

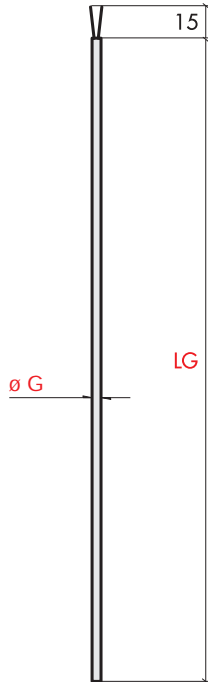


Certificata ISO 9002  
Centro taratura SIT **JTC**

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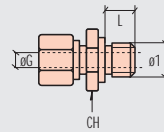
# General purpose MgO sensors

**P1** Straight thermocouple, 1...6mm o.d., stripped leads only.



### Mounting Fittings

Suggested adjustable compression fittings



Material	ø1	L	CH	øG	Model
AISI 316	1/8"G	10.5	12	1	Z1 RFS-B/E010
	1/8"NPT	10.5	12	1	Z1 RFS-B/M010
	1/8"G	10.5	12	1.5	Z1 RFS-B/E015
	1/8"NPT	10.5	12	1.5	Z1 RFS-B/M015
	1/8"G	10.5	12	2	Z1 RFS-B/E020
	1/8"NPT	10.5	12	2	Z1 RFS-B/M020
	1/8"G	10.5	12	3	Z1 RFS-B/E030
	1/8"NPT	10.5	12	3	Z1 RFS-B/M030
	1/8"G	10.5	12	4.5	Z1 RFS-B/E045
	1/8"NPT	10.5	12	4.5	Z1 RFS-B/M045
	1/4"G	12	17	6	Z1 RFS-B/F060
	1/2"G	14	24	6	Z1 RFS-B/I060

Type of termination	Diameter ø G mm	Base code	Thermocouple type	Element N° and limits	Hot junction	Sheath material	Sheath LG mm
Rigid leads	1	P1 R10	L Fe - CuNi DIN - 600°C max	0 Single Cl. 2 (standard)	0  Insulated	A AISI 321	0100
	1.5	P1 R15					
	2	P1 R20	J Fe - CuNi IEC/600°C max	1 * Dual Cl. 2 (standard)	1  Grounded	C Inconel 600 ( only K)	0150
	3	P1 R30	U Cu - CuNi DIN/-200 +300°C	2 Single Cl. 1 (special)	2  Exposed		0200
	4.5	P1 R45	T Cu - CuNi IEC/-200 +300°C	3 * Dual Cl. 2 (special)			0250
	6	P1 R60	K NiCr - Ni DIN - IEC/1050°C max				0300
							0350
							0400
							0450
							0500
							L min 0050

Note: other lengths on request for LG . Code ex.: LG = 135mm cod. 0135

**P1 R20 - L 0 0 - A 0100**

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#### Reference model:

Straight MgO thermocouple, 2mm sheath o.d., Fe-CuNi DIN, class 2 single element, ungrounded junction, AISI 321 sheath, 100mm length.



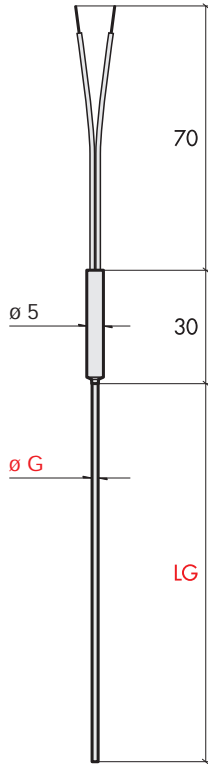


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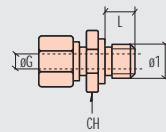
# General purpose MgO sensors

**P2** Straight thermocouple, 1 to 3mm ø, with extended terminals



### Mounting Fittings

Suggested adjustable compression fittings



Material	ø1	L	CH	øG	Model
AISI 316	1/8" G	10.5	12	1	Z1 RFS-B/EO10
	1/8" NPT	10.5	12	1	Z1 RFS-B/MO10
	1/8" G	10.5	12	1.5	Z1 RFS-B/EO15
	1/8" NPT	10.5	12	1.5	Z1 RFS-B/MO15
	1/8" G	10.5	12	2	Z1 RFS-B/EO20
	1/8" NPT	10.5	12	2	Z1 RFS-B/MO20
	1/8" G	10.5	12	3	Z1 RFS-B/EO30
	1/8" NPT	10.5	12	3	Z1 RFS-B/MO30

