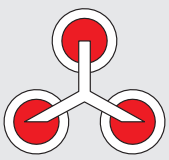


Thermocouples for inert gas applications



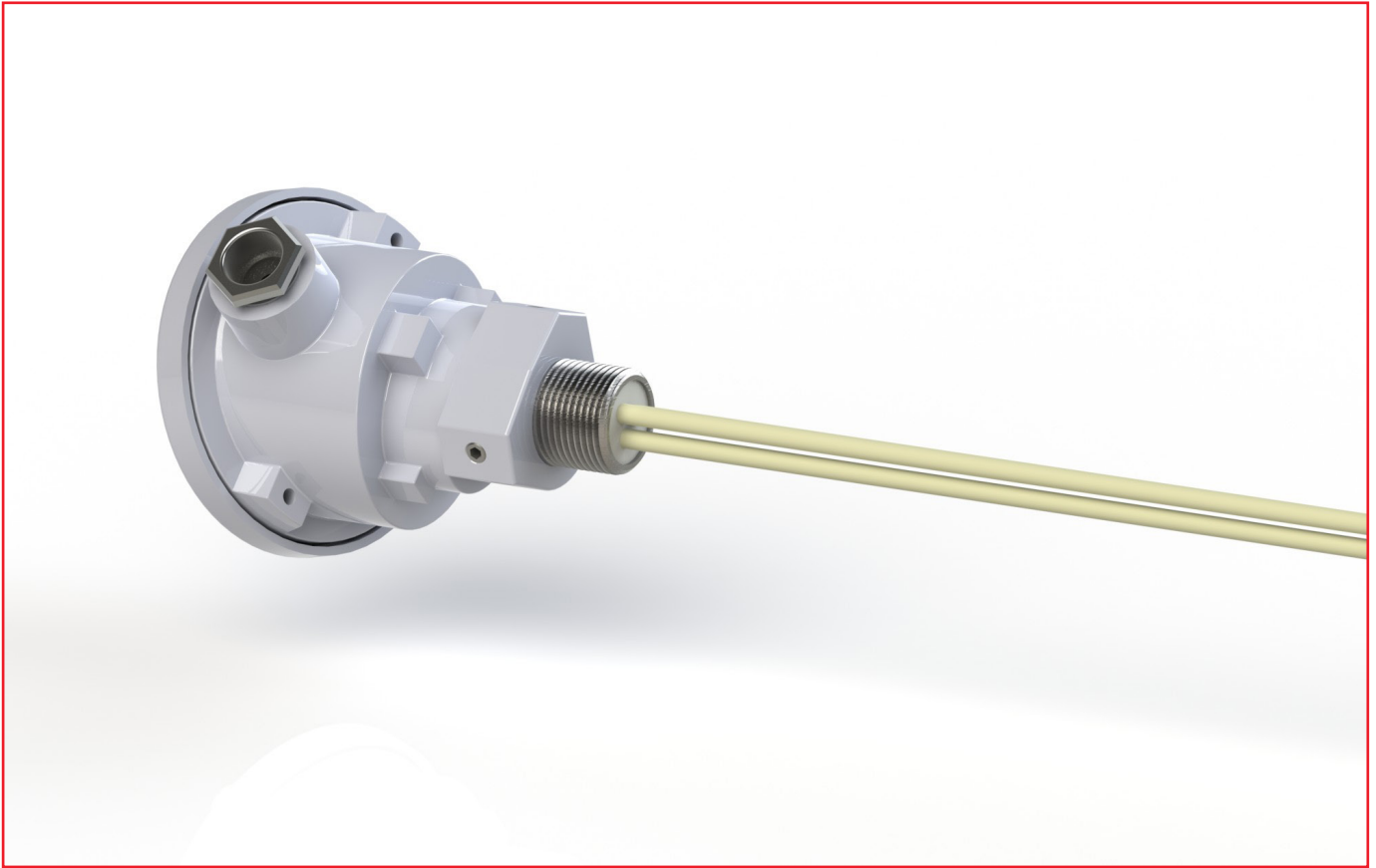
General view of standard types

Pressure range	Gas-tight and pressure proof up to 2 bar
Number of thermocouples [n]	1-3
Number of protective tubes	n + 1 additional empty tube for controlling measurements
Material of protective tubes	High-density Al ₂ O ₃ 99,7%
Diameter protective tubes	5 mm (type K up to 8 mm)
Electric connections	Ceramic insulating screws max 1,0 mm ²
Connecting head	Shape A with M20x1,5 cable screw connection
Certificates	Calibration certificate based on Ag and Pd fix-point measurements for PtRh – Pt types Optional calibration certificate in accordance to AMS 2750



Connection by screw socket

Connection by screw socket



2

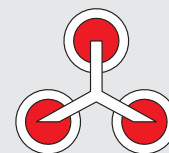
