EVI 7 S9

22 mm 30 mm

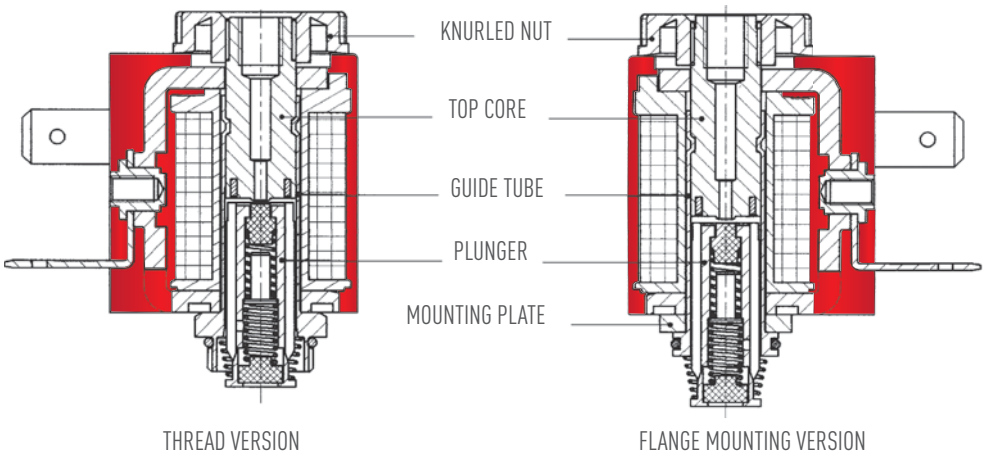
Ø9 Solenoid System

AMISCO

EVI 7 S9 Solenoid System

The EVI7 S9 system by AMISCO includes a wide range of solenoids, coils and operators, designed for pneumatic valves. All solenoids of this system have the guide tube with a diameter of 9 mm and the plunger with a diameter of 8 mm.
The system is designed for use with air.

Please contact Amisco for use with other media. All given information are subjected to changes without notice.



THREAD VERSION FLANGE MOUNTING VERSION

COIL

The coil is available in different sizes and with different electrical terminations. Types, power and other characteristics are described in the following pages. All coils feature:

- **heat resistant bobbin moulded with 30% glass filled thermoplastic polyester material**
- **class H wire 200°C according to IEC 60317-13**
- **built-in magnetic yoke made by low carbon iron**
- **encapsulation with high quality specially designed glass filled nylon (thermoset material on demand for 22 mm coil).**

The use of other materials is possible upon special agreements. All coils are rated to class F and to IP 65 (with connector). The coil is designed and constructed in accordance to EN 60204.1 and VDE 0580 and it is suitable for industrial ambient conditions. For use in special ambients with high humidity, we suggest the sealed or thermoset version; at any case, please, take contact with Amisco.

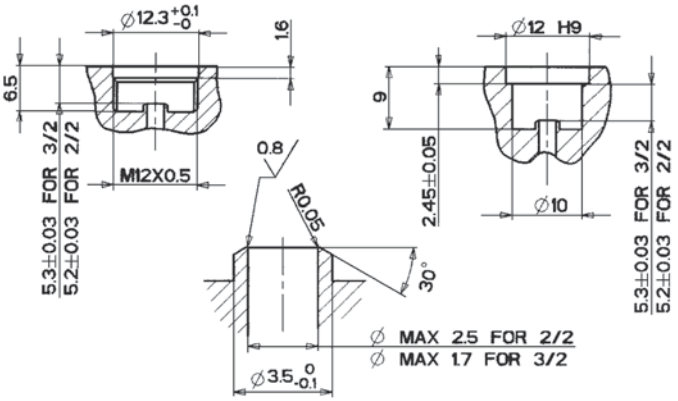
The coil is also in conformity with 94/9/EC ATEX for electrical apparatus of group II, category 3 (Ex nA II 3 GD T4 or T5).
GAS: Ex nA IIC Tx Gc
DUST: Ex tc IIIC Tx Dc
For further information about Atex versions, see the "ATEX Products" catalogue.

OPERATOR

Plunger and core are made by a magnetic stainless steel specially designed for solenoid applications.
The guide tube is made with brass (stainless steel is possible upon special agreement).
The plunger is normally equipped with NBR rubber seals. Other sealing materials like FKM are available upon demand.
The armature assembly is designed for more than $50x10^6$ cycles.

COMPLETE SOLENOID OPERATOR

The coil is fastened to the plungerguide tube by means of a knurled nut for ease of change over without interrupting the pneumatic circuit.
The operator can be fixed to the valve body either by a M12x0.5 thread (thread version), or by a mounting plate with screws (flange version). Amisco doesn't supply the plate.
The suggested interface dimensions of the valve body are shown on the right side.
Any change to the prescribed dimensions can affect the performances of the solenoid.



SOLENOID SYSTEM

for 2/2 and 3/2 way Normally Closed and Normally Open valves

Coil EVI 7/9

Electrical terminations	Code
Terminals AMP 6.3x0.8 width 11 mm	0709S...
Terminals AMP 6.3x0.8 width 11 mm Sealed version	0709G...
Terminals AMP 6.3x0.8 width 11 mm Sealed version - EPOXY	0709E...
Terminals AMP 6.3x0.8 width 11 mm Sealed version - UL	0709F...
Terminals DIN 43650 B Sealed version	0709D...
Flying leads	0709C...

Characteristics		DC			AC (50 Hz)		AC (60 Hz)	
Rated power DC	**W**	3	4,2	6,5				
Inrush power AC	**VA**				7,5	12,5	6,5	10,5
Rated power AC	**VA**				5	8,5	4,2	7
Coil temperature rise	**°C**	35	45	70	45	85	35	70
Copper temperature rise	**°C**	40	50	80	55	95	45	80

Coil EVI 30/9

Electrical terminations	Code
Terminals DIN 43650 A	3009D...
Flying leads	3009C...

