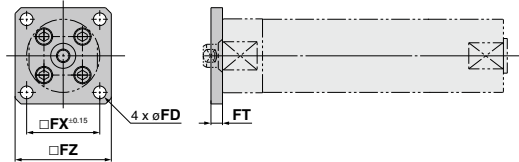
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Technical
Data

Flange Bracket

HYB series (Rod end)

Rod end flange bracket (Material: Stainless steel)

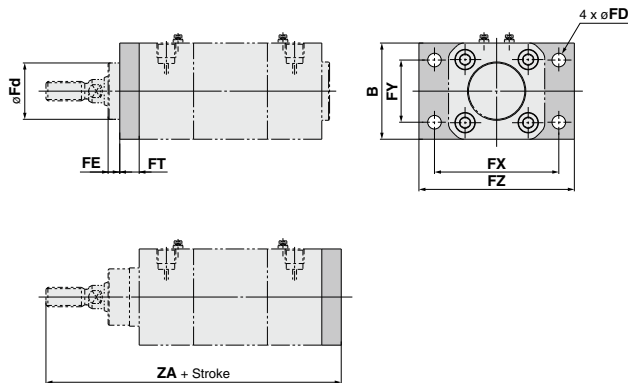


Flange bracket material: Stainless steel
Mounting bolt material: Stainless steel
(mm)

Bore size	Bracket part no.	Weight (kg)	FT	FX	FZ	FD
32	CG-F032SUS	0.10	6	38	50	6.6
40	CG-F040SUS	0.15	6	46	60	6.6
50	CG-F050SUS	0.26	9	58	75	9
63	CG-F063SUS	0.52	9	70	90	11
80	CG-F080SUS	0.66	9	82	100	11
100	CG-F100SUS	1.16	10	100	125	14

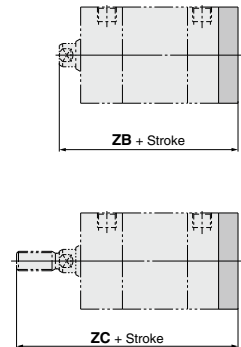
Note 1) One mounting bracket is attached with one flange bracket and four mounting bolts.
Note 2) Contact SMC for HYB ø20, ø25.

HYC series (Rod end and head end are common.)



HYQ series

(Rod end and head end are common.)



Flange bracket material: Stainless steel
Mounting bolt material: Stainless steel
(mm)

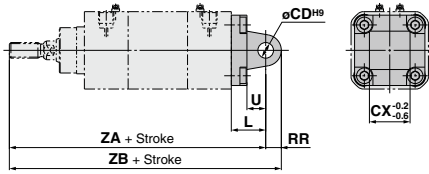
Bore size	Bracket part no.	Weight (g)	B	FD	FE	FT	FX	FY	FZ	Fd	HYC	HYQ		HYDQ		Mounting bolt	
												Without auto switch	With auto switch	Without auto switch	With auto switch		
												ZA	ZB	ZC	ZB	ZC	
32	HY-F032SUS	260	49.5	7	6	10	64	32	80	29	152	82	104	97	119		M6 x 1 x 18L
40	HY-F040SUS	320	57.5	9	8.5	10	72	36	90	34	169	87.5	111.5	102.5	126.5		M6 x 1 x 18L
50	HY-F050SUS	580	69	9	11	12	90	45	110	39	187	102.5	134.5	117.5	149.5		M8 x 1.25 x 20L
63	HY-F063SUS	770	82	9	11	12	100	50	120	44	202	103	135	118	150		M8 x 1.25 x 20L

Note 1) One mounting bracket is attached with 4 mounting bolts.
Note 2) Contact SMC for HYQ ø20, ø25.

Single Clevis Bracket

HYC series

Single clevis bracket material: Stainless steel
Mounting bolt material: Stainless steel (mm)



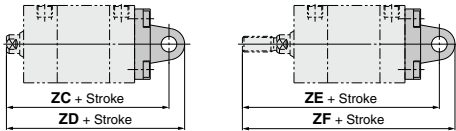
Bore size	Bracket part no.	Weight (g)	L	RR	U	CD ^{H9}	HYC	
							CX ^{-0.2}	CX ^{-0.6}
32	HY-C032SUS	200	22	10	12	10	26	164 174
40	HY-C040SUS	310	25	12	15	12	28	184 196
50	HY-C050SUS	440	27	12	17	12	32	202 214
63	HY-C063SUS	760	32	16	20	16	40	222 238

