

# EVI 5

## Coil System



**AMISCO**

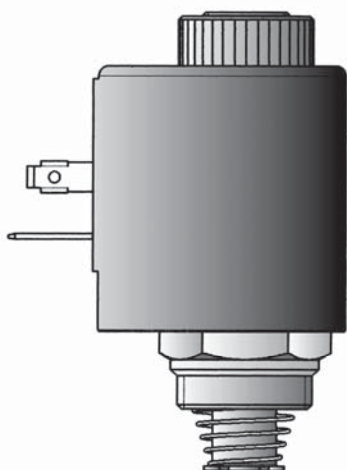
# EVI 5 Coil System

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

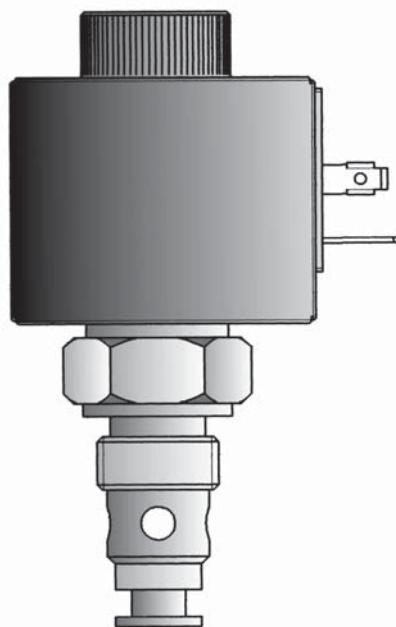
The EVI 5 coils are designed to fit most of the current applications and offer a wide choice of electrical terminations.

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

Pneumatic version



Hydraulic version



The EVI 5E coil is designed to fit solenoid tubes with 13 or 14 mm dia.

The EVI 5M, EVI 5P, EVI 5S and EVI 5T coils are designed to fit solenoid tubes with a diameter of 13 mm.

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

The coils can be manufactured with different powers or characteristics 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.

The use of other materials is possible upon special agreements.

All coils are rated to Class F and IP65 (with connector and suitable seals) and IP67 for flying lead version and for continuous service.

These coils are designed in accordance to EN 60204.1 and VDE 0580 and can be declared in conformity with 73/23 EEC directive.

# COIL CODING SPECIFICATIONS

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

## TYPE

5E = EVI 5E  
 5M = EVI 5M  
 5P = EVI 5P  
 5S = EVI 5S  
 5T = EVI 5T

## COIL BORING

13 = 13 mm  
 14 = 14 mm (only for EVI 5E)

## ELECTRICAL CONNECTION

A = AMP Junior integrated      M = METRIPACK 2 integrated  
 C = Flying leads                      S = AMP Superseal integrated  
 D = DIN 43650 A                      T = DEUTSCH DT04 integrated  
 K = KOSTAL M27x1 integrated

## 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 S13 WINDING CODE

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

### EVI 5P S13 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 S13 WINDING CODE

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

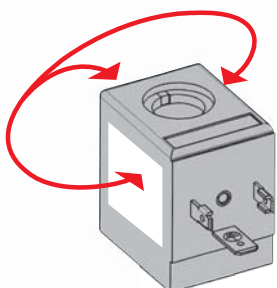
### EVI 5T S13 WINDING CODE

Nominal Voltage	Power	Winding Code
12VDC	14W	01
24VDC	14W	01

### EVI 5E S14 WINDING CODE

Nominal Voltage	Power	Winding Code
12VDC	10W	02
24VDC	10W	02
24VAC	17VA	01
110VAC	17VA	01
230VAC	17VA	01

