

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

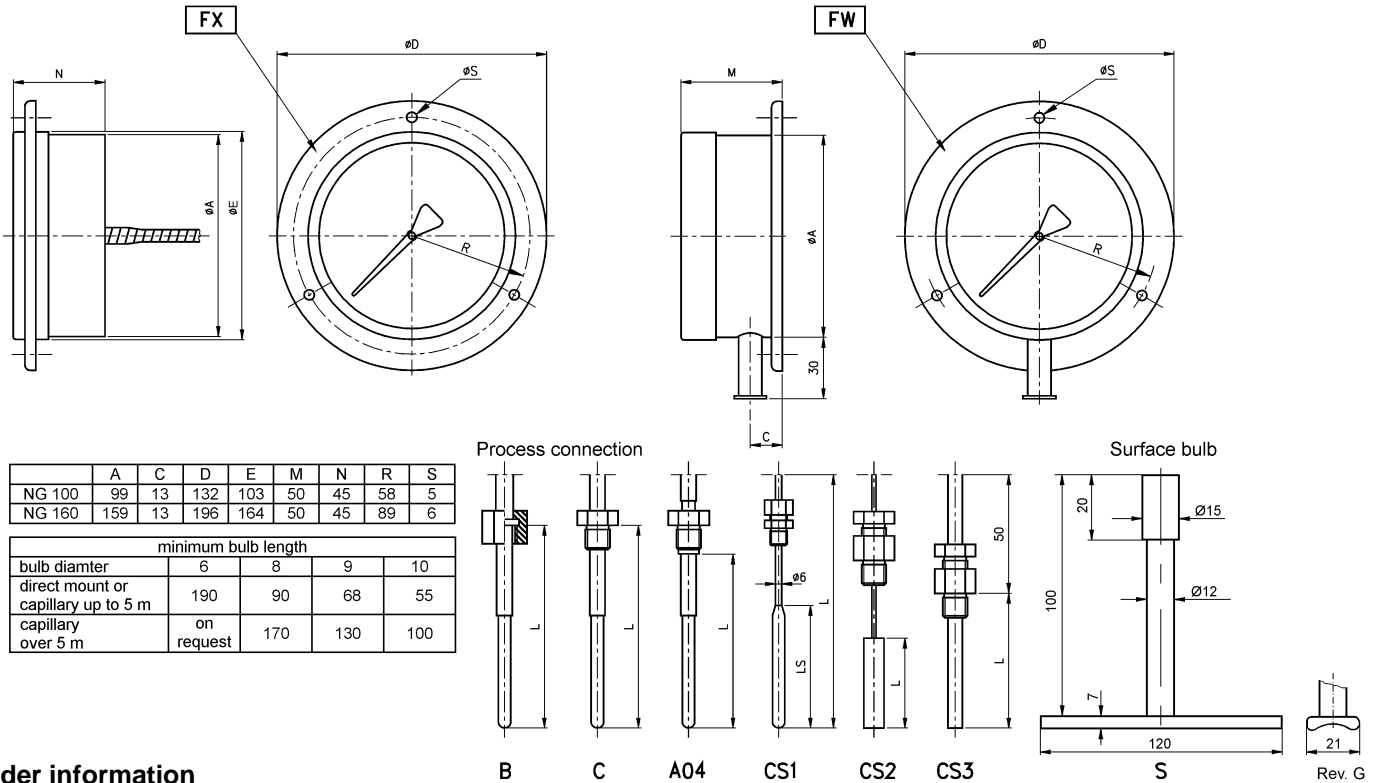
Applications

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																																	
Construction	Cylindrical case with bayonet ring (blow out at back is standard with ATEX)																																
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 ... 1000 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 (360°)																																
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Accuracy	Class 1 (dry) , Class 2 (liquid filled) according to EN 13190																																
Zero adjustment	±6 % externally																																
Conformity according to RL 94/9/EC appendix X for mechanical equipment in potential hazardous areas	Optional for thermometer without electrical contacts, Marking CE Ⓜ II 2 G c or II 2 D c File No. 35087702 at notified body 0044, TÜV NORD CERT																																
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. Thermowells must be used on all pressure or velocity applications, to protect the stem of thermometer from corrosion and physical damage, and to facilitate removal of the thermometer without disturbing the process.																																

General dimensions in 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	8	9	10
direct mount or capillary up to 5 m	190	90	68	55
capillary over 5 m	on request	170	130	100

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 1000 mm	length in mm ¹⁾	(B) Turning nut	(50) G ½ B	(L) Lower	0/ 60 0/ 80	°C	(NH) Tagging wired
(160) >160 mm	(7) 7 mm			(C) Single nipple	(75) G ¾ B	(R) Back	0/ 100 0/ 120		(DA) Dial marking
	(8) 8 mm			(A04) Turning nipple	(10) G 1 B	(E2) Knee joint bendable (360°)	0/ 160 0/ 200		(CS) Dual scale
	(9) 9 mm			(CS1) Adjustable union connection sliding on tube ¹⁾	(50N) ½ NPT (75N) ¾ NPT		0/ 250 0/ 300 0/ 400 0/ 500		(PD) Acrylic glass
	(10) 10 mm			(CS2) Adjustable union connection sliding on capillary	(10N) 1 NPT (M20) M20x1,5		0/ 700 0/ 800		(SG) Safety glass
				(CS3) Adjustable union connection sliding on stem	(M24) M24x1,5 (M27) M27x2		-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	(MP) Micro pointer	
				(S) Surface bulb ²⁾				(A4) Capillary st. st. armored	
									(A5) Capillary st. st. armored with PVC covering
									(FX) Front flange
									(FW) Back flange
									(FH) Surface mounting bracket L = 100 mm
									(UC) U-clamp
									(EP) Maximum pointer
									(TM) 2" pipe mounting bracket
									(ATEX) ATEX approval
									other options on request for contacts see data sheet K55
	others on request	others on request	max. length: 100 m	¹⁾ length of bulb (LS) must be specified. ²⁾ only for bulb diameter (7) others on request	others on request			°F and dual scale 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

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