

DURATEMP® THERMOMETERS

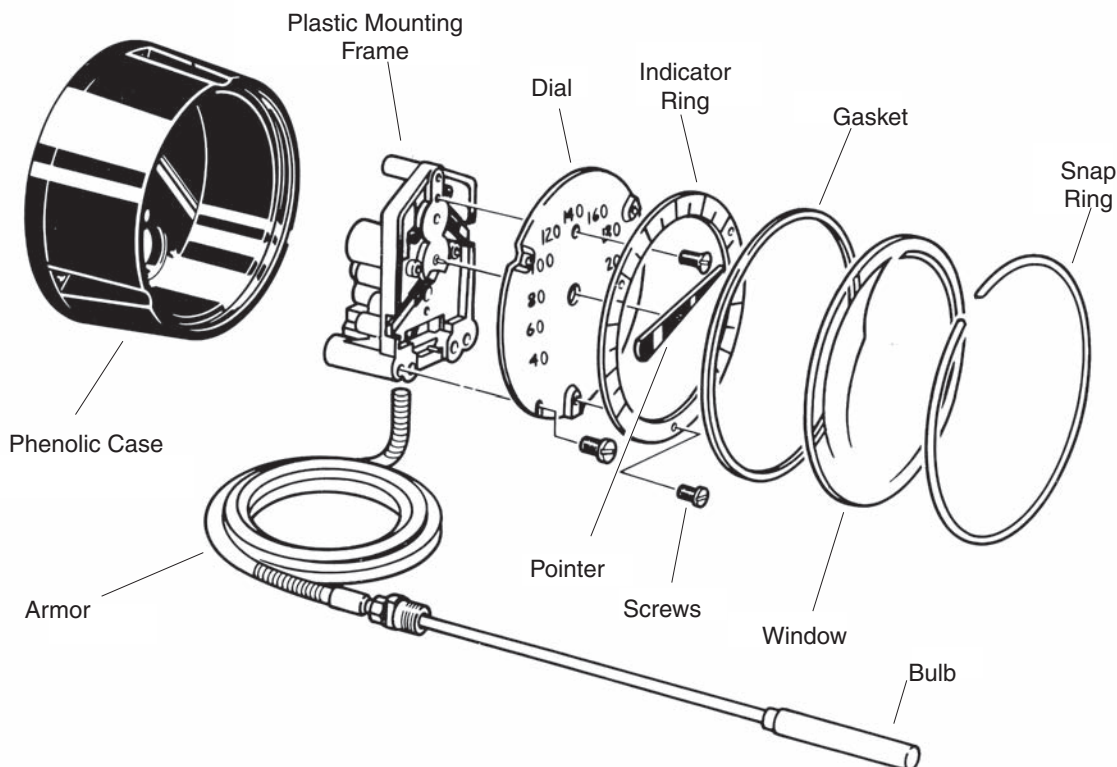
REMOTE READING THERMOMETERS

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DIRECT READING THERMOMETERS

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The superiority of a Duratem[®] thermometer is revealed by comparison to conventional thermometry. Conventional gas thermometers operate on the principle that the absolute pressure is proportional to the absolute temperature. To obtain a usable temperature span, elevated working pressures must be used which frequently produce high stresses in the Bourdon tube. These high stresses reduce instrument life and may be hazardous.

The Duratem thermometer on the other hand utilizes a combination of inert gas and activated carbon called a molecular sieve. This combination produces much lower internal pressures than conventional thermometers for the same temperature span. These lower pressures are transmitted to a compact helical Bourdon tube. The Bourdon tube connects directly to the pointer shaft thus eliminating the traditional movement assembly.

With this advantage the Duratem thermometer is able to provide long life and sustained accuracy under the most adverse shock and vibration conditions.

Accuracy: $\pm 1\%$ of range span.

Bulb Size: 3" long by $\frac{3}{8}$ " O.D. bulb.

Bulb Material: 316SS

Ambient Error: Ambient error is a function of line length, ambient temperature and other system parameters. The error at mid-scale will be $\pm \frac{1}{2}\%$ of range span for a $\pm 25^\circ\text{F}$ change in ambient temperature, for a typical thermometer. Consult factory for details.

Vibration and Shock Resistance: Extreme resistance similar to that required by MIL-T-19646.

Actuation: Gas/activated carbon. Pointer driven directly by lightweight helical Bourdon tube which is silicone damped.

Field Zero Adjustment: Adjustable pointer.

Over-range: Minimum 25% of span beyond top of range. If greater over-range is anticipated, consult Customer Service.

Head Error: None. No correction required for any mounting configuration.

Capillary Material: 300 SS

Line Length: 5-80 ft in standard increments.

Armor: AISI 302 Spring Armor as standard.

Dial Sizes: Maxivision[®] anti-parallax two piece dial design $4\frac{1}{2}$ " and 6" sizes – Celsius or Fahrenheit. Single plane design for all dual scales and $8\frac{1}{2}$ " size.

Ranges: Standard Fahrenheit ranges available from -320°F to 1200°F . Celsius and dual scale also available.

Cases: 5 basic cases with lower or back connections, surface or flush mounted in stainless steel, phenolic or aluminum. All remote mount cases are field interchangeable, within the same range. Direct mount units available $4\frac{1}{2}$ " stainless steel case only. (Everyangle)

Direct Mount Stem Lengths: Eight standard increments of semi-rigid stainless steel from 6 inches to 36 inches.

Direct Mount Union: $\frac{1}{2}$ NPT union connection fixed at the top of the stem.

Operating Conditions: The maximum case temperature should not exceed 160°F (71°C). The line should be laid so that it will not be exposed to extreme temperatures such as nearby steam pipes, ovens or other heated surfaces.

Thermowells: Thermowells must be used on any application where the bulb of the thermometer may be exposed to pressure, corrosive fluids or high velocity. Additionally, the use of a thermowell permits instrument interchangeability or recalibration without shutting down the process.

