



10 mm

Pilot Valve

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The 10 mm pilot valve has been designed and developed by Amisco as a further evolution of the traditional product range manufactured for the pneumatic automation market.

The 10mm solenoid valve is designed for those applications, where high performances in terms of pressure and flow are specified, together with very low power consumption and miniaturized dimension.

High reliability even at high cycling rates is granted in any case.

This system is designed for use with air. The solenoid valve is composed by an encapsulated coil joined to a plastic valve body made by PBT. The assembly is not detachable.



All the 10 mm pilot valves feature:

- **heat resistant bobbin moulded with 30% glass filled polyethylene terephthalate (PET)**
- **class H 180°C copper wire according to IEC 60317-51**
- **encapsulation with high quality specially designed glass filled polypropylene homopolymer**
- **plunger and core made by a magnetic stainless steel specially designed for solenoid applications.**

The pilot assembly is designed for more than 50 million cycles.

The valve is normally equipped with HNBR seals and monostable manual override.

The coil is designed and manufactured according to EN 60204.1 and VDE 0580 and it's suitable for industrial ambient conditions.

The pilot is designed only for low voltage DC applications.

Copper and plastic material used are UL-Listed.

The pneumatic connections are located in the valve body.

The Amisco 10 mm pilot valve is suitable for the use of subbases or the assembly in batteries, for common pressure and exhaust location.

More technical specifications are reported in the following pages.

Pilot valve can be supplied and marked EAC for use in Russian Market.

More details about EAC certification can be given on customer request.

TECHNICAL DATA

Pilot Valve technical data

Valve function	3/2 NC
Media	air following ISO 8573-1 class 3-4-3
Lubrication	not necessary
Temperature	ambient -5°C to + 50°C fluid -5°C to + 50°C
Orifice size	0,8 mm
Pressure	0 ÷ 8 bar
Flow rate @ 6 bar and $\Delta p = 1$ bar	13NL/min (port1 to port2)
Kv flow factor	0,20
Response time	10 ms
Max cycling time	2400 cpm
Life time expectancy	50 million cycles
Manual override	monostable
Assembly	in any position
Fixing	n°2 screws M1,6 x 14 Torque = 0.20 ÷ 0.25 Nm

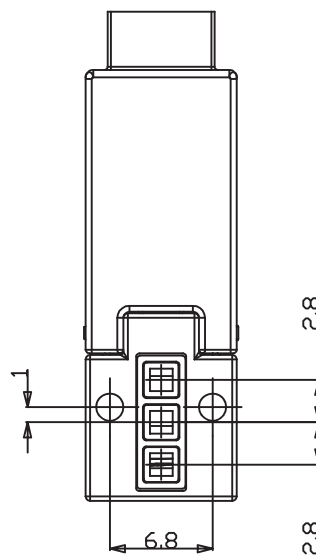
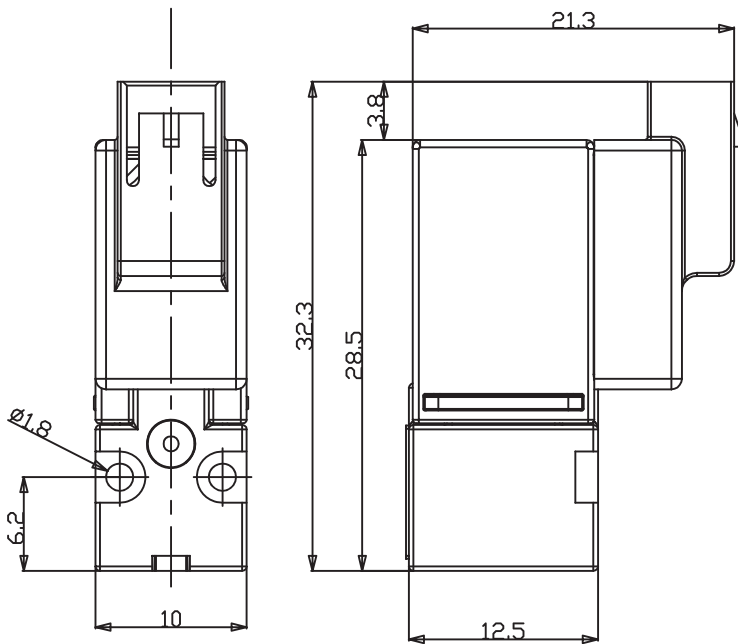
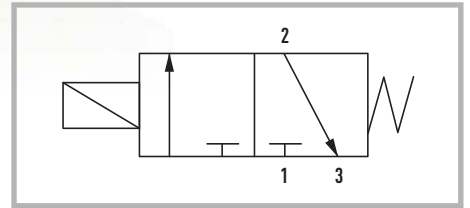
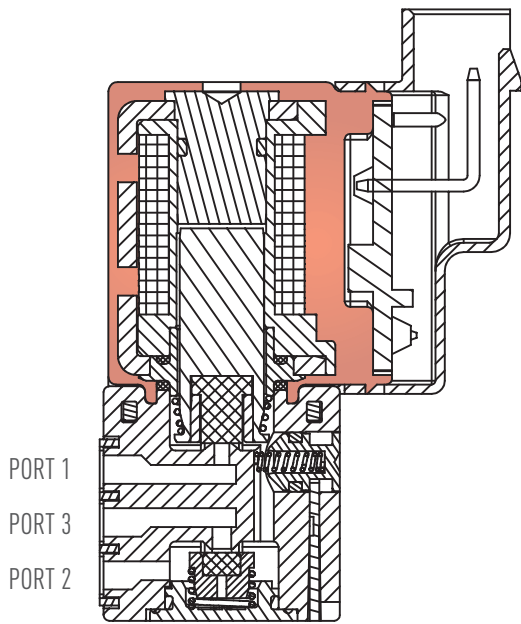
Coil technical data

