

Features

- Extreme resistance to shock and vibration
- Exclusive movementless design eliminates wear and increases product life
- No head or elevation error due to bulb placement
- Maxivision® dial for precise readings (minimize parallax reading errors)
- Multiple case sizes 4½", 6", 8½" back connection, flush mounted for panel mounting
- Gas-operated molecular sieve

Typical Uses

- Offshore oil rigs
- Chemical and petrochemical plants
- Water and wastewater temperature control
- Pulp and paper
- Refineries
- Power
- General industrial
- Equipment skids
- HVAC
- Pharmaceutical/biotech
- Food and beverage



C-600A-02

41/2", 6", 81/2" dial sizes

Specifications						
Accuracy:	±1% of span					
Sizes:	4½", 6" or 8½"					
Range:	-320 °F/200 °F to 400 °F/1200 °F (-200 °C/100 °C to 200 °C/650 °C)					
Over Range:	125% of span					
Mounting & Connection:	Flush/Rear					
Bulb Size:	3" Long x 3%" 0.D.					
Bulb Style:	12" Bendable extension with ½ NPT union connection Plain bulb with rigid extension no union Plain bulb with rigid extension ½ NPT union on armor 18" Bendable extension with ½ NPT union connection 24" Bendable extension with ½ NPT union connection					
Line Length:	5 ft to 80 ft in standard increments					
Dial:	Maxivision® anti-parallax dial, black markings on a white dial					
Head/Elevation Error:	None					
Hand Set:	Stationary red hand set or externally adjustable red set hand					
Pointer:	Black, aluminum					
Electric Contacts:	High and low, double high, double low, off at low or high and on in-between					

Key Benefits

- Epoxy coated aluminum case
- Hinged ring for easy glass replacement or pointer adjustment
- Extremely versatile for use on many applications
- 5-year limited warranty
- Ideal for extreme process temperature

tem								
Armor Material		Capillary Material		Connection Material				
AISI 302 Spring armor		316 Stainless steel		303 Stainless steel				
Non-Wetted Components								
Window			Case					
Glass, Safety glass, Acrylic			Aluminum hinged ring					
Temperature Limits								
Version				ent				
Dry			-13 °F (-25 °C) to 160 °F (71 °C)					
	Armor Ma AISI 302 S armo Compo	Armor Material AISI 302 Spring armor Components s, Temperation	Armor Material AISI 302 Spring armor Components Case Aluminum Temperature Limits A Armor Material Capillary Material 316 Stainless steel Case	Armor Material AISI 302 Spring armor Components Case S, Aluminum Aluman Aluman Ambies Capillary Material 316 Stainless steel Case Aluminum Aluman Aluman Aluman Ambies Ambies				



