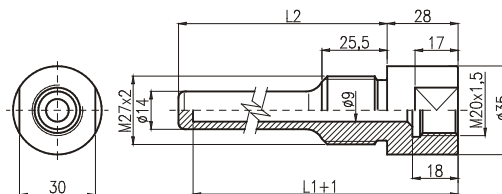


Thermowell for Screwing

- Nominal pressure PN160.
- Inner bore diameter 9 mm.



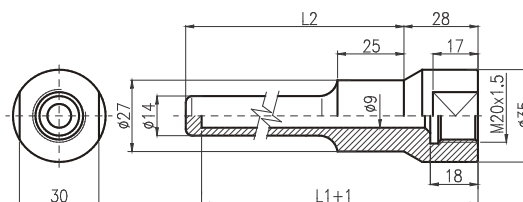
Type	Description		
• WT70 C 01	Temperature cylindrical thermowell for screwing, PN160		
Code	Inner bore diameter [mm]		
• V900	9		
Code	Inner thread		
• Z01	M20x1.5		
Code	Process connection		
• P02	M27x2		
Code	Nominal length L [mm]	Length L1 [mm]	Length L2 [mm]
• L100	100	101+1	76
• L160	160	161+1	136
• L250	250	251+1	226
• L400	400	401+1	376
• L630	630	631+1.5	606
L ...	Other (fill nominal length and other required dimensions in mm)		
Code	Thermowell material	Tmax	
• M01 ¹⁾	1.0570	400 °C	
• M03	1.4541	600 °C	
• M04	1.4571	500 °C	
M99	Other		
Code	OPTIONAL ACCESSORIES		
	Protective coating	Tmax (with spray)	
X01	Polyamide PA11	100 °C (depending on measured medium)	
X02	Ethylene-chlorotrifluorethylene E-CTFE "Halar"	170 °C (depending on measured medium)	
X03	Perfluoralkoxy - copolymer tetrafluorethylene and perfluorated vinyl ether PFA	260 °C (depending on measured medium)	
X04	Ethylentetrafluorethylene ETFE "Hyflon"	130 °C (depending on measured medium)	
X05	Polytetrafluorethylene PTFE	260 °C (depending on measured medium)	
X08	Corundum spray for extremely abrasive media	according to specific composition of coating	
X09	Other		

Example of order: WT70 C 01 V900 Z01 P02 L160 M03

- ... Ex stock version ¹⁾ ... Only for nominal length max. 250 mm.

Thermowell for Welding

- Nominal pressure PN160.
- Inner bore diameter 9 mm.



Type	Description		
• WT70 C 02	Temperature cylindrical thermowell for welding, PN160		
Code	Inner bore diameter [mm]		
• V900	9		
Code	Inner thread		
• Z01	M20x1.5		
Code	Process connection		
• P31	Diameter 27 mm		
Code	Nominal length L [mm]	Length L1 [mm]	Length L2 [mm]
• L100	100	101+1	76
• L160	160	161+1	136
• L250	250	251+1	226
• L400	400	401+1	376
• L630	630	631+1.5	606
L ...	Other (fill nominal length and other required dimensions in mm)		
Code	Thermowell material	Tmax	
• M01 ¹⁾	1.0570	400 °C	
• M03	1.4541	600 °C	
• M04	1.4571	500 °C	
M99	Other		

Example of order: WT70 C 02 V900 Z01 P31 L160 M03

- ... Ex stock version ¹⁾ ... Only for nominal length max. 250 mm.

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 Ижевск (3412)26-03-58
 Казань (843)206-01-48

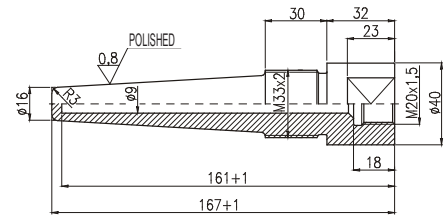
Калининград (4012)72-03-81
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 Кемерово (3842)65-04-62
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Heavy Duty Thermowell

- Nominal pressure PN400.
- Inner bore diameter 9 mm.



