

# 9920 series

Straight DZR Brass ON/OFF Automatic Balancing Valve



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



DZR brass ON/OFF automatic balancing valve  
With threaded union F/F ends (ISO 7/1 Rp)  
Wide range of flows available (see cartridges section)  
Available in the following versions:

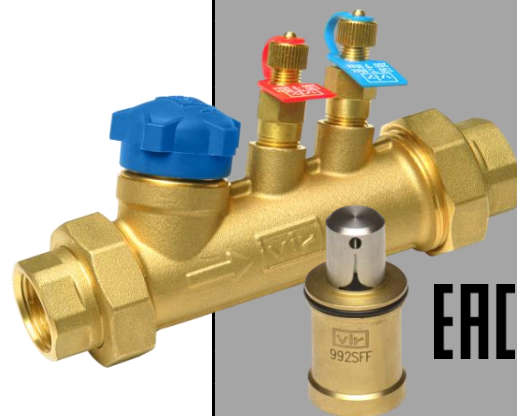
- Fig. 9920, with threaded and plugged drains (1/4" ISO 7/1Rp) (allow later mounting of test points)
- Fig. 9925, with test points

With threaded M30x1,5 connection for linear actuator  
TR CU 010 compliant

PN25 (Max 25bar up to 110°C, max 20bar above)  
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 antifreezing fluids  
over 100°C only for water with added anti-boiling fluids  
(Glycolic-Ethylene and glycolic-propylene mixtures up to 50% may be used)
- Not suitable for: gases group 1 & 2, liquids group 1 (Dir. 2014/68/UE)
- Flow range from 0,02l/s to 0,20l/s for DN15 and L-DN20 valves
- Flow range from 0,13l/s to 0,95l/s for H-DN15, DN20 e DN25 valves
- Working ΔP depending on selected cartridge



