





SKU: PC4701

-  VOLT V Sector Pneumatic Control Ball Valve
-  VOLT V Sector Pneumatik-Regelkugelhahn
-  VOLT Válvula de bola de Control V Sector neumático
-  VOLT V Secteur de commande pneumatique Ball Valve

Valves[™]
O N L I N E

- 1/2" - 3" V Port 3 -Pc Ball Valve with Pneumatic Actuator and Positioner
- 1/2" - 3" V Port 3 -Pc Kugelhahn mit pneumatischem Antrieb und Stellungsregler
- 1/2" - 3" Válvula de bola -PC V Puerto 3 con actuador neumático y posicionador
- 1/2" - 3" V Port 3 -Pc Ball Valve avec actionneur pneumatique et positionneur



Features

- High Flow Rates
- No solenoids needed
- High Temperature Seats
- Spring Return pneumatic actuator
- Screwed BSP with other end connections available
- Easy to set up self auto tune positioner

Description

VALVE / ACTUATOR

V-port ball valve that provides accurate control with high flow and low pressure drop. The series 88 heavy duty, fully encapsulated, three piece, stainless steel ball valve is fitted onto our HP spring return (Spring Open on request) pneumatic actuator. Readily available, offering strength and reliability, making them perfectly suited for many applications. The HP range of pneumatic actuators are manufactured from aluminium and have a hard anodised finish. The ball valve has a range of end connections. Seats are 50% stainless steel and 50% PTFE filled mix. A selection of V sector balls are offered to meet your flow requirements.

CONTROL POSITIONER (OPTIONAL)

To control your process we have coupled a superior state of the art positioner, that fits neatly on top of the pneumatic actuator. This robust and compact unit is designed for rotary or remote control. The digital electro-pneumatic positioner can be operated with the usual current and voltage standard signals. Pilot solenoids are built into the unit and programming is simple. Additionally to the digital graphic display the valve opening is signaled by a mechanical indicator element.



Description

Volt V-series, High Performance Stainless Steel Modulating ball valves, fitted to a quality pneumatic actuator and controlled by a well designed positioner for the control of all your process flow requirements. Easy to set up accepting 4-20mA or 0-10 volt input signals. Sizes range from 1/2" - 3" in BSP / NPT / Socket and Butt weld. Flanged 1/2" - 6" 150 #, 300# & PN16,25,40



Beschreibung

Volt V- Serie, High Performance Edelstahl Stetiger Kugelhähne, mit einer Qualität pneumatischen Antrieb durch eine gut gestaltete Stellungsregler für die Steuerung all Ihrer Prozessablaufanforderungen ausgestattet und gesteuert. Einfache Einrichtung akzeptieren 4-20mA oder 0-10 Volt- Eingangssignale . Die Größen reichen von 1/2 " - 3" . In BSP / NPT / Socket und Schweiß Flansch 1/2 " - 6" 150 # , 300 # & PN16,25,40



Descripción

Volt serie V , de alto rendimiento de acero inoxidable válvulas de bola modulante , armarios a un actuador neumático calidad y controlados por un posicionador bien diseñado para el control de todas sus necesidades de flujo de procesos . Fácil de configurar aceptar 0-10 señales de entrada de 4-20 mA o voltios . Los tamaños varían desde 1/2 " - 3 " . En BSP / NPT / Socket y soldar a tope con brida de 1/2 " - 6 " 150 # , 300 # & PN16,25,40







Description

Volt série V , haute performance en acier inoxydable robinets à tournant sphérique de moduler, équipés d' un vérin pneumatique de qualité et contrôlés par un positionneur bien conçu pour le contrôle de tous vos besoins de flux de processus. Facile à mettre en place en acceptant les signaux d'entrée 0-10 volts ou 4-20 mA . Les tailles vont de 1/2 " - 3 " . BSP / NPT / Socket et Butt soudure bride 1/2 " - 6 " 150 # , 300 # & PN16,25,40

