



EVI 5

Coil System

EVI 5

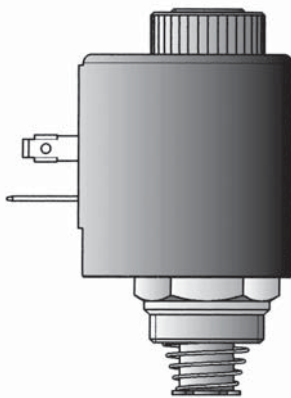
Coil System

The EVI 5 system by AMISCO includes a complete range of electrical coils suitable for solenoid operated pneumatic and hydraulic valves.

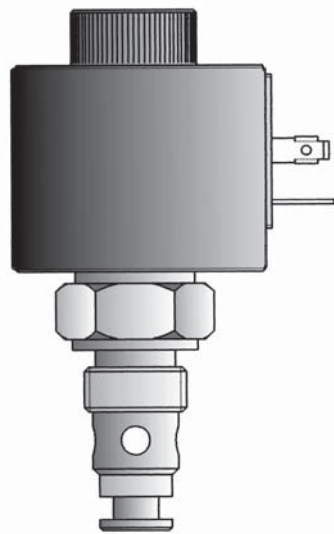
The EVI 5 coils are designed to fit most of the current applications and offer a wide choice of electrical terminations.

The lead version can be equipped with different connectors upon request.

Pneumatic version



Hydraulic version



The EVI 5E, EVI 5M, EVI 5P, EVI 5S coils are designed to fit solenoid tubes with $\varnothing = 13$ mm.

The EVI 5F is designed to fit solenoid tubes with $\varnothing = 15$ mm.

Types, power ratings and more technical specifications are described in the following pages.

The coils can be manufactured with different powers or features upon special agreement.

All coils feature:

- **Heat resistant bobbin moulded with 30% glass filled thermoplastic polyester material**
- **Class H 200°C wire according to IEC 60317-13**
- **Built-in magnetic yoke made by low carbon iron**
- **Encapsulation with high quality custom designed glass filled polyamide or thermoplastic polyester**
- **Copper and plastic material used are UL-Listed**

The use of other materials is possible upon special agreements.

These coils are designed in accordance to EN 60204.1 and DIN VDE 0580.

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

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

Coil can be supplied and marked CSA/UL for Electrical Insulation System (EIS) "E300N", designated by Amisco as AMIH - UL file E343908.

COIL CODING SPECIFICATIONS

PART NUMBER:

5 X 9 9 Y K 5 5 5 4 4 * *

TYPE

5E = EVI 5E
 5M = EVI 5M
 5P = EVI 5P
 5S = EVI 5S
 5F = EVI 5F

COIL BORING

13 = 13 mm
 15 = 15 mm (only for EVI 5F)

ELECTRICAL CONNECTION

A = AMP Junior (only for 5P and 5S) S = AMP Superseal (only for 5S)
 C = Flying leads (only for 5M, 5E and 5P) T = DEUTSCH DT04 (only for 5S)
 D = DIN 43650 A
 K = KOSTAL M27x1 (only for 5S)

SUPPLY CURRENT

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

NOMINAL VOLTAGE

Example: 012 = 12V
 024 = 24V

EVI 5M/13 WINDING CODE

Nominal Voltage	Power	Winding Code
12VDC	10W	02
24VDC	10W	02
24VAC	13VA	01
110VAC	13VA	01
230VAC	13VA	01

EVI 5P/13 WINDING CODE

Nominal Voltage	Power	Winding Code
12VDC	13W	03
12VDC	17W	05
24VDC	13W	03
24VDC	17W	05
24VAC	19VA	04
110VAC	19VA	04
230VAC	19VA	03

EVI 5E/13 WINDING CODE

Nominal Voltage	Power	Winding Code
12VDC	10W	03
24VDC	10W	03
24VAC	13VA	01
110VAC	13VA	01
230VAC	13VA	01

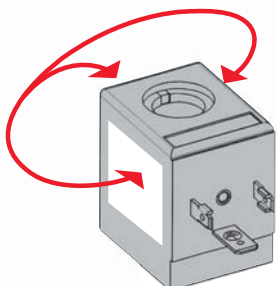
EVI 5F/15 WINDING CODE

Nominal Voltage	Power	Winding Code
12VDC	10W	01
24VDC	10W	01
24VAC	10VA	02
110VAC	10VA	01
230VAC	10VA	01

