

D-87/S-87 - Pneumatically Actuated 3 Way Brass Ball Valve

D-88/S-88

Assembly Model:

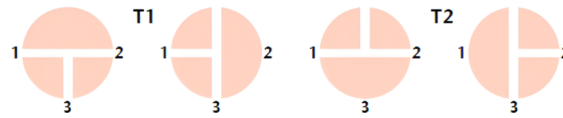
D-87 - T-port Double Acting | D-88 - L-port Double Acting

S-87 - T-port Spring Return | S-88 - L-port Spring Return



T-port valves provide flow straight through the valve
i.e. 1 > 2 or 2 > 1. When operated flow is diverted to either 1 > 3 / 3 > 1 or 2 > 3 / 3 > 2

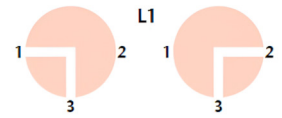
D-87 / S-87



L-port valves are used for diverting or mixing applications.

i.e. 1 > 3 / 3 > 1 or 2 > 3 / 3 > 2

D-88 / S-88

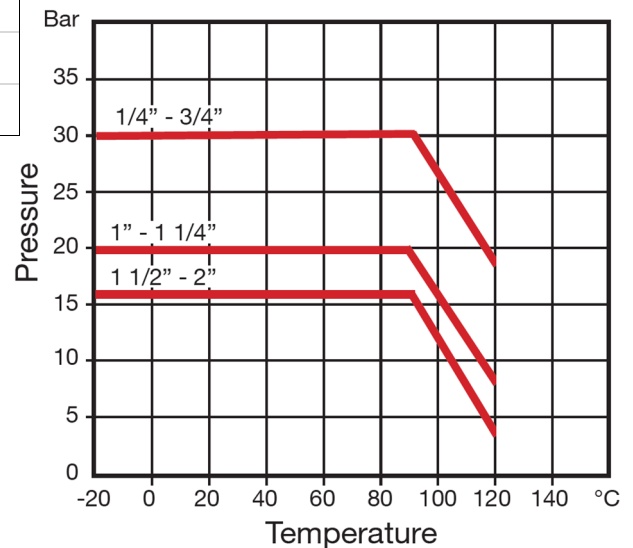


Actuator Specification	
Type	Pneumatic - Rack and Pinion
Working Pressure	2.5 to 8 Bar
Air Supply	Air or non-corrosive gas (ie. Nitrogen)
Working Temp	From -20°C to +80°C (+35°C to +80°C & -20°C to +150°C on-request)
Rotation	Anti-clockwise opening (reversible by inverting pistons)
Movement	Rotation 90° (Adjustable ±5° each end of stroke)
Body	Hard Anodized Aluminium
End Caps	Polyester coated Diecast Aluminium
Pistons	Diecast Aluminium
Pinion shaft	Nickel plated Alloy Steel
Piston Guides	PPGF (self-lubricating)
Seal Options	NBR (Viton available on request)
Types:	D-87/D-88 = Double Acting S-87/S-88 = Spring Return Actuators can be converted by adding or removing springs
Travel Stops	+/- 5° at the end of each stroke
Certification	SIL2, ATEX, PED, CE, RINA (Marine)

Valve Specification	
Body and Ball	Chrome Plated Brass
Seats	PTFE
O-Ring	Viton
Connection	Screwed BSP Taper
Maximum Pressure	1/4" - 3/4" - 30 Bar 1" - 1 1/4" - 20 Bar 1" - 2" - 16 Bar
Valve Operating Temperature	-20°C to +120°C
Ambient Temperature	-10°C to +50°C
Bore	Reduced Bore

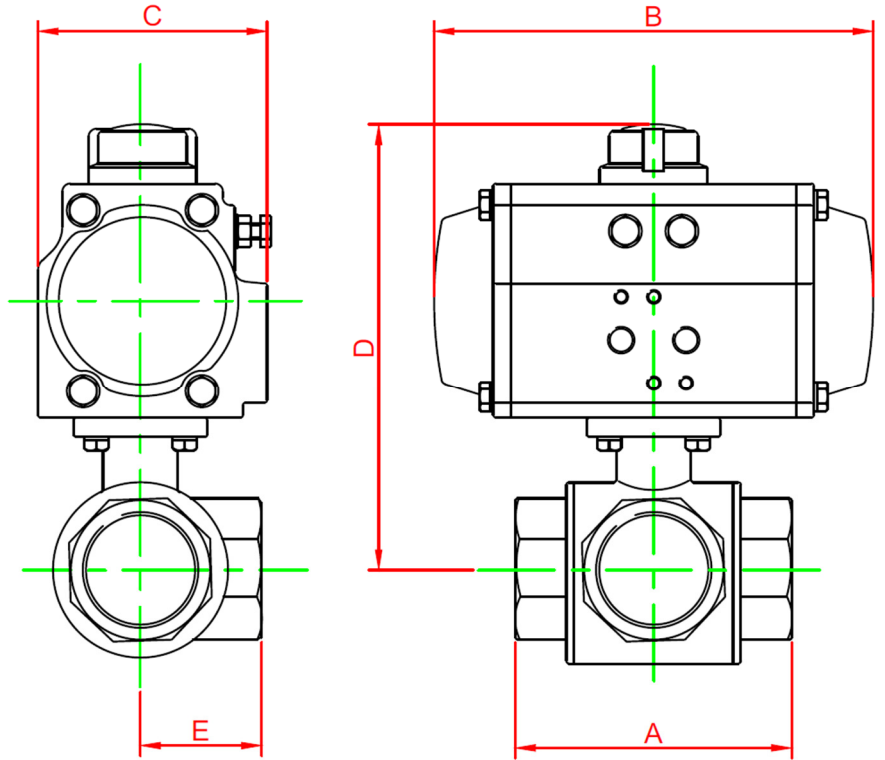


Pressure / Temperature:



