

Cartridge Solenoid Valves

2/2 & 3/2 Poppet Valves Electrically Actuated

- Standard and automotive specifications
- Compact, fully encapsulated assembly
- 2/2 or 3/2 function with collated exhaust
- Screw mounting
- Robust construction
- Maximum environmental protection

Technical Data

Medium:

Compressed air, filtered, lubricated and non-lubricated

Operation:

Poppet valve, directly actuated with spring return

Mounting:

Screw mounting

Operating Pressure:

0-12 bar standard, 16 bar available

Inlet Orifice Size:

1.0, 1.6 mm

Flow Characteristics:

31 to 80 l/min (See Flow Characteristics table for individual details)

Supply Temperature:

- 40°C to + 90°C (Consult Technical services for use above

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Ambient Temperature:

- 40°C to + 50°C (+80°C for automotive specifications) (Consult Technical services for use above + 50°C)

Life Expectancy:

20 to 100 million cycles

Environmental:

200 hours salt spray; UL94 V0; Vibration to EN60068-2-6

Weight:

78g

Materials:

Coil Glass reinforced PET

Armature Stainless iron
Stem Tube Stainless steel
Spring Stainless steel

Seals Nitrile (Viton also available)



Ordering Information

To order, quote model number inserting the voltage code for your power requirement at * from the table below

Standard Specification:

2/2 Normally Closed

Model No	Orifice (mm)	Pressure (barg)	Power (W)
VSD2CAD4-K11*K	1.00	10 barg	2 W
VSD2CAD4-K19*K	1.00	10 barg	3.4 W
VSD2CAG4-K19*K	1.60	5 barg	3.4 W
VSD2CAD4-K13*K	1.00	12 barg	6 W
VSD2CAG4-K13*K	1.60	10 barg	6 W

3/2 Normally Closed

Model No	Orifice (mm)	Pressure (barg)	Power (W)
VSD7CAD4-K11*K	1.00	10 barg	2 W
VSD7CAD4-K19*K	1.00	10 barg	3.4 W
VSD7CAG4-K19*K	1.60	3 barg	3.4 W
VSD7CAD4-K13*K	1.00	12 barg	6 W
VSD7CAG4-K13*K	1.60	7 barg	6 W

Automotive Specification:

2/2 Normally Closed

Model No	Orifice (mm)	Pressure (barg)	Power (W)
VSD2CAD4-K19*K	1.00	10 barg	3.4 W
VSD2CAD4-K1V*K	1.00	12 barg	4.7 W
VSD2CAG4-K1V*K	1.60	3 barg	4.7 W

3/2 Normally Closed

Model No	Orifice (mm)	Pressure (barg)	Power (W)
VSD7CAD4-K19*K	1.00	10 barg	3.4 W
VSD7CAG4-K19*K	1.60	3 barg	3.4 W
VSD7CAD4-K1V*K	1.00	12 barg	4.7 W
VSD7CAG4-K1V*K	1.60	3 barg	4.7 W



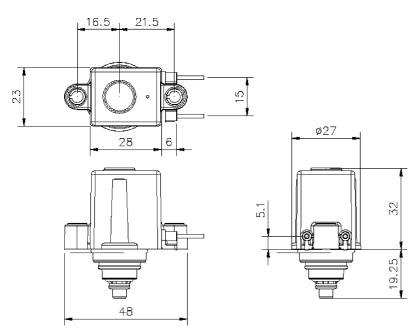
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Voltage Codes

DC Supply	Power (W)	Code
	2 W	2
12 V	3.4 W	2
	4.7 W	2
	6 W	2
	2 W	3
24 V	3.4 W	3
	4.7 W	3
	6 W	3

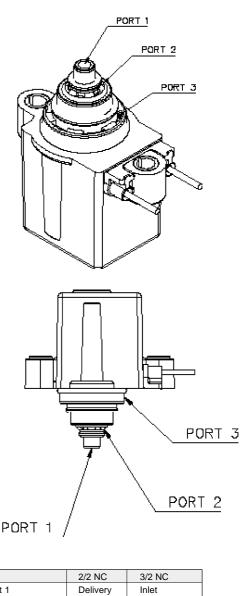
Technical Details

Voltages:	12 V & 24 V DC
VoltageTolerance:	+/- 10% Standard Specification
	+/- 25% Automotive Specification
Power:	2, 3.4 & 6 watt Standard Specification
	3.4 & 4.7 watt Automotive Specification
Typical Electrical Response Time:	On 10 to 20 ms
Protection Class:	IP65 (DIN 40 050) with Cable Clamp
Electrical Duty:	100% (Continuously Rated)
Coil:	Screwed to customer interface
Electrical Connections:	Flying Lead



Flow Characteristics - Air

Inlet Orifice	Kv m3/h	NFPA Cv	l/min
1.0 mm	0.027	0.031	31
1.6 mm	0.069	0.08	80



2/2 NC 3/2 NC Port 1 Delivery Inlet Port 2 Inlet Delivery Port 3 Not Used Exhaust

Warning

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