

Heavy Duty Rigid Probe Model 728B

GENERAL DESCRIPTION

The Series 728B Capacitance Probes are designed for heavy duty service where a ruggedized probe is required. The probe has a 15/32" O.D. stainless steel probe rod to give it extra strength for use in applications where side loading is a factor. The probe rod is available bare or Teflon insulated, which allows "tailoring" the probe for special applications.

These probes are available for use with any Robertshaw level control instrument, including the Level-Lance series, the Level-Tel and the Level-Tek units.

Typical applications of the Series 728B probes are in granular materials or highly viscous liquids that may be expected to exert significant bending forces on the probe rod.

PRINCIPLE OF OPERATION

The probe of a Robertshaw level control instrument serves as one plate of a capacitor. In non-conductive materials the wall of the tank or vessel serves as the second plate; while in conductive materials (such as water) the material surrounding the insulated probe serves as the second plate. Insulated probes must be used when measuring or detecting conductive solutions or materials.



TEFLON INSULATED

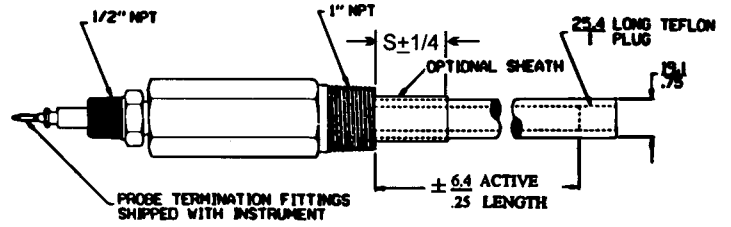
- **Rugged, Heavy Duty Service**
- **Optional Materials of Construction**
- **Available in Lengths to 20 Feet**
- **No Moving Parts**
- **Flanged or Screwed Construction**

SPECIFICATIONS

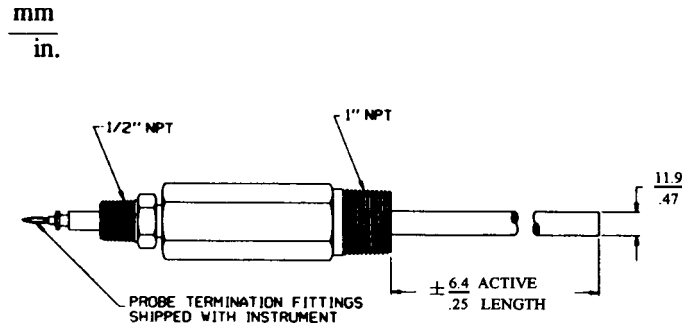
Gland Capacitance40pf
Sheath Capacitance60pf/ft
Temperature/Pressure Rating-30 Hg
 to 1000 psi @ 100°F
 Derated to 0 psi @ 350°F
Probe Gain60pf/ft
 (Insulated probe in conductive liquid)

ENGINEERING DATA

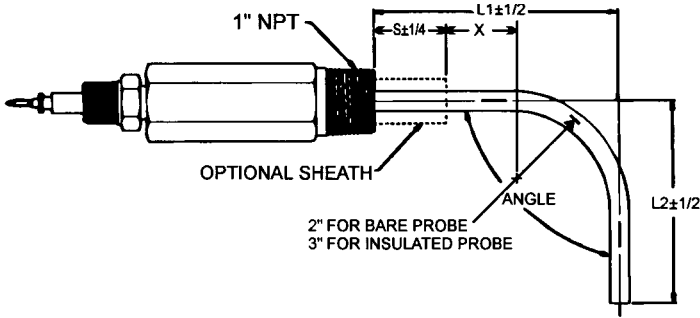
Gland Connection Size1" NPT
Probe Rod Material316stainless Steel
Probe Gland Material316 Stainless Steel
 (Standard)
Optional Probe Gland MaterialMonel
 Hastelloy C
Sheath Material316 Stainless Steel
Probe Length (Maximum)20ft
Probe Diameter, Non-insulated15/32" O.D.
 Insulated3/4" O.D.