Type of extension	Diameter ø G mm	Base code	Thermocouple type	Element N° and limits	Hot junction	Sheath material	Sheath LG mm	Wires LF mm
PTFE insulated split leads	1	P2 T10	L Fe - CuNi DIN/600°C max	0 Single Cl. 2 (standard)	0 Insulated	A AISI 321	0100	50 50
	1.5	P2 T15						
	2	P2 T20	J Fe - CuNi IEC/600°C max	1 * Dual Cl. 2 (standard)	1 Insulated	C Inconel 600 (K only)	0150	30 30
	3	P2 T30	U Cu - CuNi DIN/-200 +300°C	2 Single Cl. 1 (special)	2 Grounded		0200	70 70
			T Cu - CuNi IEC/-200 +300°C	3 * Dual Cl. 2 (special)	2 Grounded		0250	
			K NiCr - Ni DIN - IEC/1050°C max		2 Exposed		0300	
							0350	
							0400	
							0450	
							0500	
							L min 0050	
				* ø >2 only				

Note: other lengths on request for LG and LF. Code ex.: LG = 135mm cod. 0135 / LF = 65mm cod. 65

#### Reference model:

Straight MgO thermocouple, 2mm sheath o.d., Fe-CuNi DIN, class 2 single element, ungrounded junction, AISI 321 sheath, 100mm length with 50mm split leads.

**P2 T20 - L 0 0 - A 0100 - 50**

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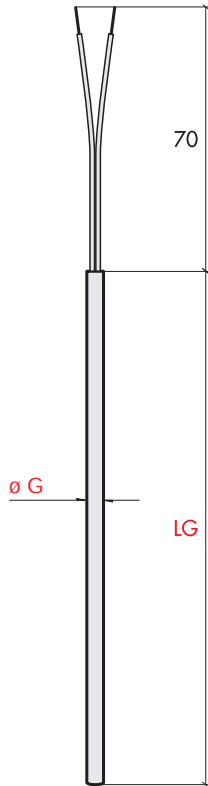
PRICE LIST



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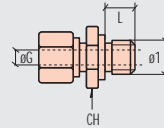
# General purpose MgO sensors

**P2** Straight thermocouple, 4.5 to 6mm  $\varnothing$ , with extended terminals



### Mounting Fittings

Suggested adjustable compression fittings



Material	$\varnothing 1$	L	CH	$\varnothing G$	Model
AISI 316	1/8" G	10.5	12	4.5	Z1 RFS-B/E045
	1/8" NPT	10.5	12	4.5	Z1 RFS-B/M045
	1/4" G	12	17	6	Z1 RFS-B/F060
	1/2" G	14	24	6	Z1 RFS-B/I060
Treated brass	1/4" G	12	17	6	Z1 RFS-O/F060
	1/2" G	14	24	6	Z1 RFS-O/I060

Type of extension	Diameter $\varnothing G$ mm	Base code	Thermocouple type	Element N° and limits	Hot junction	Sheath material	Sheath LG mm	Wires LF mm
PTFE insulated split leads	4.5	P2 T45	L Fe - CuNi DIN/600°C max	0 Single Cl. 2 (standard)	0	A AISI 321	0100	50 50
	6	P2 T60						
			J Fe - CuNi IEC/600°C max	1 Dual Cl. 2 (standard)	1	C Inconel 600 (K only)	0150	30 30
			U Cu - CuNi DIN/-200 +300°C	2 Single Cl. 1 (special)	Grounded		0200	70 70
			T Cu - CuNi IEC/-200 +300°C	3 Dual Cl. 2 (special)	2		0250	
			K NiCr - Ni DIN - IEC/1050°C max		Exposed		0300	
							0350	
							0400	
							0450	
							0500	
							L min 0050	

Note: other lengths on request for LG and LF. Code ex.: LG = 135mm cod. 0135 / LF = 65mm cod. 65

#### Reference model:

Straight MgO thermocouple, 6mm sheath o.d.,  
Fe-CuNi DIN, single element, class 2 single element,  
ungrounded junction, AISI 321 sheath, 100mm length  
with 50mm split leads.

