

METER-FLOW LTD
ELECTRONIC FLOW MEASURING SYSTEMS

Royston Road, Baldock, Herts.

Telephone Baldock 20667/8 Telex No. 82483

our ref: FWB/CP

your ref:

26th March 1969

The Continental Oil Co.,
Berkeley Square,
London.

For the attention of Mr. D. M. Lewis.

Dear Sirs,

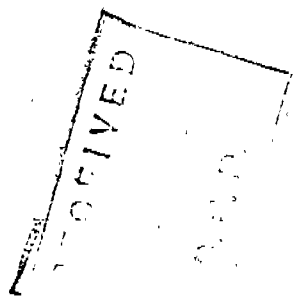
Further to your recent meeting with the undersigned, we have pleasure in submitting our official quotation for Nuclear Level equipment, consisting of five In-Val-Co model 200 HLFS Gamm-O-Switches complete with radioactive sources and safety holders.

The price is F.O.B. Tulsa and does not include any import duties, shipment should take place approximately four to five weeks after receipt of order, however we feel that this could be improved if the urgency of the project was stressed when ordering.

Trusting this meets your requirement,

Yours faithfully,
METERFLOW LIMITED

F.W. Bradbury
F. W. Bradbury,
Contracts Manager.



*1. Check and dated
15.2.1969
2. The same to be done
for the same -
check ready -
3. Can make 12.5.69
50 kg*

CCR 000032465

One of the EMI group of companies

DIRECTORS

R. Schild M.I.E.E. P. Epstein B.Sc.(Eng.) R. Kasler
R.R. Kennedy B.Sc.(Eng.), C.Eng., F.I.E.E. Secretary: H. Deutsch F.A.C.C.A., F.C.C.S., A.T.I.

LONDON OFFICE

(Accounts only)
North Feltham Trading Estate, Feltham, Middlesex.
Telephone: 01-890 5876

100

Royston Road, Baldock, Herts.
Tel: Baldock 2066
Telex: 82483

Our Ref.	Your Ref.
FWB/CP/MF/2491/69	

Date 26th March 1969

WE ARE PLEASED TO SUBMIT THE FOLLOWING QUOTATION WHICH IS ISSUED SUBJECT TO THE TERMS AND CONDITIONS PRINTED OVERLEAF

1150 each
amt.

One of the EMI group of companies

CCR 000032466

- 2 -

Q U O T A T I O N Contd....

GENERAL NOTES:

1. Prices are firm for sixty (60) days from date of quotation.
2. One reproducible transparency or two white prints of dimensional drawings and two copies instruction manuals will be furnished at no charge is requested. Additional copies of manuals are available at \$2 each.