Dials: Aluminum dials have highly legible black markings on a white background. The Maxivision dial is a linear anti-parallax dial for excellent readability in the $4\frac{1}{2}$ " and 6" sizes. The divisions and the pointer are in the same plane which allows readability from any angle without parallax error.

Windows: The standard window for the Duratem thermometer is glass. Shatter-proof glass and plastic disc windows are optional.

MERCURY FREE

Gas Filled: NIOSH and OSHA compliance for mercury contamination hazards. Protects personnel and processes from accidental contamination.

No Head or Elevation Error: Gear and pinion movements are eliminated, resulting in increased instrument life and reduced replacement costs.

Silicone damped Bourdon tube eliminates damage from shock and vibration.

- **Exclusive movementless design resists shock and vibration – no gears to wear or misalign resulting in increased instrument life**
- **Gas-operated molecular sieve**
- **No elevation error**
- **Mercury free**
- **One bulb size for all ranges**
- **±1% full-span accuracy**
- **Maxivision[®] dial**
- **Limited five-year warranty**

A high impact-resistant polished stainless steel case. Bayonet ring facilitates easy removal for glass replacement and pointer adjustment. A versatile case that enables surface or flush mounting. Available in 4½" dial size.



SELECTION TABLE

600A — 01		— C01				— B01		— A1		— L07		— AK			
Table 1		Table 2				Table 3		Table 4		Table 5 ⁽¹⁾		Table 6			
CASE STYLE		CASE SIZE		MOUNTING				BULB STYLES*		ARMOR STYLE		LINE LENGTH		RANGES	
CODE	DESCRIPTION	CODE	SIZE	SURFACE		CONNECTION		CODE	DESCRIPTION	CODE	LINE LENGTH	CODE	SINGLE RANGES		
				FLUSH	LOWER	REAR									
01	ST. ST. BAYONET RING	C01	4½"	✓		✓		B01	12" Bendable extension with ½ NPT union connection	A1	Stainless Steel Spring	L01	5'	AB	-320/200°F
		C11	4½"		✓		✓	B03	Plain bulb with rigid extension, no union			L03	10'	AE	-100/100°F
								B08	Plain bulb with rigid extension, ½ NPT union on armor			L07	20'	AG	-40/180°F
								B17	18" Bendable extension with ½ NPT union connection			L09	30'	AK	20/240°F
								B18	24" Bendable extension with ½ NPT union connection			L13	50'	AL	50/300°F
												L19	80'	AN	50/550°F
														AR	50/750°F
														AT	400/1200°F
														AY	-200/100°C
														BL	-80/40°C
														BN	-40/80°C
														BS	0/120°C
														BT	10/150°C
														BU	0/300°C
														BW	0/400°C
														BJ	200/650°C
														DUAL RANGES	
														CE	20/240°F
															0/120°C
														CF	50/550°F
															0/300°C
														DR	50/300°F
															10/150°C
														DT	-40/180°F
															-40/80°C

⁽¹⁾ Capillary length is measured from bottom of case to top of bulb extension.

TO ORDER THIS DURATEMP 600A-01 THERMOMETER:

Select:

1. Case Style: Stainless Steel/Bayonet Ring _____ Table 1 _____ **600A 01 C01 B01 A1 L07 AK XNH**

2. Case Size & Mounting: 4½" Surface, Lower _____ Table 2 _____

3. Bulb Style: 12" Bendable Extension with Union Connection _____ Table 3 _____

4. Armor Style: Stainless Steel Spring _____ Table 4 _____

5. Line Length: 20 feet _____ Table 5 _____

6. Temperature Range: 20/240°F _____ Table 6 _____

7. Options: Stainless Steel Tag _____ (See Page 228) _____

Consult factory for guidance in product selection
Phone (203) 378-8281 or visit our
web site at www.ashcroft.com

- **Exclusive movementless design resists shock and vibration – no gears to wear or misalign resulting in increased instrument life**
- **Gas-operated molecular sieve**
- **No elevation error**
- **Mercury free**
- **One bulb size for all ranges**
- **±1% full-span accuracy**
- **Maxivision[®] dial**
- **Limited five-year warranty**

An aluminum case with a durable epoxy finish. Designed specifically for panel mounting. A hinged ring permits glass replacement and pointer adjustment. Available in 4½", 6" and 8½" sizes.



SELECTION TABLE

600A — 02		C12				B01		A1		L07		AK				
Table 1		Table 2				Table 3		Table 4		Table 5 ⁽¹⁾		Table 6				
CASE STYLE		CASE SIZE		MOUNTING				BULB STYLES*		ARMOR STYLE		LINE LENGTH		RANGES		
CODE	DESCRIPTION	CODE	SIZE	SURFACE		CONNECTION		CODE	DESCRIPTION	CODE	DESCRIPTION	CODE	LINE LENGTH	CODE	SINGLE RANGES	
				FLUSH	LOWER	REAR										
600A	02 ALUMINUM HINGED RING	C12	4½"		✓		B01	12" Bendable extension with ½ NPT union connection	A1	Stainless Steel Spring	L01	5'	AB	-320/200°F		
		C27	6"		✓								AE	-100/100°F		
		C35	8½"		✓								AG	-40/180°F		
						AK							20/240°F			
														AL	50/300°F	
							B03	Plain bulb with rigid extension, no union			L03	10'	AN	50/550°F		
							B08	Plain bulb with rigid extension, ½ NPT union on armor					AR	50/750°F		
							B17	18" Bendable extension with ½ NPT union connection					AT	400/1200°F		
							B18	24" Bendable extension with ½ NPT union connection					AY	-200/100°C		
							*Minimum recommended insertion length ("u" dimension) in liquids is 4 inches and in gases is 6 inches for standard ¾ x 3" bulb						BL	-80/40°C		
													L07	20'	BN	-40/80°C
															BS	0/120°C
															BT	10/150°C
															BU	0/300°C
															BW	0/400°C
															BJ	200/650°C
															DUAL RANGES	
															CE	20/240°F
																0/120°C
															CF	50/550°F
																0/300°C
															DR	50/300°F
																10/150°C
															DT	-40/180°F
																-40/80°C

⁽¹⁾Capillary length is measured from bottom of case to top of bulb extension.