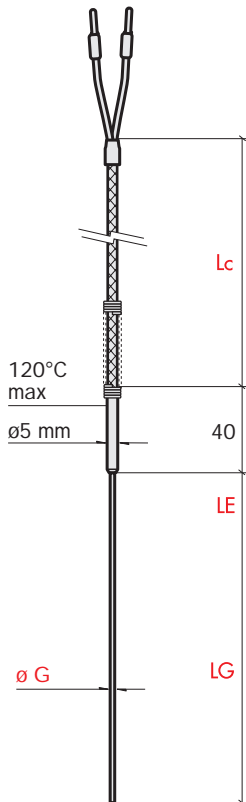
**P2 T60 - L 0 0 - A 0100 - 50**

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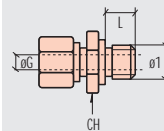
# General purpose MgO sensors

**P5** Straight thermocouple, o.d. from 0.5 to 1.5mm, with connection wire.



### Mounting Fittings

Suggested adjustable compression fittings



Material	ø1	L	CH	øG	Model
AISI 316	1/8" G	10.5	12	1	Z1 RFS-B/EO10
	1/8" NPT	10.5	12	1	Z1 RFS-B/MO10
	1/8" G	10.5	12	1.5	Z1 RFS-B/EO15
	1/8" NPT	10.5	12	1.5	Z1 RFS-B/MO15

Type of wire	Diam. øG mm	Base code	Thermocouple type	Element N° and limits	Hot junction	Sheath material	Sheath LG mm	Type of thread	Extension LE mm	Lc wire length m	Type of termination
EES - stn 300°C max PP O 100°C max TS O 200°C max	0.5	P5 A05	L Fe - CuNi DIN	0 Single Cl. 2 (standard)	0 Insulated	A AISI 321	O100	S None	OO None	10 1	P Terminals ø 1.4 - 1.8 max
TS O 220°C max SS O 200°C max	0.5	P5 D05	J Fe - CuNi IEC	2 Single Cl. 1 (special)	1 Insulated	C Inconel 600 (K and N only)	O050			05 0.5	S Wires isolés et étamés
TS T 220°C max SS O 200°C max	0.5	P5 G05	U Cu - CuNi DIN		1 Grounded		O150			15 1.5	F Faston 6.35
EES - stn 300°C max PP O 100°C max TS O 200°C max	1	P5 A10	T Cu - CuNi IEC		2 Exposed		O200			20 2	D Miniature plug
TS T 220°C max SS O 200°C max	1	P5 C10	K NiCr - Ni DIN - IEC				O250			25 2.5	G Standard plug
TS T 220°C max SS O 200°C max	1	P5 D10	ET NiCr - CuNi DIN - IEC				O300			30 3	J Cylindrical plug ø 17
TS T 220°C max SS O 200°C max	1	P5 G10	N NiCrSi - NiSiMg DIN - IEC				O350			35 3.5	R Male ø 12 cylindrical plug
TS T 220°C max SS O 200°C max	1	P5 F10					O400			40 4	
EES - stn 300°C max PP O 100°C max TS O 200°C max	1.5	P5 A15					O450			45 4.5	
TS T 220°C max SS O 200°C max	1.5	P5 C15					O500			50 5	
TS T 220°C max SS O 200°C max	1.5	P5 D15					L min O020			00 10	

Note: other lengths on request for LG, LE and Lc. Code ex.: LG = 135mm cod. 0135 / LE = 60mm cod. 06 / Lc = 7m cod. 70

#### Reference model:

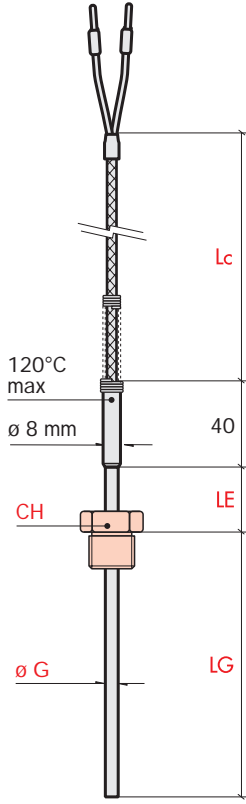
Straight MgO thermocouple with tinned EEs wire, 1.5mm ø sheath, Fe-CuNi DIN, class 2 single element, ungrounded junction, AISI321 sheath, 100mm length, no attaching device, no extension, 1m wire and 1.8mm diam. terminals.

