

**3/2 way solenoid & pilot actuated poppet valves
1/2" ... 1"**
Exceptionally high flow
High reliability
Durable, robust construction
Reversible seals
Wide temperature range
Shock vibration tested to EN 61373,
Category 1, class A and B
Call Norgren for availability

 Available from
December 2010

Technical features and data – basic valve without solenoid operator
Medium:

Filtered and lubricated or non-lubricated compressed air

Mounting:

Through-holes in valve body.

Operating pressure:

 2 ... 10 bar (29 ... 145 psi)
solenoid pilot

0 ... 20 bar (0 ... 290 psi) air pilot

Ambient temperature:

-40 ... +60°C (-40 ... +140°F)

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

Materials

 Body, piston, poppets and sub-base: aluminium alloy
Operators: zinc or aluminium
Elastomers: nitrile rubbers seals

Technical data – solenoid operators

Type	32mm solenoid valve with sub base inlet and outlet connections
Circuit function	3/2, Normally closed
Orifice	1,2 mm
Seal material	Flourine rubber
Body material	Brass
Port connection	Exhaust port 1/8" BSP male; Inlet and outlet ports CNOMO sub base
Coil Material	Epoxy Resin
Nominal voltages	12, 24, 37.5, 52, 74, 96, 110 Volts
Pull in voltage	80% of nominal voltage
Drop out voltage	3% of nominal voltage
Power consumption	5 Watt
Voltage tolerance	±20% of nominal *1)
Electrical connection	DIN EN 175301-803 (DIN 43650) Form A
Manual override	Standard: with Polyamide rotational lever, optional without manual override

Pressure range	2 ... 10 bar
Over / burst pressure	35 bar
Kv value	0.05 cubic metres / hour
Qnn value	55 litres / min
Weight	0.25 kg
Fluid temperature range	-40 ... +100°C
Ambient temperature range	-40 ... +60°C *1)
Duty cycle	100% ED
Maximum cycling rate	1000 cpm
Opening/closing time	20/22 ms
Low voltage directive	2006/95/EC
EMC directive	2004/108/EC
PE directive	97/23/EC

*1) This product has been used successfully in a wide variety of railway applications for more than 20 years. It is possible to achieve higher operating specifications, such as up to +80°C or voltage tolerance of +/- 30% depending on the application and duty. For such requirements specific type testing and approval may be required. For more details contact Norgren technical service.

Solenoid pilot operated

Symbol	Valve size (inch)	Port size	Function	Flow (l/min)	Weight (kg)	Model
	1/2	G1/2	NC	5,717	1,11	VRDA024C-00-***
	1/2	1/2 PTF	NC	5,717	1,11	VRD1024C-00-***
	1/2	G3/4	NC	6,111	1,11	VRDA025C-00-***
	1/2	3/4 PTF	NC	6,111	1,11	VRD1025C-00-***
	1	G1	NC	14,391	2,02	VRDA036C-00-***
	1	1 PTF	NC	14,391	2,02	VRD1036C-00-***

*** Insert voltage code, see page 2

Air pilot operated

Symbol	Valve size (inch)	Port size	Function	Flow (l/min)	Weight (kg)	Model
	1/2	G1/2	NC	5,717	0,96	VRDA024C-AA
	1/2	1/2 PFT	NC	5,717	0,96	VRD1024C-AA
	1/2	G3/4	NC	6,111	0,96	VRDA025C-AA
	1/2	3/4 PFT	NC	6,111	0,96	VRD1025C-AA
	1	G1	NC	14,391	1,86	VRDA036C-AA
	1	1 PFT	NC	14,391	1,86	VRD1036C-AA

Option selector

VRD★0★★C-00-★★★

Thread form	Substitute
ISO G parallel	A
PTF	1
Body size/port size	Substitute
1/2" body/ 1/2" ports	24
1/2" body/ 3/4" ports	25
1" body/ 1" ports	36

Voltage code	Substitute
For voltage code please see tables below Standard: with manual override	
Pilot operated	AA

Solenoid pilot valves – voltage codes and part numbering

Voltage	Voltage code – solenoid pilot valve with manual override	Spare – replacement coil part number with manual override
12 V d.c.	111	VSP551111
24 V d.c.	112	VSP551112
37,5 V d.c.	113	VSP551113
52 V d.c.	114	VSP551114
74 V d.c.	115	VSP551115
96 V d.c.	116	VSP551116
110 V d.c.	117	VSP551117



Note: Solenoid pilot valve without manual override also available – contact Norgren Technical service

