

2023  
2024



**GTE**  
ELETTROMECCANICA

## FLUID CONTROL COMPONENTS



[WWW.GTEELETTROMECCANICA.COM](http://WWW.GTEELETTROMECCANICA.COM)



## L'azienda / The Company

GTE Elettromeccanica S.r.l. si occupa di progettazione e produzione di componenti elettromeccanici ed elettronici per il controllo dei fluidi.

GTE Elettromeccanica S.r.l. designs and manufactures electro-mechanical and electronic components for liquid control.



## La qualità / Quality



L'azienda ha un sistema di qualità operante in accordo alla norma di riferimento **UNI EN ISO 9001-2015**.

The Company has a quality system operating in accordance with the reference **UNI EN 9001-2015**.



**RISCALDAMENTO - CLIMATIZZAZIONE**  
HEATING - CONDITIONER SYSTEM



**TRATTAMENTO ACQUE**  
WATER TREATMENT



**GENERATORI DI VAPORE**  
STEAM GENERATOR



**CAFFE'**  
COFFEE

## La produzione / Manufacturing

L'alta qualità del prodotto è garantita da laboratori per collaudi funzionali, life test e processi produttivi.

High quality product is guaranteed by laboratories for functional tests, life tests and production processes.

## I prodotti / Products

La gamma completa dei prodotti della GTE Elettromeccanica S.r.l. comprende componenti per il controllo ed intercettazione dei fluidi legati al mondo delle caldaie murali, del piccolo e grande elettrodomestico e del settore industriale, ed in particolare :

GTE Elettromeccanica S.r.l. product range includes components for control and interception liquids in boiler heating system, for the small and large appliance and industrial sectors, with a particular focus on:

**FLUSSIMETRI**  
FLOW METER



**FLUSSOSTATI**  
FLOW SWITCHES



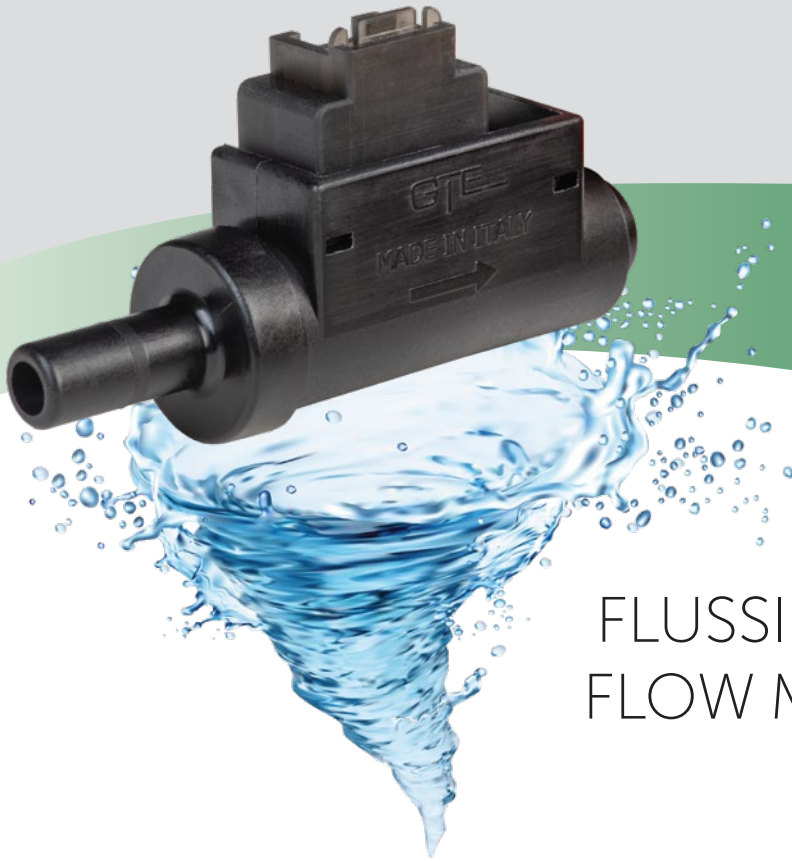
**TRASDUTTORI**  
TRANSDUCER



**PRESSOSTATI**  
PRESSURE SWITCH







## FLUSSIMETRO **SERIE SFM** FLOW METER **SFM SERIES**

### Descrizione

Il Flussimetro serie SFM è un dispositivo progettato per intercettare e misurare la quantità di fluido che scorre attraverso una tubazione mediante l'interazione di una girante immersa nel fluido e una sonda di Hall.

### Description

SFM series flowmeter is a device that has been designed to intercept and measure the quantity of fluid flowing through a pipe by the interaction of an impeller immersed in the fluid and a Hall probe.

### Dati Tecnici / Technical Data

|                        |                                                       |
|------------------------|-------------------------------------------------------|
| Working position       | Horizontal - Vertical                                 |
| Working pressure range | $\leq 10$ bar                                         |
| Connection             | RAST 2.5                                              |
| Sensor type            | Hall effect                                           |
| Power supply           | 3-24 Vdc                                              |
| Output signal          | 170 Hz (n°2 poles magnet) / 340 Hz (n°4 poles magnet) |
| Operating Flow rates   | 1 ÷ 15 l/m                                            |
| Ambient temperature    | +2°C ÷ 60°C                                           |
| Water temperature      | +2°C ÷ 70°C                                           |
| Inlet                  | Quick coupling fitting Ø8 (5/16")                     |
| Outlet                 | John Guest (see scheme pag. 5)                        |
| Protection class       | IP 00                                                 |

## Codifica / Code scheme

Esempio / Example:

**SFM C U 10 Z 00**

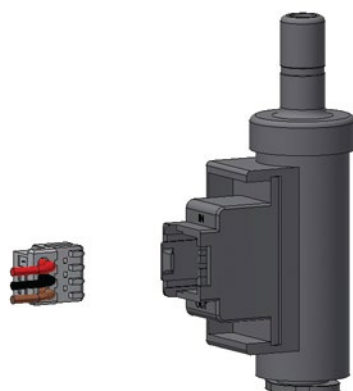
| 1      | 2                                                                            | 3                               | 4               | 5                                  | 6                                      |
|--------|------------------------------------------------------------------------------|---------------------------------|-----------------|------------------------------------|----------------------------------------|
| Series | Type                                                                         | Input Connection                | Flow            | Output Connection                  | Custom                                 |
| SFM    | C - Heating (wall heaters)<br>I - Industrial application<br>A - Food contact | U - Fast Connection Ø 8 (5/16") | 10 - 1÷15 l/min | Z - Adaptor John Guest Ø 8 (5/16") | 00 - Standard<br>10 - n°2 poles magnet |

Altre connessioni disponibili su richiesta - Other connections available on request

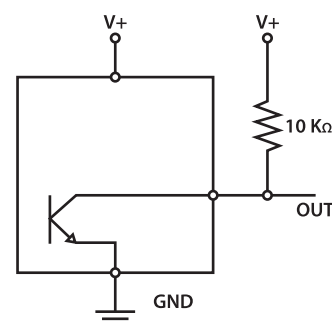
## Connessione elettrica Electric connection

RAST 2.5 -  
STANDARD

IN  
GND  
OUT

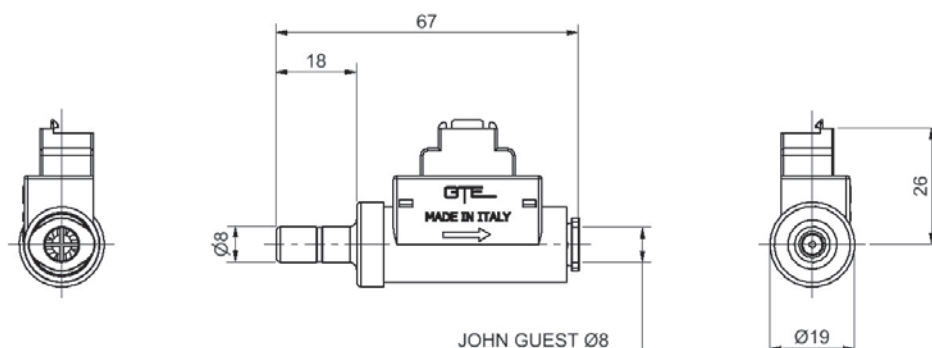


## Schema elettrico Wiring diagram



## Connessione idraulica / Hydraulic connection

U - Fast connection 8(5/16") / Z - John Guest 8 (5/16")





## FLUSSIMETRO **SERIE SFR** FLOW METER **SFR SERIES**

### Descrizione

Il Flussimetro serie SFR è un dispositivo progettato per intercettare e misurare la quantità di fluido che scorre attraverso una tubazione mediante l'interazione di una girante immersa nel fluido e una sonda di Hall.

### Description

SFR series flowmeter is a device that has been designed to intercept and measure the quantity of fluid flowing through a pipe by the interaction of an impeller immersed in the fluid and a Hall probe.

