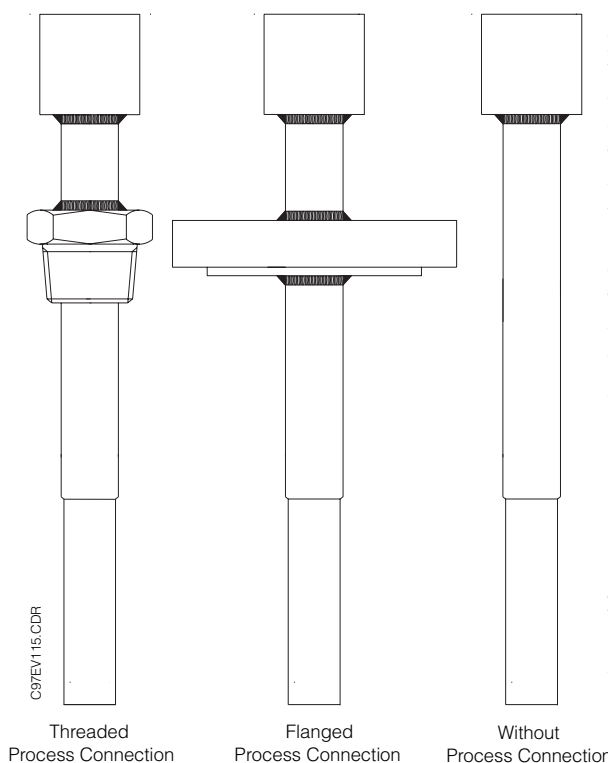


Industrial Protecting Tube *omnigrad TA540*

Heavy duty - General purpose
From pipe
Threaded or flanged weld type
Also ENI TUB 1 / 2 / 3 / 4



Description

TA540 is an industry standard thermowell manufactured from pipe, with a round extension.

The process connection can be threaded or flanged weld.

The thermowell stem shape can be straight or tapered for fast response time.

The extension, the immersion and the total lengths can be chosen according to process requirements.

A wide choice of standard pipe sizes, materials and process connections is available; other versions can be ordered according to specification.

Different grades of flange finishing are also available.

Application

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

Technical data

Pipe

Standard reference:

ENI TUB 1, ENI TUB 2, ENI TUB 3, ENI TUB 4

Round extension:

Ø 35 mm

O.D.:

1/4" sch. 40/80, 1/2" sch. 40/80, 3/4" sch. 40/80

Standard inset diameter:

6 mm diameter

Standard material:

AISI316 / W.1.4401, AISI446 / W.1.4749/W.1.4762

Connection to thermometer

Threaded:

1/2" NPT, 3/4" NPT - female

Process connection

Type:

threaded or flanged weld

Thread:

1/2" NPT, 3/4" NPT, 1" NPT, 1 1/2" NPT

Flange type:

ANSI blind, DIN 2527/2526 Form C, UNI6000

Flange material:

AISI 316, A 105

Flange mounting:

double side standard weld

Tip

Bottom shape:

straight or tapered

Bottom thickness:

5 mm

Surface

Finishing:

refer to the order key

Quality made by
Endress+Hauser



ISO 9001

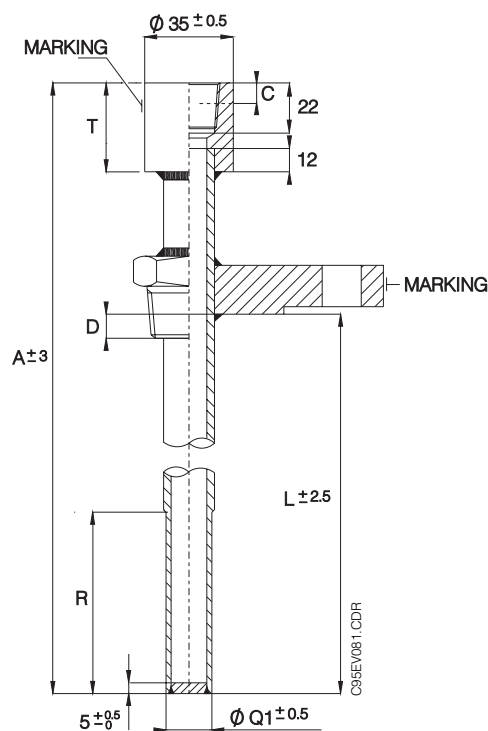
Endress+Hauser

Nothing beats know-how



Order key

TA540 - Heavy duty thermowell - General purpose - From pipe
Threaded or flanged weld type - Also ENI TUB 1 / 2 / 3 / 4



