

- > 2/2, 3/2;  
Manifold mounting
- > Compact design
- > High flow rate
- > High cycle rate of up to  
1200 cycles per minute
- > Up to kv 14 (orifice 8  
mm)



### Technical features

#### Medium:

Air, neutral gases and liquids

#### Operation:

Direct acting 2-way and 3-way valves, normally closed and normally opened, latching

#### Operating pressure:

0 ... 100 bar (0 ... 1450 psi)

#### Flow kv factor:

0,15 ... 14 (Cv: 0.01 ... 1)

#### Mounting:

G1/4 others on request

#### Orifice:

2/2: 0,5 ... 8 mm (0.02 ... 0.31")

3/2: 0,8 ... 3 mm (0.02 ... 0.12")

#### Port size:

G1/4, G1/8, M5, CNOMO

#### Response time:

10 ... 15 ms

Response time measured according to ISO 12238

#### Ambient/media temperature:

Ambient:

-15 ... +50 °C (+5 ... +122°F)

Media:

-15 ... +140 °C (+5 ... +284°F)

Air supply must be dry enough to avoid ice formation at temperatures below +2 °C (+35°F).

#### Materials:

Body in contact with media:

Stainless steel, brass, PA

Seal in contact with media: NBR, FPM, EDPM

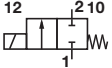
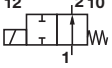
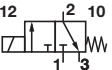
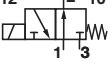
### Electrical details

<b>Voltage:</b>	24 V d.c.
<b>Voltage tolerances:</b>	-10 % ... +15 %
<b>Electrical insulation:</b>	2000 V a.c.
<b>Power consumption (nominal at 20°C)</b>	10 W
<b>Insulation class:</b>	H (180 °C)
<b>Duty cycle:</b>	100% ED
<b>Protection class according to EN 60529:</b>	IP 65 with connector
<b>Electrical connection</b>	Interface according to DIN EN 175301-803, Form A
<b>Coil orientation</b>	Rotable 360°
<b>Coil mounting</b>	M8 x 0,75 mm nut

### Following options on request

Mounting (See on request alternative pneumatic connections)
Flow rate, orifice size, kv
Materials
Pneumatic connection
Override
Operating pressure (On request incl. vacuum (10-3 torr))
Voltage
Power consumption
Electrical connection

**Technical data - standard models, G1/4**

Symbol	Port size	Function	Orifice	Operating pressure		kv *1)	Voltage	Power consumption	Seal/Body Material	Drawing No.	Model
			(mm)	(bar)	(psi)	(l/min)	(V d.c.)	(W)			
	G1/4	2/2 NC	0,5	0 ... 100	0 ... 1450	0.15	24	10	NBR/Brass	1	04-211-200-20+ACC
	G1/4	2/2 NC	0,8	0 ... 60	0 ... 870	0.40	24	10	NBR/Brass	1	04-211-201-20+ACC
	G1/4	2/2 NC	1,2	0 ... 50	0 ... 725	0.80	24	10	NBR/Brass	1	04-211-202-20+ACC
	G1/4	2/2 NC	1,6	0 ... 25	0 ... 362	1.60	24	10	NBR/Brass	1	04-211-203-20+ACC
	G1/4	2/2 NC	2,0	0 ... 20	0 ... 290	2.30	24	10	NBR/Brass	1	04-211-204-20+ACC
	G1/4	2/2 NC	2,4	0 ... 15	0 ... 217	3.00	24	10	NBR/Brass	1	04-211-205-20+ACC
	G1/4	2/2 NC	3,0	0 ... 10	0 ... 145	4.20	24	10	NBR/Brass	1	04-211-206-20+ACC
	G1/4	2/2 NC (latching)	3,0	0 ... 6	0 ... 87	4.00	24	10	NBR/Brass	1	04-241-206-20+AFX
	G1/4	2/2 NC	4,0	0 ... 3	0 ... 43	7.00	24	10	NBR/Brass	1	04-211-207-20+ACC
	G1/4	2/2 NC	5,0	0 ... 2	0 ... 29	9.00	24	10	NBR/Brass	1	04-211-208-20+ACC
	G1/4	2/2 NC	6,0	0 ... 1.5	0 ... 21	10.00	24	10	NBR/Brass	1	04-211-209-20+ACC
	G1/4	2/2 NC	8,0	0 ... 0.6	0 ... 8.7	14.00	24	10	NBR/Brass	1	04-211-210-20+ACC
	G1/4	2/2 NO	0,8	0 ... 40	0 ... 520	0.40	24	10	NBR/Brass	1	04-221-201-20+ACC
	G1/4	2/2 NO	1,6	0 ... 30	0 ... 425	1.40	24	10	NBR/Brass	1	04-221-203-20+ACC
	G1/4	2/2 NO	2,4	0 ... 13	0 ... 188	2.60	24	10	NBR/Brass	1	04-221-205-20+ACC
	G1/4	2/2 NO	3,0	0 ... 7	0 ... 101	3.20	24	10	NBR/Brass	1	04-221-206-20+ACC
	G1/4	3/2 NC	0,8	0 ... 23	0 ... 333	0.40	24	10	NBR/Brass	1	04-311-201-20+ACC
	G1/4	3/2 NC	1,2	0 ... 17	0 ... 246	0.80	24	10	NBR/Brass	1	04-311-202-20+ACC
	G1/4	3/2 NC	1,6	0 ... 14	0 ... 203	1.40	24	10	NBR/Brass	1	04-311-203-20+ACC
	G1/4	3/2 NC	2,0	0 ... 10	0 ... 145	2.20	24	10	NBR/Brass	1	04-311-204-20+ACC
	G1/4	3/2 NC	2,4	0 ... 8	0 ... 116	2.80	24	10	NBR/Brass	1	04-311-205-20+ACC
	G1/4	3/2 NC	3,0	0 ... 5.5	0 ... 79	4.00	24	10	NBR/Brass	1	04-311-206-20+ACC
	G1/4	3/2 NO	0,8	0 ... 25	0 ... 362	0.40	24	10	NBR/Brass	1	04-321-201-20+ACC
	G1/4	3/2 NO	1,6	0 ... 6	0 ... 87	1.20	24	10	NBR/Brass	1	04-321-203-20+ACC
	G1/4	3/2 NO	2,4	0 ... 3	0 ... 43	2.00	24	10	NBR/Brass	1	04-321-205-20+ACC
	G1/4	3/2 NO	3,0	0 ... 2.5	0 ... 36	2.80	24	10	NBR/Brass	1	04-321-206-20+ACC

