



Level



Pressure



Flow



Temperature



Liquid
Analysis



Registration



Systems
Components



Services



Solutions

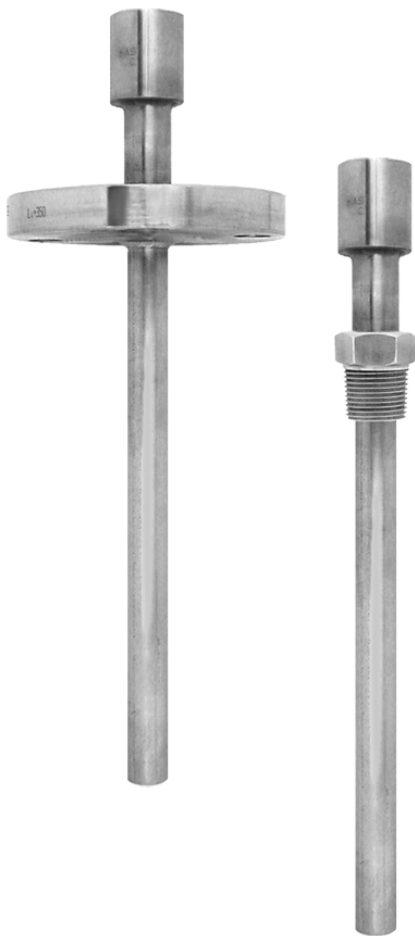
Technical Information

Industrial thermowell Omnigrad TA540

Heavy duty - General purpose

From pipe - Threaded or flanged weld type

Also ENI TUB 1/2/3/4



Application

TA540 is designed for use with resistance and thermocouple thermometers in heavy duty applications.

Benefits at a glance

- TA540 is an industry standard thermowell with a round extension.
- The process connection can either be threaded or flanged weld.
- The thermowell stem shape can be straight or tapered for fast response time.
- Extension, immersion length and total length can be chosen according to process requirements.
- A wide choice of pipe sizes, materials and process connections is available.
- Special versions can be manufactured according to specification.

Technical data

Pipe	<ul style="list-style-type: none"> ■ Standard reference: ENI TUB 1, ENI TUB 2, ENI TUB 3, ENI TUB 4 ■ Round extension: Ø35 mm (1.38 in) ■ Thermowell diameter: ¼" sch. 40, ½" sch. 40/80, ¾" sch. 40 <p>Insert diameter: 6 mm (0.24 in) Material: AISI316/W.1.4404, AISI446/W.1.4749</p>
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Connection to thermometer	Threaded: ½" NPT, ¾" NPT - female
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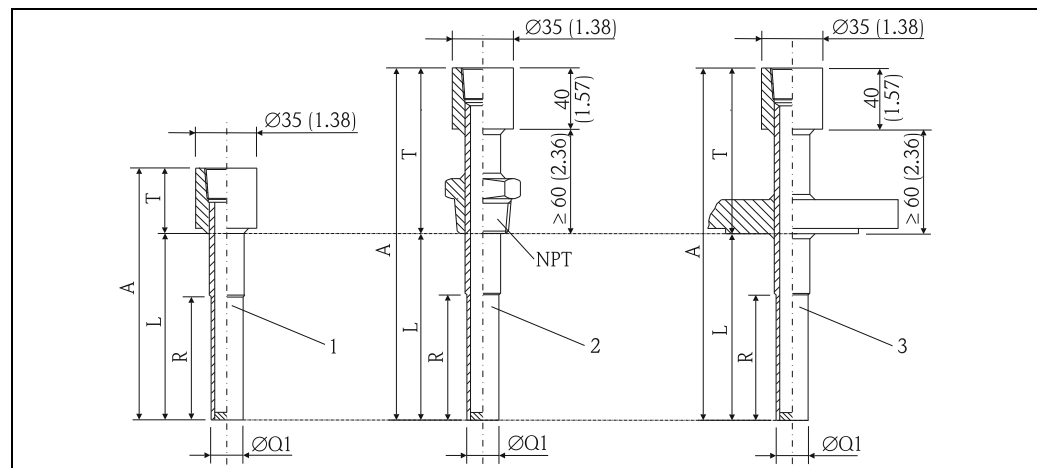
Process connection

Threaded or flanged weld				
Thread	½" NPT	¾" NPT	1" NPT	1½" NPT
Engagement length	8 mm (0.31 in)	8,5 mm (0.33 in)	10 mm (0.39 in)	10,5 mm (0.41 in)
Flange type	ANSI blind flange, DIN 2527/2526 Form C, UNI6000			
Flange material	AISI 316, A 105			
Flange mounting	double side standard weld			

Tip	<ul style="list-style-type: none"> ■ Tip: straight or with reduced diameter ■ Bottom shape: straight ■ Bottom thickness: 5 mm (0.20 in)
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Flange Finishing	Specification: see product structure
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Mechanical construction



Thermowell dimensions in mm (in):

- 1 Thermowell without process connection
- 2 Thermowell with thread as process connection
- 3 Thermowell with flange as process connection

Pos.-No.	Description
A	Total length (A=T+L)
L	Immersion length
ØQ1	Diameter thermowell tip, specification see product structure
R	Thermowell tip length, specification see product structure
T	Extension, specification see product structure

Ordering information

Product structure

This information provides an overview of the order options available. The information is not exhaustive, however, and may not be fully up to date. More detailed information is available from your local Endress+Hauser representative.