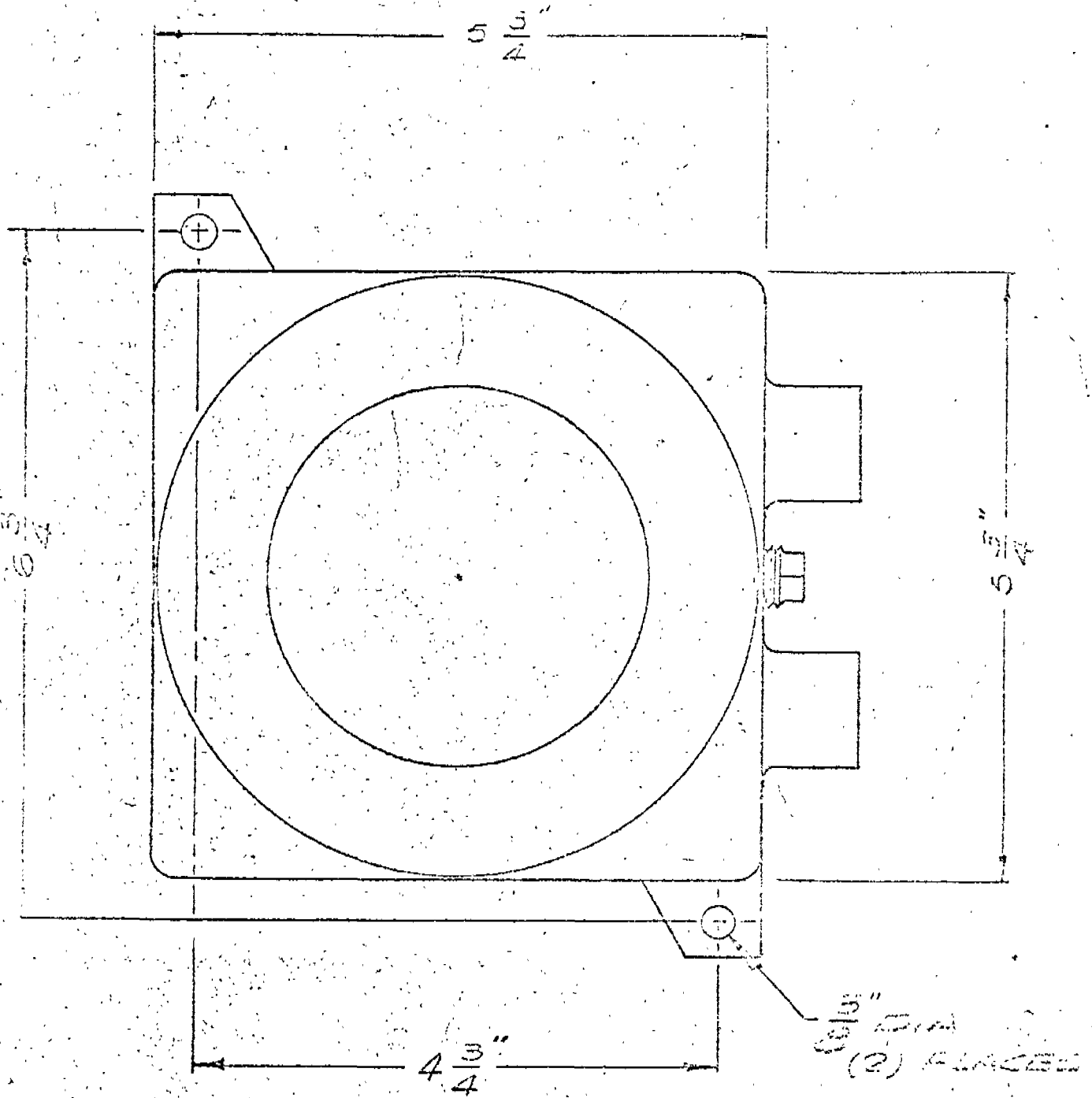
F.O.B. Tulsa, Oklahoma.

Terms: Nett Thirty Days.

Shipment: four to five weeks from receipt of order.

Shipping Weight: 300 pounds.

F.W. Bradbury
F. W. Bradbury,
Contracts Manager.