Characteristics		DC			AC (50 Hz)		AC (60 Hz)	
Rated power DC	**W**	2		4,5				
Inrush power AC	**VA**				5,5	9	4,5	7,5
Rated power AC	**VA**				3	5	2,5	4,2
Coil temperature rise	**°C**	20		35	20	35	15	30
Copper temperature rise	**°C**	25		50	25	45	20	35

Operator S9

	Code
3/2 way NC Flange	09L...
3/2 way NC Thread	09F...
2/2 way NC Flange	09L...
2/2 way NC Thread	09F...
3/2 way NO Flange (Top inlet)	09L...
3/2 way NO Thread (Top inlet)	09F...
3/2 way NO Thread (Bottom inlet)	09F...

Characteristics								
Inlet orifice Ø	**mm**	1,2	1,4	1,5	1,2	1,5	1,2	1,5
Exhaust orifice Ø	**mm**	1,45	1,45	1,45	1,45	1,45	1,45	1,45
Working pressure	**bar**	0÷10	0÷10	0÷10	0÷10	0÷10	0÷10	0÷10
Inlet orifice Ø	**mm**	1,2	1,4	1,5	1,2	1,5	1,2	1,5
Working pressure	**bar**	0÷10	0÷10	0÷10	0÷10	0÷10	0÷10	0÷10
Inlet orifice Ø	**mm**	1,45	1,45	1,45	1,45	1,45	1,45	1,45
Working pressure	**bar**	0÷7	0÷7	0÷10	0÷7	0÷10	0÷7	0÷10
Inlet orifice Ø	**mm**	1,2			1,2		1,2	
Working pressure	**bar**	0÷10			0÷10		0÷10	

Operator S9 - Large Orifice

Amisco can also offers a special S9 operator for applications where high flow rates are requested (Inlet orifice ≤ Ø6mm).
For more information about this application, please take contact with our Technical Department.

Note:

Voltage tolerance:	± 10%
Temperature range:	–20°C ÷ +50°C
Duty cycle:	100%

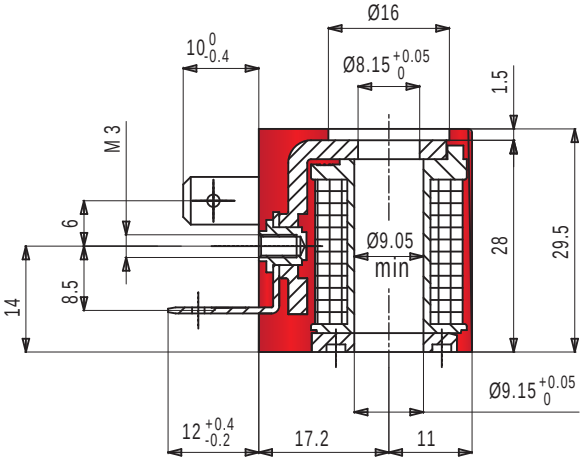
Standard voltages:	24 - 110 - 115 - 220 - 230 VAC
	12 - 24 VDC
Other voltages on request	

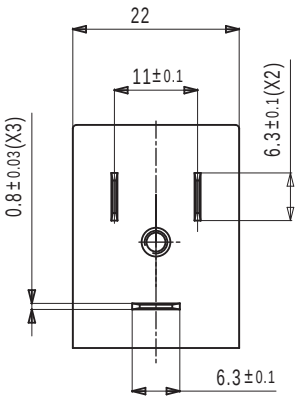
For different orifice sizes and pressures contact AMISCO S.p.A.

EVI 7/9 AMP 6,3x0,8

CODE 0709S...

(M3 Max Torque 0.6Nm)

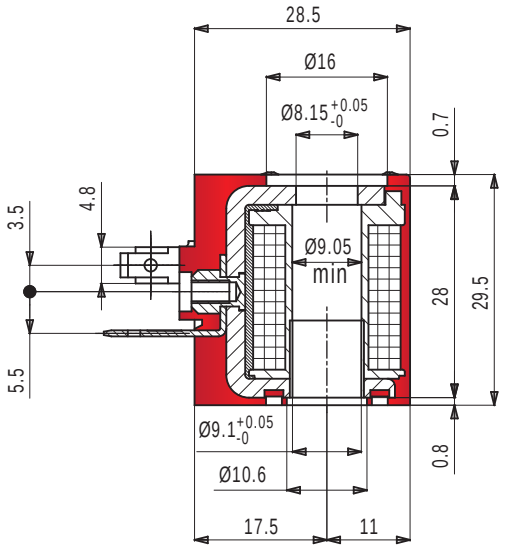


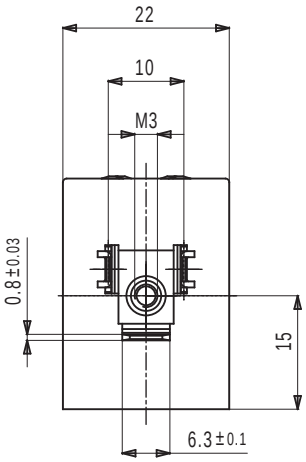


EVI 7/9 DIN 43650-B

CODE 0709D...