Standard connection is a G3/4 inch DIN 228 with a thread length of 20 mm types with a G1 inch thread are also available.

Order chart:

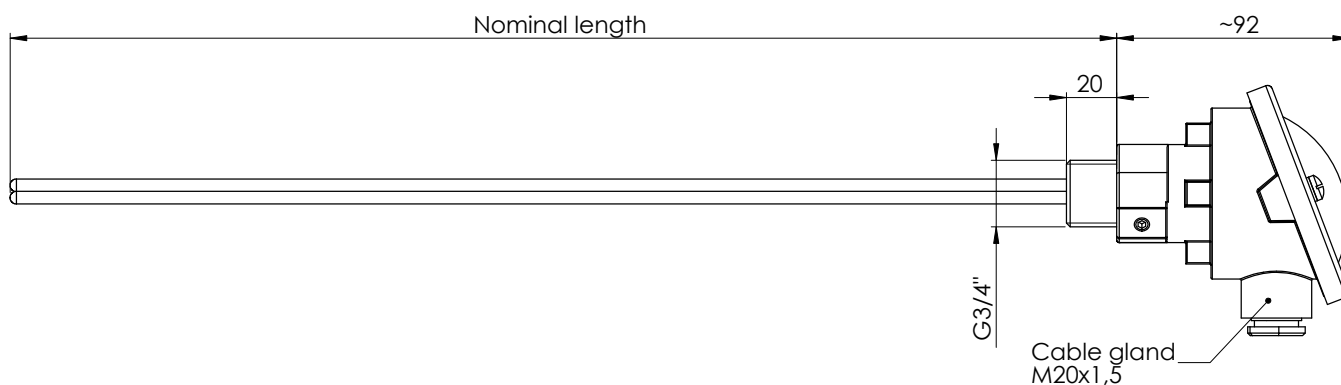
8	-	01XXZZ	-	LLLLA
		01 – Inert gas type XX – Number of thermocouples (TP) 02 – 1 TP + empty tube 03 – 2 TP + empty tube 04 – 3 TP + empty tube ZZ – Alloy of thermocouple 01 – PtRh10% - Pt (type S) 02 – PtRh13% - Pt (type R) 03 – PtRh30% - PtRh16 (type B) 04 – NiCr – Ni (type K) 05 – NiCrSi – NiSi (type N)		LLLL – Nominal length [mm] 0400 – 400 mm up to 1600 – 1600 mm In 100 mm steps A – Connection G34 – G3/4 thread G1 – G1 thread G1SW28 – G1 thread with SW28 connection

Example: 8-010301-0600G34

Thermocouple for inert gas with 2 x type S thermocouples + 1 additional empty tube for controlling measurements, with a nominal length of 600 mm and a G3/4" threaded connection.