**P5 A15 - L 0 0 - A 0100 - S 00 - 10 P**

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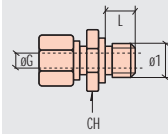
# General purpose MgO sensors



### Mounting Fittings

(for models without fixed attaching device only)

Suggested adjustable compression fittings



Material	ø1	L	CH	øG	Model
AISI 316	1/4"G	12	17	6	Z1 RFS-B/FO60
	1/2"G	14	24	6	Z1 RFS-B/IO60
	1/4"G	12	17	6.35	Z1 RFS-B/FO63
	1/4"NPT	15	17	6.35	Z1 RFS-B/NO63
	1/4"G	12	17	8	Z1 RFS-B/FO80
	1/2"G	14	24	8	Z1 RFS-B/IO80
Treated brass	1/4"G	12	17	6	Z1 RFS-O/FO60
	1/2"G	14	24	6	Z1 RFS-O/IO60
	1/4"G	12	17	8	Z1 RFS-O/FO80
	1/2"G	14	24	8	Z1 RFS-O/IO80

**P5** Straight thermocouple, o.d. from 6 to 8mm, with extension wire, optional fixed attaching device

Type of wire	Diam. øG mm	Base code	Thermocouple type	Element N° and limits	Hot junction	Sheath material	Sheath LG mm	Type of thread	Extension LE mm	Lc wire length m	Type of termination
EES - stn 300°C max PP O 100°C max TS O 200°C max Ts T 220°C max SS O 200°C max	6	P5 A60	L Fe - CuNi DIN	0 Single Cl. 2 (standard)	0 Insulated	A AISI 321	O100	S None	OO None	10 1	P  Terminals ø 1.4 - 1.8 max
EES - stn 300°C max PP O 100°C max TS O 200°C max Ts T 220°C max SS O 200°C max	6	P5 C60	J Fe - CuNi IEC	1 Dual Cl. 2 (standard)	1 Insulated	C Inconel 600 (K and N)	O050	F 1/4" Gas - L13 CH - 17	O2 20	05 0.5	S  Wires isolés et étamés
EES - stn 300°C max PP O 100°C max TS O 200°C max Ts T 220°C max SS O 200°C max	6	P5 D60	U Cu - CuNi DIN	2 Single Cl. 1 (special)	1 Grounded		O150	H 3/8" Gas - L15 CH - 22	O3 30	15 1.5	F  Faston 6.35
EES - stn 300°C max PP O 100°C max TS O 200°C max Ts T 220°C max SS O 200°C max	6.35	P5 A63	T Cu - CuNi IEC	3 Dual Cl. 1 (special)	2 Exposed		O200	I 1/2" Gas - L15 CH - 24	O5 50	20 2	F  Miniature plug
EES - stn 300°C max PP O 100°C max TS O 200°C max Ts T 220°C max SS O 200°C max	6.35	P5 C63	K NiCr - Ni DIN - IEC				O250	N 1/4" NPT - L13 CH - 17	O8 80	25 2.5	D  Standard plug
EES - stn 300°C max PP O 100°C max TS O 200°C max Ts T 220°C max SS O 200°C max	6.35	P5 D63	ET NiCr - CuNi DIN - IEC				O300	P 3/8" NPT - L15 CH - 22		30 3	D  Cylindrical plug ø 17
EES - stn 300°C max PP O 100°C max TS O 200°C max Ts T 220°C max SS O 200°C max	6.35	P5 G63	N NiCrSi - NiSiMg DIN - IEC				O350	Q 1/2" NPT - L15 CH - 24		35 3.5	G  Male ø 12 cylindric plug
EES - stn 300°C max PP O 100°C max TS O 200°C max Ts T 220°C max SS O 200°C max	8	P5 A80					O400			40 4	J  Male ø 12 cylindric plug
EES - stn 300°C max PP O 100°C max TS O 200°C max Ts T 220°C max SS O 200°C max	8	P5 C80					O450			45 4.5	J  Male ø 12 cylindric plug
EES - stn 300°C max PP O 100°C max TS O 200°C max Ts T 220°C max SS O 200°C max	8	P5 D80					O500			50 5	J  Male ø 12 cylindric plug
EES - stn 300°C max PP O 100°C max TS O 200°C max Ts T 220°C max SS O 200°C max	8	P5G80					L min			00 10	R  Male ø 12 cylindric plug
EES - stn 300°C max PP O 100°C max TS O 200°C max Ts T 220°C max SS O 200°C max	8	P5 F80					O020			00 10	R  Male ø 12 cylindric plug

Note: other lengths on request for LG, LE and Lc. Code ex.: LG = 135mm cod. 0135 / LE = 60mm cod. 06 / Lc = 7m cod. 70

### Reference model:

Straight MgO thermocouple with tinned EEs wire, 6mm ø sheath, Fe-CuNi DIN, class 2 single element, ungrounded junction, AISI321 sheath, 100mm length, no attaching device, no extension, 1m wire and 1.8mm diam. terminals.

