

Series 716 Panel Mounting



CODE	CATALOG NO.	DESCRIPTION				
I	15	CASE SIZE 1-1/2" Case				
	20	2" Case				
	25	2-1/2" Case				
	35	3-1/2" Case				
II	F	CASE TYPE Front Flange Flush Mount, 2, 2-1/2"				
	U	U-Clamp Flush Mount, 1-1/2, 2, 2-1/2"				
	B	Back Flange Surface Mount, 2, 2-1/2"				
	S	Front Flange Semi-Flush Mount, 3-1/2"				
	J	U-Clamp Semi-Flush Mount, 3-1/2"				
	Q	U-Clamp Flush Mount, 3-1/2"				
III	B	CASE CONNECTION Back Connection - Standard				
	L	Lower Connection				
IV	3	CASE FRONT AND WINDOW Molded one-piece Lexan				
	4	Stainless Steel Ring & Glass				
	5	Chrome Plated Brass, Glass				
	8	Crimped Ring, S.S., Plastic or Glass - Waterproof				
	9	Threaded one-piece Lexan				
V	1 2 3 4 5 6 7 8 9	THERMAL SYSTEM				
		Bulb Type	Bulb Material	Capillary Material	Capillary Protection	
		Plain	Copper	Copper	None	
		Plain	Copper	Copper	Cu. Braid	
		Plain	316 S.S.	316 S.S.	None	
		Union	Copper	Copper	None*	
		Union	Copper	Copper	Cu. Braid	
		Union	316 S.S.	Copper	None	
		Union	316 S.S.	Copper	Cu. Braid	
		Union	316 S.S.	316 S.S.	Intlock Armor*	
Union	316 S.S.	316 S.S.	None			
*At bulb end 31/2" long. All systems have S.S. Spring capillary protection at indicating head. No. 5-7 system include S.S. spring at bulb end - S.S. jam nut standard on No. 8-9 system.						
VI	0 1 2 3 4 6 7	BULB SELECTION				
		Thermal System No. 4 Thru 9 (Union)	Thermal System No. 1 - 3 (Plain)	Max. System Len.		
		Dia.	Length	Dia.	Length	
		7/16	1.87"	N.A.	N.A.	10Ft.
		7/16	2.5"	N.A.	N.A.	10Ft.
		7/16	3.4"	3/8	3.4	25Ft.
		7/16	5.4"	3/8	4.9	50Ft.
		7/16	7.4"	3/8	7.9	99Ft.
N.A.	N.A.	3/8	2.5	05Ft.		
N.A.	N.A.	5/16	2.5	10Ft.		
*Bulb lengths are standard for system lengths shown. Longer standard bulbs can be applied to any shorter system length. The bulb length shown is for comparative purposes, relating system length to bulb length. See Bulb Chart on Page 4 for Dim.						

SPECIFICATIONS

CASE & RING - drawn stainless steel case with snap-in "O" ring gasketed clear lexan or glass window.

DIAL - white coated aluminum with black markings.

POINTER - slotted adjustable type which permits "zero set" calibration.

BOURDON TUBE - precision geared brass movement and phosphor bronze tube.

THERMAL SYSTEMS - available in nine standard types, with system lengths from 6 inches thru 100 feet. Materials for the case and ring assembly are as shown in the Coding Charts.

PROCESS CONN. FITTING - separable socket, union or air duct flange connections.

ACCURACY - one scale division throughout range. Built with NSF accuracy and compliance, see our complete listing at www.nsf.org.

