

# All stainless steel gas filled thermometer

## Model S5500

Nominal size 100 mm or 160 mm  
 With or without capillary/contacts  
 Accuracy: Class 1 (DIN) dry  
 Class 2 (DIN) liquid filled

### Features

- Rugged stainless steel construction
- Fast response
- Protection IP65
- High repeatability and small hysteresis
- Dry or liquid filled
- Rigid stem or bulb with capillary

### Ranges

-200°C ... 50°C up to 0°C ... 800°C  
 -330°F ... 120°F up to 50°F ... 1450°F

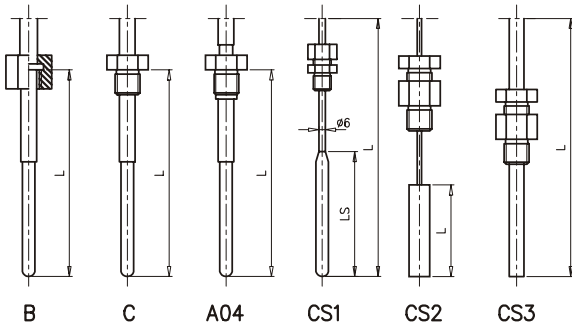
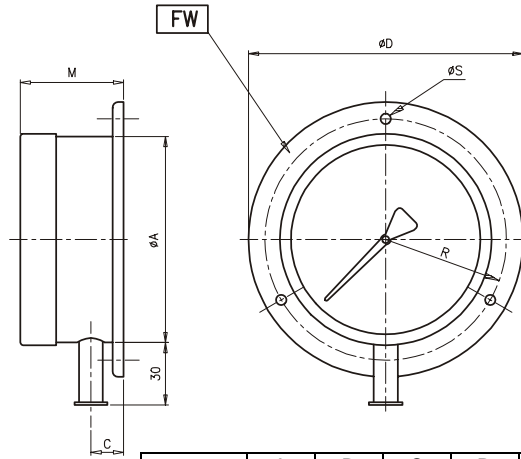
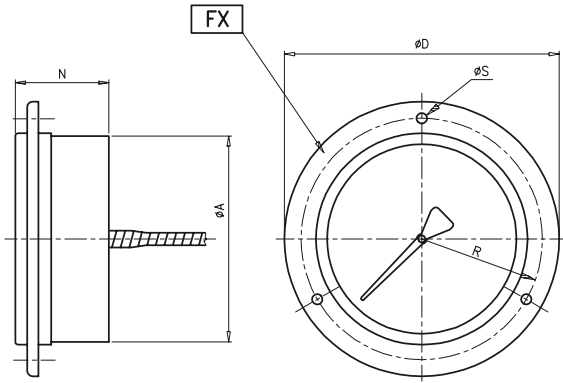
### Applications

Chemical and petrochemical industry  
 Machine and apparatus construction  
 Food and beverage industry  
 Pulp and paper industry



Technical specification	Rigid stem		With capillary	
	100	160	100	160
Dial size [mm]	100		160	
Construction	Cylindrical case with bayonet ring			
Measuring principle	Inert gas actuated			
Range [°C]	0/60 0/80 0/100 0/120 0/160 0/200 0/250 0/300 0/400 0/500 0/700 0/800 -10/50 -10/110 -20/40 -20/100 -20/120 -20/180 -30/50 -30/70 -30/170 -40/40 -40/60 -40/160 -50/50 -60/40 -80/40 -100/50 -120/40 -200/50 Ranges in °F and dual scales on request			
Overtemperature limit	max. 130% F.S. but max. 800°C, optional 210% F.S. but max. 800°C			
Stem or bulb diameter	6 mm, 8 mm, 9 mm, 10 mm, others on request			
Lengths	55 ... 4000 mm, other length on request, min. length depends on bulb and range			
Capillary length	N.A.		max. 100 m	
Process connection	Plain G ½ B male, ½ NPT male G 3/8 B male, 3/8 NPT male G ¼ B male, ¼ NPT male, others on request fixed, adjustable or with swivel nut			
Connection location	Back, lower, knee joint bendable (180°), knee joint bendable (360°)			
Material	Stainless steel 316 (1.4401) Connection Stem Case/ring Capillary Armor Window Dial Pointer Movement Stainless steel 321 (1.4541) Stainless steel 304 (1.4301), optional 316 (1.4401) Stainless steel 321 (1.4541) Flexible, stainless steel 304 (1.4301), optional PVC covered			
Accuracy	Class 1 (dry) , Class 2 (liquid filled) according to DIN 16203			
Zero adjustment	± 6% externally			
Protection according EN 60 529/IEC 529	IP65			
Filling liquids	Glycerin, silicone			
Weight dry/filled [kg]	0,8/1,0 (stem length 100 mm)	1,2/3,0 (stem length 100 mm)	1,0/1,2 (stem length 100 mm, capillary length 1,5 m)	1,4/3,2 (stem length 100 mm, capillary length 1,5 m)
Accessories, options	Thermowells, dual scales, magnet spring- or inductive contacts, calibration certification			

## General dimensions [mm]



	A	B	C	D	M	R	∅ S
NG 100	99	13	132	50	45	58	5
NG 160	159	13	196	50	45	89	6

### minimum bulb length

bulb diameter	6 mm	8 mm	9 mm	10 mm
direct mount or capillary up to 5 m	190 mm	90 mm	68 mm	55 mm
capillary over 5 m	on request	170 mm	130 mm	100 mm

Rev.C

## Order information

Size	Bulb diameter	Length of bulb/stem	Length of capillary	Process connection	Connection size	Connection orientation	Range	Engineering units	Options
(100) 100 mm	(6) 6 mm	55 to 4000 mm	length in [mm] max. 100 m	(CS1) Adjustable union connection sliding on tube <sup>1)</sup>  (CS2) Adjustable union connection sliding on capillary  (CS3) Adjustable union connection sliding on stem  (B) Turning nut (C) Single nipple (A04) Turning nipple	(50) G ½ B  (75) G ¾ B  (10) G 1 B  (50N) ½ NPT  (75N) ¾ NPT  (10N) 1 NPT	(L) Lower  (R) Back  (E1) Knee joint bendable (180°)  (E2) Knee joint bendable (360°)	0/ 60 0/ 80 0/ 100 0/ 120 0/ 160 0/ 200 0/ 250 0/ 300 0/ 400 0/ 500 0/ 700 0/ 800  -10/ 50 -10/ 110 -20/ 40 -20/ 100 -20/ 120 -20/ 180 -30/ 50 -30/ 70 -30/ 170 -40/ 40 -40/ 60 -40/ 160 -50/ 50 -60/ 40 -80/ 40 -100/ 50 -120/ 40 -200/ 50	°C	(NH) Tagging wired  (DA) Dial marking  (CS) Dual scale  (PD) Acrylic glass  (SG) Safety glass  (MP) Micro pointer  (A4) Capillary stainless steel armored  (A5) Capillary stainless steel armored with PVC covering  (FX) Front flange  (FW) Back flange  (FH) Surface mounting bracket L = 100 mm  (UC) U-clamp  (EP) Maximum pointer
(160) 160 mm	(8) 8 mm								
	(9) 9 mm								
	(10) 10 mm								
Others on request				<sup>1)</sup> Length of bulb (LS) must be specified.				*F and dual scale on request	
				Others on request					

## How to order

Size	Type	Bulb diameter	Length of bulb/stem	Length of capillary	Process connection	Connection size	Connection orientation	Range	Engineering unit	Option
100	S5500	8	100	1500	CS2	50N	L	0/100	C	FW