EVI 5S/13 WINDING CODE

Nominal Voltage	Power	Winding Code
12VDC	20W	01
24VDC	20W	01

Alternative possibilities for
CUSTOMER LOGO



MARKING

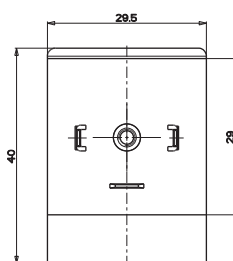
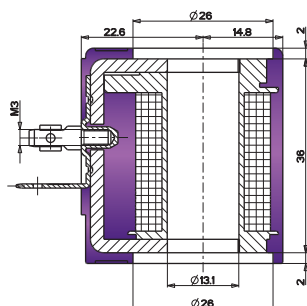
ZN = Standard coil (no logo)
 AM = Standard coil + Amisco logo
 ... = Customized marking

EVI 5M/13

DIN 43650 A (EN 175301-803 ISO 4400)

M3 Torque 0,4÷0,6Nm

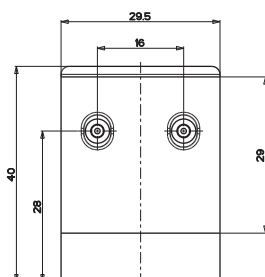
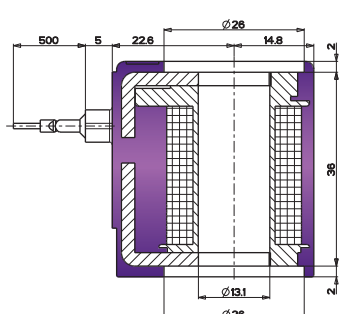
PART NUMBER 5M13D...



FLYING LEADS

500 mm flying leads as a standard, PVC 105°C Ø2.25

PART NUMBER 5M13C...

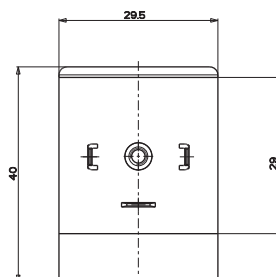
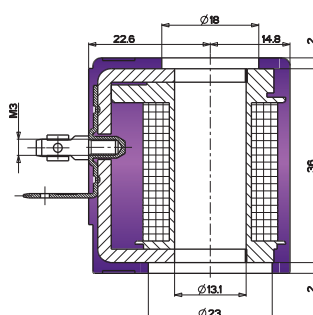


EVI 5E/13

DIN 43650 A (EN 175301-803 ISO 4400)

M3 Torque 0,4÷0,6Nm

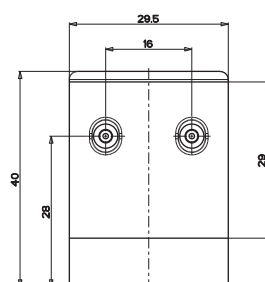
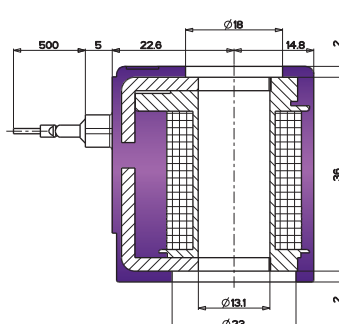
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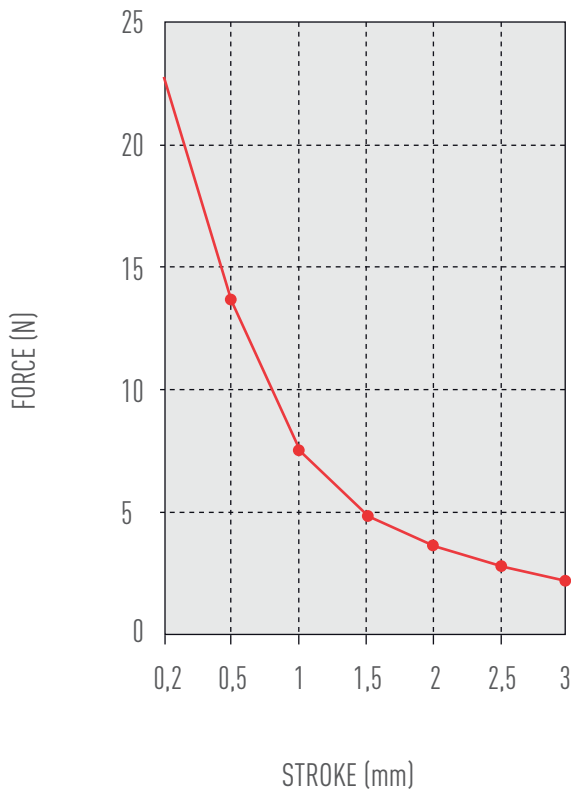
FLYING LEADS