Case Style C-600A-02-C12 - 4½" Case size, aluminum hinged ring, flush mount, rear connection C-600A-02-C17 - 6" Case size, aluminum hinged ring, flush mount, rear connection C-600A-02-C27 - 6" Case size, aluminum hinged ring, flush mount, rear conne Bulb Style (Note 1) Bulb Style (Note 1) B01 - 12" Bendable extension with ½ NPT union connection B08- Plain bulb with rigid extension, no union B08- Plain bulb with rigid extension, in ounion B08- Plain bulb with rigid extension with ½ NPT union connection B18 - 24" Bendable extension with ½ NPT union connection B18 - 24" Bendable extension with ½ NPT union connection B18 - 25" Bendable extension with ½ NPT union connection	Ordering Code	Example:	C-600A-02-C12	B01	A 1	L01	AB	XSG
C-600A-02-C27 - 6" Case size, aluminum hinged ring, flush mount, rear connection C-600A-02-C35 - 8% Case size, aluminum hinged ring, flush mount, rear conn Bub Style (Note 1) B01 - 12" Bendable extension with ½ NPT union connection B03 - Plain bulb with rigid extension, no union B03 - Plain bulb with rigid extension, no union B05 - Plain bulb with rigid extension, ½ NPT union connection B18 - 24" Bendable extension with ½ NPT union connection B18 - 24" Bendable extension with ½ NPT union connection B18 - 24" Bendable extension with ½ NPT union connection B18 - 24" Bendable extension with ½ NPT union connection B18 - 25" Bendable extension with ½ NPT union connection B18	Case Style	·						
C-600A-02-C35 - 8% Case size, aluminum hinged ring, flush mount, rear conn Bulb Style (Note 1) B01 - 12' Bendable extension with ½ NPT union connection B03 - Plain bulb with rigid extension, no union B03 - Plain bulb with rigid extension, ½ NPT union on armor (Not available with A3 armor style) B17 - 18' Bendable extension with ½ NPT union connection B18 - 24' Bendable extension with ½ NPT union connection B18 - 24' Bendable extension with ½ NPT union connection Armor Style A1 - Stainless steel interlock A3 - PVC coated stainless steel interlock L01 - 5' L01 - 5' L07 - 20' L29 - 25' L09 - 30' L30 - 36' L11 - 40' L33 - 45' L13 - 50' L15 - 60' L15 - 60' L15 - 60' L19 - 80' Ranges (See table below for range codes) A3 - 320 'F/200 'F AB Options (if choosing an option(s) must include an "X") M - Dial marking E0 - Externally adjustable red set hand EP - Externally adjustable maximum pointer RN - Stainless steel tag PD - Acrylic window SG - Safety glass	C-600A-02-C12 - 41/2" Case size, aluminum hinged ring, flush mount, r	ear connection	C-600A-02-C12					
Bulb Style (Note 1) B01 - 12" Bendable extension with ½ NPT union connection B03 - Plain bulb with rigid extension, no union B06 - Plain bulb with rigid extension, w. NPT union connection B17 - 18" Bendable extension with ½ NPT union connection B17 - 18" Bendable extension with ½ NPT union connection B18 - 24" Bendable extension with ½ NPT union connection Armor Style A1 - Stainless steel spring A1 - Stainless steel interlock A3 - PVC coated stainless steel interlock Line Length (Capillary length is measured from bottom of case to top of bulb extension) L01 - 5' L03 - 10' L05 - 15' L07 - 20' L29 - 25' L09 - 30' L30 - 35' L11 - 40' L15 - 60' L19 - 80' Ranges (See table below for range codes) A8 320 * F/200 * F A8 - 320 * F/200 * F A8 - 320 * F/200 * F A8 - 320 * F/200 * F A9 - Stainless steel tag PD - Actylic window S6 - Safety glass S6	C-600A-02-C27 - 6" Case size, aluminum hinged ring, flush mount, re	ear connection						
B01 - 12" Bendable extension with ½ NPT union connection	C-600A-02-C35 - 8½" Case size, aluminum hinged ring, flush mount,	, rear conn						
B03 - Plain bulb with rigid extension, no union B08 - Plain bulb with rigid extension, ½ NPT union on armor (Not available with A3 armor style) B17 - 18' Bendable extension with ½ NPT union connection B18 - 24' Bendable extension with ½ NPT union connection Armor Style	Bulb Style (Note 1)							