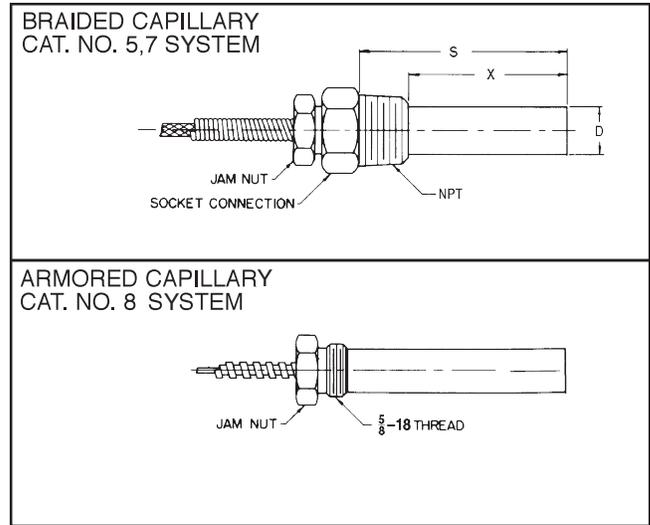
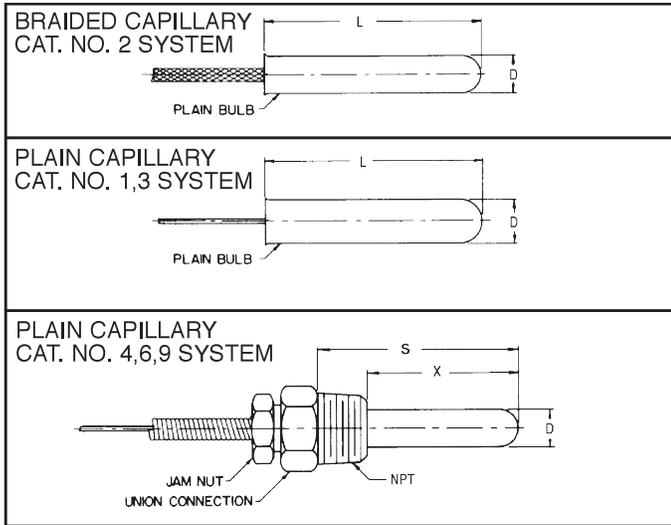
VII	1 2 3 4 7 9	PROCESS CONNECTION FITTING
		Union Connection 1/2" NPT
		Union Connection 3/4" NPT
		Separable Socket 1/2" NPT
		Separable Socket 3/4" NPT
		Air Duct Flange, Union Conn., Aluminum only Plain bulb, no fitting
VIII	1 2 3 5 0	PROCESS CONNECTION MATERIAL
		Brass
		304 Stainless Steel
		316 Stainless Steel
		Aluminum (Air Duct Flange only) None - Plain Bulb
IX A-B	See Example Below	SYSTEM LENGTH SPECIFYING
		9A - Use 2 digits: EX. 05, 10, 99 for length required. 9B - Use FT for feet, use IN for inches
IX C		SYSTEM TIN PLATING (IF REQUIRED)
		9C - Use TIN (No. 1, 4 & 5 Thermal System*) NOTE: All other system plating consult factory. *Should be specified for Foodservice Equipment Thermometers

EXAMPLE FOR OBTAINING COMPLETE CATALOG NUMBER FROM CODES - SERIES 716

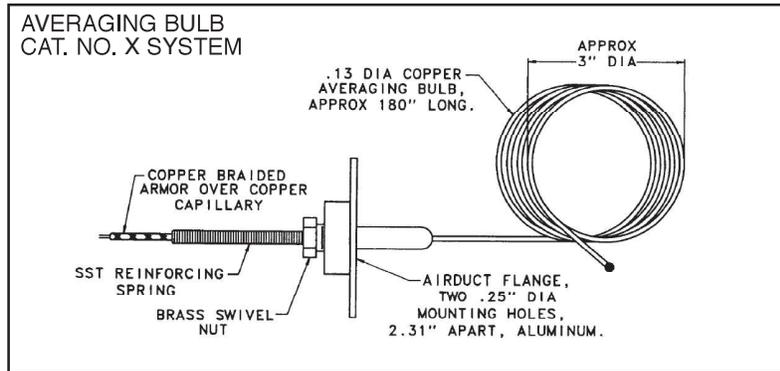
CODE I-IV (HEAD ASSY)	CODE V-VIII (THERMAL SYSTEM)	CODE IX A - B (CAPILLARY LENGTH)
20FB3	1690	05FT
CODE IX C		RANGE
---		40-0-60 F&C

