

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

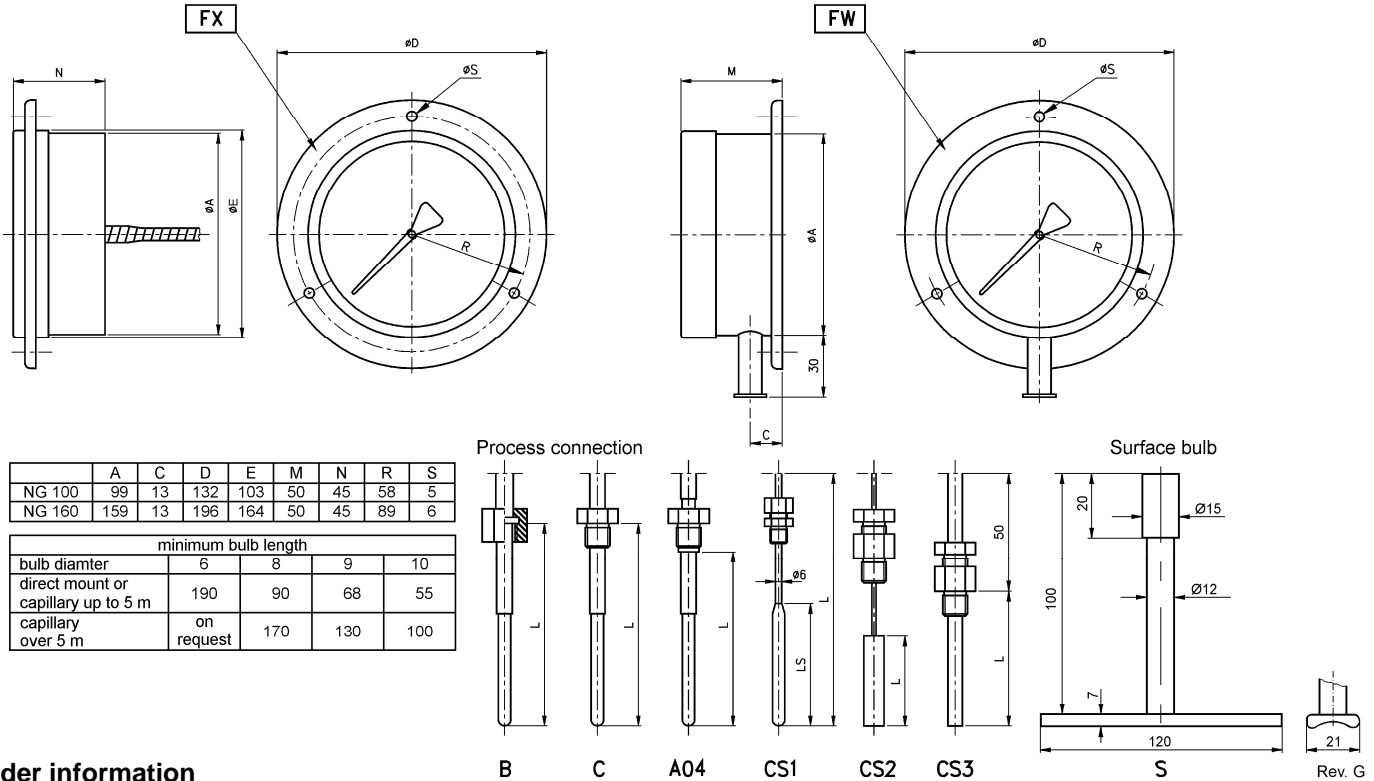
Applications

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																																													
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 rowspan="2">Stainless steel 321 (1.4541)</td> <td rowspan="2">Stainless steel 304 (1.4301), optional 316 (1.4401)</td> <td rowspan="2">Stainless steel 321 (1.4541)</td> </tr> <tr> <td>Stem</td> <td>Stainless steel 321 (1.4541)</td> </tr> <tr> <td>Case/ring</td> <td colspan="4">Stainless steel 304 (1.4301), optional 316 (1.4401)</td> </tr> <tr> <td>Capillary</td> <td colspan="4">Flexible, 304 (1.4301), or 316 (1.4401)</td> </tr> <tr> <td>Armor</td> <td colspan="4">optional PVC covered</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)	Stainless steel 321 (1.4541)	Stainless steel 304 (1.4301), optional 316 (1.4401)	Stainless steel 321 (1.4541)	Stem	Stainless steel 321 (1.4541)	Case/ring	Stainless steel 304 (1.4301), optional 316 (1.4401)				Capillary	Flexible, 304 (1.4301), or 316 (1.4401)				Armor	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)			
Connection	Stainless steel 304 (1.4301)	Stainless steel 321 (1.4541)	Stainless steel 304 (1.4301), optional 316 (1.4401)	Stainless steel 321 (1.4541)																																										
Stem	Stainless steel 321 (1.4541)																																													
Case/ring	Stainless steel 304 (1.4301), optional 316 (1.4401)																																													
Capillary	Flexible, 304 (1.4301), or 316 (1.4401)																																													
Armor	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)																																													
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



	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 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		(DA) Dial marking
(160) >160 mm	(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	
					(M27) M27x2		0/ 400	(FX) Front flange	
				(S) Surface bulb ²⁾			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		

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

Ashcroft Instruments GmbH

Germany
Max-Planck-Str. 1, D-52499 Baesweiler
P.O. Box 11 20, D-52490 Baesweiler
Tel.: +49 (0) 2401 808-0, Fax: +49 (0) 2401 808-125

France
„206“ ZA du Mandinet, 1/3 Rue des Campanules
F-77185 Lognes
Tel.: +33 (0) 1 60 37 25 30, Fax: +33 (0) 1 60 37 25 39

Website: www.ashcroft.eu

e-Mail: sales@ashcroft.com

United Kingdom
Unit 5 William James House
Cowley Road, Cambridge CB4 0WX
Tel.: +44 (0) 12 23 39 55 00, Fax: +44 (0) 12 23 39 55 01