Omnigrad T540			
Heavy duty thermowell - General purpose - Threaded or flanged weld type - Also ENI TUB 1/2/3/4			
Pos. 010	Thermometer Connection		
	1	Thread 1/2" NPT	
	2	Thread 3/4" NPT	
Pos. 020	Extension T; Q1; R:		
	A	100 mm; 0 mm; 0 mm	
	B	100 mm; 20 mm; 110 mm	
	C	200 mm; 0 mm; 0 mm	
Pos. 040	Total Length A:		
	AA	not needed	
Pos. 050	Diameter; Material:		
	AC	1/4" sch. 40; 316	
	BC	Pipe: 1.4401 D=1/4" sch. 80 Eni TUB1	
	EC	1/2" sch. 40; 316	
	EP	1/2" sch. 40; 446	
	FC	1/2" sch. 80; 316	
	GC	3/4" sch. 40; 316	
	GP	3/4" sch. 40; 446	
	HC	Pipe: 1.4401 D=3/4" sch. 80 Eni TUB2	
	YY	Special version, TSP-no. to be spec.	
Pos. 060	Immersion Length L:		
	9 mm, as specified	
Pos. 070	Process Connection:		
	AA	not needed	
	AB	Flange 1" ANSI 150 RF BL; B 16.5; JPI;316	
	AC	ANSI 1" 150 RF A105 flange	
	AD	Flange 1" ANSI 300 RF BL; B 16.5; JPI;316	
	AE	ANSI 1" 300 RF A105 flange	
	AF	ANSI 1" 600 RF SS316 flange	
	AG	ANSI 1" 600 RF A105 flange	
	AH	Flange 1-1/2" ANSI 150 RF BL; B 16.5; JPI; 316	
	AJ	ANSI 1 1/2" 150 RF A105 flange	
	AK	Flange 1-1/2" ANSI 300 RF BL; B 16.5; JPI; 316	
	AL	ANSI 1 1/2" 300 RF A105 flange	
	AM	Flange 1-1/2" ANSI 600 RF; 316	
	AN	ANSI 1 1/2" 600 RF A105 flange	
	AP	ANSI 1 1/2" 600 RTJ SS316 flange	
	AQ	ANSI 1 1/2" 600 RTJ A105 flange	
	AV	Flange 2" ANSI 300 RF BL; JPI; 316	
	AW	ANSI 2" 300 RF A105 flange	
	AX	Flange 2" ANSI 300 RTJ; 316	
	AZ	ANSI 2" 300 RTJ A105 flange	
	BA	ANSI 2" 600 RF SS316 flange	
	BB	ANSI 2" 600 RF A105 flange	
	BC	ANSI 2" 600 RTJ SS316 flange	
	BD	ANSI 2" 600 RTJ A105 flange	
	BE	Flange 1-1/2" ANSI 300 RTJ; 316	
	BF	ANSI 1 1/2" 300 RTJ A105 flange	
	EA	Flange DN25 PN16; 316L	
	EB	DN25 PN16 CS flange	
	EC	Flange DN25 PN40; 316L	
	ED	DN25 PN40 C CS flange	
	EE	DN40 PN40 C SS316L flange	
	EF	DN40 PN40 C CS flange	
	EG	Flange DN50 PN40; 316L	
	EH	DN50 PN40 C CS flange	
	GA	DN25 PN16 UNI6092(93)/29 SS316	

Pos. 070										Process Connection:
										GB DN25 PN16 UNI6092 (93)/29 A105
										GC DN25 PN40 UNI6094 (95)/29 SS316
										GD DN25 PN40 UNI6094 (95)/29 A105
										GE DN40 PN40 UNI6094 (95)/29 SS316
										GF DN40 PN40 UNI6094 (95)/29 A105
										GG DN50 PN40 UNI6094 (95)/29 SS316
										GH DN50 PN40 UNI6094 (95)/29 A105
										PA Thread ½"NPT-M
										PB Thread ¾"NPT-M
										PC Thread 1"NPT-M
										PD 1½" NPT mounting bush, SS 316
Pos. 080										Flange Finishing:
										1 not needed
										2 ASME/ANSI
										5 Rz160 DIN 2526
										6 125 AARH (UNI)
										9 Special version, TSP-no. to be spec.
Pos. 090										Safety Plug + Chain:
										A not needed
										B Material 304
Pos. 100										Additional Option:
										0 not needed
										1 Special version, TSP-no. to be spec.
TA540										⇒ Order code

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