



## Capacitance level indicator CapFox® EFT 20



### Benefits

- Easy adjustment via magnetic pin
- Degree of protection IP 68 with fixed cable connection
- For tank heights of 100 mm and more
- EX version suitable for mining

### Application

Capacitance level indicator with 2-wire or 3-wire technology for continuous level measurement of liquids and bulk solids (flour, sand, cement, plastic granules) in open and closed container, tanks or silos. Particularly suitable for low tank heights.

### Versions

#### CapFox® EFT 20 MS

Model / series	Process connection	Part no.
CapFox® EFT 20 MS -20 ST	G1B	5655020ST-L-1B01
CapFox® EFT 20 MS -20 ST	G¾B	5655020ST-L-2B01
CapFox® EFT 20 MS -20 ST	¾" NPT	5655020ST-L-3B01
CapFox® EFT 20 MS -20 ST	Tri-Clamp DIN 32676, ø 34 mm	5655020ST-L-4B01
CapFox® EFT 20 MS -20 ST	Tri-Clamp DIN 32676, ø 50.5 mm	5655020ST-L-5B01
CapFox® EFT 20 MS -20 HT	G1B	5655020HT-L-1B01
CapFox® EFT 20 MS -20 HT	G¾B	5655020HT-L-2B01
CapFox® EFT 20 MS -20 HT	¾" NPT	5655020HT-L-3B01
CapFox® EFT 20 MS -20 HT	Tri-Clamp DIN 32676, ø 34 mm	5655020HT-L-4B01
CapFox® EFT 20 MS -20 HT	Tri-Clamp DIN 32676, ø 50.5 mm	5655020HT-L-5B01
CapFox® EFT 20 MS -21 ST	G1B	5655021ST-L-1B01

Blue part no. = in-stock items



Model / series	Process connection	Part no.
CapFox® EFT 20 MS -21 ST	G¾B	5655021ST-L-2B01
CapFox® EFT 20 MS -21 ST	¾" NPT	5655021ST-L-3B01
CapFox® EFT 20 MS -21 ST	Tri-Clamp DIN 32676, ø 34 mm	5655021ST-L-4B01
CapFox® EFT 20 MS -21 ST	Tri-Clamp DIN 32676, ø 50.5 mm	5655021ST-L-5B01
CapFox® EFT 20 MS -21 HT	G1B	5655021HT-L-1B01
CapFox® EFT 20 MS -21 HT	G¾B	5655021HT-L-2B01
CapFox® EFT 20 MS -21 HT	¾" NPT	5655021HT-L-3B01
CapFox® EFT 20 MS -21 HT	Tri-Clamp DIN 32676, ø 34 mm	5655021HT-L-4B01
CapFox® EFT 20 MS -21 HT	Tri-Clamp DIN 32676, ø 50.5 mm	5655021HT-L-5B01
CapFox® EFT 20 MS -22 ST	G1B	5655022ST-L-1B01
CapFox® EFT 20 MS -22 ST	G¾B	5655022ST-L-2B01
CapFox® EFT 20 MS -22 ST	¾" NPT	5655022ST-L-3B01
CapFox® EFT 20 MS -22 ST	Tri-Clamp DIN 32676, ø 34 mm	5655022ST-L-4B01
CapFox® EFT 20 MS -22 ST	Tri-Clamp DIN 32676, ø 50.5 mm	5655022ST-L-5B01
CapFox® EFT 20 MS -22 HT	G1B	5655022HT-L-1B01
CapFox® EFT 20 MS -22 HT	G¾B	5655022HT-L-2B01
CapFox® EFT 20 MS -22 HT	¾" NPT	5655022HT-L-3B01
CapFox® EFT 20 MS -22 HT	Tri-Clamp DIN 32676, ø 34 mm	5655022HT-L-4B01
CapFox® EFT 20 MS -22 HT	Tri-Clamp DIN 32676, ø 50.5 mm	5655022HT-L-5B01