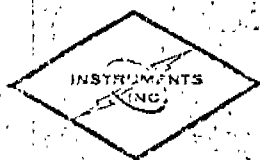
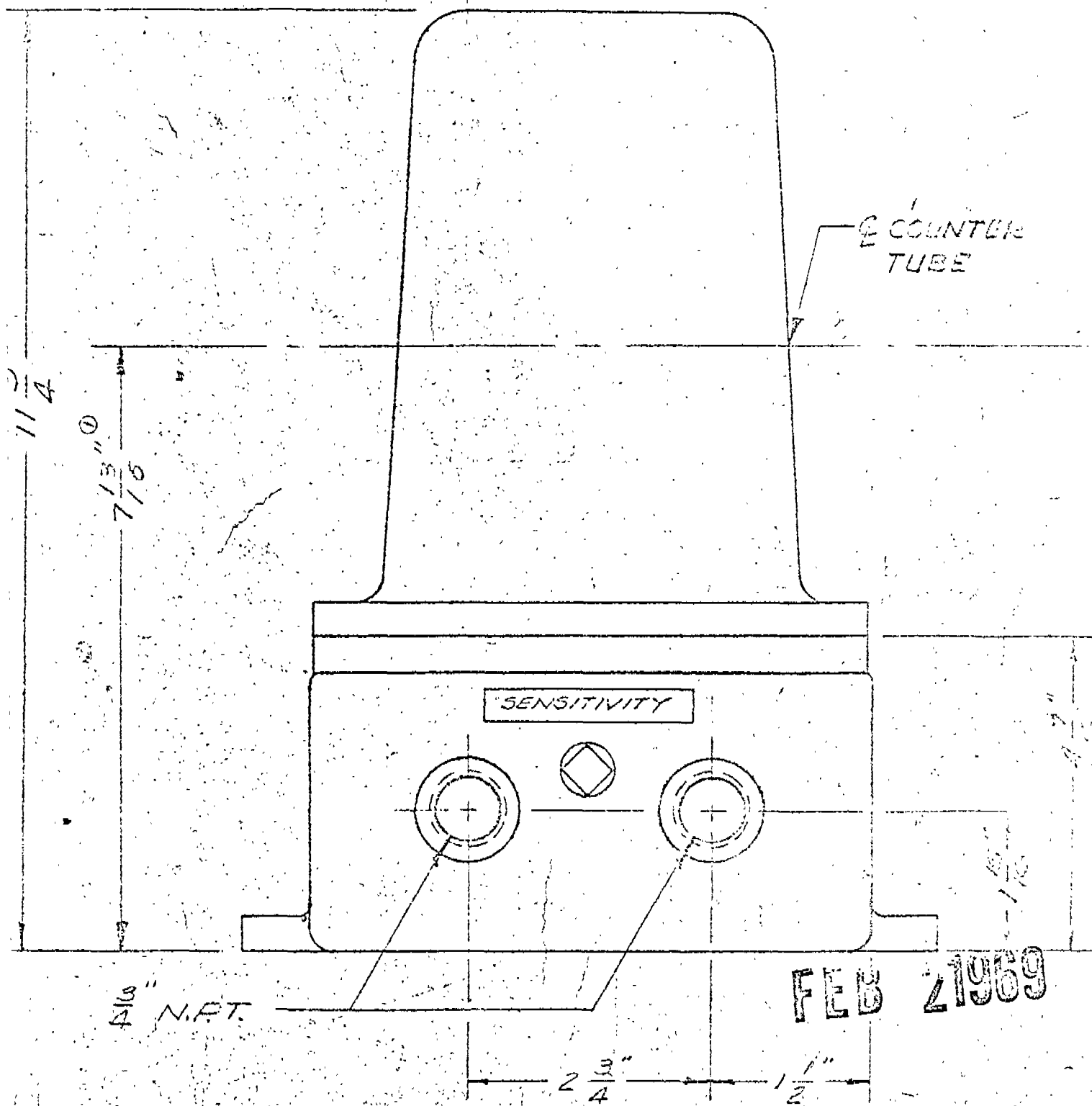


TOP VIEW

				ADDED 7 ¹³ / ₁₆ DIMENSION			
NO.	DATE	MADE BY	CHK'D BY	REVISIONS	DESCRIPTION	NO.	SUBJECT
						REFERENCE DRAWINGS	

INSTRUMENTS, INC.

**TULSA, OKLAHOMA
U.S.A.**



TOLERANCES UNLESS
OTHERWISE NOTED
FRACTIONAL $\pm 1/64$
DECIMAL $\pm .005$

DIMENSIONAL
GAMMA-O-SWITCH

DRAWING FILE NO.

