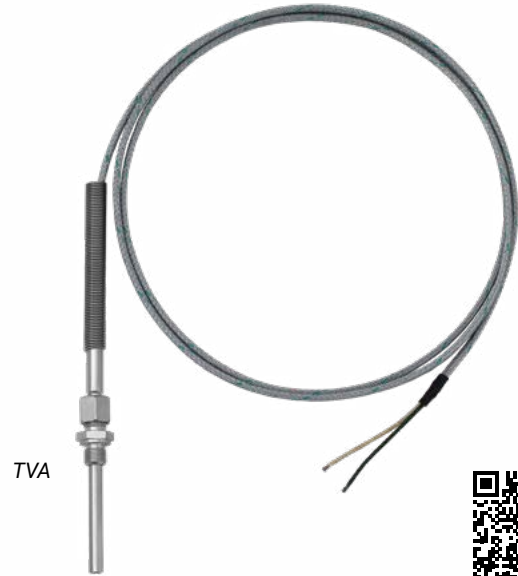


# Temperature sensors TWE, TVA

With connection cable // 0...800 °C



TWE



TVA



## Highlights

- For exhaust gas temperature measurement on diesel and gas engines, turbines and compressors  
→ Up to 800 °C media temperature
- Available as resistance thermometer or thermocouple
- Very high vibration and shock resistance → Reliable and long-lasting operation
- Extremely resistant connecting cable → Enables use in harsh environments

## Technical data

<b>Type</b>	Temperature sensor with connection cable
<b>Measuring range</b> → TWECK → TVACP / TVACK	0...800 °C 0...600 °C
<b>Measuring medium</b>	Exhaust gases marine diesel engines
<b>Immersion tube length</b>	100...250 mm
<b>Immersion tube diameter</b>	8 or 12 mm
<b>Process connection</b>	Without, G¼, G½, M27 x 2
<b>Nominal pressure</b>	PN 25
<b>Medium temperature</b> → TWECK → TVACP / TVACK	0...800 °C 0...600 °C
<b>Ambient temperature</b>	-40...85 °C
<b>Storage temperature</b>	-25...70 °C
<b>Degree of protection according to EN 60529</b>	IP54

## Approvals

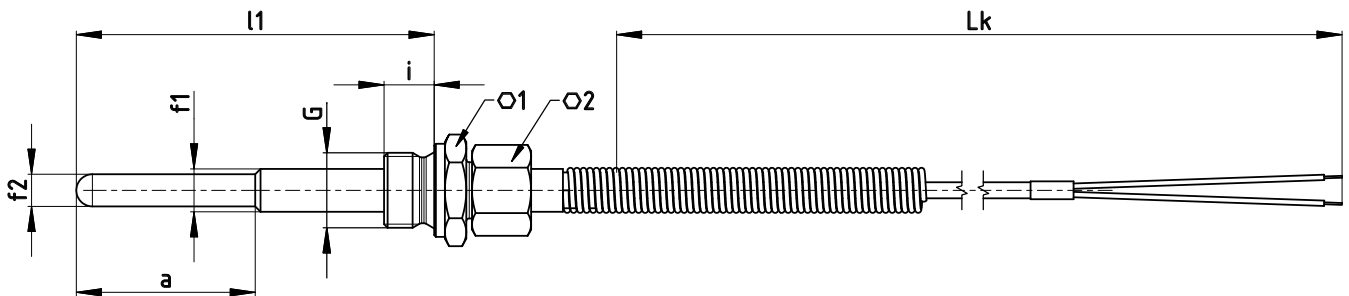
DNV (only TWE)

## Electrical data

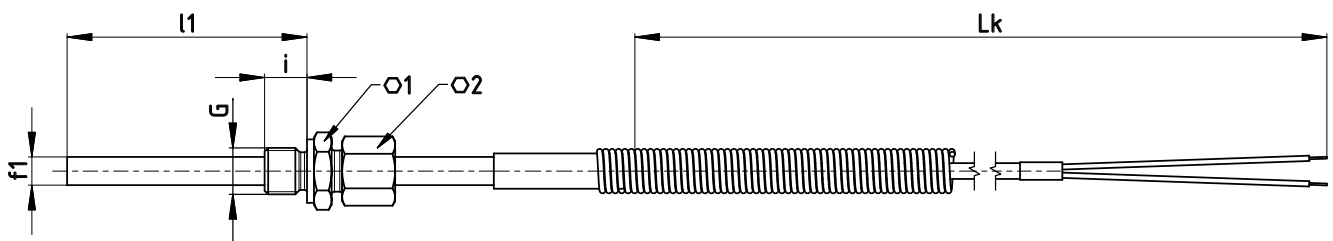
<b>Measuring element</b>	1 x NiCr-Ni (Type K) 1 x Pt100 / 3-wire (only type TWE)
<b>Measuring insert</b>	Not interchangeable
<b>Accuracy</b>	Class 1 / ±1.5 °C or 0.004 x T Class B / ±(0.30 K + 0.005 x T)
<b>Electrical connection</b>	FEP cable Fibreglass, wire braided

# Technical drawings / Dimensions

## TWE



## TVA



### Dimensions [mm]

Type	l1	Lk	f1	f2	G	i	a	Ø1	Ø2
TWE	100	2000±10	Ø 12	Ø 9	G½, G¼, M27 x 2 or without	14	50		
TVA	68	2000±10	Ø 8	—	G½, G¼, M27 x 2 or without	12	—	19	17

## Materials

### Materials

#### In contact with media

#### Process connection

Stainless steel 1.4571 or galvanized steel

#### Protection tube

Stainless steel 1.4571

# Article numbers

Order code								
<b>Diameter f1</b>								
8 mm	TVA							
12 mm	TWE							
<b>Material</b>								
Stainless steel 1.4571	C							
<b>Sensor element</b>								
1 x NiCr-Ni (Type K)		K11						
1 x Pt100 3-wire / Class B (only Type TWE)		P31						
<b>Nominal length L1</b>								
100 mm			0100					
150 mm			0150					
200 mm			0200					
250 mm			0250					
<b>Electrical connection</b>								
FEP cable				07				
Fibreglass, wire braided				08				
<b>Process connection G</b>								
without						0		
G¼ Galvanised steel						I		
G½ Galvanised steel						K		
G½ Stainless steel						J		
M27 x 2 Galvanised steel						H		
<b>Cable length Lk</b>								
1.0 m							01	
1.5 m							02	
2.0 m							03	
2.5 m							04	
3.0 m							05	
<b>Example order number</b>		<b>TVA</b>	<b>C</b>	<b>K11</b>	<b>0100</b>	<b>07</b>	<b>0</b>	<b>01</b>