TO ORDER THIS DURATEMP 600A-02 THERMOMETER:

Select:

1. Case Style: Aluminum/Hinged Ring _____ Table 1 _____ **600A 02**

2. Case Size & Mounting: 4½" Flush, Rear _____ Table 2 _____ **C12**

3. Bulb Style: 12" Bendable Extension with Union Connection _____ Table 3 _____ **B01**

4. Armor Style: Stainless Steel Spring _____ Table 4 _____ **A1**

5. Line Length: 20 feet _____ Table 5 _____ **L07**

6. Temperature Range: 20/240°F _____ Table 6 _____ **AK**

7. Options: Stainless Steel Tag _____ (See Page 228) _____ **XNH**

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 web site at www.ashcroft.com

- Exclusive movementless design resists shock and vibration – no gears to wear or misalign resulting in increased instrument life
- Gas-operated molecular sieve
- No elevation error
- Mercury free
- One bulb size for all ranges
- ±1% full-span accuracy
- Maxivision[®] dial
- Limited five-year warranty

A black-coated aluminum case with excellent impact resistance. Threaded ring permits adjustment. Available in 4½" and 6" sizes.



SELECTION TABLE

600A — 03		C02				B01		A1		L07		AK			
Table 1		Table 2				Table 3		Table 4		Table 5 ⁽¹⁾		Table 6			
CASE STYLE		CASE SIZE		MOUNTING				BULB STYLES*		ARMOR STYLE		LINE LENGTH		RANGES	
CODE	DESCRIPTION	CODE	SIZE	SURFACE	FLUSH	LOWER	REAR	CODE	DESCRIPTION	CODE	DESCRIPTION	CODE	LINE LENGTH	CODE	SINGLE RANGES
03	ALUMINUM THREADED RING	C02	4½"	✓		✓		B01	12" Bendable extension with ½ NPT union connection	A1	Stainless Steel Spring	L01	5'	AB	-320/200°F
		C15	6"	✓		✓		B03	Plain bulb with rigid extension, no union			L03	10'	AE	-100/100°F
								B08	Plain bulb with rigid extension, ½ NPT union on armor			L07	20'	AG	-40/180°F
								B17	18" Bendable extension with ½ NPT union connection			L09	30'	AK	20/240°F
								B18	24" Bendable extension with ½ NPT union connection			L13	50'	AL	50/300°F
												L19	80'	AN	50/550°F
														AR	50/750°F
														AT	400/1200°F
														AY	-200/100°C
														BL	-80/40°C
														BN	-40/80°C
														BS	0/120°C
														BT	10/150°C
														BU	0/300°C
														BW	0/400°C
														BJ	200/650°C
														DUAL RANGES	
														CE	20/240°F 0/120°C
														CF	50/550°F 0/300°C
														DR	50/300°F 10/150°C
														DT	-40/180°F -40/80°C

*Minimum recommended insertion length ("u" dimension) in liquids is 4 inches and in gases is 6 inches for standard ¾ x 3" bulb

⁽¹⁾Capillary length is measured from bottom of case to top of bulb extension.

TO ORDER THIS DURATEMP 600A-03 THERMOMETER:

Select:

1. Case Style: Aluminum/Threaded Ring _____ Table 1 _____ 600A 03 C02 B01 A1 L07 AK XNH

2. Case Size & Mounting: 4½" Surface, Lower _____ Table 2 _____

3. Bulb Style: 12" Bendable Extension _____ Table 3 _____

 with Union Connection _____ Table 3 _____

4. Armor Style: Stainless Steel Spring _____ Table 4 _____

5. Line Length: 20 feet _____ Table 5 _____

6. Temperature Range: 20/240°F _____ Table 6 _____

7. Options: Stainless Steel Tag _____ (See Page 228) _____

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- **Exclusive movementless design resists shock and vibration – no gears to wear or misalign resulting in increased instrument life**
- **Gas-operated molecular sieve**
- **No elevation error**
- **Mercury free**
- **One bulb size for all ranges**
- **±1% full-span accuracy**
- **Maxivision® dial**
- **Limited five-year warranty**

The phenolic case construction is ideal for most ambient conditions. Flush or surface mounting. Snap ring permits pointer adjustment. Available in 4½" and 6" sizes.



SELECTION TABLE

600A — 04		C03				B01		A1		L07		AK				
Table 1		Table 2				Table 3		Table 4		Table 5 ⁽¹⁾		Table 6				
CASE STYLE		CASE SIZE		MOUNTING				BULB STYLES*		ARMOR STYLE		LINE LENGTH		RANGES		
CODE	DESCRIPTION	CODE	SIZE	MOUNTING		CONNECTION		CODE	DESCRIPTION	CODE	DESCRIPTION	CODE	LINE LENGTH	CODE	SINGLE RANGES	
				SURFACE	FLUSH	LOWER	REAR									
600A	04 PHENOLIC SNAP RING	C03	4½"	✓		✓		B01	12" Bendable extension with ½ NPT union connection	A1	Stainless Steel Spring	L01	5'	AB	-320/200°F	
		C08	4½"	✓			✓							AE	-100/100°F	
		C38	4½"		✓		✓					AG	-40/180°F			
		C16	6"	✓		✓						AK	20/240°F			
									B03			Plain bulb with rigid extension, no union	L03	10'	AL	50/300°F
									B08			Plain bulb with rigid extension, ½ NPT union on armor			AN	50/550°F
													L07	20'	AR	50/750°F
															AT	400/1200°F
													L09	30'	AY	-200/100°C
																BL
										L13	50'	BN	-40/80°C			
													BS	0/120°C		
										L19	80'	BT	10/150°C			
													BU	0/300°C		
													BW	0/400°C		
													BJ	200/650°C		
														DUAL RANGES		
														CE	20/240°F 0/120°C	
														CF	50/550°F 0/300°C	
														DR	50/300°F 10/150°C	
														DT	-40/180°F -40/80°C	

⁽¹⁾ Capillary length is measured from bottom of case to top of bulb extension.

