

All stainless steel bimetal thermometer

Model A and E

Nominal size 3", 5", 100 mm or 160 mm
 Accuracy: Class 1,0 to EN (100 mm and 160 mm)
 Grade A (1 %) according ASME (3" and 5")

Features

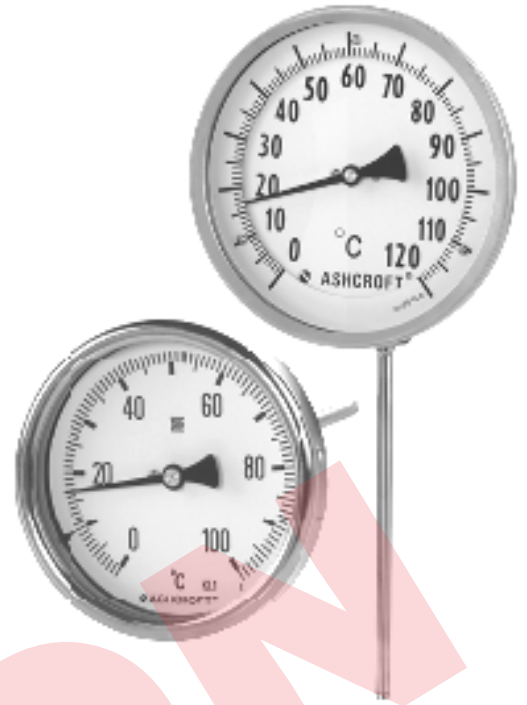
- Rugged stainless steel construction
- Fast response
- Protection IP65
- Antiparallax Maxivision® dial (model E)
- External zero adjustment (model E)
- Dry or liquid filled
- Silicone damped coil

Ranges

-50 ... 50 °C up to 0 ... 500 °C
 -80 ... 120 °F up to 200 ... 1000 °F

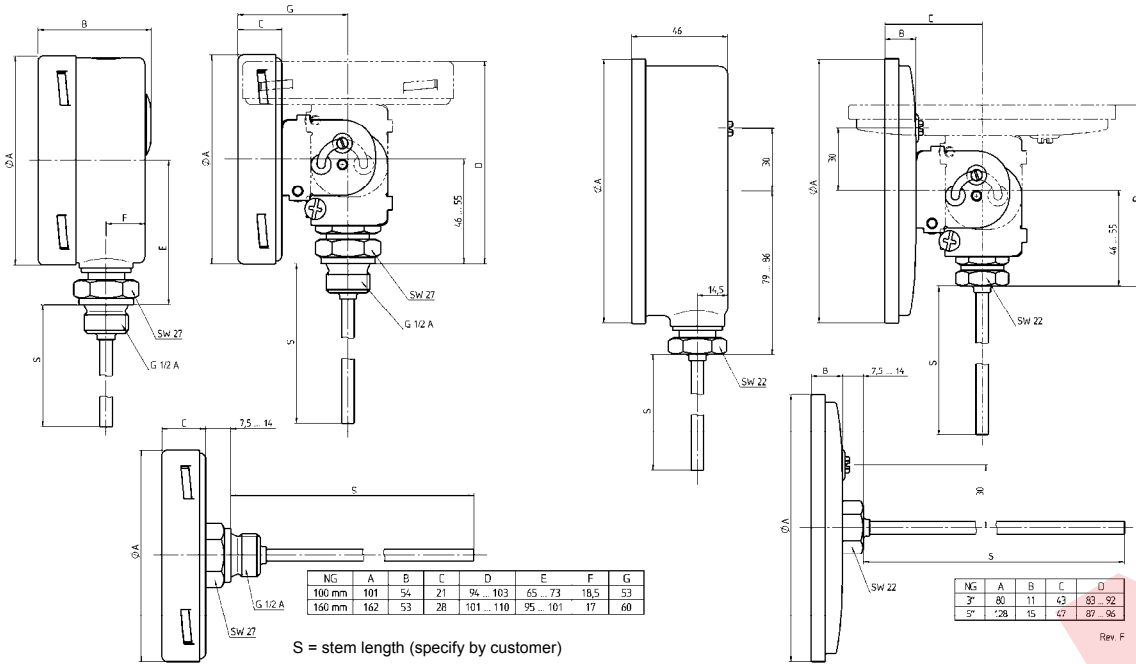
Applications

Chemical and petrochemical industry
 Machine and apparatus construction
 Food and beverage industry
 Pulp and paper industry