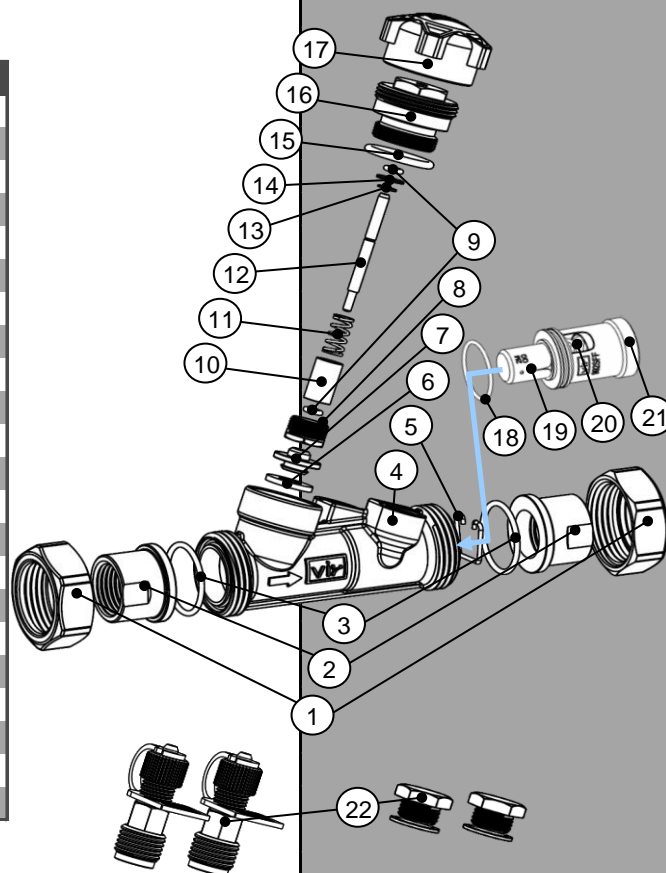
EAC

## PARTLIST

N.	Part	Material	Norm
1	Union nut	Brass	-
2	Union <sup>1</sup>	DZR Brass	EN12165 CW602N
3	Union O-ring	EPDM Perox	-
4	Body	DZR Brass	EN12165 CW602N
5	Spring	Stainless steel	EN10270-3 1.4310HS
6	Shutter gasket	EPDM Perox	-
7	Shutter	DZR brass	EN12164 CW602N
8	Internal nut	DZR brass	EN12164 CW602N
9	Stem O-ring	EPDM Perox	-
10	Spring cartridge	Brass	-
11	Spring	Stainless steel	-
12	Shutter stem	Stainless steel	-
13	Stop ring	Stainless steel	-
14	Washer	Brass	-
15	Bonnet O-ring	EPDM Perox	-
16	Bonnet	DZR brass	EN12164 CW602N
17	ON/OFF cap	Blue polyamide	-
18	Cartridge OR	EPDM Perox	-
19	Shaped opening	Stainless steel	-
20	Cartridge body	DZR Brass	EN12164 CW602N
21	Cartridge spring	Stainless steel	EN10270-3 1.4310HS
22	Test point / plug	DZR Brass <sup>2</sup>	EN12164 CW602N

<sup>1</sup>In two parts for L-DN020

<sup>2</sup>Plug with copper gaskets, test points with EPDM Perox gaskets and polypropylene ties



160401

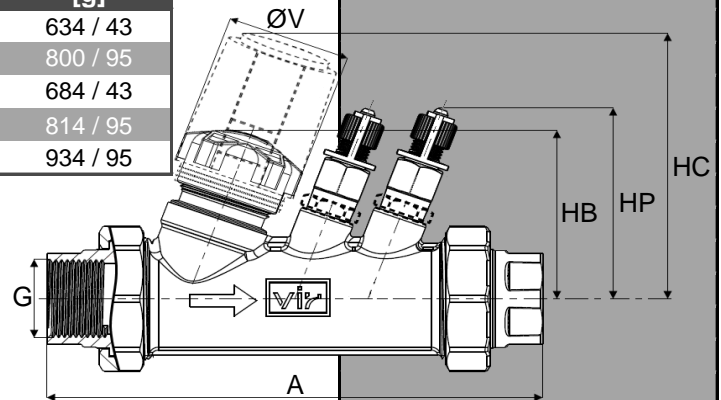
## DIMENSIONS

DN	G	A [mm]	HB [mm]	HP [mm]	HC <sup>1</sup> [mm]	ØV [mm]	K <sub>v</sub> <sup>2</sup> [m <sup>3</sup> /h]	Weight <sup>3</sup> [g]
015	½"	131	57	46	92 / 102	40	2,3	634 / 43
H 015	½"	150	57	62	92 / 102	40	4,9	800 / 95
L 020	¾"	152	57	46	92 / 102	40	2,3	684 / 43
020	¾"	156	57	62	92 / 102	40	4,9	814 / 95
025	1"	160	57	62	92 / 102	40	4,9	934 / 95

<sup>1</sup>100N VIR actuator version (+100g) / 125N VIR actuator version (+110g)

<sup>2</sup>For valve body without cartridge

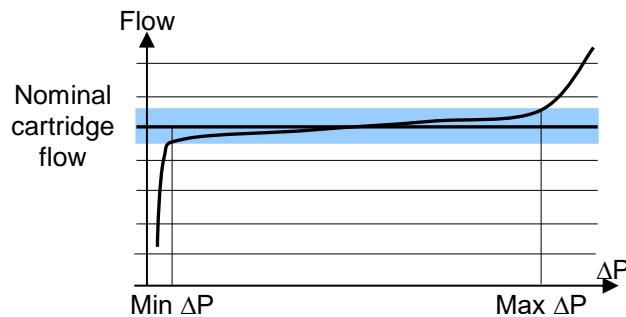
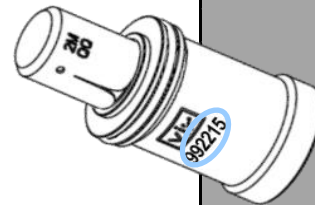
<sup>3</sup>Valve weight / cartridge weight. For version without test points -64g



## CARTRIDGES

Cartridges are available in different ranges of working differential pressure, the minimum and maximum working  $\Delta P$  therefore depend on the specific cartridge model.

A numeric code is marked on the cartridge body univocally identifying it (example for KRR992215.1880).



Flow regulation accuracy  $\pm 5\%$  of nominal flow

If installed, the test points allow to verify if the valve is actually working within the range suitable for the selected cartridge.