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Size	Actuator Model		Operating time at 6 Bar (s)			Air Volume/Stroke (Litres)		Dimensions							
	Double Acting	Spring Return	Double Acting	Spring Return		Double Acting	Spring Return	A	B		C		D		E
				Opening	Closing				DA	SR	DA	SR	DA	SR	
1/4" (6mm)	HP50D	HP50S	<1	<1	<1	0.3	0.1	65	144		72		124		33
3/8" (10mm)	HP50D	HP50S	<1	<1	<1	0.3	0.1	65	144		72		124		33
1/2" (15mm)	HP50D	HP50S	<1	<1	<1	0.3	0.1	78	144		72		127	124	39
3/4" (20mm)	HP50D	HP63S	<1	<1	<1	0.3	0.2	87	144	163	72	85	136	150	44
1" (25mm)	HP50D	HP63S	<1	<1	<1	0.3	0.2	105	144	163	72	85	141	155	53
1 1/4" (32mm)	HP50D	HP63S	<1	<1	<1	0.3	0.2	118	144	163	72	85	146	160	59
1 1/2" (40mm)	HP63D	HP66S	<1	1	<1	0.5	0.2	134	163	202	85		182	178	72
2" (50mm)	HP66D	HP75S	<1	1	1	0.5	0.3	161	202	202	85	96	188	205	81

Note: Actuator model specification is based on air supply of 5.5 Bar to the actuator

HP Series Standard Accessories

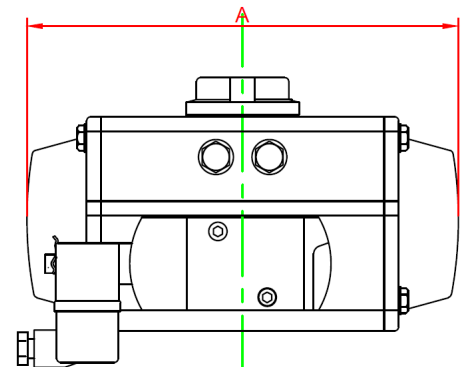
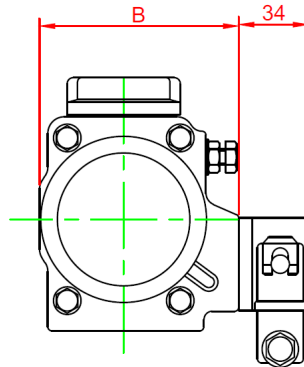
HP-50 > HP-200

NAMUR Solenoid Valve

The HP series Actuators feature a VDI/VDE 3845 interface enabling the use of a Namur Solenoid Valve.

Features:

- 5/2 (Double Acting) 3/2 (Spring Return)
- 1/4" BSP inlet ports
- 1/8" BSP exhaust ports
- Screwdriver Override
- IP65 and SIL4 Rated
- Available in all standard voltages

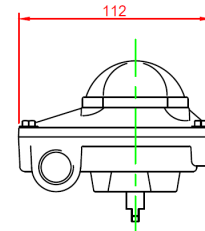
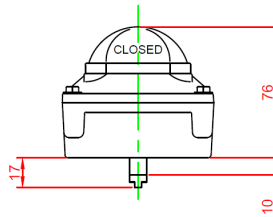
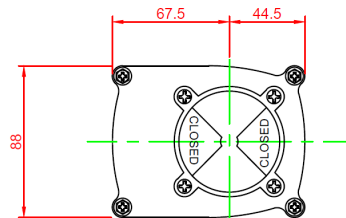
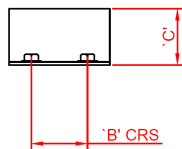
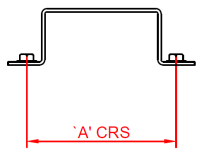


Specification	Actuator	Solenoid	Model	50	63	66	75	88	100	115	125	145	160	180	200
Pressure	3 to 8 Bar	2 to 8 Bar	A	144	163	202	210	247	268	316	347	414	467	497	555
Temperature	-20°C to +80°C	-25°C to +60°C	B	72	85	85	96	108	123	141	151	172	190	206	227

Switch Box

For open and closed position feedback a switch box can be fitted to the VDI/VDE 3845 NAMUR interface using a stainless steel mounting bracket:

Bracket	A	B	C	Application
MBP-100	80	30	30	80 x 30 x 20
MBP-200	80	30	40	80 x 30 x 30
MBP-300	130	30	40	130 x 30 x 30
MBP-400	130	30	60	130 x 30 x 50



For potentially explosive environments, an ATEX explosion proof or intrinsically safe Solenoid Valve can be provided.



Switch Box Specification

Enclosure	IP67 Die Cast Aluminium IP67 (IP68 option available)
Finish	Polyester Powder Coating
Shaft Material	Stainless Steel
Cable Entries	2 x M20 (PH13.5 & 1/2" NPT also available)
Limit Switch Type	2 x SPDT, Mechanical (Gold Contacts available)
Voltage/Amps	250V AC/16A, 125V AC/16A, 250VDC/0.3A, 125VDC/0.6A, 30VDC/10A
Ambient Temp	-20°C to +80°C
Beacon Indicator	2 way (3 way indication option available)
Options	ATEX certification, inductive Sensors

