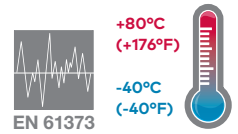


# VR98 series, 3/2

## Direct solenoid actuated poppet valve



- > Port size: 1/2" (ISO G or NPT)
- > Valve switches at power failure into starting position (mechanical spring return)
- > Suited for outdoor use under critical environment conditions (see solenoid list)
- > 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:

Compressed air, filtered, non-lubricated and dry

#### Operation:

Direct solenoid operated poppet valve

#### Operating pressure:

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

#### Orifice:

8 mm

#### Port size:

G1/2, 1/2 NPT

#### Flow:

1000 l/min

#### Flow direction:

Optional

#### Mounting position:

Optional, preferably with solenoid on top

#### Ambient/Media temperature:

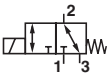
-40 ... +80°C (-40 ... +176°F) depending on solenoid system. Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

#### Material:

Housing: Brass  
Seal: SNBR (special perbunan)  
Inner parts: Stainless steel, brass

### Technical data

#### With threaded connection, brass valves

Symbol	Port size	Operating pressure (bar)	Material Seat seal	Temperature *2) (°C)	Manual override	Weight (kg)	Dimension No.	Solenoid group	Model *1)
	G1/2	0 ... 10	SNBR	-40 ... +60	without	0,90	see below	0800 & 5270 or 9318 (F&S)	VR98D9678-01XXP
	1/2 NPT	0 ... 10	SNBR	-40 ... +60	without	0,90	see below	0800 & 5270 or 9318 (F&S)	VR98T9678-01XXP

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

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

### Option selector




VR98★9678-01★★P

Port size	Substitute
G1/2	D
1/2 NPT	T

Additional versions on request

Voltage	Substitute
24 V d.c.	3
36 V d.c.	4
72 V d.c.	A
110 V d.c.	7
Solenoids	Substitute
5270	2
0800	4
9318 (Fire & Smoke)	8

## Solenoid parameters

	Power consumption 24 V d.c. (W)	Rated current 24 V d.c. (mA)	Temperature range (°C)	Voltage tolerance (%)	Protection class *7)	Electrical connection	Weight (kg)	Dimension No.	Circuit diagram No.	Model	Code
	16,9	703 (24 V d.c.) 425 (36 V d.c.) *10) 193 (72 V d.c.) *10) 139 (110 V d.c.)	-25 ... +40 -25 ... +60	+20/-20 (+15/-22) *9) +10/-20 (+6/-22) *9) ( ) for 37,5 & 74 V d.c. only	IP 65 (with Connector *5)	Connector DIN EN 175301-803 Form A *6)	0,26	3	1	0800	4
	8,9	369 (24 V d.c.) 222 (36 V d.c.) *10) 120 (72 V d.c.) *10) 69 (110 V d.c.)	-40 ... +60 -40 ... +80	+30/-15 (+25/-17) +30/-10 (+25/-12) ( ) for 37,5 & 74 V d.c. only	IP 65	M20 x 1,5 *6)	0,500	6	4	5270 *8)	2
	14	1165 (12 V d.c.) 584 (24 V d.c.) 389 (36 V d.c.) 194 (72 V d.c.) 165 (85 V d.c.) 127 (110 V d.c.)	-40 ... +70	+/- 30%	IP 65	Connector DIN EN 175301-803 Form A *11)	0,41	7	1	9318	8

\*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 V d.c. and 72 ... 74 V d.c.

\*11) Fire & Smoke tested to EN 45545-2 HL3

## Spare coils

	Voltage	Power consumption	Model
	24 V d.c.	16,9 W	0000000.0800.0240R
	36 V d.c.	16,9 W	0000000.0800.0360R
	72 V d.c.	16,9 W	0000000.0800.0720R
	110 V d.c.	16,9 W	0000000.0800.1100R

	Voltage	Power consumption	Model
	24 V d.c.	8,9 W	0000000.5270.0240R
	36 V d.c.	8,9 W	0000000.5270.0360R
	72 V d.c.	8,9 W	0000000.5270.0720R
	110 V d.c.	8,9 W	0000000.5270.1100R

	Voltage	Power consumption	Model
	24 V d.c.	14,0 W	0000000.9318.0240R
	36 V d.c.	14,0 W	0000000.9318.0360R
	72 V d.c.	14,0 W	0000000.9318.0720R
	110 V d.c.	14,0 W	0000000.9318.1100R

## Accessories

Cable gland				Connector DIN EN 175301-803	
Page 4 Thread	Cable Ø	Material	Model		
M20x1,5	5 ... 9 mm	PA, UL94 V0	0110854	0570275 (form A)	
M20x1,5	6 ... 12 mm	PA, UL94 V0	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

Silencer *1)	Exhaust guard *2)
Page 4	Page 4
	
T40C4800 (G1/2) MS004A (1/2 NPT)	0613423 (G1/2, 1/2 NPT)