Blue part no. = in-stock items

### CapFox® EFT 20 KX

Model / series	Process connection	Part no.
CapFox® EFT 20 KX -40 ST	G1B	5655040ST-L-1B01
CapFox® EFT 20 KX -40 ST	G¾B	5655040ST-L-2B01
CapFox® EFT 20 KX -40 ST	¾" NPT	5655040ST-L-3B01
CapFox® EFT 20 KX -40 ST	Tri-Clamp DIN 32676, ø 34 mm	5655040ST-L-4B01
CapFox® EFT 20 KX -40 ST	Tri-Clamp DIN 32676, ø 50.5 mm	5655040ST-L-5B01
CapFox® EFT 20 KX -40 HT	G1B	5655040HT-L-1B01
CapFox® EFT 20 KX -40 HT	G¾B	5655040HT-L-2B01

Blue part no. = in-stock items



Model / series	Process connection	Part no.
CapFox® EFT 20 KX -40 HT	¾" NPT	5655040HT-L-3B01
CapFox® EFT 20 KX -40 HT	Tri-Clamp DIN 32676, ø 34 mm	5655040HT-L-4B01
CapFox® EFT 20 KX -40 HT	Tri-Clamp DIN 32676, ø 50.5 mm	5655040HT-L-5B01
CapFox® EFT 20 KX -41 ST	G1B	5655041ST-L-1B01
CapFox® EFT 20 KX -41 ST	G¾B	5655041ST-L-2B01
CapFox® EFT 20 KX -41 ST	¾" NPT	5655041ST-L-3B01
CapFox® EFT 20 KX -41 ST	Tri-Clamp DIN 32676, ø 34 mm	5655041ST-L-4B01
CapFox® EFT 20 KX -41 ST	Tri-Clamp DIN 32676, ø 50.5 mm	5655041ST-L-5B01
CapFox® EFT 20 KX -41 HT	G1B	5655041HT-L-1B01
CapFox® EFT 20 KX -41 HT	G¾B	5655041HT-L-2B01
CapFox® EFT 20 KX -41 HT	¾" NPT	5655041HT-L-3B01
CapFox® EFT 20 KX -41 HT	Tri-Clamp DIN 32676, ø 34 mm	5655041HT-L-4B01
CapFox® EFT 20 KX -41 HT	Tri-Clamp DIN 32676, ø 50.5 mm	5655041HT-L-5B01

Blue part no. = in-stock items

### CapFox® EFT 20 MF

Model / series	Process connection	Part no.
CapFox® EFT 20 MF -60 ST	G1B	5655060ST-L-1B01
CapFox® EFT 20 MF -60 ST	G¾B	5655060ST-L-2B01
CapFox® EFT 20 MF -60 ST	¾" NPT	5655060ST-L-3B01
CapFox® EFT 20 MF -60 ST	Tri-Clamp DIN 32676, ø 34 mm	5655060ST-L-4B01
CapFox® EFT 20 MF -60 ST	Tri-Clamp DIN 32676, ø 50.5 mm	5655060ST-L-5B01
CapFox® EFT 20 MF -60 HT	G1B	5655060HT-L-1B01
CapFox® EFT 20 MF -60 HT	G¾B	5655060HT-L-2B01
CapFox® EFT 20 MF -60 HT	¾" NPT	5655060HT-L-3B01
CapFox® EFT 20 MF -60 HT	Tri-Clamp DIN 32676, ø 34 mm	5655060HT-L-4B01
CapFox® EFT 20 MF -60 HT	Tri-Clamp DIN 32676, ø 50.5 mm	5655060HT-L-5B01

Blue part no. = in-stock items

## Description

The capacitance level indicator CapFox® EFT 20 detects the change in electrical capacitance caused by the change in level and converts the amount of change into a current signal (4–20 mA) or a voltage signal (0–10 V). The electronics module is contained in a robust stainless steel



housing. Flexible probes or rod probes are available as measurement electrode. For level measurement of adhesive, corrosive or electrically conductive media, the electrodes are available with an insulating coating. If media are stored in tanks made of non-conductive materials or in open containers, the probes must be equipped with an additional coax reference pipe.