TA540 with process connection
Note: all dimensions in millimeters

Connection to thermometer	
Thread	Engagement length C
1/2" NPT	8 mm
3/4" NPT	8.5 mm

Table A

Process connection	
Thread	Engagement length D
1/2" NPT	8 mm
3/4" NPT	8.5 mm
1" NPT	10 mm
1 1/2" NPT	10.5 mm

Table B

Thermometer connection
1 - 1/2" NPT
2 - 3/4" NPT

Extension T, Taper diameter Q1, Taper length R
A - T = 40 mm, no reduced tip, straight shape type (TUB 1 and TUB 2 style)
B - T = 40 mm, Q1 = 20 mm, R = 110 mm (TUB 3 and TUB 4 style) [1]
Y - T = mm, Q1 = mm, R = mm (to specification) [4]

Total length A (140 ÷ 4000 mm)
TF - 150 mm
YY - mm length to specification [4]

Material of Total length A
Pipe size, Pipe schedule, Material
AC - 1/4", Sch. 40, AISI316/ W.1.4401 [2] [3]
BC - 1/4", Sch. 80, AISI316/ W.1.4401 (ENI TUB 1 style) [2] [3]
EC - 1/2", Sch. 40, AISI316/ W.1.4401 [3]
FC - 1/2", Sch. 80, AISI316/ W.1.4401 (ENI TUB 3 / 4 style) [1] [3]
EP - 1/2", Sch. 40, AISI446/ W.1.4749/ W.1.4762 [3]
GC - 3/4", Sch. 40, AISI316/ W.1.4401
HC - 3/4", Sch. 80, AISI316/ W.1.4401 (ENI TUB 2 style)
GP - 3/4", Sch. 40, AISI446/ W.1.4749/ W.1.4762
YY - Size, Schedule, Material to specification

Immersion length L (100 ÷ 3700 mm)
9 - mm length to specification [4]

Process connection / material
See next page

Flange finishing
1 - Not required (Without flange)
2 - Standard for ASME/ANSI
5 - Rz 160 DIN 2526
6 - Smooth (125 AARH) for UNI
9 - To specification

Plug and chain
A - Without plug and chain
B - AISI304 plug and chain

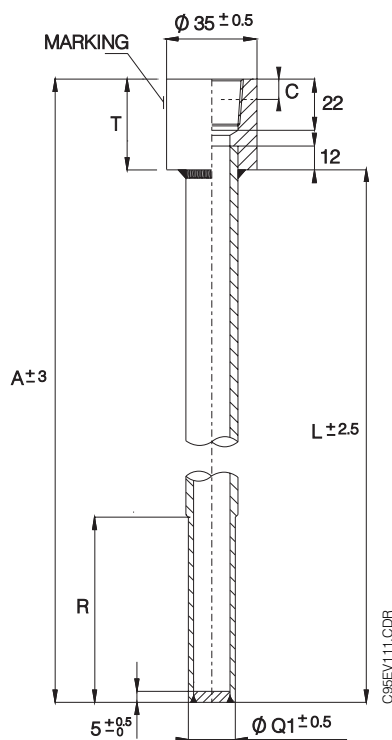
Markings
0 - None
1 - Punched on

TA540-

Complete Order Code

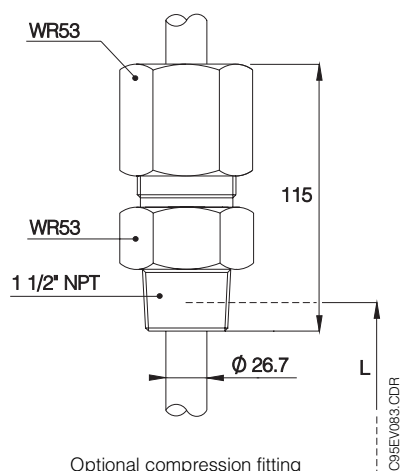
Notes:
[1] Only for pipe size 1/2", Schedule 80 (Digit FC).
[2] Only for pipe size 1/4" (Digit AC, BC).
[3] Only for pipe size 1/4" and 1/2" (Digit AC, BC, EC, FC, EP).
[4] Special lengths calculated as follows:

