

- > Port size: 1/4" (ISO G/NPT)
- > Direct acting - intrinsically safe solenoid valve
- > Reliable and long life, ideal for a one time installation
- > A direct solenoid operated valve for the control of pneumatic or hydraulic operated equipment
- > IECEx and ATEX certified, complies with ATEX directive 94/9/EC
- > Safety integrity level 3 or 4 (SIL 4 redundant configuration only)
- > Environmental protection: NEMA 4X, IP66/X8



### Technical features

#### Medium:

Hydraulic and pneumatic – customer to specify and confirm compatibility

#### Operation:

Direct solenoid operated poppet valves

#### Mounting position:

Solenoid vertical

#### Flow:

0,6 Cv (8,7 Kv)

#### Port size:

1/4 NPT, G1/4

#### Operating pressure:

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

#### Temperature:

Media:

-55 ... +69°C (-67 ... 156°F)

Ambient:

See table below

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

#### Materials:

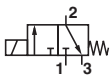
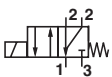
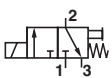
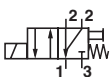
Valve body, trim, coil housing and top cover: stainless steel 1.4404 (316 L)  
O-rings seats & seals: high NBR

Other seal materials available on request

#### Additional global approvals:

FM, IN-METRO

### Technical data - standard models

Symbol	Port size	Function	Operating pressure (bar)	Manual override/reset	Conduit connection	ATEX	Temperature range Media (°C)	Ambient (°C)	Weight (kg)	Dimension No.	Model
	1/4 NPT	3/2 NC	0 ... 12	Without	M20 x 1,5	Ex II 2 GD, Ex ia IIC	-55 ... +69°C	-55 ... +69°C	2,0	1	YX13AA1H1BS
	G 1/4	3/2 NC	0 ... 12	Without	M20 x 1,5	Ex II 2 GD, Ex ia IIC	-55 ... +69°C	-55 ... +69°C	2,0	1	YX13AE1H1BS
	1/4 NPT NAMUR	3/2 NC	0 ... 12	Without	M20 x 1,5	Ex II 2 GD, Ex ia IIC	-55 ... +69°C	-55 ... +69°C	2,0	3	YX13ANA1H1BS
	G 1/4 NAMUR	3/2 NC	0 ... 12	Without	M20 x 1,5	Ex II 2 GD, Ex ia IIC	-55 ... +69°C	-55 ... +69°C	2,0	3	YX13ANE1H1BS
	1/4 NPT	3/2 NC	0 ... 12	PBMR*1)	M20 x 1,5	Ex II 2 GD, Ex ia IIC	-55 ... +69°C	-55 ... +69°C	2,5	2	YX13PA1H1BS
	G 1/4	3/2 NC	0 ... 12	PBMR*1)	M20 x 1,5	Ex II 2 GD, Ex ia IIC	-55 ... +69°C	-55 ... +69°C	2,5	2	YX13PE1H1BS
	1/4 NPT NAMUR	3/2 NC	0 ... 12	PBMR*1)	M20 x 1,5	Ex II 2 GD, Ex ia IIC	-55 ... +69°C	-55 ... +69°C	2,5	4	YX13PNA1H1BS
	G 1/4 NAMUR	3/2 NC	0 ... 12	PBMR*1)	M20 x 1,5	Ex II 2 GD, Ex ia IIC	-55 ... +69°C	-55 ... +69°C	2,5	4	YX13PNE1H1BS

\*1) PBMR = Push button manual reset

### Technical data – solenoid operators

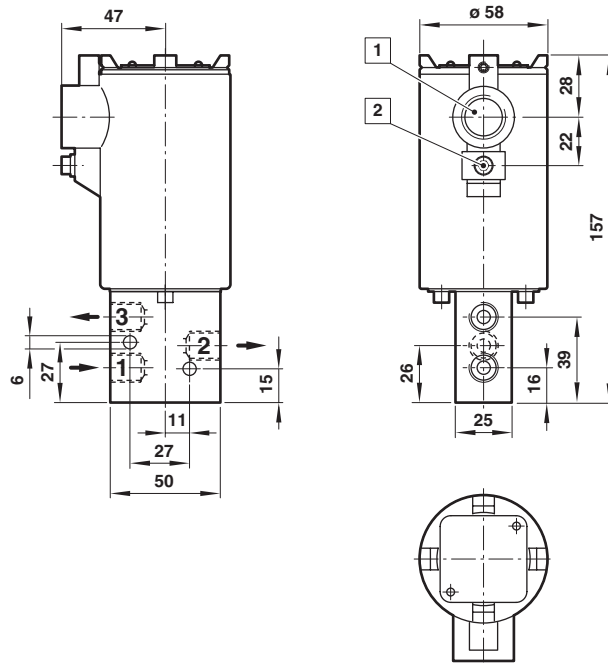
<b>Nominal voltages</b>	12 V d.c. via an energy limiting barrier	<b>Power consumption</b>	0,43 watts typical
<b>Pull-in voltage</b>	≥ 87,5% of nominal	<b>Voltage protection</b>	Surge suppression diodes fitted as standard
<b>Response times</b>	Pull-in 3 ... 4 seconds, drop out < 60 ms	<b>Coil encapsulation</b>	Class H
<b>Drop-out voltage</b>	10 ... 20% of nominal	<b>Leak performance</b>	Bubble tight at 50°C < 30 cc/m at -55°C
<b>Coil rating</b>	293 ohms	<b>Coil duty cycle</b>	100%

