





# PNEUMATIC COAXIAL VALVE

FUNCTION PRINCIPLE		
	This valve opens and clopiston experiences little in more effluent fluid dy	oses through piston motion forced by compressed air. As fluid pressure acts onto the valve seat, the resistance and thereby enables the valve to quickly open/close. The latest design improvement results mamics and less pressure loss.
ADVANTAGES		
	1. Compact and aesthe	etic design. The stainless steel body ensures superb durability.
	2. Easy to use with mar	ny possible mounting positions. The valve operates efficiently with minimum pressure loss.
	3. Excellent sealing, wo	orks well with relative vacuum
TECHNICAL SPECIFICATION		
	Operating Pressure Control Pressure	0-16bar (0-232psi) 3-8bar (43.5-116psi)
	<b>Control Medium</b>	Filtered compressed air or neutral gas
	Body Material	CF8M/CF8
	Seal Material	EPDM/FPM
	Applicable Medium	FPM-Suitable for most fluid, except for steam. EPDM-Suitable for steam and hot water, unsuitable for oils, greases, fuels etc.
	Medium Temperature	-20°C - +150°C (FPM), -20°C - +130°C (EPDM)
	Ambient Temperature	-20°C - +80°C
	Control Type	Normally closed, Normally open, Double acting normally closed, Double acting without spring
	Connection Type	Threaded connection (BSP, BSPT, NPT) DIN EN 12266 Class A
APPLICATION		
	<ul> <li>Food &amp; Beverage</li> <li>Air Separation</li> <li>Filling Operation</li> <li>Ceramic Molding</li> </ul>	<ul> <li>Semi-conductor Cleaning</li> <li>Automotive</li> <li>Others</li> </ul>
	A	B A B







### **Closing:**

When hole "A" is supplied with air (hole "B" must be discharging), the piston moves towards and eventually presses onto the seat, thereby closing the valve.

For a single-acting N.C. Shuttle valve, a spring is installed in "A" chamber, pressing the piston against the seat seal and allowing the valve to remain closed in its idle state.



#### Opening:

When hole "B" is supplied with air (hole "A" must be discharging), the piston moves towards "C" and away from the seat seal, thereby opening the valve.

For a single-acting N.O. Shuttle valve, a spring is installed in "B" chamber, forcing the piston away from the seat seal and allowing the valve to remain open in its idle state.

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## **PRESSURE / DIMENSION DATA SHEET**

	SINGLE ACTING, NORMALLY CLOSED-ABOVE SEAT								
Size	Interface	Orifice (mm)	Flow value Kv(m <sup>3</sup> /h)	Differential Pressur Range (Bar)	Control Pressure (Bar)				
DN 10	G 3/8"	10	3.2	0-16	3-5				
DN 15	G 1/2"	15	6.4	0-1.6	4-5				
DN 20	G 3/4"	20	8.9	0-1.6	4-5				
DN 25	G 1"	25	13.7	0-1.6	3-5				
DN 32	G 1-1/4"	32	21.6	0-1.6	3-5				
DN 40	G 1-1/2"	40	36.5	0-1.6	3-5				
DN 50	G 2"	50	55.0	0-1.6	5-6				

	DOUBLE ACTING, NORMALLY CLOSED-ABOVE SEAT								
Size	Interface	Orifice (mm)	Flow value Kv(m <sup>3</sup> /h)	Flow value Differential Kv(m³/h) Pressur Range (Bar) F					
DN 10	G 3/8"	10	3.2	0-16	3-5				
DN 15	G 1/2"	15	6.4	0-16	4-5				
DN 20	G 3/4"	20	8.9	0-16	4-5				
DN 25	G 1"	25	13.7	0-16	3-7				
DN 32	G 1-1/4"	32	21.6	0-16	3-7				
DN 40	G 1-1/2"	40	36.5	0-16	3-7				
DN 50	G 2"	50	55.0	0-16	5-7				

	NORMALLY OPEN-ABOVE SEAT								
Size	Interface	Orifice (mm)	Flow value Differential Kv (m³/h) Pressur Range (Bar) F		Control Pressure (Bar)				
DN 10	G 3/8"	10	3.2	0-16	5				
DN 15	G 1/2"	15	6.4	0-16	5				
DN 20	G 3/4"	20	8.9	0-16	5				
DN 25	G 1"	25	13.7	0-16	5				
DN 32	G 1-1/4"	32	21.6	0-16	5				
DN 40	G 1-1/2"	40	36.5	0-16	5				
DN 50	G 2"	50	55.0	0-16	6				

# PNEUMATIC COAXIAL VALVE DIMENSION





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SINGLE ACTING, NORMALLY CLOSED-BELOW SEAT								
Size	Interface	Orifice (mm)	Flow value Kv (m³/h)	Differential Pressur Range (Bar)	Control Pressure (Bar)			
DN 10	G 3/8"	10	3.2	0-16	3			
DN 15	G 1/2"	15	6.4	0-16	4			
DN 20	G 3/4"	20	8.9	0-16	4			
DN 25	G 1"	25	13.7	0-9	3			
DN 32	G 1-1/4"	32	21.6	0-14	3			
DN 40	G 1-1/2"	40	36.5	0-12	3			
DN 50	G 2"	50	55.0	0-8	5			

DOUBLE ACTING, NORMALLY CLOSED-BELOW SEAT								
Size	Interface	Orifice (mm)	Flow value Kv (m³/h)	Differential Pressur Range (Bar)	Control Pressure (Bar)			
DN 10	G 3/8"	10	3.2	0-16	3-5			
DN 15	G 1/2"	15	6.4	0-16	4-5			
DN 20	G 3/4"	20	8.9	0-16	4-5			
DN 25	G 1"	25	13.7	0-16	3-7			
DN 32	G 1-1/4"	32	21.6	0-16	3-7			
DN 40	G 1-1/2"	40	36.5	0-16	3-7			
DN 50	G 2"	50	55.0	0-16	5-7			

NORMALLY OPEN-BELOW SEAT								
Size	Interface	Orifice (mm)	Flow value Kv (m³/h)	low value Differential Kv (m³/h) Pressur Range (Bar) I				
DN 10	G 3/8"	10	3.2	0-16	5			
DN 15	G 1/2"	15	6.4	0-16	5			
DN 20	G 3/4"	20	8.9	0-16	5			
DN 25	G 1"	25	13.7	0-16	7			
DN 32	G 1-1/4"	32	21.6	0-16	7			
DN 40	G 1-1/2"	40	36.5	0-16	7			
DN 50	G 2"	50	55.0	0-16	7			

SIZE	DN10	DN15	DN20	DN25	DN32	DN40	DN50
THREAD END	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
A (mm)	56	61	72	78	94	104	116
OD (mm)	46	52	64	69	86	96	108
HEXAGON (mm)	22	26.5	32	41	50	56	70
B (mm)	33	35	40	43	51	56	62
L (mm)	98	112	135	143	165	180	207
WEIGHT (Kg)	0.76	0.94	1.43	1.85	2.98	3.66	5.64

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