Inert gas thermocouples with G3/4 screw thread

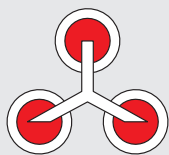


Equipped with 1 thermocouple type S (PtRh10% - Pt)

Material number	Description	Specification
501212	Inert gas thermocouple 600 mm, 1 x type S + empty tube, G3/4 threaded connection	8-010201-0600G34
501213	Inert gas thermocouple 700 mm, 1 x type S + empty tube, G3/4 threaded connection	8-010201-0700G34
501214	Inert gas thermocouple 800 mm, 1 x type S + empty tube, G3/4 threaded connection	8-010201-0800G34
501215	Inert gas thermocouple 900 mm, 1 x type S + empty tube, G3/4 threaded connection	8-010201-0900G34
501216	Inert gas thermocouple 1000 mm, 1 x type S + empty tube, G3/4 threaded connection	8-010201-1000G34
501218	Inert gas thermocouple 1200 mm, 1 x type S + empty tube, G3/4 threaded connection	8-010201-1200G34

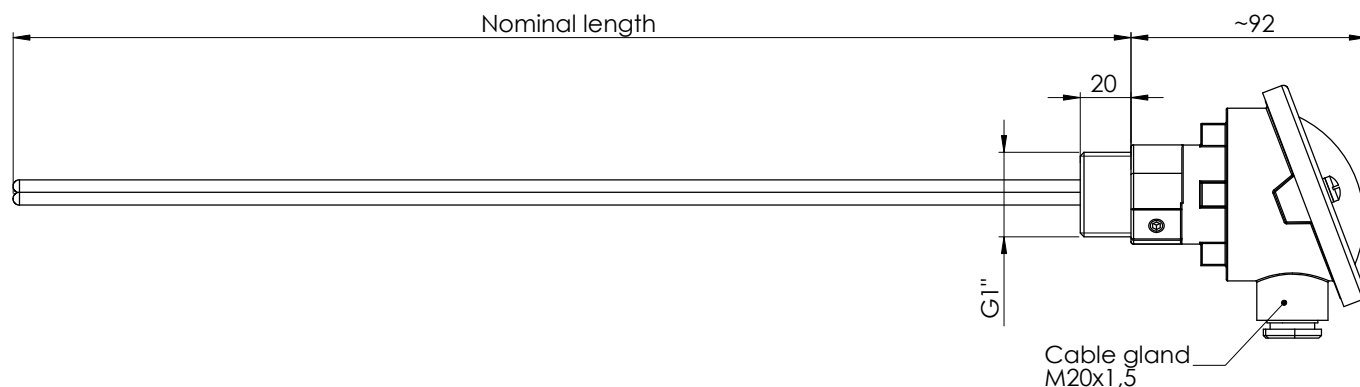
Equipped with 2 thermocouples type S (PtRh10% - Pt)

Material number	Description	Specification
501312	Inert gas thermocouple 600 mm, 2 x type S + empty tube, G3/4 threaded connection	8-010301-0600G34
501313	Inert gas thermocouple 700 mm, 2 x type S + empty tube, G3/4 threaded connection	8-010301-0700G34
501314	Inert gas thermocouple 800 mm, 2 x type S + empty tube, G3/4 threaded connection	8-010301-0800G34
501315	Inert gas thermocouple 900 mm, 2 x type S + empty tube, G3/4 threaded connection	8-010301-0900G34
501316	Inert gas thermocouple 1000 mm, 2 x type S + empty tube, G3/4 threaded connection	8-010301-1000G34
501318	Inert gas thermocouple 1200 mm, 2 x type S + empty tube, G3/4 threaded connection	8-010301-1200G34



Connection by screw socket

Inert gas thermocouple with G1 threaded connection



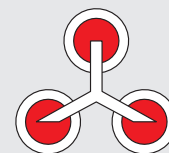
Equipped with 1 thermocouple type S (PtRh10% - Pt)

