

# Industrial Automation

**IMI** Norgren

# RA..., RB... & RC... 2/2 & 3/2 Cartridge solenoid valve

- Direct integration on to a manifold
- Simple, compact design and construction
- 2/2 or 3/2 function with collected exhaust
- Quick easy installation
- Maximum protection from vibration and impact damage





#### **Technical features**

#### Medium:

Neutral gaseous and liquid fluids, air compatibility is based on combination of body and seal materials

#### Operation:

Poppet valve, directly actuated with spring return

# Operating pressure:

0 ... 12 bar (0 ... 175 psi)

## Mounting:

Direct intergration with customers manifold

#### Temperature range:

-40°C ... +70°C (-40 ... +158°F) Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

#### Materials:

Valve base: Brass, stainless steel Plunger: PTFE coated Springs: stainless steel Terminals: Tin-plated brass Cable: PTFE Per MIL-W-16578

Type 'E' Seals: FPM

# Technical data - solenoid operators

Nominal voltages	12, 24, 37, 100 Volts
Power consumption	see table below
Voltage tolerance	±30% of nominal
Duty cycle	Continuous

Coil	Fully encapsulated, dry coil
Electrical Connections	Terminals: Flying leads (length approx. 305 mm)

# **Technical data**

Symbol	Orifice (mm)	(inch)	Operating (bar)	pressure (psi)	Voltage (normal)	Power (W)	Coil construction	Weight (kg)	Drawing no.	Model
12 W	3	0,12	10	150	37 V d.c.	14	Class 'N'	0,15	1	RC212215-0221-37VDC *2
	2,4	0,093	11	160	12 V d.c	5	Class 'H'	0,15	2	RA221114-2201-12VDC *3
	2,4	0,093	11	160	24 V d.c	5	Class 'H'	0,15	2	RA221114-2201-24VDC *3
2	1,2	0,046	12	175	37 V d.c.	9	Class 'H'	0,15	3	RB322131-2221-37VDC *2
	1,2	0,046	8,7	127	100 V d.c.	14	Class 'N'	0,15	3	RC222231-2221-100VDC *2
1 3										

<sup>\*2)</sup> Electrical connection: Terminals

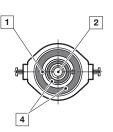
<sup>\*3)</sup> Electrical connection: Flying leads

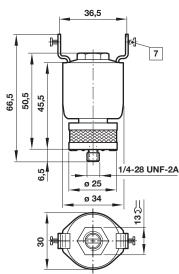


## **Dimensions**

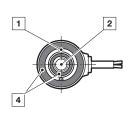
# **Valves**





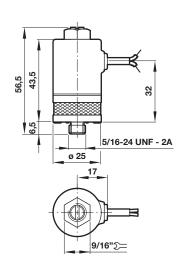






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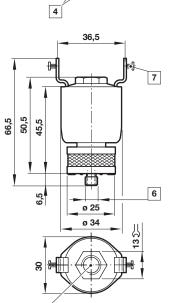
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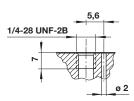
#### Dimensions in mm Projection/First angle



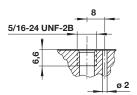


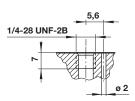


# **Customer interface**

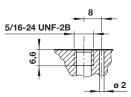


- 1 Inlet port
  2 Outlet port
  3 Exhaust port
  4 'O'-rings, star 'O'-rings, standard in scope of delivery Terminals 8-32 UNC-2B
- ☐ Terminals 8-32 UNC-2B
  ☐ Model RB322131-2221-37 V d.c. (5/16-24 UNF-2A) Model RC222231-2221-100 V d.c. (1/4-28 UNF-2A)
- Screws (8-32 UNC-2B) and lock washer (#8) included standard delivery





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# 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.