TO ORDER THIS DURATEMP 600A-04 THERMOMETER:

Select:

1. Case Style: Phenolic Snap Ring _____ Table 1 _____

2. Case Size & Mounting: 4½" Surface, Lower _____ Table 2 _____

3. Bulb Style: 12" Bendable Extension with Union Connection _____ Table 3 _____

4. Armor Style: Stainless Steel Spring _____ Table 4 _____

5. Line Length: 20 feet _____ Table 5 _____

6. Temperature Range: 20/240°F _____ Table 6 _____

7. Options: Stainless Steel Tag _____ (See Page 228) _____

600A 04 C03 B01 A1 L07 AK XNH

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- Exclusive movementless design resists shock and vibration – no gears to wear or misalign resulting in increased instrument life
- Gas-operated molecular sieve
- No elevation error
- Mercury free
- One bulb size for all ranges
- ±1% full-span accuracy
- Maxivision® dial
- Limited five-year warranty
- IP 65

This hermetically sealed case is designed for applications where extreme moisture or dust is present. Available in a 4½" solid front phenolic turret case, lower connection.



SELECTION TABLE

600H — 45		C60				B01		A1		L07		AK			
Table 1		Table 2				Table 3		Table 4		Table 5 ⁽¹⁾		Table 6			
CASE STYLE		CASE SIZE		MOUNTING				BULB STYLES*		ARMOR STYLE		LINE LENGTH		RANGES	
CODE	DESCRIPTION	CODE	SIZE	MOUNTING		CONNECTION		CODE	DESCRIPTION	CODE	LINE LENGTH	CODE	SINGLE RANGES		
				SURFACE	FLUSH	LOWER	REAR								
45	PHENOLIC HERMETICALLY SEALED	C60	4½"	✓		✓		B01	12" Bendable extension with ½ NPT union connection	A1	Stainless Steel Spring	L01	5'	AB	-320/200°F
600H								B03	Plain bulb with rigid extension, no union			L03	10'	AE	-100/100°F
								B08	Plain bulb with rigid extension, ½ NPT union on armor			L07	20'	AG	-40/180°F
								B17	18" Bendable extension with ½ NPT union connection			L09	30'	AK	20/240°F
								B18	24" Bendable extension with ½ NPT union connection			L13	50'	AL	50/300°F
											L19	80'	AN	50/550°F	
														AR	50/750°F
														AT	400/1200°F
														AY	-200/100°C
														BL	-80/40°C
														BN	-40/80°C
														BS	0/120°C
														BT	10/150°C
														BU	0/300°C
														BW	0/400°C
														BJ	200/650°C
														DUAL RANGES	
														CE	20/240°F 0/120°C
														CF	50/550°F 0/300°C
														DR	50/300°F 10/150°C
														DT	-40/180°F -40/80°C

⁽¹⁾ Capillary length is measured from bottom of case to top of bulb extension.

TO ORDER THIS DURATEMP 600H-45 THERMOMETER:

Select:

1. Case Style: Phenolic Hermetically Sealed _____ Table 1 _____ **600H 45 C60**

2. Case Size & Mounting: 4½" Surface, Lower _____ Table 2 _____ **B01 A1 L07 AK**

3. Bulb Style: 12" Bendable Extension with Union Connection _____ Table 3 _____ **XNH**

4. Armor Style: Stainless Steel Spring _____ Table 4 _____

5. Line Length: 20 feet _____ Table 5 _____

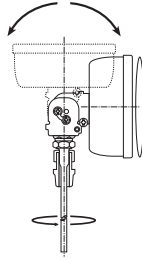
6. Temperature Range: 20/240°F _____ Table 6 _____

7. Options: Stainless Steel Tag _____ (See Page 228) _____

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web site at www.ashcroft.com

- *Exclusive movementless design resists shock and vibration – no gears to wear out – or misalign resulting in increased instrument life*
- *Gas-operated molecular sieve*
- *Mercury free*
- *1% full-span accuracy*
- *Everyangle Duratem[®] thermometer can be rotated 360° and can be angled 180°, ensuring readability in any installation*
- *Maxivision[®] dial*
- *Limited five-year warranty*

The direct-reading thermometer (stainless steel case only) offers the same unique features of the Ashcroft[®] Duratem[®] remote-reading thermometer for those critical applications where only a direct-connected instrument can be used. Available in 4½" dial size.



The Everyangle[™] Duratem[®] thermometer may be rotated 360° for readability and the stem turned 180° for the most challenging installations.