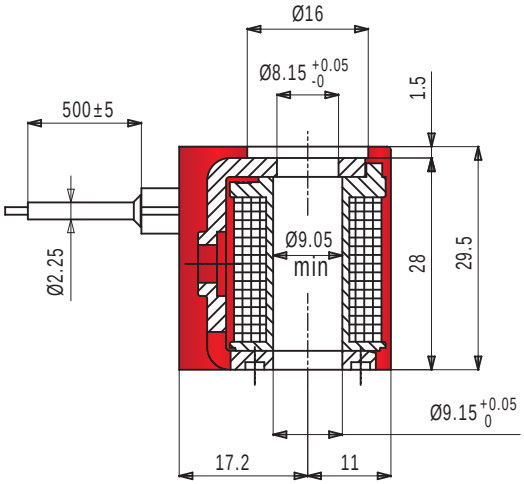
(M3 Max Torque 0.6Nm)

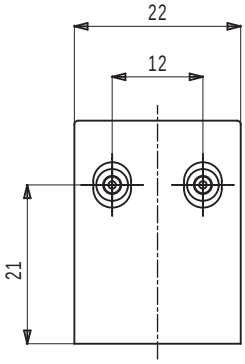




EVI 7/9 Flying Leads

CODE 0709C...

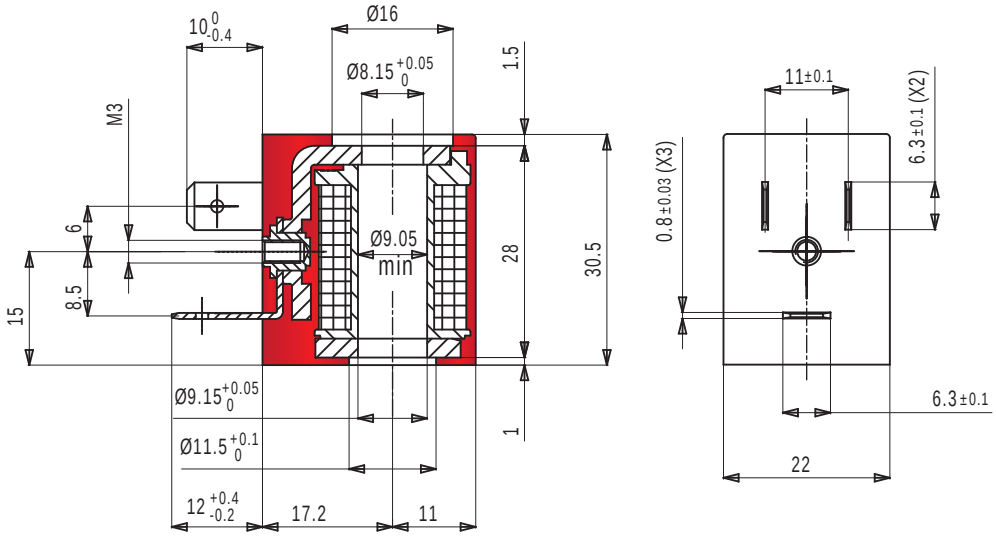




EVI 7/9 AMP 6,3x0,8 Sealed Version

CODE 0709G...

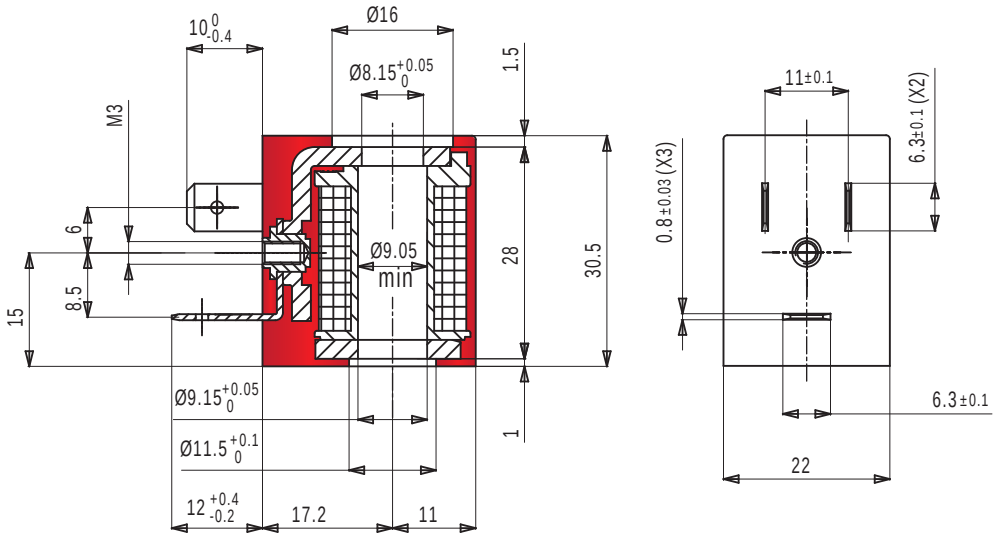
(M3 Max Torque 0.6Nm)



EVI 7/9 AMP 6,3x0,8 Epoxy Version

CODE 0709E...

