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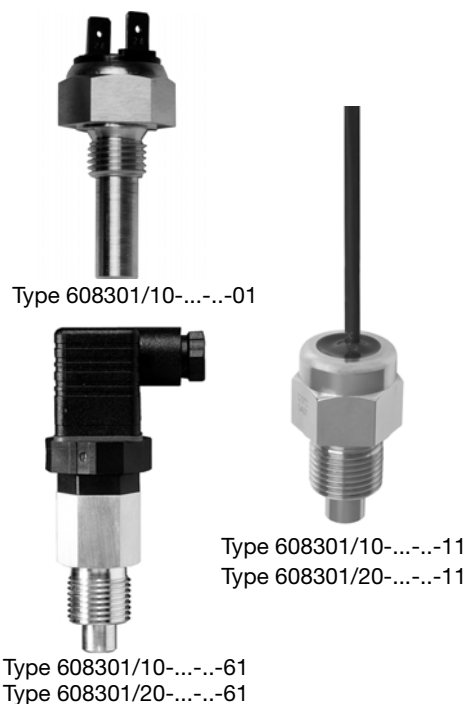
Bimetal Temperature Switch

- electromechanical temperature switch with a fixed switching temperature
- IP67 protection (max.)
- simple installation
- contact rating up to 2.5 kVA

Brief description

The bimetal temperature switch lends itself to universal use. Areas of application include temperature monitoring/control and signaling in cooling and heating systems, compressors and motors.

The temperature switch can, to a limited extent, also be used as a temperature controller. The temperature change is transferred to a mechanism via the fitting. When the switching temperature is reached, the temperature switch is activated.





Technical data

Minimum ordering quantity: 50 items

| | Faston connector A 6.3-08 | Connecting cable with cable gland | Encapsulated connecting cable | Plug connector for cable connection * |
|----------------------------|---|---|---|---|
| Fitting | brass or stainless steel; screw-in spigot similar to DIN 3852 Form A for sealing and sealing ring | | | |
| Protection | IP52 | IP65 | IP67 | IP65 |
| Electrical contact | | | | cable diameter 6 – 8 mm; earth contact not connected |
| Snap-action switch | A 6.3-0.8 to DIN 46244 | cable diameter approx. 5.5 mm; core cross-section 0.75 mm ² | | |
| Connection | | | | |
| Contact rating | 5 A, 30 V DC, +10 / -15% 10(10) A, 230 V AC +10/-15%, 48 – 63Hz, p.f. = 0.75 | | | |
| Contact resistance | 15(13.5) A, 115 V AC +10/-15%, 48 – 63Hz, p.f. = 1 (0.75) | 10(10) A, 115 V AC +10/-15%, 48 – 63Hz, p.f. = 1 (0.75) | | |
| Breakdown strength | < 3 mΩ | | | |
| | 1500 V AC /1min | | | |
| Electrical contact | | | 8 A, 12 V DC +10/-15% 4 A, 24 V DC +10/-15% 6 A, 115 V AC +10/-15%, 48 – 63Hz | |
| Slow-action contact | - | - | | |
| Contact rating | If the bimetal temperature switch is operated off a voltage above 50 V, the fitting must be provided with a protective earth according to VDE or the corresponding local regulations. | | | |

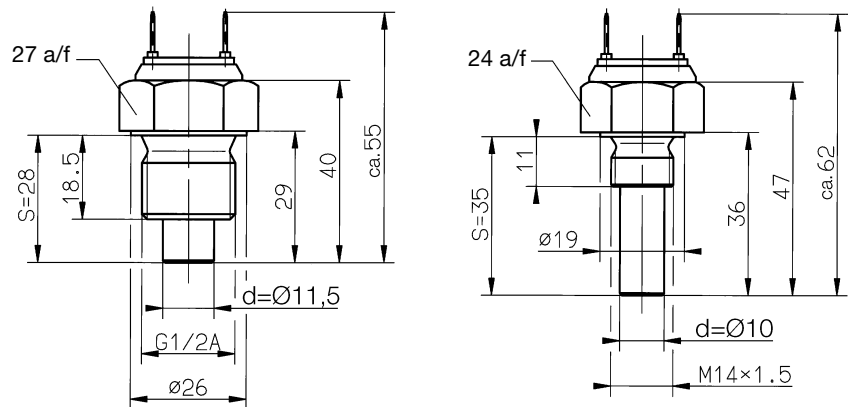
* to EN 175301-803 (DIN 43650)