CJ5
CG5

HY

Water
Resistant

HYQ series



Bore size	Bracket part no.	HYQ / without auto switch			
		ZC	ZD	ZE	ZF
32	HY-C032SUS	94	104	116	126
40	HY-C040SUS	102.5	114.5	126.5	138.5
50	HY-C050SUS	117.5	129.5	149.5	161.5
63	HY-C063SUS	123	139	155	171

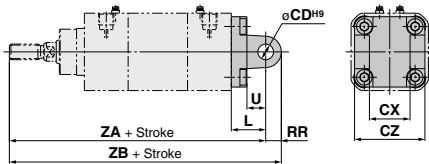
Bore size	Bracket part no.	HYDQ / with auto switch				Mounting bolt
		ZC	ZD	ZE	ZF	
32	HY-C032SUS	109	119	131	141	M6 x 1 x 18L
40	HY-C040SUS	117.5	129.5	141.5	153.5	M6 x 1 x 18L
50	HY-C050SUS	132.5	144.5	164.5	176.5	M8 x 1.25 x 20L
63	HY-C063SUS	138	154	170	186	M8 x 1.25 x 20L

Note 1) One mounting bracket is attached with 4 mounting bolts.
Note 2) Contact SMC for HYQ ø20, ø25.

Double Clevis Bracket

HYC series

Double clevis bracket material: Stainless steel
Mounting bolt material: Stainless steel (mm)



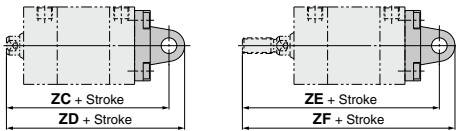
Bore size	Bracket part no.	Weight (g)	L	RR	U	CD ^{H9}	CX ^{H14}	CZ ^{H14}
40	HY-D040SUS	350	25	12	15	12	28	52
50	HY-D050SUS	490	27	12	17	12	32	60
63	HY-D063SUS	810	32	16	20	16	40	70

Bore size	Bracket part no.	HYC		HYQ / without auto switch			
		ZA	ZB	ZC	ZD	ZE	ZF
32	HY-D032SUS	164	174	94	104	116	126
40	HY-D040SUS	184	196	102.5	114.5	126.5	138.5
50	HY-D050SUS	202	214	117.5	129.5	149.5	161.5
63	HY-D063SUS	222	238	123	139	155	171

Bore size	Bracket part no.	HYDQ / with auto switch				Mounting bolt
		ZC	ZD	ZE	ZF	
32	HY-D032SUS	109	119	131	141	M6 x 1 x 18L
40	HY-D040SUS	117.5	129.5	141.5	153.5	M6 x 1 x 18L
50	HY-D050SUS	132.5	144.5	164.5	176.5	M8 x 1.25 x 20L
63	HY-D063SUS	138	154	170	186	M8 x 1.25 x 20L

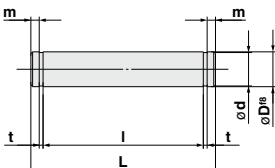
Note 1) One mounting bracket is attached with 4 mounting bolts and clevis pin (HY-E0□SUS) and retaining rings.
Note 2) Contact SMC for HYQ ø20, ø25.

HYQ series



Clevis Pin

Pin material: Stainless steel
Retaining ring material: Stainless steel (mm)



Bore size	Bracket part no.	Weight (g)	D ^ø	L	d	l	m	t	Applied retaining ring
40	HY-E04SUS	60	12	60	11.5	53	2.3	1.2	C type for shaft 12
50	HY-E05SUS	70	12	68	11.5	61	2.3	1.2	C type for shaft 12
63	HY-E06SUS	130	16	78	15.2	71	2.3	1.2	C type for shaft 16

Note 1) One clevis pin is attached with two retaining rings.
Note 2) Contact SMC for HYQ ø20, ø25.

D-

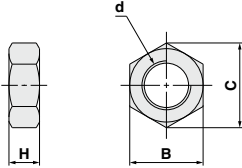
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Technical
Data

HY□ Series Options

Rod End Nut

HYQ, HYC series



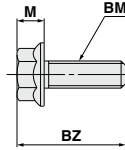
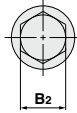
Material: Stainless steel
(mm)

Part no.	Applicable bore size	d	H	B	C
NTH-02SUS	20	M6 x 1.0	3.6	10	11.5
NT-02SUS	25	M8 x 1.25	5	13	15
NT-03SUS	32	M10 x 1.25	6	17	19.6
NTH-04SUS	40	M12 x 1.25	7	19	21.9
NTH-05SUS	50, 63	M16 x 1.5	10	24	27.7

Plug Bolt

Plug bolts are used to close the mounting hole not used.