### MINI: for DN15 and L-DN20 valves

VIR Code	Flow [l/s]	Portata [l/h]	Range $\Delta P$ [kPa]
KRR991202.1880	0,02	72	15-170
KRR991203.1880	0,03	108	16-220
KRR991204.1880	0,04	144	16-220
KRR991205.1880	0,05	180	16-220
KRR991206.1880	0,06	216	16-220
KRR991207.1880	0,07	252	16-220
KRR991208.1880	0,08	288	16-220
KRR991209.1880	0,09	324	16-220
KRR991210.1880	0,10	360	16-220
KRR991211.1880	0,11	396	17-220
KRR991212.1880	0,12	432	17-220
KRR991213.1880	0,13	468	17-220
KRR991214.1880	0,14	504	17-220
KRR991215.1880	0,15	540	17-220
KRR991216.1880	0,16	576	17-220
KRR991218.1880	0,18	648	18-220
KRR991220.1880	0,20	720	19-220



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

**SMALL: for H-DN15, DN20 and DN25 valves**

## Standard range

VIR Code	Flow [l/s]	Portata [l/h]	Range $\Delta$ P [kPa]
KRR992213.1880	0,13	468	17-240
KRR992214.1880	0,14	504	17-240
KRR992215.1880	0,15	540	17-240
KRR992216.1880	0,16	576	17-240
KRR992217.1880	0,17	612	17-240
KRR992219.1880	0,19	684	17-240
KRR992221.1880	0,21	756	18-240
KRR992224.1880	0,24	864	18-240
KRR992227.1880	0,27	972	18-240
KRR992230.1880	0,30	1080	18-240
KRR992233.1880	0,33	1188	18-240
KRR992236.1880	0,36	1296	18-240
KRR992240.1880	0,40	1440	18-240
KRR992245.1880	0,45	1620	19-240
KRR992250.1880	0,50	1800	19-240
KRR992255.1880	0,55	1980	21-240
KRR992260.1880	0,60	2160	22-240
KRR992266.1880	0,66	2376	24-240
KRR992272.1880	0,72	2592	24-240

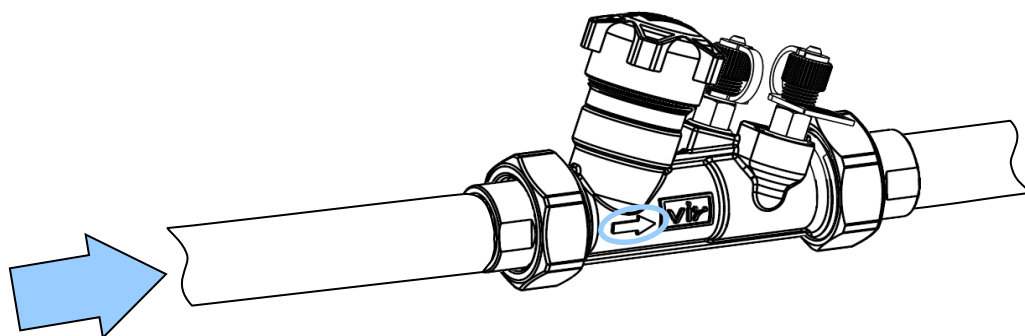
## HP range

VIR Code	Flow [l/s]	Portata [l/h]	Range $\Delta$ P [kPa]
KRR992318.1880	0,18	648	29-440
KRR992319.1880	0,19	684	32-440
KRR992320.1880	0,20	720	32-440
KRR992321.1880	0,21	756	33-440
KRR992323.1880	0,23	828	33-440
KRR992327.1880	0,25	900	33-440
KRR992329.1880	0,29	1044	33-440
KRR992332.1880	0,32	1152	33-440
KRR992336.1880	0,36	1296	33-440
KRR992340.1880	0,40	1440	33-440
KRR992345.1880	0,45	1620	33-440
KRR992350.1880	0,50	1800	33-440
KRR992355.1880	0,55	1980	34-440
KRR992361.1880	0,61	2196	36-440
KRR992368.1880	0,68	2448	36-440
KRR992375.1880	0,75	2700	36-440
KRR992380.1880	0,80	2880	36-440
KRR992386.1880	0,86	3096	40-440
KRR992395.1880	0,95	3420	40-440

## INSTALLATION

Install the valve so that the flow direction matches the direction of the arrow indicated on the body of the valve. Perform correct flushing of the plant before installing the cartridge.

In order to obtain the best correct flowrate regulation the valves should be installed using pipes of its same nominal size. Water quality should be according VDI 2035. Use at least one strainer for each installation.



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