Via Circonvallazione, 10 13018 Valduggia (VC), Italy Tel: +39 0163 47891 Fax: +39 0163 47895 www.vironline.com



DZR Brass ON/OFF Ball Valve with Connection for Actuator

DZR brass ON/OFF ball valve with connection for actuator Available in the following versions:

- 2-way, threaded M/M (ISO 228/1)
- 3-way with "L" ball, threaded M/M/M (ISO 228/1)
- 3-way with "T" ball, threaded M/M/M (ISO 228/1)

Actuator connection according to ISO 5211 F04-□9mm Blow-out proof stem

TR CU 010 compliant

Shell rating: PN40

Working conditions: Max 16bar, max differential pressure 3,5bar Free of CE marking (cat. according to Art. 4.3 Dir. 2014/68/EU)

Working conditions

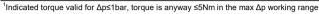
- Suitable for: water, -10°C to +130°C below 0°C only for water with added antifreeze fluids over 100°C only for water with added anti-boiling fluids (Glycolic-Ethylene and glycolic-propylene mix. >20% and ≤50% may be used)
- Not suitable for: gases group 1 & 2, liquids group 1 (Dir. 2014/68/EU)

PARTLIST

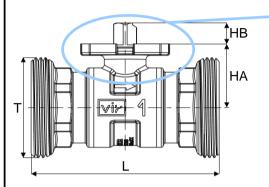
N.	Part	Material	Norm	
1	Fixed end	DZR Brass	EN12165 CW602N	
2	Seat O-ring	EPDM Perox		
3	Seat	PTFE ¹	-	
4	Ball	Chrom. pl. DZR Brass	EN12164 CW602N	
5	Body	DZR Brass	EN12165 CW602N	
6	Stem	DZR Brass	EN12164 CW602N	8)
7	Antifriction ring	PTFE+Bronzo+MoS ₂	-	7
8	Stem O-ring	EPDM Perox	-	6
¹ PTFE	+10% carbon fiber for 2-way	y DN20, DN25 and DN32		5
		8 7 6 5		4)
Sfera, ver. "L"	Sfera, ver. "T"	(4) (3) (2) (1)		1)

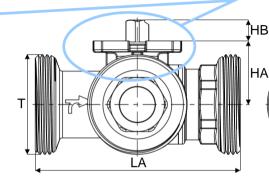
DIMENSIONS

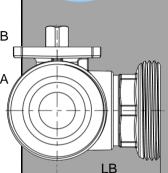
DN	т	L [mm]	LA [mm]	LB [mm]	HA [mm]	HB [mm]	ISO-□Q [mm]	Torque ¹ [Nm]	Weight² [g]
015	1"	87,0	88,6	43,4 ³	27,6	10,0	F04 - □9	2,0	370 / 445/ 440
020	11/4"	90,0	98,4	49,6	30,5	10,0	F04 - □9	2,0	520 / 700 / 680
025	1½"	90,0	98,4	49,6	30,5	10,0	F04 - □9	3,0	550 / 770 / 750
032	2"	100,0	114,0	63,7	34,3	10,0	F04 - □9	3,5	835 / 1270 / 1200
040	21/4"	116,2	127,6	74,3	39,8	10,0	F04 - □9	3,5	1290 / 1945 / 1840
050	2¾"	124,8	138,0	82,3	52,8	10,0	F04 - □9	3,5	2020 / 2960 / 2850



 $^{^2}$ Weight of 2-way version / weight of 3-way version with "L" ball / weight of 3-way version with "T" ball

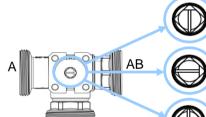






5,5mm

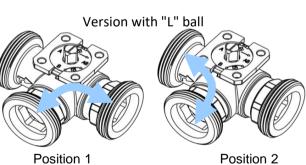
WORKING DIAGRAM



Stem detail, position 1



Stem detail, position 3



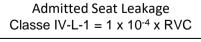
Position 2

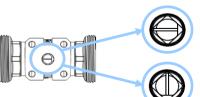
Position 2

Version with "T" ball

Position 3

Admitted Seat Leakage Classe IV-L-1 = $1 \times 10^{-4} \times RVC$ Admitted Seat Leakage 1 x 10⁻² x RVC





Stem detail, valve open

Stem detail, valve close

No Visible Leakage when tested to verify Class IV-L-1

Allowable Seat Leakage Classes according to IEC 60534-4. RVC: "Rated Valve Capacity" as per IEC 60534-4 standard.



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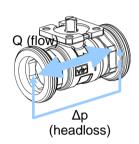
HEADLOSS CALCULATION

$$\Delta p = \left(\frac{36 \cdot Q}{K_V}\right)^2$$

Formula linking flow Q (in l/s) and theoretical valve headloss Δp (in kPa). K_{ν} value depends on valve version and working positions as indicated on following tables.

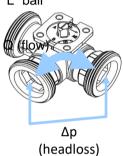
2-way version

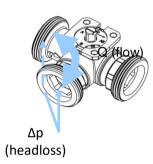
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DN	K _v [m³/h]
015	9
020	17
025	22
032	35
040	68
050	96



3-way version with "L" ball

·,	
DN	K _v [m³/h]
015	5
020	8
025	9
032	13
040	25
050	37





3-way version with "T" ball

DN	Κ _ν [m³/h]
015	8
020	13
025	13
032	25
040	49
050	73