HYC series

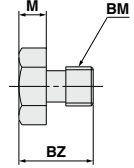
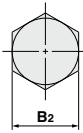


Material: Stainless steel
(mm)

Part no.	Applicable bore size	B2	BM	BZ	M
HYC-H03SUS	32, 40	10	M6 x 1.0	22	6
HYC-H05SUS	50, 63	12	M8 x 1.25	24	8

Note) The above part number is attached with 4 bolts.

HYB, HYG series



Material: Stainless steel
(mm)

HYB

Part no.	Applicable bore size	B2	BM	BZ	M
HYB-H020SUS	20	7	M4 x 0.7	9	3
HYB-H025SUS	25	8	M5 x 0.8	9.5	3.5
HYB-H025SUS	32	8	M5 x 0.8	9.5	3.5
HYB-H040SUS	40	10	M6 x 1.0	12	4
HYB-H050SUS	50	13	M8 x 1.25	15.5	5.5
HYB-H063SUS	63	17	M10 x 1.5	19	7
HYB-H063SUS	80	17	M10 x 1.5	19	7
HYB-H100SUS	100	19	M12 x 1.75	24	8

Note) The above part number is attached with 4 bolts.

HYG

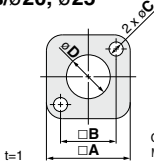
Part no.	B2	BM	BZ	M
HYG-H020SUS	8	M5 x 0.8	9.5	3.5
HYG-H025SUS	10	M6 x 1.0	12	4
HYG-H032SUS	13	M8 x 1.25	15.5	5.5
HYG-H050SUS	17	M10 x 1.5	19	7

Note) The above part number is attached with 4 bolts.

External Cover

HYQ series/ø20, ø25

Rod end

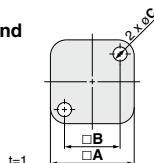


Cover material: Stainless steel
Mounting bolt material: Stainless steel
(mm)

Part no.	A	B	C	D	Installation bolt
HYQ-HA020SUS	32.2	22	5.5	18.5	M5 x 0.8 x 10L
HYQ-HA025SUS	39.2	26	6.6	20.5	M6 x 1.0 x 10L

Note) One mounting bracket is attached with two mounting bolts.

Head end



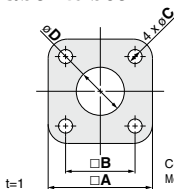
Cover material: Stainless steel
Mounting bolt material: Stainless steel
(mm)

Part no.	A	B	C	Installation bolt
HYQ-HB020SUS	32.2	22	5.5	M5 x 0.8 x 10L
HYQ-HB025SUS	39.2	26	6.6	M6 x 1.0 x 10L

Note) One mounting bracket is attached with two mounting bolts.

HYQ series/ø32 to ø63

Rod end

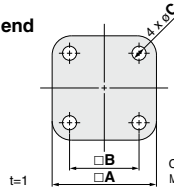


Cover material: Stainless steel
Mounting bolt material: Stainless steel
(mm)

Part no.	A	B	C	D	Installation bolt
HYQ-HA032SUS	48.8	32.5	6.6	22.5	M6 x 1.0 x 10L
HYQ-HA040SUS	56.8	38	6.6	26.5	M6 x 1.0 x 10L
HYQ-HA050SUS	68.2	46.5	8.8	32.5	M8 x 1.25 x 10L
HYQ-HA063SUS	83.2	56.5	8.8	32.5	M8 x 1.25 x 10L

Note) One mounting bracket is attached with four mounting bolts.

Head end



Cover material: Stainless steel
Mounting bolt material: Stainless steel
(mm)

Part no.	A	B	C	Installation bolt
HYQ-HB032SUS	48.8	32.5	6.6	M6 x 1.0 x 10L
HYQ-HB040SUS	56.8	38	6.6	M6 x 1.0 x 10L
HYQ-HB050SUS	68.2	46.5	8.8	M8 x 1.25 x 10L
HYQ-HB063SUS	83.2	56.5	8.8	M8 x 1.25 x 10L

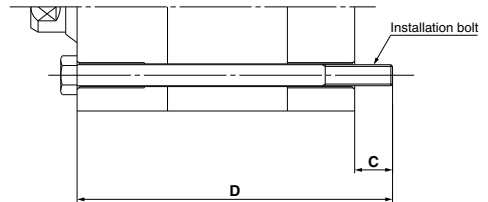
Note) One mounting bracket is attached with four mounting bolts.