**V Port
Electro-Pneumatic
Control Valve**

Requirements

Input Signal – 4-20mA, 0-10 Volt
Supply Voltage - 24 VDC
Pilot Air – Min 5.5 Bar

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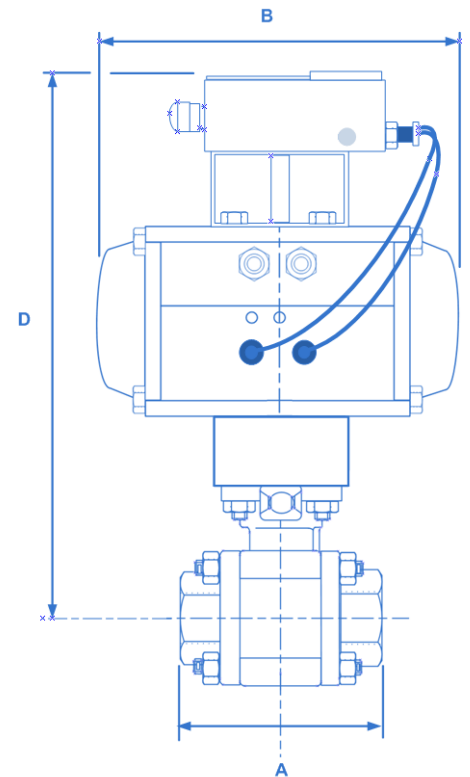
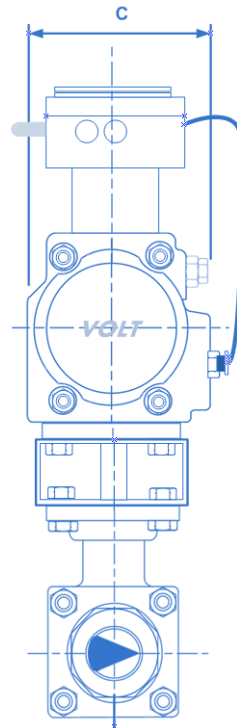
V Sector Control Ball Valve - Pneumatic

V SECTOR BALL

The "V" port control valves are available from Valves Online with 30° V or 60° V and V90° V notch.

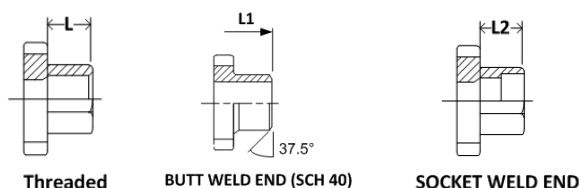
V port valves offer better control than traditional round ported ball valves. The control port is cast and machined into the ball (not in the seat), which allows better flow characteristics and the need to replace seats. The 30° option allows for finer control and the 60°- 90° offers a larger Flow (Cv) in addition to an accurate controlled flow. **Sizing of valves must be used in conjunction with our CV coefficient of flow chart attached.**

Pneumatic actuator has been sized on a minimum pilot pressure of 5.5-7 Bar







2½" - 3" Ball valve reverts to 6 Body Bolt version - see data sheet

Dimensions					
Spring Return					
Valve Size	Spring Return	A	B	C	D
1/2"	HP66	72.5	202	85	319.2
3/4"	HP75	84.5	210	96	345.6
1"	HP88	105	247	108	393.1
1 1/4"	HP100	111	268	123	422.2
1 1/2"	HP115	127	316	141	452.35
2"	HP125	145	347	151	505.2
2 1/2"	HP145	185	414	172	560.2
3"	HP160	205	467	190	598.7



Various End Connection Options Available

The V segment ball valve is ideal for use in commercial and industrial process applications. Designed for maintaining flow rates for continuous or batch operation, controlling the pressure of liquid filling lines, discharge temperature of a heat exchangers that have a steam feed line.

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Flow in M3/h based on 0.5 bar pressure drop

KV Calculator for Liquids												
Valve Size	Ball Angle	0%	15%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1/2"	30	0	0.0865	0.0865	0.173	0.2595	0.4325	0.692	0.9515	1.384	1.903	2.249
	60	0	0.0865	0.0865	0.2595	0.4325	0.7785	1.211	1.73	2.8545	3.806	5.1899
	90	0	0.0865	0.173	0.346	0.519	0.7785	1.2975	1.903	3.287	4.671	5.9685
3/4"	30	0	0.0865	0.173	0.4325	0.6055	0.9515	1.557	2.076	2.8545	3.8925	4.671
	60	0	0.0865	0.173	0.6055	0.865	1.4705	2.422	3.46	5.6225	7.785	10.3799
	90	0	0.173	0.346	0.692	1.038	1.73	2.6815	3.9789	6.92	9.7745	12.11
1"	30	0	0.0865	0.2595	0.692	1.1245	1.9895	3.0275	4.41149	8.477	7.3525	8.65
	60	0	0.173	0.346	0.9515	1.557	2.941	4.5845	6.8335	10.6395	13.2345	18.165
	90	0	0.173	0.519	1.557	2.941	4.4115	7.0065	9.861	13.84	18.165	25.085
1.1/4"	30	0	0.173	0.346	0.9515	1.73	3.2005	4.7575	6.92	8.65	11.245	12.975
	60	0	0.173	0.519	1.557	2.595	4.7575	8.2175	11.072	16.435	22.49	33.735
	90	0	0.2595	0.692	1.73	4.325	6.92	12.11	16.435	24.22	33.735	47.575
1.1/2"	30	0	0.2595	0.519	1.384	2.595	4.325	6.4875	9.515	12.11	14.705	17.3
	60	0	0.346	0.692	2.1625	3.46	6.92	11.245	16.435	23.355	34.6	44.98
	90	0	0.346	0.7785	3.0275	6.055	11.245	17.3	26.815	36.33	54.495	67.47
2"	30	0	0.346	1.038	3.287	5.19	8.65	12.975	19.895	26.815	37.195	51.9
	60	0	0.346	1.297	3.979	7.785	14.2725	23.355	33.735	47.575	71.795	95.15
	90	0	0.4325	1.73	5.19	10.38	19.03	30.275	38.925	60.55	90.825	116.775
2.1/2"	30	0	0.346	0.865	3.46	6.92	10.38	15.57	24.22	32.005	53.63	64.875
	60	0	0.346	1.297	4.325	8.65	18.165	29.41	45.845	64.875	89.095	129.75
	90	0	0.4325	1.4705	6.055	12.11	24.22	41.52	60.55	91.69	138.4	188.57
3"	30	0	0.4325	1.04	3.46	6.92	12.11	19.895	28.5449	39.79	56.225	70.9299
	60	0	0.4325	2.1625	5.19	12.11	21.625	34.6	56.225	78.715	110.72	142.725
	90	0	0.6055	3.0275	6.92	15.57	30.275	51.9	77.85	116.775	177.325	268.15
4"	30	0	0.519	1.73	5.19	12.975	25.085	41.5199	61.415	86.5	112.45	137.535
	60	0	0.6055	2.595	9.515	21.625	34.6	51.035	77.85	121.965	183.38	307.94
	90	0	0.865	3.0275	13.84	34.6	64.875	108.125	164.35	255.175	382.33	579.55
6"	30	0	0.7785	2.768	12.11	28.545	51.9	89.095	134.075	190.3	242.2	302.75
	60	0	1.73	4.325	19.03	51.9	95.15	164.35	246.525	359.84	506.89	692
	90	0	2.595	6.92	30.275	77.85	138.4	242.2	367.625	562.25	839.05	1280.2

