



10 mm

Pilot Valve

10 mm

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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 60335 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	15 ms
Max cycling time	2400 cpm
Life time expectancy	50 million cycles
Manual override	monostable - no override
Assembly	in any position
Fixing	n°2 screws M1,6 x 14 Torque = 0.20 ÷ 0.25 Nm

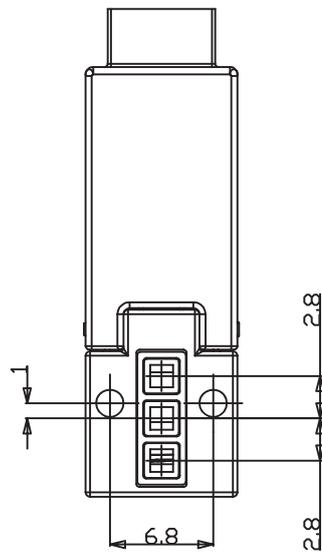
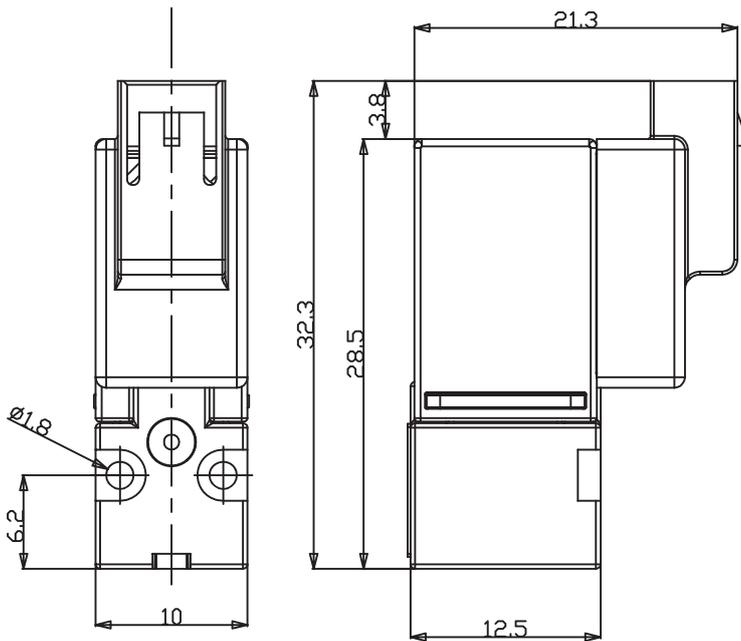
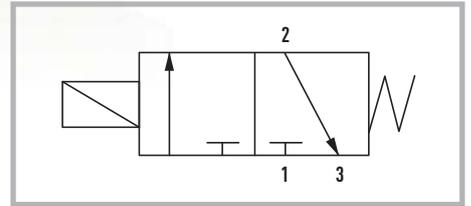
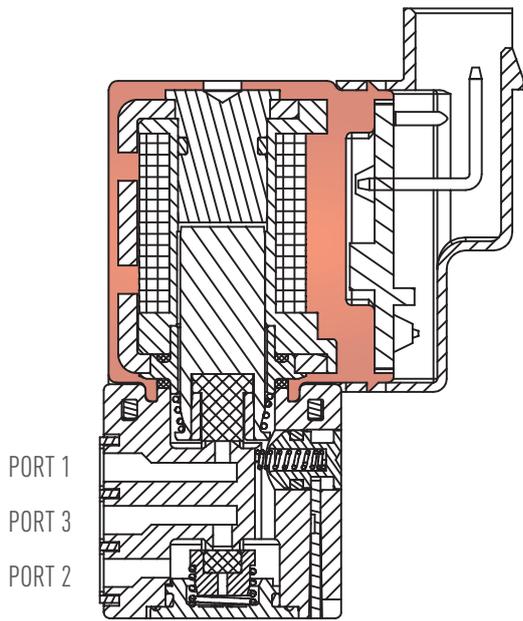
Coil technical data

