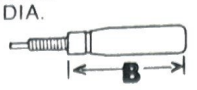
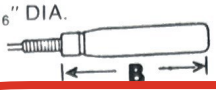
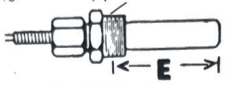
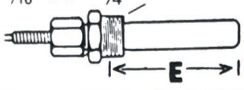
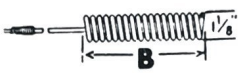
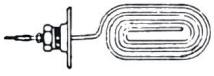
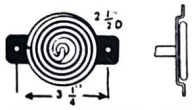
Bulb Specifications

Series D Temperature Controls

RANGE TABLE, SERIES D BULBS

BULB NUMBERS "B"=BULB LENGTH "E"=MIN. INSERTION DEPTH	APPLICATION	Bulb and 6 ft. tubing	RANGE NUMBERS 1A, 2	2A	3	4	5,6,7A 8 ⑦	8A,9 ⑥
BULB NO. ONE 11/16" DIA. 	For liquid or gases not under pressure	Copper	B= 4⅞"	B= 4⅞"	N.A.	③	B= 3"	N.A.
		Stainless Steel ⑤	B= 5¼"	B= 5¼"	N.A.	③	B= 5¼"	B= 5¼"
BULB NO. ONE "A" 11/16" DIA. 	For liquid or gases not under pressure. Where cross ambient conditions exist see ①	Copper	B= 13"	N.A.	B= 13"	B= 13"	B= 13"	N.A.
		Stainless Steel ⑤	B= 16"	N.A.	B= 16"	B= 16"	B= 16"	B= 16"
BULB NO. TWO 11/16" DIA. ¾" NPT 	For liquid or gases under pressure (max. 300lbs) For pressure above 300lbs see ②	Copper	E= 4¼"	E= 4¼"	N.A.	③	E= 2⅞"	N.A.
		Stainless Steel ⑤	E= 4⅞"	E= 4⅞"	N.A.	③	E= 4⅞"	E= 4⅞"
BULB NO. TWO "A" 11/16" DIA. ¾" NPT 	For liquid or gases under pressure (max. 300lbs). Where cross ambient conditions ①	Copper	E= 12⅜	N.A.	E= 12⅜	E= 12⅜	E= 12⅜	N.A.
		Stainless Steel ⑤	E= 15⅝"	N.A.	E= 15⅝"	E= 15⅝"	E= 15⅝"	E= 15⅝"
BULB NO. THREE 	For air or gases (coil type 1⅛" O.D. x 6")	Copper	B=6"	N.A.	N.A.	N.A.	B=6"	N.A.
BULB NO. FOUR 	Same as Bulb No. 3 except with 1" NPT connection	Copper	E=10"	N.A.	N.A.	N.A.	E=10"	N.A.
BULB NO. FIVE 	For air, gases or surface mounting (10ft. uncoiled 3/16 in. O.D. tubing.)	Copper	N.A.	N.A.	N.A.	N.A.	10 ft. uncoiled 3/16 in. O.D. tubing	N.A.
BULB NO. SIX 	For surface mounting flat coil with mounting bracket	Copper	N.A.	N.A.	N.A.	N.A.	flat coil with mounting bracket	N.A.

Bulb must be completely immersed.

APPLICATION NOTES:

① Bulbs 1A and 2A must be used where cross-ambient conditions occur. Example—where temperature surrounding the control case can vary both above and below temperature at the remote bulb.

② For pressure to 4,000 psig use Bulb No. 21SS with Packing Gland Assembly. Available with 1/2" diameter bulb and 1/2" male NPT union. Available only for Ranges 5 to 9 inclusive (write for details).

③ Range No. 4 availabe with Bulb No. 2 (4-7/8" long) if operating temperature is always above 125° F. (no extra charge).

④ Dimensions of Bulb No. 2 can be varied to meet special applications. Example—they can be furnished with 1/2" union and /or smaller diameters. Small diameter bulbs require greater length (min. diameter 3/8"). Write for details.

⑤ Standard Bulb No. 304SS. Packing Gland Assembly No. 303. Capacity No. 316. for other construction write for prices.

⑥ See next page for Protective Sleeves and wells for this Bulb.

⑦ Ranges 5, 6: where ambient temperatures are above 100° F. special compensation can be provided. Write for details.

STANDARD SUPPLY

Unless otherwise specified, Mercoid will furnish the following bulbs for each control Range No. ordered:

Range Nos.	Bulb Nos.
1A, 2, 2A, 5, 6, 7A, 8	2 (copper) with 6' copper capillary
3, 4	2A (copper) with 6' copper capillary
8A, 9	2 (S.S.) with 6' S.S. capillary

Capillary Tubing

Capillary Tubing Maximum Length for various ranges with standard bulbs must not exceed:

For Ranges 1A, 2, 2A, 3 ..... 25 ft.
Range No. 4 (Bulb No. 1 or No. 2) ..... 15 ft.
Range No. 4 (Bulb No. 1A or No. 2A) ..... 25 ft.
Range Nos. 5, 6, 7A, 8, 8A ..... 50 ft.

Capillary tubing lengths beyond maximums listed require special size bulbs—submit details.

Special Coatings

Vinylite Plastic (225° max.) for Bulb No. 1 only. For Other Special Coatings, Consult Factory.

Protection for Standard Capillary Tubing:

Galvanized Armor or Stainless Steel Armor.