Length	Model of thermowell	
	without process connection	with process connection
Extension T	T ≥ 40 mm	T ≥ 40 mm
Total A	A = T + L	A - (T+L) ≥ 50 mm



TA540 without process connection

Note: all dimensions in millimeters



Optional compression fitting
model TSPV-4701AA
for pipe size 3/4"

Note: all dimensions in millimeters

Process connection / material

AA - Without

Blind flange

- AB-Blind 1" ANSI 150 RF - AISI 316**
AC-Blind 1" ANSI 150 RF - A 105
AD-Blind 1" ANSI 300 RF - AISI 316
AE-Blind 1" ANSI 300 RF - A 105
AF-Blind 1" ANSI 600 RF - AISI 316
AG-Blind 1" ANSI 600 RF - A 105
AH-Blind 1 1/2" ANSI 150 RF - AISI 316
AJ-Blind 1 1/2" ANSI 150 RF - A 105
AK-Blind 1 1/2" ANSI 300 RF - AISI 316
AL-Blind 1 1/2" ANSI 300 RF - A 105
BE-Blind 1 1/2" ANSI 300 RTJ - AISI 316
BF-Blind 1 1/2" ANSI 300 RTJ - A 105
AM-Blind 1 1/2" ANSI 600 RF - AISI 316
AN-Blind 1 1/2" ANSI 600 RF - A 105
AP-Blind 1 1/2" ANSI 600 RTJ - AISI 316
AQ-Blind 1 1/2" ANSI 600 RTJ - A 105
AV-Blind 2" ANSI 300 RF - AISI 316
AW-Blind 2" ANSI 300 RF - A 105
AX-Blind 2" ANSI 300 RTJ - AISI 316
AZ-Blind 2" ANSI 300 RTJ - A 105
BA-Blind 2" ANSI 600 RF - AISI 316
BB-Blind 2" ANSI 600 RF - A 105
BC-Blind 2" ANSI 600 RTJ - AISI 316
BD-Blind 2" ANSI 600 RTJ - A 105

DIN flange

- EA - DN25PN10 or 16 DIN2527/2526 Form C / AISI 316
EB - DN25PN10 or 16 DIN2527/2526 Form C / A 105
EC - DN25PN25 or 40 DIN2527/2526 Form C / AISI 316
ED - DN25PN25 or 40 DIN2527/2526 Form C / A 105
EE - DN40PN25 or 40 DIN2527/2526 Form C / AISI 316
EF - DN40PN25 or 40 DIN2527/2526 Form C / A 105
EG - DN50PN25 or 40 DIN2527/2526 Form C / AISI 316
EH - DN50PN25 or 40 DIN2527/2526 Form C / A 105

UNI flange

- GA - DN25PN16 UNI6092/29-6093/29 / AISI 316
GB - DN25PN16 UNI6092/29-6093/29 / A 105
GC - DN25PN40 UNI6094/29-6095/29 / AISI 316
GD - DN25PN40 UNI6094/29-6095/29 / A 105
GE - DN40PN40 UNI6094/29-6095/29 / AISI 316
GF - DN40PN40 UNI6094/29-6095/29 / A 105
GG - DN50PN40 UNI6094/29-6095/29 / AISI 316
GH - DN50PN40 UNI6094/29-6095/29 / A 105

Welded mounting bushing, Material

- PA - 1/2" NPT mounting bushing, AISI 316 [2]
PB - 3/4" NPT mounting bushing, AISI 316 [3]
PC - 1" NPT mounting bushing, AISI 316
PD - 1 1/2" NPT mounting bushing, AISI 316

YY_F Process connection / material to specification

Product designation for process connection / material

Export Division

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