\*1) Cv - Value in [gal/min] = kv x 0.07; kv for 3/2 way valves represents flow value between ports 2 and 3

**Accessories**

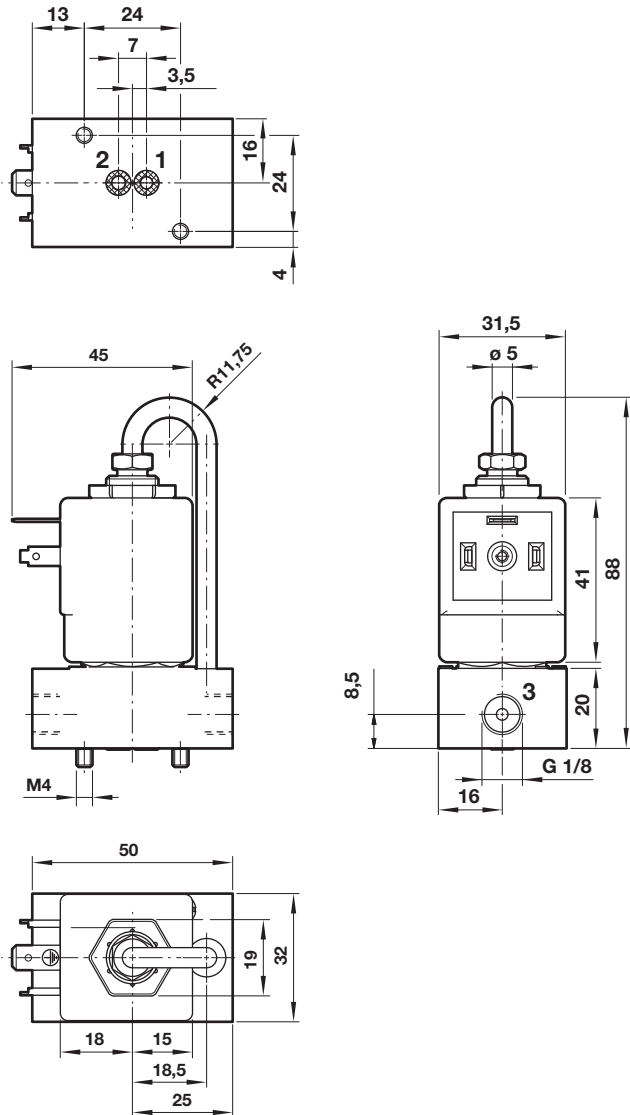
Electrical connector  
DIN EN 175301-803, Form A



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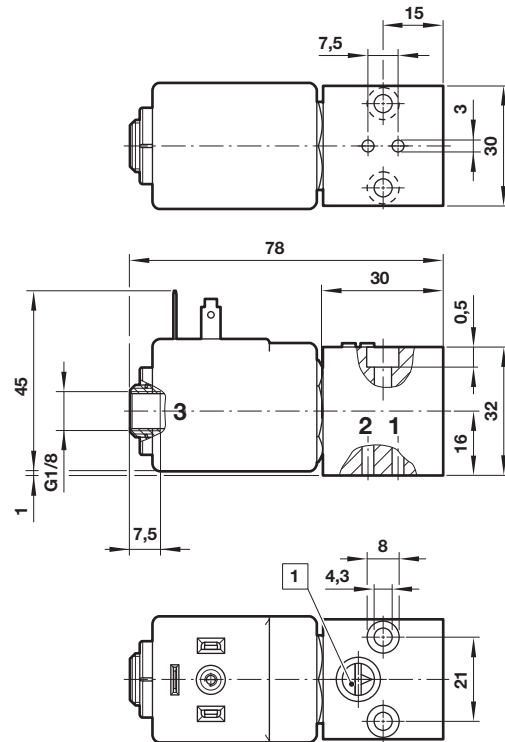


**VR-Type connection**  
(available for 3/2 NO valves)



**CNOMO-Type connection**  
(available for 2/2 NC & 3/2 NC valves)

Dimensions shown in mm  
Projection/First angle



1 Manual override

**Port identification for BACOSOL VR-type**

	Ports		
	1	2	3
3/2 NO	P	A	R

P = Inlet; A = Outlet; R = Exhaust

**Warning**

These products are intended for use in air, neutral gas and liquid systems only. Do not use these products where pressures and temperatures can exceed those listed under »**Technical features**«.

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 FAS.

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.