B08 - Plain bulb with rigid extension, ½ NPT union on armor (Not available with A3 armor style) B17 - 18' Bendable extension with ½ NPT union connection B18 - 24' Bendable extension with ½ NPT union connection Armor Style A1 - Stainless steel spring A1 - Stainless steel spring A1 - Stainless steel interlock A3 - PVC coated stainless steel interlock Line Length (Capillary length is measured from bottom of case to top of bulb extension) L01 - 5' L07 - 20' L09 - 25' L09 - 25' L09 - 30' L19 - 30' L11 - 40' L13 - 50' L15 - 60' L19 - 80' Ranges (See table below for range codes) AB320' F/Z00 °F AB Options (If choosing an option(s) must include an "X") X DM - Dial marking EP - Externally adjustable maximum pointer EQ - Externally adjustable maximum pointer NH - Stainless steel tag PD - Acrylic window SG - Safety glass SG	B01 - 12" Bendable extension with ½ NPT union connection			B01				
B17 - 18" Bendable extension with ½ NPT union connection B18 - 24" Bendable extension with ½ NPT union connection Armor Style	B03 - Plain bulb with rigid extension, no union							
B18 - 24" Bendable extension with 1/6 NPT union connection Armor Style	B08 - Plain bulb with rigid extension, ½ NPT union on armor (Not ava	ailable with A3 armo	r style)					
Armor Style A1 - Stainless steel spring A1 - Stainless steel interlock A3 - PVC coated stainless steel interlock Line Length (Capillary length is measured from bottom of case to top of bulb extension) L01 - 5' L03 - 10' L03 - 10' L03 - 15' L07 - 20' L29 - 25' L09 - 30' L30 - 35' L11 - 40' L13 - 50' L11 - 80' L13 - 80' L19 - 80' Ranges (See table below for range codes) AB320' F/200 °F AB320' F/20	B17 - 18" Bendable extension with 1/2 NPT union connection							
A1 - Stainless steel spring A1 A2 - Stainless steel interlock A3 - PVC coated stainless steel interlock Line Length (Capillary length is measured from bottom of case to top of bulb extension) L01 - 5' L01 - 15' L07 - 20' L29 - 25' L09 - 30' L29 - 35' L11 - 40' L13 - 50' L13 - 50' L15 - 60' L15 - 60' L19 - 80' Ranges (See table below for range codes) AB320 °F/200 °F AB Options (if choosing an option(s) must include an "X") M - Dial marking EO - Externally adjustable maximum pointer EP - Externally adjustable minimum pointer EP - Externally adjustable minimum pointer SG - Safety glass SG	B18 - 24" Bendable extension with ½ NPT union connection							
A2 - Stainless steel interlock A3 - PVC coated stainless steel interlock Line Length (Capillary length is measured from bottom of case to top of bulb extension) L01 - 5° L01 L03 - 10° L05 - 15° L07 - 20° L29 - 25° L30 - 30° L30 - 35° L11 - 40° L53 - 45° L11 - 40° L15 - 60° L19 - 80° Ranges (See table below for range codes) AB - 320 °F/200 °F AB Options (If choosing an option(s) must include an "X") DM - Dial marking EO - Externally adjustable maximum pointer EP - Externally adjustable maximum pointer EP - Externally adjustable maximum pointer EN - Stainless steel tag PD - Acrylic window SG - Safety glass SG Safety glass	Armor Style							
A3 - PVC coated stainless steel interlock Line Length (Capillary length is measured from bottom of case to top of bulb extension) L01 - 5' L01 L03 - 10' L05 - 15' L07 - 20' L29 - 25' L09 - 30' L30 - 35' L11 - 40' L53 - 45' L13 - 50' L19 - 80' Ranges (See table below for range codes) AB - 320 'F/200 'F AB Options (if choosing an option(s) must include an "X") DM - Dial marking EO - Externally adjustable maximum pointer EP - Externally adjustable maximum pointer EQ - Externally adjustable minimum pointer EQ - Externally adjustable minimum pointer PD - Acrylic window SG - Safety glass SG	A1 - Stainless steel spring				A1			