Duty Cycle	ED 100%
Power	1W
Voltage	12-24V DC (other voltages on request)
Voltage variation	± 10%
Insulation Class	F
Degrees of protection	IP 40 (according to EN 60529)
Electrical connection	connector
Coil construction	according to EN 60204.1 and VDE 0580

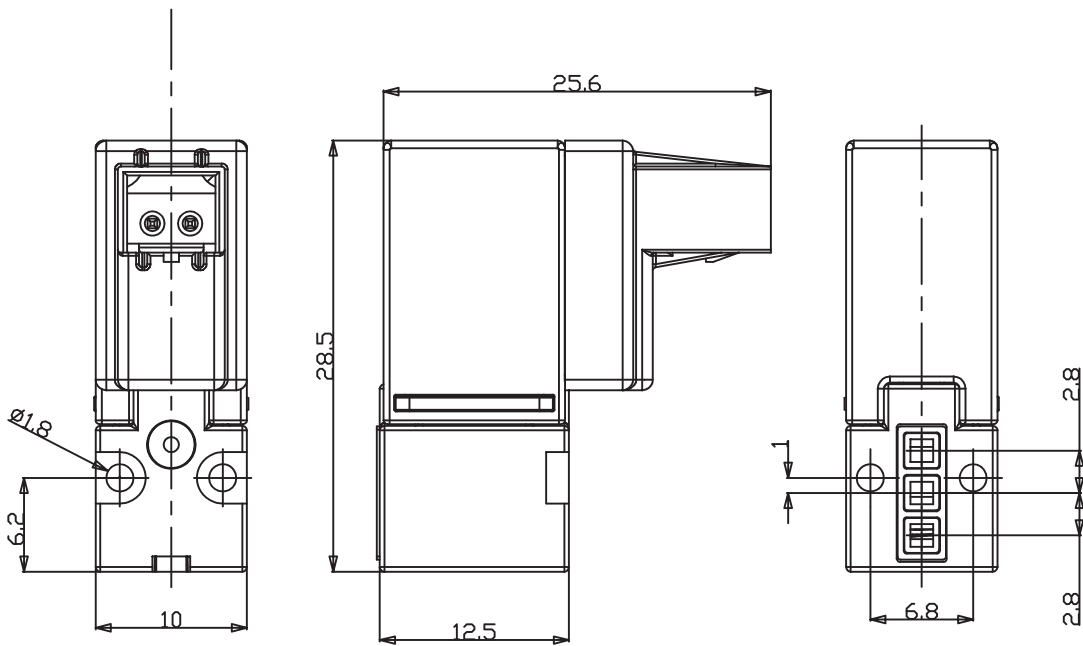
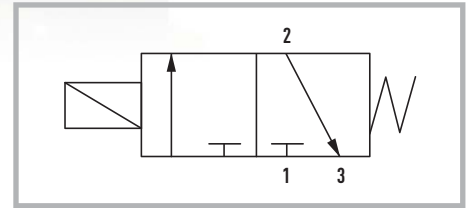
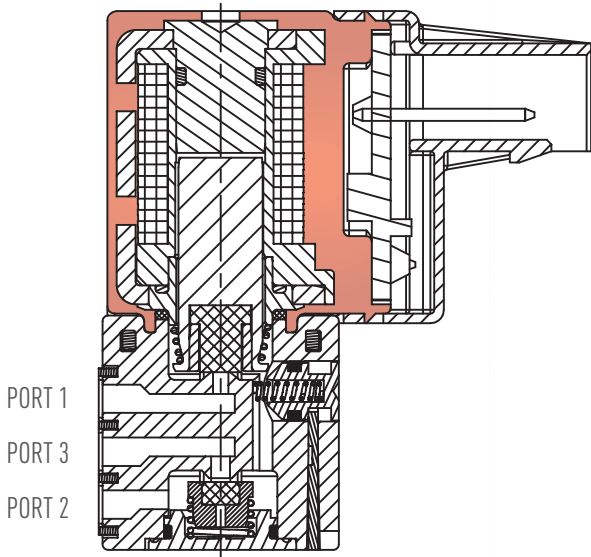
Materials

