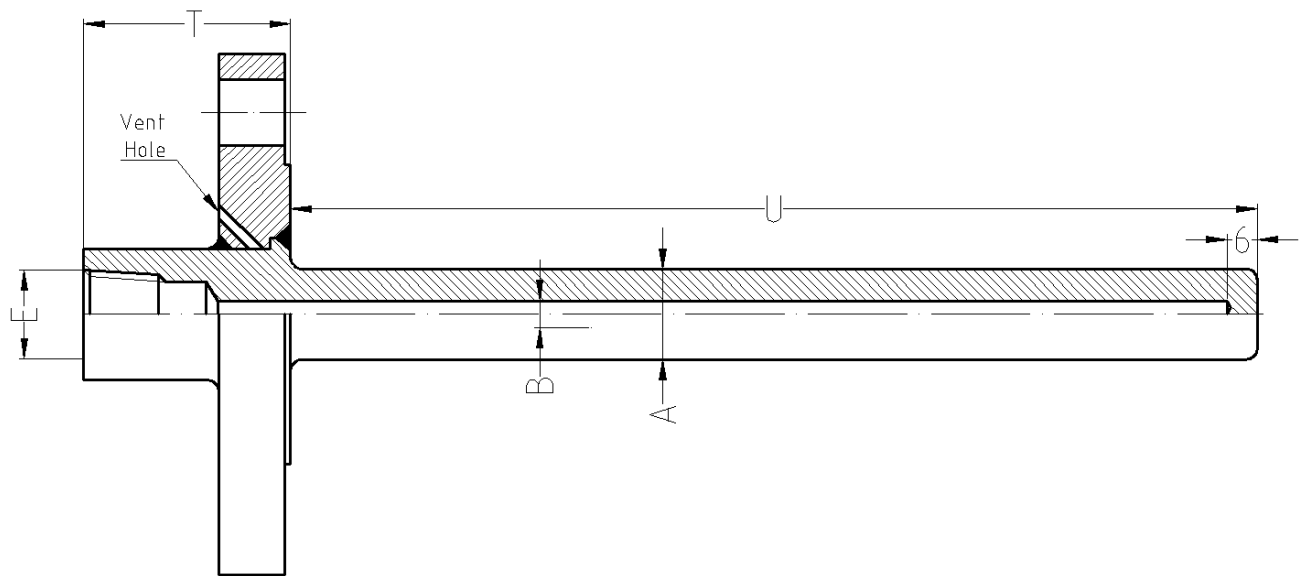
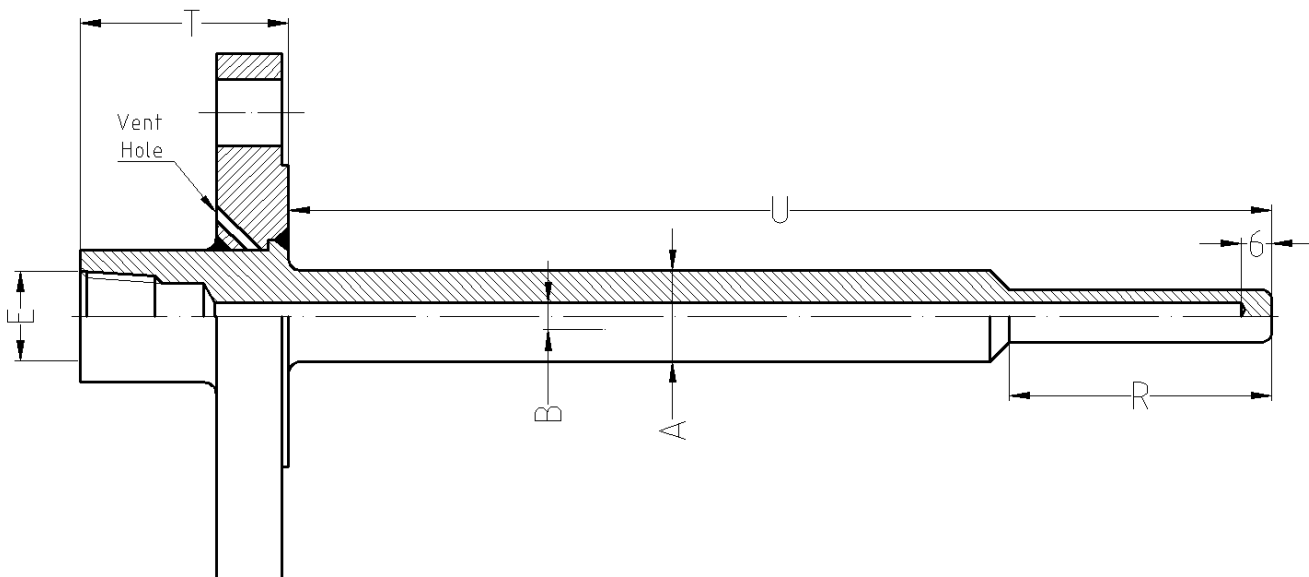


## DRILLED BAR STOCK THERMOWELL REINFORCED-BORED – FLANGED – STRAIGHT

### RBFS (Reinforced Bored Flanged Straight)



### RBFSR (Reinforced Bored Flanged Straight Reduced)



### Features

Reinforced thermowells are designed in order to increase safety for your application  
Our reinforced thermowells are machined and drilled from solid bar stock. High accuracy machines are used to ensure concentricity of the bore with respect to the outside diameter and a consistent wall thickness over the full length of the thermowell.  
Our bar stock reinforced thermowells with straight stem have been designed for various fluids and pressure applications. Metric and fractional connections are available.

