

# VR95 series, 2/2 Direct solenoid actuated poppet valve



- > Port size: 1/4" (ISO G or NPT)
- > Working from 0 bar up
- > Short switching times
- Suited for fine vacuum down to 1,33 x 10<sup>-2</sup> mbar
- > Wide temperature range
- Shock vibration tested to EN 61373, Category 1, class A and B
- > Fire & Smoke (F&S) tested to EN 45545-2 HL3 (optional versions)





#### Technical features Medium:

For neutral gaseous and liquid fluids (with contaminated fluids, upstream installation of a dirt trap is recommended)

**Operation:** Direct solenoid operated

poppet valve **Operating pressure:** 

0 ... 10 bar (0 ... 145 psi)

## Technical data

Symbol Port size Weight Dimension Operatina Material Temperature \*2) Solenoid Model Seat seal Housing (°C) \*1) pressure (bar) (kg) No. group G 1/4 0 ... 10 EPDM -40 ... +80 0,21 0700, 5220 or 9398 (F&S) VR95B1613-01XXP brass 1 1/4 NPT 0 ... 10 EPDM -40 ... +80 0,21 0700, 5220 or 9398 (F&S) VR95R1613-01XXP brass

\*1) xx = Insert solenoid code on 13th digit and voltage code on 14th digit, see below!

Orifice:

Port size:

350 l/min

G1/4, 1/4 NPT

Mounting position:

Optional, preferably with solenoid on top

3 mm

Flow:

\*2) Depending on solenoid system, see page 2

## **Option selector**

	<b>e</b> 1
Port size	Substitute
G 1/4	В
1/4 NPT	R

Additional versions on request

#### Ambient/Media temperature:

-40 ... +80°C (-40 ... +176°F) depending on solenoid system. Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

#### Material:

Housing: brass Seals: EPDM other see option selector Inner parts: steel 1.4104 (430 F), brass

VR95*1613-	01★★P		
		→ Voltage	Substitute
		24 V d.c.	3
		24 V U.C.	J
		36 V d.c.	4
			-

Solenolas	SUDSTITUTE
5220	1
0700	3
9398 (Fire&Smoke)	7

Calamaida

Calendaria



#### Solenoid parameters

	Power consumption 24 V d.c.	Rated current 24 V d.c.	Temperature range	Voltage tolerance	Protection class *7)	Electrical connection	Weight	Dimension	Circuit diagram	Model	Code
	(W)	(m A)	(°C)	(%)			(kg)	No.	No.		
	16,9	703 (24 V d.c.)	-25 +40	+20/-30 (+15/-22) *9)	IP 65 (with Connector Connector) DIN EN 175301- *5) 803		0,26	3	1	0800	4
		425 (36 V d.c.) *10)	-25 +60	+10/-30 (+6/-22) *9							
193	193 (72 V d.c.) *10) 139 (110 V d.c.)		( ) for 37,5 & 74 V d.c. only		Form A *6)						
	8,9 369 (24 V d.c.) 222 (36 V d.c.) *10)		-40 +80	+30/-15 (+25/-17)	IP 65 M20 x 1,5 *6)	M20 x 1,5 *6)	0,500	6	4	5220	2
- CO.		-40 +80	+30/-10 (+25/-12)						*8)		
		120 (72 V d.c.) *10) 69 (110 V d.c.)		( ) for 37,5 & 74 V d.c. only							
	584 (24 V d.c 389 (36 V d.c 194 (72 V d.c.	1165 (12 V d.c.)	-40 +70	+/- 30%	IP 65 Connector DIN EN 175301- 803 Form A *11)	0,41	7	1	9398	7	
		584 (24 V d.c.) 389 (36 V d.c.)				803					
and the second		194 (72 V d.c.)									
		165 (85 V d.c.) 127 (110 V d.c.)									

\*5) Required connector: type 0570275

\*6) Connector cable gland not supplied, see table »Accessories«
\*7) IP-Protection class according to EN60529

\*8) Suitable for outdoor installation

\*9) Working pressure applied to port 3: -16%
\*10) Voltage range: 36 ... 37,5 d.c. and 72 ... 74 V d.c.
\*11) Fire & Smoke tested to EN 45545-2 HL3

#### **Spare coils**

Voltage	Power consumption	Model	Voltage	Power consumption	Model
24 V d.c.	16,9 W	000000.0800.0240R	24 V d.c.	8,9 W	0000000.5220.0240R
36 V d.c.	16,9 W	000000.0800.0360R	36 V d.c.	8,9 W	0000000.5220.0360R
72 V d.c.	16,9 W	000000.0800.0720R	72 V d.c.	8,9 W	0000000.5220.0720R
110 V d.c.	16,9 W	0000000.0800.1100R	110 V d.c.	8,9 W	0000000.5220.1100R

	Voltage	Power consumption	Model
	24 V d.c.	14,0 W	000000.9398.0240R
	36 V d.c.	14,0 W	000000.9398.0360R
	72 V d.c.	14,0 W	000000.9398.0720R
	110 V d.c.	14,0 W	000000.9398.1100R

## Accessories

Cable gland				Connector DIN EN 175301-803
Page 3 Thread	Cable Ø	Material	Model	
M 20x1,5	5,09,0 mm	PA, UL94 VO	0110854	0570275 (form A)
M 20x1,5	6,012 mm	PA, UL94 VO	0110855	SPC/991500/5 (form A, F&S*1))
				SPC/991500/12 (form A, F&S*1), with anti-surge diode)
				*1) Fire & Smoke tested according to EN 45545-2



## **Drawings - Valve**





## 2 M4 x 6 mm deep

6

#### Solenoids







1 Connector can be indexed by 4x90°

2 Ø 16 or 13 (with spacer tube)

5 With cable gland, Pg 13,5



Dimensions in mm Projection/First angle









## Circuit diagrams



#### Cable gland



For cable Ø	Α	В	С	Σ <b>=</b>	Model
59	M20 x 1,5	9	36	24	0110854
6 12	M20 x 1,5	9	36	24	0110855

## Warning

These products are intended for use in industrial compressed air and rail transport systems only. Do not use these products where pressures and temperatures can exceed those listed under

#### »Technical features/data«.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult IMI NORGREN.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.

Dimensions in mm Projection/First angle