GS-00-25

DRAWN BY

CC

DATE

11-2-65

SCALE

CHECKED

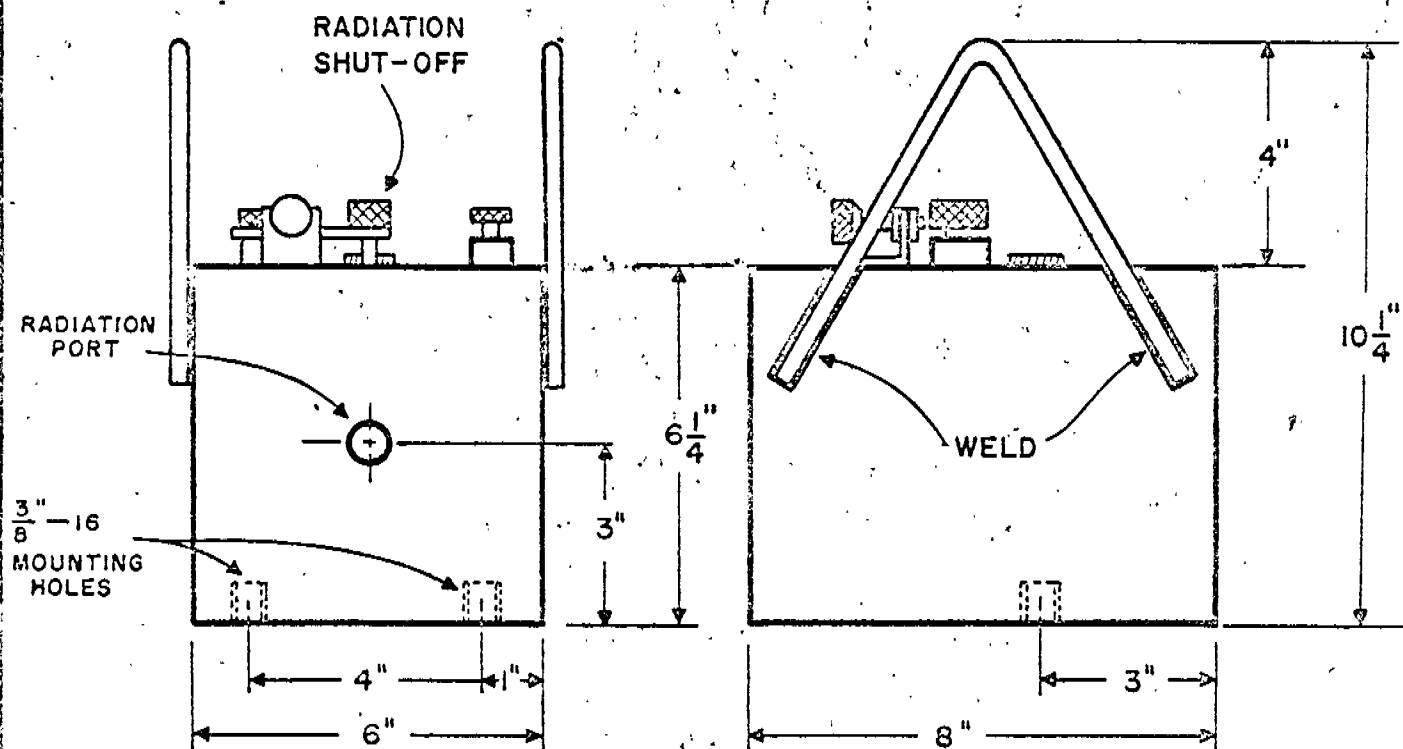
APPROVED

REVISION NO.

CUSTOMER

MODEL NO.

(CCR 000032469)