### Dati Tecnici / Technical Data

|                        |                                                      |
|------------------------|------------------------------------------------------|
| Working position       | Horizontal - Vertical                                |
| Working pressure range | $\leq 10$ bar                                        |
| Connection             | RAST 2.5                                             |
| Sensor type            | Hall effect                                          |
| Power supply           | 3-24 Vdc                                             |
| Output signal          | 90 Hz (n°2 poles magnet) / 180 Hz (n°4 poles magnet) |
| Operating Flow rates   | 1 ÷ 15 l/m                                           |
| Ambient temperature    | +2°C ÷ 60°C                                          |
| Water temperature      | +2°C ÷ 70°C                                          |
| Inlet                  | Brass G1/2                                           |
| Outlet                 | G1/2 male                                            |
| Protection class       | IP 00                                                |

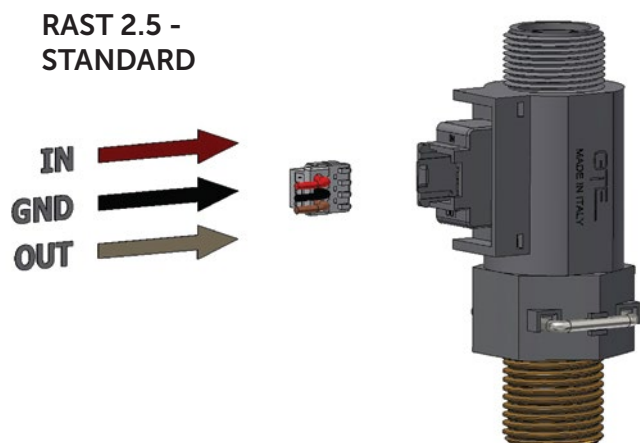
## Codifica / Code scheme

Esempio / Example:

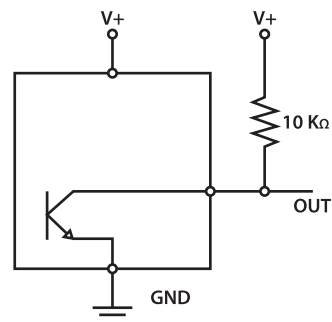
**SFR C Z 10 A 00**

| 1      | 2                                                                            | 3                | 4               | 5                 | 6                                      |
|--------|------------------------------------------------------------------------------|------------------|-----------------|-------------------|----------------------------------------|
| Series | Type                                                                         | Input Connection | Flow            | Output Connection | Custom                                 |
| SFR    | C - Heating (wall heaters)<br>I - Industrial application<br>A - Food contact | Z - Adaptor G1/2 | 10 - 1÷15 l/min | A - G1/2 male     | 00 - Standard<br>10 - n°2 poles magnet |

## Connessione elettrica Electric connection

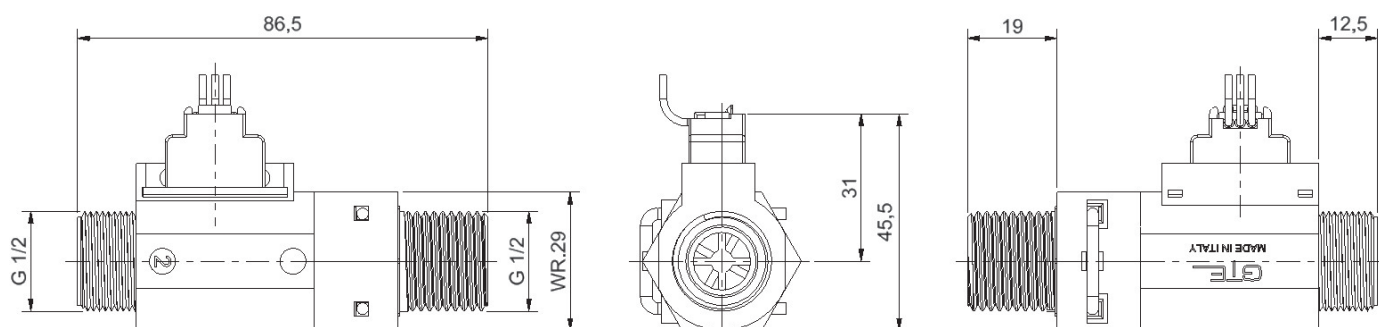


## Schema elettrico Wiring diagram



## Connessione idraulica / Hydraulic connection

Z - G1/2 Male input connection / A - G1/2 Male output connection





## FLUSSOSTATO **SERIE FM** FLOW SWITCH **FM SERIES**

### Descrizione

Flussostato Serie FM progettato per intercettare la presenza di flusso attraverso un sistema magnetico e un contatto reed.

### Description

FM Series Flow Switch is designed to intercept the presence of flow through a magnetic system and a reed contact.

### Dati Tecnici / Technical Data

|                                        |                                                                                                      |
|----------------------------------------|------------------------------------------------------------------------------------------------------|
| Switching power max                    | 10 W                                                                                                 |
| Switching current                      | 0,5 A                                                                                                |
| Switching voltage                      | 100 Vac / Vdc                                                                                        |
| Insulation resistance                  | 100.000 MOhms                                                                                        |
| Breakdown voltage                      | 160 / 220 Vac / Vdc                                                                                  |
| Contact resistance                     | 100 mOhms max.                                                                                       |
| Capacitance                            | 0,7 Pf                                                                                               |
| Switch                                 | Normally open (NO)                                                                                   |
| Working position                       | Horizontal - Vertical                                                                                |
| Working pressure range                 | 0 - 15 bar                                                                                           |
| Switching range                        | ON 1,5 l/min OFF 0,5 l/min (su richiesta disponibili altri range / other range available on request) |
| Connection pins tabs                   | 6,3 x 0,8 mm                                                                                         |
| Water temperature                      | +2°C ÷ 90°C                                                                                          |
| Ambient temperature                    | -20°C (with antifreeze additive) ÷ +60°C                                                             |
| Inlet                                  | Quick coupling fitting Ø 8 (5/16")                                                                   |
| Outlet                                 | John Guest (see scheme pag. 9)                                                                       |
| Grado di protezione / Protection Class | IP 00                                                                                                |
| Peso / Weight                          | 19 grammi / grams                                                                                    |



## Codifica / Code scheme

Esempio / Example:

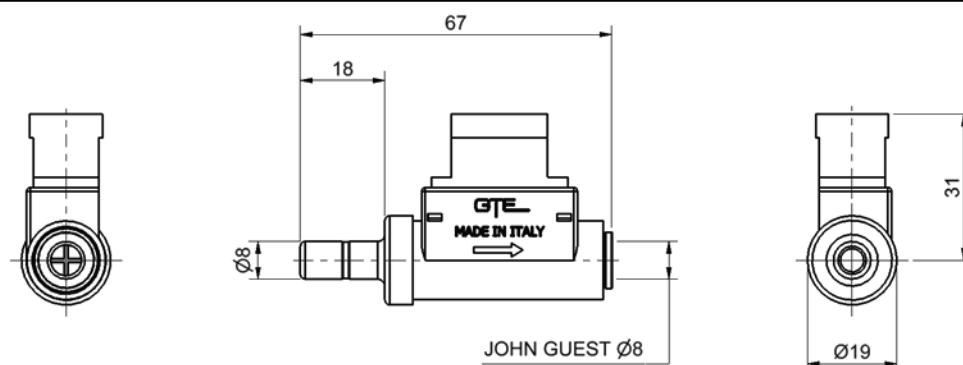
**FMAU10Z00**

| 1      | 2                | 3                               | 4                                   | 5                                  | 6             |
|--------|------------------|---------------------------------|-------------------------------------|------------------------------------|---------------|
| Series | Type             | Input Connection                | Flow                                | Output Connection                  | Custom        |
| FM     | A - Food contact | U - Fast Connection Ø 8 (5/16") | 10 - ON 1,50 l/min<br>OFF 0,5 l/min | Z - Adaptor John Guest Ø 8 (5/16") | 00 - Standard |

Altre connessioni disponibili su richiesta - Other connections available on request

## Connessione idraulica / Hydraulic connection

A - Fast connection Ø8(5/16") / Z - John Guest Ø8 (5/16")





## FLUSSOSTATO **SERIE FL** FLOW SWITCH **FL SERIES**

### Descrizione

Flussostato Serie FL progettato per intercettare la presenza di flusso attraverso un sistema magnetico e un contatto reed.

### Description

FL series has designed to intercept the flow presence by magnetic system and a reed contact.

### Dati Tecnici / Technical Data

|                                        |                                          |
|----------------------------------------|------------------------------------------|
| Switching power max                    | 10 W                                     |
| Switching current                      | 0,5 A                                    |
| Switching voltage                      | 100 Vac / Vdc                            |
| Insulation resistance                  | 100.000 MOhms                            |
| Breakdown voltage                      | 160 / 220 Vac / Vdc                      |
| Contact resistance                     | 100 mOhms max.                           |
| Capacitance                            | 0,7 Pf                                   |
| Switch                                 | Normally open (NO)                       |
| Working position                       | Vertical                                 |
| Working pressure range                 | 0 - 15 bar                               |
| Switching range                        | ON 2,0 l/min OFF 1,2 l/min               |
| Connection pins tabs                   | 6,3 x 0,8 mm                             |
| Water temperature                      | +2°C ÷ 90°C                              |
| Ambient temperature                    | -20°C (with antifreeze additive) ÷ +60°C |
| Inlet                                  | Brass G1/2                               |
| Outlet                                 | See scheme pag. 11                       |
| Grado di protezione / Protection Class | IP 00                                    |
| Peso / Weight                          | 86 grammi / grams                        |

# Codifica / Code scheme

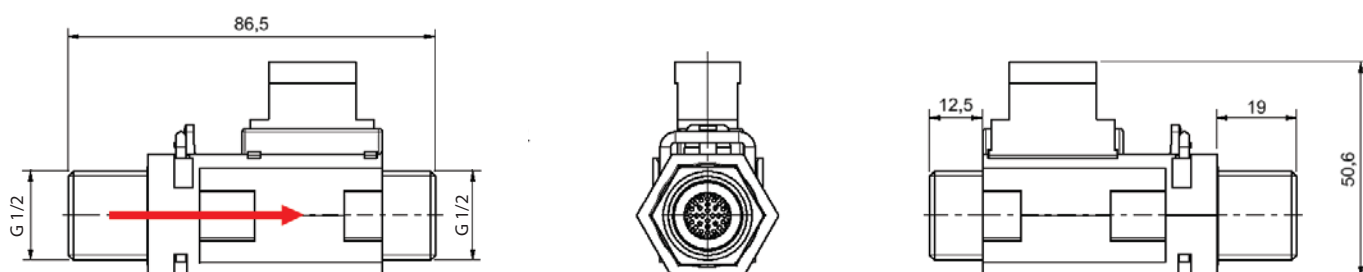
Esempio / Example:

