

All stainless steel gas actuated thermometer

Model S5500

According EN 13190

Nominal size 100 mm or 160 mm

With or without capillary/contacts

Accuracy: Class 1 (EN) dry

Class 2 (EN) 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 ... 50 °C up to 0 ... 800 °C

-330 ... 120 °F up to 50 ... 1450 °F

Applications

Chemical and petrochemical industry

Machine and apparatus construction

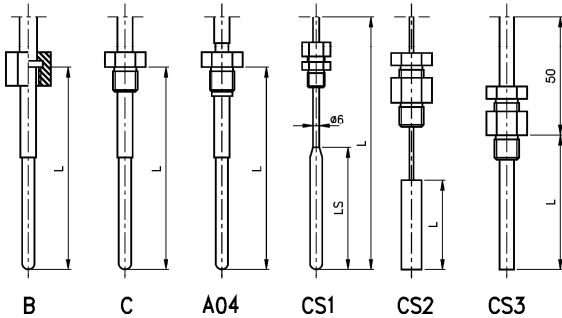
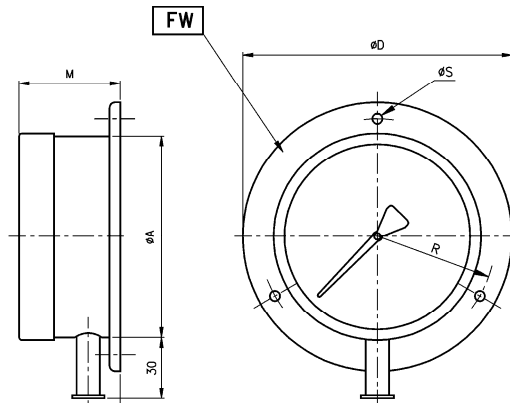
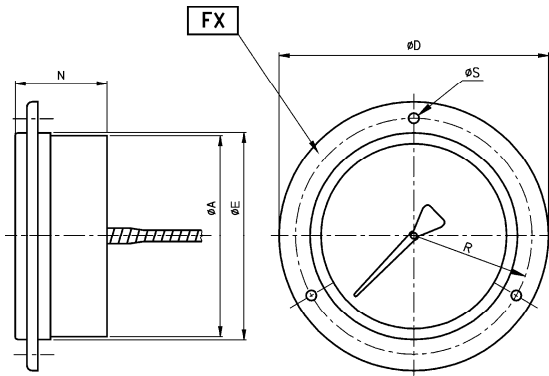
Food and beverage industry

Pulp and paper industry



Technical specification	Rigid stem		With capillary																																					
	100	160	100	160																																				
Dial size [mm]																																								
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, G ¾ B male, G 1B male according ISO 228-1, ½ NPT male, ¾ NPT male, 1 NPT male according ANSI/ASME B1.20.1, M20x1,5 male, M24x1,5 male, M27x2 male according ISO 68-1, Others on request Fixed, adjustable union or with swivel nut																																							
Connection location	Back, lower, knee joint bendable (180°), knee joint bendable (360°)																																							
Material	<table border="0"> <tr> <td>Connection</td> <td colspan="3">Stainless steel 304 (1.4301)</td> </tr> <tr> <td>Stem</td> <td colspan="3">Stainless steel 321 (1.4541)</td> </tr> <tr> <td>Case/ring</td> <td colspan="3">Stainless steel 304 (1.4301), optional 316 (1.4401)</td> </tr> <tr> <td>Capillary</td> <td colspan="3">Stainless steel 321 (1.4541)</td> </tr> <tr> <td>Armor</td> <td colspan="3">Flexible, 304 (1.4301), or 316 (1.4401) optional PVC covered</td> </tr> <tr> <td>Window</td> <td colspan="3">Instrument glass, optional laminated safety glass or acrylic glass</td> </tr> <tr> <td>Dial</td> <td colspan="3">Aluminum, black markings on white background</td> </tr> <tr> <td>Pointer</td> <td colspan="3">Aluminum, black, optional micrometer pointer or maximum pointer</td> </tr> <tr> <td>Movement</td> <td colspan="3">Stainless steel 304/303 (1.4301/1.4305)</td> </tr> </table>				Connection	Stainless steel 304 (1.4301)			Stem	Stainless steel 321 (1.4541)			Case/ring	Stainless steel 304 (1.4301), optional 316 (1.4401)			Capillary	Stainless steel 321 (1.4541)			Armor	Flexible, 304 (1.4301), or 316 (1.4401) optional PVC covered			Window	Instrument glass, optional laminated safety glass or acrylic glass			Dial	Aluminum, black markings on white background			Pointer	Aluminum, black, optional micrometer pointer or maximum pointer			Movement	Stainless steel 304/303 (1.4301/1.4305)		
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Movement	Stainless steel 304/303 (1.4301/1.4305)																																							
Accuracy	Class 1 (dry) , Class 2 (liquid filled) according to EN 13190																																							
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 1,5 m)	1,4/3,2 (stem length 100 mm, capillary 1,5 m)																																				
Accessories, options	Thermowells, dual scales, magnet spring- or inductive contacts, built in microswitch 1 or 2 SPDT, calibration certification																																							

General dimensions [mm]



	A	C	D	E	M	N	R	S
NG 100	99	13	132	103	50	45	58	5
NG 160	159	13	196	164	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. E

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 ¹⁾	(50) G ½ B	(L) Lower	0/ 60	°C	(NH) Tagging wired	
	(75) G ¾ B				(R) Back	0/ 80 0/ 100	(DA) Dial marking			
(160) 160 mm	(8) 8 mm			(CS2) Adjustable union connection sliding on capillary	(10) G 1 B	(E1) Knee joint bendable (180°)	0/ 120 0/ 160 0/ 200 0/ 250 0/ 300 0/ 400		(CS) Dual scale	
	(9) 9 mm				(50N) ½ NPT	(E2) Knee joint bendable (360°)	0/ 500 0/ 700 0/ 800		(PD) Acrylic glass	
	(10) 10 mm				(75N) ¾ NPT		(10N) 1 NPT			(A4) Capillary stainless steel armored
					(10N) 1 NPT		(M20)M20x1,5			(A5) Capillary stainless steel armored with PVC covering
				(B) Turning nut	(M24)M24x1,5			(FX) Front flange		
				(C) Single nipple	(M27)M27x2				(FW) Back flange	
				(A04) Turning nipple					(FH) Surface mounting bracket L = 100 mm	
									(UC) U-clamp	
									(EP) Maximum pointer	
	others on request			¹⁾ length of bulb (LS) must be specified. others on request	others on request			°F and dual scale 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

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