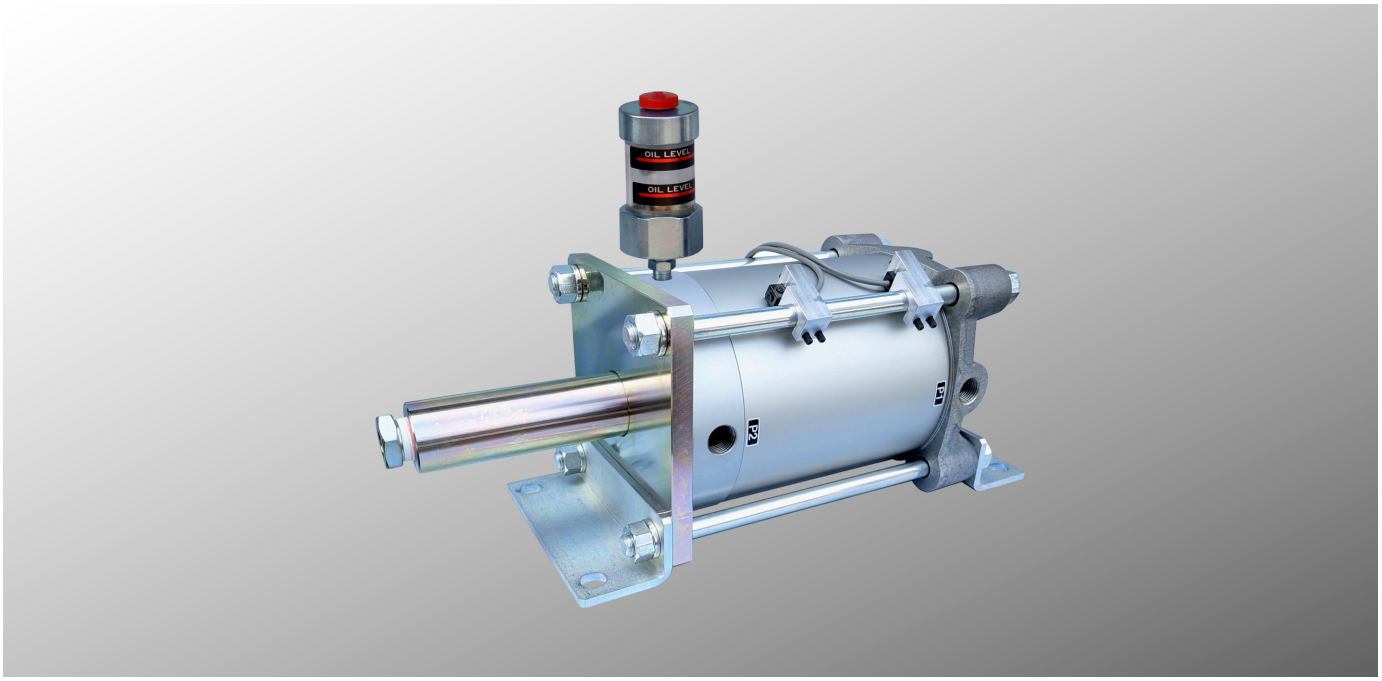
Air－hydro booster

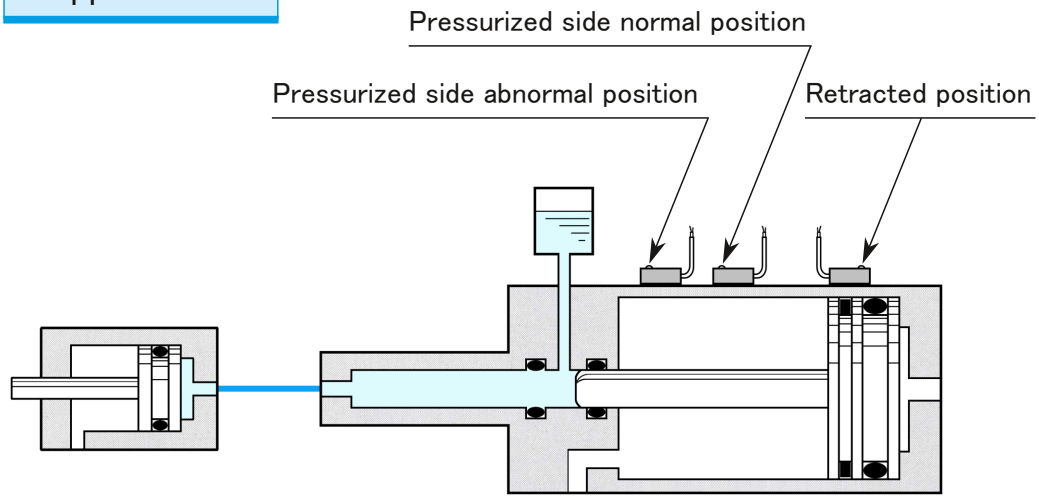
RUSH BOOSTER

With auto switch
(Built-in magnet)

This model comes with an auto switch for detecting the operating position of the rush booster.
Auto switch models are available for the RB160 type with pressure boost ratio of 16 times, 28 times, and 65 times.