Alternative possibilities for  
**CUSTOMER LOGO**

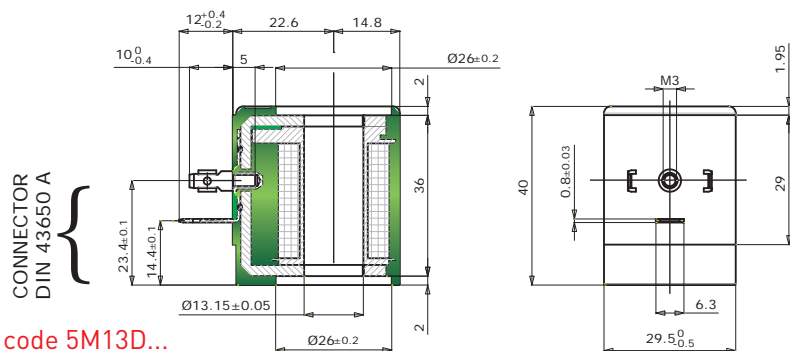


## MARKING

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

# EVI 5M/13

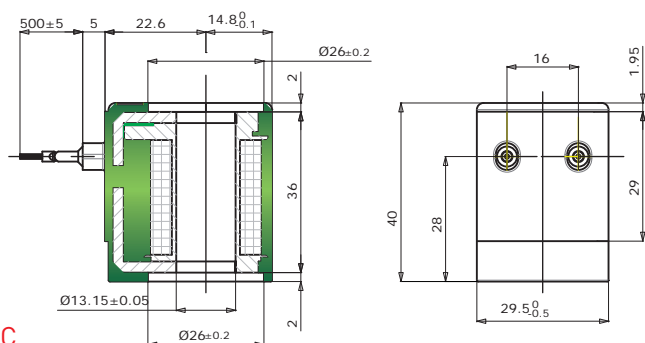
DIN 43650 A



code 5M13D...



## FLYING LEADS

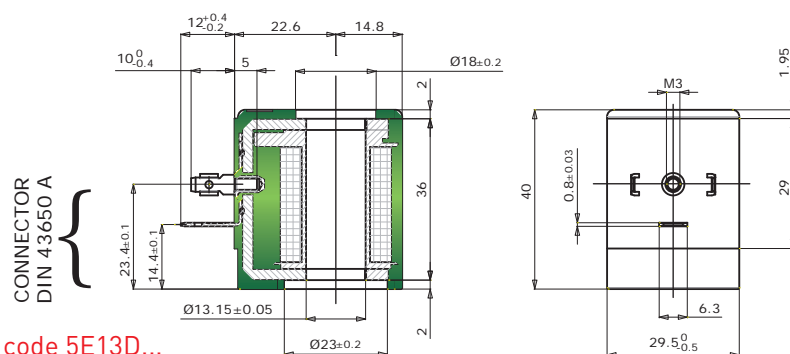


code 5M13C...



# EVI 5E/13

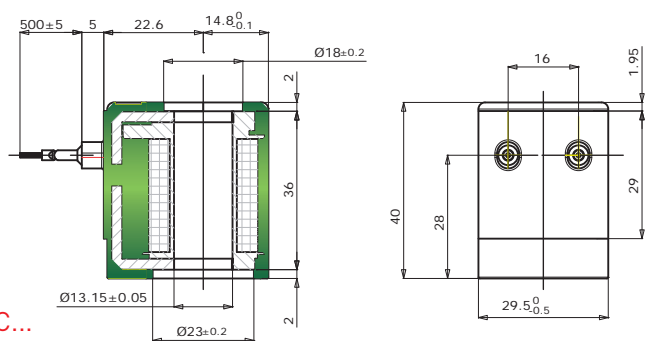
DIN 43650 A



code 5E13D...



## FLYING LEADS

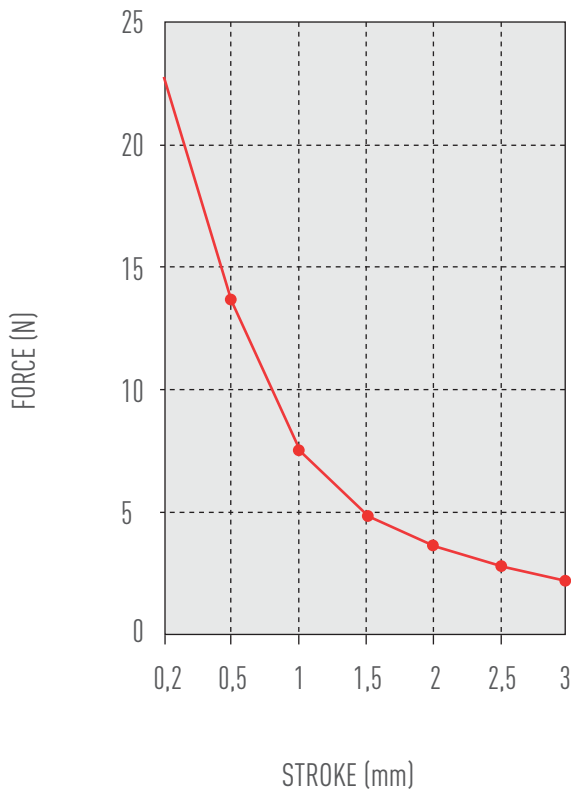


code 5E13C...