Thermal Systems

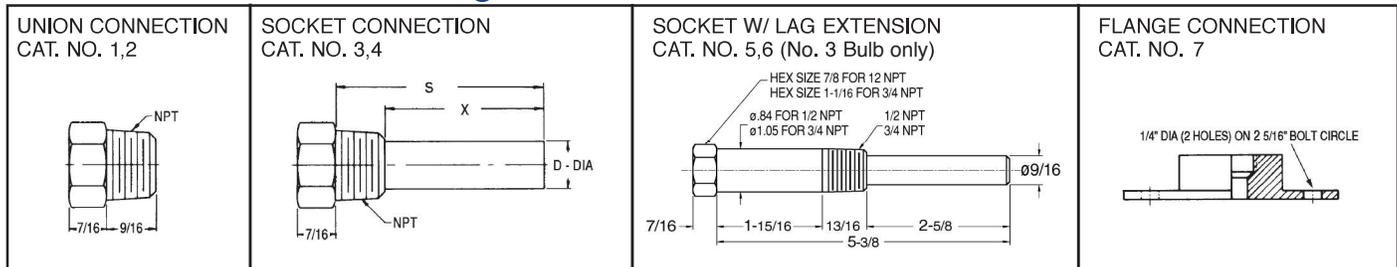
Code V



Code VI



Process Connection Fittings - Code VII

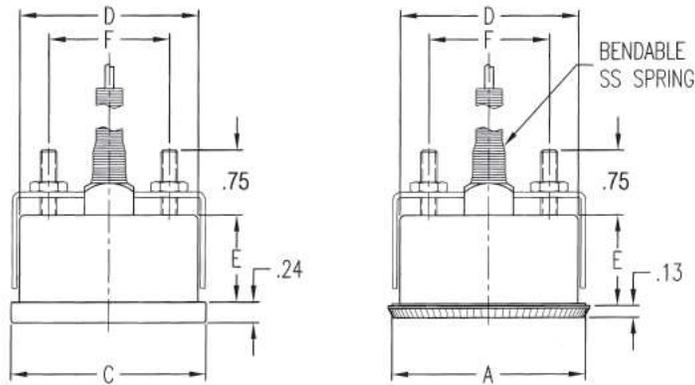


Bulb Dimensions

BULB NO. (CODE VI)	PLAIN CONNECTION		UNION CONNECTION			SOCKET CONNECTION			FLANGE CONNECTION	
	L	D	X	S	D	X	S	D	X	D
0	N/A	N/A	1	1 7/8	7/16	N/A	N/A	N/A	N/A	N/A
1	N/A	N/A	1 13/16	2 3/8	7/16	1 15/16	2 1/2	9/16	2 3/16	7/16
2	3 7/16	3/8	2 5/8	3 3/8	7/16	2 5/8	3 3/8	9/16	3	7/16
3	4 7/8	3/8	4 5/8	5 3/8	7/16	4 5/8	5 3/8	9/16	5	7/16
4	7 7/8	3/8	6 5/8	7 3/8	7/16	6 5/8	7 3/8	9/16	7	7/16
5	9 7/16	3/8	8 5/8	9 3/8	7/16	8 5/8	9 3/8	9/16	9	7/16
6	2 1/2	3/8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
7	3	5/16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