**FL C Z 20 A 00**

| 1<br>Series | 2<br>Type                  | 3<br>Input Connection | 4<br>Flow         | 5<br>Output Connection | 6<br>Custom                    |
|-------------|----------------------------|-----------------------|-------------------|------------------------|--------------------------------|
| FL          | C - Heating (wall heaters) | Z - Adaptor G1/2      | 20 - 2 l/min on   | A - G1/2 male          | 00 - Standard                  |
| FN          | V - Steam                  |                       | 30 - 3 lt./min.on | B - Dado G1/2 female   | 10 - Lateral output G1/4       |
| FR          | I - Industrial application |                       | 50 - 5 lt./min.on |                        | 15 - With flow reducer (3 way) |
|             | A - Food contact           |                       | 60 - 6 lt./min.on |                        | 20 - With Flow rate spring     |
|             |                            |                       | 70 - 7 lt./min.on |                        | 25 - With Flow reducer (2 way) |

# Connessioni idrauliche / Hydraulic connections

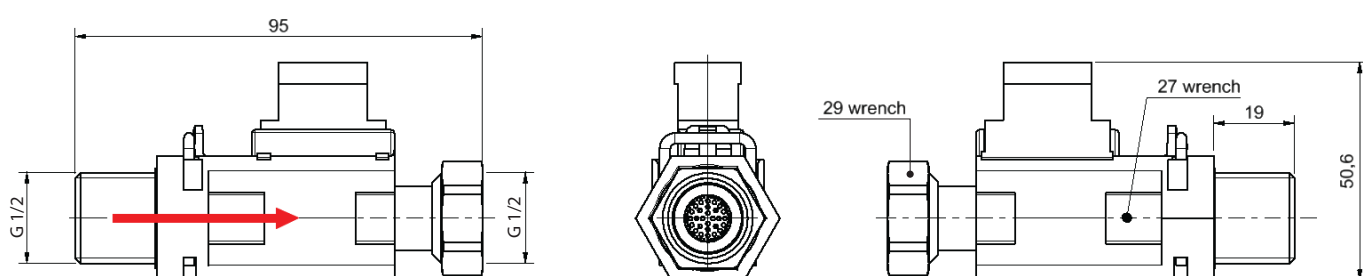
Z - G1/2 Male input connection / A - G1/2 Male output connection



Z - G1/2 Male input connection / A - G1/2 Male output connection / 10 - with lateral output G1/4



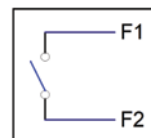
Z - G1/2 Male input connection / B - G1/2 Female Swivel Nut output connection



Flussostato  
Flow Switch with G1/2 male  
Input and output



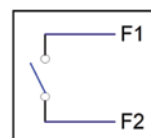
WIRING DIAGRAM



Flussostato  
Flow Switch with G1/2 male  
Input and output  
Lateral output G1/4 male



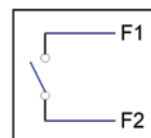
WIRING DIAGRAM



Flussostato  
Flow Switch with G1/2 male  
Input and G1/2 female  
Swivel nut output



WIRING DIAGRAM







## PRESSOSTATO **SERIE PS** PRESSURE SWITCH **PS SERIES**

### Descrizione / Description

Compact device used in heating system boiler to check minimum water pressure.

|                           |                            |
|---------------------------|----------------------------|
| Max static pressure       | 6 bar                      |
| Fixing working pressure   | 0.5 bar                    |
| Custom calibration        |                            |
| Hysteresis                | > 0,1 bar                  |
| Maximum overload pressure | > 10 bar                   |
| Ambient temperature       | -20°C ÷ +60°C              |
| Water temperature         | < 90°C                     |
| Minimum contact current   | 5mA @ 5...24 V             |
| Contact resistance        | 100 mOhms max.             |
| Terminal connection       | 6.3 x 0.8 mm               |
| Hydraulic inlet (plastic) | See connections pag. 19-20 |
| Protection Class          | IP 00                      |
| Weight                    | ~19 grammi / grams         |

### Omologazioni / Approvals

- EN60730-1, EN60730-2-6, EN60730-1:2016/A1:2019.
- Tutti i nostri prodotti sono conformi alla direttiva europea 2002/95/EC (RoHS).  
*All our products conform to the 2002/95/EC European directive (RoHS).*



### Stoccaggio / Storage

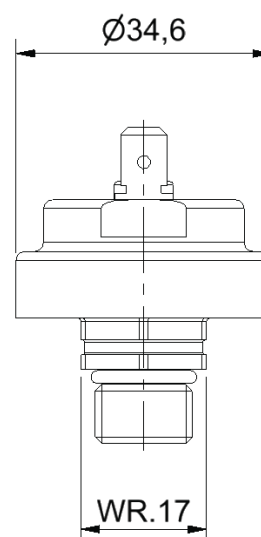
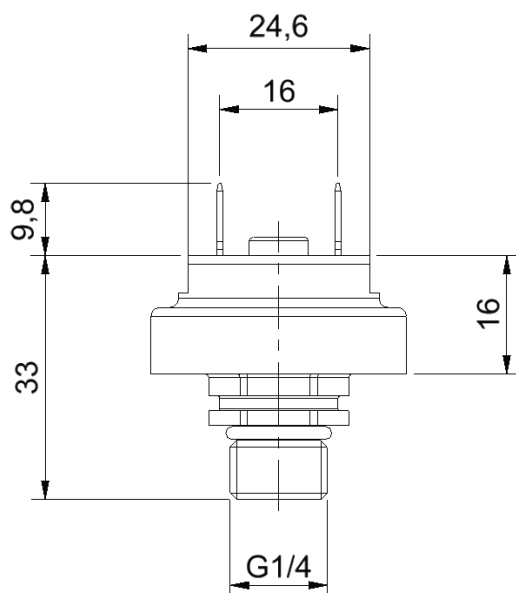
- Evitare che il pressostato venga a contatto con polveri.  
*Avoid the transducer coming into contact with powders.*
- Non immagazzinare in luoghi con umidità condensata.  
*Do not store in locations with humidity condensation.*
- Temperatura di stoccaggio / storage temperature -25°C

## Codifica / Code scheme

Esempio / Example:

**PSC B 05 NO 00**

| 1<br>Series | 2<br>Type                                                    | 3<br>Connection              | 4<br>Calibration | 5<br>Microswitch Circuit | 6<br>Custom   |
|-------------|--------------------------------------------------------------|------------------------------|------------------|--------------------------|---------------|
| PS          | C - Heating<br>I - Industrial application<br>A - Foodcontact | See SP series<br>Code scheme | XX               | NO - Normally Open       | 00 - Standard |



Pressure switch with Hydraulic Connection - John Guest

**WATER TREATMENT**



- Feature:
- Food contact material
  - High hysteresis (The high hysteresis is a necessary feature for stable operation in automatic systems)
  - Long working life and small dimensions
  - Male and Female connection

Pressure switch with Hydraulic Connection - Gas thread and Adjustable connection

**HVAC**



**PS SERIES**

**SP SERIES**



- Feature:
- Male and Female Gas thread (also with brass adapter) or adjustable connection
  - Different configurations: Faston (COM+NO/NC - COM+NC+NO), vertical fastons, RAST 5, RAST 2.5 (with cover) and soldered wire with coverage
  - Long working life and small dimensions
  - High and Low pressure range

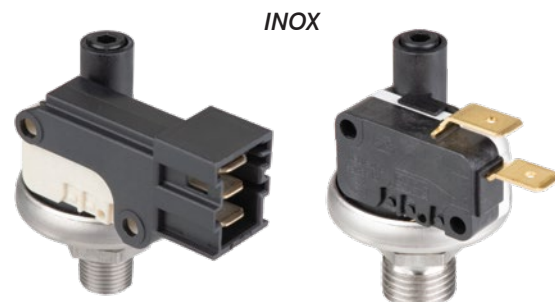
- Feature:
- Compact device
  - Fixing working pressure (falling)
  - monitor minimum water pressure in the secondary circuits.

Pressure switch with Hydraulic Connection - Metallic body

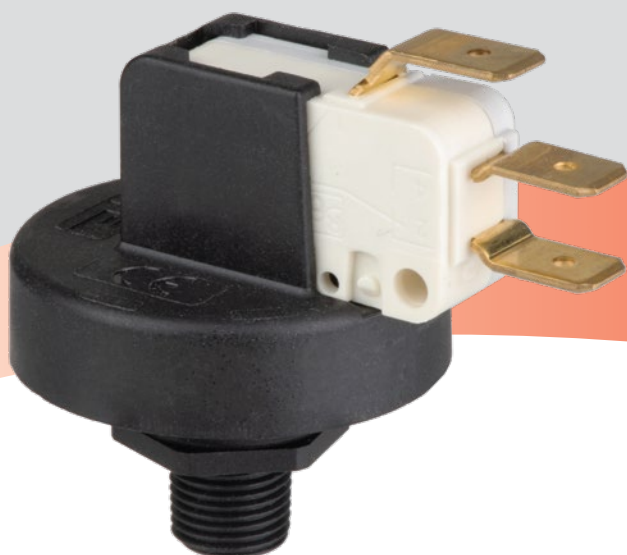
**STEAM - COFFEE - INDUSTRIAL**

**BRASS**

**INOX**



- Feature:
- Heavy duty industrial applications
  - High pressure
  - Long working life and small dimensions



## PRESSOSTATO **SERIE SL** PRESSURE SWITCH **SL SERIES**

### Descrizione / Description

Compact device used in heating system boiler to check minimum water pressure.

|                                        |                                          |
|----------------------------------------|------------------------------------------|
| Max static pressure                    | 6 bar                                    |
| Fixing working pressure                | 0.5 bar (optional 0.4 / 0.3 bar) FALLING |
| Hysteresis                             | 0,1 ÷ 0,4 bar                            |
| Ambient temperature                    | -20°C ÷ +60°C                            |
| Water temperature                      | < 90°                                    |
| Voltage                                | 5Vdc/24Vdc - 230Vac (16A)                |
| Connection terminal                    | 6.3 x 0.8 mm, RAST 5 or RAST 2.5         |
| Hydraulic inlet (PLASTIC)              | See connections pag. 19-20               |
| Grado di protezione / Protection Class | IP 00                                    |
| Peso / Weight                          | ~22 grammi / grams                       |

### Omologazioni / Approvals

- EN60730-1, EN60730-2-6, EN60730-1:2016/A1:2019.
- Tutti i nostri prodotti sono conformi alla direttiva europea 2002/95/EC (RoHS).  
All our products conform to the 2002/95/EC European directive (RoHS).