# EVI 5M/13

# 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.

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:** -20°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:

**Degree of protection:** IP 54 (EN 60529)

With connector and suitable seals it can reach:

DIN 43650A IP65

Flying leads IP65 / IP67

## 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	°C	60	70
Copper temperature rise	°C	100	100

Above-mentioned AC consumption have to be intended only as indicative.

They may change according to the tube design solutions.

**AMISCO** Arretramenti elettrici

**DICHIARAZIONE DI CONFORMITA' / DECLARATION OF CONFORMITY** **CE**

Noi: AMISCO S.p.A.  
 We: Via Piaggio, 70  
 I 20037 Paderno D. MI - ITALY

dichiariamo sotto la nostra responsabilità che il prodotto:  
 declare under our sole responsibility that the product:

Bobina tipo: EVI 5M13 (V<sub>nom</sub> = fino a 240V P<sub>nom</sub> = fino a 12W[DC] o 17VA[AC]) (1)  
 T<sub>amb</sub> = fino a 50°C  
 Coil type: EVI 5M13 (V<sub>nom</sub> = up to 240V P<sub>nom</sub> = up to 12W [DC] or 17VA[AC]) (1)  
 T<sub>amb</sub> = up to 50°C

(1) V<sub>nom</sub> = tensione nominale P<sub>nom</sub> = potenza nominale T<sub>amb</sub> = temperatura ambiente  
 Tolleranza sui valori nominali: ± 10%  
 (2) V<sub>nom</sub> = nominal voltage P<sub>nom</sub> = nominal power T<sub>amb</sub> = ambient temperature  
 Tolerance range on nominal values: ± 10%  
 Type of conformance and other information are on Amisco's Catalogue

a cui si riferisce questa dichiarazione, è conforme a quanto richiesto dalla seguente direttiva:  
 to which this declaration relates, is in conformity with the provisions of the following directive:

2006/95/CE  
 2006/95/CE

con riferimento a quanto applicabile delle seguenti norme:  
 with reference (if applicable) to the following standards:

EN 60204.1 - VDE 0580 [ed.2009]

**CSQ**

Paderno D. no. 26 Ottobre 2009  
 Paderno D. no. 26 October 2009

Dott. Cesare Novellone  
 Direttore Tecnico

I dati riportati nel Catalogo Amisco e tutte le misure preventive necessarie al fine di evitare eventuali incidenti dovuti a uso scorretto, durante l'installazione e l'uso del prodotto. Questa dichiarazione potrà in sua validità o il cliente o per errore vengono modificati e/o ripetizioni e/o basati su uso improprio del prodotto.

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 T<sub>amb</sub> = fino a 50°C  
 Coil type: EVI 5E13 (V<sub>nom</sub> = up to 240V P<sub>nom</sub> = up to 12W [DC] or 17VA[AC]) (1)  
 T<sub>amb</sub> = up to 50°C

(1) V<sub>nom</sub> = tensione nominale P<sub>nom</sub> = potenza nominale T<sub>amb</sub> = temperatura ambiente  
 Tolleranza sui valori nominali: ± 10%  
 (2) V<sub>nom</sub> = nominal voltage P<sub>nom</sub> = nominal power T<sub>amb</sub> = ambient temperature  
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Paderno D. no. 26 Ottobre 2009  
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 Direttore Tecnico

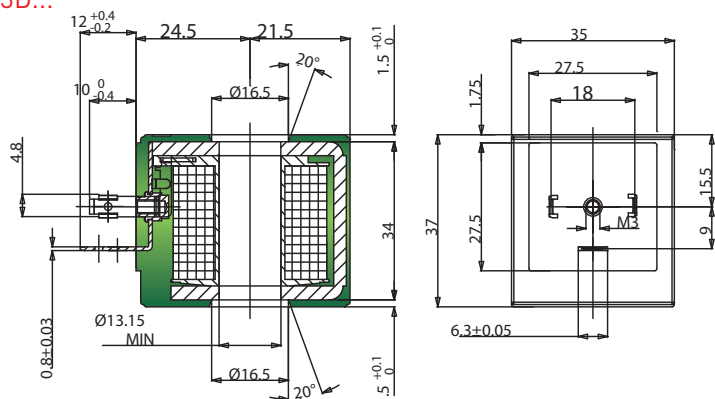
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# EVI 5P/13