Technical data

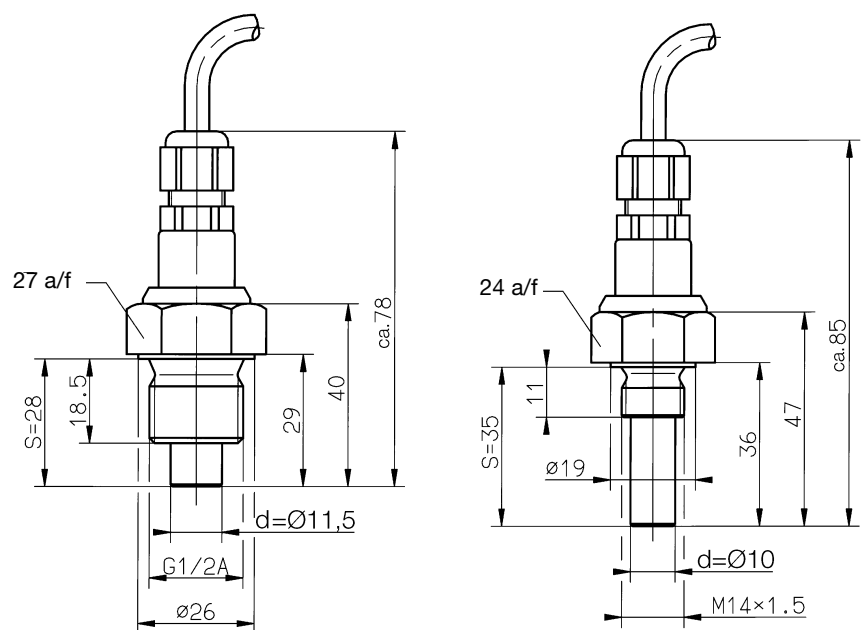
| | Snap-action switch | Slow-action contact |
|--------------------------|---|---|
| Switching temperature | +40°C to +140°C; 5 °C steps | |
| Reset temperature | 15 to 30 °C below the switching temperature | approx. 1.5 °C below the switching temperature (measured in water bath, switching point 40°C) |
| Switching point accuracy | switching temperature: up to 130 °C ± 5 °C, above 130°C ± 10 °C at a rate of temperature change of 1 °C/min | |
| Vibration strength | 13 g (vibration in direction of central axis, at a frequency of 45 Hz and an amplitude of ± 1.6 mm) | |
| Dynamic response | t _{0,9} approx. 3.5 min, measured in agitated oil bath; brass fitting, G1/2 A | |
| Switching output (SA) | break (n.c.) SA01  or make (n.o.) SA02  referred to rising temperature | |
| Limit temperatures | for temperature and storage -5 to +80°C | |
| Nominal position | any | |
| Weight | approx. 50 g | |

