

#### **Bimetal Thermometer Model TS**

#### **FEATURES**

- Robust, fully welded stainless steel construction
- Protection upto IP65
- Dry or liquid filled
- Silicone coil dampening provides vibration dampening and improves response time

#### **TYPICAL USES**

- Water Treatment Industry
- HVAC Industry
- Maritime Industry
- Automotive Industry
- Manufacturing Industry
- Plastics and Rubber Industry
- Mechanical Engineering Industry
- Textile Industry
- Coatings Industry
- Power generation



#### **TECHNCAL SPECIFICATIONS**

Dial Size: Ø in

mm 52, 65, 80, 100 lnch 2", 2 1/2", 3",4"

Connection Location: Lower or Back
Stem Diameter 6 mm, 8 mm and 9 mm

Stem Length: 60 ... 1000 mm

#### **MECHANICAL SPECIFICATION**

Process Connection: G 1/2 A Male

1/2 NPT Male

others please see in the coding table

Accuracy For range  $\leq +400^{\circ}\text{C} \pm 1\%$ 

For range > +400°C  $\pm 2\%$ 

Max. Overtemperature limit

For Range ≤400°C 20% of Span

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For Range > 400°C Peak Overload 600°C Continus Overload 520°C

#### **KEY BENEFITS:**

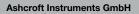
- High reliability and durability
- Perfectly designed for our HVAC thermowells

#### **MATERIALS Process Connection** Stainless steel 303 (1.4305) Stainless steel 316L (1.4404) or 304L (1.4306) Stem: For Dial Size 52 mm and 65 mm: Case/Ring: Head in rolled Stainless steel 303 (1.4305) For Dial Size 80 mm, 100 mm: Head in galvanized Steel, bezel in neutral colored anodized aluminium Window: Mineral glass, Acrylic glass Dial: Aluminum, black marked Pointer: Aluminum, black BUNA-N (NBR) Gaskets/Sealing:



# **Bimetal Thermometer Model TS**

ORDER	RING CODE	EXAMPLE:	TS	Н	=	052	Α	L	B0704	X
Model										
TS	Bimetal Thermometer									
Connection										
Н	Co-axial back [inadmissible for process connection A sn									
V	Vertical Lower [inadmissible for mounting F; inadmissible	e for process connection I_ and L_]								
Connection	ı size:									
052	dial size 52 mm									
065	dial size 65 mm									
080	dial size 80 mm									
100	dial size 100 mm									
Mounting										
Α	with unthreaded shoulder [inadmissible for p									
F	with back mounting flange [inadmissible for					and NX]				
S	with fixed threaded connection [inadmis	sible for process connection} A_, I_, L_ and N_; inadm	issible for co	nnection style AU	and AX]					
Filling										
-	Without filling									
L	Field with Silicone [inadmissible for process connect	on} A_, I_, L_ and N_; inadmissible for connection style	and AX							
Process co	nnection									
Α	Ø 15 Aluminium [inadmissible for connection style NX]									
I	Ø 15, AISI 303 / 1.4305 [inadmissible for conne	ction style NX]								
L	Ø 15, galvanized brass									
I	Ø 15, AISI [inadmissible for stem diameter and material 8I, 8	X and 9X; inadmissible for connection style NX]								
N	Ø 15, Nickel-plated Aluminium [inadmis									
G2	G ¼, AISI 303 / 1.4305 [inadmissible for connections]									
G4	$G \frac{1}{2}$ , AISI 303 / 1.4305 [inadmissible for connection of the connection of th									
G6	G 3/4, AISI 303 /1.4305 [inadmissible for connections]	tion style AU, AX and NX]								
N2	1/4 NPT, AISI 303 / 1.4305 [inadmissible for co									
N4	1/2 NPT, AISI 303 /1.4305 [total stem length L	{IL} = min. 70 mm; inadmissible for connection style Al	J, AX and NX	]						
Temperatui	re Range									
B0704	-70 +40°C									
B0404	-40 +40°C									
B0307	-30 +70°C									
B0312	-30 +120°C [inadmissible for measuring system C]									
B0317	-30 +170°C [inadmissible for measuring system C]									
B0204	-20 +40°C									
C0004	0 +40°C									
C0006	0 +60°C									
C0012	0 +120°C									
C0016	0 +160°C [inadmissible for measuring system C]									
C0020	0 +200°C [inadmissible for measuring system C]									
C0025	$0 \ \ +250^{\circ} C$ [inadmissible for measuring system C]									
C0032	$0\\ +320^{\circ}C$ [inadmissible for measuring system C; inadm									
C0040	$0\\ +400^{\circ}C$ [inadmissible for measuring system C; inadm	issible for open measuring system 2]								
C0050	$0 \ \dots \ +500^{\circ} C$ [total stem length L = min. 100 mm; inadmissi	ble for measuring system C; inadmissible for open mea	asuring syste	m 2]						
C0060	0 +600°C process wetted part m	ax. 550°C								