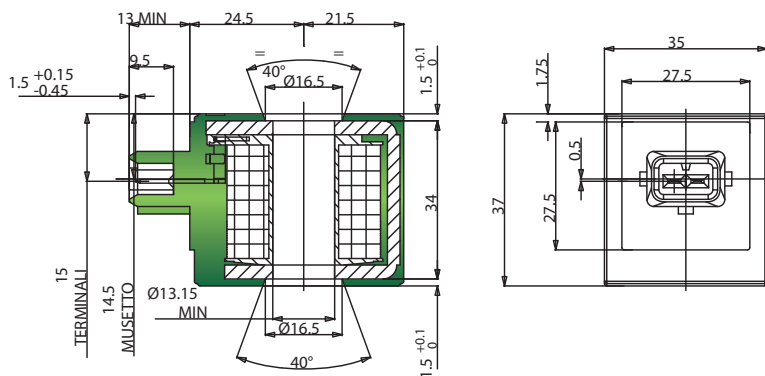
## DIN 43650 A

code 5P13D...



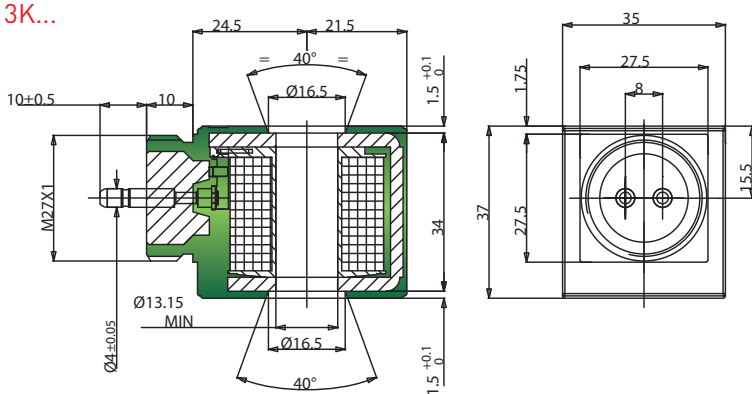
## AMP JUNIOR

code 5P13A...



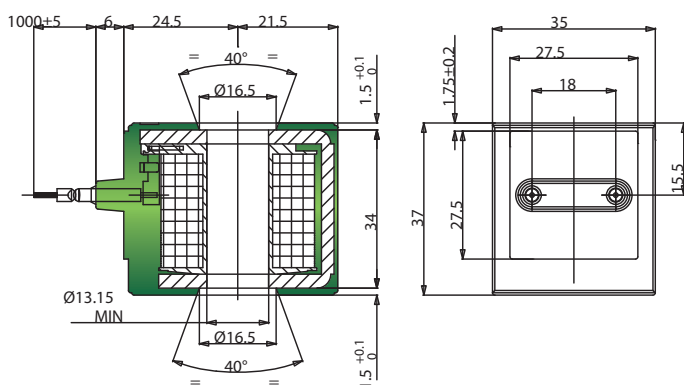
## KOSTAL M27x1

code 5P13K...