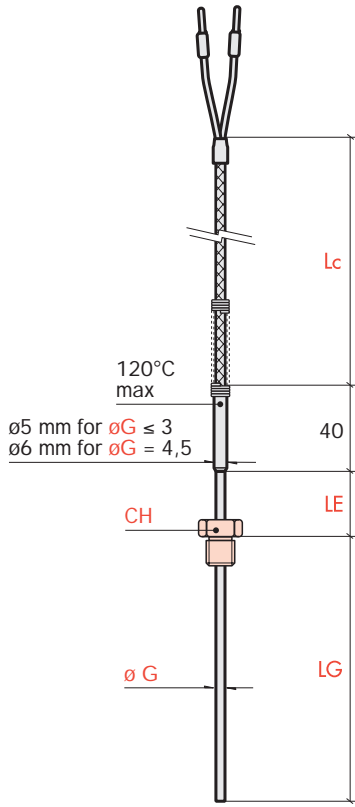
**P5 A60 - L 0 0 - A 0100 - S 00 - 10 P**

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# General purpose MgO sensors

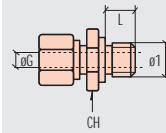
**P5** Straight thermocouple, o.d. from 2 to 4.5mm, with extension wire, optional fixed attaching device



### Mounting Fittings

(for models without fixed attaching device only)

Suggested adjustable compression fittings



Material	ø1	L	CH	øG	Model
AISI 316	1/8" G	10.5	12	2	Z1 RFS-B/EO20
	1/8" NPT	10.5	12	2	Z1 RFS-B/MO20
	1/8" G	10.5	12	3	Z1 RFS-B/EO30
	1/8" NPT	10.5	12	3	Z1 RFS-B/MO30
	1/8" G	10.5	12	4.5	Z1 RFS-B/EO45
	1/8" NPT	10.5	12	4.5	Z1 RFS-B/MO45

Type of wire	Diam. øG mm	Base code	Thermocouple type	Element N° and limits	Hot junction	Sheath material	Sheath LG mm	Type of thread	Extension LE mm	Lc wire length m	Type of termination
EES - stn 300°C max PP O 100°C max	2	P5 A20	L Fe - CuNi DIN	0 Single Cl. 2 (standard)	0	A AISI 321	O100	S None	OO None	10 1	P Terminals ø 1.4 - 1.8 max
TS O 200°C max TS T 220°C max SS O 200°C max	2	P5 D20	J Fe - CuNi IEC	1 Dual Cl. 2 (standard)	1	C Inconel 600 (K and N)	O050	A M6 x 1 - L10 CH-10 (pour ø2 et 3)	O2 20	05 0.5	S Wires isolés et étamés
	2	P5 G20	U Cu - CuNi DIN	2 Single Cl. 1 (special)	2		O150	B M8 x 1.25 - L10 CH - 14	O3 30	15 1.5	F Faston 6.35
	2	P5 F20	T Cu - CuNi IEC	3 *Dual Cl. 1 (special)	3		O200	D M10 x 1.5 - L13 CH - 14	O5 50	20 2	D Miniature plug
EES - stn 300°C max PP O 100°C max TS O 200°C max TS T 220°C max SS O 200°C max	3	P5 A30	K NiCr - Ni DIN - IEC				O250	ET 1/8" Gas - L12 CH - 14	O8 80	25 2.5	G Standard plug
	3	P5 C30	ET NiCr - CuNi DIN - IEC				O300	F 1/4" Gas - L13 CH - 17		30 3	J Cylindrical plug ø 17
	3	P5 D30	N NiCrSi - NiSiMg DIN - IEC				O350	M 1/8" NPT - L10 CH - 14		35 3.5	R Male ø 12 cylindric plug
	3	P5 F30					O400	N 1/4" NPT - L13 CH - 17		40 4	
EES - stn 300°C max PP O 100°C max TS O 200°C max TS T 220°C max SS O 200°C max	4.5	P5 A45					O450			45 4.5	
	4.5	P5 C45					O500			50 5	
	4.5	P5 D45					L min O020			00 10	
	4.5	P5 G45									
	4.5	P5 F45		* > ø2 only							

