

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 dry
Class 2 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

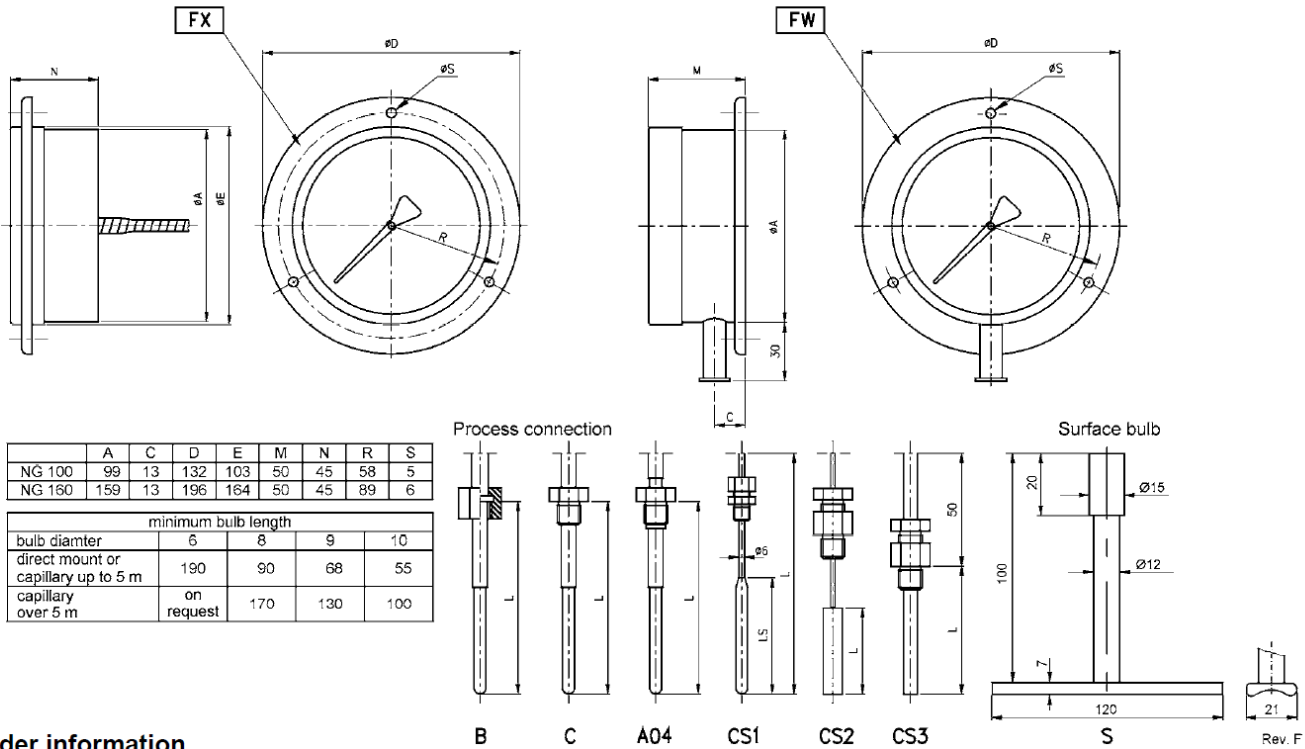
Applications

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 in mm			100	160																																				
Construction	Cylindrical case with bayonet ring																																							
Measuring principle	Inert gas actuated																																							
Range in °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																																							
Overtemperature limit	Ranges in °F and dual scales on request 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 1 B 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 in 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 in mm



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 ¹⁾	(B) Turning nut	(50) G ½ B	(L) Lower	0/ 60	°C	(NH) Tagging wired
(160) >160 mm	(7) 7 mm			(C) Single nipple	(75) G ¾ B	(R) Back	0/ 80		(DA) Dial marking
	(8) 8 mm			(A04) Turning nipple	(10) G 1 B	(E1) Knee joint bendable (180°)	0/ 100		(CS) Dual scale
	(9) 9 mm			(CS1) Adjustable union connection sliding on tube ¹⁾	(50N) ½ NPT		0/ 120		(PD) Acrylic glass
	(10) 10 mm			(CS2) Adjustable union connection sliding on capillary	(75N) ¾ NPT		0/ 160		(SG) Safety glass
				(CS3) Adjustable union connection sliding on stem	(10N) 1 NPT	(E2) Knee joint bendable (360°)	0/ 200	(MP) Micro pointer	
					(M20) M20x1,5		0/ 250	(A4) Capillary st. st. armored	
					(M24) M24x1,5		0/ 300	(A5) Capillary st. st. armored with PVC covering	
				(S) Surface bulb ²⁾	(M27) M27x2		0/ 400	(FX) Front flange	
							0/ 500	(FW) Back flange	
							0/ 700	(FH) Surface mounting bracket L = 100 mm	
							0/ 800	(UC) U-clamp	
							-10/ 50	(EP) Maximum pointer	
							-10/ 110	(TM) 2" pipe mounting bracket	
							-20/ 40	(Q3) 1 microswitch	
							-20/ 100	(Q33) 2 microswitches	
							-20/ 120	other options on request	
							-20/ 180	for contacts see data sheet K55	
							-30/ 50		
							-30/ 70		
							-30/ 170		
							-40/ 40		
							-40/ 60		
							-40/ 160		
							-50/ 50		
							-60/ 40		
							-80/ 40		
							-100/ 50		
							-120/ 40		
							-200/ 50		

1) for fixed bulb „0“
max. length: 100 m

1) length of bulb (LS) must be specified.
2) only for bulb diameter (7)

others on request

Order example

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