## Technical specifications

### Indicator

LED green:	Operation
LED orange:	Status

### Max. measuring range

MS:	≤ 2,000 mm
KX:	≤ 1,000 mm
MF:	≤ 6,000 mm

(specify exact probe length when ordering)

### Operating temperature range

Medium:	-40/+300 °C
ST version:	-40 °C 85 °C
HT version:	-40/+200 °C
Ambient:	-30/+85 °C

### Process connection

G1B  
G¾B  
¾" NPT  
Tri-Clamp DIN 32676, ø 34 mm  
Tri-Clamp DIN 32676, ø 50.5 mm  
G¾B

### Material

Housing:	Stainless steel 304
MS:	Stainless steel 316 L
KX:	Stainless steel 304
MF:	Stainless steel 316

## Options

- Other process connections
- FEP/PFA coatings
- Ex version
- Ex II 1 G Ex ia IIB T4 Ga
- Ex II 1/2 D Ex ia IIIC T120°C Da/Db
- Ex M1 Ex ia I Ma

### Supply voltage

DC 9 – 34 V

### Output signal

4–20 mA, 2-wire

### Current input

Max. 20.4 mA

### Load

$R_{Max} = 700 \Omega$  at  $U = 24 V$

### Degree of protection

IP 68 (EN 60529)