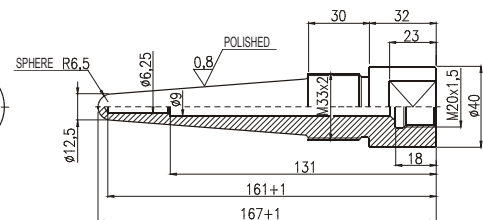
Type	Description	
• WT70 T 21	Temperature conical thermowell for screwing, PN400	
Code	Inner bore diameter [mm]	
• V900	9	
Code	Inner thread	
• Z01	M20x1.5	
Code	Process connection	
• P01	M33x2	
Code	Nominal length L [mm]	Length L1 [mm]
• L160	160	161+1
Code	Thermowell material	
• M02	1.7715	
• M03	1.4541	
• M99	Other	

Example of order: WT70 T 21 V900 Z01 P01 L160 M03

- ... Ex stock version

Heavy Duty Thermowell

- Nominal pressure PN400.
- Inner bore diameter 6.25 mm.



Type	Description	
• WT70 T 21	Temperature conical thermowell for screwing, PN400	
Code	Inner bore diameter [mm]	
• V625	6.25	
Code	Inner thread	
• Z01	M20x1.5	
Code	Process connection	
• P01	M33x2	
Code	Nominal length L [mm]	Length L1 [mm]
• L160	160	161+1
Code	Thermowell material	
• M02	1.7715	
• M03	1.4541	
• M99	Other	

Example of order: WT70 T 21 V625 Z01 P01 L160 M03

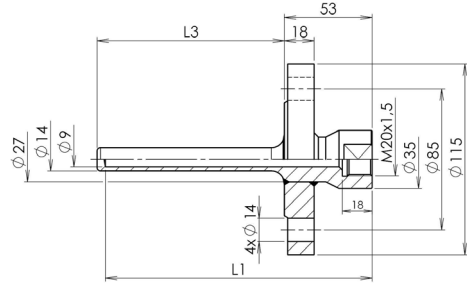
- ... Ex stock version

Thermowells from special materials

Thermowells from nickel, titanium, tantalum, Monel, etc. for corrosive conditions can be delivered.

Thermowell with Flange and Optional Protective Coating

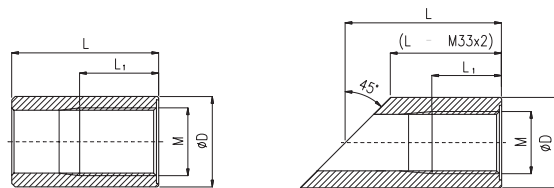
- High chemical resistance.
- Suitable mechanical properties.
- Nominal pressure PN40.
- Mounting with suitable resistance and thermocouple temperature sensors into thermowells.



Type	Description		
WT70 C 03	Temperature cylindrical thermowell with flange		
Code	Inner bore diameter [mm]		
V900	9		
Code	Inner thread		
Z01	M20x1.5		
Code	Process connection		
P54	flange DN 25/PN 40 according to EN 1092-1, form B1		
Code	Nominal length L [mm]	Length L1 [mm]	Length L2 [mm]
L100	100	101+1	50
L160	160	161+1	110
L250	250	251+1	200
L400	400	401+1	350
L630	630	631+1.5	580
L...	Other (fill nominal length and other required dimensions in mm)		
Code	Thermowell material	Tmax	
M01 ¹⁾	1.0570	400 °C	
M03	1.4541	600 °C	
M04	1.4571	500 °C	
M99	Other		
Code	OPTIONAL ACCESSORIES		
	Protective coating	Tmax (with spray)	
X01	Polyamide PA11	100 °C (depending on measured medium)	
X02	Ethylene-chlorotrifluorethylene E-CTFE "Halar"	170 °C (depending on measured medium)	
X03	Perfluoralkoxy - copolymer tetrafluorethylene and perfluorated vinyl ether PFA	260 °C (depending on measured medium)	
X04	Ethylentetrafluorethylene ETFE "Hyflon"	130 °C (depending on measured medium)	
X05	Polytetrafluorethylene PTFE	260 °C (depending on measured medium)	
X08	Corundum spray for extremely abrasive media	according to specific composition of coating	
X09	Other		
Example of order: WT70 C 03 V900 Z01 P54 L160 M03			

¹⁾ ... Only for nominal length max. 250 mm.