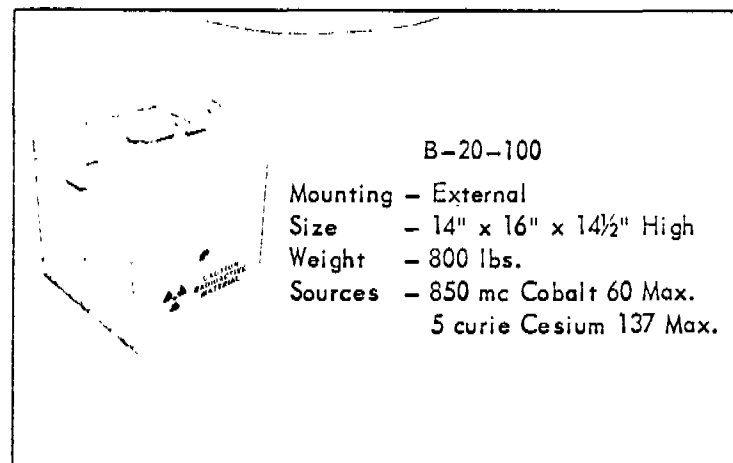
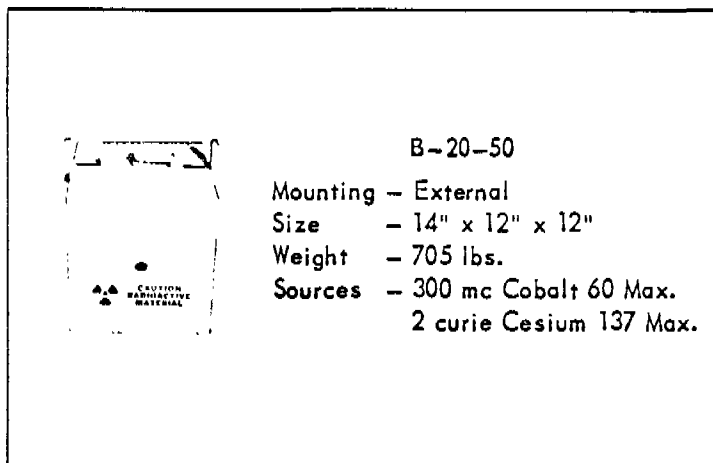
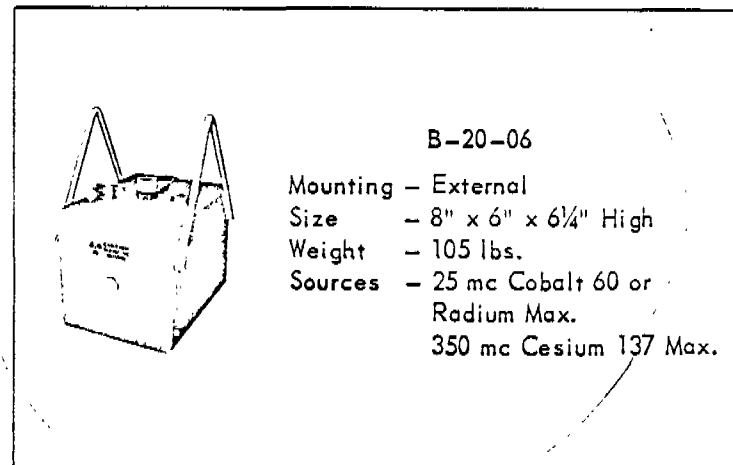
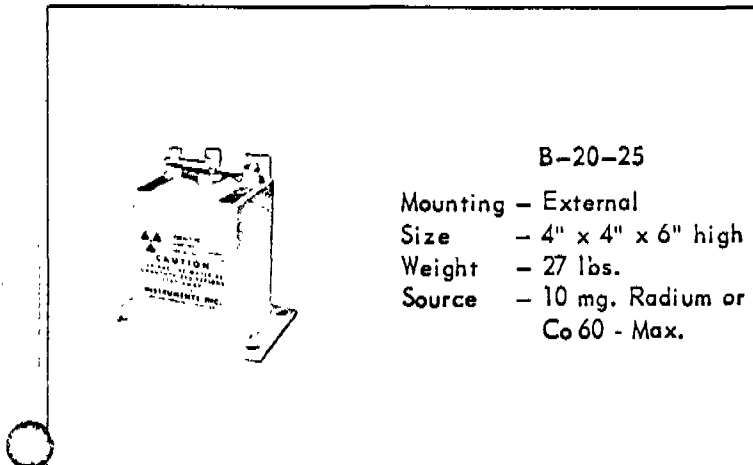
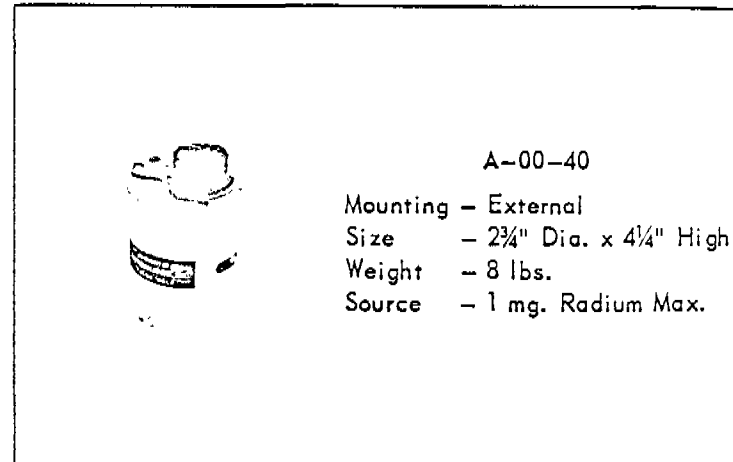
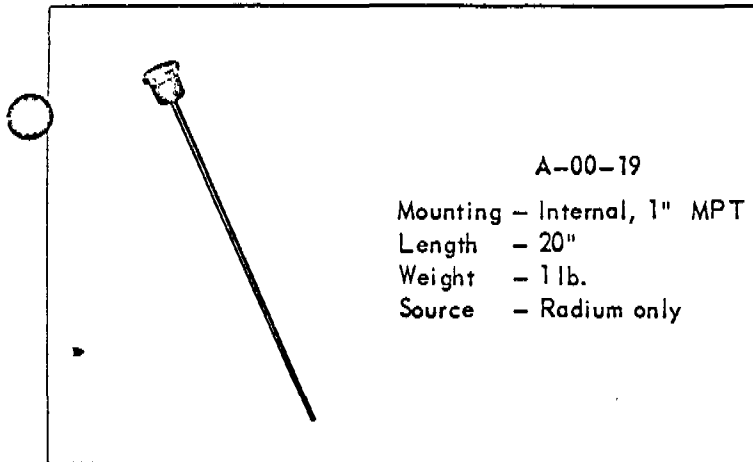
 TOLERANCES UNLESS OTHERWISE NOTED FRACTIONAL $\pm 1/64$ DECIMAL $\pm .005$	<u>SOURCE HOLDER</u> <u>TYPE B-20-06</u>		DRAWN G.F.	DATE 12-60	DRAWING FILE NO. B-20-06
			CH'K'D	SCALE	
			APPROVED		
			CUSTOMER		
			MODEL NO.		
INSTRUMENTS, INC. TULSA, OKLAHOMA, U. S. A.					ISSUE NO. 3