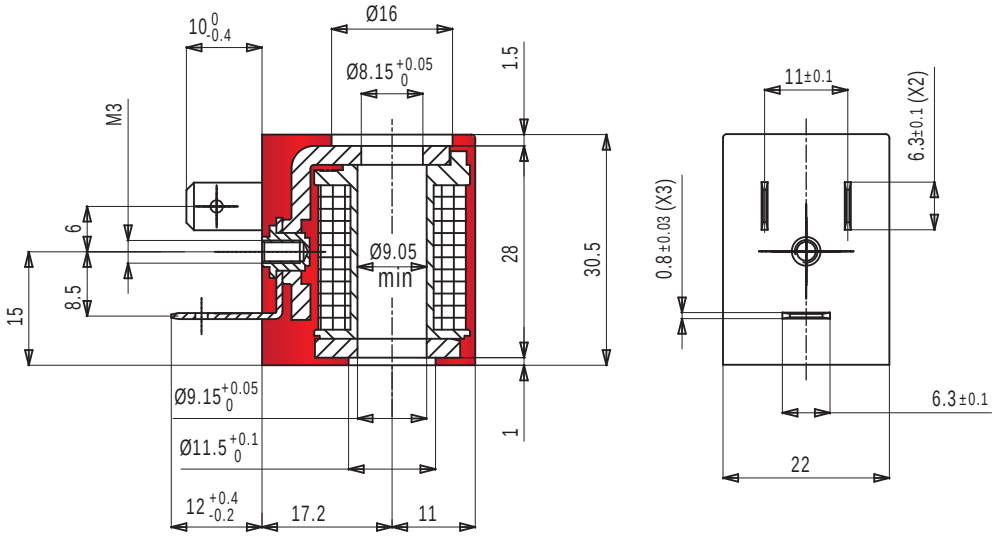
(M3 Max Torque 0.6Nm)



EVI 7/9 AMP 6,3x0,8 UL Version

CODE 0709F...

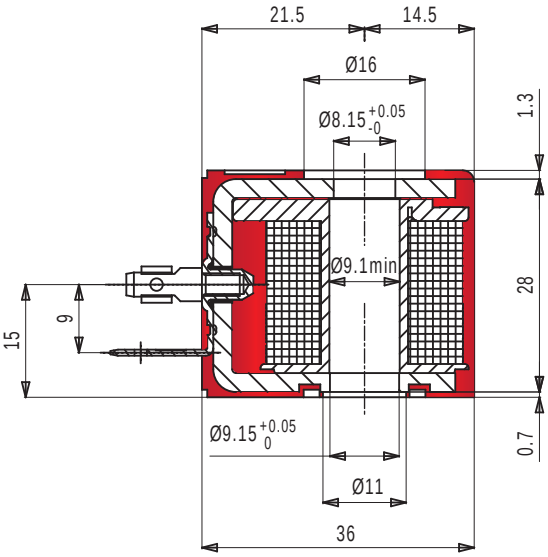
(M3 Max Torque 0.6Nm)

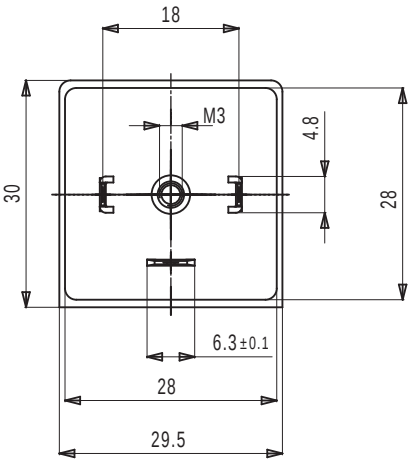


EVI 30/9 DIN 43650 A

CODE 3009D...

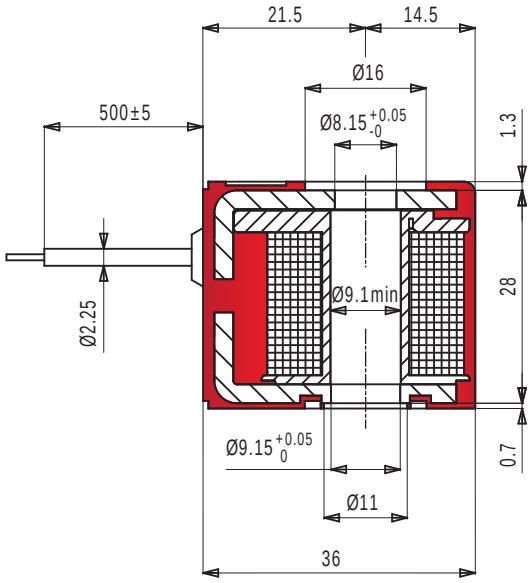
(M3 Max Torque 0.6Nm)

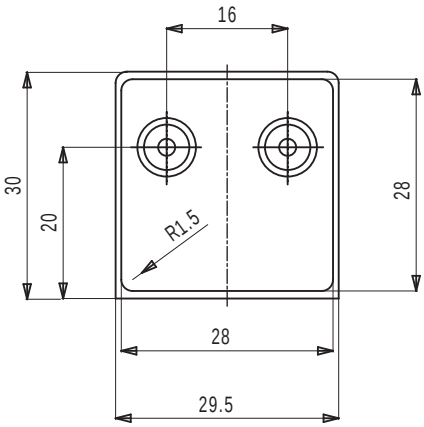




EVI 30/9 Flying Leads

CODE 3009C...





COIL CODING SPECIFICATIONS

CODE:	X	X	9	9	Y	K	5	5	5	4	4	*	*

TYPE
07 = EVI 7
30 = EVI 30

COIL BORING
09 = 9 mm

ELECTRICAL CONNECTION

for EVI 7	for EVI 30
C = Flying Leads	D = DIN 43650 A
D = DIN 43650 B	C = Flying Leads

E = AMP 6.3x0.8mm Epoxy Sealed Version
F = AMP 6.3x0.8mm UL Version
G = AMP 6.3x0.8mm Sealed Version
S = AMP 6.3x0.8mm

SUPPLY CURRENT
A = Alternating current (A.C.)
D = Direct current (D.C.)
R = Rectified alternating current (R.A.C.)

