



## Main Features

- Conical immersion tube
- Class 1 according to EN 13190
- Immersion tube brass
- Installed length 62 mm

## Applications

- Water & Waste water
- Energy
- Machinery
- HVAC

## Technical Data

Nominal size	80, 100, 160 mm	Window	Instrument glass
Temperature range	-20 ... 250°C	Dial	Aluminium, white
Accuracy	Class 1 (according to EN 13190)	Pointer	Aluminium, black
Protection rating	TBX: IP 50 (EN 60529) TBW: IP 65 (EN 60529)	Minimum immersion length	$L_E \geq 36$ mm
Immersion tube	Brass		
Case	Stainless steel 1.4301 (AISI 304)		
Bezel ring	Stainless steel 1.4301 (AISI 304)		

## Options

Dampening grease	Code 0581
Acrylic window (PMMA or Plexiglass) <sup>(1)</sup> <sup>(2)</sup>	Code 0752
Silicon free, label marking	Code 0793
Silicon free, marking on dial	Code 0794
Red mark	Code 9700
Green mark	Code 9701
According to customer data	Code 9709
Customer logo on dial	Code 9710
Specific technical data on dial	Code 9711

## To be ordered separately

Calibration certificate (3 points)	90001188
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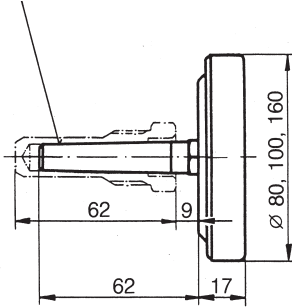
<sup>(1)</sup> The case must not be constantly heated over 75°C.

<sup>(2)</sup> Only NS 80 and NS 100.

## Dimensions (mm)

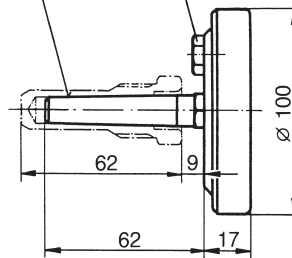
**TBX (center back)**

Morse cone 1  
(see VSM 33 713)



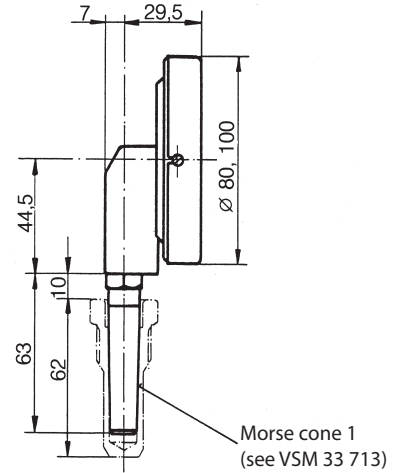
**TBW (center back)**

Morse cone 1  
(see VSM 33 713) Correcting device



Only TBW 100/212.111

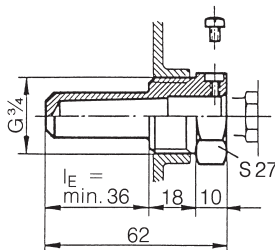
**TBX (bottom)**



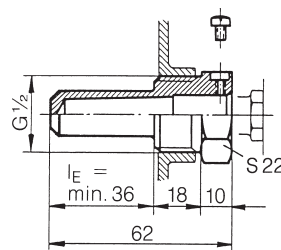
NS	Weight (kg)	
	Bottom	Center back
80	0.250	0.160
100	0.300	0.200
160	-	0.430

## Thermowells

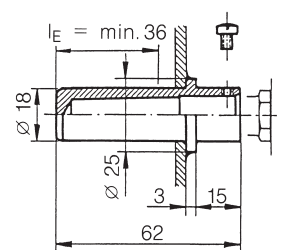
**G 3/4**



**G 1/2**



**Welding**



### Ordering codes for Thermowells

Connection	Material	Ordering code	Weight (kg)
G 3/4	Brass	T 06696.0001	0.110
G 3/4	Stainless steel 1.4435 (AISI 316L)	T 06696.0005	0.110
G 1/2	Brass	T 06697.0001	0.080
G 1/2	Stainless steel 1.4435 (AISI 316L)	T 06697.0005	0.080
welded	Steel, black finish	T 06698.0001	0.080
welded	Stainless steel 1.4435 (AISI 316L)	T 06698.0002	0.080

### Technical Data

Max. Temp. °C	Max. Pressure (bar)		
	Brass	Steel	St. Steel
100	64	125	250
250	25	80	160

## Temperature ranges

Code	Range °C
52T	-20 ... 40
11T	0 ... 60
20T	0 ... 120
13T	0 ... 160
14T	0 ... 250

## Ordering details TBX - TBW

	TBX			-	2			.	1		.	xxx	/
<b>Model</b>													
Bimetal Thermometer, conical (IP 50)	TBX												
Bimetal Thermometer, conical (IP 65) <sup>(1)</sup>	TBW												
<b>Nominal size</b>													
80 mm <sup>(2)</sup>		0	8	0									
100 mm		1	0	0									
160 mm <sup>(2)</sup>		1	6	0									
<b>Case</b>													
Stainless steel 1.4301 (AISI 304)					2								
<b>Connection</b>													
Without connection (direct mounting)						1							
<b>Immersion tube outlet</b>													
Bottom (only for NS 80 and NS 100)								1					
Center back									2				
<b>Indication</b>													
EN 13190 (Standard)										1			
<b>Immersion tube / shape / material</b>													
Morse cone 1, L = 62 mm, Cu-Leg.											1	1	
<b>Unit of measurement / Temperature ranges <sup>(3)</sup></b>													xxT
°C													

Options to be added behind the / (see example below)

<sup>(1)</sup> The watertight design TBW can be supplied only with case NS 100 and the immersion tube outlet at the rear and exterior indicator correction.  
<sup>(2)</sup> Only TBX.  
<sup>(3)</sup> Available standard temperature ranges, see table on page 2. For ranges not listed, please contact Baumer.

## Ordering example with options

	TBX	100	-	2	1	2	.	1	11	.	20T	/	9710	_	9700	_	0793
Bimetal thermometer, conical (IP 50)	←																
Nominal size 100 mm	←																
Case material stainless steel 1.4301 (AISI 304)	←																
Without connection (direct mounting)	←																
Immersion tube outlet: Center back	←																
Indication EN 13190 (standard)	←																
Immersion tube Morse cone 1, L = 62 mm, Cu-Leg.	←																
Temperature range: 0 ... 120°C	←																
Option: Customer logo on dial	←																
Option: Red mark	←																
Option: Silicon free, label marking	←																