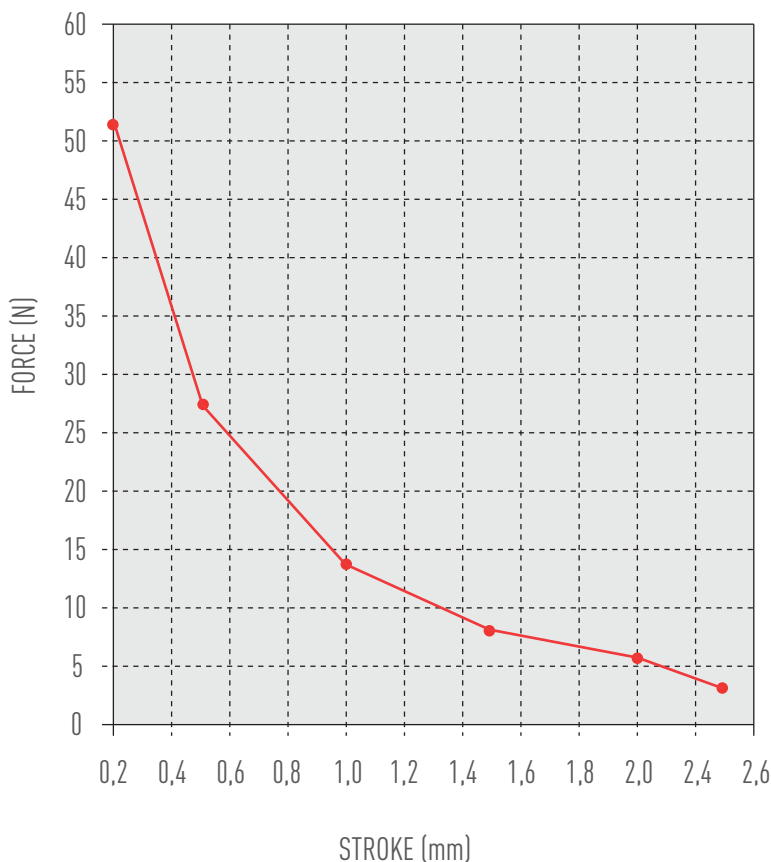


## FLYING LEADS

code 5P13C...



# 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 at 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	°C	55	70	45/36	55/45
Copper temperature rise	°C	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.

### 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:** -20°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

### ELECTRICAL CONNECTIONS:

**Degree of protection:** IP 54 (EN 60529)

With connector and suitable seals it can reach:

DIN 43650A IP65  
 FLYING LEADS IP67  
 KOSTAL M27x1 integrated IP67  
 AMP JUNIOR integrated IP65

**DICHIARAZIONE DI CONFORMITA'**  
DECLARATION OF CONFORMITY

Noi: AMISCO S.p.A.  
 Via Piaggio, 70  
 I 20037 Paderno D. MI - ITALY

dichiariamo sotto la nostra responsabilità che il prodotto:  
 declare under our sole responsibility that the product:

---

Bobina tipo: **EVI 5P13** ( $V_{nom}$  = fino a 240V  $P_{nom}$  = fino a 17W[DC] o 21VA[AC]) (1)  
 $T_{amb}$  = fino a 50°C  
 Coil type: **EVI 5P13** ( $V_{nom}$  = up to 240V  $P_{nom}$  = up to 17W [DC] or 21VA[AC]) (1)  
 $T_{amb}$  = up to 50°C

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(1)  $V_{nom}$  = tensione nominale  $P_{nom}$  = potenza nominale  $T_{amb}$  = temperatura ambiente  
 Tolleranza sui valori nominali: ± 10%  
 Tipo di connessione e altre informazioni sono reperibili sul Catalogo AMISCO  
 (2)  $V_{nom}$  = nominal voltage  $P_{nom}$  = nominal power  $T_{amb}$  = ambient temperature  
 Tolerance range on nominal values: ± 10%  
 Type of connection and other information are on Amisco's Catalogue

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**2006/95/CE**  
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**EN 60204.1 - VDE 0580 [ed.2000]**

