



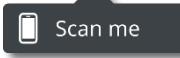
PNEUMATIC COAXIAL VALVE



ISO 9001
Quality 

ISO 14001
Environment 

OHSAS 18001
Health & Safety 



PNEUMATIC COAXIAL VALVE

FUNCTION PRINCIPLE

This valve opens and closes through piston motion forced by compressed air. As fluid pressure acts onto the valve seat, the piston experiences little resistance and thereby enables the valve to quickly open/close. The latest design improvement results in more effluent fluid dynamics and less pressure loss.

ADVANTAGES

1. Compact and aesthetic design. The stainless steel body ensures superb durability.
2. Easy to use with many possible mounting positions. The valve operates efficiently with minimum pressure loss.
3. Excellent sealing, works well with relative vacuum

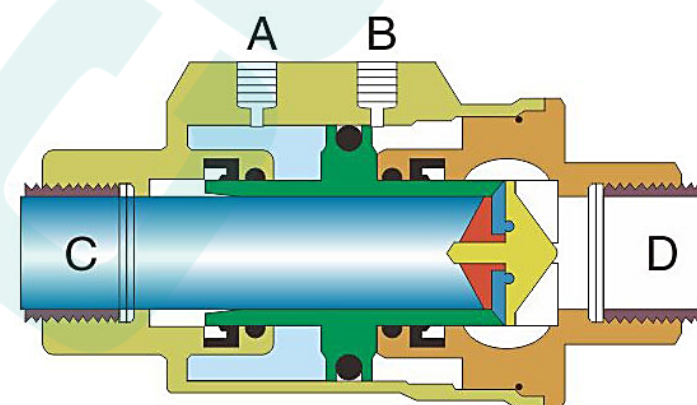
TECHNICAL SPECIFICATION

Operating Pressure	0-16bar (0-232psi)
Control Pressure	3-8bar (43.5-116psi)
Control Medium	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)
Leakage Class	DIN EN 12266 Class A

APPLICATION

- Food & Beverage
- Air Separation
- Filling Operation
- Ceramic Molding
- Semi-conductor Cleaning
- Automotive
- Others

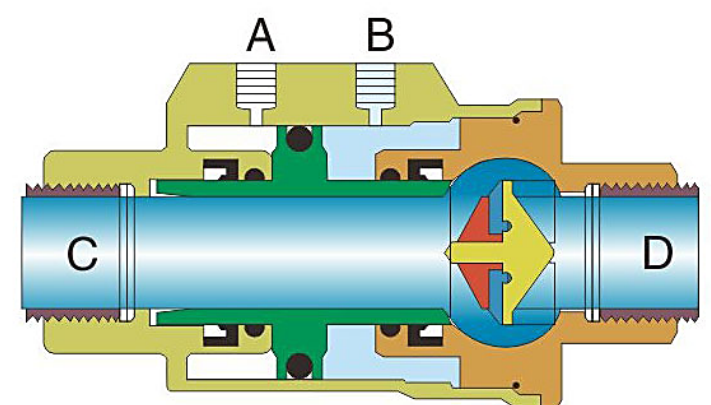
WORKING PRINCIPLE



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.

PRESSURE / DIMENSION DATA SHEET

SINGLE ACTING, NORMALLY CLOSED-ABOVE SEAT					
Size	Interface	Orifice (mm)	Flow value Kv(m ³ /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

SINGLE ACTING, NORMALLY CLOSED-BELOW SEAT					
Size	Interface	Orifice (mm)	Flow value Kv (m ³ /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

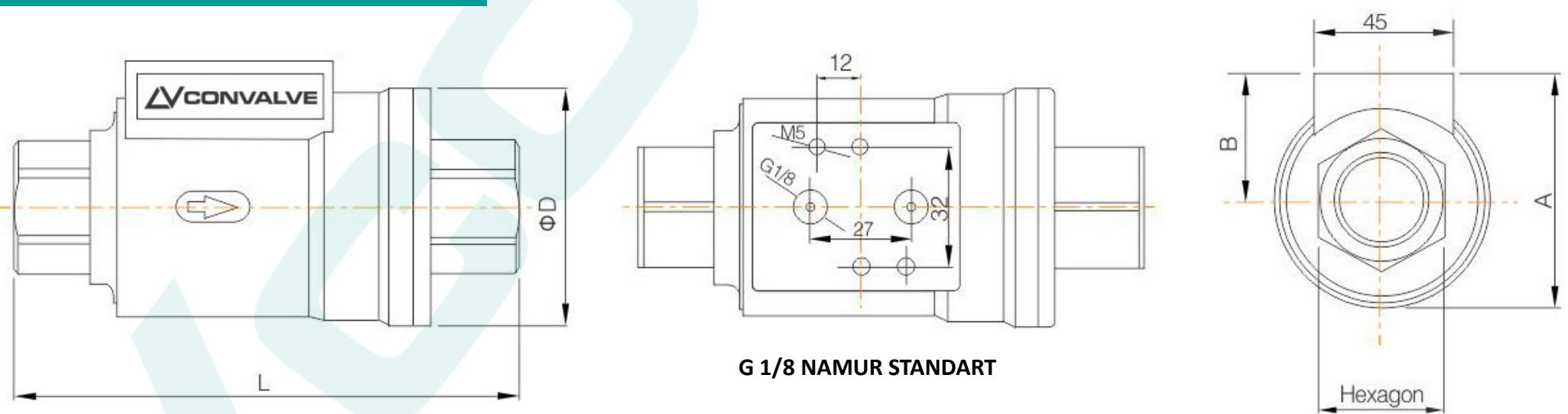
DOUBLE ACTING, NORMALLY CLOSED-ABOVE SEAT					
Size	Interface	Orifice (mm)	Flow value Kv(m ³ /h)	Differential Pressur Range (Bar)	Control Pressure (Bar)
DN 10	G 3/8"	10	3.2	0-16	3-5
DN 15	G 1/2"	15	6.4	0-16	4-5
DN 20	G 3/4"	20	8.9	0-16	4-5
DN 25	G 1"	25	13.7	0-16	3-7
DN 32	G 1-1/4"	32	21.6	0-16	3-7
DN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

DOUBLE ACTING, NORMALLY CLOSED-BELOW SEAT					
Size	Interface	Orifice (mm)	Flow value Kv (m ³ /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-ABOVE SEAT					
Size	Interface	Orifice (mm)	Flow value Kv (m ³ /h)	Differential Pressur Range (Bar)	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

NORMALLY OPEN-BELOW SEAT					
Size	Interface	Orifice (mm)	Flow value Kv (m ³ /h)	Differential Pressur Range (Bar)	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	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

PNEUMATIC COAXIAL VALVE DIMENSION



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