

## PND / PSO / PSC type Pneumatic Actuator Specifications

### FEATURE

Compact, lightweight and double piston structure pneumatic actuator. Simple structure and long service life.

### PND type

Classification	Double-acting type			
Actuator type	PND-03S	PND-03D	PND-04D	PND-05D
Weight [kg]	0.2	0.3	0.5	0.8
Air consumption (round-trip) [ℓ]	0.05	0.08	0.19	0.35
Operation time [s]	Less than 1.			
Operation	SHUT by air to port A. ↔ OPEN by air to port B.			
Air pressure	0.4 to 0.7 MPa			
Piping connection	Rc 1/8			
Method of operation	Scotch yoke			
Housing material	PPS resin			
Ambient temperature	-10 to 50 °C (Please be careful when you use in 5 °C or less, so that there no freeze.)			
Manual operation	Operates the upper shaft of the actuator directly.			

3 way valve: SHUT/Position-1, OPEN/Position-2.

### PSO / PSC type

Classification	Single-acting type (Spring-return)				
Actuator type	PSO - 03S PSC - 03S	PSO - 03D PSC - 03D	PSO - 04D PSC - 04D	PSO - 05D PSC - 05D	PSO - 05W PSC - 05W
Weight [kg]	0.2	0.4	0.6	1.2	1.8
Air consumption (round-trip) [ℓ]	0.03	0.04	0.1	0.2	0.53
Air exit	One side	Both sides			
Operation time [s]	Less than 1.				
Operation	PSO : OPEN by air to intake port. ↔ SHUT by spring-return. (Airless SHUT) PSC : SHUT by air to intake port. ↔ OPEN by spring-return. (Airless OPEN)				
Air pressure	0.4 to 0.7 MPa				
Piping connection	Rc 1/8				
Method of operation	Scotch yoke				
Housing material	PPS resin				
Ambient temperature	-10 to 50 °C (Please be careful when you use in 5 °C or less, so that there no freeze.)				
Manual operation	No manual operation.				

3 way valve: SHUT/Position-1, OPEN/Position-2.

## OPTIONAL PARTS

Classification		Code	PND	PSO	PSC	
FR Unit (Regulator with Filter) TA2-FR (KONAN)		FR	○	○	○	
Limit Switch Box (Standard load signal)		LB	○	○	○	
Speed Controller (with One-touch Fitting) One set		SE	○	○	○	
Speed Controller (with One-touch Fitting) Two sets		SS	○			
Speed Controller (with One-touch Fitting) Dual Speed Controller		SF		○	○	
Smart positioner for PSO / PSC (Except 03S)		EX		○	○	
Positioner operation	OPEN by 20 mA. ↔ SHUT by 4 mA. / spring-return. (Airless SHUT)	C		○		
	OPEN by 4 mA. ↔ SHUT by 20 mA. / spring-return. (Airless SHUT)	D		○		
(Input signal: 4 to 20 mA)	SHUT by 4 mA. ↔ OPEN by 20 mA. / spring-return. (Airless OPEN)	E			○	
	SHUT by 20 mA. ↔ OPEN by 4 mA. / spring-return. (Airless OPEN)	T			○	
5-Port Solenoid Valve (with speed controller, silencer, DIN connector)  VZ3190-□D-X213		Voltage: 100V AC	1S	○	○	○
		Voltage: 200V AC	2S	○	○	○
		Voltage: 110V AC	3S	○	○	○
		Voltage: 220V AC	4S	○	○	○
		Voltage: 24V DC	5S	○	○	○

3 way valve: SHUT/Position-1, OPEN/Position-2.

## SOLENOID VALVE (Applicable Pneumatic Actuator: PND-05D)

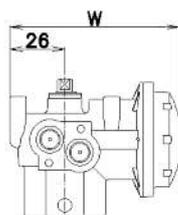
Classification (□: Voltage code)			Code	□: Voltage 1 : 100V AC 3 : 200V AC 5 : 24V DC
5-port Solenoid Valve Return (with bypass valve)	Lead wire	4N3S102K-L□	N43SL□	
	DIN Connector	4N3S102K-D□	N43SD□	
	DIN Connector (with lamp)	4N3S102K-N□	N43SN□	
	Watertight cover	4N3S102K-W□	N43SW□	
5-port Explosion proof solenoid valve Return (with bypass valve)	Conduit	4N4S102K-E01-H□B0-R	4N4S01-□B0, NO	
	Flame proof packing (Cable size Φ9.5 to 10.4 mm)	4N4S102K-E10-H□B0-R	4N4S10-□B0, NO	

## Operate by solenoid valve (Normally Open)

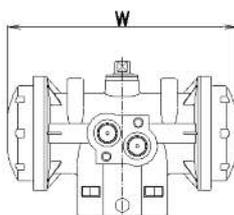
PND	SHUT by solenoid off. ↔ OPEN by power to solenoid.
PSO	OPEN by power to solenoid. ↔ SHUT by solenoid off / spring-return. (Airless SHUT)
PSC	SHUT by power to solenoid. ↔ OPEN by solenoid off / spring-return. (Airless OPEN)

DIMENSIONS

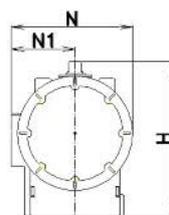
PND



03S

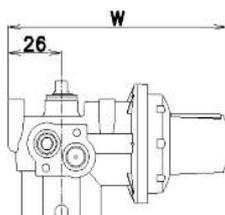


03D/04D/05D

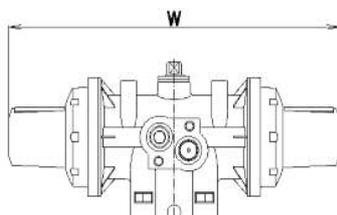


	H	W	N	N1
PND-03S	65	80	57	30
PND-03D	73	108	57	30
PND-04D	90	128	68	36
PND-05D	98	157	82	44

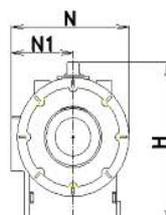
PSO  
PSC



03S



03D/04D/05D/05W



	H	W	N	N1
PSO / C-03S	65	106	57	30
PSO / C-03D	73	160	57	30
PSO / C-04D	90	185	68	36
PSO / C-05D	98	247	82	44
PSO / C-05W	98	288	95	48