500 mm flying leads as a standard, PVC 105°C Ø2.25

PART NUMBER 5E13C...



EVI 5M/13 and EVI 5E/13



Force stroke curve at -10% nominal voltage and stabilized duty temperature. This graph has to be intended as an indication. In fact it can change according to the specific applications.

EVI 5M/13 EVI 5E/13

		DC	AC 50/60 Hz
Rated power DC	W	10	
Inrush power AC	VA		23/19
Rated power AC	VA		13/11
Coil temperature rise @ 50°C ambient T		60	70
Copper temperature rise @ 50°C ambient T		100	100

Above-mentioned AC consumption have to be intended only as indicative. They may change according to the tube design solutions.

Coil type EVI 5M/13 and EVI 5E/13 are suitable for pneumatics and hydraulics applications. In the first case, additional information are available in the brochure "EVI 5 S13 solenoid system", as complete solenoid.

TECHNICAL DATA

Power: 10 Watt (standard)

Force: see the graph

Duty Cycle: 100% ED (continuous) at power and temperatures indicated

Standard Operating Voltages: 12-24 VDC 24-110-230 VAC

Other voltages on request

Operating voltage range:

max: 10% over the nominal voltage

min: according to the specific application

Operating temperature range: -40°C ÷ +50°C

Coil insulation: Class F

GENERAL CONSTRUCTION

According to EN 60204.1 and DIN VDE 0580

Materials:

Wire class H200°C

Encapsulant: glass filled Polyamide PA 6.6

Other materials on request

ELECTRICAL CONNECTIONS AND DEGREE PROTECTION

Degree of protection with connector and tube assembled with suitable seals:

DIN 43650A IP65

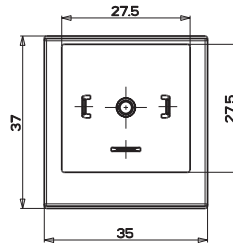
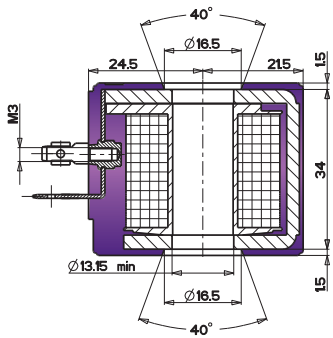
FLYING LEADS IP67

EVI 5P/13

DIN 43650 A (EN 175301-803 ISO 4400)

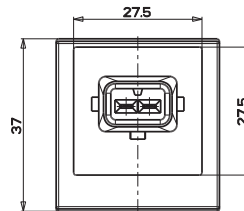
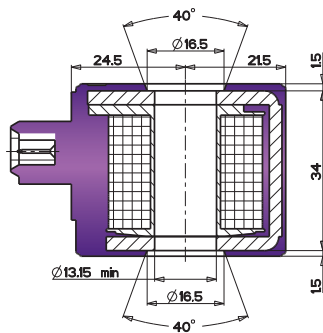
PART NUMBER 5P13D...

M3 Torque 0,4±0,6Nm



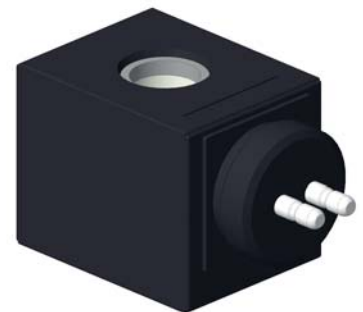
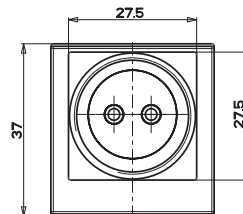
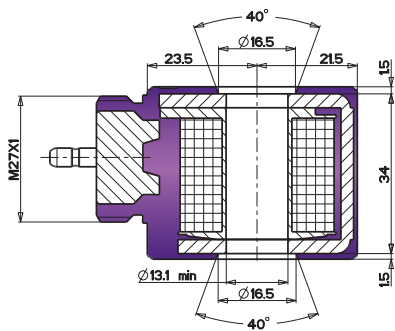
AMP JUNIOR

PART NUMBER 5P13A...