### Stoccaggio / Storage

- Evitare che il pressostato venga a contatto con polveri.  
Avoid the transducer coming into contact with powders.
- Non immagazzinare in luoghi con umidità condensata.  
Do not store in locations with humidity condensation.
- Temperatura di stoccaggio / storage temperature -25°C

### Codifica / Code scheme

Esempio / Example:

**SL C H 04D VA 00**

| 1 Series | 2 Type                                                        | 3 Connection                 | 4 Calibration                           | 5 Microswitch Circuit                                                                          | 6 Custom                                        |
|----------|---------------------------------------------------------------|------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------|
| SL       | C - Heating<br>I - Industrial application<br>A - Food contact | See SP series<br>Code scheme | XX D - Setting fall<br>XX U - Rising up | D - Switch 3 pins<br>NA - Normally Open<br>NC - Normally Closed<br>VA - Vertical Normally Open | 00 - Standard<br>25 - Microswitch (+ connector) |



## PRESSOSTATO **SERIE SP** PRESSURE SWITCH **SP SERIES**

### Descrizione

Il pressostato serie SP trova il suo ottimale utilizzo nei seguenti settori:

- Riscaldamento (caldaie murali)
- Sistemi di condizionamento
- Sistemi a caldaia (stiro, caffè, lavamoquette, giardinaggio, ecc.)
- Applicazioni industriali
- Trattamento acque

Costituito da un elemento sensibile in AISI, è compatibile nel suo utilizzo con diversi tipi di fluidi gassosi o liquidi, con temperature fino a 150° C.

La taratura è regolabile.

E' costruito con tecnopolimero rinforzato.

L'utilizzo della tecnologia di saldatura ad ultrasuoni, rende omogeneo e stabile nel tempo l'accoppiamento dei componenti che costituiscono il prodotto, evitando giunzioni metalliche o rivettature.

### Description

SP series Pressure Switch is best suited to the following applications:

- Heating (wall heaters)
- Air conditioning systems
- Boiler systems (irons, coffee, carpet cleaners, gardening etc...)
- Industrial applications
- Water treatment

Consisting of a sensitive element in AISI, it is compatible in its use with different types of gaseous or liquid fluids, with temperatures up to 150° C.

Calibration is adjustable.

It is built with technopolymer reinforced.

Ultrasonic welding system, make the coupling homogeneous and stable for a long time avoiding metal joints or rivets.



## Caratteristiche Costruttive / Construction Features

|                                        |                                                                                                                                                                                 |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Involucro plastico / Plastic Casing    | Polyaryllamide Solvay (disponibile anche con materiali omologati IEC 60695-2-12 GWFI e alimentare).<br>Also available as IEC 60695-2-12 GWFI approved materials, food approval. |
| Membrana / Membrane                    | AISI                                                                                                                                                                            |
| Microinterruttore / Micro-switch       | 1 - Omologato / approved ENEC<br>2 - Disponibile / Availability: <b>NO</b> Normally open<br><b>NC</b> Normally closed<br><b>DEV</b> Changeover                                  |
| Terminali / Terminals                  | Fast-on 6,3 x 0,8; RAST 2,5; RAST 5<br>(su richiesta disponibili altre connessioni elettriche / electric connections available on request)                                      |
| Contatti / Contacts                    | AgNi10 (contatti per segnali a bassa tensione / voltage signal contacts)                                                                                                        |
| Grado di protezione / Protection Class | IP 00                                                                                                                                                                           |
| Peso / Weight                          | ~24 grammi / grams                                                                                                                                                              |

## Caratteristiche Funzionali / Operational Features

| Campo di regolazione<br>Adjustment Range                                | 1° Range                     | 2° Range      | 3° Range      | 4° Range      |
|-------------------------------------------------------------------------|------------------------------|---------------|---------------|---------------|
| Pressione massima di sovraccarico<br>Maximum Overload Pressure          | 0,2 ÷ 1,2 bar                | 1,0 ÷ 2,5 bar | 1,5 ÷ 4,0 bar | 3,0 ÷ 6,0 bar |
| Temperatura fluido<br>Fluid Temperature                                 | 10 bar                       |               |               |               |
| Temperatura ambiente<br>Ambient Temperature                             | < 150° C                     |               |               |               |
| Dati elettrici<br>Electrical Data                                       | -20°C ÷ +125° C              |               |               |               |
| Durata elettrica microinterruttore<br>Micro-switch Electrical Endurance | 5Vdc ÷ 230Vdc / 16 A, 250V ~ |               |               |               |
| Durata meccanica pressostato<br>Pressure Switch Mechanical Endurance    | 100K cicli / cycles          |               |               |               |
|                                                                         | > 20 bar                     |               |               |               |

## Omologazioni / Approvals

- EN60730-1, EN60730-2-6, EN60730-1:2016/A1:2019.
- Tutti i nostri prodotti sono conformi alla direttiva europea RoHS e REACH.  
All our products conform to the European directive RoHS and REACH.



## Stoccaggio / Storage

- Evitare che il pressostato venga a contatto con polveri.  
Avoid the transducer coming into contact with powders.
- Non immagazzinare in luoghi con umidità condensata.  
Do not store in locations with humidity condensation.
- Temperatura di stoccaggio / storage temperature -25°C

## Varianti / Alternative versions

BRASS



PRESSOSTATO **SERIE SPO CORPO IN OTTONE**  
PRESSURE SWITCH **SPO SERIES BRASS FITTING BODY**

INOX



PRESSOSTATO **SERIE SPS CORPO IN INOX**  
PRESSURE SWITCH **SPS SERIES INOX FITTING BODY**

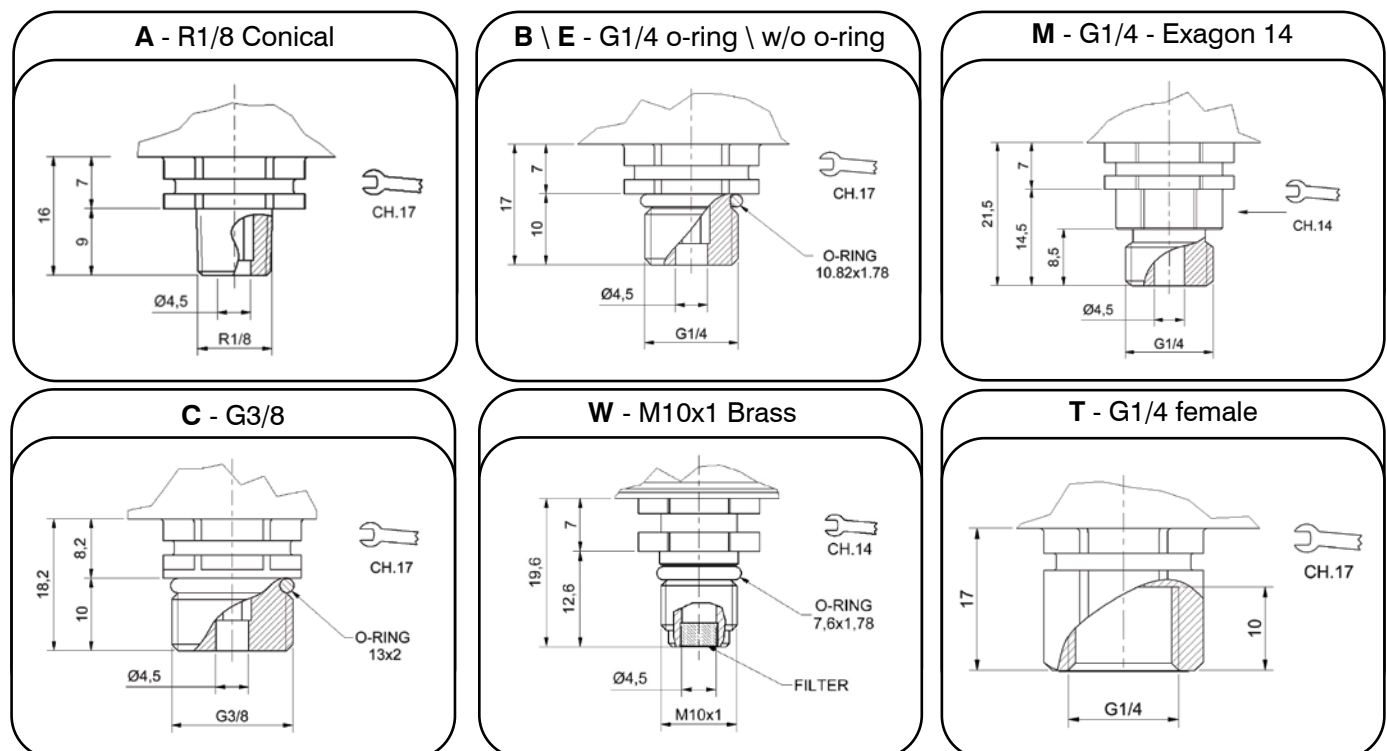
## Codifica / Code scheme

Esempio / Example:

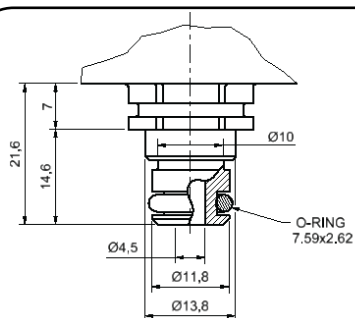
**SP A B 40U D 00**

| 1<br>Series | 2<br>Type                   | 3<br>Connection               | 4<br>Calibration    | 5<br>Microswitch Circuit    | 6<br>Custom                             |
|-------------|-----------------------------|-------------------------------|---------------------|-----------------------------|-----------------------------------------|
| SP          | C - Heating (wall heaters)  | A - R1/8 Conical              | XX D - Setting fall | D - Switch 3 pins           | 00 - Standard                           |
|             | V - Steam                   | B - G1/4 + o-ring             | XX U - Rising up    | NA - Normally Open          | 20 - Microswitch (connection protected) |
|             | I - Industrial applications | C - G3/8                      |                     | NC - Normally Closed        | 25 - Microswitch (+ connector)          |
|             | A - Food contact            | D - Fast connection Ø14       |                     | VA - Vertical Normally Open | 40 - Microswitch (full covered)         |
|             | O - Brass                   | E - G1/4 Without o-ring       |                     |                             | 42 - Silicon membrane                   |
|             | S - Inox                    | F - RILSAN Ø 6 mm             |                     |                             |                                         |
|             | R - Manual restart          | G - Adaptor G1/4 plastic      |                     |                             |                                         |
|             | L - Linear                  | H - Fast connection           |                     |                             |                                         |
|             |                             | I - Fast connection           |                     |                             |                                         |
|             |                             | K - Adaptor John Guest Ø 6,00 |                     |                             |                                         |
|             |                             | L - Adaptor G1/4 brass        |                     |                             |                                         |
|             |                             | M - Exagon ch.14 mm - G1/4    |                     |                             |                                         |
|             |                             | N - Circulator connection     |                     |                             |                                         |
|             |                             | P - RILSAN Ø 6,35 mm          |                     |                             |                                         |
|             |                             | R - Fast connection           |                     |                             |                                         |
|             |                             | S - Adaptor G1/8 brass        |                     |                             |                                         |
|             |                             | T - G1/4 female               |                     |                             |                                         |
|             |                             | U - RILSAN Ø 8 mm             |                     |                             |                                         |
|             |                             | V - Adaptor G3/8 brass        |                     |                             |                                         |
|             |                             | W - M10x1 (brass) + o-ring    |                     |                             |                                         |
|             |                             | X - Adaptor John Guest Ø 4,00 |                     |                             |                                         |
|             |                             | Y - Adaptor John Guest Ø 6,35 |                     |                             |                                         |
|             |                             | Z - Adaptor John Guest Ø 8    |                     |                             |                                         |

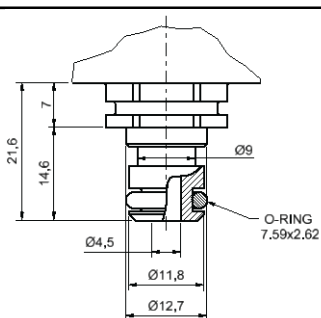
## Connessioni idrauliche / Hydraulic connections



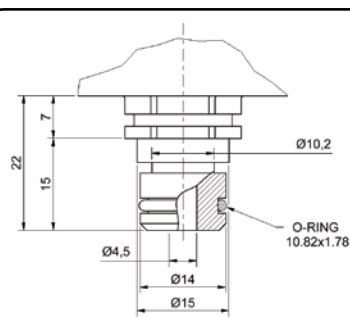
**I - Fast connection**



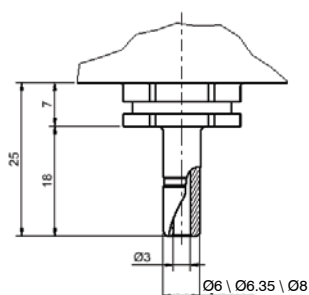
**R - Fast connection Ø 12,7 mm**



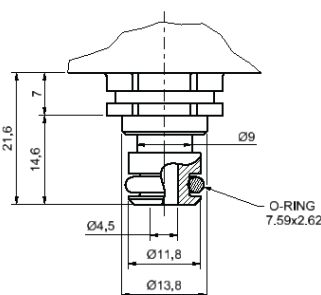
**D - Fast connection Ø14**



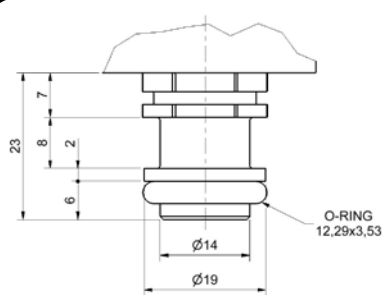
**F \ P \ U - Rilsan Ø6 \ Ø6.35 \ Ø8**



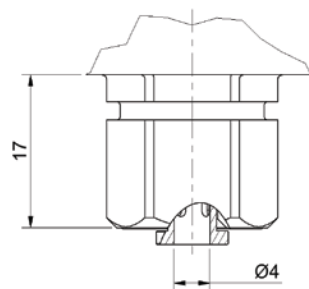
**H - Fast connection**



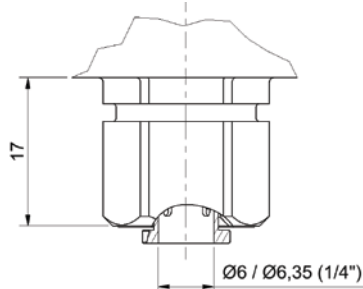
**N - Circulator connection**



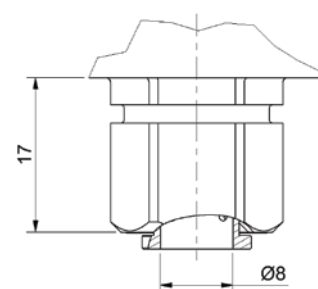
**X - Adaptor JGØ4**



**K \ Y - Adaptor JGØ6\Ø6.35 (1/4")**



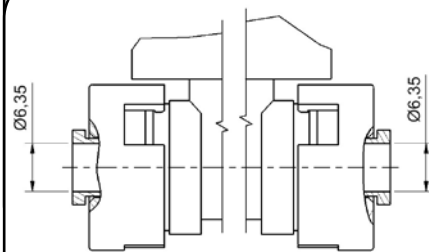
**Z - Adaptor JGØ8**



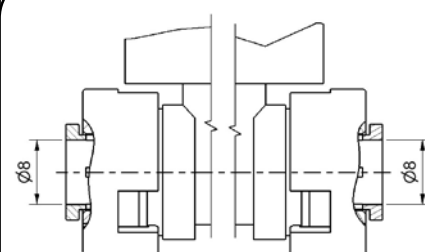
**LK Type - Adaptor JGØ6**



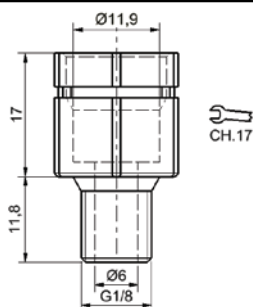
**LY Type - Adaptor JGØ6,35**



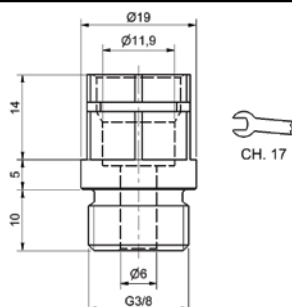
**LZ Type - Adaptor JGØ8**



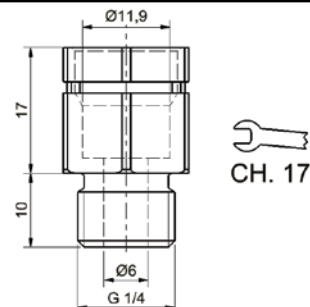
**S - Adaptor G1/8 brass**



**V - Adaptor G 3/8 Brass**



**G \ L - Adaptor G1/4 Plastic \ Brass**





## TRASDUTTORE EFFETTO HALL **SERIE T/TM** HALL EFFECT TRANSDUCER **T/TM SERIES**

### Descrizione

I trasduttori serie T e TM trovano il loro ottimale utilizzo nelle seguenti applicazioni:

- Riscaldamento (caldaie murali)
- Sistemi di condizionamento
- Sistemi a caldaia (vapore)
- Applicazioni industriali
- Trattamento acque

Costituito da un sensore di Hall, lo sviluppo di questo trasduttore si basa sul concetto della sollecitazione di un semiconduttore mediante magnete.

Il trasduttore serie TM è una variante della serie T con l'aggiunta di un manometro che permette la visualizzazione della pressione anche in assenza di alimentazione.

E' costruito con tecnopolimero rinforzato e l'elemento sensibile in AISI 301.

L'utilizzo della tecnologia di saldatura ad ultrasuoni, rende omogeneo e stabile nel tempo l'accoppiamento dei componenti che costituiscono il prodotto, evitando giunzioni metalliche o rivettature.

### Description

Transducer T and TM Series find their optimal use in the following applications:

- Heating (wall heaters)
- Air conditioning systems
- Boiler systems (steam)
- Industrial applications
- Water treatment

Development of this transducer, which consists of a Hall sensor, is based on the concept of using a magnet to affect a semiconductor.

TM Series development consist of gauge indicator let to check the pressure value without electric supply.

It is constructed in reinforced thermoplastic and sensitive element in AISI 301.

Ultrasonic welding system, make the coupling homogeneous and stable for a long time avoiding metal joints or rivets.