Welded-on Pieces for Thermowells WT70 C and WT70 T

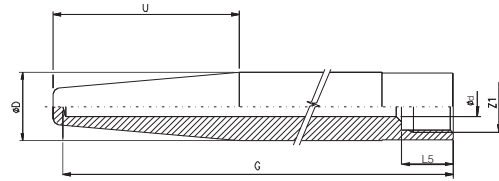


Type	Description		
• NV	Welded-on piece for thermowells WT70 C and WT70 T		
Code	Thread dimension M	Nominal pressure	L / L1 / D [mm] ¹⁾
• M20	M20x1.5	PN160	50 / 25 / 30 (28)
• M27	M27x2	PN160	65 / 30 / 40 (35)
• M30	M30x2	PN160	65 / 35 / 40 (38)
• M33	M33x2	PN250	40 / 35 / 55
99	Other (specify thread in the order)		
Code	Version		
• P	Straight		
• S	Oblique 45°		
J	Other (specify angle in the order)		
Code	Material	Tmax	
• 0	1.0308, (PN40 only)	300 °C	
• 1	1.0570	400 °C	
• 2	1.7715	575 °C	
• 4	1.4541	550 °C	
• 5	1.4903	620 °C	
9	Other		
Example of order: NV M27 P1			

• ... Ex stock version ¹⁾ ... Other length of the welded-on piece specify in brackets of ordering code, in brackets are information for material 1.0308.

Thermowell for Welding according to DIN 43772

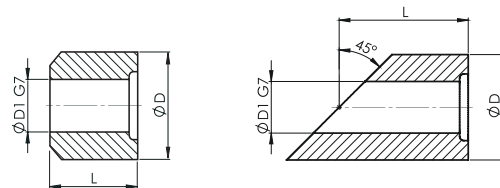
- Nominal pressure PN250.
- ES Certification of control test type acc. to Directive 97/23/ES, issued by TÜV.
- Certified as pressure accessories of energetic equipment, category III acc. to European Directive PED.



Type	Description			
• WT70 D	Temperature conical thermowell for welding according to DIN 43772			
Code	Version	Design	Process connection diameter D	Inner bore diameter [mm]
• 31	conical for welding	4	diameter 18h7	3,5 - only for code Z4
• 32	conical for welding	4	diameter 24h7	7 - only for code Z2
• 33	conical for welding	4	diameter 26h7	7
• 34	conical for welding	4	diameter 26h7	9
99	Other			
Code	Inner thread	Length L5 [mm]		
• Z01	M20x1.5	15	- not for codes 31,32	
• Z02	M18x1.5	15	- only for code 32	
• Z04	M14x1.5	13	- only for code 31	
Z99	Other			
Code	Nominal length L [mm]	Length U [mm]	Length G [mm]	Length U1 [mm]
• L200	200	65+2	195+1	130±2
L...	Other (fill nominal length and other required dimensions in mm)			
Code	Thermowell material	Tmax		
M11	1.0425, P265GH	450 °C		
• M02	1.7715	575 °C		
• M03	1.4541	600 °C		
M05	1.4903	620 °C		
M99	Other specific thermowell consult with the manufacturer			
Code	OPTIONAL ACCESSORIES			
	Protective coating			
P64	Flange DN 40/PN 160 according to EN 1092-1			
P67	Flange DN 40/PN 250 according to EN 1092-1			
P99	Other			
Example of order: WT70 D 32 V900 Z02 L200 M03				