Material number	Description	Specification
92000840	Inert gas thermocouple 600 mm, 1 x type S + empty tube, G1 threaded connection	8-010201-0600G1
92000841	Inert gas thermocouple 700 mm, 1 x type S + empty tube, G1 threaded connection	8-010201-0700G1
92000842	Inert gas thermocouple 800 mm, 1 x type S + empty tube, G1 threaded connection	8-010201-0800G1
92000843	Inert gas thermocouple 900 mm, 1 x type S + empty tube, G1 threaded connection	8-010201-0900G1
92000844	Inert gas thermocouple 1000 mm, 1 x type S + empty tube, G1 threaded connection	8-010201-1000G1
92000845	Inert gas thermocouple 1200 mm, 1 x type S + empty tube, G1 threaded connection	8-010201-1200G1

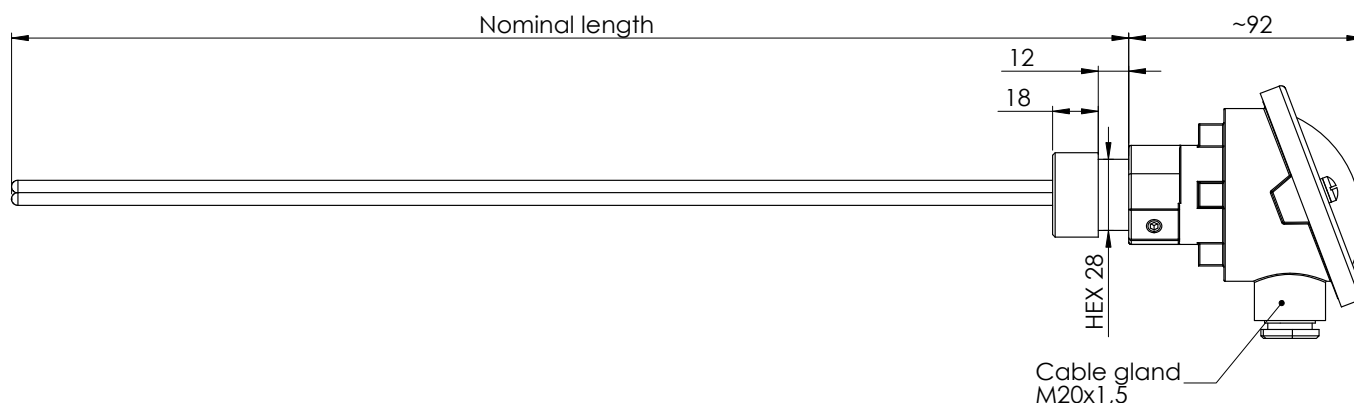
Equipped with 2 thermocouples type S (PtRh10% - Pt)

Material number	Description	Specification
92000836	Inert gas thermocouple 600 mm, 2 x type S + empty tube, G1 threaded connection	8-010301-0600G1
521039	Inert gas thermocouple 700 mm, 2 x type S + empty tube, G1 threaded connection	8-010301-0700G1
92000837	Inert gas thermocouple 800 mm, 2 x type S + empty tube, G1 threaded connection	8-010301-0800G1
92000838	Inert gas thermocouple 900 mm, 2 x type S + empty tube, G1 threaded connection	8-010301-0900G1
521040	Inert gas thermocouple 1000 mm, 2 x type S + empty tube, G1 threaded connection	8-010301-1000G1
92000839	Inert gas thermocouple 1200 mm, 2 x type S + empty tube, G1 threaded connection	8-010301-1200G1

Connection by screw socket



Inert gas thermocouple with G1 threaded connection with SW28 connection

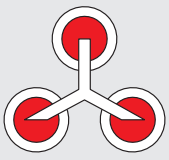


Equipped with 1 thermocouple type S (PtRh10% - Pt)

