## DZR Brass Pressure Independent Control Valve (PICV)

#### **Feature**

DZR brass pressure independent control valve (PICV) Threaded M/M for union ends (ASME B1.20.1 - NPSM)

Max. ΔP working pressure 60psi

Flow accuracy: +/-5% of maximum flow or +/-10% of the set flow, whichever is greater With test points

100% full stroke-independent of valve setting

M30x1.5 threads for linear actuator

#### 300WOG

Working conditions Water: 15°F - 260°F

> below 32°F only for water with added antifreezing fluids over 212°F only for water with added anti-boiling fluids

(Ethylene-glycolic and propylene-glycolic mixtures up to 50% may be used)

Resistant





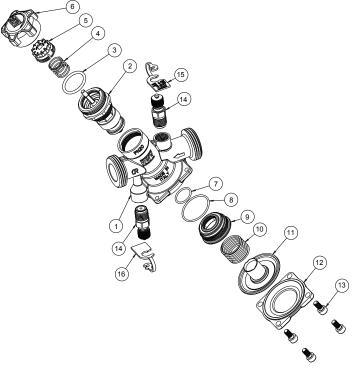
#### Material

	Part	Material	Specification
1	Allen screw	Stainless steel	AISI 304
2	Plug	DZR brass	UNS C35330
3	Diaphragm Assy <sup>1</sup>	EPDM/SS	EPDM/AISI 303
4	Spring	Stainless steel	AISI 302
5	Diaphragm seat	DZR brass	UNS C35330
6	Seat/body O-ring	EPDM Perox	-
7	Seat/cursor O-ring	EPDM Perox	-
8	Body	DZR brass	UNS C35330
9	Washer	DZR brass	UNS C35330
10	Disc gasket	EPDM Perox	-
11	Flow reg. assembly	DZR brass <sup>2</sup>	UNS C35330
12	O-ring	EPDM Perox	-
13	Spring	Stainless steel	AISI 302
14	Dial	Polyamide	-
15	ON/OFF cap	Polyamide	-
16	Test point	DZR brass <sup>3</sup>	UNS C35330



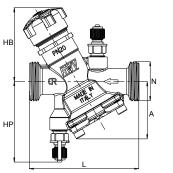
<sup>1</sup> In two pieces, with EPDM Perox diaphragm <sup>2</sup> With stainless steel spring (AISI 302) and EPDM Perox gaskets

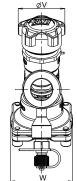
3 Test points with EPDM gaskets and polypropylene ties



## Dimension, Weight, Flow range

Size	N	L	Α	HP	НВ	w	ø٧	Wt	Flow
		[in]	[in]	[in]	[in]	[in]	[in]	[lb]	[GPM]
L 1/2"	3/4"	3.09	1.53	2.40	2.44	1.7	1.6	0.93	0.12-0.62
1/2"	3/4"	3.09	1.53	2.40	2.44	1.7	1.6	0.93	0.48-2.38
3/4"	1"	3.62	1.87	2.73	2.44	2.0	1.6	1.32	0.99-4.93
1"	11/4"	4.53	2.21	3.08	2.96	2.3	1.6	2.49	1.90-9.51
11/4"	1½"	5.51	3.07	3.61	2.99	3.2	1.6	4.44	3.18-15.9







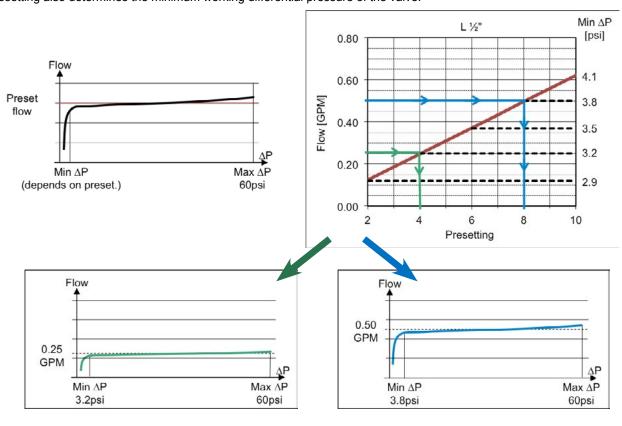


WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

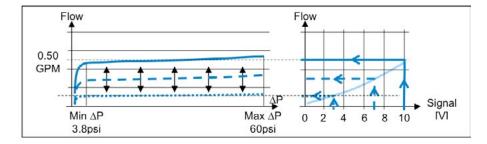
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### **Presetting**

Valve presetting ensures the maximum flow is constant (by means of dynamic balancing). Presetting also determines the minimum working differential pressure of the valve.



The flow regulating assembly determines the stroke length. When coupled with a modulating actuator, the control signal and the actual output flow is proportional (example for a RWV actuator with control signal 0-10V). In the above example, at 0.5 GPM a presetting of 8 is determined on a L  $\frac{1}{2}$ " valve. The valve will start to operate at a  $\Delta P$  of 3.8 psi.



To set the flow rate:

- a) push down the dial
- b) rotate the scale until the desired value aligns with the mark on the bonnet
- c) release the dial, this will automatically lock in the preset position



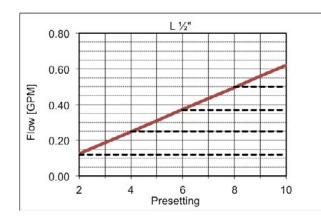






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L 1/2"	Flow	ΔP min.
Preset	[GPM]	[psi]
2	0.12	2.9
3	0.19	3.0
4	0.25	3.2
5	0.31	3.3
6	0.37	3.5
7	0.43	3.6
8	0.50	3.8
9	0.56	3.9
10	0.62	4.1

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1/2"	Flow	∆P min.
Preset	[GPM]	[psi]
2	0.48	3.5
3	0.71	3.6
4	0.95	3.8
5	1.19	4.1
6	1.43	4.4
7	1.67	4.6
8	1.90	4.9
9	2.14	5.1
10	2.38	5.2

	6.00			3/4				
	5.00							
5	4.00						_	
Flow [GPM]	3.00							
Flow	2.00							
	1.00							
	0.00							
	2	W.	4	oreset	ting	8		

3/4"	Flow	ΔP min.			
Preset	[GPM]	[psi]			
2	0.99	3.5			
3	1.48	3.6			
4	1.97	3.8			
5	2.47	4.1			
6	2.96	4.4			
7	3.45	4.6			
8	3.94	4.9			
9	4.44	5.1			
10	4.93	5.2			

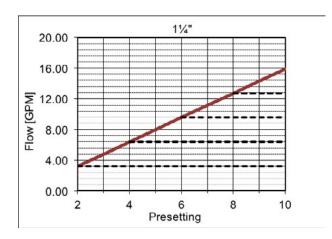
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1"	Flow	ΔP min.		
Preset	[GPM]	[psi]		
2	1.90	3.5		
3	2.85	3.6		
4	3.80	3.8		
5	4.75	4.1		
6	5.70	4.4		
7	6.65	4.6		
8	7.60 4.			
9	8.55	5.1		
10	9.50	5.2		



# 9707R

## DZR Brass Pressure Independent Control Valve (PICV)



11/4"	Flow	ΔP min.
Preset	[GPM]	[psi]
2	3.17	3.5
3	4.76	3.6
4	6.34	3.8
5	7.93	4.1
6	9.51	4.4
7	11.1	4.6
8	12.7	4.9
9	14.3	5.1
10	15.9	5.2