PRINTED IN U.S.A.

CCR 000032470

W-1200

SOURCE HOLDERS



NOTE: THE MAXIMUM SOURCE SIZES STATED ABOVE ARE BASED ON A 5 MR/HR RADIATION LEVEL MEASURED 12" FROM THE SURFACE OF THE HOLDERS.....

IN-VAL-CO®

A DIVISION OF COMBUSTION ENGINEERING, INC.
 P. O. BOX 556 - TULSA, OKLAHOMA 74101

CCR 000032471

RANGES - DIALS

- Standard 0-4 feet 0-1200 mm
- 0-6 feet 0-1800 mm
- 0-7 feet 0-2800 mm
- 0-8 feet
- 0-9 feet
- Special Any range to max. of 36 feet or 11000 mm.

SCALES

Graduated in units of tank depth, weight or volume

SENSITIVITY - ACCURACY

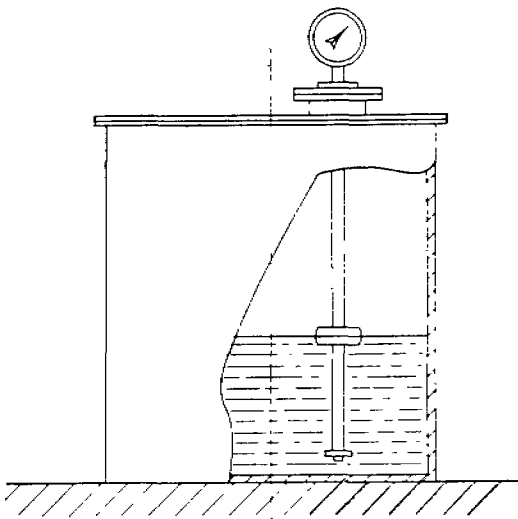
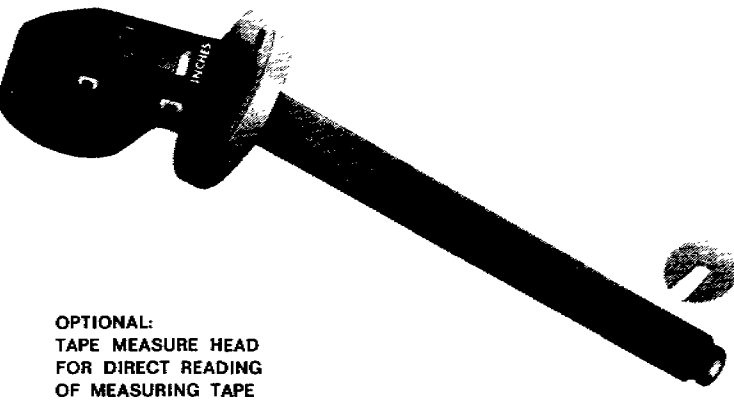
- All units below 18 feet - float movement ±0.0625" (1.6 mm)
- All units 18 feet to 36 feet - float movement ±0.125" (3.2 mm)
- Accuracy: ± 0.5% of max indicated depth

