

VGL2-P* CUSTOM PNEUMATIC VALVE 2 WAY

The control valves are the type with two-way flow body starts, single seat and in-line connections. The actuator, diaphragm multi-springs, can be direct acting (air to close) or reverse action (air to open). Designed to provide a precise and effective control over the entire field of regulation, in all operating conditions, the VGL2-P* can be used with the most common process fluids, such as water, superheated water, saturated steam, gas and all other fluids provided they are compatible with the materials used. These valves use a particular type of self-adjusting packing gland which, for critical applications, replaces and improves the performance of traditional bellows.

Nominal diameters DN 15...DN 250 flanged, single-ported, casting in cast iron or cast steel. Body length: according to EN 60534-3-1; 2000

Nominal pressure and connection depends on material design:

– according to EN 1092-1; EN 1092-2; ANSI B16.5

– During temporary period the flanges may be made according to ISO 7005-1

Pneumatic Actuator: diaphragm multi-springs, membrane NBR70 canvas, Carbon Steel case Fe401.1 painting EPoSS. T amb. -20 ... +70 ° C, Signal 3-15 / 6-18 / 6-30 / 0-35 psi; Pmax 50 psi (3.5 bar), connection 1/4 "NPT-F



DESCRIPTION

Body:	Material	Pressure	Connection (identification)			
			Raised face	Groove	Recess	Ring joint
PN	Grey Cast Iron	10-16	B	-	-	-
	Ductile Iron	10-16-25-40				
	Cast Steel	10-16-25-40	B	D	F	-
		20*	B1	-	-	J
		50*		D1	F1	

*) Connection marking according to ISO 7005-1

Plug: contoured, balanced or unbalanced
control characteristic: linear (L), equipercantage (EQP); quick opening (S)
rangeability: – 50:1

Bonnet body: rolled steel connected to valve body by assembling plate; cast.
Standard – Extended - Bellows

Packing:

Type:	PN	Temperature °C - Bonnet type		
		Standard	Extended	Bellows
PTFE	10...50	-46...+200	-198...-46 +200...+300	-100...+200
PTFE + Graphite				
PTFE /Ta-Luft		+200...+300	+300...+450	+200...+400
Graphite				
Graphite/Ta-luft				

EXTRA ON REQUEST : Pneumatic pilot positioner 3-15 psi ... 3-9 psi ... 9-15 psi
Electropneumatic positioner 4-20 mA ... 4-12 mA ... 12-20 mA
Filter regulator
Limit switches
Pilot solenoid valves



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TECHNICAL SPECIFICATIONS

	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80
Kv	3,8	5,1	9,4	15,4	22,2	40,1	63,4	89,7
CV	4,5	6	12	18	27	47	73	105
	DN 100	DN 125	DN 150	DN 200				
Kv	136,7	230,60	316,10	555,30				
CV	160	270	370	650				

Kv = flow rate in m³ / h @ 1 bar differential pressure

CV = Flow rate in GPM with 1 psi differential pressure

AD = DIRECT ACTION

AR = REVERSE ACTION

mm stroke actuators

	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80
Stroke	20	20	20	20	20	30	30	30
	DN 100	DN125	DN150	DN200				
Stroke	30	40	50	50				

table 1.1		GP240GH /A216 WCB						
		Temperature °C						
PN	Norm	-10...120	150	180	200	230	250	300
		Maximum working pressure bar						
10	EN1092-2	10,0	9,0	8,4	8,0	7,4	7,0	6,0
16		16,0	14,4	13,4	12,8	11,8	11,2	9,6

table 1.2		EN-GJS400-118 LT according to EN 1563						
		Temperature °C						
PN	Norm	-10...120	150	200	250	300	350	
		Maximum working pressure bar						
10	EN1092-2	10,0	9,0	8,4	8,0	7,4	7,0	
16		16,0	14,4	13,4	12,8	11,8	11,2	
25		25,0	24,3	23,0	21,8	20,0	17,5	
40		40,0	38,8	36,8	34,8	32,0	28,0	