KOSTAL M27x1

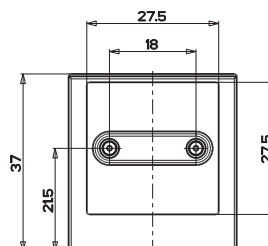
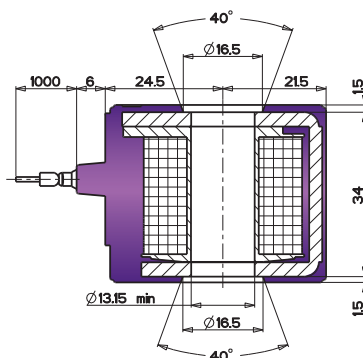
PART NUMBER 5P13K...



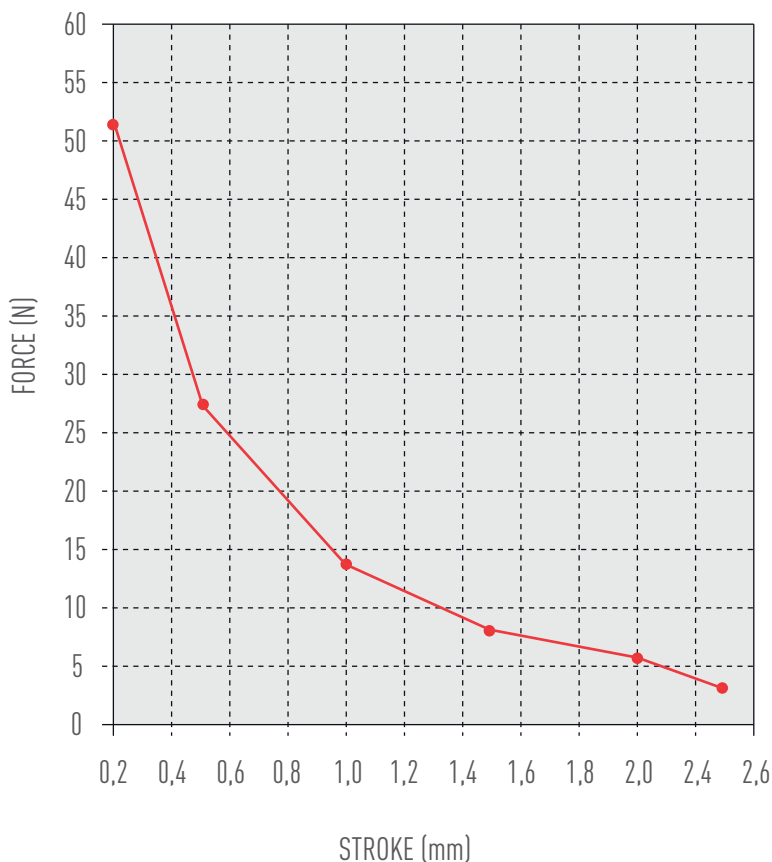
FLYING LEADS

PART NUMBER 5P13C...

1000 mm flying leads as a standard, AWG 18 UL Style 3173



EVI 5P/13



Force stroke curve at -10% nominal voltage and stabilized duty temperature. This graph has to be intended as an indication.

In fact it can change according to the specific applications.

This graph is referred to 13W version.

EVI 5P/13

		DC		AC 50/60 Hz	
Rated power DC	W	13	17		
Inrush power AC	VA			32/27	37/31
Rated power AC	VA			19/16	22/18
Coil temperature rise @ 50°C ambient T		55	70	45/36	55/45
Copper temperature rise @ 50°C ambient T		85	105	86/72	100/85

Above-mentioned AC consumption have to be intended only as indicative.
They may change according to the tube design solutions.

Coil type EVI 5P/13 is suitable for pneumatics and hydraulics applications.