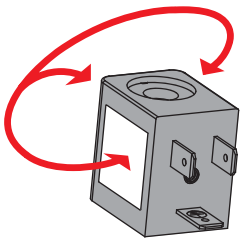
NOMINAL VOLTAGE
Example: 024 = 24V
220 = 220 V

EVI 7 S9 WINDING CODE

Nominal Voltage	Power	Winding Code
12VDC	3W	03
	4,2W	06
	6,5W	04
24VDC	3W	03
	4,2W	06
	6,5W	04
24VAC	5VA	01
	8,5VA	02
110VAC	5VA	01
	8,5VA	02
230VAC	5VA	03
	8,5VA	01

EVI 30 S9 WINDING CODE

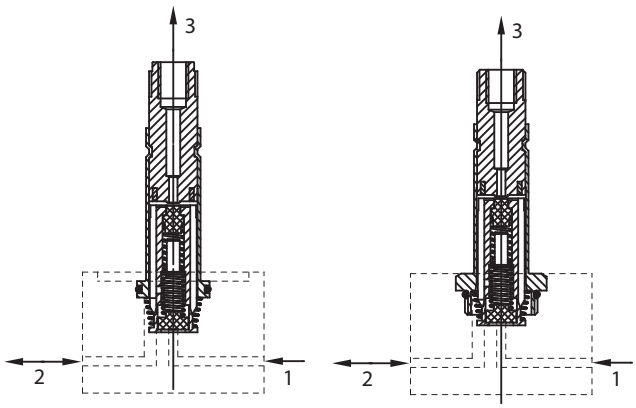
Nominal Voltage	Power	Winding Code
12VDC	2W	01
	4,5W	05
24VDC	2W	01
	4,5W	06
24VAC	3VA	08
	5VA	02
110VAC	3VA	07
	5VA	02
230VAC	3VA	04
	5VA	01



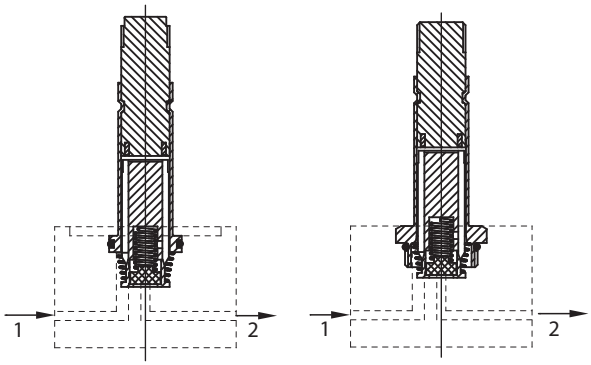
Alternative possibilities for
CUSTOMER LOGO

MARKING
ZN = Standard - no logo
AM = Standard + Amisco logo
... = Customized marking

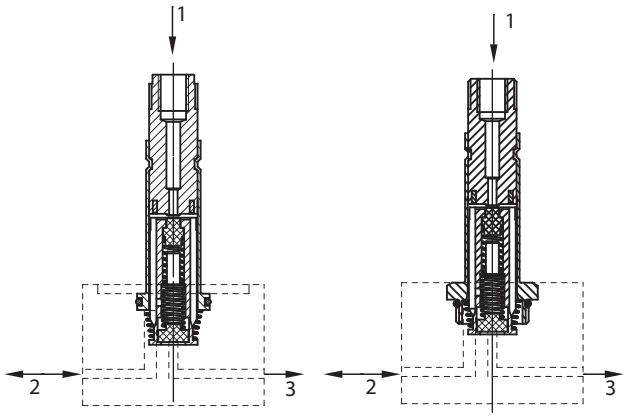
EXAMPLES OF STANDARD APPLICATIONS



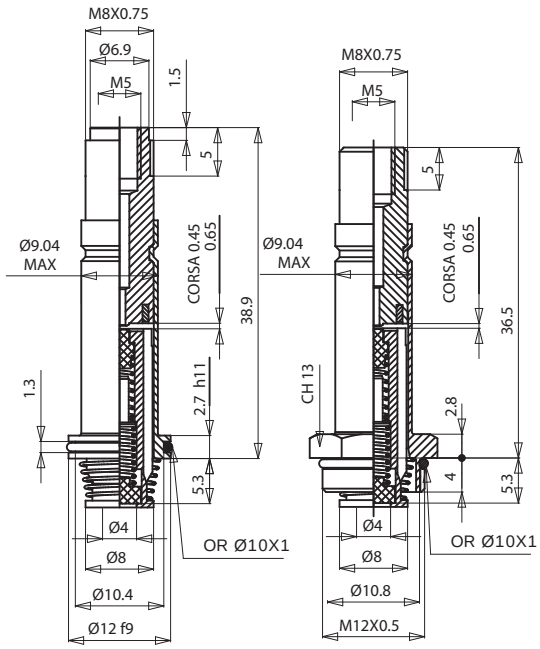
3/2 NC



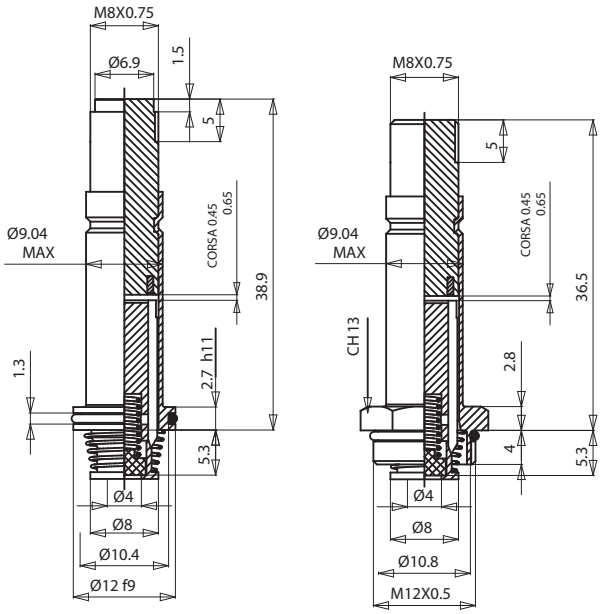
2/2 NC



3/2 NO (Top inlet)