Valve body	PBT (Polybutylene terephthalate)
Seals	HNBR (other materials on request)
Cores	stainless steel
Springs	stainless steel
Coil	PET (polyethylene terephthalate)
Copper wire	class H 180°C IEC 60317-51

10 mm PILOT VALVE axial connection

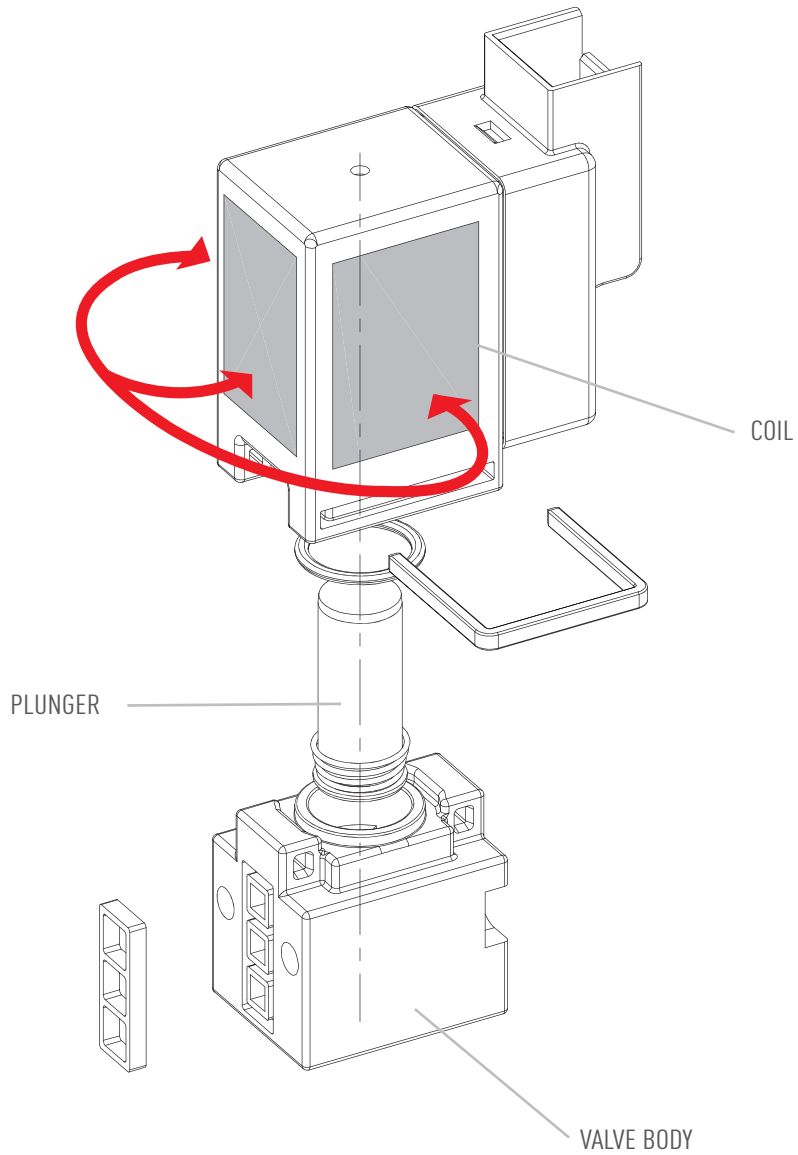


10 mm PILOT VALVE perpendicular connection

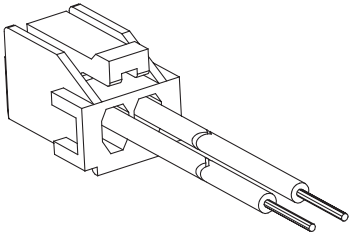
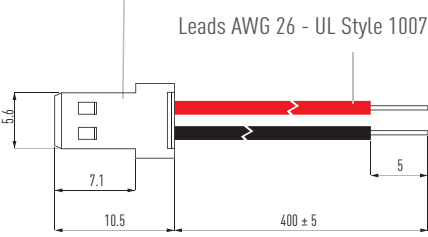


MARKING

Alternative possibilities for
CUSTOMER LOGO



ASSEMBLING EQUIPMENTS - to be ordered separately

electrical connector	P/N 540471	
	<p>Molex Connector 35155-0200</p> <p>Leads AWG 26 - UL Style 1007 - 1569</p> 	

10 mm PILOT VALVE CODING SPECIFICATIONS

PART NUMBER: 1 0 Z P A A K B Y W C * *

ELECTRICAL CONNECTION

P = Perpendicular
A = Axial

PACKAGING

1 = Plastic tray
2 = Single plastic bag

NOMINAL VOLTAGE

C1 = 12VDC
C2 = 24VDC
Other voltages available on demand

WINDING CONFIGURATION

B = 1.0 W
Other winding configurations available on demand

ASSEMBLING COIL-VALVE

1 = pneumatic and electrical ports on the opposite side

VALVE TYPES

B = 3/2 NC \varnothing 0.8/1 mm

SEAL MATERIALS

H = HNBR


MANUAL OVERRIDE

M = monostable (no lock) brass


MARKING

AM = Amisco logo and technical specifications
XX = according to customer demand
ZN = no marking

Certifications



UE DECLARATION OF CONFORMITY



We declare under our sole responsibility that the product:

Electrovalve: 10mm