### Technical specifications

- Tolerances : all dimensions +/- 1 mm except B : +/- 0.15 mm
- Standard finish  $1.6 < Ra < 3.2 \mu$
- Material : wide range of materials available as per DIN 10088 /AISI-ASTM and many others
- Reduced tip : OD 12 mm over length R in mm
- Flanges  
ANSI B16.5  
EN1092-1  
DIN2527
- Welding : ASME Section IX – Ed. 2010, Add. 11  
ISO15614-1:2004/A1:2008/A2:2012
- Seal Welded

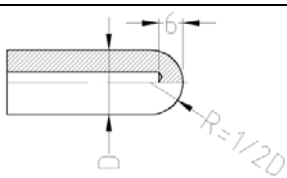
### Options

Thermowell calculation to ASME PTC 19.3-TW-2010 is recommended in critical applications

### ORDERING INFORMATION

	<b>M2101</b>	<b>M2103</b>	<b>M2108</b>	<b>M2118</b>	<b>M0601</b>	<b>M0703</b>	<b>M0803</b>
Materials	SS304L	SS321	SS316L	SS310S	Inconel 600	Incoloy 800HT	Hastelloy C22
	1.4307	1.4541	1.4404/1.4435	1.4845	2.4816	1.4959	2.4605
Process Connection	<b>A</b>	<b>E</b>	<b>D</b>				
	<b>ANSI</b>	<b>IEC</b>	<b>DIN</b>				

A: Flanges according ANSI B16.5																		
Pressure rating [lbs/inch <sup>2</sup> ]	1	150#	2	300#	3	600#	4	900#	5	1500								
Nominal size (NPS)	07	1"	09	1 1/2"	10	2"	11	2 1/2"	12	3"								
Flange facing	RF	Raised face		FF	Flat face		RTJ	Ring type joint										
Surface finish	ST :stock finish						Other finishes on request											
E: Flanges according EN 1092-1																		
Pressure rating [PN]	1	6	2	10	3	16	4	40	5	63	6	100						
Nominal size (DN)	07	25	09	40	10	50	11	65	12	80	12	100						
Flange facing	FF	Flat face		RF	Raised Face		TG	Tongue/groove		PR	Project/recess							
Surface finish	Form A			Form B1 /B2 *			Form C- Form D			Form E – Form F								
*B1 :PN6 to PN40 B2 : PN63-PN100				A/B1/E/F: Ra 3.2 to max 12.5				B2/C/D/G/H : Ra 0.8 to max 3.2										
D: Flanges according to DIN2527-Facinc acc.to DIN2526-Form F/N=DIN2512-Form V13/R13=DIN2513																		
Pressure rating [PN]	1	6	2	10	3	16	4	40	5	64	6	100						
Nominal size (DN)	07	25	09	40	10	50	11	65	12	80	13							
Flange facing	FF	Flat face		RF	Raised Face		TG	Tongue/groove		PR	Project/recess							
Surface finish acc.DIN2526	A		B		C		D		E		F		N		V13		P13	
A no finishing req		B: Rz = 160			C: Rz =160			D: Rz = 40			E : Rz = 16							

Instrument Connection	E205	E405	E206	E406			Other	
	1/2" G	1/2" NPT	3/4" G	3/4" NPT				
	T (mm)				For 1500/2500lbs flanges length T minimum			
	50 mm				70 mm			
Stem	A		AC		Domed Tip: 			
	A = 22		Customer					
	TOP SIZE	32	TOP SIZE	dep				
Bore	6.5		7					
Options	Ra		Domed tip					
	Indicate value stem		DT					

Code	Certificates
Q701MC	Material certificate En10204-3.1
Q625ND	External pressure test report (liquid)
Q610ND	Internal pressure test report (liquid)
Q665NT	PMI testing after construction by third party
Q820CC	Test report EN10204-2.2
Q120ED	Wake frequency calculation on process condition

HOW TO ORDER (example)			
Code	Description	Example	Your code
<b>Type</b>	Thermowell type	RBFS	
<b>Flange Norm</b>	ANSI	A	
<b>Material TW</b>	Thermowell material SS316L	M2108	
<b>Material Flange</b>	Flange material (if other than stem)		
<b>Process connection</b>	1 ½"-300lbs	F209	
<b>Facing and finish</b>	Flange facing and finish	RFSF	
<b>Instrument connection</b>	Connection for the instrument ½"NPT	E405	
<b>B</b>	Bore diameter 6.5 mm	B6.5	
<b>U</b>	Length under process flange (R included)	U150	
<b>R</b>	Reduced tip length in mm if required		
<b>T</b>	Length top to process	T50	
<b>AC</b>	Stem diameter 20 mm	A20	
<b>Options</b>	Domed tip	DT	
<b>Q701MC</b>	Material certificate EN10204-3.1	Q701MC	

Ordering example

RBFS A M2108 F209 RFSF E405 B6.5 U150 T50 A20 DT Q701MC

**For all options: please contact Rodax**