Line Length (Capillary length is measured from bottom of case to top of bulb extension) L01 L03 - 10° L01 L05 - 15° L07 L07 - 20° L29 - 25° L09 - 30° L30 - 35° L11 - 40° L53 - 45° L13 - 50° L15 - 60° L19 - 80° Ranges (See table below for range codes) AB - 320° F/200° F AB Options (if choosing an option(s) must include an "X") X DM - Dial marking EO - Externally adjustable red set hand EP - Externally adjustable maximum pointer EP - Externally adjustable maximum pointer NH - Stainless steel tag PD - Acrylic window SG - Safety glass SG	A2 - Stainless steel interlock							
L01 - 5' L01 L03 - 10' L05 - 15' L07 - 20' L29 - 25' L09 - 30' L30 - 35' L11 - 40' L53 - 45' L13 - 50' L15 - 60' L19 - 80' Ranges (See table below for range codes) AB320 °F/200 °F AB Options (If choosing an option(s) must include an "X") DM - Dial marking EO - Externally adjustable red set hand EP - Externally adjustable maximum pointer EQ - Externally adjustable minimum pointer NH - Stainless steel tag PD - Acrylic window SG - Safety glass SG	A3 - PVC coated stainless steel interlock							
L03 - 10" L05 - 15" L07 - 20" L29 - 25" L09 - 30" L30 - 35" L11 - 40" L53 - 45" L13 - 50" L15 - 60" L19 - 80" Ranges (See table below for range codes) AB 320 "F/200 °F AB Options (If choosing an option(s) must include an "X") DM - Dial marking EO - Externally adjustable red set hand EP - Externally adjustable maximum pointer EQ - Externally adjustable minimum pointer NH - Stainless steel tag PD - Acrylic window SG - Safety glass SG	Line Length (Capillary length is measured from bottom of case to to	p of bulb extension)						
L05 - 15' L07 - 20' L29 - 25' L09 - 30' L30 - 35' L11 - 40' L53 - 45' L13 - 50' L19 - 80' Ranges (See table below for range codes) AB - 320 °F/200 °F AB Options (If choosing an option(s) must include an "X") DM - Dial marking EO - Externally adjustable maximum pointer EO - Externally adjustable minimum pointer EO - Externally adjustable minimum pointer NH - Stainless steel tag PD - Acrylic window SG - Safety glass SG	L01 - 5'					L01		
L07 - 20' L29 - 25' L09 - 30' L30 - 35' L11 - 40' L53 - 45' L13 - 50' L19 - 80' Ranges (See table below for range codes) AB320 °F/200 °F AB Options (If choosing an option(s) must include an "X") DM - Dial marking EO - Externally adjustable maximum pointer EO - Externally adjustable minimum pointer EO - Externally adjustable minimum pointer SG - Safety glass SG	L03 - 10′							
L29 - 25' L09 - 30' L30 - 35' L11 - 40' L53 - 45' L13 - 50' L19 - 80' Ranges (See table below for range codes) AB - 320 °F/200 °F AB Options (if choosing an option(s) must include an "X") X DM - Dial marking EO - Externally adjustable maximum pointer EQ - Externally adjustable minimum pointer EQ - Externally adjustable minimum pointer NH - Stainless steel tag PD - Acrylic window SG - Safety glass SG	L05 - 15′							
L09 - 30' L30 - 35' L11 - 40' L53 - 45' L13 - 50' L15 - 60' L19 - 80' Ranges (See table below for range codes) AB - 320 °F/200 °F AB Options (If choosing an option(s) must include an "X") DM - Dial marking EO - Externally adjustable red set hand EP - Externally adjustable maximum pointer EQ - Externally adjustable minimum pointer NH - Stainless steel tag PD - Acrylic window SG - Safety glass SG	L07 - 20′							
L10 - 35' L11 - 40' L53 - 45' L13 - 50' L15 - 60' L19 - 80' Ranges (See table below for range codes) AB320 °F/200 °F AB Options (If choosing an option(s) must include an "X") DM - Dial marking EO - Externally adjustable red set hand EP - Externally adjustable maximum pointer EQ - Externally adjustable minimum pointer NH - Stainless steel tag PD - Acrylic window SG - Safety glass SG	L29 - 25′							