SELECTION TABLE

600B	01		AB			
Type	Table 1		Table 2			
600B	CODE	STEM LENGTH	CODE	SINGLE RANGES	CODE	DUAL RANGES
D I R E C T - M O U N T E D	01	Semirigid Stainless Steel 6"	AB	-320/200°F	CE	20/240°F 0/120°C
			AE	-100/100°F		
	02	Semirigid Stainless Steel 9"	AG	-40/180°F	CF	50/550°F 0/300°C
			AK	20/240°F		
	03	Semirigid Stainless Steel 12"	AL	50/300°F	DR	50/300°F 10/150°C
			AN	50/550°F		
	04	Semirigid Stainless Steel 15"	AR	50/750°F*	DT	-40/180°F -40/80°C
			AT	400/1200°F*		
	05	Semirigid Stainless Steel 18"	AY	-200/100°C	*For these ranges a minimum "S" dimension (stem length) of 9 inches is required. This removes case from exposure to high temperature which may damage the instrument.	
BL			-80/40°C			
06	Semirigid Stainless Steel 24"	BN	-40/80°C			
		BS	0/120°C			
07	Semirigid Stainless Steel 30"	BT	10/150°C			
		BU	0/300°C			
08	Semirigid Stainless Steel 36"	BW	0/400°C*			
		BJ	200/650°C*			

NOTE: Thermowells must be used whenever an Ashcroft Duratem[®] thermometer is installed on a pressurized application or where fluid velocity or corrosive media is present.

TO ORDER THIS 600B DURATEMP THERMOMETER:

SELECT 600B 01 AB XNH

1. Stem Length: Length: 6" _____ Table 1 _____

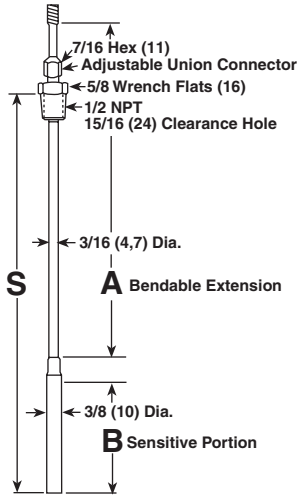
2. Temperature Range: -320/200°F _____ Table 2 _____

3. Options: Stainless Steel Tag _____ (See Page 228) _____

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Style B01, B17 and B18

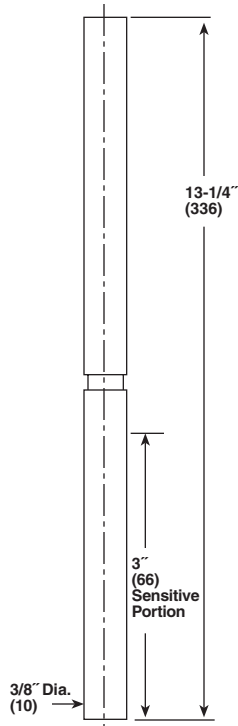
Bendable Extension,
Union Connection



Bulb Code	Bulb Size "B"	"A"	"S" Max.	"S" Min.
B01	3 (76)	12 (305)	15 (381)	4 (102)
B17	3 (76)	18 (457)	21 (533)	4 (102)
B18	3 (76)	24 (610)	27 (686)	4 (102)

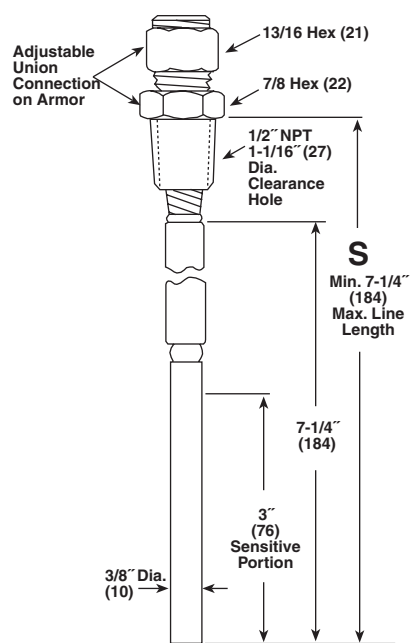
Style B03

Plain

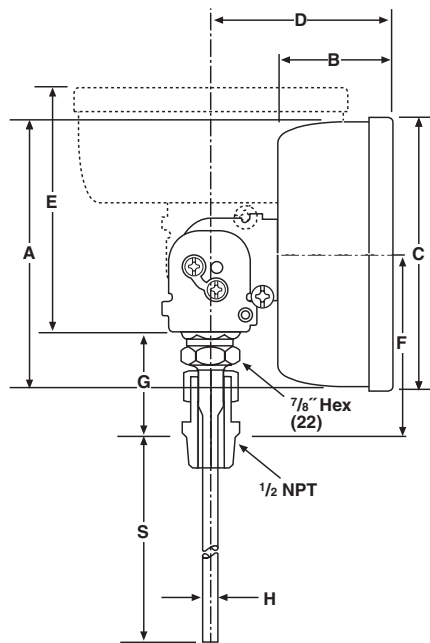


Style B08

Long Extension, Locking Fitting



600B Everyangle



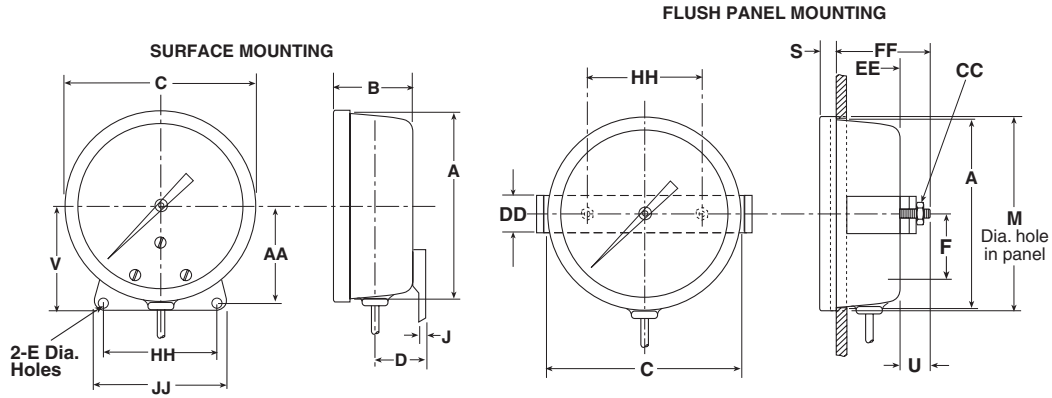
FOR TEMPERATURES BELOW 750°F	
S	U-Dimension (Insertion Length)
6 (152)	4½ (114)
9 (229)	7½ (191)
12 (305)	10½ (268)

FOR TEMPERATURES 750°F AND ABOVE USE WELL WITH 3" LAG		
S	Well Lag	U-Dimension (Insertion Length)
9 (229)	3	4½ (114)
12 (305)	3	7½ (191)
15 (381)	3	10½ (268)

Dial Size Inches	A	B	C	D	E	F	G	H
4½	4 ²³ / ₃₂ (120)	2 ¹ / ₁₆ (52)	5 ¹ / ₃₂ (128)	3 ¹¹ / ₆₄ (81)	4 ¹³ / ₁₆ (122)	3 (76)	1 (25)	3/8 (10)

NOTE: Dimensions in inches, () are millimeters.