Paderno D. no, 26 Ottobre 2009  
 Paderno D. no, 26 October 2009

Dott. Cesare Novellone  
 Direttore Tecnico

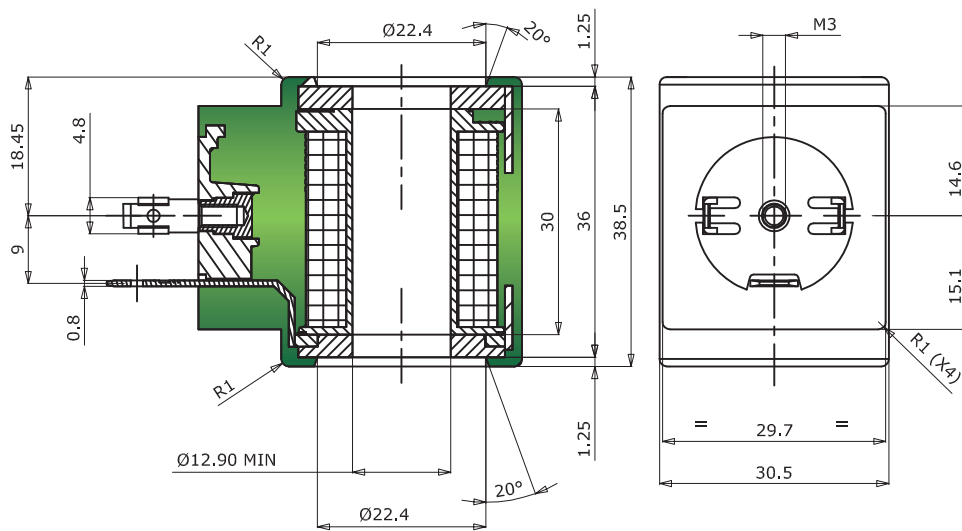
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The data supplied in AMISCO Catalogues are to be consulted, and preventive accident prevention regulations are to be followed during product installation and use. Any unauthorized work performed by purchaser or by third parties can require its functions,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

# EVI 5T/13

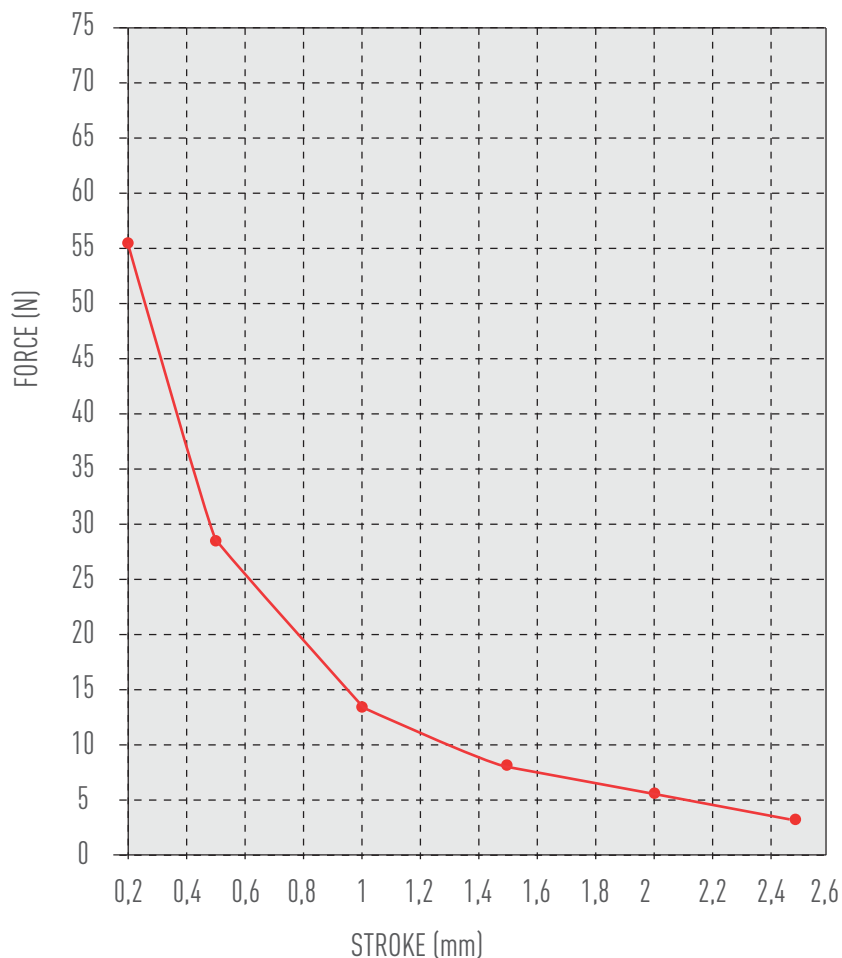
DIN 43650 A

code 5T13D...