L11 - 40' L53 - 45' L13 - 50' L15 - 60' L19 - 80' Ranges (See table below for range codes) AB320 °F/200 °F AB Options (If choosing an option(s) must include an "X") DM - Dial marking EO - Externally adjustable red set hand EP - Externally adjustable maximum pointer EQ - Externally adjustable minimum pointer NH - Stainless steel tag PD - Acrylic window SG - Safety glass SG	L09 - 30′							
L53 - 45' L13 - 50' L15 - 60' L19 - 80' Ranges (See table below for range codes) AB - 320 °F/200 °F Options (If choosing an option(s) must include an "X") DM - Dial marking EO - Externally adjustable red set hand EP - Externally adjustable maximum pointer EQ - Externally adjustable minimum pointer NH - Stainless steel tag PD - Acrylic window SG - Safety glass SG	L30 - 35′							
L13 - 50′ L15 - 60′ L19 - 80′ Ranges (See table below for range codes) AB320 °F/200 °F Options (If choosing an option(s) must include an "X") DM - Dial marking EO - Externally adjustable red set hand EP - Externally adjustable maximum pointer EQ - Externally adjustable minimum pointer NH - Stainless steel tag PD - Acrylic window SG - Safety glass	L11 - 40′							
L15 - 60' L19 - 80' Ranges (See table below for range codes) AB320 °F/200 °F Options (If choosing an option(s) must include an "X") DM - Dial marking EO - Externally adjustable red set hand EP - Externally adjustable maximum pointer EQ - Externally adjustable minimum pointer NH - Stainless steel tag PD - Acrylic window SG - Safety glass SG	L53 - 45′							
L19 - 80' Ranges (See table below for range codes) AB320 °F/200 °F Options (If choosing an option(s) must include an "X") DM - Dial marking EO - Externally adjustable red set hand EP - Externally adjustable maximum pointer EQ - Externally adjustable minimum pointer NH - Stainless steel tag PD - Acrylic window SG - Safety glass SG	L13 - 50′							
Ranges (See table below for range codes) AB320 °F/200 °F Options (If choosing an option(s) must include an "X") DM - Dial marking EO - Externally adjustable red set hand EP - Externally adjustable maximum pointer EQ - Externally adjustable minimum pointer NH - Stainless steel tag PD - Acrylic window SG - Safety glass SG	L15 - 60′							
AB320 °F/200 °F Options (If choosing an option(s) must include an "X") DM - Dial marking EO - Externally adjustable red set hand EP - Externally adjustable maximum pointer EQ - Externally adjustable minimum pointer NH - Stainless steel tag PD - Acrylic window SG - Safety glass AB X	L19 - 80′							
Options (If choosing an option(s) must include an "X") DM - Dial marking EO - Externally adjustable red set hand EP - Externally adjustable maximum pointer EQ - Externally adjustable minimum pointer NH - Stainless steel tag PD - Acrylic window SG - Safety glass SG	Ranges (See table below for range codes)							
DM - Dial marking EO - Externally adjustable red set hand EP - Externally adjustable maximum pointer EQ - Externally adjustable minimum pointer NH - Stainless steel tag PD - Acrylic window SG - Safety glass SG	AB320 °F/200 °F						AB	
EO - Externally adjustable red set hand EP - Externally adjustable maximum pointer EQ - Externally adjustable minimum pointer NH - Stainless steel tag PD - Acrylic window SG - Safety glass SG	Options (If choosing an option(s) must include an "X")							X
EP - Externally adjustable maximum pointer EQ - Externally adjustable minimum pointer NH - Stainless steel tag PD - Acrylic window SG - Safety glass SG	DM - Dial marking							
EQ - Externally adjustable minimum pointer NH - Stainless steel tag PD - Acrylic window SG - Safety glass SG	EO - Externally adjustable red set hand							
NH - Stainless steel tag PD - Acrylic window SG - Safety glass SG	EP - Externally adjustable maximum pointer							
PD - Acrylic window SG - Safety glass SG	EQ - Externally adjustable minimum pointer							
SG - Safety glass SG	NH - Stainless steel tag							
	PD - Acrylic window							
	SG - Safety glass							SG
	SH - Stationary red set hand							