table 1.3		GP240GH according to EN 10213-2						
		Temperature °C						
PN/CL	Norm	100	150	200	250	300	350	400
		Maximum working pressure bar						
10	EN1092-2	9,2	8,8	8,3	7,6	6,9	6,4	5,9
16		14,8	14,0	13,3	12,1	11,0	10,2	9,5
25		23,2	22,0	20,8	19,0	17,2	16,0	14,8
40		37,1	35,2	33,3	30,4	27,6	25,7	23,8
CL150	EN1759-1	15,4	14,6	13,8	12,1	10,2	8,4	6,5
CL300		40,1	38,1	36,0	32,9	29,8	27,7	25,7



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table 1.4		GX5CrNiMo (1.4408) according to EN 10213-2						
		Temperature °C						
PN/CL	Norm	100	200	250	300	350	400	450
Maximum working pressure bar								
10	EN1092-2	10,0	8,4	7,9	7,4	7,1	6,8	6,7
16		16,0	13,4	12,7	11,8	11,4	10,9	10,7
25		25,0	21,0	19,8	18,5	17,8	17,1	16,8
40		40,0	33,7	31,8	29,7	28,5	27,4	26,9
CL150	EN1759-1	16,3	13,5	12,1	10,2	8,4	6,5	4,7
CL300		42,5	35,3	32,9	30,5	28,8	27,6	26,9

table 1.5		G20Mn5 (1.6220) according to EN 10213-3						
		Temperature °C						
PN	Norm	-40	100	150	200	250	300	
Maximum working pressure bar								
10	-	6,0	6,0	3,8	3,6	3,5	3,4	
16		16,0	16,0	10,1	9,6	9,3	9,1	
25		25,0	25,0	15,8	15,0	14,5	14,2	
40		40,0	28,0	28,0	27,0	26,0	25,0	

table 1.6		WCB according to ASTM A216						
		Temperature °C						
PN/CL	Norm	100	150	200	250	300	350	400
Maximum working pressure bar								
10	EN1092-2	10	9,7	9,4	0,0	8,3	7,9	6,7
16		16	15,6	15,1	14,4	13,4	12,8	10,8
25		25	24,4	23,7	22,5	20,9	20,0	16,9
40		40	39,1	37,9	36,0	33,5	31,9	27
CL150	EN1759-1	17,7	15,8	14,0	12,1	10,2	8,4	6,5
CL300		46,4	45,1	43,9	41,8	38,9	36,9	34,6

table 1.7		CF8M according to ASTM A351						
		Temperature °C						
PN/CL	Norm	100	200	250	300	350	400	450
Maximum working pressure bar								
10	EN1092-2	7,8	6,6	6,1	5,8	5,6	5,4	5,3
16		12,5	10,6	9,8	9,3	9,0	8,7	8,5
25		19,5	16,5	15,5	14,6	14,1	13,6	13,4
40		31,3	26,4	24,7	23,4	22,6	21,8	21,4
CL150	EN1759-1	16,0	13,6	12,0	10,2	8,4	6,5	4,6
CL300		42,3	35,8	33,5	31,6	30,4	29,3	29,0



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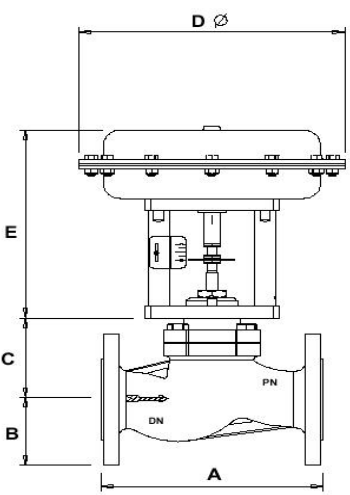
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TECHNICAL SPECIFICATIONS

