

All stainless steel bimetal thermometer

Model A and E

Nominal size 3", 5", 100 mm or 160 mm
 Accuracy: Class 1,0 to DIN (100 mm and 160 mm)
 1% to 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°C ... 50°C up to 0°C ... 500°C
 -80°F ... 120°C up to 200°F ... 1000°F

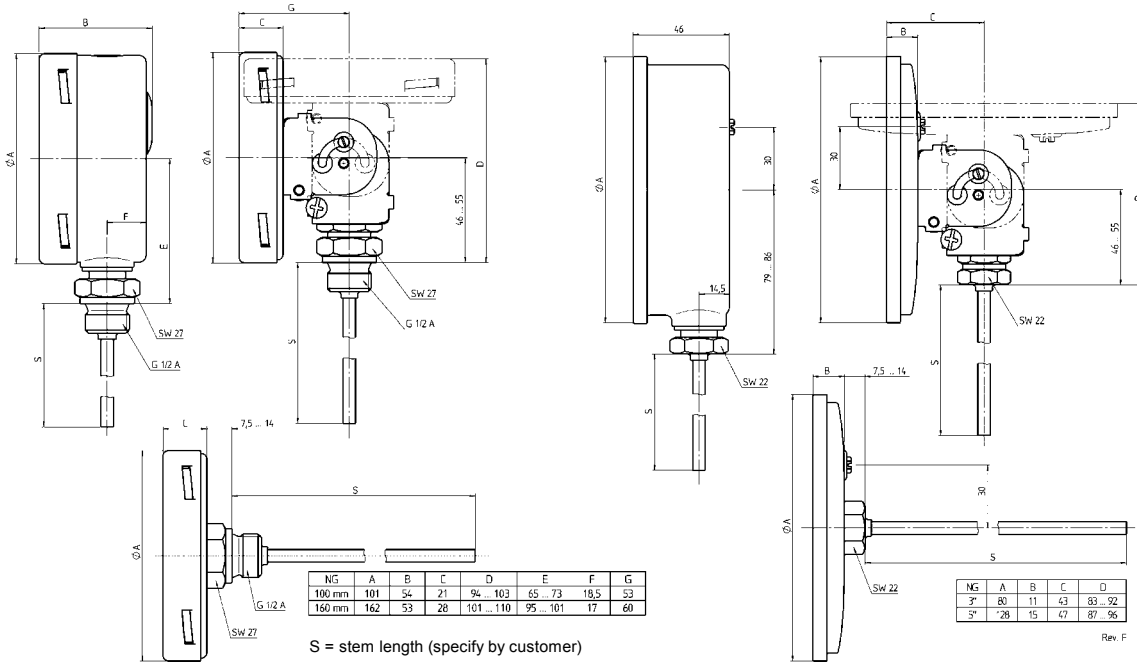
Applications

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 [°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	< 120°C			≥ 120°C and < 290°C			≥ 290°C					
max. process overtemperature	100% of span			50% of span			max. 425°C for continuous service					
Stem												
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 B male, G ½ female, ½ NPT male or ½ NPT female G ¾ B male, G ¾ female, ¾ NPT male or ¾ NPT female G 1 B 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 DIN 16 203						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 [kg]												
Connection location	Back	Lower	Every angle	Back	Lower	Every angle	Back	Lower	Every angle	Back	Lower	Every angle
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 [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	
dual scale on request	

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⁾	65 to 1000 mm	0/ 50 ¹⁾	°C	(NH) Tagging wired	
(160) 160 mm	(AM) 6 mm	(L) Liquid filled with silicone max. up to 300°C (not for lower connection, ambient temperature maximum 65°C)	(042) Union outlet ½ NPT male	(R) Back		0/ 60 ¹⁾		(DA) Dial marking	
	(AE) 8 mm		(060) Fixed ½ NPT male	(E) Every angle		0/ 80 ¹⁾		(RT) Stepped stem	
	(AI) ¼" (6,4 mm)		(061) Fixed G ½ B male			0/ 100		(CS) Dual scale	
	(A3B) 3/8" (9,6 mm)		(070) Adjustable union ½ NPT male			0/ 120		(PD) Acrylic glass	
(30) 3" (80 mm)	ANSI housing hermetically sealed (IP65)			(071) Adjustable union G ½ B male				0/ 150	(SG) Safety glass
(50) 5" (125 mm)	(EM) 6 mm			(072) Adjustable union ¾ NPT male				0/ 160	(SH) Red set hand stationary
	(EE) 8 mm			(074) Adjustable union ½ NPT female				0/ 200	(YW) 316L (1.4404) housing (not for lower housing and size 3")
	(EI) ¼" (6,4 mm)			(080) Swivel nut G ½ B male				0/ 250 ¹⁾	
	(E3B) 3/8" (9,6 mm)			(081) Swivel nut G ½ female				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/ 160				
					-20/ 180				
					-25/ 25 ¹⁾				
					-30/ 50 ¹⁾				
					-30/ 70				
					-30/ 170				
					-40/ 40 ¹⁾				
					-40/ 60				
					-40/ 100				
					-40/ 160				
					-50/ 50				
				¹⁾ not for dial size 3"	¹⁾ minimum stem length 100 mm	dual scale on request			

How to order

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

DRESSER EUROPE GmbH Instruments

Germany
Max-Planck-Str. 1, D-52499 Baesweiler
P.O. Box 11 20, D-52490 Baesweiler
Tel.: +49 (0) 24 01 80 80, Fax: +49 (0) 24 01 80 81 25

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

Website: www.dresserbae.de

United Kingdom
East Gillibrands
Skelmersdale, Lancashire WN8 9TU
Tel.: +44 (0) 16 95 52 600, Fax: +44 (0) 16 95 52 693

e-Mail: sales@dresserbae.de