

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

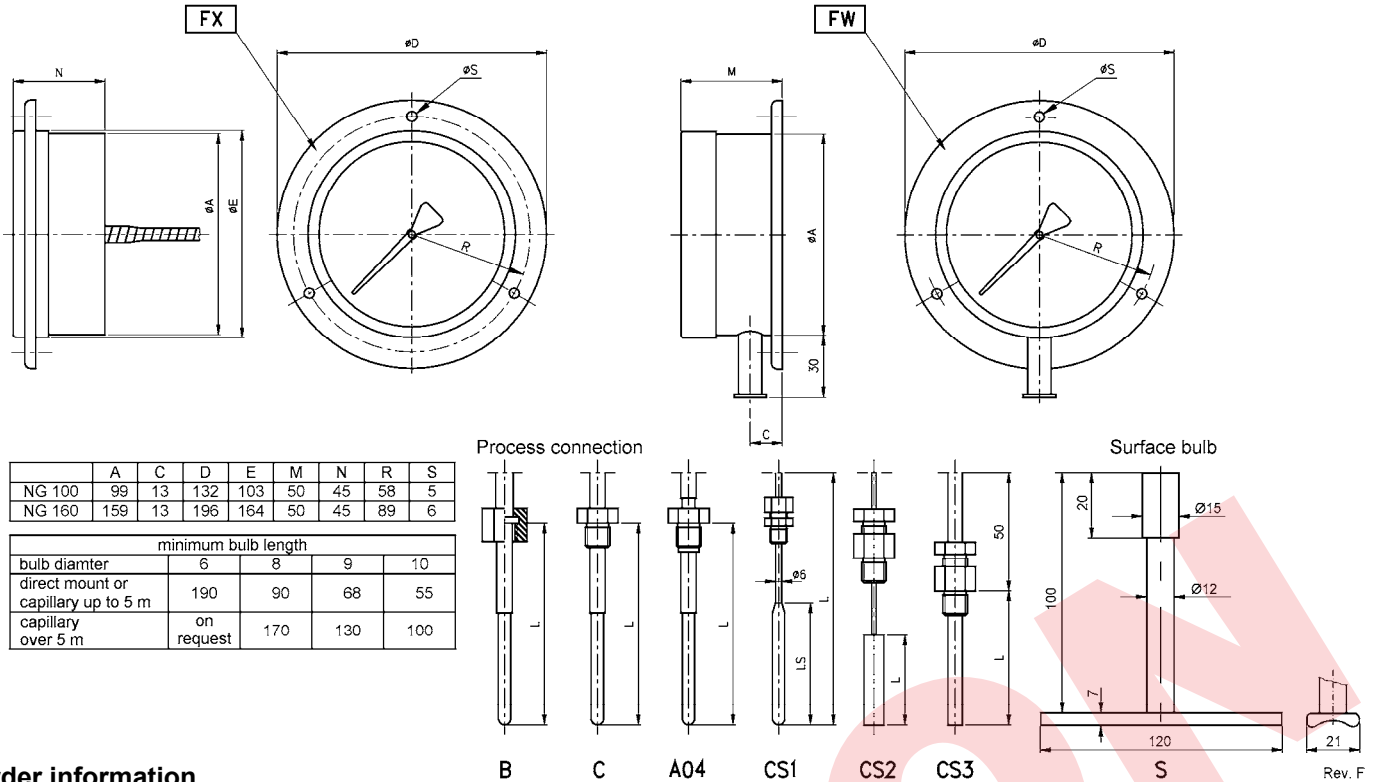
Food and beverage industry

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>Stainless steel 304 (1.4301)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Stem</td> <td>Stainless steel 321 (1.4541)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Case/ring</td> <td>Stainless steel 304 (1.4301), optional 316 (1.4401)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Capillary</td> <td></td> <td></td> <td>Stainless steel 321 (1.4541)</td> <td></td> </tr> <tr> <td>Armor</td> <td></td> <td></td> <td>Flexible, 304 (1.4301), or 316 (1.4401)</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>optional PVC covered</td> <td></td> </tr> <tr> <td>Window</td> <td colspan="4">Instrument glass, optional laminated safety glass or acrylic glass</td> </tr> <tr> <td>Dial</td> <td colspan="4">Aluminum, black markings on white background</td> </tr> <tr> <td>Pointer</td> <td colspan="4">Aluminum, black, optional micrometer pointer or maximum pointer</td> </tr> <tr> <td>Movement</td> <td colspan="4">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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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
	(7) 7 mm			(C) Single nipple	(75) G ¾ B	(R) Back	0/ 80		
(160) >160 mm	(8) 8 mm			(A04) Turning nipple	(10) G 1 B	(E1) Knee joint bendable (180°)	0/ 120		(CS) Dual scale
	(9) 9 mm			(CS1) Adjustable union connection sliding on tube ¹⁾	(50N) ½ NPT (75N) ¾ NPT		0/ 160 0/ 200 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	(E2) Knee joint bendable (360°)	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
	others on request		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			°F and dual scale on request	(FX) Front flange (FW) Back flange (FH) Surface mounting bracket L = 100 mm (UC) U-clamp (EP) Maximum pointer (TM) 2" pipe mounting bracket (Q3) 1 microswitch (Q33) 2 microswitches other options on request for contacts see data sheet K55

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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