## Caratteristiche Costruttive / Construction Features

|                                        |                                                                                                                                                                                           |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Involucro plastico / Plastic Casing    | Polyaryllamide Solvay (disponibile anche con materiali omologati IEC 60695-2-12 GWFI, e alimentare).<br>Polyaryllamide Solvay (also available as IEC 60695-2-12 GWFI approved materials). |
| Membrana / Membrane                    | AISI                                                                                                                                                                                      |
| Tenuta / Seal                          | EPDM; VITON; SILICONE; NBR                                                                                                                                                                |
| Sensore / Sensor                       | Programmazione lineare / Linear programming                                                                                                                                               |
| Connessione / Connector                | RAST 2,5 (AMP duoplug type)                                                                                                                                                               |
| Grado di protezione / Protection Class | IP 00                                                                                                                                                                                     |
| Peso / Weight                          | ~ 23 grammi / grams                                                                                                                                                                       |

## Caratteristiche Funzionali / Operational Features

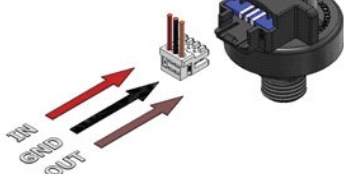
|                                                  |                                                                                                                                                                                                                          |                                                 |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| Campo di lavoro / Operating Range                | $0 \div 4 \text{ bar} / 0 \div 6 \text{ bar} / 0 \div 10 \text{ bar}$                                                                                                                                                    | $0 \div 12 \text{ bar} / 0 \div 20 \text{ bar}$ |
| Pressione di sovraccarico / Overload Pressure    | $\leq 15 \text{ bar}$                                                                                                                                                                                                    | $\leq 25 \text{ bar}$                           |
| Pressione di rottura / Breakdown Pressure        | $> 20 \text{ bar}$                                                                                                                                                                                                       | $> 30 \text{ bar}$                              |
| Temperatura fluido / Fluid Temperature           | $\leq 110^\circ \text{C}$                                                                                                                                                                                                |                                                 |
| Temperatura ambiente / Environmental Temperature | $-20^\circ \text{C} \div +85^\circ \text{C}$                                                                                                                                                                             |                                                 |
| Fluido / Fluid                                   | Liquido, gas, acqua contenete le usuali concentrazioni ed additivi per circuiti di riscaldamento e glicole.<br>Liquid, gas, or water containing the usual concentrations and additives for heating circuits and glycols. |                                                 |
| Manometro / Manometer                            | Visualizzazione indicativa 0 - 3 bar (solo serie TM). Display 0 - 3 bar (only TM serie).                                                                                                                                 |                                                 |

## Caratteristiche Elettriche / Electrical Features

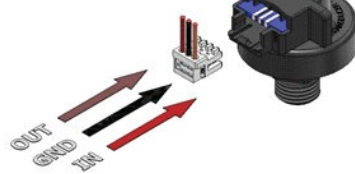
|                                                    |                                                                    |
|----------------------------------------------------|--------------------------------------------------------------------|
| Alimentazione / Supply                             | 5 Vdc; 8...30 Vdc (Available on request with anti-revers diod)     |
| Segnale di uscita / Output Signal                  | 0.5...2.5Vdc / 0.5...3.5Vdc / 0...3Vdc / 0.5...4Vdc / 0.5...4.5Vdc |
| (Segnale di uscita personalizzato / Custom output) |                                                                    |
| Assorbimento / Current consumption                 | $< 9 \text{ mA}$                                                   |
| Carico resistivo / Resistance Load                 | $\geq 4,7 \text{ K}\Omega$                                         |
| Carico capacitivo / Capacitance Load               | $\leq 10 \text{ nF}$                                               |

## Connessioni elettriche / Electric connections

RAST 2.5 -  
STANDARD



RAST 2.5 -  
INVERTED



RAST 2.5 -  
POLARIZED



## Omologazioni / Approvals

- EMC 2014/30EU
- Tutti i nostri prodotti sono conformi alla direttiva europea RoHS e REACH.  
All our products conform to the 2002/95/EC European directive RoHS and REACH.



## Stoccaggio / Storage

- Evitare che il trasduttore venga a contatto con polveri.  
Avoid the transducer coming into contact with powders.
- Non immagazzinare in luoghi con umidità condensata.  
Do not store in locations with humidity condensation.
- Temperatura di stoccaggio / storage temperature  $-25^\circ \text{C}$

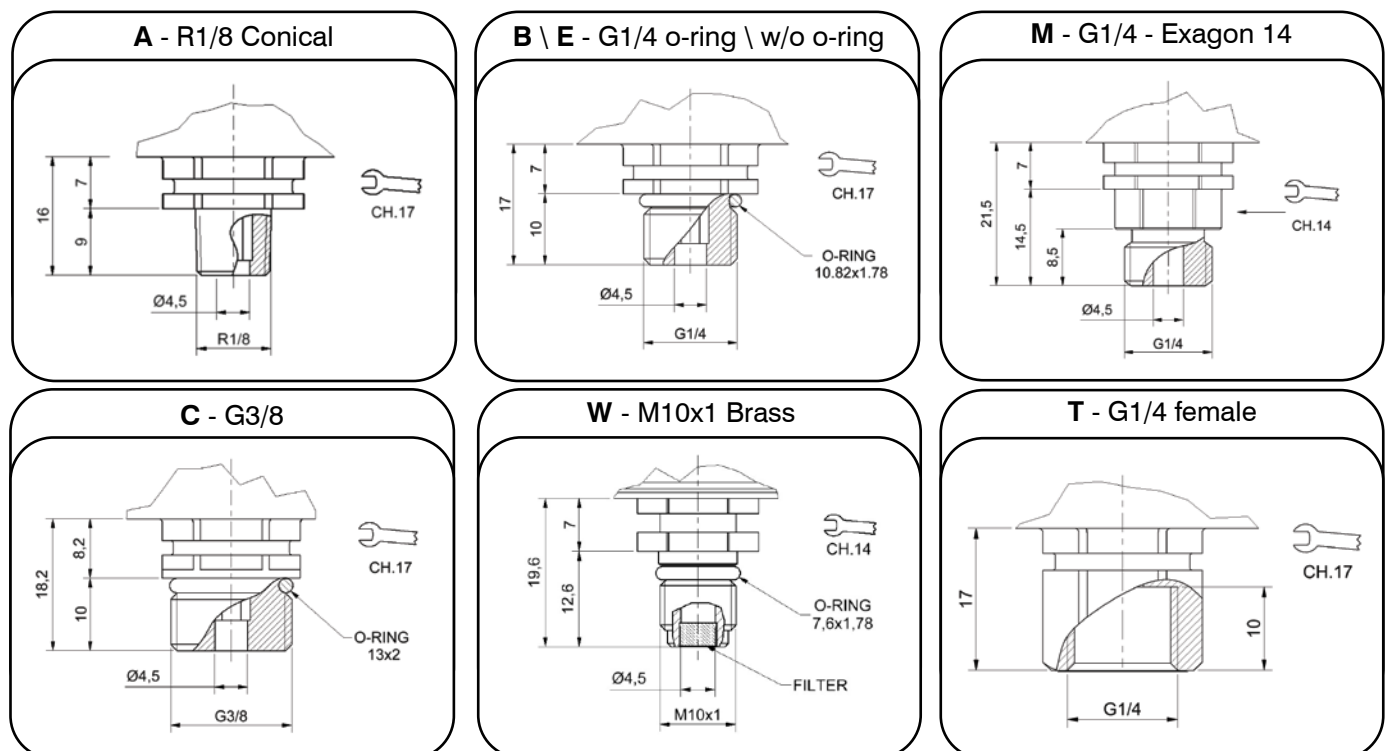
## Codifica / Code scheme

Esempio / Example:

**T C B A A 00**

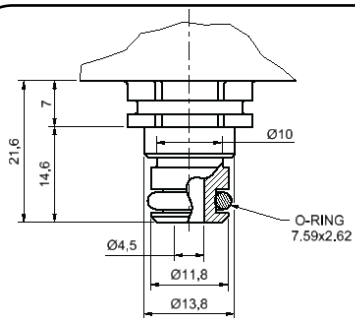
| 1<br>Series | 2<br>Type                   | 3<br>Connection               | 4<br>Voltage Output          | 5<br>Voltage Input | 6<br>Custom                       |
|-------------|-----------------------------|-------------------------------|------------------------------|--------------------|-----------------------------------|
| T/TM        | C - Heating (wall heaters)  | A - R1/8 Conical              | A - 0,5÷2,5 Vdc              | A - 5 Vdc          | 00 - Standard 0...4bar            |
| VE (vuoto)  | V - Steam                   | B - G1/4 + o-ring             | B - 0,5÷3,5 Vdc              | B - 8÷30 Vdc       | 01 - Input and output inverted    |
| TT          | I - Industrial applications | C - G3/8                      | C - 0,5÷3,0 Vdc              |                    | 50 - Support / card polarized     |
|             | A - Food contact            | D - Fast connection Ø 14      | D - 0,5÷3,5 Vdc Ratiometric  |                    | 60 - 0...6 bar                    |
|             | O - Brass                   | E - G1/4 Without o-ring       | E - 0,5÷4,0 Vdc Ratiometric  |                    | 70 - Connection with inlet filter |
|             | S - Inox                    | F - RILSAN Ø 6 mm             | F - 0,5÷2,5 Volt Ratiometric |                    |                                   |
|             |                             | G - Adaptor G1/4 plastic      | G - 0,5÷4,5 Vdc Ratiometric  |                    |                                   |
|             |                             | H - Fast connection           | H - 0,5÷3,0 Vdc Ratiometric  |                    |                                   |
|             |                             | I - Fast connection           | I - 0,0÷10 Vdc               |                    |                                   |
|             |                             | K - Adaptor John Guest Ø 6    | L - 0,3÷4,8 Vdc Ratiometric  |                    |                                   |
|             |                             | L - Adaptor G1/4 brass        | V - 1,125÷3,4 Vdc            |                    |                                   |
|             |                             | M - Exagon ch.14 mm - G1/4    |                              |                    |                                   |
|             |                             | N - Circulator connection     |                              |                    |                                   |
|             |                             | P - RILSAN Ø 6,35 mm          |                              |                    |                                   |
|             |                             | R - Fast connection           |                              |                    |                                   |
|             |                             | S - Adaptor G1/8 brass        |                              |                    |                                   |
|             |                             | T - G1/4 female               |                              |                    |                                   |
|             |                             | U - RILSAN Ø 8,00             |                              |                    |                                   |
|             |                             | V - Fast connection           |                              |                    |                                   |
|             |                             | W - M10x1 (brass) + o-ring    |                              |                    |                                   |
|             |                             | X - Adaptor John Guest Ø 4,00 |                              |                    |                                   |
|             |                             | Y - Adaptor John Guest Ø 6,35 |                              |                    |                                   |
|             |                             | Z - Adaptor John Guest Ø 8,00 |                              |                    |                                   |