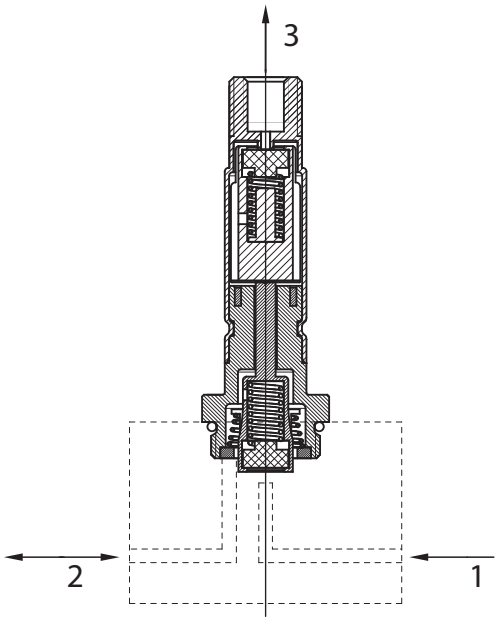


3/2 NC & 3/2 NO (Top Inlet) OPERATOR

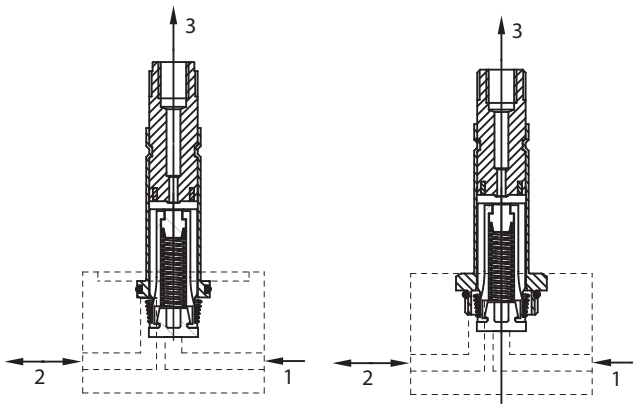


2/2 NC OPERATOR

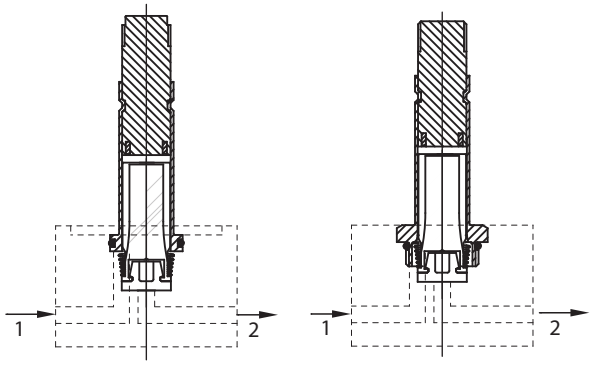
EXAMPLES OF SPECIAL APPLICATIONS



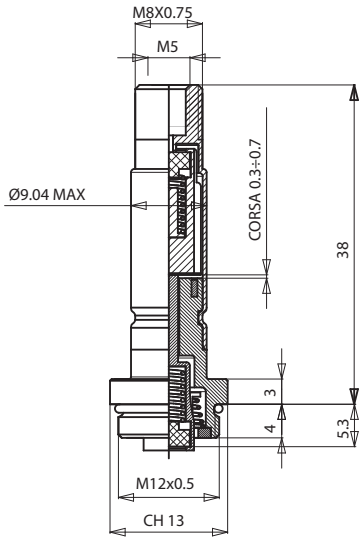
3/2 NO (Bottom inlet)