Applications



HIROTAKA MFG. CO.,LTD.

Specifications

Model	RBW160		
	□-16	□-28	□-65
Pneumatic cylinder diameter	ϕ160		
Booster ram diameter	ϕ40	ϕ30	ϕ20
Pressure boosting ratio	1:16	1:28	1:64
□ Amount of discharged oil (cm³)	25 166 90 184 119 231	25 143 44 182 73 227 92 272 118	25 113 42 139 69 175 86 220
Maximum generated oil pressure (MPa)	11.2MPa	19.6MPa	44.8MPa
Proof pressure (Air)	1MPa		
Operating pressure (Air)	0.15～0.7MPa		
Fluid (Air pressure)	Air		
Fluid (Oil pressure)	Standard mineral hydraulic fluid (ISO viscosity grade:VG22)		

For piping examples, model selection, hydraulic piping precautions, installation, and adjustment, please refer to the RB Series catalog, as they are the same.

How to Order

RBW 160 - 25 - 65 - 2 - H2ME

Refer to the specifications for combinations of amount of discharged oil and pressure boosting ratio.

Rush Booster
(With auto switch)

Symbol	Bore size
160	160 mm

Symbol	Amount of discharged oil
25	25 cm³
44	44 cm³
92	92 cm³
166	166 cm³
220	220 cm³
⋮	⋮

Symbol	Pressure boosting ratio
16	1:16
28	1:28
65	1:64

Symbol	Auto switch types
Nil	Read auto switch
H2ME	Solid state auto switch

Symbol	Number of auto switches
1	1 pc.
2	2 pcs.
N	"N" pcs.

Air Consumption

Unit: L (ANR)

Model	L	Model	L
RBW-160- 25-16	14.7	RBW-160-182-28	74.7
90	26.3	227	91.1
119	33.2	272	107.6
166	42.5	RBW-160- 25-65	30.5
184	44.8	42	44.7
231	54.0	69	68.4
RBW-160- 25-28	18.4	86	82.6
44	25.5	113	106.3
73	37.2	139	127.6
92	41.9	175	158.4
118	51.3	220	196.2
143	60.7		

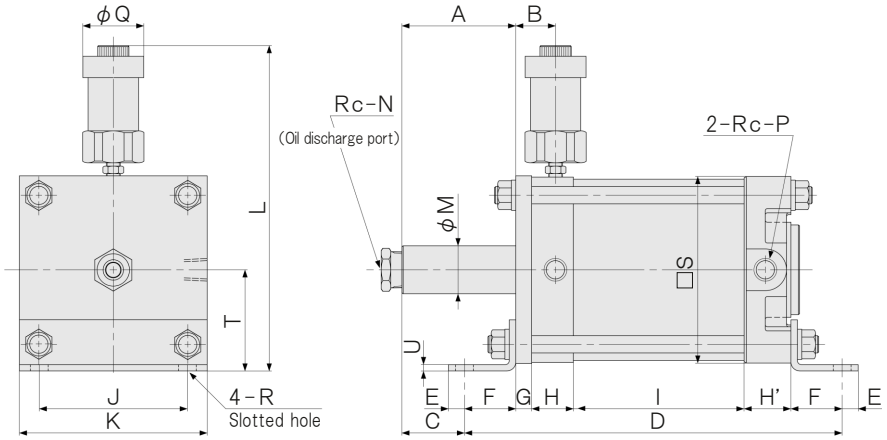
The values represent the air consumption converted to atmospheric pressure for one cycle of total oil volume discharge at an air pressure of 0.5 MPa.

Mass

Unit: kg

Model	L	Model	L
RBW-160- 25-16	23.2	RBW-160-182-28	28.1
90	25.2	227	29.6
119	26.2	272	31.6
166	27.7	RBW-160- 25-65	23.6
184	28.3	42	24.8
231	29.8	69	26.6
RBW-160- 25-28	22.1	86	28.6
44	22.6	113	31.6
73	23.7	139	33.6
92	24.6	175	36.6
118	25.6	220	40.1
143	26.4		

