



Level



Pressure



Flow



Temperature



Liquid
Analysis



Registration



Systems
Components



Services



Solutions

Technical Information

Omnigrad TA570

Industrial thermowell

Heavy duty - General purpose

From round bar stock - Socket weld type

Also Dow Chemical G6D-7001-00



Application

The thermowell TA570 is especially designed for use with resistance and thermocouple thermometers mainly in heavy duty applications.

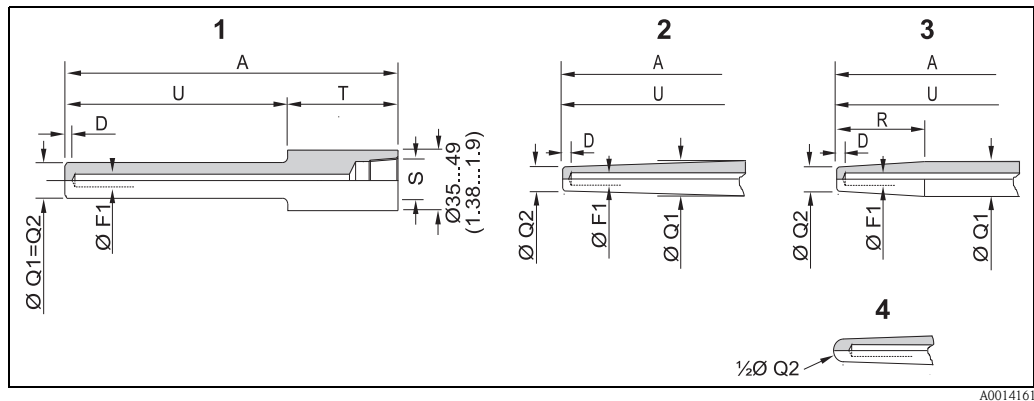
Benefits at a glance

- The TA570 is an industry standard thermowell, manufactured from round bar stock.
- The process connection is socket weld.
- Optionally the thermowell stem shape can be straight, conical or conical tapered. The extension, the immersion and the tapering lengths can be chosen according to process requirements.
- Wide choice of standard materials. Additional versions can be ordered according to specification.
- Different grades of surface finishing.

Technical data

Round bar stock	<ul style="list-style-type: none"> ■ Standard reference: Dow Chemical G6D-7001-00 ■ Socket size diameter: 35...49 mm (1.38...1.9 in) ■ Immersion O.D.: < socket size diameter ■ Standard material: AISI316Ti/W.1.4571, AISI316/W.1.4401, AISI316 L/W.1.4404, AISI321/W.1.4541
Connection to thermometer	Thread: ½" NPT, ½" NPSM ¹ , ½" BSP, G½" BSPF - female
Process connection	Socket weld
Tip	<ul style="list-style-type: none"> ■ Shape: Straight, conical or conical tapered tip ■ Bottom thickness: 6 mm (0.24 in)
Surface roughness	Finishings: 0.8 µm (0.32 µin) or 1.6 µm (0.63 µin)

Mechanical construction



Thermowell dimensions in mm (in):

- 1 Continuous straight shape, flat bottom
- 2 Conical tip shape, flat bottom
- 3 Conical tapered tip shape, flat bottom
- 4 Rounded bottom

Pos.-No.	Description
A	Total length, nominal length: 125...1000 mm (4.9...39.4 in)
U	Immersion length: 150 mm (5.9 in), 225 mm (8.9 in)
T	Extension, 75 mm (2.96 in)
D	Bottom thickness
ØQ1	Diameter thermowell tip, specification see product structure
ØQ2	Note: Wall thickness 3 mm (0.12 in) minimum, $(Q2 - F1)/2 \geq 3$ mm (0.12 in)
ØF1	Bore diameter: 7 mm (0.28 in)
R	Thermowell tip length, specification see product structure
S	Thermometer connection thread S, specification see product structure

1. Thermowell thread complete with ½" NPS plug. NPSM pipe internal thread will accept both NPT and NPS male thread.

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.

TA570-	Heavy duty thermowell - General purpose - From round bar stock; socket weld type - Ø35...49 mm Also Dow Chemical G6D-7001-00						
Thermometer connection S							
	1	½"	NPSM	thermometer	connection		
	2	Thread	½"	NPT			
	3	Thread	BSP	½"			
	4	½"	BSPF	thermometer	connection		
Extension T; D1; Q1; Q2; R							
	1	75 mm;	48 mm;	25 mm;	18 mm;	0 mm	
	9	... mm, as specified					
Immersion length U							
	UA	150 mm					
	UB	225 mm					
	YY mm, as specified					
Thermowell material							
	B	316Ti/1.4571					
	C	316/1.4401					
	D	316L/1.4404					
	F	321/1.4541					
Thermowell finishing							
	1	0,8 µm					
	4	1,6 µm					
Bottom thickness D, shape							
	B	6 mm; flat (Dow Chemical Standard)					
	D	6 mm; rounded (½ Q2)					
Bore diameter F1							
	1	7 mm					
Safety plug + chain							
	A	Not needed					
	B	Material 316L/1.4404					
Additional option							
	0	Not needed					
	1	Special version, TSP-no. to be specified					
TA570-						1	⇒ Order code

Instruments International

Endress+Hauser
Instruments International AG
Kaegenstrasse 2
4153 Reinach
Switzerland

Tel. +41 61 715 81 00
Fax +41 61 715 25 00
www.endress.com
info@ii.endress.com

Endress+Hauser 
People for Process Automation