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 $\underline{ashcroft.eu} \hspace{0.1cm} \rule{0.1cm}{3.2cm} \hspace{0.1cm} \underline{sales@ashcroft.com}$ 



# **Bimetal Thermometer Model TS**

ORDE	RING CODE	EXAMPLE:	S	61	60	AA	-	G4	60	XNH
Mesuring s	systems									
S	Standard									
С	Short									
-										
Stem diam	eter & Material:									
6I	Ø 6 mm, AISI 304L / 1.4306 [total stem len	igth L= max. 650 mm; length L1 below adapter= max. 62	0 mm]							
6X	Ø 6 mm, AISI 316L / 1.4404 [total stem len	gth L= max. 650 mm; length L1 below adapter= max. 62	0 mm]							
81	Ø 8 mm, AISI 304L / 1.4306									
8X	Ø 8 mm, AISI 316L / 1.4404									
9X	Ø 9 mm, AISI 316L / 1.4404									
Total stem	length L in mm:									
XXX	60 1000 mm stem length in 1 mn	n steps								
Windows										
AA	Acrylic with index pointer									
AM	Mineral with index pointer									
VA	Acrylic glass									
VM	Mineral glass									
Filling										
-	Without adapter [inadmissible for adapter connection									
AU	AMU swiveling and sliding cap con									
AX	AMX swiveling and sliding threaded									
NX	AMX swiveling and sliding threaded	Connection [inadmissible for adapter conne	ection size	M5,M6,M8,M9,I	N6,NX; inadmis	sible for length L	.1 below]			
•	onnection size									
G4	G ½, AISI 303 / 1.4305									
G6	G ¾, AISI 303 /1.4305									
M8	M24x1,5, AISI 303									
M9	M27x2, AISI 303									
N4	1/2 NPT, AISI 303 /1.4305 [length L1 below ac									
N6	34 NPT, AISI 303 [length L1 below adapter = min. 70 m									
NX	1/2 NPT, AISI 316L [length L1 below adapter = min. 76	0 mm]								
_	below adapter size									
	mm stem length in 1 mm steps									
Uption mea	asuring system									
-	Without Silicone grease for vibrations C2									
2										

### Ashcroft Instruments GmbH

Without

3 points

3



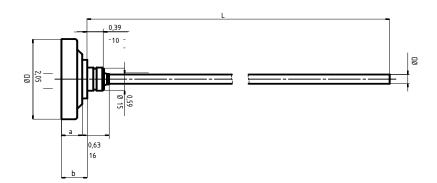
## **Bimetal Thermometer Model TS**

#### **DIMENSIONS IN MM**

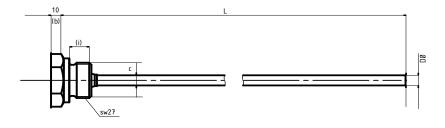
For reference only, ask us for specific dimensional drawings