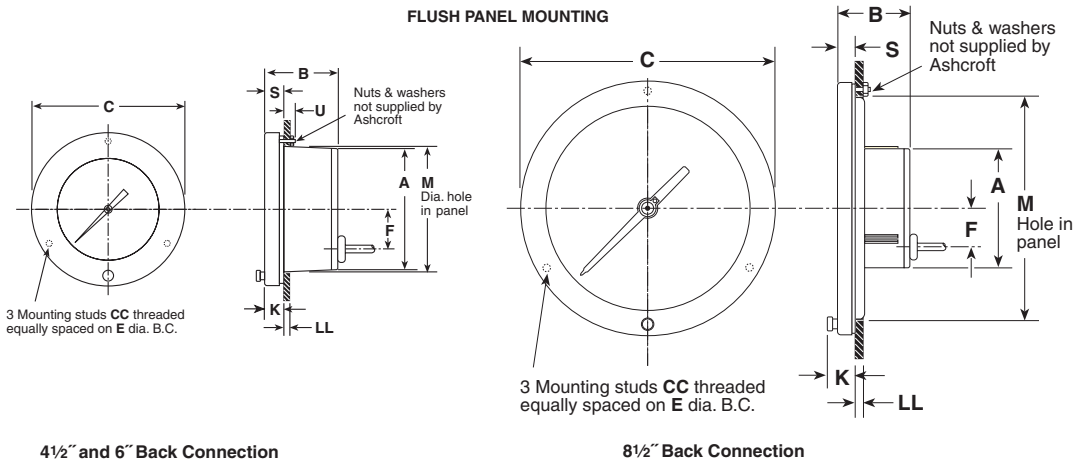
600A-01 Stainless Steel Case



Dial Size Inches	A	B	C	D	E	F	J	M	S	U	AA	CC	DD	FF	EE	HH	JJ
4½	4 ²³ / ₃₂ (120)	2 ³ / ₁₆ (56)	5 ¹ / ₈ (130)	1 ¹ / ₁₆ (27)	7 ³ / ₃₂ (6)	1 ⁵ / ₈ (141)	1 ¹ / ₁₆ (2)	4 ²⁵ / ₃₂ (121)	7 ¹ / ₁₆ (11)	1 ⁷ / ₁₆ (37)	2 ⁵ / ₈ (67)	#10-32	1 (25)	2¼ (57)	1 ⁵ / ₈ (41)	3 (76)	3½ (89)

NOTE: Dimensions in inches, () are millimeters.

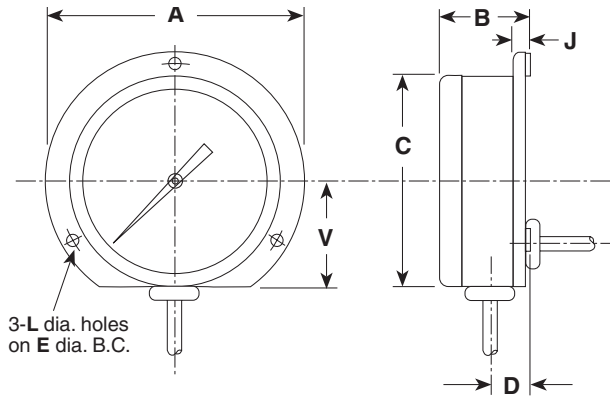
600A-02 Hinged Ring Case



Case Size Inches	A	B	C	E	F	K	M	S	U	CC	LL
4½	4.75 (120.7)	2 ³ / ₁₆ (56)	6.03 (153)	5 ³ / ₈ (137)	1 ⁵ / ₈ (41)	1 ¹ / ₁₆ (27)	4 ⁷ / ₈ (124)	5 ⁸ / ₁₆ (16)	¾ (19)	10-24	1/8 1/2 (3) (13)
6	4.87 (123.7)	2¼ (57)	7.50 (190.5)	7 (178)	2 ¹ / ₈ (54)	1 ¹ / ₁₆ (27)	6½ (165)	5 ⁸ / ₁₆ (16)	¾ (19)	¼-20	1/8 1/2 (3) (13)
8½	4.75 (120.7)	2¼ (57)	9.96 (253)	9 ⁵ / ₈ (244)	2 ¹ / ₈ (54)	1 ¹ / ₁₆ (27)	9 (229)	5 ⁸ / ₁₆ (16)	¾ (19)	¼-20	1/8 1/2 (3) (13)

NOTE: Dimensions in inches, () are millimeters.