TEFLON INSULATED



BARE

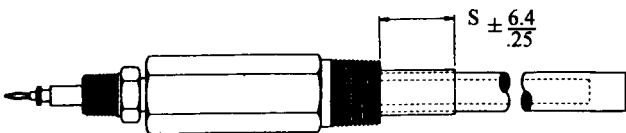


Sheath must terminate 1 1/2" or more before start of bend. If Teflon Insulated for part of probe length Teflon must terminate 1" or more before start of bend.

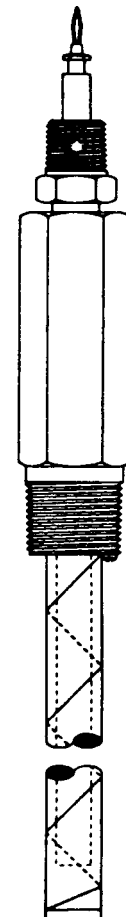
When specifying order, probes can be bent as shown. Specify: L1 Dimension, L2 Dimension and Bent Angle.

MINIMUM VALUES				
		L1	L2	X
WITHOUT SHEATH	Bare	3.5"	4"	
	Insulated	5"	4"	
WITH SHEATH	Bare	"S" + 5"	4"	2"
	Insulated	"S" + 5"	4"	2"

BENT PROBE OPTION



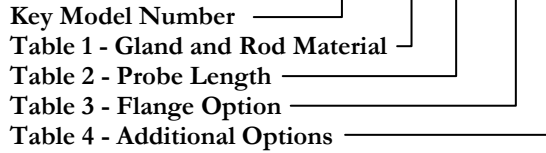
SHEATH OPTION



GROUND WIRE OPTION

ORDERING INFORMATION

728B-A xxx-N O



KEY MODEL NUMBER

Model No.	Description
728B	Heavy duty rigid probe. Rugged 15/32" 316 St. St. rod for use in applications where standard probes will bend or flex. The Teflon insulated version has 3/4" OD Teflon. The two-piece gland is made of 316 St. St. as standard with other materials optional. 1" NPT mounting thread size.

Table I - GLAND AND SENSOR MATERIAL

Desig.	Description
A	316 St. St. gland and bare rod, 15/32" OD
B	316 St. St. gland and Teflon ins. rod. 3/4" OD
C	Monel gland with Teflon ins. St. St. rod. 3/4" OD
D	Hastelloy C gland with Teflon ins. St. St. rod. 3/4" OD

Table 2 - PROBE ACTIVE LENGTH

Desig.	Description
xxx	Specify active length in inches. Max length is 240". The Teflon insulated probe insertion length is 1" longer than the active length due to the Teflon plug seal at the lower end.

Table 3- FLANGE OPTION

Desig.	Description
N	None
A	Flange screwed onto probe gland. SPECIFY SIZE AND MATERIAL .
B	Flange welded to probe gland. SPECIFY SIZE AND MATERIAL.

NOTE: Select flange model from Product Specification sheet.

Table 4 - ADDITIONAL OPTIONS

Desig.	Description
0	None
1	Bent Probe. SPECIFY BENDING DIMENSIONS. See Table
2	Sheath, same material as gland. SPECIFY LENGTH.
3	Combination of 1 & 2 above.
4	Ground Wire Probe. SPECIFY MATERIAL.

Standard Flange Sizes

1" Class 150 Raised Face
1-1/2" Class 150 Raised Face
2" Class 150 Raised Face
3" Class 150 Raised Face
4" Class 150 Raised Face
1" Class 300 Raised Face
1-1/2" Class 300 Raised Face
2" Class 300 Raised Face
3" Class 300 Raised Face
4" Class 300 Raised Face

Standard Flange Materials

Carbon Steel
316 Stainless Steel

Ground Wire Materials

316 Stainless Steel
Monel
Hastelloy B
Hastelloy C
Tantalum

Robertshaw

U.S.A. and CANADA

Robertshaw Industrial Products Division
1602 Mustang Drive
Maryville, TN 37801
Phone: (865) 981-3100 Fax: (865) 981-3168
<http://www.robertshawindustrial.com>

Exports

Invensys Appliance Controls
2809 Emerywood Parkway
P.O. Box 26544
Richmond, Virginia 23261-6544
Phone: (804) 756-6500 Fax: (804) 756-6561
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