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

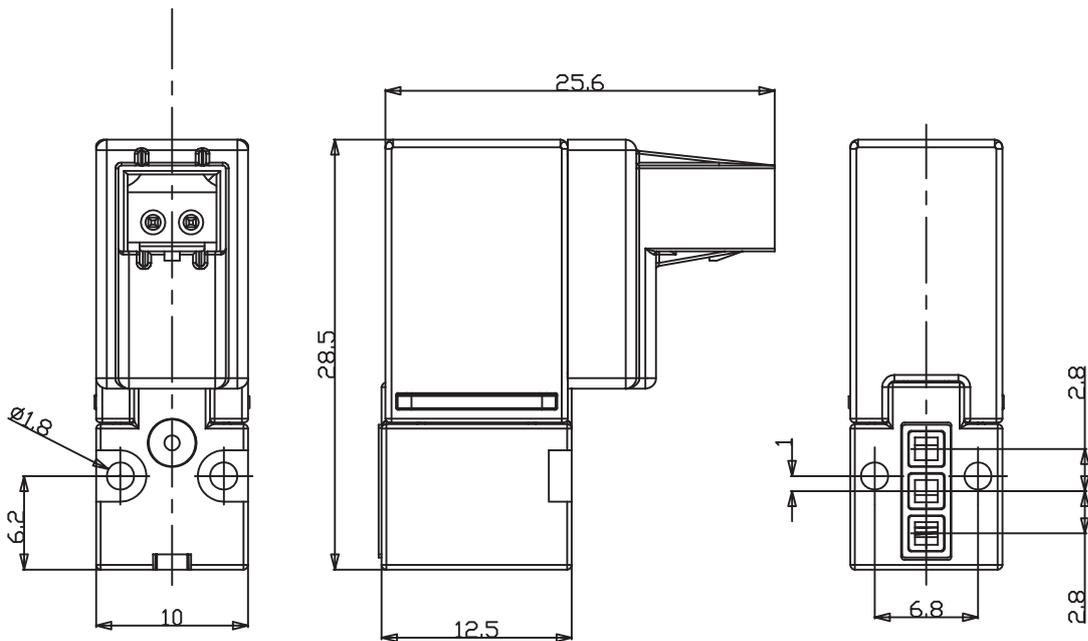
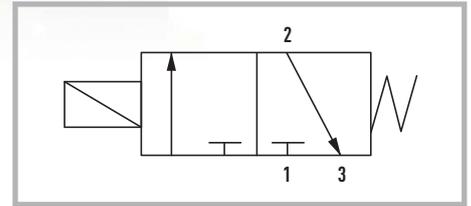
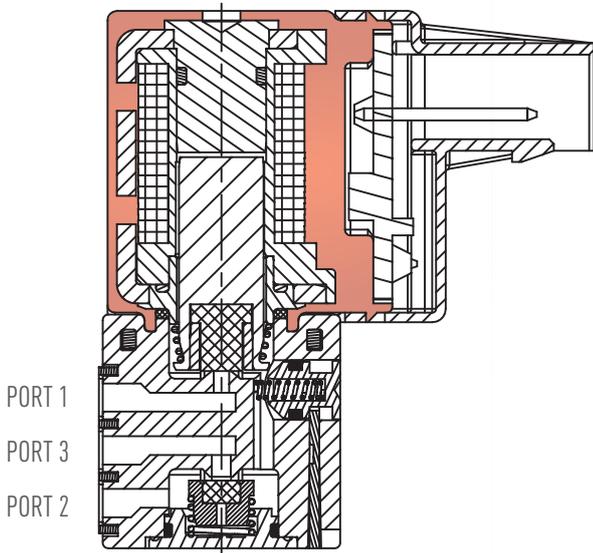
Materials