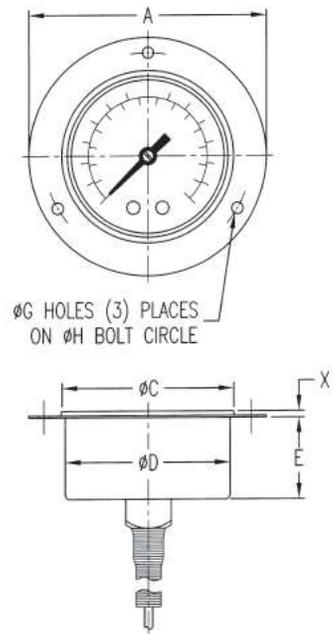
Series 716 Dimensions

Series 716 - U-Clamp Case Styles

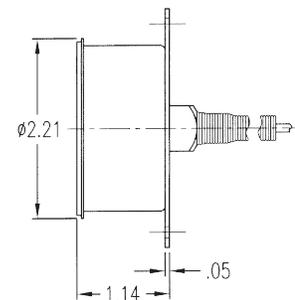


NOTE: CUSTOMER PANEL THICKNESS FOR MOUNTING FROM .03" TO .63".

Front Flange Style



Back Flange Style



Case Dimensions

CASE SIZE	CASE TYPE	CODE I	FLGE DIA. A	RING O.D. C	PANEL HOLE B	DIA. D	E	F	G	H	X CASE FRONT CODE IV		
											4	3	5
1-1/2"	U-CLAMP	15U	1-13/16	—	1-5/8	1-19/32	7/8	1-1/16	—	—	—	—	—
2"	U-CLAMP	20U	2-7/32	2-11/16	2-1/16	2-1/32	31/32	1-3/8	—	—	3/16	3/32	—
2"	FRONT FLGE	20F	2-15/16	2-11/64	2-1/16	2-1/32	31/32	—	9/64	2-9/16	3/16	3/32	—
2-1/2"	U-CLAMP	25U	2-13/16	2-7/8	2-39/64	2-9/16	1	2	—	—	3/16	1/4	—
2-1/2"	FRONT FLGE	25F	3-11/16	2-7/8	2-39/64	2-9/16	1	—	11/64	3-5/16	3/16	1/4	—
2-1/2"	FRONT FLGE	25S	3-11/16	2-7/8	2-21/32	2-41/64	3/4	—	7/32	3-5/16	3/8	—	—
3-1/2"	FRONT FLGE	35S	4-3/4	3-31/32	3-5/8	3-19/32	3/4	—	5/32	4-5/16	7/16	—	—
3-1/2"	U-CLAMP	35J	3-31/32	3-31/32	3-5/8	3-19/32	3/4	3-1/16	—	—	7/16	—	—
3-1/2"	U-CLAMP	35Q	3-7/8	3-29/32	3-5/8	3-19/32	1	3-1/16	—	—	—	—	1/8

Series **VTVA & VTR** Direct Mount & Remote Reading



35VA - Vari-angle® Direct Mount



CODE	CATALOG NO.	DESCRIPTION			
I	35	CASE SIZE 3 1/2" Case			
	45	4 1/2" Case			
II	V	Vari-angle® Direct Mount			
	B	Back Flange, Surface Mount			
	R	Semi-flush, Panel Mount			
	Z	Adjustable Bracket, Remote Mount			
III	A	CASE CONNECTION Adjustable			
	B	Back Connection			
	L	Lower Connection			
IV	3	CASE WINDOW Snap in Lexan with "O" Ring			
V	0	THERMAL SYSTEM Union Copper (Vari-angle only)			
	2	Plain Copper Copper Cu. Braid			
	3	Plain 316 S.S. 316 S.S. None			
	5	Union Copper Copper Cu. Braid			
	7	Union 316 S.S. Copper Cu. Braid			
	8	Union 316 S.S. 316 S.S. Intlock Armor*			
	9	Union 316 S.S. 316 S.S. None			
	*At bulb end 3 1/2" long. All systems have S.S. Spring capillary protection at indicating head. No. 5-7 system include S.S. spring at bulb end - S.S. jam nut standard on No. 8-9 system.				
	VI	BULB SELECTION			
Thermal System No. 5 Thru 9 (Union)		Thermal System No. 2 & 3 (Plain)	Max. System Len.		
Dia.		Length	Dia.	Length	
1		7/16 2.5"	N.A. N.A.	10Ft.	
2		7/16 3.4"	3/8 3.4	25Ft.	
3		7/16 5.4"	3/8 4.9	50Ft.	
4		7/16 7.4"	3/8 7.9	99Ft.	
5	7/16 9.4"	3/8 9.4	99Ft.		
X	1/8" x 180" Averaging Bulb		10Ft.		
6	N.A. N.A.	3/8 2.5	05Ft.		