## **HVAC BIMETAL TS**

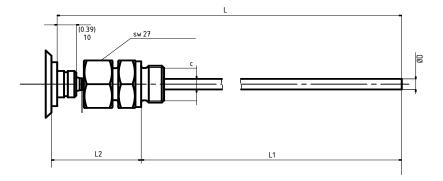
For mounti	ng with unthrea	aded shoulder	(A) and with fix	ked threaded c	onnection (S)
ØD	52	65	77	100	
a	9	10	12	12	
b	12	13	14	14	
С	G1/4	G3/8	G1/2	G3/4	1/4 NPT
i	10	10	12	12	17
sw	17	22	27	32	17



TS=H=A
With unthreaded Shoulder



TS=H=S
With fixed threaded connection



TS=H with swivelling & sliding threaded connection





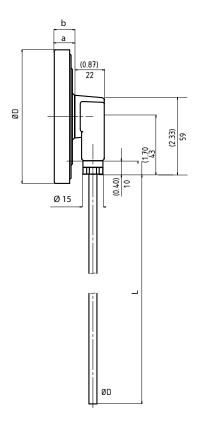
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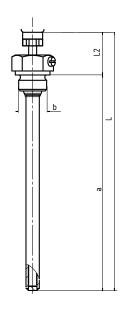
## **DIMENSIONS IN MM**

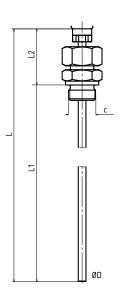
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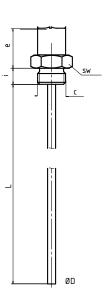
For mou	ınting with unth	readed should	er (A) and with t	fixed threaded o	onnections
ØD	52	65	77	100	
a	9	10	12	12	
b	12	13	14	14	
е	15	15	15	29	
С	G1/4	G3/8	G1/2	G3/4	1/4 NPT
i	10	10	12	12	17
sw	17	22	27	32	17

TS=V	TS=V=A	TS=V	TS=V
with unthreaded shoulder	with thermowell	with thermowell	with swivelling sliding Threaded connection







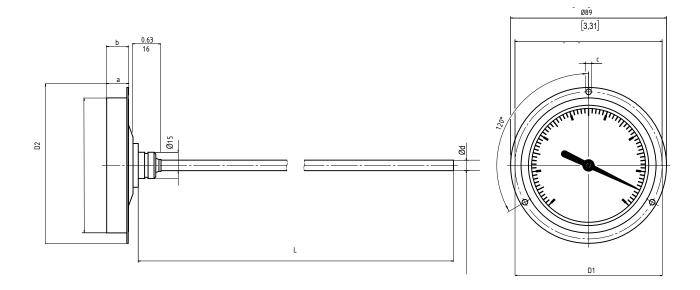




# **Bimetal Thermometer Model TS**

For mouting with back mouting flange						
ØD	65	77	100			
D1	74	84	111			
D2	80	89	120			
а	11	12	13			
b	14	15	15			
ØC	3.2	3.2	4.3			

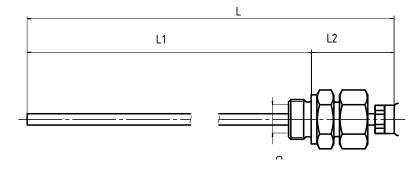
# TS=H=F with mouting flange





## **Bimetal Thermometer Model TS**

Thermometer vertical	Fitting and connections supplid as accessories Minimum Length L2 in mm					
Тур	+DAE	+AMX	+AMU			
TS=V=052=A	15	37	30			
TS=V=065=A	15	37	30			
TS=V080=A	25	37	30			
TS=V100=A	32	44	37			



The fixing system descripted on sheet TA1 and supplied as accessories

(e.g the connection AMX) require that in all cases the length L1, and also the lengths L2 and L. For vertical (bottom-connected) thermometers with unthreaded shoulder TSVA+.. The length L1 is in fact the useful length for temperature measurement.

For vertical thermometers TSV A+ according to the head diameter and to the fixing system. The length L2 corresponds in each case to a minimum length which allows the connection to be screwed up without the spanner fouling the head. See table opposite for dimensions to this effect.

When length L2 exceeds 100 mm, we recommend 8 or 9 mm diameter stems (wall thickness 1.4 mm or 1.9 mm respectively) to eliminate any risks of occidental bending.