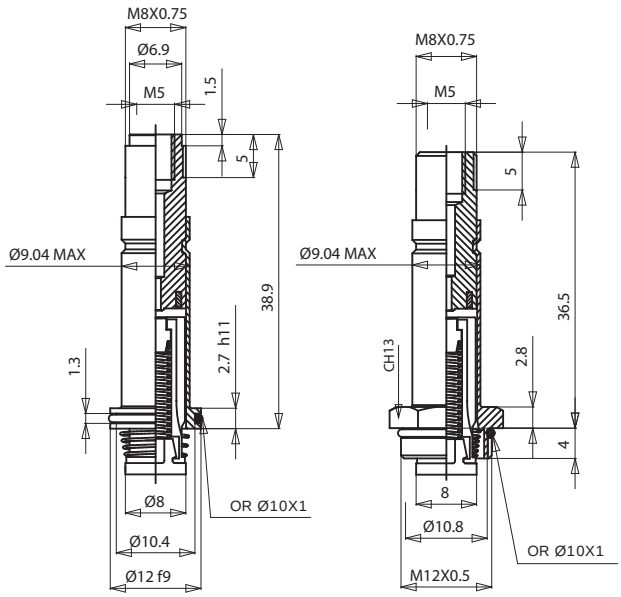
3/2 NC Large Orifice



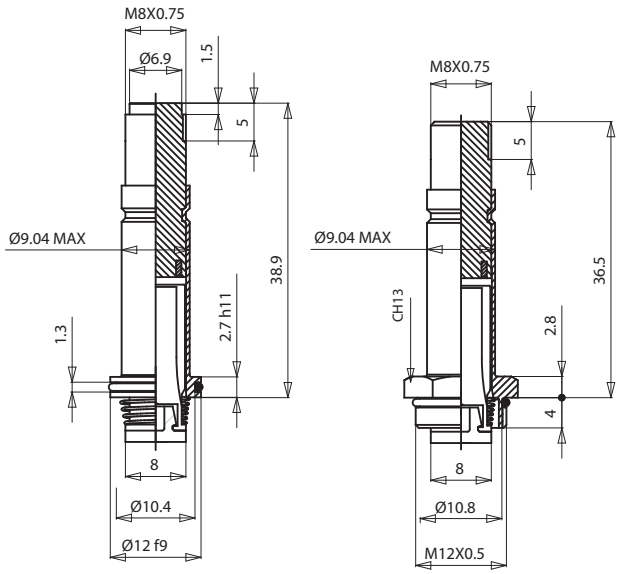
2/2 NC Large Orifice



3/2 NO (Bottom inlet) OPERATOR



3/2 NC Large Orifice Operator



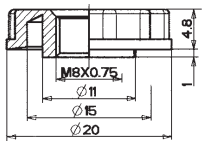
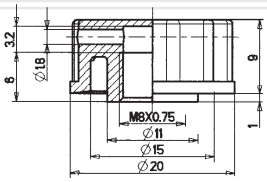
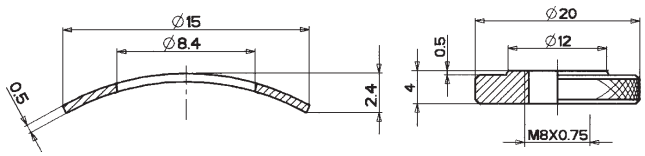
2/2 NC Large Orifice Operator

OPERATOR CODING SPECIFICATIONS

Type	Function	Inlet orifice Ø	Seals	Operator Code
FLANGE	3/2 NC	1,2 mm	NBR	09L02401A3CNN
			FKM	09L02401A3CVN
		1,4 mm	NBR	09L07170A3CNN
			FKM	09L07171A3CVN
		1,5 mm	NBR	09L02402A3CNN
			FKM	09L02402A3CVN
	2/2 NC	1,2 mm	NBR	09L02600A2CNN
			FKM	09L02600A2CVN
		1,4 mm	NBR	09L02600A2CNN
			FKM	09L02600A2CVN
		1,5 mm	NBR	09L02600A2CNN
			FKM	09L02600A2CVN
	3/2 NO (Top Inlet)	1,45 mm	NBR	09L02403A3ONN
			FKM	09L02403A3OVN
THREAD	3/2 NC	1,2 mm	NBR	09F07350A3CNN
			FKM	09F07350A3CVN
		1,4 mm	NBR	09F07210A3CNN
			FKM	09F07212A3CVN
		1,5 mm	NBR	09F07360A3CNN
			FKM	09F07360A3CVN
	2/2 NC	1,2 mm	NBR	09F07370A2CNN
			FKM	09F07370A2CVN
		1,4 mm	NBR	09F07370A2CNN
			FKM	09F07370A2CVN
		1,5 mm	NBR	09F07370A2CNN
			FKM	09F07370A2CVN
	3/2 NO (Top Inlet)	1,45 mm	NBR	09F07401A3ONN
			FKM	09F07403A3OVN
	3/2 NO (Bottom Inlet)	1,2 mm	NBR	09F11100A3ONN
			FKM	09F11101A3OVN

Contact Amisco for operator S9 large orifice (< 6 mm), or for special version.

FASTENING NUTS (Note: tightening torque max 0.6 Nm)

Plastic knurled nut	Cod. 540238	
Plastic knurled nut for protected exhaust	Cod. 540270	
Aluminium knurled nut Weavy washer Ø 8 DIN 137 type A	Cod. 540201 Cod. 535019	

Certificates

Certificate of Compliance

Certificate Number 20101224-E343908
Report Reference E343908, 2010 December 23
Issue Date 2010 December 24
Page 1 of 1

Underwriters Laboratories

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 consist 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 conjuction with the required Recognized Marks. The Recognized Component Mark is required when specified in the UL directory preceeding the recognition 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.

Certificate of Compliance

Certificate Number 20110331-E343908
Report Reference E343908, 2011 March 31
Issue Date 2011 March 31
Page 1 of 1

Underwriters Laboratories

Issued to: AMISCO SPA

VIA PIAGGIO 70
20037 PADERNO DUGNANO MI ITALY

This is to certify that representative samples of SYSTEMS, ELECTRICAL INSULATION
Class 180 (H) transformer, motor, or coil insulation system designated AMIH.

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: Systems of Insulating Materials - General, UL1446
CAN/CSA C22.2 No. 0-M91 Appendix B

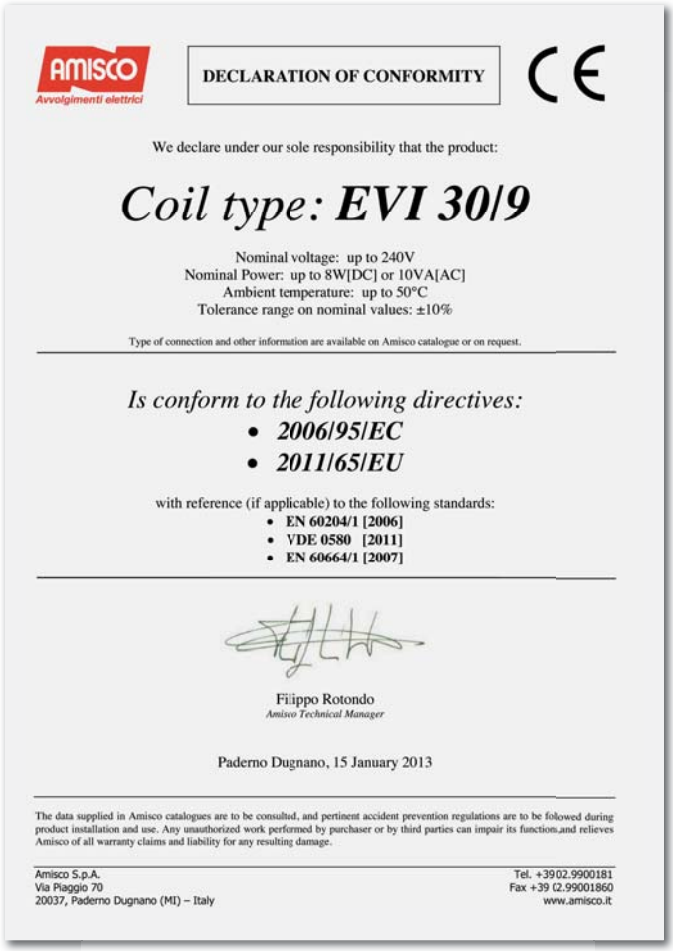
Additional Information: See UL On-Line Certification Directory at www.UL.com for additional information.