Dimensions

Type 608301/10-...-...-01

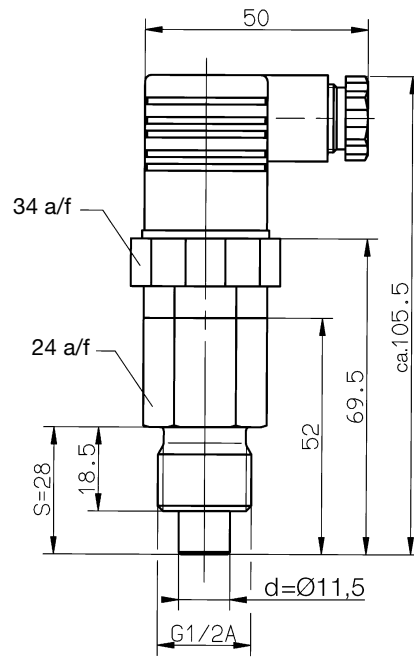


Type 608301/10-...-...-18

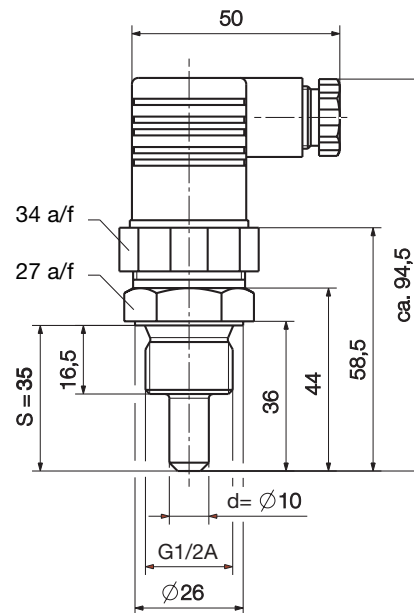


Dimensions

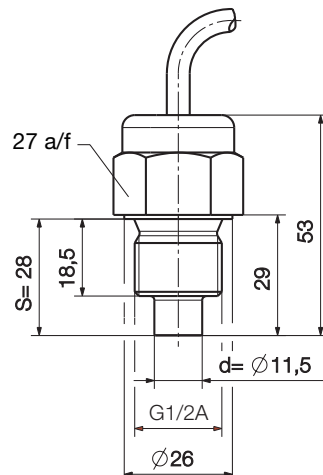
Type 608301/10-...-...-61



Type 608301/20-...-...-61



Types 608301/10-...-...-11
608301/20-...-...-11



Order details

Bimetal temperature switch Type 608301

Minimum ordering quantity: 50 items

| | | | | |
|---|---|---|--------|--|
| | | (1) Basic type | 608301 | Electromechanical temperature switch with a fixed switching temperature |
| | | (2) Basic type extension | | |
| X | | 10 | | snap-action switch |
| | X | 20 | | slow-action contact |
| | | (3) Switching temperature | | |
| X | X | ... | | in degrees, within the range from +40°C to +140°C, in 5 °C increments (e.g. 85 Δ + 85°C) |
| | | (4) Switching output (SA) | | |
| X | X | 98 | | break (n.c.) (SA01) |
| X | X | 99 | | make (n.o.) (SA02) |
| | | (5) Electrical connection | | |
| X | | 01 | | faston connector A 6.3-0.8 DIN 46244 |
| X | X | 61 | | plug connector for cable connection to EN 175301-803 (DIN 43650) |
| X | | 18 | | connecting cable with cable gland |
| X | X | 11 | | encapsulated connecting cable (continuous operating temperature: 120°C max.) |
| | | (6) Material of process connection | | |
| X | X | 50 | | brass (CuZn) |
| X | X | 78 | | stainless steel (CrNi, 1.4305) |
| | | (7) Diameter of process connection (PA), dimension "d" | | |
| | | 10 | | 10 mm |
| | | 11,5 | | 11.5 mm |
| | | (8) Type of thread for process connection (PA) | | |
| | | 121 | | thread M14x1.5 |
| | | 104 | | thread G 1/2 |
| | | (9) Fitting length of process connection (PA), dimension "S" | | |
| | | 28 | | 28 mm |
| | | 35 | | 35 mm |
| | | (10) Cable length | | |
| X | X | 0 | | none |
| X | X | 1000 | | 1000 mm |
| X | X | 2000 | | 2000 mm |
| X | X | 3000 | | 3000 mm |
| X | X | 4000 | | 4000 mm |
| X | X | 5000 | | 5000 mm |
| | | (11) Extra codes (TZ) | | |
| X | X | 000 | | no extra codes |

Other versions (switching temperatures, fittings etc.) available on request.

Order code

| | | | | | | | | | | | | | | | | | | | | |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|---|-----|---|-----|---|-----|---|-----|---|-----|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | | | | | | | | | | |
| 608301 | / | ... | - | ... | - | .. | - | .. | - | ... | - | ... | - | ... | - | ... | - | ... | / | ... |

Order example

| | | | | | | | | | | | | | | | | | | | | |
|--------|---|----|---|----|---|----|---|----|---|----|---|----|---|-----|---|----|---|---|---|-----|
| 608301 | / | 10 | - | 85 | - | 98 | - | 01 | - | 50 | - | 10 | - | 121 | - | 35 | - | 0 | / | 000 |
|--------|---|----|---|----|---|----|---|----|---|----|---|----|---|-----|---|----|---|---|---|-----|