

1-5. Pneumatically Operated ON-OFF Valves (Stainless Steel Actuator): BPO1400N

1 Features of Actuator

Actuator excellent in corrosion-proof and cleaning performances



DN8-10



DN15-50

Excellent Corrosion-Proof Performance / All Stainless Steel

- Exposed surfaces are all made of stainless steel. More excellent in corrosion proof performance compared to standard aluminum actuator (BPO1400NB (N)).
- No requirement for coating prevents the occurrence of foreign substances due to peeling of coated films.

Excellent Cleanability / External Shape

- A retaining ring is adopted for fixing the bonnet and cylinder similarly as standard aluminum actuator (BPO1400NB).
- Compactness & buffing, excellent in cleanability.

Significantly Enhanced Smoothness of Action and Durability

- The adopted outer wear ring for piston and bearing* for spindle sliding zone have significantly enhanced the smoothness of action and durability. (* Excluding actuator code 05S)

Actuator Specifications

Types	BPO (BPC, BPN) 1400N
Actuator Code	05S, 07S, 09S, 12S, 16S
Types of Operation	Single Acting: Reverse Acting BPO (Air to Open / Spring to Close), Direct Acting BPC (Air to Close / Spring to Open), Double Acting: BPN (Air to Open / Air to Close)
Nominal Size (DN)	8-50
Actuator Materials	Cylinder: SCS13 #300 Buffing Bonnet: SCS13 #200 Buffing or Precision Cast Surface
Operating Pressure	0.4 ^{+0.1} MPa • Direct Acting and Double Acting types shall be in accordance with a separate actuator selection table.
Max. Shutoff Differential Pressure	1.0MPa
Lubricants	Cassida Grease HDS2 (Standards regarding food additives: FDA21CFR178.3570. Lubricants with permission of incidental contact with food: NSF Class H1 conforming product)
Options	Opening limit device, Special limit switch box (Eco-friendly type, white baked finish)

Bio-Clean Diaphragm Valves
Pneumatically Operated ON-OFF Valves

Products for Dead Spaces

Special Valves · Related Products

Sanitary Valves · Clean Room Related Products

Technical Materials

Safety Instructions

2 Actuator Selection Table

Reverse Acting: BPO1400N

Operating Pressure: 0.4 ^{+0.1} MPa

Nominal Size (DN)		Actuator	Working Pressure (MPa)																		
DN	S		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0									
8	—	05S																			
10	—	05S																			
15	—	07S																			
20	—	09S																			
25	—	09S																			
40	—	12S																			
50	—	16S																			

* Option

Direct Acting: BPC1400N

Operating Pressure: In table below, MPa
(Operating pressure of 05S: Same as reverse acting)

Nominal Size (DN)		Actuator	Working Pressure (MPa)																		
DN	S		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0									
8	—	05S																			
10	—	05S																			
15	—	07S																			
20	—	09S																			
25	—	09S																			
40	—	12S																			
50	—	16S																			

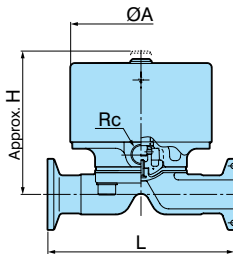
Double Acting: BPN1400N

Operating Pressure: In table below, MPa
(Operating pressure of 05S: Same as reverse acting)

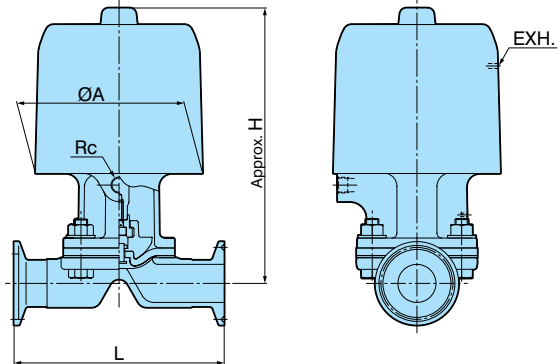
Nominal Size (DN)		Actuator	Working Pressure (MPa)																		
DN	S		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0									
8	—	05S																			
10	—	05S																			
15	—	07S																			
20	—	09S																			
25	—	09S																			
40	—	12S																			
50	—	16S																			

3 Major Dimensions

BPO1400N-DN8-10



BPO1400N-DN15-50



Unit: mm

Nominal Size	Actuator	L	Approx. H	Rc	ØA	Mass
						(Approx. kg)
DN	S		BPO BPC BPN			BPO
8	—	90	70	1/8	68	1.1
10	—	90	70		68	1.1
15	—	102	127		102	2.3
20	—	118	155		118	3.4
25	1	127	168		127	3.9
40	1.5	159	192		159	7.5
50	2	191	220		191	15.1

• The above table is based on Ferrule main body made of SUS316L. Contact us for detailed dimensions for each valve.