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

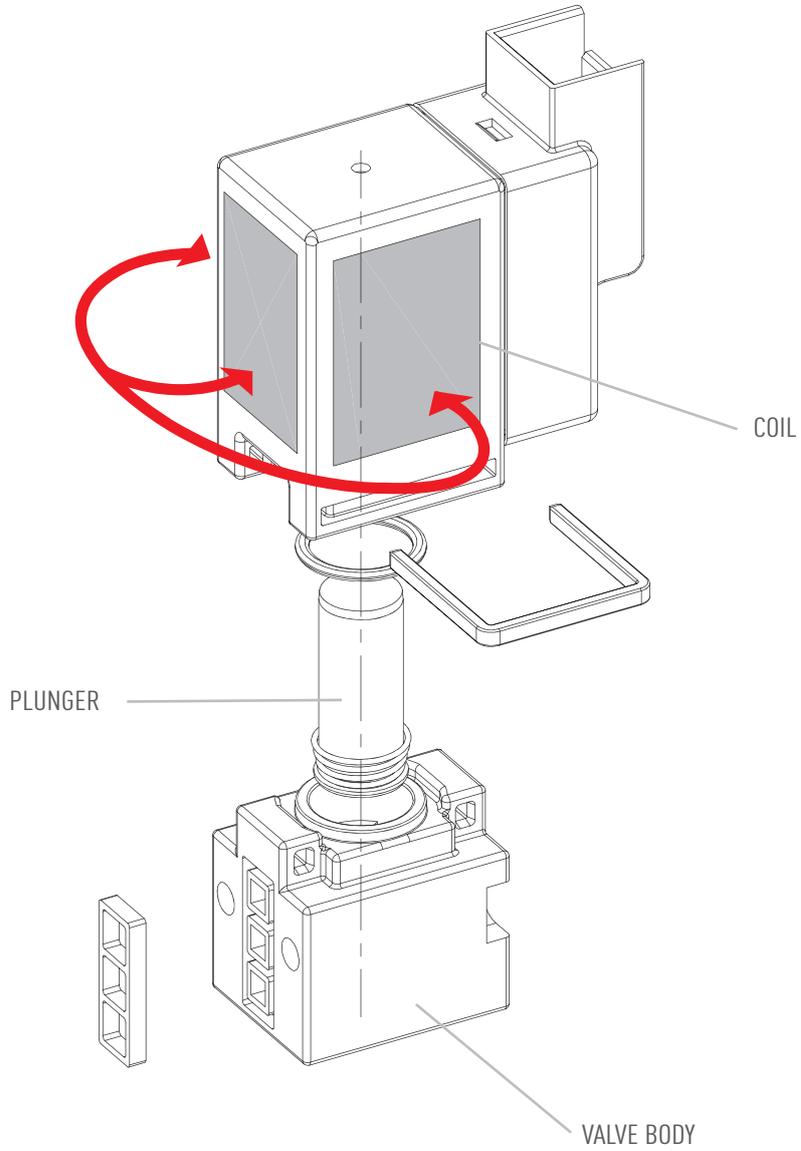


10 mm PILOT VALVE perpendicular connection

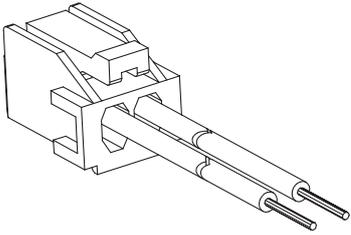
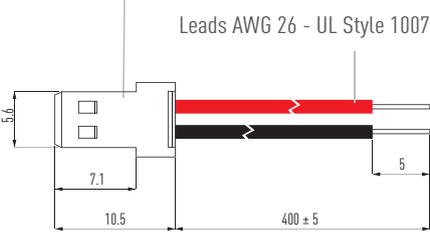


MARKING

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

0 = NO manual override
M = monostable (no lock) brass

MARKING

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

Certifications



EU DECLARATION OF CONFORMITY



We declare under our sole responsibility that the electric coils and pilot valves families named:

- EVI 3
- EVI 5
- EVI 7
- EVI 9
- EVI 30
- 10 mm
- 15 mm

Marked with Amisco logo and CE marking are in conformity with the following directives:

2011/65/EU (and it's amendment 2015/EU/863)
on the restriction of the use of certain hazardous substances in electrical and electronic equipment

2014/35/EU
on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits

For the evaluation of the conformity, the following standards, or part of them, has been consulted:

EN 60335/1: 2020 - Household and similar electrical appliances - Safety - Part 1: General requirements
DIN VDE 0580: 2011 - Electromagnetic devices and components

Filippo Rotondo
Amisco Technical Division Director



April 07, 2022

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UKCA Declaration of Conformity



We declare under our sole responsibility that the electric coils and pilot valves families named:

- EVI 3
- EVI 5
- EVI 7
- EVI 9
- EVI 30
- 10 mm
- 15 mm

Marked with Amisco logo and UKCA marking are in conformity with to the following directives:

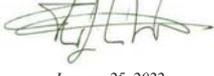
SI 2012/3032
The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

SI 2016/1101
Electrical Equipment (Safety) Regulations 2016

For the evaluation of the conformity, the following standards, or part of them, has been consulted:

EN 60335/1: 2020 - Household and similar electrical appliances - Safety - Part 1: General requirements
DIN VDE 0580: 2011 - Electromagnetic devices and components

Filippo Rotondo
Amisco Technical Division Director



January 25, 2022

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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



SERCONS INTERNATIONAL — Certification Authority
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Certificate of Compliance

Certificate Number 20101224-E343908
Report Reference E343908, 2010 December 23
Issue Date 2010 December 24

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Issued to: **AMISCO SPA**
VIA PIAGGIO 70
20037 PADERNO DUGNANO MI ITALY

This is to certify that representative samples of **SYSTEMS, ELECTRICAL INSULATION**
Class 155(F) insulation system, designated AMIF.

Have been investigated by Underwriters Laboratories Inc.® (UL) or any authorized licensee of UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 1446, STANDARD FOR SYSTEMS OF INSULATING MATERIALS - GENERAL, Edition 6

Additional Information: See UL On-Line Certification Directory at www.UL.com for additional information.

Only those products bearing the UL Recognized Component Mark should be considered as being covered by UL's Recognition and Follow-Up Service.
The UL Recognized Component Mark generally consists of the manufacturer's identification and catalog number, model number or other product designation as specified under "Marking" for the particular Recognition as published in the appropriate UL Directory. As a supplementary means of identifying products that have been produced under UL's Component Recognition Program, UL's Recognized Component Mark: , may be used in conjunction with the required Recognized Marks. The Recognized Component Mark is required when specified in the UL Directory preceding the recognitions or under "Markings" for the individual recognitions.

Look for the UL Recognized Component Mark on the product

William R. Carney
Director, North American Certification Programs
Underwriters Laboratories Inc.



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