SPECIFICATIONS

CASE & RING - drawn stainless steel case with snap-in "O" ring gasketed clear lexan window.

CASE STYLES - five case styles are available (as shown) to accommodate direct mount, surface or panel mounting.

DIAL - white coated aluminum with black markings.

POINTER - slotted adjustable type.

BOURDON TUBE - phosphor bronze.

THERMAL BULB & LINE ASSEMBLY - copper or 316 stainless steel.

PROCESS CONN. FITTING - separable socket, union or air duct flange connections.

ACCURACY - one scale division throughout range.

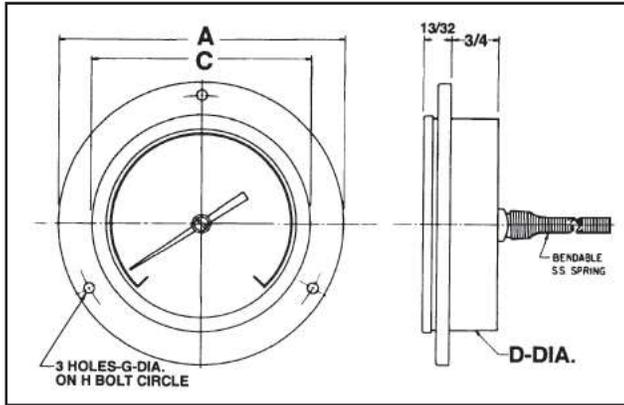
VII		PROCESS CONNECTION FITTING
	1	Union Connection 1/2" NPT
	2	Union Connection 3/4" NPT
	3	Separable Socket 1/2" NPT
	4	Separable Socket 3/4" NPT
	5	Separable Socket 1/2" NPT with 2" Lag Extension (No.3 Bulb only)
	6	Separable Socket 3/4" NPT with 2" Lag Extension (No.3 Bulb only)
	7	Air Duct Flange, Union Conn., Aluminum only
	9	Plain bulb, no fitting
VIII		PROCESS CONNECTION MATERIAL
	1	Brass
	2	304 Stainless Steel
	3	316 Stainless Steel
	5	Aluminum (Air Duct Flange only)
	0	None - Plain Bulb
IX	See Example Below	SYSTEM LENGTH SPECIFYING
	A-B	9A - Use 2 digits: EX. 05, 10, 99 for length required. 9B - Use FT for feet, use IN for inches

EXAMPLE FOR OBTAINING COMPLETE CATALOG NUMBER FROM CODES - SERIES VTVA & VTR

CODE I-IV (HEAD ASSY)	—	CODE V-VIII (THERMAL SYSTEM)	—	CODE IX A - B (CAPILLARY LENGTH)
4 5 B L 3		5 2 3 1		0 5 F T
RANGE				
40-240 F				