To Select the flow you require on our V sector ball, you should aim for looking on the chart at between 70% and 80% open for your maximum flow (this is a rough way of sizing and to be correct we would prefer it, if you contacted our technical sales to size your valve correctly). So for example if you are looking for a flow of 7 m3/h we would choose the 60Deg ball size 1" at 70% fully open-as shown below.

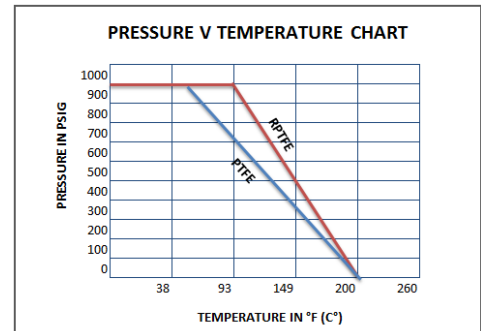
3/4"	60	0	0.0865	0.173	0.6055	0.865	1.4705	2.422	3.46	5.6225	7.785	10.3799
	90	0	0.173	0.346	0.692	1.038	1.73	2.6815	3.9789	6.92	9.7745	12.11
1"	30	0	0.0865	0.2595	0.692	1.1245	1.9895	3.0275	4.41149	8.477	7.3525	8.65
	60	0	0.173	0.346	0.9515	1.557	2.941	4.5845	6.8335	10.6395	13.2345	18.165
	90	0	0.173	0.519	1.557	2.941	4.4115	7.0065	9.861	13.84	18.165	25.085
	30	0	0.173	0.346	0.9515	1.73	3.2005	4.7575	6.92	8.65	11.245	12.975

Flow Coefficients Kv
Measured in M₃/h of water
at 20°C based on 0.5 bar
pressure drop

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V Sector Control Ball Valve - Pneumatic

V - Sector Ball Valve Materials	
Body	CF8M
End Cap	CF8M
Ball	SS 316
Seat	50% SS + 50% PTFE
Joint Gasket	PTFE
Stem Seal	RTFE
Stem	SS 316
Gland packing	PTFE
Bolt / Nut	SS 304
Pressure Range	1/4" - 1" 2000 PSI
	1 1/4" - 3" 1500 PSI
Temperature Range	- 20°C to + 200°C



Actuator Details	
Working Pilot Pressure	2.5 - 8 Bar (sized at 6 bar)
Actuation	Single Acting
	Double Acting
Rotation	Anti Clockwise Opening
Movement	90° (Adjustment 5% each end)

Unit supplied with operation / set up and maintenance manual for the positioner

Electro-Pneumatic Positioner Details	
Body	Aluminium - Plastic Coated
Operating Voltage 24 VDC	ASTM A105
Input	4-20mA and 0 to 5/10 Volt
Power Consumption	<5 W
Ambient Temperature	-25°C to + 80°C
Protection	IP65
Graphic Display	Language Options (Backlight)
Analogue Feedback	4-20mA, 0-20mA, 0-10V, 0-5V
Pilot Solenoid	Internal

Electric Actuated Versions Available Type SKU : EC 4701

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