Dimensions



Unit : kg

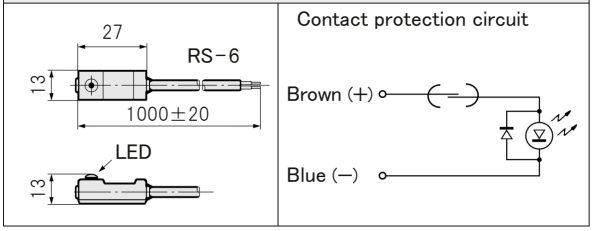
Model \ Symbol	A	B	C	D	E	F	G	H	H'	I	J	K	L	M	N	P	Q	R	S	T	U
RBW160- 25-16	65	37	17	300	15	48	15	39	44	106	140	176	313	66	3/8	1/2	58	15	176	95	6
90	120	37	72	355	15	48	15	39	44	161	140	176	313	66	3/8	1/2	58	15	176	95	6
119	145	37	97	380	15	48	15	39	44	186	140	176	313	66	3/8	1/2	58	15	176	95	6
166	185	37	137	420	15	48	15	39	44	226	140	176	313	66	3/8	1/2	58	15	176	95	6
184	200	37	152	435	15	48	15	39	44	241	140	176	313	66	3/8	1/2	58	15	176	95	6
231	240	37	192	475	15	48	15	39	44	281	140	176	313	66	3/8	1/2	58	15	176	95	6
RBW160- 25-28	80	37	32	315	15	48	15	39	44	121	140	176	313	45	3/8	1/2	58	15	176	95	6
44	110	37	62	345	15	48	15	39	44	151	140	176	313	45	3/8	1/2	58	15	176	95	6
73	155	37	107	390	15	48	15	39	44	196	140	176	313	45	3/8	1/2	58	15	176	95	6
92	185	37	137	420	15	48	15	39	44	226	140	176	313	45	3/8	1/2	58	15	176	95	6
118	225	37	177	460	15	48	15	39	44	266	140	176	313	45	3/8	1/2	58	15	176	95	6
143	265	37	217	500	15	48	15	39	44	306	140	176	313	45	3/8	1/2	58	15	176	95	6
182	325	37	277	560	15	48	15	39	44	366	140	176	313	45	3/8	1/2	58	15	176	95	6
227	395	37	347	630	15	48	15	39	44	436	140	176	313	45	3/8	1/2	58	15	176	95	6
272	465	37	417	700	15	48	15	39	44	506	140	176	313	45	3/8	1/2	58	15	176	95	6
RBW160- 25-65	135	37	87	370	15	48	15	39	44	176	140	176	313	45	3/8	1/2	58	15	176	95	6
42	195	37	147	430	15	48	15	39	44	236	140	176	313	45	3/8	1/2	58	15	176	95	6
69	295	37	247	530	15	48	15	39	44	336	140	176	313	45	3/8	1/2	58	15	176	95	6
86	355	37	307	590	15	48	15	39	44	396	140	176	313	45	3/8	1/2	58	15	176	95	6
113	450	37	402	685	15	48	15	39	44	491	140	176	313	45	3/8	1/2	58	15	176	95	6
139	545	37	497	780	15	48	15	39	44	586	140	176	313	45	3/8	1/2	58	15	176	95	6
175	675	37	627	910	15	48	15	39	44	716	140	176	313	45	3/8	1/2	58	15	176	95	6
220	835	37	787	1070	15	48	15	39	44	876	140	176	313	45	3/8	1/2	58	15	176	95	6

Auto Switch

Read auto switch		
Auto switch model	RS−6	
Voltage	24 VDC	100 V/200 VAC
Max. switching current	20 mA	20 mA
Max. switching capacity	5 W	5 VA
Average operating time	1 m SEC	
Insulation resistance	100 MΩ or more (at 500 VDC)	
Impact resistance	30 G	
Ambient temperature	−10 to 60℃ (Non−freezing)	
Lead wire	2 cores cable, 1 m	
Indicator light	Red LED illuminates when turned ON	

Read auto switch

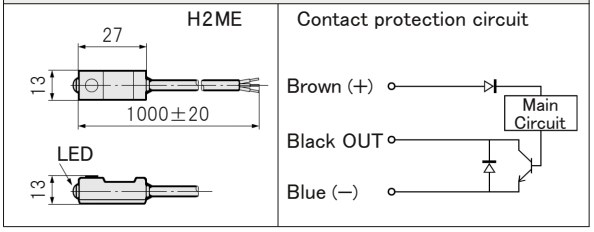
Dimentions and internal circuit



Solid state auto switch	
Auto switch model	H2ME
Output type	NPN
Voltage	5, 12, 24 VDC
Max. load current	5 mA (5 VDC),10 mA (12 VDC),20 mA (24 VDC)
Max. switching current	100 mA (5 VDC), 200 mA (24 VDC)
Internal voltage drop	0.6 V or less (24 VDC)
Max. leakage current	0.1 mA or less (24 VDC)
Impact resistance	30 G
Ambient temperature	−10 to 60℃ (Non−freezing)
Lead wire	3 cores cable, 1 m
Indicator light	Red LED illuminates when turned ON

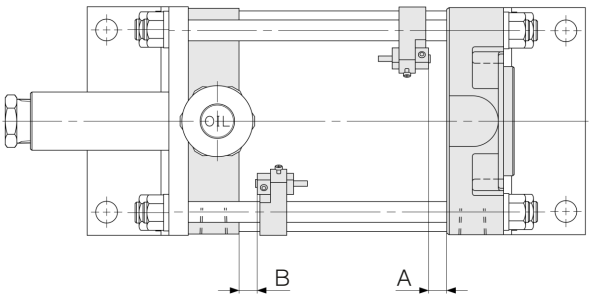
Solod state auto switch

Dimentions and internal circuit



Mounting bracket compatibility : The same mounting bracket is used for both Read auto switch (RS−6) and Solid state auto switch (H2ME).

Proper Mounting Position of Auto Switch (At Stroke End)



Model	RS−6		H2ME	
Stmbol	A	B	A	B
Proper mounting position	18	18	25	24

Note : In actual installation, please adjust after confirming the operating status of the auto switch.

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