- ... Ex stock version

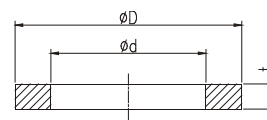
Welded-on Pieces for Thermowells WT70 D



Type	Description	
• NV	Welded-on piece for thermowells WT70 D	
Code	Inner diameter of welded-on piece	Length / outer diameter D [mm] ¹⁾
D18	18G7	40 / 39
• D24	24G7	40 / 49
• D26	26G7	40 / 49
D99	Other	
Code	Version	
• P	Straight	
S	Oblique 45°	
J	Other (specify angle in the order)	
Code	Material	
• M01	1.0570	
M11	1.0425, P265GH	
• M02	1.7715	
• M03	1.4541	
M04	1.4571	
M05	1.4903	
M99	Other	
Example of order: NV D26 P M03		

- ... Ex stock version ¹⁾ ... Other length of the welded-on piece specify in brackets of ordering code.

Seals for Temperature Sensors



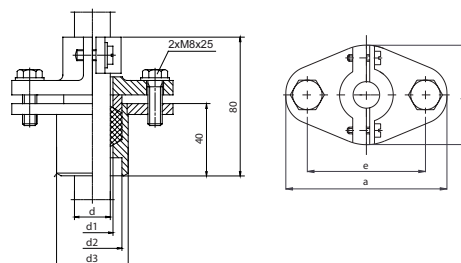
Type	Description	
• TT	Seal for temperature sensors	
Code	For thread	Dimensions (diameter D/ diameter d - t)
• 20	M20x1.5	d. 24/ d. 20 - 1.5
• 21	G1/2"	d. 25/ d. 21 - 1.5
• 27	M27x2, G3/4"	d. 32/ d. 27 - 2
• 30	M30x2	d. 36/ d. 30 - 2
• 33	M33x2, G1"	d. 39/ d. 33 - 2
99	Other	
Code	Material	Tmax
• CU	Copper (annealed)	300 °C
• AL	Aluminium	300 °C
• MP	Metalloplastic	300 °C
9	Other	

Example of order: TT 21 CU

- ... Ex stock version

Fixing Shift Flanges

- For fixing of temperature sensor by protective tube
- Sealing element: ceramic ligament.
- Maximal operating pressure 100 kPa, maximal operation temperature 400 °C.



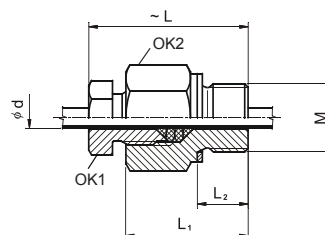
Type	Dimensions [mm]		d ₁		d ₂	d ₃	b	a	e
	Nominal	Actual	Nominal	Actual					
• UP 01	14	15	14	16	28	34	50	75	55
• UP 02	15	16	15	17	28	34	50	75	55
• UP 03	22	24	22	23	36	45	65	90	70
• UP 04	32	33	26	28	36	45	65	90	70
• UP 05	32	33	32	33	42	51	65	90	70

Example of order: UP 02

- ... Ex stock version

Fixing Shift Pipe Union

- For fixing of temperature sensor by stem or protective tube.
- Sealing element: Teflon seal.
- Maximal operating pressure 100 kPa, maximal operation temperature 400 °C.