TECHNICAL DATA

Power: 13 Watt (pneumatic std) 17 Watt (hydraulic std)

Force: see the graph

Duty Cycle: 100% ED (continuous)
at power and temperatures indicated

Standard operating voltages: 12-24 VDC 24-110-230 VAC

Other voltages on request

Operating voltage range:

max: 10% over the nominal voltage

min: according to the specific application

Operating temperature range: -40°C ÷ +50°C

Coil insulation: class F

GENERAL CONSTRUCTION

According to EN 60204.1 and DIN VDE 0580

Materials:

Wire class H200°C

Encapsulant: glass filled Polyamide 6.6

Other materials on request

Degree of protection:

IP 54 (EN 60529)

ELECTRICAL CONNECTIONS AND RELATED IP DEGREE

Degree of protection with connector

and tube assembled with suitable seals:

DIN 43650A IP65

FLYING LEADS IP65 / IP67

KOSTAL M27x1 IP67

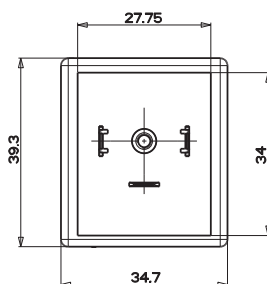
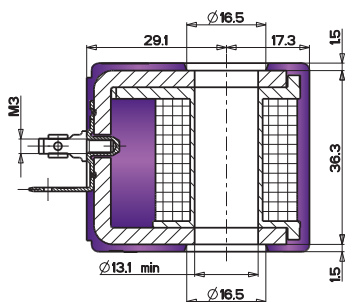
AMP JUNIOR IP65

EVI 5S/13

DIN 43650 A (EN 175301-803 ISO 4400)

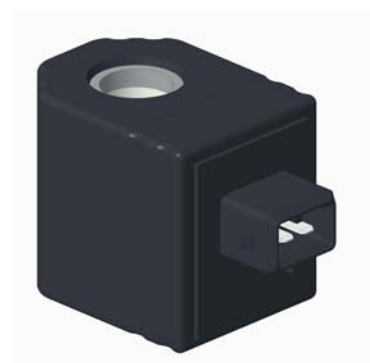
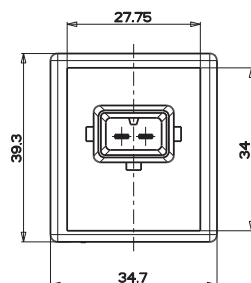
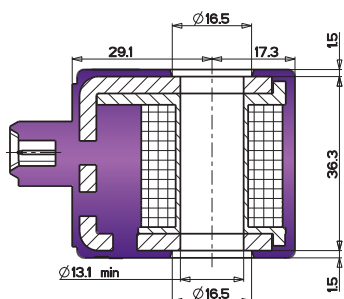
PART NUMBER 5S13D...

M3 Torque 0,4±0,6Nm



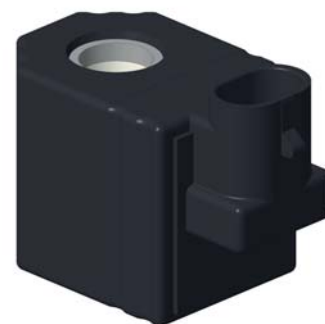
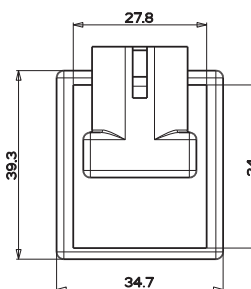
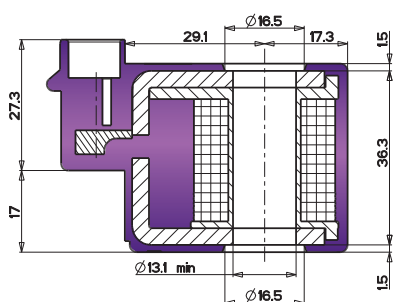
AMP JUNIOR

PART NUMBER 5S13A...



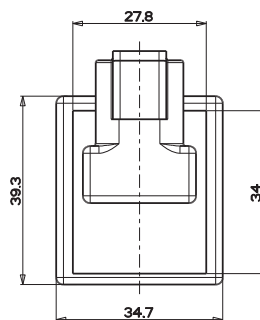
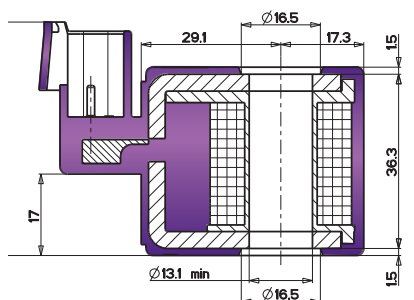
AMP SUPERSEAL

PART NUMBER 5S13S...