Dimensions

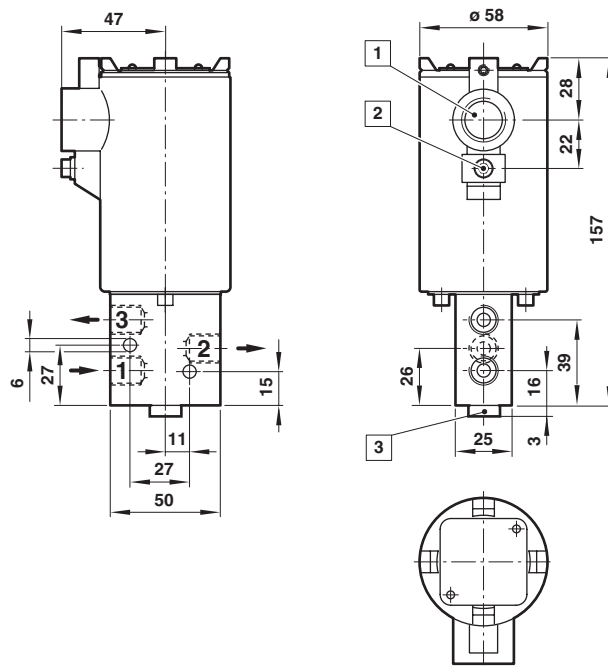
Dimensions in mm  
Projection/First angle



1

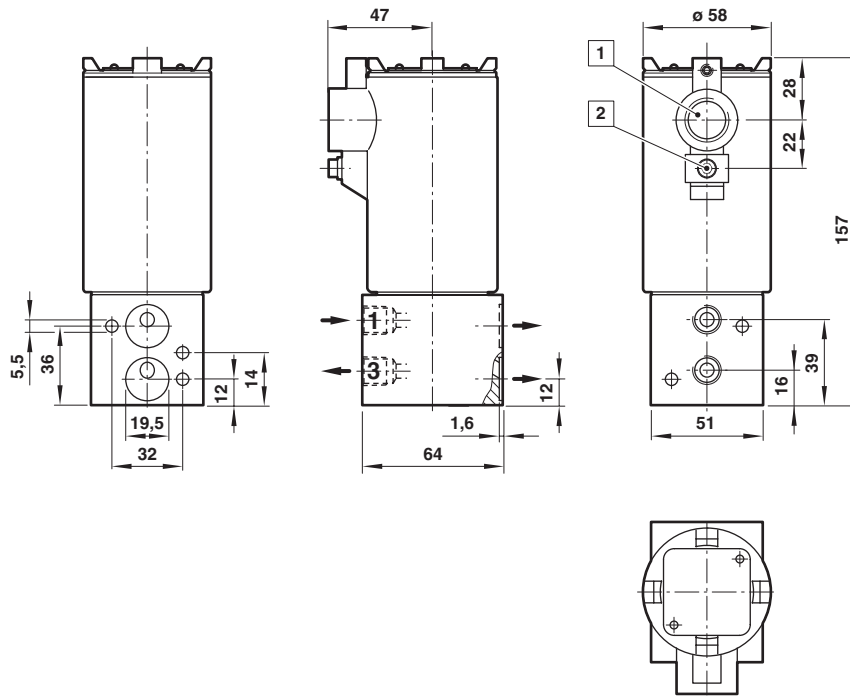
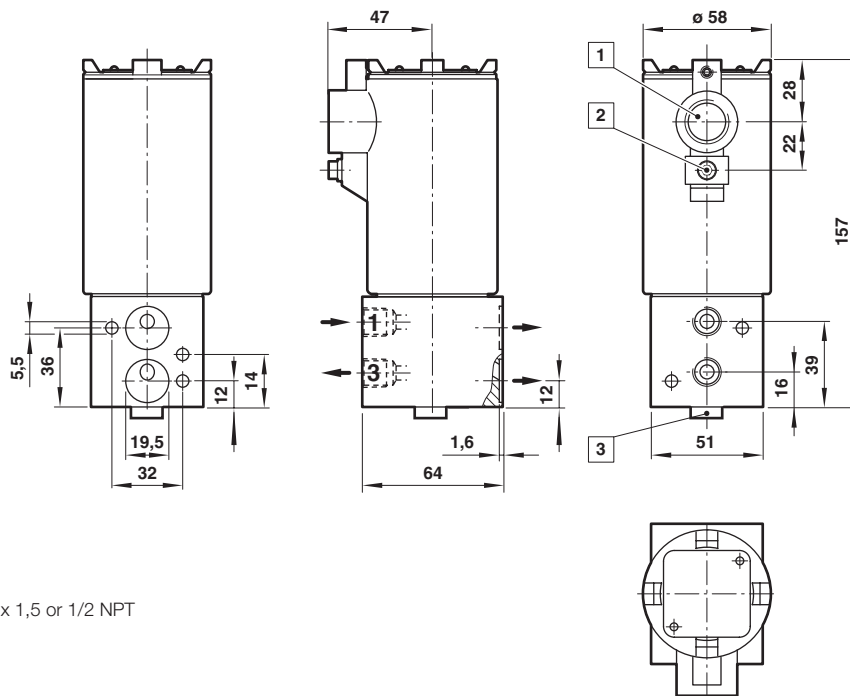


2



- 1 Conduit connection M20 x 1,5 or 1/2 NPT
- 2 External earth
- 3 Manual reset

**3**

 Dimensions in mm  
 Projection/First angle

**4**


- 1 Conduit connection M20 x 1,5 or 1/2 NPT
- 2 External earth
- 3 Manual reset

### 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 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 Precision Engineering, Thompson Valves Ltd.

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.