Note: other lengths on request for LG, LE and Lc. Code ex.: LG = 135mm cod. 0135 / LE = 60mm cod. 06 / Lc = 7m cod. 70

### Reference model:

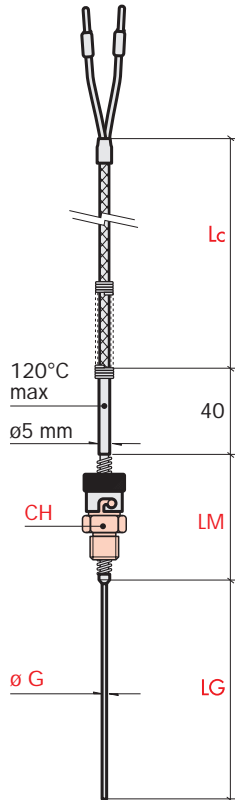
Straight MgO thermocouple with tinned EEs wire, 3mm ø sheath, Fe-CuNi DIN, class 2 single element, ungrounded junction, AISI321 sheath, 100mm length, no attaching device, no extension, 1m wire and 1.8mm diam. terminals.

**P5 A30 - L 0 0 - A 0100 - S 00 - 10 P**

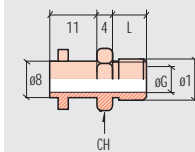
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## General purpose MgO sensors

**P7** Spring-loaded thermocouple, sheath o.d. from 1.5 to 3mm, extension wire and adjustable bayonet lock.



Bayonet assembly sizes



Material	ø1	L	CH	øG	Model
Treated	8 x 1	8.5	10	5.2	Z1-RFB-O/C053
brass	10 x 1.5	8.5	10	5.2	Z1-RFB-O/D053
	1/8" Gas	8.5	12	5.2	Z1-RFB-O/E053

Type of wire	Diam. øG mm	Base code	Thermocouple type	Element N° and limits	Hot junction	Sheath material	Sheath LG mm	Type of thread	LM spring leng. m	Lc wire length m	Type of termination
EES - stn 300°C max	1.5	P7 A15	L Fe-CuNi DIN	0 Single Cl. 2 (standard)	Insulated	A AISI 321	O100	C M8 x 1 - 8.5 CH - 10	1 100	10 1	P Terminals ø 1.4 - 1.8 max
PP O 100°C max	1.5	P7 C15									
TS O 200°C max	1.5	P7 D15	J Fe - CuNi IEC	1 * Dual Cl. 2 (standard)	1 Insulated	C Inconel 600 (K only)	O050	D M10 x 1.5 - 8.5 CH - 12	5 50	05 0.5	S Wires isolés et étamés
EES - stn 300°C max	2	P7 A20	K NiCr - Ni DIN - IEC	2 Single Cl. 1 (special)	Grounded		O150	ET 1/8" Gas - L8.5 CH - 12		15 1.5	F Faston 6.35
PP O 100°C max	2	P7 C20		3 * Dual Cl. 1 (special)			O200			20 2	
TS O 200°C max	2	P7 D20					O250			25 2.5	D Miniature plug
EES - stn 300°C max	3	P7 A30					O300			30 3	
PP O 100°C max	3	P7 C30					O350			35 3.5	G Standard plug
TS O 200°C max	3	P7 D30					O400			40 4	
							O450			45 4.5	J Cylindrical plug ø 17
							O500			50 5	
				* ø 3 only			L min O020			00 10	R Male ø 12 cylindric plug

Note: other lengths on request for LG and Lc. Code ex.: LG = 135mm cod. 0135 / Lc = 7m cod. 70

Reference model:

Spring-loaded MgO thermocouple with linned EEs wire, 2mm sheath o.d., Fe-CuNi DIN, class 2 single element, ungrounded junction, AISI321 sheath, 100mm length, M8x1 threaded fitting, 100mm spring, 1m wire and 1.8mm ø terminals.

**P7 A20 - L 0 0 - A 0100 - C 1 - 10 P**

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