Material number	Description	Specification
92000846	Inert gas thermocouple 600 mm, 1 x type S + empty tube, G1 threaded connection with SW28	8-010201-0600G1SW28
92000847	Inert gas thermocouple 700 mm, 1 x type S + empty tube, G1 threaded connection with SW28	8-010201-0700G1SW28
92000848	Inert gas thermocouple 800 mm, 1 x type S + empty tube, G1 threaded connection with SW28	8-010201-0800G1SW28
92000849	Inert gas thermocouple 900 mm, 1 x type S + empty tube, G1 threaded connection with SW28	8-010201-0900G1SW28
92000850	Inert gas thermocouple 1000 mm, 1 x type S + empty tube, G1 threaded connection with SW28	8-010201-1000G1SW28
92000851	Inert gas thermocouple 1200 mm, 1 x type S + empty tube, G1 threaded connection with SW28	8-010201-1200G1SW28

Equipped with 2 thermocouples type S (PtRh10% - Pt)

Material number	Description	Specification
92000852	Inert gas thermocouple 600 mm, 2 x type S + empty tube, G1 threaded connection with SW28	8-010301-0600G1SW28
92000853	Inert gas thermocouple 700 mm, 2 x type S + empty tube, G1 threaded connection with SW28	8-010301-0700G1SW28
92000854	Inert gas thermocouple 800 mm, 2 x type S + empty tube, G1 threaded connection with SW28	8-010301-0800G1SW28
92000855	Inert gas thermocouple 900 mm, 2 x type S + empty tube, G1 threaded connection with SW28	8-010301-0900G1SW28
92000856	Inert gas thermocouple 1000 mm, 2 x type S + empty tube, G1 threaded connection with SW28	8-010301-1000G1SW28
92000857	Inert gas thermocouple 1200 mm, 2 x type S + empty tube, G1 threaded connection with SW28	8-010301-1200G1SW28



Stainless steel tube connection

Stainless steel tube connection



6

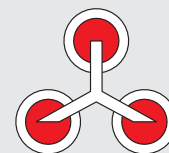
As a standard a tube (W1.4305) of $\text{Ø}22$ mm x 150 mm length is used. Variations with $\text{Ø}1$ " inch x 150 mm or $\text{Ø}27$ mm x 150 mm are also available.

Order chart:

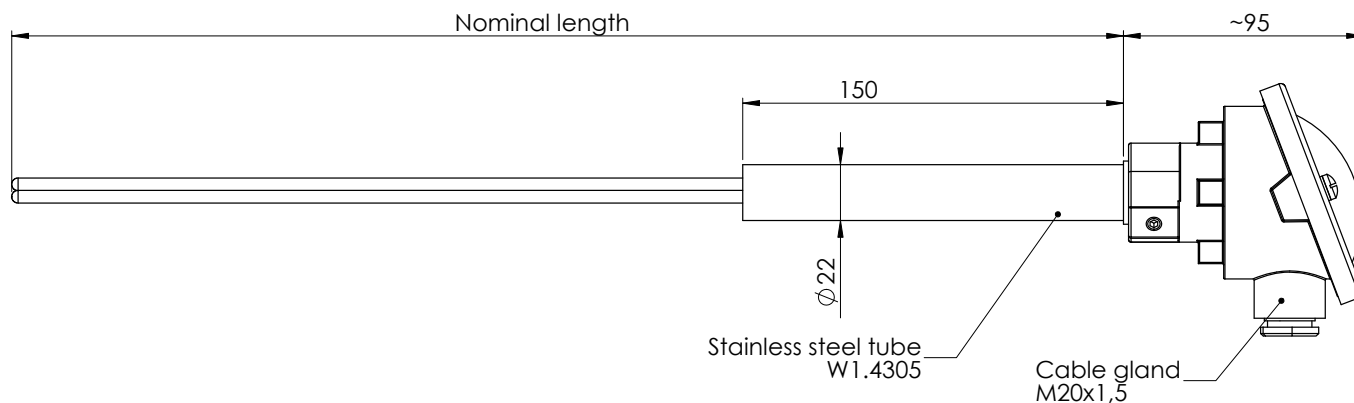
8	-	<i>01XXZZ</i>	-	<i>LLLLA</i>
		01 – Inert gas type XX – Number of thermocouples (TP) 02 – 1 TP + empty tube 03 – 2 TP + empty tube 04 – 3 TP + empty tube ZZ – Alloy of thermocouple 01 – PtRh10% - Pt (type S) 02 – PtRh13% - Pt (type R) 03 – PtRh30% - PtRh16 (type B) 04 – NiCr – Ni (type K) 05 – NiCrSi – NiSi (type N)		LLLL – Nominal length [mm] 0400 – 400 mm up to 1600 – 1600 mm In 100 mm steps A – Connection SR22 – $\text{Ø}22$ mm x 150 mm SG1Z – $\text{Ø}1$ " inch x 150 mm SR27 – $\text{Ø}27$ mm x 150 mm