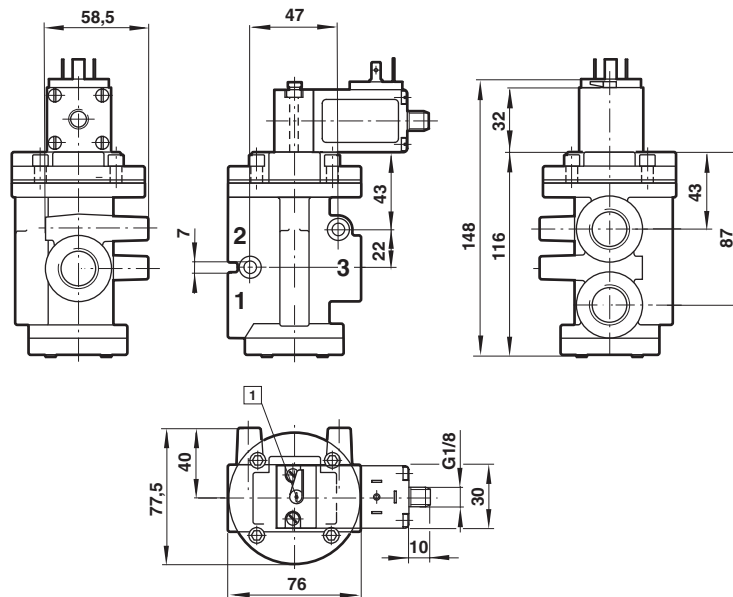
Accessories



Basic dimensions

1/2" valve size, solenoid valve
Port size: 1/2 or 3/4"

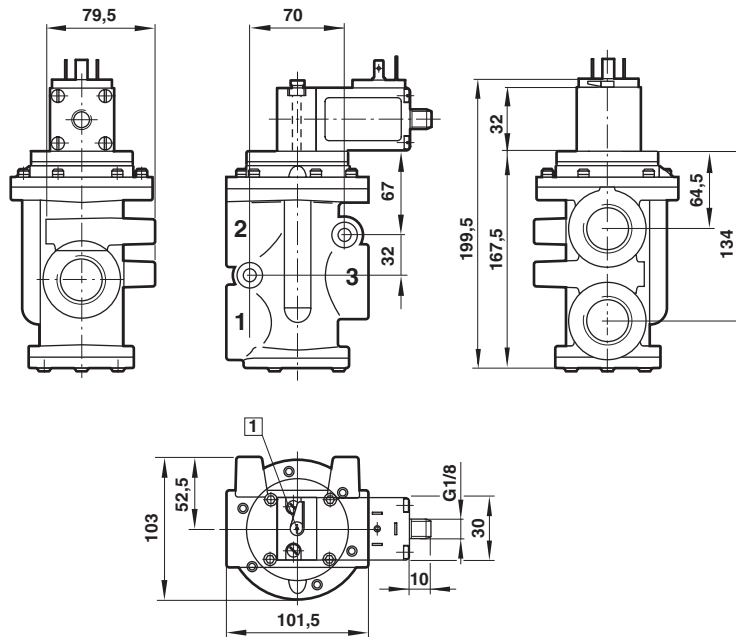
Dimensions shown in mm
Projection/First angle



1 Manual override

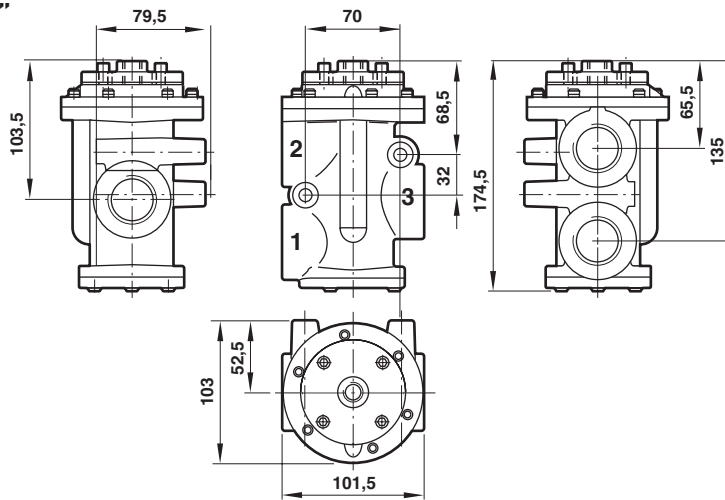
1" valve size, solenoid valve
Port size: 1"

Dimensions shown in mm
Projection/First angle

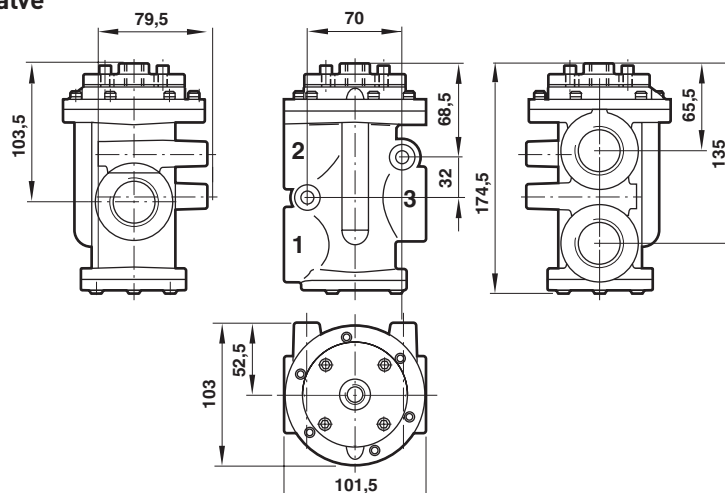


1 Manual override

Basic dimensions
1/2" valve size, pilot valve
Port size: 1/2 or 3/4"



1" valve size, pilot valve
Port size: 1"



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'.

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.