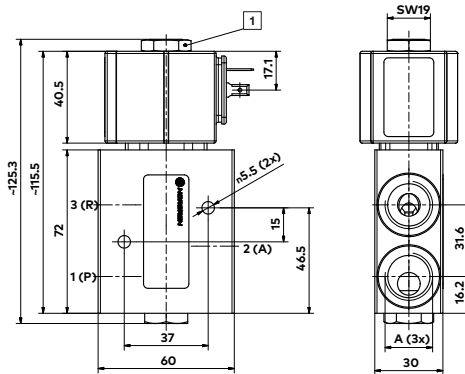
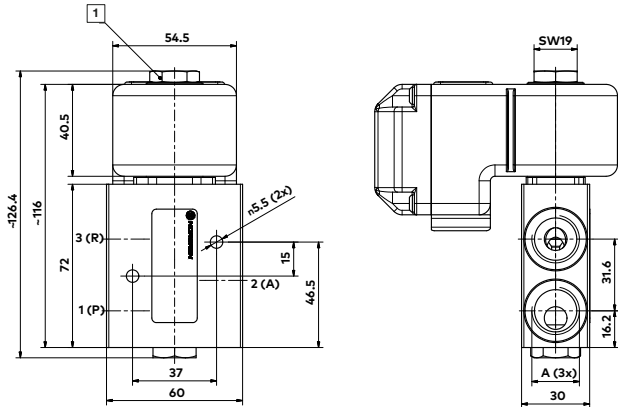
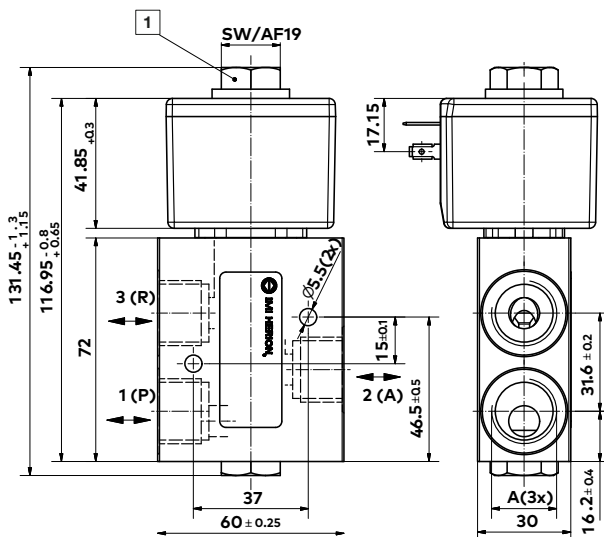
\*1) For indoor use

\*2) For outdoor use

\*3) Useable with the indirect actuated valves only.

**Dimensions**
**1/2" ISO G and NPT versions (VR98B ... & VR98R ...)**

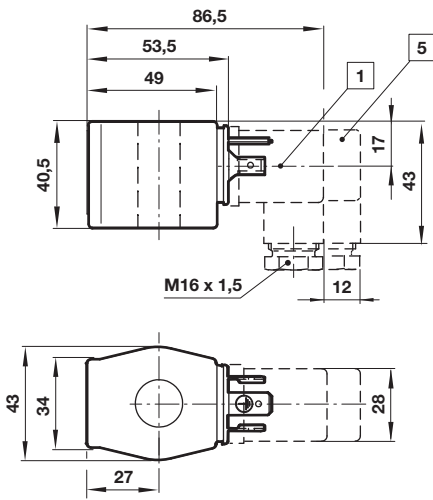
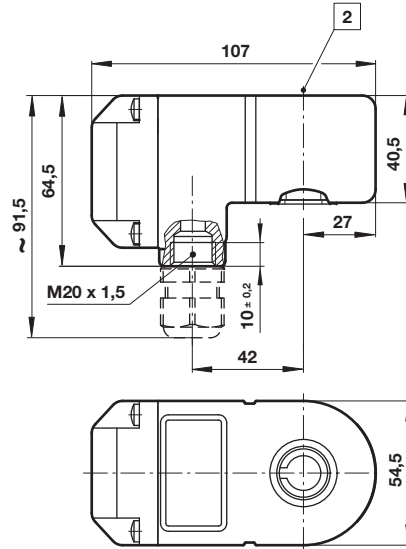
 Dimensions in mm  
 Projection/First angle

**VR98D9678-012xP / VR98T9678-012xP**  
**Solenoid .5270**
**VR98D9678-014xP / VR98T9678-014xP**  
**Solenoid .0800**

**VR96B4613-018xP / VR96R4613-018xP**  
**NC / solenoid .9318**


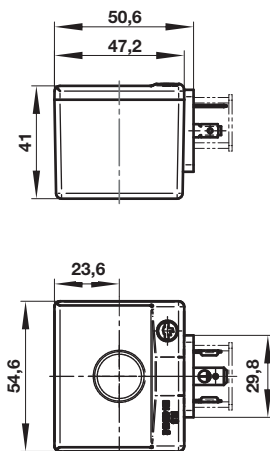
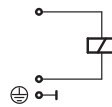
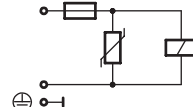
1 Tightening torque: 5±1 Nm

**Solenoids**

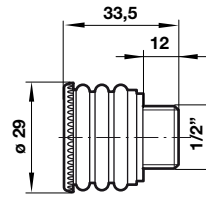
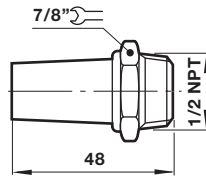
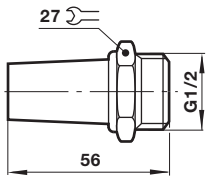
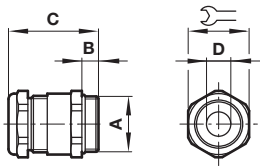
 Dimensions in mm  
 Projection/First angle


**3**

**6**


- 1 Connector can be indexed by 4x90°
- 2 Ø 16 or 13 (with spacer tube)
- 5 With cable gland, Pg 13,5

**7**

**Circuit diagrams**
**1**

**4**


**Silencer**  
**Model: T40C4800**
**MS004A**
**Exhaust guard**  
**Model: 0613423**

 Dimensions in mm  
 Projection/First angle

**Cable gland**


For cable ø	A	B	C		Model
5 ... 9	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 Precision Engineering, Norgren GmbH.

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.