## Connessioni idrauliche / Hydraulic connections

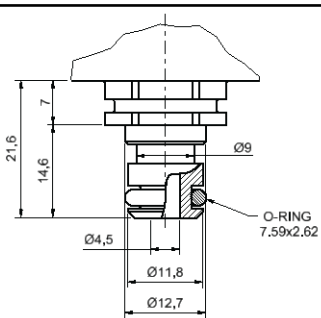




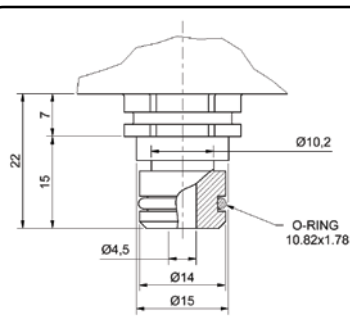
**I - Fast connection**



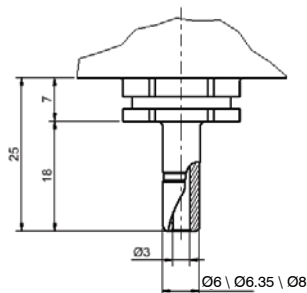
**R - Fast connection Ø 12,7 mm**



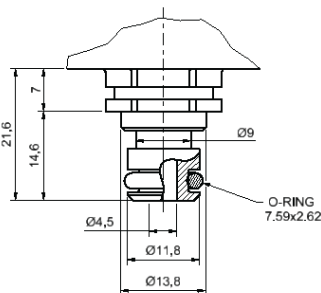
**D - Fast connection Ø14**



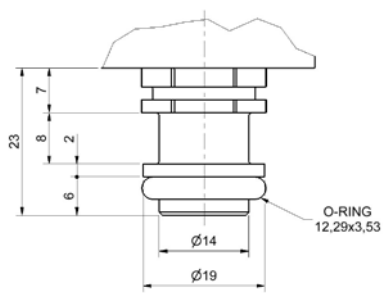
**F \ P \ U - Rilsan Ø6 \ Ø6.35 \ Ø8**



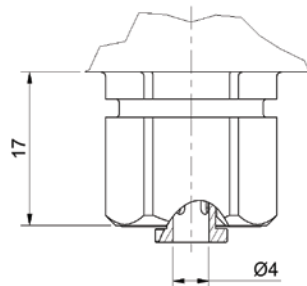
**H - Fast connection**



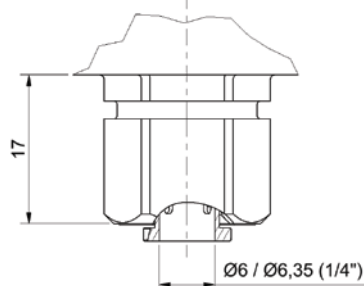
**N - Circulator connection**



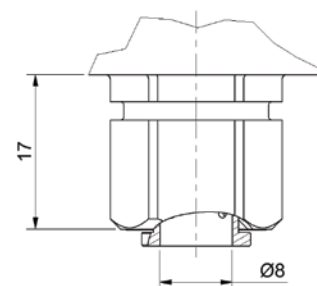
**X - Adaptor JGØ4**



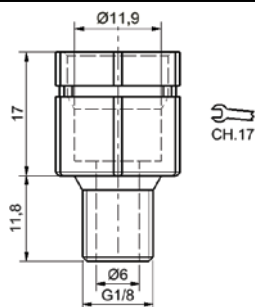
**K \ Y - Adaptor JGØ6, Ø6.35 (1/4")**



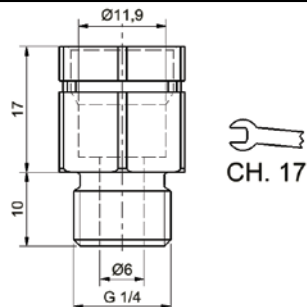
**Z - Adaptor JGØ8**



**S - Adaptor G1/8 brass**



**G \ L - Adaptor G1/4 Plastic \ Brass**



Transducer with Hydraulic Connection - John Guest

WATER TREATMENT



- Feature:
- Food contact material
  - Long working life and small dimensions
  - Male and Female connection

Transducer with Hydraulic Connection - Gas thread and Adjustable connection

HVAC



Trasduttore con filtro in entrata.  
Transducer with inlet filter.



- Feature:
- Male and Female Gas thread (also with brass adapter) or adjustable connection
  - Different configurations: RAST 2.5 IN-GND-OUT; RAST 2.5 OUT-GND-IN; RAST 2.5 POLARIZED OUT-N-GND-IN
  - Long working life and small dimensions
  - High and Low pressure range

Trasduttore con manometro in plastica e in ottone.  
Gauge Transducer with plastic and brass body.



Trasduttore con attacco in metallo.  
Transducer with metallic body.





## TRASDUTTORE EFFETTO HALL **SERIE TT** HALL EFFECT TRANSDUCER **TT SERIES**

### Descrizione

I trasduttori serie TT trovano il loro ottimale utilizzo nelle seguenti applicazioni:

- Riscaldamento (caldaie murali)
- Sistemi di condizionamento
- Sistemi a caldaia (vapore)
- Applicazioni industriali
- Trattamento acque

### Description

TT Series transducer is best suited to the following applications:

- Heating (wall heaters)
- Air conditioning systems
- Boiler systems (steam)
- Industrial applications
- Water treatment

### Codifica / Code scheme

Esempio / Example:

**TT C B A A 00**

| 1<br>Series | 2<br>Type                   | 3<br>Connection               | 4<br>Voltage Output          | 5<br>Voltage Input | 6<br>Custom                       |
|-------------|-----------------------------|-------------------------------|------------------------------|--------------------|-----------------------------------|
| T/TM        | C - Heating (wall heaters)  | A - R1/8 Conical              | A - 0,5÷2,5 Vdc              | A - 5 Vdc          | 00 - Standard 0...4bar            |
| VE (vuoto)  | V - Steam                   | B - G1/4 + o-ring             | B - 0,5÷3,5 Vdc              | B - 8÷30 Vdc       | 01 - Input and output inverted    |
| TT          | I - Industrial applications | C - G3/8                      | C - 0,5÷3,0 Vdc              |                    | 50 - Support / card polarized     |
|             | A - Food contact            | D - Fast connection Ø 14      | D - 0,5÷3,5 Vdc Ratiometric  |                    | 60 - 0...6 bar                    |
|             | O - Brass                   | E - G1/4 Without o-ring       | E - 0,5÷4,0 Vdc Ratiometric  |                    | 70 - Connection with inlet filter |
|             | S - Inox                    | F - RILSAN Ø 6 mm             | F - 0,5÷2,5 Volt Ratiometric |                    |                                   |
|             |                             | G - Adaptor G1/4 plastic      | G - 0,5÷4,5 Vdc Ratiometric  |                    |                                   |
|             |                             | H - Fast connection           | H - 0,5÷3,0 Vdc Ratiometric  |                    |                                   |
|             |                             | I - Fast connection           | I - 0,0÷10 Vdc               |                    |                                   |
|             |                             | K - Adaptor John Guest Ø 6    | L - 0,3÷4,8 Vdc Ratiometric  |                    |                                   |
|             |                             | L - Adaptor G1/4 brass        | V - 1,125÷3,4 Vdc            |                    |                                   |
|             |                             | M - Exagon ch.14 mm - G1/4    |                              |                    |                                   |
|             |                             | N - Circulator connection     |                              |                    |                                   |
|             |                             | P - RILSAN Ø 6,35 mm          |                              |                    |                                   |
|             |                             | R - Fast connection           |                              |                    |                                   |
|             |                             | S - Adaptor G1/8 brass        |                              |                    |                                   |
|             |                             | T - G1/4 female               |                              |                    |                                   |
|             |                             | U - RILSAN Ø 8,00             |                              |                    |                                   |
|             |                             | V - Fast connection           |                              |                    |                                   |
|             |                             | W - M10x1 (brass) + o-ring    |                              |                    |                                   |
|             |                             | X - Adaptor John Guest Ø 4,00 |                              |                    |                                   |
|             |                             | Y - Adaptor John Guest Ø 6,35 |                              |                    |                                   |
|             |                             | Z - Adaptor John Guest Ø 8,00 |                              |                    |                                   |

## Caratteristiche Costruttive / Construction Features

|                                        |                                                                                                                                                                                           |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Involucro plastico / Plastic Casing    | Polyaryllamide Solvay (disponibile anche con materiali omologati IEC 60695-2-12 GWFI, e alimentare).<br>Polyaryllamide Solvay (also available as IEC 60695-2-12 GWFI approved materials). |
| Membrana / Membrane                    | AISI                                                                                                                                                                                      |
| Tenuta / Seal                          | EPDM; VITON; SILICONE; NBR                                                                                                                                                                |
| Sensore / Sensor                       | Programmazione lineare / Linear programming                                                                                                                                               |
| Connessione / Connector                | RAST 2,5 (AMP duoplug type)                                                                                                                                                               |
| Grado di protezione / Protection Class | IP 00                                                                                                                                                                                     |
| Peso / Weight                          | ~ 23 grammi / grams                                                                                                                                                                       |