### Electrical connection

Cable gland M12 x 1.5 with fixed cable connection  
Cable length: 2 m

### Weight

ST version:	Approx. 0.3 kg
HT version:	Approx. 0.6 kg

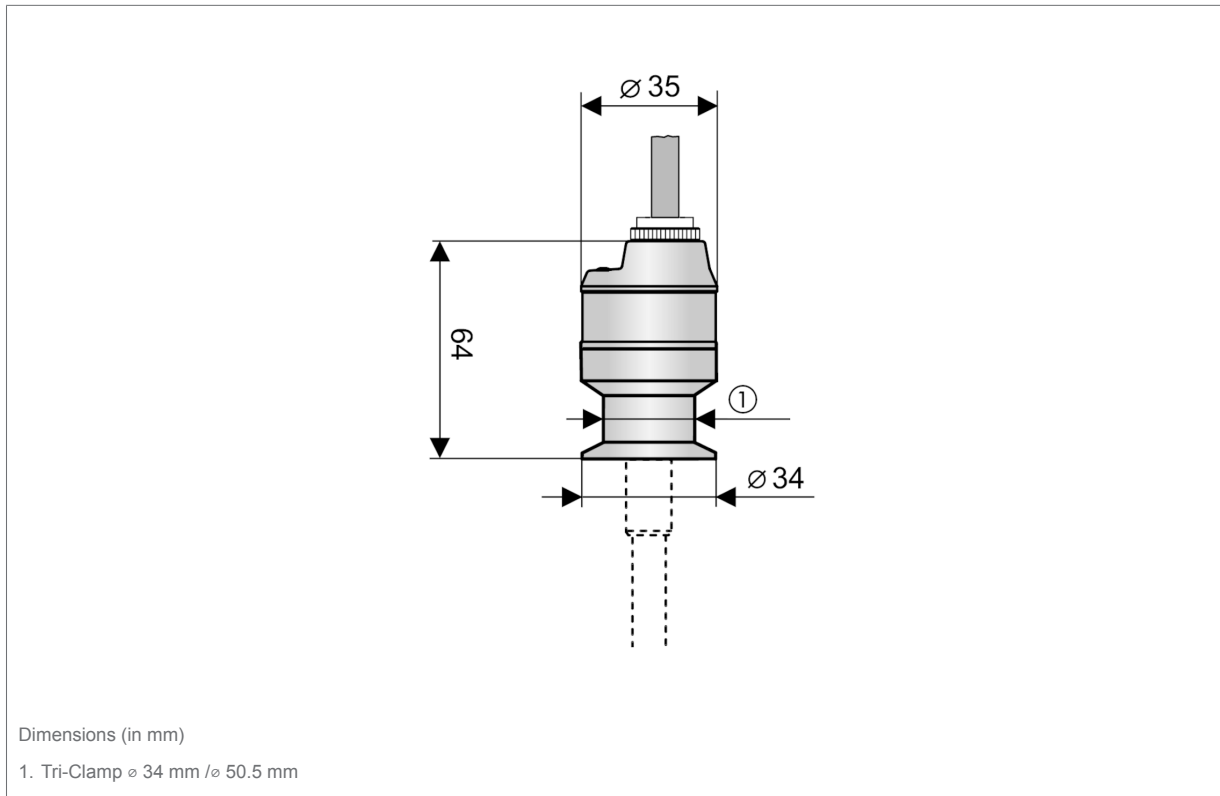
### Scope of delivery

- CapFox® EFT 20 according to configuration
- Magnetic pin

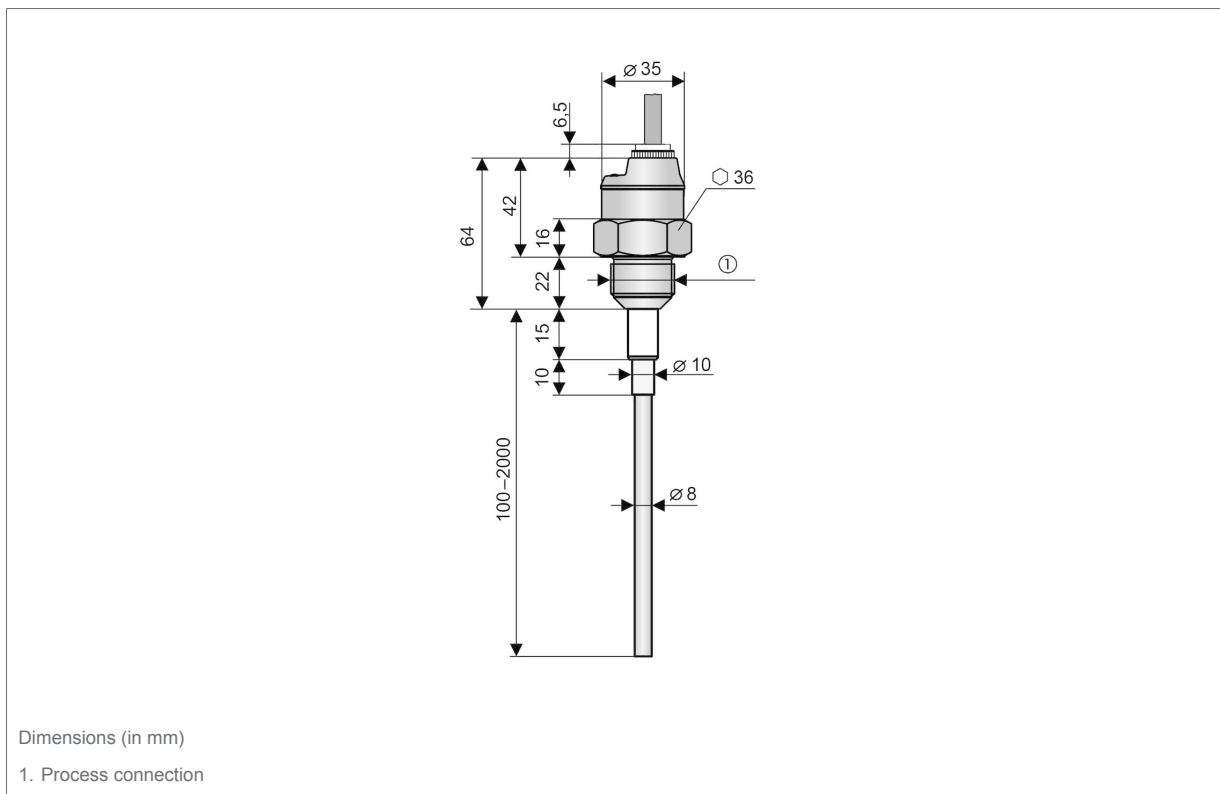