Mounting Bolts for HYQB and HYDQB

Mounting method : Mounting bolts for HYQB and HYDQB with through-holes are available.

How to Order : Add "HY-" to the head of the bolt.

Example) Prepare the mounting bolt of cylinder model "HYQB20-5".
The part no. is "HY-M4 x 65L" 2 pcs.



CJ5
CG5
HY
Water Resistant

HYQ/Without built-in magnet

Cylinder model	C	D	Mounting bolt part no.
HYQB20-5	10	65	HY-M4 x 65L
-10		70	x 70L
-15		75	x 75L
-20		80	x 80L
-25		85	x 85L
-30		90	x 90L
-35		95	x 95L
-40		100	x 100L
-45		105	x 105L
-50		110	x 110L
HYQB25-5	9	65	HY-M5 x 65L
-10		70	x 70L
-15		75	x 75L
-20		80	x 80L
-25		85	x 85L
-30		90	x 90L
-35		95	x 95L
-40		100	x 100L
-45		105	x 105L
-50		110	x 110L

Cylinder model	C	D	Mounting bolt part no.
HYQB32-5	9	75	HY-M5 x 75L
-10		80	x 80L
-15		85	x 85L
-20		90	x 90L
-25		95	x 95L
-30		100	x 100L
-35		105	x 105L
-40		110	x 110L
-45		115	x 115L
-50		120	x 120L
-75	145	x 145L	
-100	170	x 170L	
HYQB40-5	9.5	80	HY-M5 x 80L
-10		85	x 85L
-15		90	x 90L
-20		95	x 95L
-25		100	x 100L
-30		105	x 105L
-35		110	x 110L
-40		115	x 115L
-45		120	x 120L
-50		125	x 125L
-75	150	x 150L	
-100	175	x 175L	

Cylinder model	C	D	Mounting bolt part no.
HYQB50-10	13.5	100	HY-M6 x 100L
-15		105	x 105L
-20		110	x 110L
-25		115	x 115L
-30		120	x 120L
-35		125	x 125L
-40		130	x 130L
-45		135	x 135L
-50		140	x 140L
-75		165	x 165L
-100	190	x 190L	
HYQB63-10	13	100	HY-M6 x 100L
-15		105	x 105L
-20		110	x 110L
-25		115	x 115L
-30		120	x 120L
-35		125	x 125L
-40		130	x 130L
-45		135	x 135L
-50		140	x 140L
-75		165	x 165L
-100	190	x 190L	

Material: Stainless steel

HYDQ/With built-in magnet

Cylinder model	C	D	Mounting bolt part no.
HYDQB20-5	10	75	HY-M4 x 75L
-10		80	x 80L
-15		85	x 85L
-20		90	x 90L
-25		95	x 95L
-30		100	x 100L
-35		105	x 105L
-40		110	x 110L
-45		115	x 115L
-50		120	x 120L
HYDQB25-5	9	75	HY-M5 x 75L
-10		80	x 80L
-15		85	x 85L
-20		90	x 90L
-25		95	x 95L
-30		100	x 100L
-35		105	x 105L
-40		110	x 110L
-45		115	x 115L
-50		120	x 120L

Cylinder model	C	D	Mounting bolt part no.
HYDQB32-5	9	90	HY-M5 x 90L
-10		95	x 95L
-15		100	x 100L
-20		105	x 105L
-25		110	x 110L
-30		115	x 115L
-35		120	x 120L
-40		125	x 125L
-45		130	x 130L
-50		135	x 135L
-75	160	x 160L	
-100	185	x 185L	
HYDQB40-5	9.5	95	HY-M5 x 95L
-10		100	x 100L
-15		105	x 105L
-20		110	x 110L
-25		115	x 115L
-30		120	x 120L
-35		125	x 125L
-40		130	x 130L
-45		135	x 135L
-50		140	x 140L
-75	165	x 165L	
-100	190	x 190L	

Cylinder model	C	D	Mounting bolt part no.
HYDQB50-10	13.5	115	HY-M6 x 115L
-15		120	x 120L
-20		125	x 125L
-25		130	x 130L
-30		135	x 135L
-35		140	x 140L
-40		145	x 145L
-45		150	x 150L
-50		155	x 155L
-75		180	x 180L
-100	205	x 205L	
HYDQB63-10	13	115	HY-M6 x 115L
-15		120	x 120L
-20		125	x 125L
-25		130	x 130L
-30		135	x 135L
-35		140	x 140L
-40		145	x 145L
-45		150	x 150L
-50		155	x 155L
-75		180	x 180L
-100	205	x 205L	

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Technical Data