

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

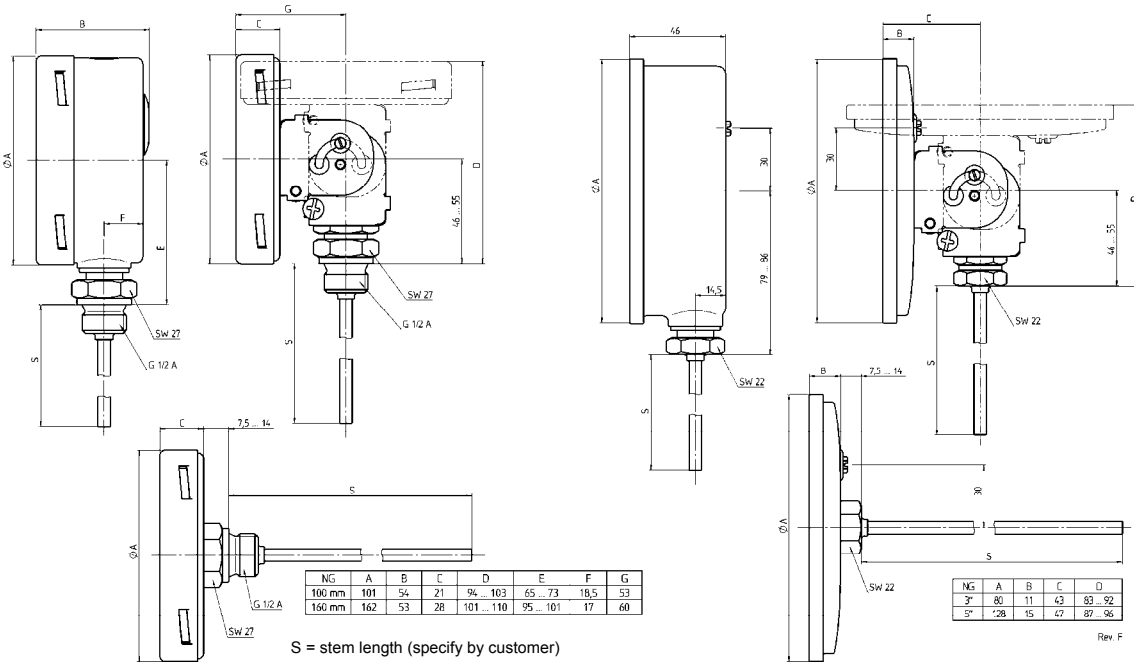
Food and beverage industry

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		Connection Stainless steel 316Ti (1.4571) Stem Stainless steel 316Ti (1.4571) Case/ring Stainless steel 304 (1.4301), optional 316L (1.4404) for model A Window Instrument glass, optional laminated safety glass or acrylic glass Dial Aluminum, black markings on white background Aluminum, black markings on white background, antiparallax, Maxivision® scale											
Pointer		Aluminum, black											
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		0,35 0,55 0,55 0,7 0,9 0,9 0,2 --- 0,4 0,4 0,6 0,6											
Dry		0,6 --- 0,8 1,0 --- 1,2 0,6 --- 0,7 0,7 --- 0,9											
Filled													
Accessories, options		Thermowells, dual scale, calibration certification											

General dimensions in mm



0/ 100	
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	°F
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, ambi- ent 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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