# EVI 5T/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 5T/13

		DC
Rated power DC	W	14
Coil temperature rise	°C	70
Copper temperature rise	°C	100

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

### TECHNICAL DATA:

**Power:** 14 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:** -20°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:

**Degree of protection:** IP 54 (EN 60529)

With connector and suitable seals it can reach:

DIN 43650A IP65

**DICHIARAZIONE DI CONFORMITA'**  
**DECLARATION OF CONFORMITY**

Noi : AMISCO S.p.A.  
 We : Via Freggio, 70  
 120037 Paderno D. MI - ITALY

dichiariamo sotto la nostra responsabilità che il prodotto:  
 declare under our sole responsibility that the product:

---

Robotta tipo: **EVI 5T13** ( $V_{nom}$  = fino a 24V[DC]  $P_{nom}$  = fino a 14W[DC]) (1)  
 $T_{amb}$  = fino a 50°C

Coil type: **EVI 5T13** ( $V_{nom}$  = up to 24V[DC]  $P_{nom}$  = up to 14W [DC]) (1)  
 $T_{amb}$  = up to 50°C

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(1)  $V_{nom}$  = tensione nominale  $P_{nom}$  = potenza nominale  $T_{amb}$  = temperatura ambiente  
 Tolleranza sui valori nominali: ± 10%  
 Tipo di connessione e altre informazioni sono reperibili sul Catalogo AMISCO

(2)  $V_{nom}$  = nominal voltage  $P_{nom}$  = nominal power  $T_{amb}$  = ambient temperature  
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 with reference (if applicable) to the following standards:

**EN 60204.1 - VDE 0580 (ed.2000)**

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Paderno D. no., 10 Marzo 2011  
 Paderno D. no., March 10, 2011

Dott. Cesare Novellone  
 Direttore Tecnico

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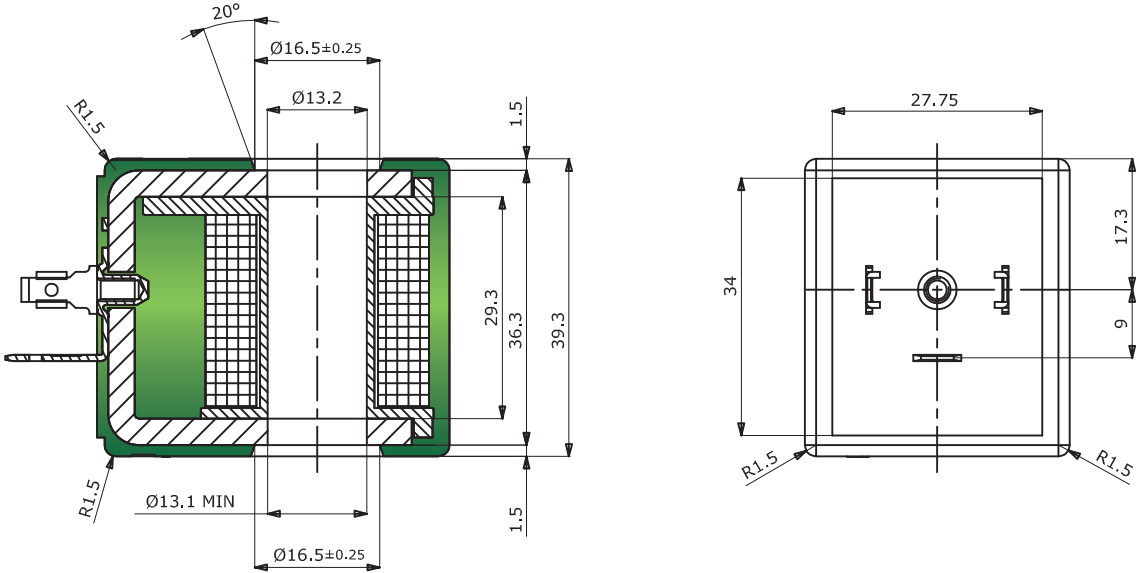
The data supplied in AMISCO Catalogues are to be consulted, and pertinent accident prevention regulations are to be followed during product installation and use. Any unauthorized work performed by purchaser or by third parties can impair its functions, and relieve AMISCO of all warranty claims and liability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

The specifications and drawings contained herein are believed to be correct and are given in good faith, however no liability is accepted therefore. Manufacturer reserves the right to modify said specifications and drawings without notice for technical or commercial reasons.

