

**Original P+F**

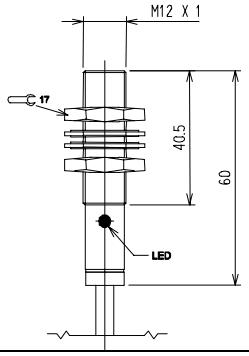
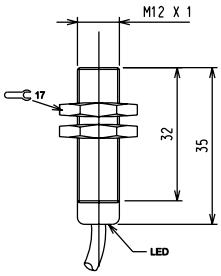
# TYPE FCE/I4 PNP NO+NC 10..30 V DC

# TYPE FCE/I2N NC 7.7..9.0 V DC

**ATEX 94/9/CE II 1-G EExia IIC T6**
**ATEX 94/9/CE II 1-D EExia D20 T…°C**
**With EExia IIC intrinsically safe switching amplifier**

## DESCRIPTION

The principle of inductive proximity sensors is based on the interaction between metallic conductors and an electromagnetic alternating field.
When the plate located on the valve stem enters the sensor “Active surface” and operating distance is assured, causes a change on the output.

| Description | Type FCE/I4 | Type FCE/I2N |
|---|---|---|
| Housing size | M12x1 | M12x1 |
| Mounting | a filo | A filo |
| Rated operation distance | 2 mm | 2 mm |
| Assured operating distance | 0 .. 1.6 mm | 0 .. 1.62 mm |
| Switching functions | PNP antivalente ( N0+NC) | NC |
| Rated operational voltage | 24 V DC | 8 V DC |
| Supply voltage | 10 .. 30 V DC | 7,7 .. 9,0 V DC |
| Voltage drop | ≤ 2.5 V | - |
| Rated insulation voltage | 250 V AC | - |
| Rated operational current | 200 mA | - |
| Protected against polarity reversal | YES | - |
| Short circuit protected | YES | - |
| Repeat accuracy R | ≤ 5 % | - |
| Ambient temperature range | - 25 .. +70 °C | - 25 .. +100 °C |
| Frequency of operating cycles | 800 Hz | - |
| Utilization categories | DC 13 | - |
| LED function indication | YES | YES |
| Degree of protection | IEC 529 - IP 68 | ATEX 94/9/CE<br>II 1-G EExia IIC T6 II 1-D EExia D20 T…°C<br>IP 67 with switching amplifier see pag.2 |
| Housing material | Brass Nickel Plated | Stainless steel |
| Material of sensing face | PA 12 | PBT |
| Connection | Cable | Cable |
| Number of wires | 4 | 2 |
| Conductor cross section | 0,25 mm2 | 0,34 mm2 |
| **DIMENSIONS in mm** |  |  |

On request Proximity Limit Switches 2 wires NO or NC voltage 20..250 V AC

CONFLOW s.p.a.
FLOW CONTROL SOLUTIONS

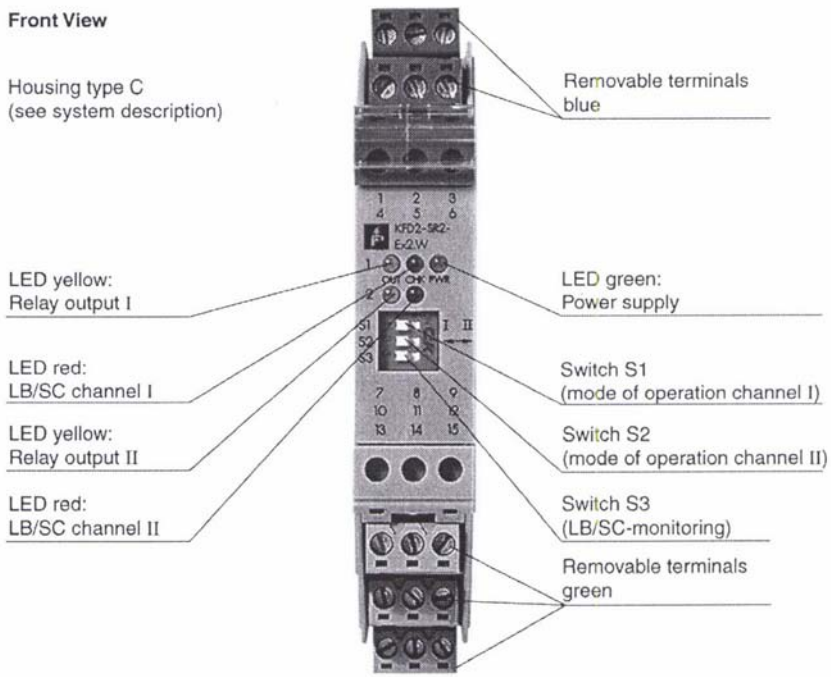
COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV GL = ISO 9001 =

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## Switching Amplifier KF Series for FCE/I2N – ATEX 94/9/CE

| Type | Operating voltage |
|---|---|
| KFD2-SR2-Ex2.W | 20 … 30 V DC |
| KFA5-SR2-Ex2.W | 103,5 … 126 V AC |
| KFA6-SR2-Ex2.W | 207 … 253 V AC |

**Composition**




| Description | Switching Amplifier for type FCE/I2N |
|---|---|
| Supply voltage | 24 V DC or 24V AC or.103,5 … 126 V AC or 220 … 230 V AC 45 …65 Hz |
| Input voltage circuit | Intrinsecally safe |
| Intrisecally safe category | EExia II C |
| Input | N° 2 |
| Output contact loading n° 2 | 253 V AC / 2A / cos φ >0,7; 126.5 V AC / 4A / / cos φ >0,7; 40 V DC / 2A resistive load |
| Mounting | snap fitting for rail mounting or with mounting screws |
| Degree of protection | IP 20 |
| Dimensions | 20 x 118 x 115 mm |

### Principle

The switching amplifier process signal from type FCE/I2N.
It may be installed only outside of a hazardous area.
The sensor itself may be installed within the explosion area (zone 1 and 2).
The switching amplifier prevents a dangerous current or voltage levels reaching the hazardous area.

## MOUNTING KIT OF PROXIMITY LIMIT SWITCHES ON PNEUMATIC VALVES

**MOUNTING KIT COMPOSED BY :**

- NAMUR bracket with M8 screw to be assembled on valve yoke.
- Plate to be assembled on valve stem



**Specifications given are only indicative and not binding for the manifacturer who reserve the right to carry-out any modifications deemed necessary without prior notice. All data sheets by CONFLOW SpA, are available last update on our internet web site www.conflow.it.**