

Manual Switching Valves

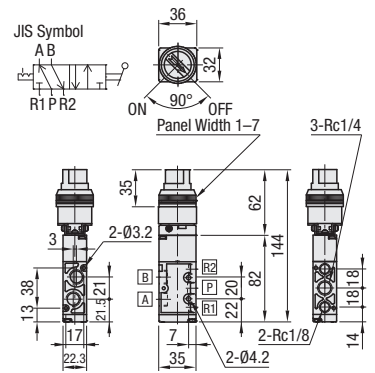
Panel Mount 5-Port Type

Manual Switching Valves – Panel Mount
5-Port Type

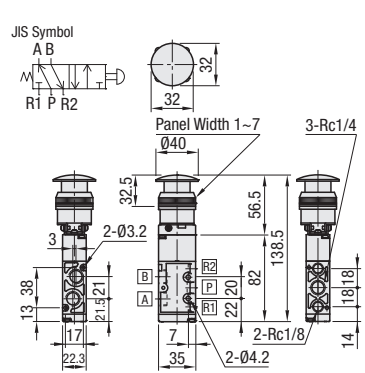
RoHS 10



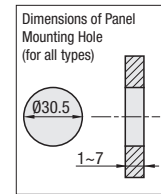
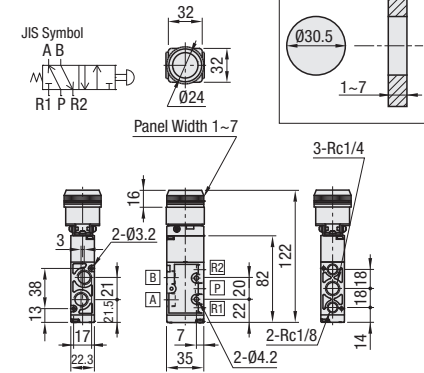
NCHS4 Name: 8A
5-Port Rotary Type



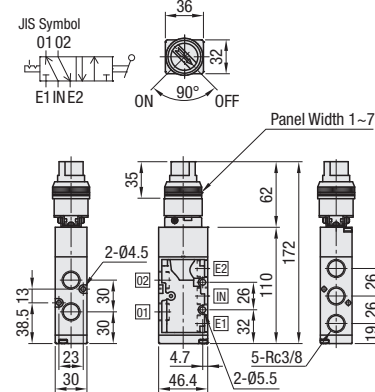
NCHB4 Name: 8A
5-Port Button Type



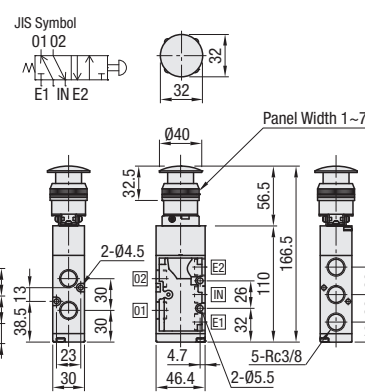
NCHP4 Name: 8A
5-Port Push Button Type



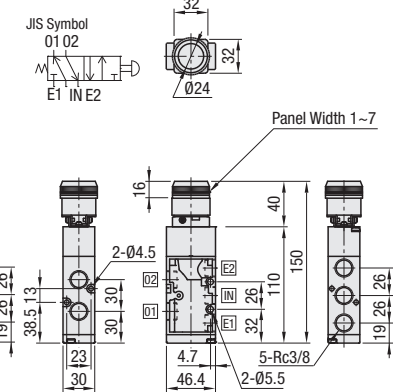
NCHS4 Nominal: 10A
5-Port Rotary Type



NCHB4 Nominal: 10A
5-Port Button Type

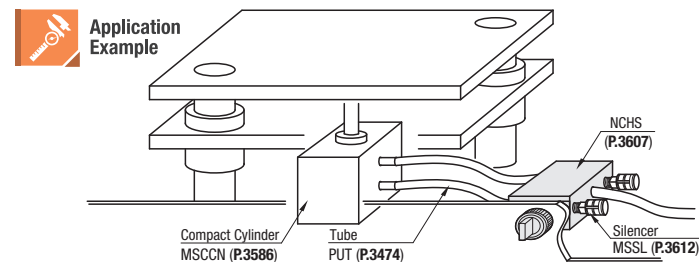


NCHP4 Nominal: 10A
5-Port Push Button Type



Part Number Type	No.	Nominal	Direction	No. of Ports	Pipe Connection Bore Dia.		Number of Positions	Effective Sectional Area (mm ²)	Operating Pressure Range (MPa)	Operating Temp. Range (°C)	Used Fluid	Mass (g)
					IN / OUT	EX						
Rotary Type NCHS	4	8A	4	5	Rc1/4	Rc1/8	2	18	0.15-0.8	5-60	Air	180
Button Type NCHB					Rc3/8	Rc3/8						
Push Button Type NCHP		10A			Rc3/8	Rc3/8	30	320				

- Refer to the parts list on the previous page.
- The NCHP buttons are green.