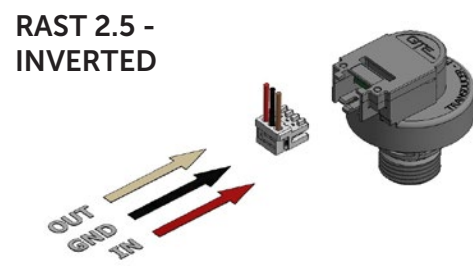
## Caratteristiche Funzionali / Operational Features

|                                                  |                                                                                                                                                                                                                          |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Campo di lavoro / Operating Range                | $-0 \div 4 \text{ bar} / -0 \div 6 \text{ bar} / -0 \div 10 \text{ bar}$                                                                                                                                                 |
| Pressione di sovraccarico / Overload Pressure    | $\leq 15 \text{ bar}$                                                                                                                                                                                                    |
| Pressione di rottura / Breakdown Pressure        | $> 20 \text{ bar}$                                                                                                                                                                                                       |
| Temperatura fluido / Fluid Temperature           | $\leq 110^\circ \text{C}$                                                                                                                                                                                                |
| Temperatura ambiente / Environmental Temperature | $-20^\circ \text{C} \div +85^\circ \text{C}$                                                                                                                                                                             |
| Fluido / Fluid                                   | Liquido, gas, acqua contenete le usuali concentrazioni ed additivi per circuiti di riscaldamento e glicole.<br>Liquid, gas, or water containing the usual concentrations and additives for heating circuits and glycols. |
| Manometro / Manometer                            | Visualizzazione indicativa 0 - 3 bar (solo serie TM). Display 0 - 3 bar (only TM serie).                                                                                                                                 |

## Caratteristiche Elettriche / Electrical Features

|                                                    |                                                                                                                    |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Alimentazione / Supply                             | 5 Vdc; 8...30 Vdc                                                                                                  |
| Segnale di uscita / Output Signal                  | $-0.5...2.5 \text{ Vdc} / -0.5...3.5 \text{ Vdc} / -0...3 \text{ Vdc} / -0...4 \text{ Vdc} / -0...4.5 \text{ Vdc}$ |
| (Segnale di uscita personalizzato / Custom output) |                                                                                                                    |
| Assorbimento / Current consumption                 | $< 9 \text{ mA}$                                                                                                   |
| Carico resistivo / Resistance Load                 | $\geq 4,7 \text{ K}\Omega$                                                                                         |
| Carico capacitivo / Capacitance Load               | $\leq 10 \text{ nF}$                                                                                               |

## Connessioni elettriche / Electric connections



## Omologazioni / Approvals

- EMC 2014/30EU
- Tutti i nostri prodotti sono conformi alla direttiva europea RoHS e REACH.  
All our products conform to the 2002/95/EC European directive RoHS and REACH.

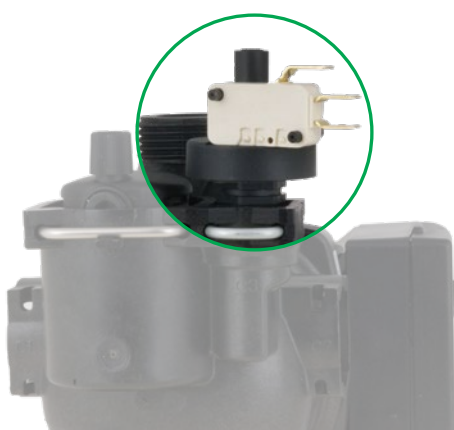


## Stoccaggio / Storage

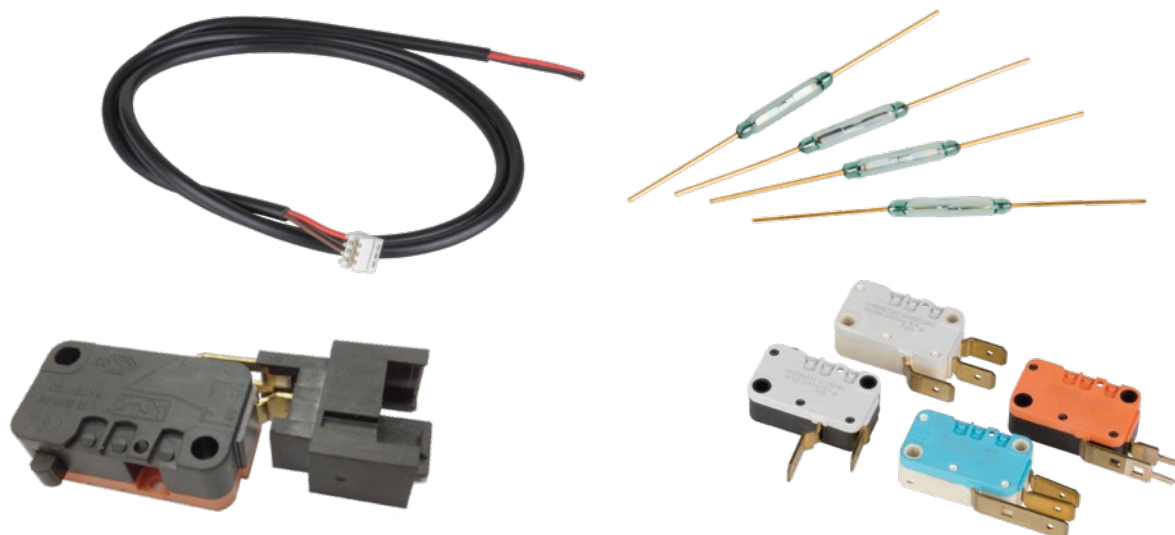
- Evitare che il trasduttore venga a contatto con polveri.  
Avoid the transducer coming into contact with powders.
- Non immagazzinare in luoghi con umidità condensata.  
Do not store in locations with humidity condensation.
- Temperatura di stoccaggio / storage temperature  $-25^\circ \text{C}$



Le nostre connessioni idrauliche  
*Our hydraulic connection*



Connessione idraulica per circolatori  
*Hydraulic connection for circulator pump system*









## ATTESTATION OF CONFORMITY

TO ELECTROMAGNETIC COMPATIBILITY STANDARDS  
ATTESTATO DI CONFORMITA'  
ALLE NORME DI COMPATIBILITA' ELETTROMAGNETICA

|                                                    |                                                                                                                         |
|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Attestation number<br>Attestato numero             | : 3507070.01_AoC_EMC                                                                                                    |
| Issued to<br>Rilasciata a                          | : GTE Elettromeccanica s.r.l.<br>Via Galileo Galilei, 1B<br>I - 20875 Burago di Molgora (MB)                            |
| Manufacturer<br>Costruttore                        | : GTE Elettromeccanica s.r.l.<br>Via Galileo Galilei, 1B<br>I - 20875 Burago di Molgora (MB)                            |
| Product Type<br>Tipo prodotto                      | : Hall Effect Transducer                                                                                                |
| Model reference<br>Riferimento Modello             | : TCHAA00<br>TCHBB00                                                                                                    |
| Serial number<br>Numero di serie                   | : -                                                                                                                     |
| Main Specs/Ratings<br>Dati tecnici/Caratteristiche | : Elettech S.r.l. 002596EMC00_01                                                                                        |
| Test Report ref. No.<br>Rapporto di prova Nr.      | : EN IEC 61000-6-1: 2019;<br>EN 61000-4-2: 2009<br>EN 61000-4-3: 2006 +A1:2008 +IS1:2008 +A2:2010<br>EN 61000-4-4: 2012 |

The undersigned declares that the above described product meets the above mentioned test results as laid down in the referred Test Report. The undersigned does not include an assessment of the manufacturer's production nor of the factory location.

Il sottoscritto dichiara che il prodotto di cui sopra è conforme ai requisiti tecnici di cui sopra e che il prodotto è conforme ai requisiti tecnici di cui sopra e che il prodotto è conforme ai requisiti tecnici di cui sopra.

  
 Franco Vasta  
 Executive

Date of issue:  
Emesso in data

2020-05-29

DEKRA Testing and Certification S.r.l. e S.U. Via Fratelli Gracchi 27 - Tel. 0362/30001  
Sede operativa di I-23875 Oleggio (VC) - Via Martiri della Libertà 10 - Tel. 0322/30001  
e-mail: [italy.certification@dekra.com](mailto:italy.certification@dekra.com) - C.F./P.I. 02894270962 - REA: MI-20337

## RAPPORTO DI PROVA / TEST REPORT

|                                                   |                                 |
|---------------------------------------------------|---------------------------------|
| NUMERO<br>0677\FPM\FDC\22_1                       | DATA DI EMISSIONE<br>08/06/2022 |
| BUSINESS AREA<br>BA Product Conformity Assessment | LABORATORIO<br>Food Contact     |

**IDENTIFICAZIONE E DESCRIZIONE DEL CAMPIONE**  
 ASSIEME PRESSOSTATO serie SPA:  
 Raccordo 07-0012; Membrana 05-0001; O-ring 06-0005

**CLIENTE**  
 GTE ELETTROMECCANICA SRL  
 PIAZZA G. LA PIRA, 24  
 20851 LISSONE (MB)

**NORMA DI RIFERIMENTO**  
 D.P.R. 777 del 23 Agosto 1982 e D.L. 108 del 25 Gennaio 1992; D.M. 34 del 21.3.73 S.O. GU n° 104 del 20/04/73 e succ. agg. e mod.  
 Regolamento (EU) n. 10/2011, GUUE L 12 del 15/01/2011 e successivi aggiornamenti.  
 UNI EN 1186 1+1:2003 (il riferimento alla parte specifica della norma tecnica viene riportato nella descrizione della prova)

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GG001 REV.02

CSI S.p.A. A SOCIO UNICO  
 SOCIETA' AD ATTIVITA' DIREZIONE E  
 COORDINAMENTO DI MAG GROUP SRL  
 REA MI 1464310  
 R.I./C.F./P.I. 11380160151  
 Cap. Soc. € 1.040.000  
 Sede legale  
 Italia | 20030 Senago (MI) | Casella Postale 21  
 direzione-cultura@csimail.it | info@csi-tpa.com | www.csi-tpa.com

## Note / Notes





**GTE**  
ELETTROMECCANICA

   
MADE in ITALY



**Dirección: C/ Eugeni Ferrer Dalmau nº34 CP: 08223 – Terrassa (Barcelona)**

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