Series VTVA & VTR Dimensions

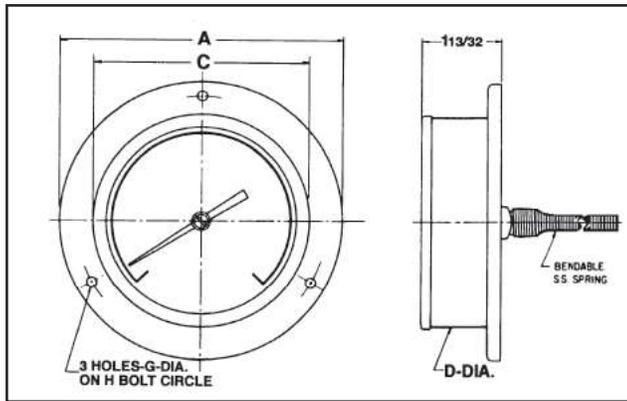
RB Case - Semi Flush Panel Mount



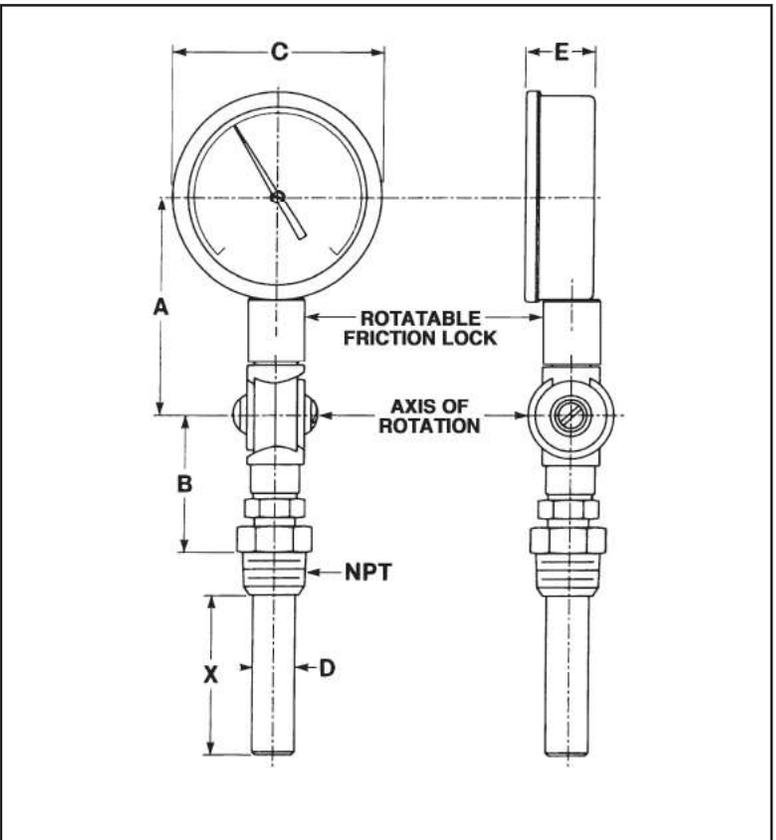
Series VTR Dimensions

DIAL SIZE	A	C	D	E	G	H	*PANEL HOLE
3 1/2"	4 3/4	3 11/16	3 19/32	1 1/4	5/32	4 5/16	3 5/8
4 1/2"	5 7/8	4 11/16	4 19/32	1 1/4	7/32	5 3/8	4 5/8

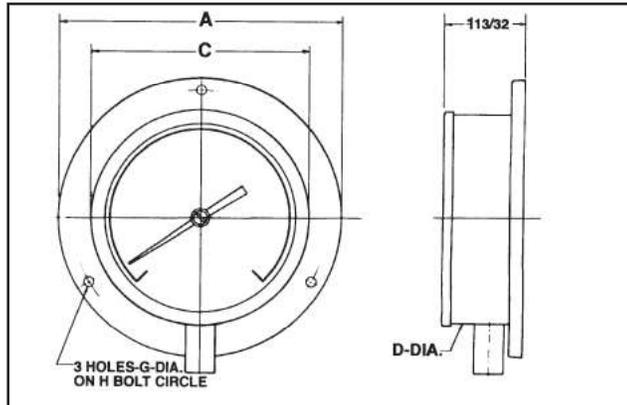
BB Case - Surface Mounted Back Connected