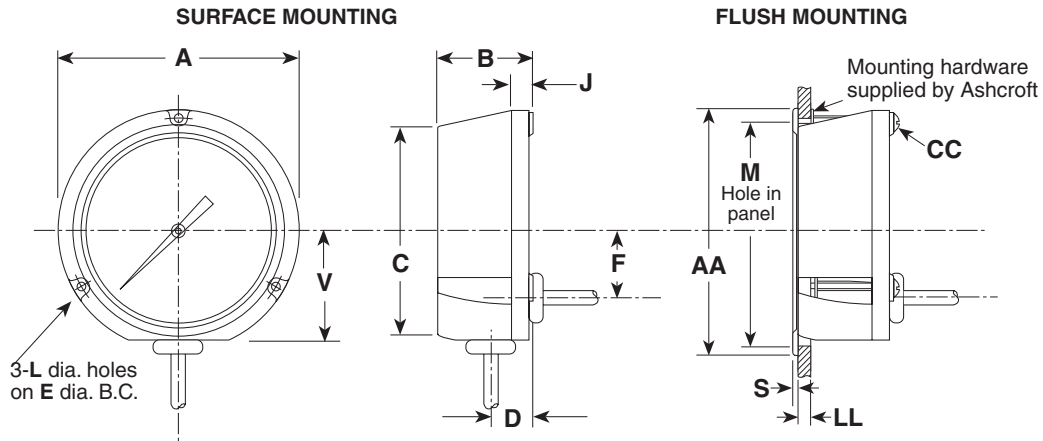
600A-03 Aluminum-Threaded Ring Case



Case Size Inches	A	B	C	D	E	J	L	V
4½	5 13/16 (148)	2 3/8 (57)	5 1/32 (126)	1 7/32 (24)	5 3/8 (137)	5/8 (10)	7/32 (5,5)	2 3/8 (60)
6	7 5/8 (194)	2 1/4 (57)	6 1/2 (165)	1 5/16 (24)	7 (178)	7/16 (11)	9/32 (7)	3 1/8 (79)

APPROXIMATE WEIGHT (LBS.) FOR ALL REMOTE READING DURATEMP THERMOMETERS			
Line Length	Case Size		
	4½"	6"	8½"
5'	1.75	2.55	3.40
10'	2.05	2.85	3.70
20'	2.65	3.45	4.30
30'	3.25	4.05	4.90
50'	4.45	5.25	6.10
80'	6.25	7.05	7.90

600A-04, 600H-45 Phenolic Case



Model	Case Size Inches	A	B	C	D	E	F	J	L	S	V	AA	M	LL	PP
600A-04	4½	5 13/16 (148)	2 5/16 (59)	5 1/16 (129)	1 (25)	5 3/8 (137)	1 5/8 (41)	9/16 (14)	7/32 (5,5)	3/16 (5)	2 5/8 (67)	6 (154)	5 37/64 (148)	1/16 - 1/2 (2)-(13)	#10-24 x 7/8
	6	7 5/8 (194)	2 3/8 (60)	6 5/8 (168)	1 1/16 (27)	7 (178)	2 1/8 (54)	5/8 (16)	9/32 (7)	3/16 (5)	3 1/2 (89)	7 3/4 (197)	7 17/64 (185)	1/16 - 1/2 (2)-(13)	#1/4-20 x 7/8
600H-45	4½	5 13/16 (148)	3 3/8 (86)	5 1/16 (129)	1 5/8 (41)	5 3/8 (137)	—	1 (25)	7/32 (5,5)	3/16 (5)	2 5/8 (67)	6 (154)	5 37/64 (148)	1/16 - 1/2 (2)-(13)	#10-24 x 7/8

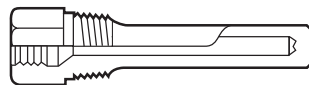
NOTE: Dimensions in inches, () are millimeters.

Consult factory for guidance in product selection
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web site at www.ashcroft.com

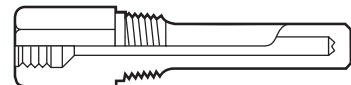
TYPICAL ORDER CODE EXAMPLE (THREADED)

75 Size		W	0750 U-Dimension		Thread	Logging	Shank	T	260 Bore	C	Cap & Chain	Facing	Rating	Special Logging Length
Code	Inches		Code	Inches		Code	Inches	Code	Type	Code	Type		Code	Rating #
50	1/2		0162	1 1/8		-	Without	T	NPT Thd.	AA	Brass		150	150
75	3/4		0250	2 1/2		L	With	W	Weld-in	B	Carbon Steel		300	300
10	1		0450	4 1/2				F	Flanged	C	AISI 304		600	600
12	1 1/4		0750	7 1/2				V	Van Stone	S	AISI 316		1500	1500
15	1 1/2		1050	10 1/2				S	Socket Weld				2500	2500
20	2		1350	13 1/2				M	Limited Space Threaded					
30	3		1650	16 1/2				G	Ground Joint					
40	4		1950	19 1/2				C	Sanitary					
			2250	22 1/2										
						Code	Internal Thread	Code	Shank	Code	Diameter	Code	Facing	
						-	1/2 NPSM	H	Tapered	260	.260"	F	Flat Face	
								S	Straight	385	.385"	R	Raised Face	
								R	Stepped			J	Ring Joint	
								B	Built-up			L	Lap Joint	

Type: Straight (Uniform) Shank, Threaded
Bore Size: .260, .385
Process Conn.: 1/2, 3/4, 1 NPT
Materials: Brass, Carbon Steel
 304 Stainless Steel, 316 Stainless Steel

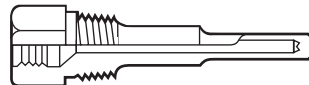


Standard Configuration

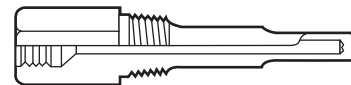


Lagging Configuration

Type: Stepped Shank, Threaded
Bore Size: .260
Process Conn.: 1/2, 3/4, 1 NPT
Materials: Brass, Carbon Steel
 304 Stainless Steel, 316 Stainless Steel



Standard Configuration

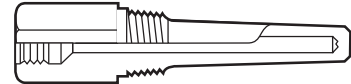


Lagging Configuration

Type: Tapered Shank, Threaded
Bore Size: .260, .385
Process Conn.: 1/2, 3/4, 1 NPT
Materials: Brass, Carbon Steel
 304 Stainless Steel, 316 Stainless Steel