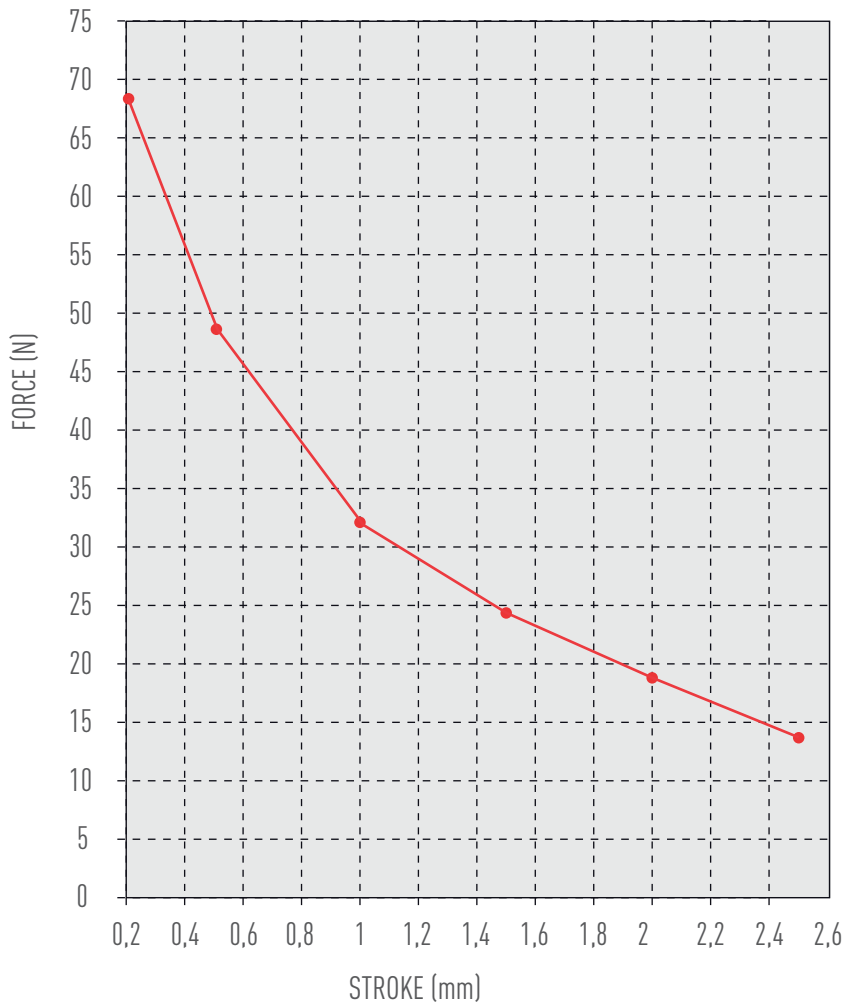


DEUTSCH DT-04

PART NUMBER 5S13T...



EVI 5S/13



Force stroke curve at -10% nominal voltage and stabilized duty temperature. This graph has to be intended as an indication. In fact it can change according to the specific applications.

EVI 5S/13

		DC
Rated power DC	W	20
Coil temperature rise @ 50°C ambient T		75
Copper temperature rise @ 50°C ambient T		110

Coil type EVI 5S/13 is suitable for pneumatics and hydraulics applications.

TECHNICAL DATA

Power: 10 Watt (standard)

Force: see the graph

Duty cycle: 100% ED (continuous)
at power and temperatures indicated

Standard operating voltages: 12-24 VDC
Other voltages on request

Operating voltage range:

max: 10% over the nominal voltage

min: according to the specific application

Operating temperature range: -40°C ÷ +50°C

Coil insulation: Class F

GENERAL CONSTRUCTION

According to EN 60204.1 and DIN VDE 0580

Materials:

Wire class H200°C

Encapsulant: glass filled Polyamide PA 6.6

Other materials on request

Degree of protection:

IP 54 (EN 60529)

ELECTRICAL CONNECTIONS AND DEGREE PROTECTION

Degree of protection with connector
and tube assembled with suitable seals:

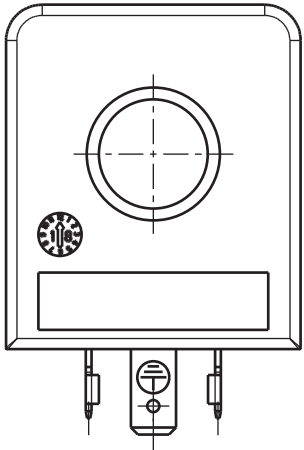
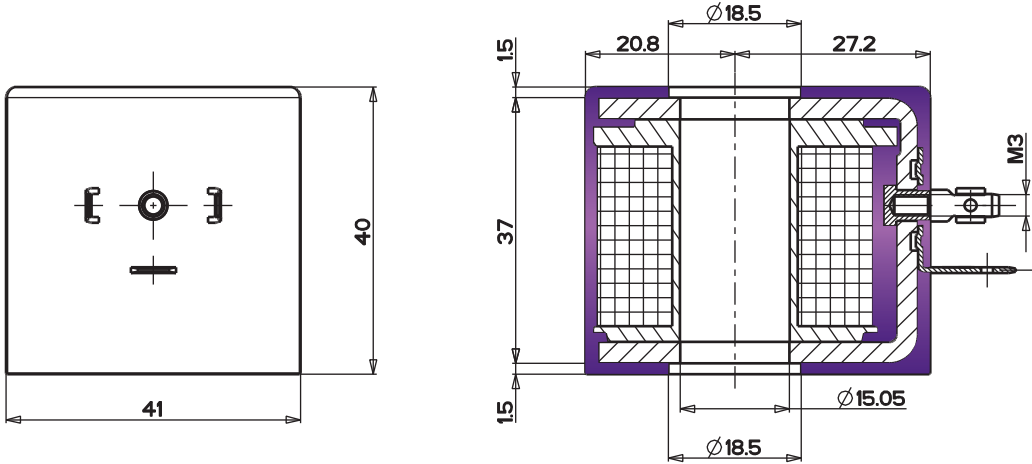
DIN 43650A	IP65
AMP JUNIOR integrated	IP65
DEUTSCH DT04 integrated	IP69K
AMP SUPERSEAL integrated	IP69K

EVI 5F/15

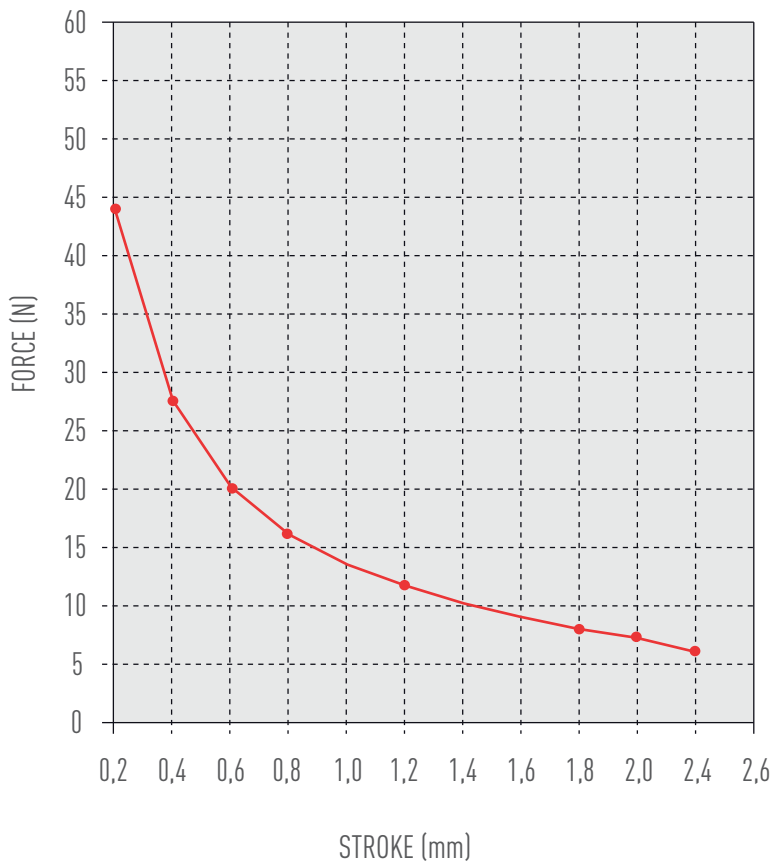
DIN 43650 A (EN 175301-803 ISO 4400)

PART NUMBER 5F15D...