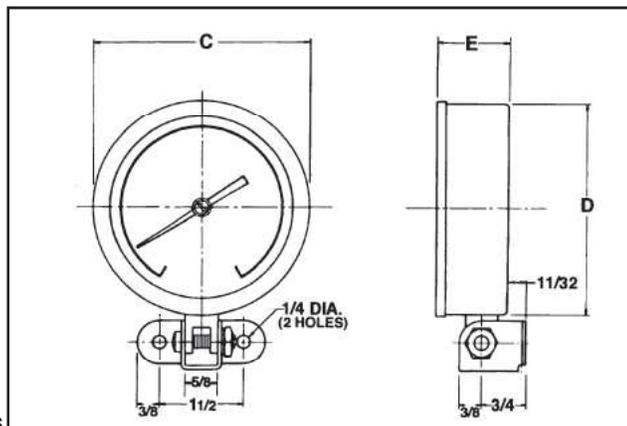
Series VTVA - Direct Mount



BL Case - Surface Mounted Bottom Connected



ZL Case - Adjustable Bracket Mount

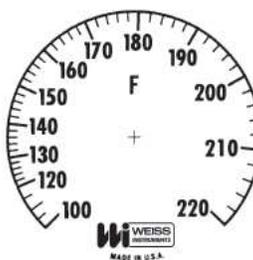
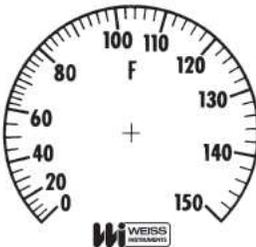
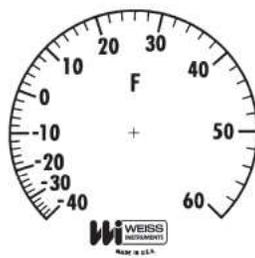
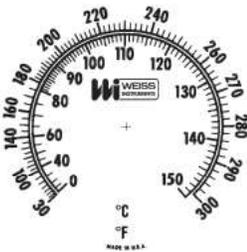
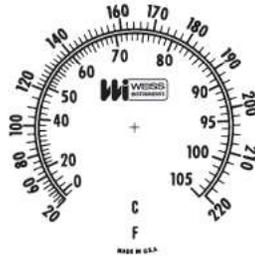
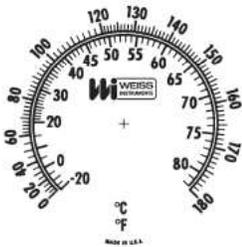
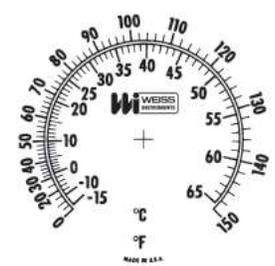
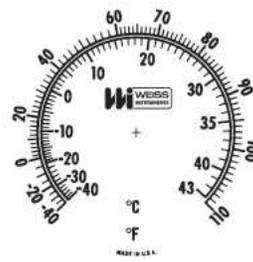
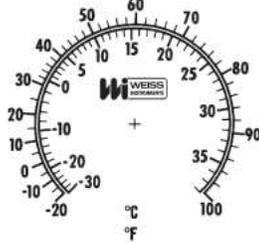
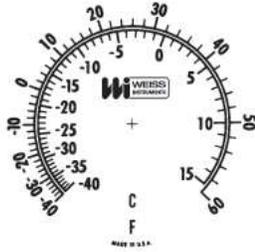


DIAL SIZE	A	B	C	E	*D	**X LENGTH FOR BULB NO. (CODE VI)			
						2	3	4	5
3 1/2"	3 7/8	2 9/16	3 11/16	1 1/4	9/16	2 5/8	4 5/8	6 5/8	8 5/8
4 1/2"	4 3/8	2 9/16	4 11/16	1 1/4	9/16				

*D Dimension for Union Connection and Air Duct Union Flange Conn. is 7/16"
 ** Same for Union Conn. and Air Duct Union Flange Connection.

Standard Ranges

VTVA·VTR·716



NOTE: Careful consideration should be used when selecting a range, since Vapor Thermometers have progressive graduations and are best read within the upper two thirds of range. Other ranges are available, consult the factory.