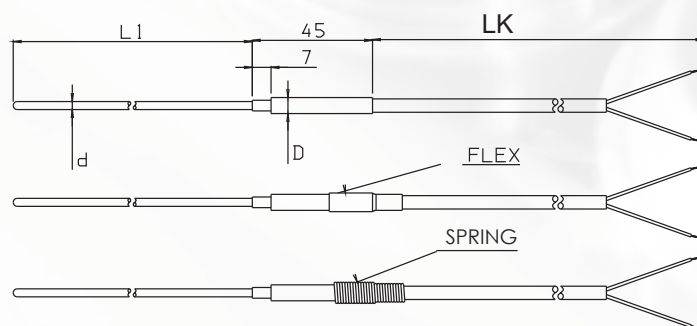


# Thermocouple TYPE MK



## Straight mineral insulated wire sensor - Classified

- Mineral insulated thermocouples - DIN EN 61515:1996-09 - are used for reasons such as flexibility, fast response time and good resistance to vibrations, for measurement of temperatures in inaccessible places and harsh environment.
- Thermocouples only available with 1xTC for diameters below Ø3 mm.
- The measuring junction is standard insulated from Ø2 and up. The thermocouples are available with grounded measuring junction. Ø1 mm and Ø1.5 mm only available as grounded or measuring junction.
- The thermocouple is insulated with MgO. The tube is sealed at the tails. This sealing must not be exposed to temperatures over 180°C.
- Jacket material for protective sheath is chosen depending on temperature and environment, see separate data sheet.
- The recommended working temperature is dependent on thermowire and jacket material.
- Mechanical connection: Compression fitting, see data sheet for accessories.
- Response time (mean values) measured at velocities in: water at 0.4 m/s:  $\tau_{0.5} = 1.5$  sec. -  $\tau_{0.9} = 3$  sec.
- Approvals: DNV-GL, Bureau Veritas, DNV-GL EU RO MR.



EU RO MUTUAL RECOGNITION TYPE APPROVAL CERTIFICATE - Group members are:



Ordering: See ordering form on back page



# ORDERING FORM / THERMOCOUPLE \*

# TYPE MK

**Imm. length/L1/mm**  
Min. 55 mm - max. 10,000 mm  
Optional length .....

**Sheath/d-Neck dia./D/mm**

Ø1.0/Ø8 .....	1
Ø1.5/Ø8 .....	2
Ø2.0/Ø8 .....	3
Ø3.0/Ø10 .....	4
Ø4.5/Ø10 .....	5
Ø6.0/Ø10 .....	6
Ø8.0/Ø12 .....	7
Ø9.5/Ø12 .....	8

**Jacket material**

AISI 316 .....	1
Inconel .....	4
Hastelloy .....	5
Nicrobell .....	6

**Wire/LK in mm**  
Min. 200 mm - max. 20,000 mm  
Optional length .....

V 2.7

**Tolerance class**

1 .....	1
2 .....	2

**Thermoelement EN 60584 - Type/work. temp./Cl. 1/2**

1 ... K - NiCr-Ni	-40°C/ +1,000°C/ +1,200°C
2 ... J - Fe-CuNi	-40°C/ +750°C/ +750°C
6 ... N - NiCrSi-NiSi	-40°C/ +1,000°C/ +1,200°C

**Number of thermocouples**

1 .....	1xTC
2 .....	2xTC <sup>1)</sup>

**Junction**

1 .....	Without
2 .....	Flex
3 .....	Spring

**Wire type**

1 .....	PVC -5 / +85°C
2 .....	Silicone -40 / +180°C
3 .....	Teflon arm. -50 / +260°C
4 .....	Glassflex arm.

1) Min. Ø3 mm

## Connection diagram:

Type	+	-
K	Non-magnetic Green	Magnetic White
J	Non-magnetic Black	Non-magnetic White
N	Non-magnetic Pink	Magnetic White

\*Some configurations are unavailable. Your Senmatic sales person will notify you if you have made an incorrect selection.