

ExPro-TT Safety temperature trigger

connectable to actuators **ExMax-...-BF** and **RedMax-...-BF** for fire dampers

Subject to change!

Type	Function	Length (L)*	Temperature fuse duct / outside duct	Test button	Connectable to
ExPro-TT-72	Safety temperature trigger	65 mm	1 temp. fuse switching at +71 °C / +72 °C	1 test button	ExMax-...-BF..., RedMax-...-BF...
ExPro-TT-72-L90	Safety temperature trigger	90 mm	1 temp. fuse switching at +71 °C / +72 °C	1 test button	ExMax-...-BF..., RedMax-...-BF...

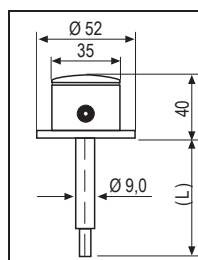
* Other lengths on request

Product views and applications

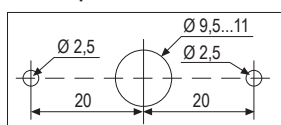
Temperature trigger



Dimensions in mm



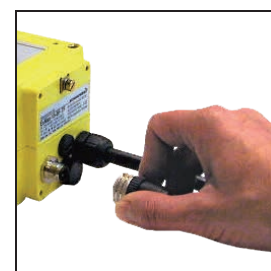
Drill template



Mounting

Direct mounting to the duct or damper with tapping screws.
Notice:
Position of the sensor of the safety temperature trigger must guarantee free air flow.

Quick fastener M12



Description

The thermoelectric safety trigger ExPro-TT-... activates the motorized fire damper into its safety position by spring return operation of an ExMax-...-BF or RedMax-...-BF actuator.

Function

Two temperature fuses Tf1 and Tf2 are part of the trigger. In case that the ambient temperature outside the duct is more than +72 °C the temperature fuse Tf1 triggers. If the temperature inside the duct is more than +71 °C the temperature fuse Tf2 triggers. If Tf1 or Tf2 is switching off the power, the circuit to the actuator is irreversibly cut. The spring return of the actuator moves the damper into its safety position.

Performance control

A performance control for safety operation of the damper is possible with push button of the trigger. The function of the temperature fuses Tf1, Tf2 can be simulated in this way.

Electrical wiring

The temperature trigger must be connected directly to the actuator. Remove the plastic cover and put the plug in the socket and screw tight.

Short circuit monitoring

The ExPro-TT-... is continuously monitored by the actuator. If a short circuit is detected in the wiring the actuator travels back to its safety position.

Technical data

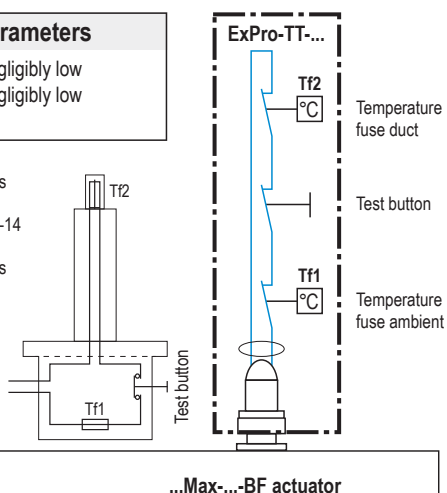
Supply	only by ...Max-...-BF... actuators by Schischek
Connection	~ 1 m cable
Cable	2 × 0,5 mm ² , -40...+220 °C, halogen-free inductance ≈ 0,6 mH/km, capacitance ≈ 30 nF/km
Cable gland	M12 × 1,5 mm Ex-e, brass nickel-plated Ø 4...6 mm
Temperature fuse	1 × duct, 1 × outside duct (not changeable)
Response temperatures	Tf1 room ambient temperature at +72 °C Tf2 duct temperature at +71 °C
Ambient temperature	Ta -40...+72 °C, working temperature Tb -40...+55 °C
Storage temperature	-40...+55 °C
Humidity protection	< 95 % rH, non condensing
Weight	200 g
Materials	thermowell brass plated, housing № 1.4581 / UNS-J92900 / similar AISI 316Nb cover brass plated, seal cover FPM
Maintenance	maintenance free, a yearly function control is recommended

Electrical wiring to ...Max-...-BF actuators

Intrinsically safe parameters

U_i = 30 V C_i = negligibly low
I_i = 25 mA L_i = negligibly low
P_i = 60 mW

- For electrical installations design, selection and erection, EN/IEC 60079-14 can be used.
- For electrical installations inspection and maintenance, EN/IEC 60079-17 can be used.



Approvals

ATEX directive	2014/34/EU
EC type-approved	EPS 19 ATEX 1 020
IECEx certified	IECEx EPS 19.0012
Approval for gas	II 2 G Ex ia IIC T6 Gb
Approval for dust	II 2 D Ex tb IIIC T80°C Db
CE identification	CE № 0158
EMC directive	2014/30/EU
Low voltage directive	2014/35/EU
Enclosure protection	IP66 in acc. with EN 60529
Fire resistance tests	ISO 21925-1

Special solutions

ExPro-TT-...-S1	Safety temperature trigger incl. cable gland M25 × 1,5 mm
ExPro-TT-...-S6	Safety temperature trigger with 1,5 m cable

**Approvals**

CSA	2236405
Class Division	Class II, Division 1, Groups EFG, T80°C Db Ex ia IIC T6 Gb
Class Zone	Class I, Zone 1, AEx ia IIC T6 Gb Class II, Zone 21, AEx tb IIIC T80°C Db

Installation and commissioning

All national and international standards, rules and regulations must be complied with. Certified apparatus must be installed in accordance with manufacturer instructions. If the equipment is used in a manner not specified by the manufacturer, the safety protection provided by the equipment may be impaired.

Canada: Install per Canadian Electrical Code (CEC).

USA: Install per National Electrical Code (NEC).

CSA – Hazardous Location – EMBLEMENTS DANGEREUX

WARNING: Substitution of components may impair intrinsic safety.
AVERTISSEMENT : LA SUBSTITUTION DE COMPOSANTS PEUT
COMPROMETTRE LA SECURITE INTRINSEQUE.