NOTES

- 1. Minimum recommended insertion length ("u" dimension) in liquids is 4 inches and in gases is 6 inches for standard 3%" \times 3" bulb.
- 2. Thermowells must be used on any application where the bulb of the thermometer may be exposed to pressure, corrosive fluids, or velocity. Additionally, the use of a thermowell permits instrument interchangeability or recalibration without shutting down the process.



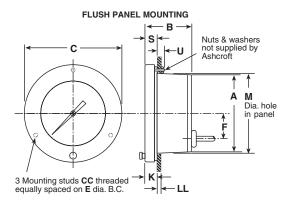
Tem	Temperature Ranges								
	Single	Rang	е		Dual Range				
Ra	ange Code °F	Ra	inge Code °C		Range Code				
AA	-320 °F/300 °F	AY	-200 °C/100 °C	DP	-80 °C/40 °C and -100 °F/100 °F				
AB	-320 °F/200 °F	AX	-200 °C/40 °C	DT	-40 °C/80 °C and -40 °F/180 °F				
AC	-320 °F/100 °F	AZ	-200 °C/150 °C	CF	0 °C/300 °C and 50 °F/550 °F				
AD	-200 °F/100 °F	BE	-120 °C/40 °C	DK	0 °C/200 °C and 50 °F/400 °F				
AE	-100 °F/100 °F	BL	-80 °C/40 °C	CE	0 °C/120 °C and 20 °F/240 °F				
AF	-100 °F/200 °F	BM	-80 °C/100 °C	DR	10 °C/150 °C and 50 °F/300 °F				
AG	-40 °F/180 °F	DA	-40 °C/160 °C						
CN	-20 °F/300 °F	BN	-40 °C/80 °C						
АН	-20 °F/120 °F	DS	-30 °C/150 °C						
AM	50 °F/400 °F	BP	-30 °C/50 °C						
AR	50 °F/750 °F	DB	-10 °C/110 °C						
AJ	20 °F/160 °F	BR	-10 °C/70 °C						
AK	20 °F/240 °F	BW	0 °C/400 °C						
AL	50 °F/300 °F	BU	0 °C/300 °C						
AN	50 °F/550 °F	ВҮ	0 °C/200 °C						
AT	400 °F/1200 °F	BS	0 °C/120 °C						
		BT	10 °C/150 °C						
		BJ	200 °C/650 °C						

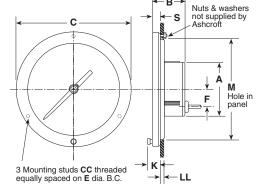


Dimensions in [] are millimeters

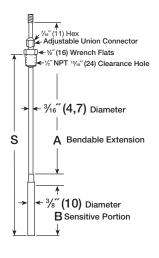
For reference only, consult Ashcroft for specific dimensional drawings

Dial Size Inches	A	В	С	СС	E	F	K	M	LL	S	U
41/2	4.75 [120.7]	2.19 [56]	6.03 [153]	10-24	5.38 [137]	1.63 [41]	1.06 [27]	4.88 [124]	0.13 0.5 [3] [13]	0.63 [16]	0.75 [16]
6	4.88 [123.7]	2.25 [57]	7.5 [190.5]	0.25 - 20	7 [178]	2.13 [54]	1.06 [27]	6.5 [165]	0.13 0.5 [3] [13]	0.63 [16]	0.75 [16]
81/2	4.75 [120.7]	2.25 [57]	9.97 [352]	0.25 -20	9.63 [244]	2.13 [54]	1.06 [27]	9 [229]	0.13 0.5 [3] [13]	0.63 [16]	0.75 [16]





Bulb Style B01, B17 & B18



The 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.

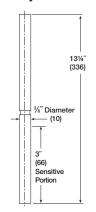
After installation, the bendable extension may be formed to suit the application.

Armor Style A1

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

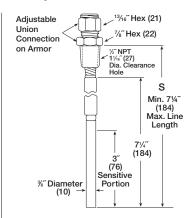
Bulb Code	Bulb Size B	Α	S Max.	S Min.
B01	3	12	15	4
	[76]	[305]	[381]	[102]
B17	3	18	21	4
	[76]	[457]	[533]	[102]
B18	3	24	27	4
	[76]	[610]	[686]	[102]

Bulb Style B03



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

Bulb 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.