**Detail views**

**CapFox® EFT 20 with process connection Tri-Clamp DIN 32676**



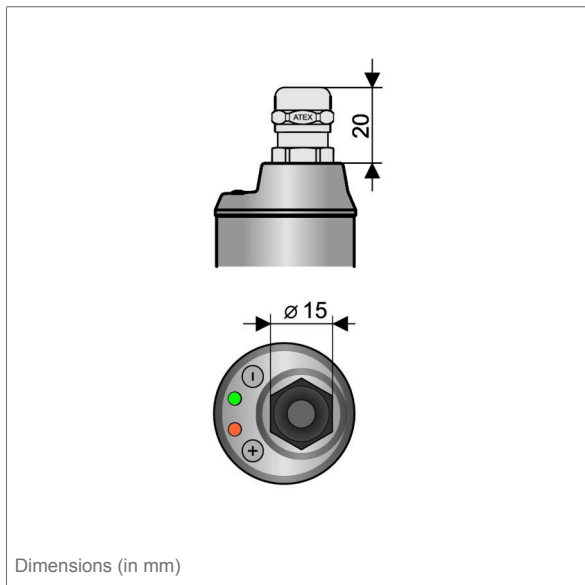
**CapFox® EFT 20 MS - 20 with rigid mono probe**



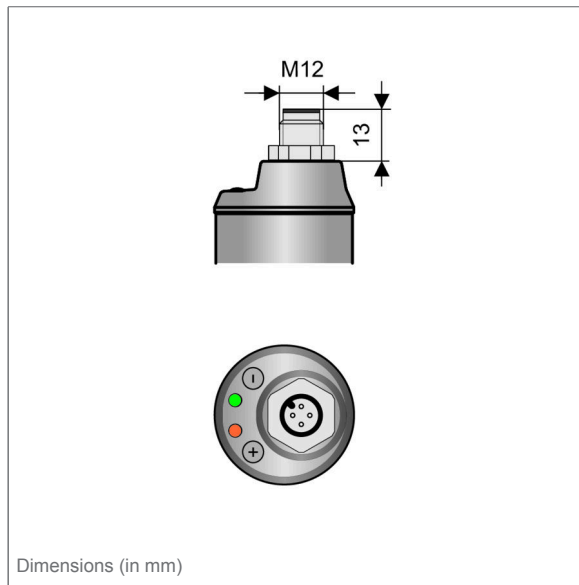


### Technical drawings

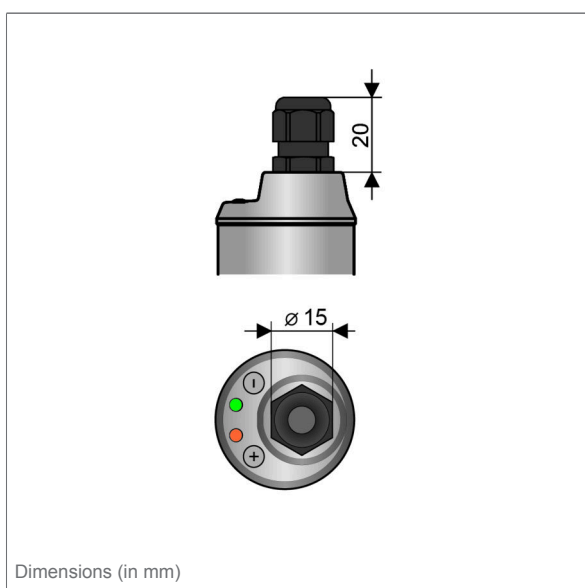
Electrical connection D with dust-tight cable gland (ATEX)