Nominal voltage: up to 24V
 Nominal Power: up to 1W [DC]
 Ambient temperature: -5 ÷ +50 °C
 Tolerance range on nominal values: ±10 %


Type of connection and other information are available on AMISCO catalogue or on request.

Is in conformity with the following directives:

- **2014/30/UE EMC**
- **2014/35/UE LV**
- **2011/65/UE RoHS**

with reference (if applicable) to the following harmonized standards:

• EN 12100 [2010]	• EN 60664/1 [2007]
• EN 60204/1 [2006]	• VDE 0580 [2011]
• EN 61000 – 6.2 [2006]	• EN 61000 - 4-5 [2014]
• EN 61000 – 6.4 [2006]	



Filippo Rotondo
Amisco Technical Division Manager

Paderno Dugnano, 20 April 2016

The data supplied in AMISCO Catalogues are to be consulted, and pertinent accident prevention regulations are to be followed during product installation and use. Any unauthorized work performed by purchaser or by third parties can impair its functions, and relieves AMISCO of all warranty claims and liability for any resulting damage.

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This Certificate does not replace the original EAC Document





CERTIFICATE

In accordance with
SERCONS INTERNATIONAL
Russian Certification Authority in Europe

the company:
AMISCO S.p.A.
Via Piaggio 70,
Paderno Dugnano (MI), 20037
ITALY

fulfills the necessary requirements to be certified according to EAC regulations.

Valid until: 22.05.2023



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