Example: 8-010301-0600SR22

Thermocouple for inert gas with 2 x type S thermocouples + 1 additional empty tube for controlling measurements, with a nominal length of 600 mm and a $\text{Ø}22$ mm x 150 mm tube.



Inert gas thermocouple with Ø22 x 150 stainless steel tube



Equipped with 1 thermocouple type S (PtRh10% - Pt)

Material number	Description	Specification
92000858	Inert gas thermocouple 600 mm, 1 x type S + empty tube, 22 x 150 tube	8-010201-0600SR22
92000860	Inert gas thermocouple 700 mm, 1 x type S + empty tube, 22 x 150 tube	8-010201-0700SR22
92000861	Inert gas thermocouple 800 mm, 1 x type S + empty tube, 22 x 150 tube	8-010201-0800SR22
92000862	Inert gas thermocouple 900 mm, 1 x type S + empty tube, 22 x 150 tube	8-010201-0900SR22
92000863	Inert gas thermocouple 1000 mm, 1 x type S + empty tube, 22 x 150 tube	8-010201-1000SR22
92000864	Inert gas thermocouple 1200 mm, 1 x type S + empty tube, 22 x 150 tube	8-010201-1200SR22

Equipped with 2 thermocouples type S (PtRh10% - Pt)

Material number	Description	Specification
92000865	Inert gas thermocouple 600 mm, 2 x type S + empty tube, 22 x 150 tube	8-010301-0600SR22
520993	Inert gas thermocouple 700 mm, 2 x type S + empty tube, 22 x 150 tube	8-010301-0700SR22
92000866	Inert gas thermocouple 800 mm, 2 x type S + empty tube, 22 x 150 tube	8-010301-0800SR22
92000867	Inert gas thermocouple 900 mm, 2 x type S + empty tube, 22 x 150 tube	8-010301-0900SR22
92000868	Inert gas thermocouple 1000 mm, 2 x type S + empty tube, 22 x 150 tube	8-010301-1000SR22
92000869	Inert gas thermocouple 1200 mm, 2 x type S + empty tube, 22 x 150 tube	8-010301-1200SR22

Equipped with 3 thermocouples type S (PtRh10% - Pt)

Material number	Description	Specification
92000870	Inert gas thermocouple 600 mm, 3 x type S + empty tube, 22 x 150 tube	8-010401-0600SR22
92000871	Inert gas thermocouple 700 mm, 3 x type S + empty tube, 22 x 150 tube	8-010401-0700SR22
92000872	Inert gas thermocouple 800 mm, 3 x type S + empty tube, 22 x 150 tube	8-010401-0800SR22
92000873	Inert gas thermocouple 900 mm, 3 x type S + empty tube, 22 x 150 tube	8-010401-0900SR22
92000874	Inert gas thermocouple 1000 mm, 3 x type S + empty tube, 22 x 150 tube	8-010401-1000SR22
92000875	Inert gas thermocouple 1200 mm, 3 x type S + empty tube, 22 x 150 tube	8-010401-1200SR22