Technical specification	AM, AE, AI, A3B						EM, EE, EI, E3B					
Dial size	100 mm			160 mm			3" (80 mm)			5" (125 mm)		
Construction	Cylindrical case with bayonet ring						Cylindrical case with crimp ring, hermetically sealed and external adjustment					
Measuring principle	Bimetallic coil											
Range in °C	0/50 0/60 0/80 0/100 0/120 0/150 0/160 0/200 0/250 0/300 0/400 0/500 10/150 50/300 50/450 100/500 -10/50 -10/110 -20/40 -20/60 -20/160 -20/180 -25/25 -30/50 -30/70 -40/40 -40/60 -40/160 -50/50											
Temperature limits for ranges	Ranges in °F and dual scales on request											
Max. process overtemperature	< 120 °C				≥ 120 °C and < 290 °C				≥ 290 °C			
Stem	100 % of span				50 % of span				max. 425 °C for continuous service			
Diameter	6 mm, 8 mm, ¼" (6,4 mm), 3/8" (9,6 mm)											
Length	63 ... 1000 mm, minimum length depends on range											
Process connection	Plain G ½ A male, G ½ female, ½ NPT male or ½ NPT female G ¾ A male, G ¾ female, ¾ NPT male or ¾ NPT female G 1 A male, G 1 female, 1 NPT male or 1 NPT female, others on request Fixed, adjustable or with swivel nut											
Connection location	Back, lower (not for dial size 3") and every angle (rotatable)											
Material	Stainless steel 316Ti (1.4571) Stainless steel 316Ti (1.4571) Stainless steel 304 (1.4301), optional 316L (1.4404) for model A Instrument glass, optional laminated safety glass or acrylic glass Aluminum, black markings on white background											
Connection	Aluminum, black markings on white background, antiparallax, Maxivision® scale											
Stem	Aluminum, black											
Case/ring												
Window												
Dial												
Pointer												
Accuracy	Class 1 (dry) and class 2 (liquid filled) according EN 13190						1 % ASME B40.3, Grade A					
Protection according EN 60 529/IEC 529	IP65											
Filling liquids	Silicone, not for lower connection, standard acrylic glass, Maximum range up to 300 °C (ambient temperature maximum 65 °C)											
Weight in kg	Back	Lower	Every angle	Back	Lower	Every angle	Back	Lower	Every angle	Back	Lower	Every angle
Connection location												
Dry	0,35	0,55	0,55	0,7	0,9	0,9	0,2	---	0,4	0,4	0,6	0,6
Filled	0,6	---	0,8	1,0	---	1,2	0,6	---	0,7	0,7	---	0,9
Accessories, options	Thermowells, dual scale, calibration certification											

General dimensions in mm



0/ 100	°F
0/ 150 ¹⁾	
0/ 200	
0/ 250	
0/ 300 ¹⁾	
0/ 350	
0/ 500 ¹⁾	
20/ 120 ¹⁾	
30/ 130 ¹⁾	
30/ 240 ¹⁾	
50/ 300	
50/ 400	
50/ 550 ¹⁾	
80/ 180	
100/ 800	
160/ 360	
170/ 270	
200/ 400	
200/ 700 ¹⁾	
200/1000 ¹⁾	
-40/ 120	
-40/ 160	
-20/ 120 ¹⁾	
-80/ 120	
-10/ 100	

¹⁾ minimum stem length 100 mm

Order information

Size	Type and stem execution	Filling	Process connection	Connection orientation	Stem length	Range	Engineering unit	Options
(100) 100 mm	Metric housing with bayonet ring (IP65)	(=) Standard (no filling)	(040) Plain	(L) Lower ¹⁾	63 to 1000 mm	0/ 50 ¹⁾ 0/ 60 ¹⁾ 0/ 80 ¹⁾ 0/100 0/120 0/150 0/160 0/200 0/250 ¹⁾ 0/300 ¹⁾ 0/400 ¹⁾ 0/500 ¹⁾ 10/150 50/300 ¹⁾ 50/450 ¹⁾ 100/500 ¹⁾ -10/ 50 ¹⁾ -10/110 -20/ 40 ¹⁾ -20/ 60 ¹⁾ -20/180 -25/ 25 ¹⁾ -30/ 50 ¹⁾ -30/ 70 -30/170 -40/ 40 ¹⁾ -40/ 60 -40/100 -40/160 -50/ 50	°C	(NH) Tagging wired (DA) Dial marking (RT) Stepped stem (CS) Dual scale (PD) Acrylic glass (SG) Safety glass (SH) Red set hand stationary
(160) 160 mm	(AM) 6 mm (AE) 8 mm (AI) 1/4" (6,4 mm) (A3B) 3/8" (9,6 mm)	(L) Liquid filled with silicone max. up to 300 °C (not for lower connection, ambient temperature maximum 65 °C)	(042) Union outlet 1/2 NPT male (060) Fixed 1/2 NPT male (061) Fixed G 1/2 A male (070) Adjustable union 1/2 NPT male (071) Adjustable union G 1/2 A male (072) Adjustable union 3/4 NPT male (074) Adjustable union 1/2 NPT female (080) Swivel nut G 1/2 A male (081) Swivel nut G 1/2 female	(R) Back (E) Every angle			°F see table	(YW) 316L (1.4404) housing (not for lower housing and size 3")
(30) 3" (80 mm)	ANSI housing hermetically sealed (IP65)							
(50) 5" (125 mm)	(EM) 6 mm (EE) 8 mm (EI) 1/4" (6,4 mm) (E3B) 3/8" (9,6 mm)							

¹⁾ not for dial size 3" ¹⁾ minimum stem length 100 mm

Order example

Size	Type and stem execution	Filling	Process connection	Connection orientation	Stem length	Range	Engineering unit	Options
50	EE	=	070	E	150	0/200	C	NH

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