M3 Torque 0,4±0,6Nm



EVI 5F/15



Force stroke curve at -10% nominal voltage and stabilized duty temperature. This graph has to be intended as an indication. In fact it can change according to the specific applications.

EVI 5F/15

		DC
Rated power DC	W	10
Coil temperature rise @ 50°C ambient T		76
Copper temperature rise @ 50°C ambient T		92

Coil type EVI 5F/15 is suitable for hydraulic and fluid applications, it has a 15 mm inner diameter hole.

TECHNICAL DATA

Power: 10 Watt (standard)

Force: see the graph

Duty cycle: 100% ED (continuous)

at power and temperatures indicated

Standard operating voltages: 12-24 VDC

Other voltages on request

Operating voltage range:

max: 10% over the nominal voltage

min: according to the specific application

Operating temperature range: -40°C ÷ +50°C

Coil insulation: Class F

GENERAL CONSTRUCTION

Materials:

Wire class H200°C

Encapsulant: glass filled Polyamide PA 6.6

Other materials on request

Degree of protection:

IP 54 (EN 60529)


ELECTRICAL CONNECTIONS AND DEGREE PROTECTION

Degree of protection with connector


and tube assembled with suitable seals:

DIN 43650A

IP 65



UE DECLARATION OF CONFORMITY



We declare under our sole responsibility that the product:

Coil type: ***EVI 5M13***

Nominal voltage: up to 240V
 Nominal Power: up to 12W [DC] or 17VA [AC]
 Ambient temperature: -40 ÷ +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:

- **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]




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.

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

Tel. +39 02 9900181
Fax +39 02 99001860
www.amisco.it



UE DECLARATION OF CONFORMITY



We declare under our sole responsibility that the product:

Coil type: ***EVI 5E13***

Nominal voltage: up to 240V
 Nominal Power: up to 12W [DC] or 17VA [AC]
 Ambient temperature: -40 ÷ +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:

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

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Tel. +39 02 9900181
Fax +39 02 99001860
www.amisco.it



UE DECLARATION OF CONFORMITY



We declare under our sole responsibility that the product:

Coil type: ***EVI 5P13***

Nominal voltage: up to 240V
 Nominal Power: up to 17W [DC] or 22VA [AC]
 Ambient temperature: -40 ÷ +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:

- **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]




Filippo Rotondo
Amisco Technical Division Manager

Paderno Dugnano, 20 April 2016


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20037, Paderno Dugnano (MI) – Italy

Tel. +39 02 9900181
Fax +39 02 99001860
www.amisco.it



UE DECLARATION OF CONFORMITY



We declare under our sole responsibility that the product:

Coil type: ***EVI 5S13***

Nominal voltage: up to 24V
 Nominal Power: up to 20W [DC]
 Ambient temperature: -40 ÷ +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:

- **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]



Filippo Rotondo
Amisco Technical Division Manager

Paderno Dugnano, 20 April 2016

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

Tel. +39 02 9900181
Fax +39 02 99001860
www.amisco.it

Certifications

AMISCO **UE DECLARATION OF CONFORMITY** **CE**

We declare under our sole responsibility that the product:

Coil type: *EVI 5F15*

Nominal voltage: up to 230V DC
 Nominal Power: up to 11W [DC]
 Ambient temperature: -40 + +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:

- **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]



Filippo Rotondo
 Amisco Technical Division Manager

Paderno Dugnano, 04 October 2016

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Amisco S.p.A. Tel. +39 02 9900181
 Via Piaggio 70 Fax +39 02 99001860
 20037, Paderno Dugnano (MI) - Italy www.amisco.it

Certificate of Compliance Page 1 of 1

Certificate Number: 20110331-E343908
 Report Reference: E343908, 2011 March 31
 Issue Date: 2011 March 31

UL 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.

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Look for the UL Recognized Component Mark on the product

William R. Carney
 Director, North American Certification Programs
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CERTIFICATE

In accordance with
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the company:
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 Via Piaggio 70,
 Paderno Dugnano (MI), 20037
 ITALY

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

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SERCONS INTERNATIONAL - Certification Authority
 Piazza della Repubblica, 32, 20124 MILAN | +39 02 8601 2140 | www.SERCONS.ch/it



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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