

2/2 Way Pneumatic Piston Operated Normally Closed High Pressure Valves

DATA SHEET
6412B

Screwed Female End Body With Cylinder Actuator
For On-Off Application.

SPECIFICATIONS

Sizes : 15MM (1/2") to 50mm (2").

CONSTRUCTION

Body and End Piece : Investment casted ASTM-A,
351CF8 (St.St. 304)/CF8M
(St.St. 316).

Pressure Temperature : As per ANSI class 300.

Rating

End Connections : Standard BSP(F)/NPT(F).

Seating : Metal to Metal backed by
specially compounded Teflon.

Leakage : As per ANSI B16.104 - 1976
Teflon seating class IV.

Trim : S.S. AISI 400.

Stem Packing : Self adjusting, spring loaded
Teflon packing.

Characteristics : On-off, normally closed/normally
open.

Working Fluid Pressure: Refer to table below.

Working Temperature : On steam-continuous 180°C
Intermittent 205°C.

ACTUATOR

Spring return type, high duty Pneumatic Cylinder Actuator.

Cylinder Cover : S.S. AISI 304 Investment casted.

Piston & Yoke : ASTM A216 WCB Investment
casted and plated.

Piston Packing : Spring loaded Teflon seal.

Actuator Spring : IS 4454 Grade III, duly painted.

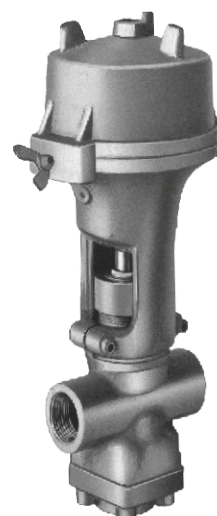
Actuator Working : 3.5 to 6 bar.

Signal Pressure (Main line pressure dependent).

Operating Cycles per hour : 15mm, 20mm, 25mm upto 600
cy/hr. 35mm and 50mm upto 300
cy/hr. (tested on air, on other
fluids, this figure may vary).

Life Expectancy : Over one million cycles (lab
tested in ideal condition).

Air Quality : Lubricated/Non-lubricated or
non corrosive gas.



Accessory : Air lock, Solenoid Valve, Filter
Regulator Gauge. Other
accessories available on
application.

Application : For control of steam, air, hot
water, oil, gas, hydraulic oil.
specially where heavy duty
operations are called for,
specially for tyre and tube
building presses, power
generation, atomic energy,
chemical & petrochemical
plants, PSA nitrogen system,
air and gas dryers, gas
generators and others.

Back Pressure : Refer to AVCON.

Instruction Manual : Refer to IM 6412B.

SPECIFICATION TABLE

Catalogue Number	Size BSP (F)		Orifice Size Φ	Flow Factor Kv m ³ /hr	Maximum Working Pressure			Safe Working Pressure bar	Actuator Type Cy	Air Consumption litres/cy
	Inch	mm			Air/Gas bar	Hot Water bar	Steam bar			
6412 B 15	1/2	15	13	2.8	21	16	16	32	68	0.032
6412 B 20	3/4	20	15	4.3	21	16	16	32	85	0.057
6412 B 25	1	25	19	7.0	21	16	16	32	110	0.152
6412 B 35	1½	35	34	22.7	21	16	16	32	150	0.352
6412 B 50	2	50	45	36.0	21	16	16	32	180	0.636

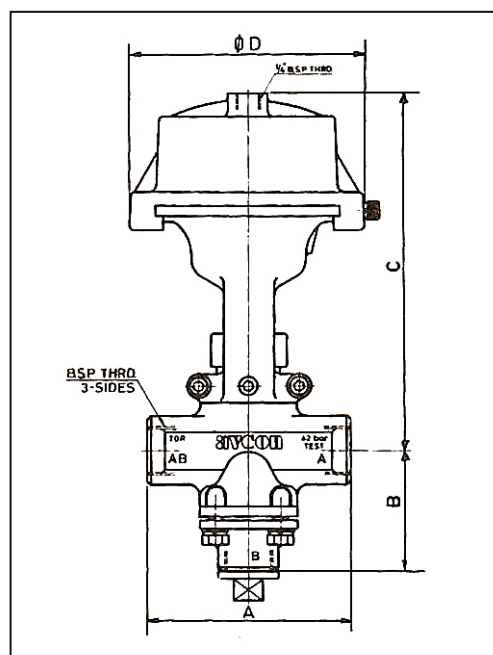
OPERATION:

Valve Type 6412B - In normal condition passage between 'A' and 'AB' port is close. On introduction of air in the actuator 'A' port is connected to 'AB' or 'AB' port is connected to 'A'.

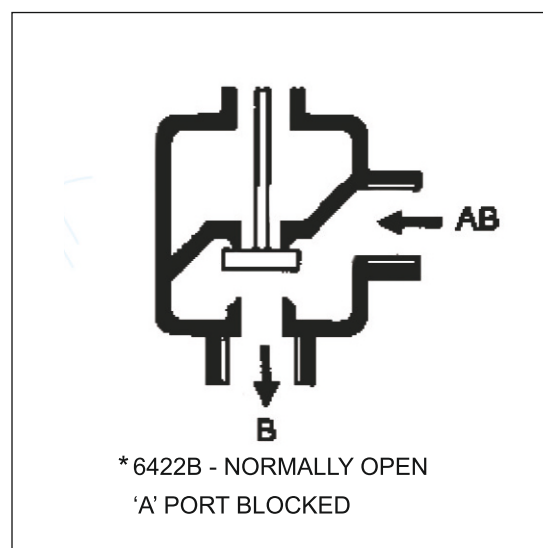
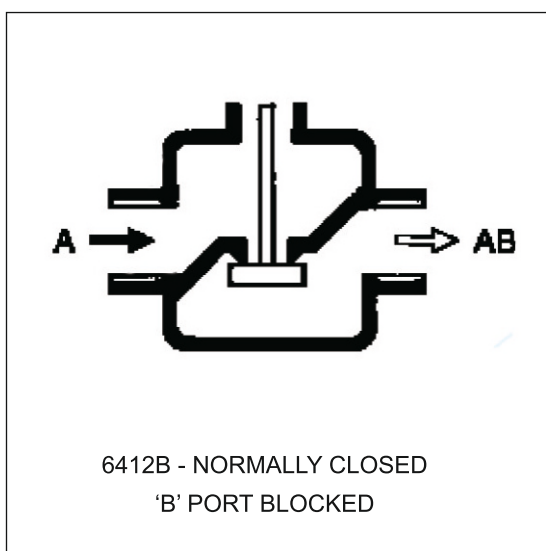
DIMENSIONS IN MM

Catalogue Number	SIZE		A	B	C	D ϕ	Weight Kgs.
	Inch	mm					
6412 B 15	1/2	15	85	50	160	100	2.750
6412 B 20	3/4	20	110	66	195	125	5.250
6412 B 25	1	25	120	72	265	152	9.500
6412 B 35	1 1/2	35	150	91	305	195	16.500
6412 B 50	2	50	190	100	425	223	23.500

● OPEN TOLERANCE ± 3 MM ALL OVER.



FLOW DIAGRAMS



* for Normally open design ask AVCON for details.

Note:

Technical specifications, details & dimensions are subject to change without prior notice. Dimensions in the table are approximate subject to final confirmation by AVCON.

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AVCON[®]

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