

Industrial Automation

IMI Norgren

VSD, 2/2 & 3/2 Cartridge solenoid valve

- Direct integration on to a manifold
- Compact, fully encapsulated assembly
- 2/2 or 3/2 function with collected exhaust
- Maximum protection from vibration and impact damage
- Maximum environmental protection
- Wide range of temperature
- Shock and vibration resistant to EN 61373, Category 1, class A and





Technical features

Medium:

Compressed air, filtered, lubricated and non-lubricated Light oil, water and other non corrosive liquids and gases

Operation:

Poppet valve, directly actuated with spring return

Operating pressure:

0 ... 12 bar (0 ... 174 psi)

Flow:

See table

Mounting:

Direct integration on to a manifold

Environmental:

200 hours salt spray

Life expectancy:

Typically in excess of 20 million cycles

Temperature range:

Supply:

-40°C ... +90°C (-40 ... +194°F)

Ambient:

-40°C ... +80°C (-40 ... +176°F) Air supply must be dry enough to avoid ice formation at operating temperature.

Materials:

Valve base: moulded PBT Coil: glass reinforced PET

(UL94 V0)

Armature: stainless iron Stem tube: stainless steel Springs: stainless steel Seals: NBR

Technical data - solenoid operators

Nominal voltages	12, 24, 110 Volts
Power consumption	3,4 or 4,7 Watt
Voltage tolerance	± 25% of nominal
Duty cycle	100% ED

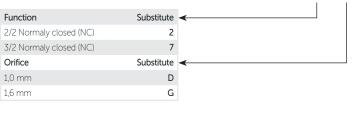
Opening/closing time	10 20/5 10 ms
Protection Class	IP 6 5 (DIN 40 050) with cable clamp, IP69 with DIN connector
Coil	Fully encapsulated
Electrical Connections	Flying leads (length approx. 520 mm)

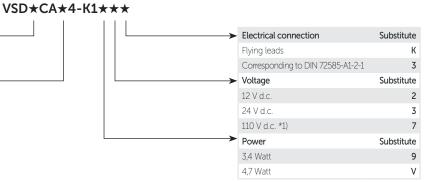
Technical data

Symbol	Power (W)	Orifuce (mm)	Flow (l/min)	Operating pressure (bar)	Weight (g)	Model
,2	3,4	1,0	31	10	84	VSD2CAD4-K19*K
7-11 ± W	4,7	1,0	31	12	84	VSD2CAD4-K1V*K
1	4,7	1,6	80	3	84	VSD2CAG4-K1V*K
	3,4	1,0	31	10	84	VSD7CAD4-K19*K
2	3,4	1,6	80	3	84	VSD7CAG4-K19*K
□ I I I W	4,7	1,0	31	12	84	VSD7CAD4-K1V*K
1 3	4,7	1,6	80	3	84	VSD7CAG4-K1V*K

^{* =} Insert voltage code, see below







^{*1)} For DIN connector only



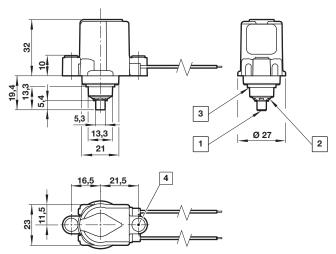
Dimensions

Flying lead type

Dimensions in mm Projection/First angle





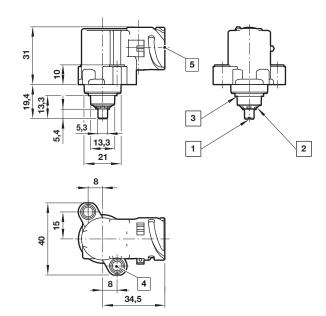


		2/2 way	3/2 way
1	Port 1	Delivery	Inlet
2	Port 2	Inlet	Delivery
3	Port 3	Not used	Exhaust
		and the second	

Fastering screws not supplied. Use M4 screws and suitable washers.

Note: Installation drawings available on request!

DIN connector type



		2/2 way	3/2 way
1	Port 1	Delivery	Inlet
2	Port 2	Inlet	Delivery
3	Port 3	Not used	Exhaust

- Fastering screws not supplied.
 Use M4 screws and suitable washers. 4
- Electrical connection corresponding to DIN 72585-A1-2-1, connector not supplied.

Note: Installation drawings available on request!

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.