Part Number Example

Part Number	Nominal
NCHS4	8A
NCHB4	10A

Manual Switching Valves

Grip Type / Miniature Type

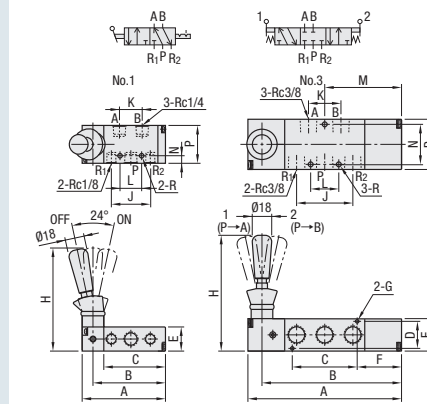
Manual Switching Valves – Grip Type



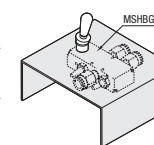
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MSHBA 2 Position Type

MSHBG 3 Position Type



Application Example

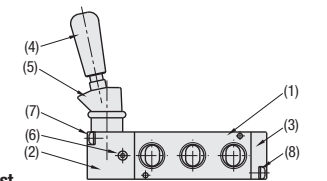


Specifications

Application Fluid	Air
Operating Temperature Range	5-60° C
Operating Pressure Range	0-0.9 MPa

Features: Ensured switching with a lever irrespective of pressure.
MSHBA: Lever position is held at switching point.
Air is sure to flow into either A or B port.
MSHBG: Lever returns to the middle position (blocking air) when released. (Cannot abruptly stop cylinder due to its residual pressure.)

Components



Component List

Part No.	Name	Qty.	Material
1	Body	1	6061 Aluminum Alloy
2	Pilot Body	1	6061 Aluminum Alloy
3	End Cover	1	(No. 1) POM Polyoxymethylene (No. 3) 6061 Aluminum Alloy
4	Hand Lever	1	POM Polyoxymethylene
5	Dust Cover	1	NBR Rubber
6	Set Screw	2	Carbon Steel
7	Screw for Pilot Body	2	Carbon Steel
8	End Cover Screw	2	Carbon Steel

Part Number Type	Direction	No. of Ports	No. of Positions	Pipe Connection Bore Dia.		Effective Sectional Area (mm ²)	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	Mass (g)
				IN / OUT	EX																	
MSHBA	4	5	2	Rc1/4	Rc1/8	18	77	67	57	—	22.3	—	—	95	36	21	20	—	7	35	4.2	200
				Rc3/8	Rc3/8	34	114	101.5	60	25	30	17	3.2	107	52	30	26	47	37	46.4	4.5	440
MSHBG	4	5	3	Rc1/4	Rc1/8	16	97	86.5	71	—	22.3	—	—	95	36	21	20	—	7	35	4.2	240
				Rc3/8	Rc3/8	34	142	129	60	25	30	41	3.2	107	52	30	26	71	37	46.4	4.5	490

Manual Switching Valves – Miniature Type



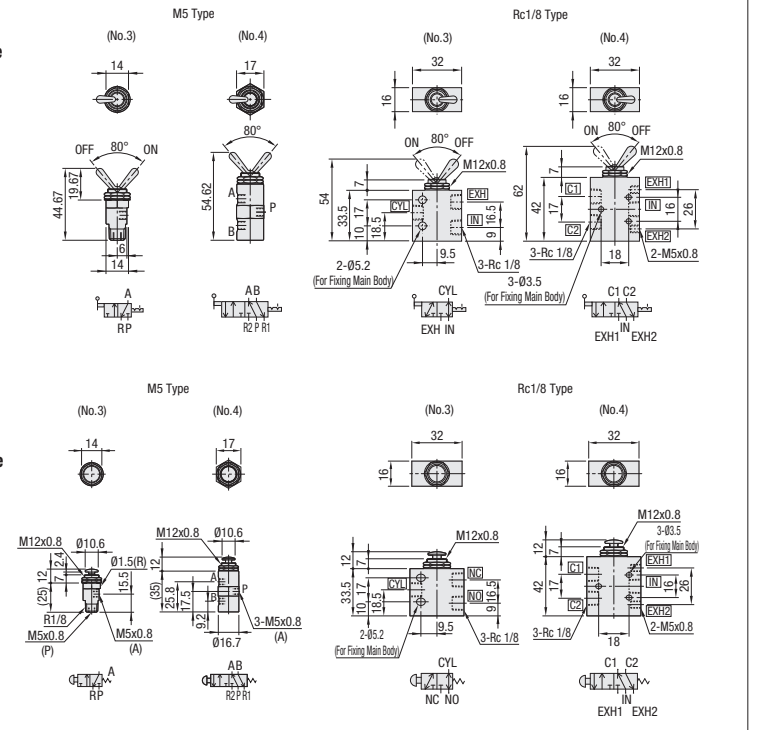
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MSHRT M5 Connection Type
MSHBT Rc1/8 Connection Type

Material: Body: Brass (Surface Treatment: Electroless Nickel Plating), Toggle: 1214 Carbon Steel
Toggle position is retaining type.

MSHRP M5 Connection Type
MSHBP Rc1/8 Connection Type

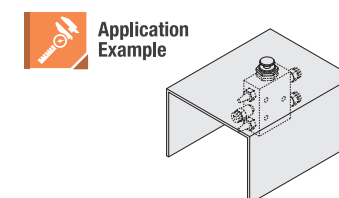
Material: Body: Brass (Surface Treatment: Electroless Nickel Plating), Push Button: 303 Stainless Steel
Button operation is momentary (spring return).
Reference value for button pressure: 11 N (the same for No. 3 and 4)



Part Number Type	No.	Direction	No. of Ports	Name	Pipe Connection Bore Dia.		Number of Positions	Effective Sectional Area (mm ²)	Mass (g)
					IN / OUT	EX			
MSHRP	3	3	3	M5	M5	1.5	2	1.8	30
MSHRT	4	4	5	6A	Rc1/8	M5		1.9	60
MSHBP	3	3	3					4.5	130
MSHBT	4	4	5					5.5	160

Part Number Example

Part Number	MSHBA1
	MSHBG3
	MSHRP3
	MSHBP4



- Toggle Type body is same shape / dimension as Button Type. For detailed body dimensions, please see above Button Type (MSHRT, MSHBP) Drawings.