

# 3/2 Way Pneumatic Piston Operated Mixing or Diverting Valves

With Cylinder Actuator, For On-Off Application  
(Rust Free Design)

DATA SHEET  
6616E-NORMALLY 'A'  
PORT CLOSED  
6619E-NORMALLY 'B'  
PORT CLOSED

## SPECIFICATIONS

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

## CONSTRUCTION

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

Pressure Temperature Rating : As per ANSI class 300.

Rating

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

Seating : Soft seated Teflon backed by EPDM. Optional-VITON /EPDM, Buna Nitrile.

Leakage : As per ANSI B16.104 - 1976 Teflon seating class IV. For other soft seating class VI Drop Tight/ Bubble Tight.

Trim : S.S. AISI 304/316.

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 155°C Intermittent 180°C. with Teflon seating, Buna Nitrile 80°C., EPDM 135°C., VITON 180°C.

## ACTUATOR

Spring return type, Pneumatic Cylinder.

Cylinder Cover : S.S. AISI 304 (deep drawn).

Cylinder Flange : Pressure die casted, aluminium silicon alloy, solution treated and hard anodised.

Piston : Steel (deep drawn).

Piston Packing : Buna Nitrile.

Actuator Spring : IS 4454 Grade III, duly painted.

Actuator Working : 3.5 to 6 bar, (refer to graph).

Signal Pressure

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.

Maximum Operating Pressure Differential : Refer to graph.

Accessory : Position indicating limit switch box, solenoid valve, filter regulator gauge. Other accessories available on application.

Application : For control of air, water, oil, gas, steam in textile, power generation, paper & pulp, chemical, petro chemical industries, PSA nitrogen system, air dryer, gas generator and in process plants.

Back Pressure : Refer to table below or 2.5 bar.

Instruction Manual : Refer to IM 6616E/6619E.

## SPECIFICATION TABLE

Catalogue Number	Size BSP (F)		orifice Size mm	flow Factor Kv m <sup>3</sup> /hr	Maximum* Working Pressure bar	Safe Working Pressure bar	Actuator Type Cy	Air Consumption litres/cy
	Inch	mm						
6616E 15 6619E 15	1/2	15	15	3.3	10	16	70	0.150
6616E 20 6619E 20	3/4	20	18	4.7	10	16	70	0.150
6616E 25 6619E 25	1	25	23	8.5	10	16	70	0.160
6616E 35 6619E 35	1½	35	36	22.5	10	16	100	0.310
6616E 50 6619E 50	2	50	45	35.0	7	16	100	0.326

\* Inlet Pressure at 'A' port or 'B' port.