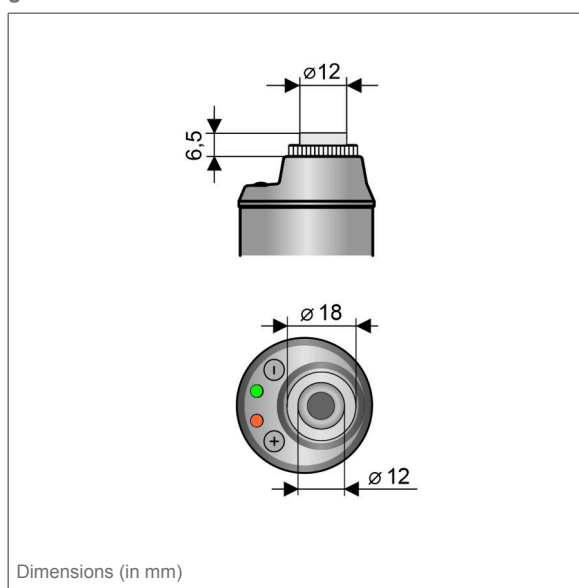
Electrical connection C with connector M12 x 1, 4-pin



Electrical connection B with PVC cable gland M12 x 1.5

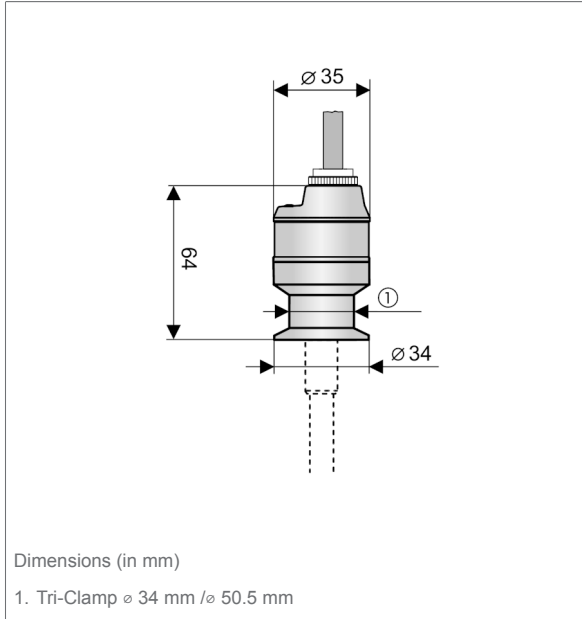


Electrical connection A with short stainless steel cable gland

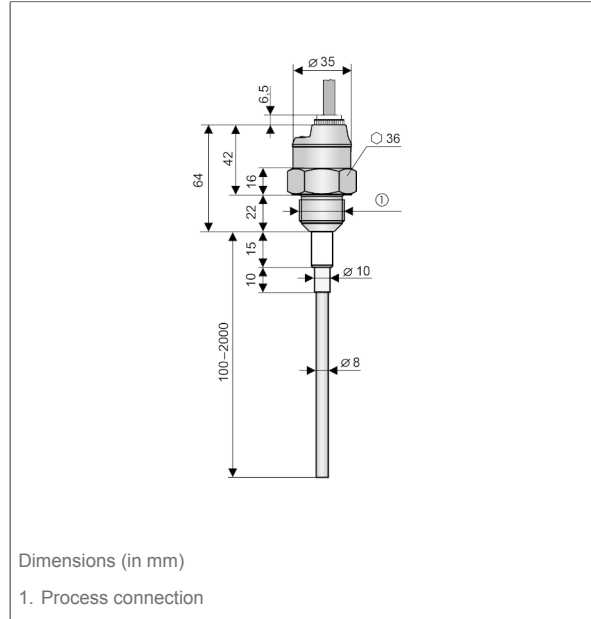




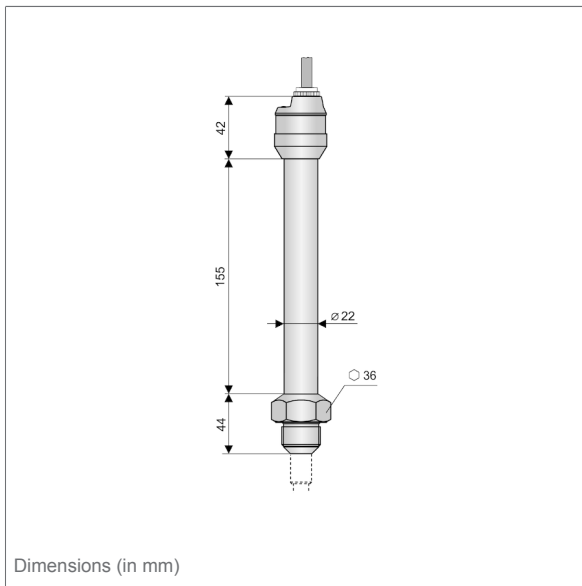
**CapFox® EFT 20 with process connection Tri-Clamp DIN 32676**



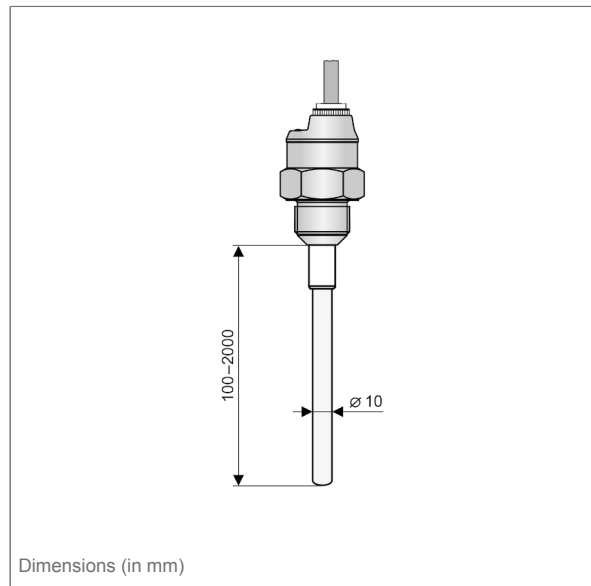