Only those products bearing the UL Recognized Component Marks for the U.S. and Canada should be considered as being covered by UL's Recognition and Follow-Up Service and meeting the appropriate U.S. and Canadian requirements.

The UL Recognized Component Mark for the U.S. 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 conjuction with the required Recognized Marks. The Recognized Component Mark is required when specified in the UL Directory preceeding the recognitions or under "Markings" for the individual recognitions. The UL Recognized Component Mark for Canada consists of the UL Recognized Mark for Canada , and 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.

Look for the UL Recognized Component Mark on the product

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



AMISCO Avvolgimenti elettrici

DECLARATION OF CONFORMITY CE

We declare under our sole responsibility that the product:

*Coil type: **EVI 30/9***

Nominal voltage: up to 240V
Nominal Power: up to 8W[DC] or 10VA[AC]
Ambient temperature: up to 50°C
Tolerance range on nominal values: ±10%

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

Is conform to the following directives:

- ***2006/95/EC***
- ***2011/65/EU***

with reference (if applicable) to the following standards:

- **EN 60204/1 [2006]**
- **VDE 0580 [2011]**
- **EN 60664/1 [2007]**

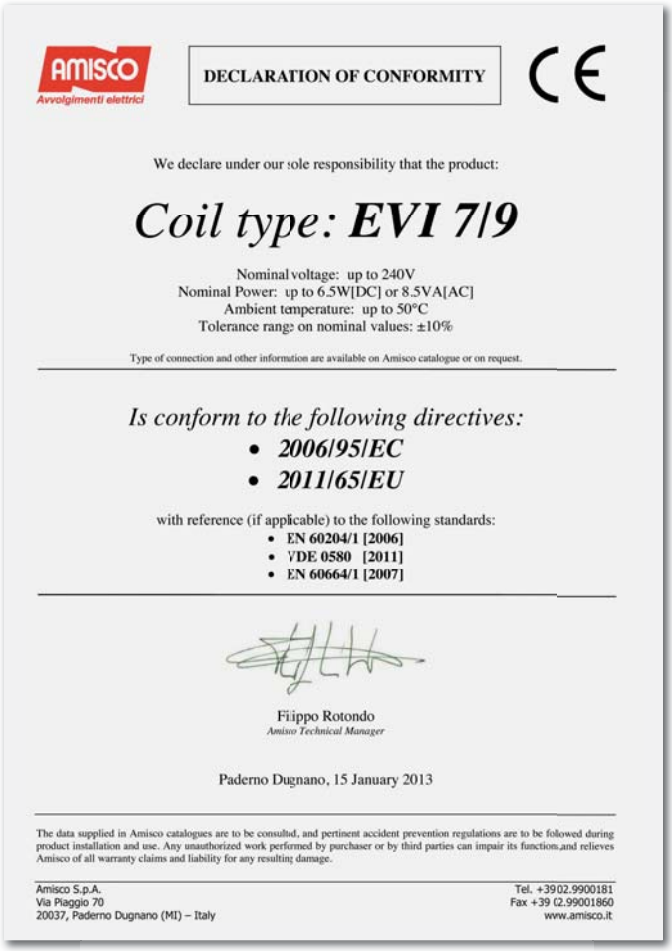
Filippo Rotondo
Amisco Technical Manager

Paderno Dugnano, 15 January 2013

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 function,and relieves Amisco of all warranty claims and liability for any resulting damage.

Amisco S.p.A.
Via Piaggio 70
20037, Paderno Dugnano (MI) – Italy

Tel. +3902.9900181
Fax +39 02.99001860
www.amisco.it



AMISCO Avvolgimenti elettrici

DECLARATION OF CONFORMITY CE

We declare under our sole responsibility that the product:

*Coil type: **EVI 7/9***

Nominal voltage: up to 240V
Nominal Power: up to 6.5W[DC] or 8.5VA[AC]
Ambient temperature: up to 50°C
Tolerance range on nominal values: ±10%

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

Is conform to the following directives:

- ***2006/95/EC***
- ***2011/65/EU***

with reference (if applicable) to the following standards:

- **EN 60204/1 [2006]**
- **VDE 0580 [2011]**
- **EN 60664/1 [2007]**

Filippo Rotondo
Amisco Technical Manager

Paderno Dugnano, 15 January 2013

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 function,and relieves Amisco of all warranty claims and liability for any resulting damage.

Amisco S.p.A.
Via Piaggio 70
20037, Paderno Dugnano (MI) – Italy

Tel. +3902.9900181
Fax +39 02.99001860
www.amisco.it

w w w . a m i s c o . i t

AMISCO S.p.A.
Via Piaggio, 70
20037 Paderno Dugnano (Mi)
Italy

Tel. +39 02.99.00.181
Fax +39 02.99.00.18.60
amisco@amisco.it

Rev. 4/2015