Maximum permissible pressure in bar (fluid opens) signals in psi

	APT205	APT275	APT340	APT435		APT435
DN 15	3/15 = 6 6/18 = 10 6/30 = 12 0/35 = 25	3/15 = 30 6/18 = 40 6/30 = 50 0/35 = 100	3/15 = 60 6/18 = 80 6/30 = 100 0/35 = 100		DN 125	3/15 = 1 6/18 = 1,5 6/30 = 2 0/35 = 2,1
DN 20	3/15 = 6 6/18 = 10 6/30 = 12 0/35 = 23	3/15 = 27 6/18 = 38 6/30 = 45 0/35 = 90	3/15 = 60 6/18 = 80 6/30 = 100 0/35 = 100		DN 150	3/15 = 0,6 6/18 = 1 6/30 = 1,2 0/35 = 1,3
DN 25	3/15 = 5 6/18 = 7 6/30 = 9 0/35 = 20	3/15 = 16 6/18 = 20 6/30 = 25 0/35 = 40	3/15 = 50 6/18 = 60 6/30 = 80 0/35 = 80		DN 200	3/15 = 0,4 6/18 = 0,6 6/30 = 0,8 0/35 = 1
DN 32		3/15 = 8 6/18 = 12 6/30 = 16 0/35 = 16	3/15 = 20 6/18 = 30 6/30 = 40 0/35 = 35		1. Values expressed are the force of actuator, but the rating of the body limits the application. The values have been verified that the control signal coming from an electro-pneumatic converter with minimum signal of 3 psi always online. Optional fields are available with different differential pressures greater. 	
DN 40		3/15 = 6 6/18 = 10 6/30 = 14 0/35 = 10	3/15 = 12 6/18 = 16 6/30 = 20 0/35 = 25	3/15 = 40 6/18 = 48 6/30 = 60 0/35 = 90		
DN 50		3/15 = 3,5 6/18 = 5 6/30 = 6,5 0/35 = 7	3/15 = 10 6/18 = 13 6/30 = 18 0/35 = 16	3/15 = 25 6/18 = 30 6/30 = 50 0/35 = 40		
DN 65			3/15 = 4 6/18 = 6 6/30 = 7 0/35 = 6	3/15 = 6 6/18 = 10 6/30 = 14 0/35 = 20		
DN 80			3/15 = 2,5 6/18 = 4 6/30 = 5 0/35 = 5,5	3/15 = 5 6/18 6/30 = 9 0/35 = 13 12		
DN 100			3/15 = 1 6/18 = 2 6/30 = 2,2 0/35 = 4	3/15 = 3 6/18 = 5,5 6/30 = 7,5 0/35 = 8		

DIMENSIONS mm.

DN	A	B *	C std. *	C extended *
15	130	48	80	150
20	150	53	80	150
25	160	58	85	165
32	180	70	90	170
40	200	75	105	185
50	230	83	105	195
65	290	93	165	265
80	310	100	175	270
100	350	110	190	310
125	400	125	240	300
150	480	142	290	340
200	600	170	315	360

**Customizable product,
the dimensions * shown
are approximate and
subject to change.**



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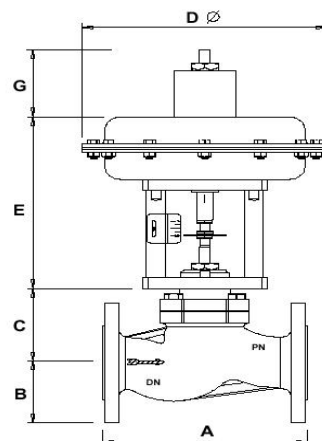
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TECHNICAL SPECIFICATIONS

Actuators	D mm *	E mm. *			G mm. *	
		DN15...100	DN125..200	DN125..200	DN125..200	DN125..200
APT205	210	235				
APT275	275	240				
APT340	335	265				
APT435	430	295	360	395	250	

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