**CapFox® EFT 20 MS - 20 with rigid mono probe**



**CapFox® EFT 20 high temperature version**

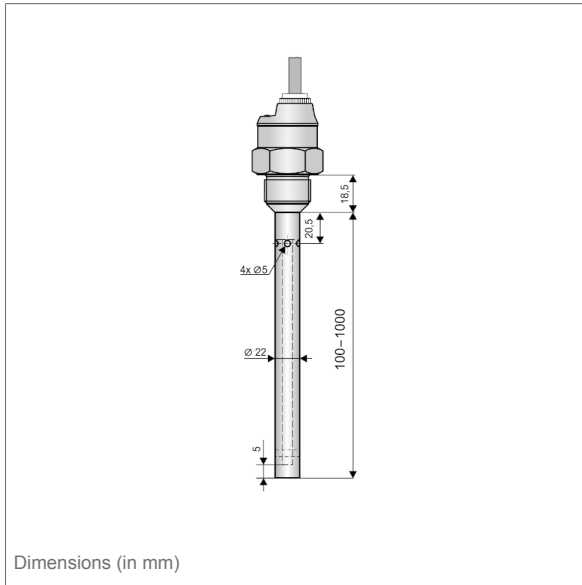


**CapFox® EFT 20 MS - 21 with rigid mono probe with FEP insulation – CapFox® EFT 20 MS - 22 with rigid mono probe with PFA insulation**





CapFox® EFT 20 KX - 40 with coax probe – CapFox® EFT 20 KX - 41 with coax probe FEP insulation



CapFox® EFT 20 MF - 60 with flexible mono probe