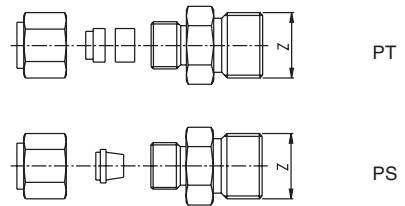
Type ¹⁾	Dimensions [mm]		Connection thread	L	L ₁	L ₂	OK1	OK2
	Nominal	Actual						
• UPS 3 M12	3	3.5	M12x1.5	36	27	10	14	19
• UPS 4.5 M12	4.5	5	M12x1.5	36	27	10	14	19
• UPS 6 M20	6	6.5	M20x1.5	47	35	15	19	27
• UPS 8 M20	8	8.5	M20x1.5	47	35	15	19	27
• UPS 11 M20	11	11.5	M20x1.5	47	35	15	22	27
• UPS 14 M27	14	14.5	M27x2	61	43	20	27	32
• UPS 15 M27	15	15.5	M27x2	61	43	20	27	32
• UPS 20 M30	20	20.5	M30x2	72	50	24	32	36
• UPS 22 M33	22	22.5	M33x2	72	50	24	36	41
Code	Material							
• 0	1.0308 (galvanized)							
9	Other							

Example of order: UPS 6 M20 0

- ... Ex stock version

¹⁾ ... It is suitable only for mounting of temperature sensors in non-flowing gas medium, free of mechanical stress including impacts and vibrations, where adjustable nominal length is required and it is impossible to use fixing pipe unions PT because of high temperature.

Fixing Shift Pipe Union for Sheath Temperature Sensors



Type	Description		
• P	Fixing shift pipe union for sheath temperature sensors		
Code	Version	Tmax	Pmax
• S ¹⁾	With stainless steel cutting ring, pipe union of stainless steel material	600 °C / 0.1 MPa	4 MPa / 100 °C
• T ²⁾	With PTFE sealing ring, pipe union of stainless steel material	200 °C / 0.1 MPa	0.6 MPa / 100 °C
Code	Connection thread Z		
• M01	M8x1	- only for sensors with diameter sheath 1 to 3 mm	
• M02	M12x1.5	- only for sensors with diameter sheath 3 to 6 mm	
• M03	M16x1.5	- only for sensors with diameter sheath 3 to 6 mm	
• M04	M20x1.5	- only for sensors with diameter sheath 3 to 6 mm	
• G01	G1/8"	- only for sensors with diameter sheath 1 to 3 mm	
• G02	G1/4"	- only for sensors with diameter sheath 3 to 6 mm	
• G03	G3/8"	- only for sensors with diameter sheath 3 to 6 mm	
• G04	G1/2"	- only for sensors with diameter sheath 3 to 6 mm	
• N01	1/8" NPT	- only for sensors with diameter sheath 1 to 3 mm	
• N02	1/4" NPT	- only for sensors with diameter sheath 3 to 6 mm	
• N03	3/8" NPT	- only for sensors with diameter sheath 3 to 6 mm	
• N04	1/2" NPT	- only for sensors with diameter sheath 3 to 6 mm	
Code	Outside diameter of stem sensor		
• D15	1.5 mm		
• D20	2 mm		
• D30	3 mm		
• D45	4.5 mm		
• D60	6 mm		

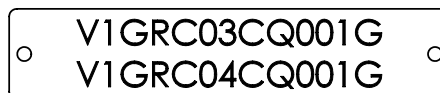
Example of order: PS M04 D30

- ... Ex stock version
- ¹⁾ ... Adjustable immersion length of temperature sensor only for first time of mounting.
- ²⁾ ... Always adjustable immersion length of temperature sensor.

BZS Stainless steel tag

Suitable for:

- KKS codes (TAG).
- Name of the measuring point.
- Cable identification numbers etc.



Type	Description		
BZS	Stainless steel tag for attachment		
Code	Dimensions [mm]	Material	Number of holes for mounting
1	70x15x1	1.4401	1 - max. 1 line of text with height 5 mm, length 58 mm
2	70x20x1	1.4401	1 - max. 2 lines of text with height 5 mm, length 58 mm
3	135x42x1	1.4301	2 - max. 4 lines of text with height 5 mm, length 115 mm
4	195x67x1	1.4301	2 - max. 7 lines of text with height 5 mm, length 160 mm
5	88x18x1	1.4401	2 - max. 2 lines of text with height 5 mm, length 76 mm
9	Other		
Code	Character height		
5	5 mm (standard)		
...	Other		

Example of order: BZS2 5

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