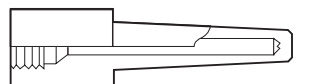


Standard Configuration

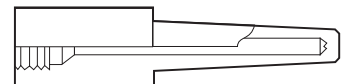


Lagging Configuration

Type: Socket Weld
Bore Size: .260, .385
Process Conn.: 3/4, 1" Pipe Size
Materials: 304 Stainless Steel, 316 Stainless Steel,
 Carbon Steel

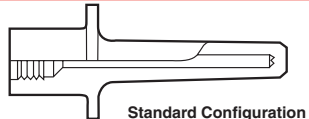


Standard Configuration



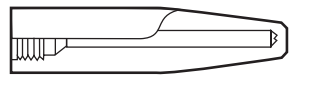
Lagging Configuration

Type: Van Stone
Bore Size: .260, .385
Process Conn.: 1, 1 1/2" Pipe Size
Materials: 304 Stainless Steel, 316 Stainless Steel



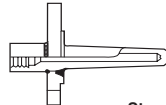
Standard Configuration

Type: Weld-in
Bore Size: .260, .385
Process Conn.: 1 1/2" Dia.
Materials: 304 Stainless Steel, 316 Stainless Steel



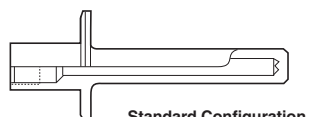
Standard Configuration

Type: Flanged
Bore Size: .260, .385
Process Conn.: 1, 1 1/2, 2" Pipe Size
Materials: 304 Stainless Steel, 316 Stainless Steel



Standard Configuration

Type: Sanitary
Bore Size: .260, .385
Process Conn.: Tri-Clamp connection® 1, 1 1/2, 2"
Materials: 304 Stainless Steel, 316 Stainless Steel



Standard Configuration



Lagging Configuration

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 web site at www.ashcroft.com

DURATEMP AND BIMETAL OPTIONS

Code	Description	Bimetal	Duratemp
XCS ¹	Dual scale	●	●
XDM	Dial marking	●	●
XED ²	High and low electric contacts		●
XEE ²	Double high-electric contacts		●
XEF ²	Double low-electric contacts		●
XEG ²	Electric contacts off at low or high and on in-between		●
XEO	Externally adjustable red set hand		●
XEP	Externally adjustable maximum pointer		●
XEQ	Externally adjustable minimum pointer		●
XNG	Nonglare		●
XNN	Paper tag	●	●
XNH	Stainless steel tag	●	●
XPD ³	Plastic window	●	●
XSG ³	Shatterproof glass	●	●
XSH	Stationary red set hand		●
XTK	Tank car thermometer		●
X3B ⁴	3/8" stem diameter with 1/2 NPT	●	
X02 ⁵	1/4 NPT when 1/2 NPT is standard	●	

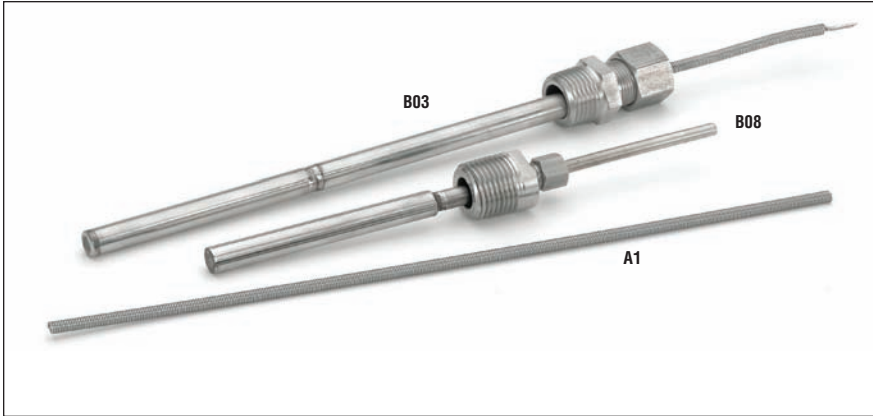
1. 3" and 5" case only.

2. 4 1/2" and 6" – 600A02, 600A03 and 600A04 styles only.

3. Not available on EL liquid filled thermometers. Polycarbonate is the standard window on EL series.

4. Not available on 2" case.

5. Only available on rear connect.



BULB AND ARMOR STYLED – REMOTE MOUNTED

Styles B01, B17 and B18 are bendable extensions with union connections. B01 (12" bendable extension) is the standard Duratemp® bulb style and is suitable for a variety of insertion lengths and lagging requirements. B17 is a 18" bendable extension, B18 is a 24" bendable extension. The union connection on all three styles is pressure tight and can be freely moved the entire length of the bendable portion. After installation, the bendable extension may be formed to suit the application.

Style B03

13" plain bulb for applications used in open tanks where pressures and velocities are negligible.

Style B08

The compression fitting fastens anywhere along the armored line. This bulb style is well suited for insertion requirements in excess of 13½". The B08 style is not a pressure tight connection. A thermowell is recommended for this style and for all bulb styles.

ARMOR STYLE

Style A1

AISI 302 stainless steel spring armor is supplied as standard. Originally designed for U.S. Navy Hi Shock thermometers.



TANK CAR THERMOMETER

Code XTK

Ashcroft's Duratemp® movementless design is well suited for severe vibration and shock applications as seen in railroad tank cars or other rolling stock applications, such as milk, chemical and produce transportation.

The option XTK is available in a 8½" case with a large adjustable pointer and a maximum indicating pointer. The range available is 20/240°F and the dial is marked "Tank Car Thermometer." The maximum indicating pointer illustrates the highest temperature sensed by the thermometer. Case size and pointer size makes the Duratemp easily read from a distance.