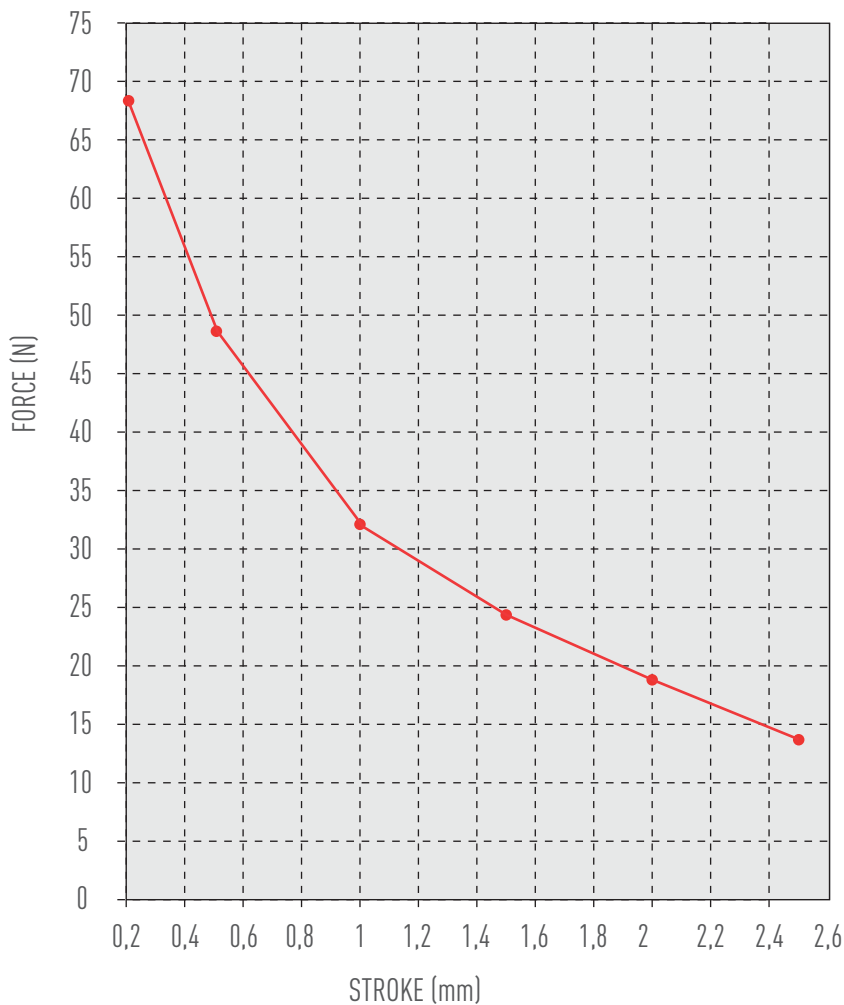
# EVI 5S/13

DIN 43650 A

code 5S13D...



# 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	°C	75
Copper temperature rise	°C	110

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

### TECHNICAL DATA:

- Power:** 20 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:** -20°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:

**Degree of protection:** IP 54 (EN 60529)

With connector and suitable seals it can reach:

- DIN 43650A IP 65
- FLYING LEADS IP 67
- AMP JUNIOR integrated IP65
- DEUTSCH DT04 integrated IP69K
- AMP SUPERSEAL integrated IP69K
- METRIPACK 2 integrated IP69K

**DICHIARAZIONE DI CONFORMITA'**  
**DECLARATION OF CONFORMITY**

Noi: AMISCO S.p.A.  
We: Via Piaggio, 70  
I 20037 Paderno D. MI - ITALY

dichiariamo sotto la nostra responsabilità che il prodotto:  
declare under our sole responsibility that the product:

Bobina tipo: **EVI 5S13** ( $V_{min}$  = fino a 240V  $P_{nom}$  = fino a 12W [DC] o 17VA [AC]) (1)

Coil type: **EVI 5S13** ( $V_{min}$  = up to 240V  $P_{nom}$  = up to 12W [DC] or 17VA [AC]) (1)

(1)  $V_{min}$  = tensione nominale  $P_{nom}$  = potenza nominale  $T_{amb}$  = temperatura ambiente  
Tolleranza sui valori nominali: ± 10%  
Tipo di connessione e altre informazioni sono reperibili sul Catalogo AMISCO.

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Paderno D. no, 26 Ottobre 2009  
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Direttore Tecnico

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

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

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Fax +39 02.99.00.18.60  
amisco@amisco.it