



**ELEKTRONIK**

# FLOW CONTROLLER

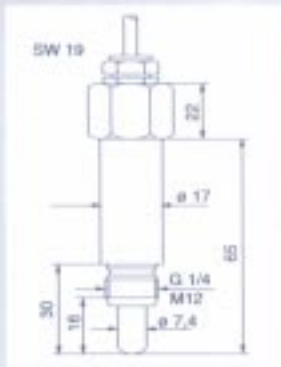
**Ex** - Sensors Zone 0 • Series 400

*Sensors for use in hazardous areas*

- Flow control
- Adjustable above and below set-point
- Flow failure monitoring
- For mounting in pipes and tanks

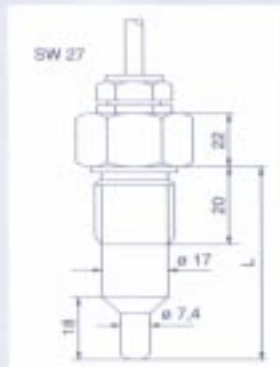


**G 1/4 / M12**



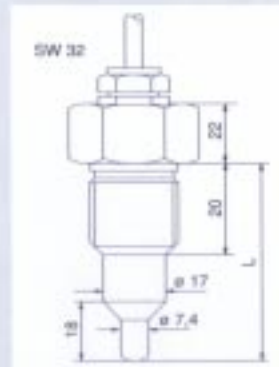
**STS 01/02**

**G 1/2 / NPT 1/2**



**STS 03/05**

**G 3/4**



**STS 04**

**G 3/4 / NPT 3/4**



**STEX 01/02**

**SENSORS EEx ia IIC T4**

| TYPE     | ID-NO. | DESIGN  |               |
|----------|--------|---------|---------------|
| STS 01 K | P10760 | M12 x 1 | Cable         |
| STS 02 K | P10762 | G1/4    | Cable         |
| STS 03 K | P10764 | G1/2    | L=65 mm Cable |
| STS 04 K | P10766 | G3/4    | L=65 mm Cable |
| STS 05 K | P10768 | NPT 1/2 | L=65 mm Cable |

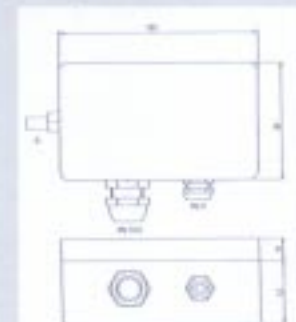
**SENSORS EEx ib [ia] IIC T4**

| TYPE    | ID-NO. | DESIGN  |                       |
|---------|--------|---------|-----------------------|
| STEX 01 | P10750 | G3/4    | Separated clamp space |
| STEX 02 | P10751 | NPT 3/4 | Separated clamp space |

**LIGHTNING PROTECTION FOR SENSORS**

| TYPE    | ID-NO. | DESIGN               |                       |
|---------|--------|----------------------|-----------------------|
| SBGX 01 | Z01007 | Lightning protection | Separated clamp space |

**Lightning protection**



**SBGX 01**

**Combination sensor-amplifier**

|         | SEA 400 Ex | SEA 401 Ex | SZA 400 Ex |
|---------|------------|------------|------------|
| STS...  | ●          | ●          | ●          |
| STEX... | ●          | ●          | ●          |

**Notes**

Sensors with special lengths up to L=300 mm and sensors with plug are available on request. If required, the lightning protection should be fitted.

Different materials (e.g. Hastelloy) are available on request.

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## Technical Data

|                                 | STS...  | STEX...                                     |
|---------------------------------|---|---|
| Confirmation of conformity Sign | PTB No. Ex-94.C.2125X<br>EEx ia IIC T4                  | PTB No. Ex-93.C.2098X<br>EEx ib [ia] IIC T4 |
| Maximum values                  | Pi = 0,866 W<br>Ci = 100 pF<br>Li = 0.01 mH             |   |
| Power consumption               |   |   |
| Internal capacity               |   |   |
| Internal inductivity            |   |   |
| Detection range                 |   |   |
| Water (nominal flow)            | 1...100 cm/s  | (20 cm/s)                                   |
| Oil (nominal flow)              | 3...200 cm/s  | (60 cm/s)                                   |
| Temperature class               | T4  |   |
| Temperature range               | -20...60 °C   |   |
| Temperature gradient            | 250 °C/min  |   |
| Temperature-step time           | typ. 12 s   |   |
| Standby time                    | typ. 8 s (2...18 s)                                     |   |
| Switch-on time                  | typ. 2 s (1...13 s)                                     |   |
| Switch-off time                 | typ. 2 s (1...15 s)                                     |   |
| Compressive strength            | 60 bar  |   |
| Protection (EN 60529)           |   |   |
| Cable                           | IP 68   |   |
| Clamp space                     | IP 67   |   |
| Material sensor (DIN 17440)     | 1.4571 (AISI 316 Ti)                                    |   |
| Tightening torque thread        | 100 Nm  |   |
| Connection STS...               | cable 2m PUR blue / 4 x 0.25 mm <sup>2</sup> , shielded |   |
| Connection STEX...              | Separated clamp space                                   |   |

### Connection STS...



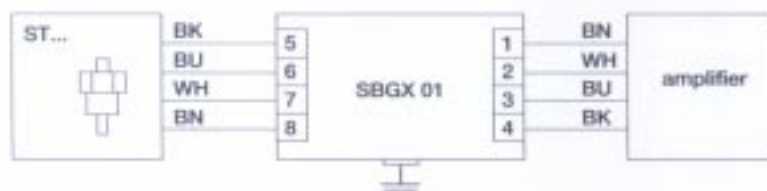
### Connection STEX...



### Clamp space STEX...



### Connection lightning protection SBGX 01



Code: BK = black BN = brown BU = blue GN = green YE = yellow GY = grey PK = pink WH = white