RATINGS

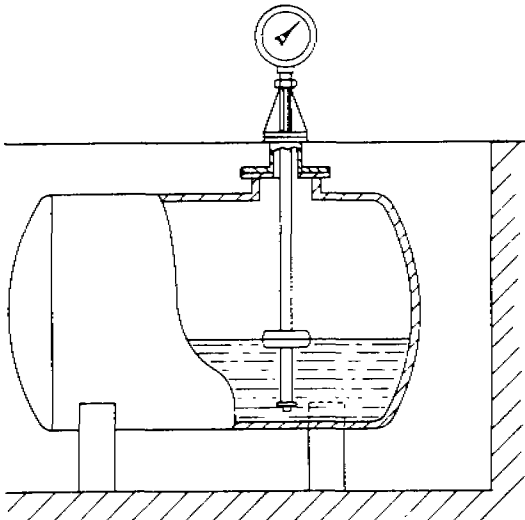
- Maximum fluid temperature, +250°F (+120°C)
- Minimum fluid temperature, -320°F (-196°C)
- Maximum ambient temperature at indicator, +150°F (+65°C)
- Minimum ambient temperature at indicator, -40°F (-40°C)
- Maximum fluid pressure, 600 PSI (40 kg/cm²)
- For other pressure and temperature ratings, consult factory

OPTIONAL EQUIPMENT

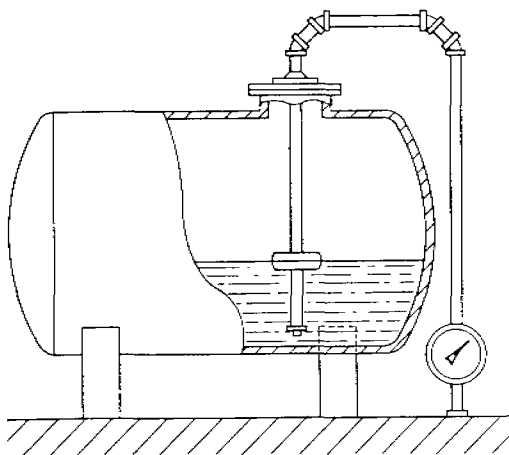
- Pre-set electrical switches
- Explosion proof switches available
- Pre-set pneumatic switches
- Minimum setting between switches 1 degree dial movement
- Electrical switches SPDT 5 Amp. at 220V 50/60 HZ or 10 Amp. at 110V non-inductive load
- Electrical transmission (optional explosion proof)
- Pneumatic transmission 3-15 PSI on full or partial range
- Eye level reading
- Direct reading tape measure
- Reading on demand
- Double guide tube assembly



DIRECT MOUNTING ON TANK



EYE LEVEL MOUNTING ON TOP OF TANK



EYE LEVEL MOUNTING ON SIDE OF TANK

TYPICAL FLOAT DESIGNS

Floats in Stainless Steel

Diameter		Height		Min. Liquid Density in kg/cm ³	Max. oper. pressure		Max. oper. temperature		Float Identification	Float application
Inches	mm	Inches	mm		PSIG	kg/cm ²	°C	°F		
9½	241	3	76	0.55	50	3.5	250	480	A	for standard use
5¾	146	5	127	0.85	100	7.0	250	480	B	for small branch entry
7½	190			0.55	350	22.5	250	480	C	for medium pressures
8½	216			0.45	250	17.5	250	480	C	same
10½	266			0.28	120	8.5	250	480	C	same, and for low density liquids

Floats in Polypropylene, Polyethylene, PVC

9½	241	3	76	0.55	15	1.0	100	220	D	for standard use
7½	190	2½	64	0.85	300	21.0	100	220	E	solid for high pressure applications
4¾	121	5½	140	0.85	250	17.5	100	220	F	for small branch entry
3½	89	7	178	0.98	200	14.0	100	220	F	same

Interface floats

6	152	2¾	70	See	200	14.0	100	220*	G	for interface measurement with adjustable weights
7½	190	2½	64	note	200	21.0	100	220**	E	

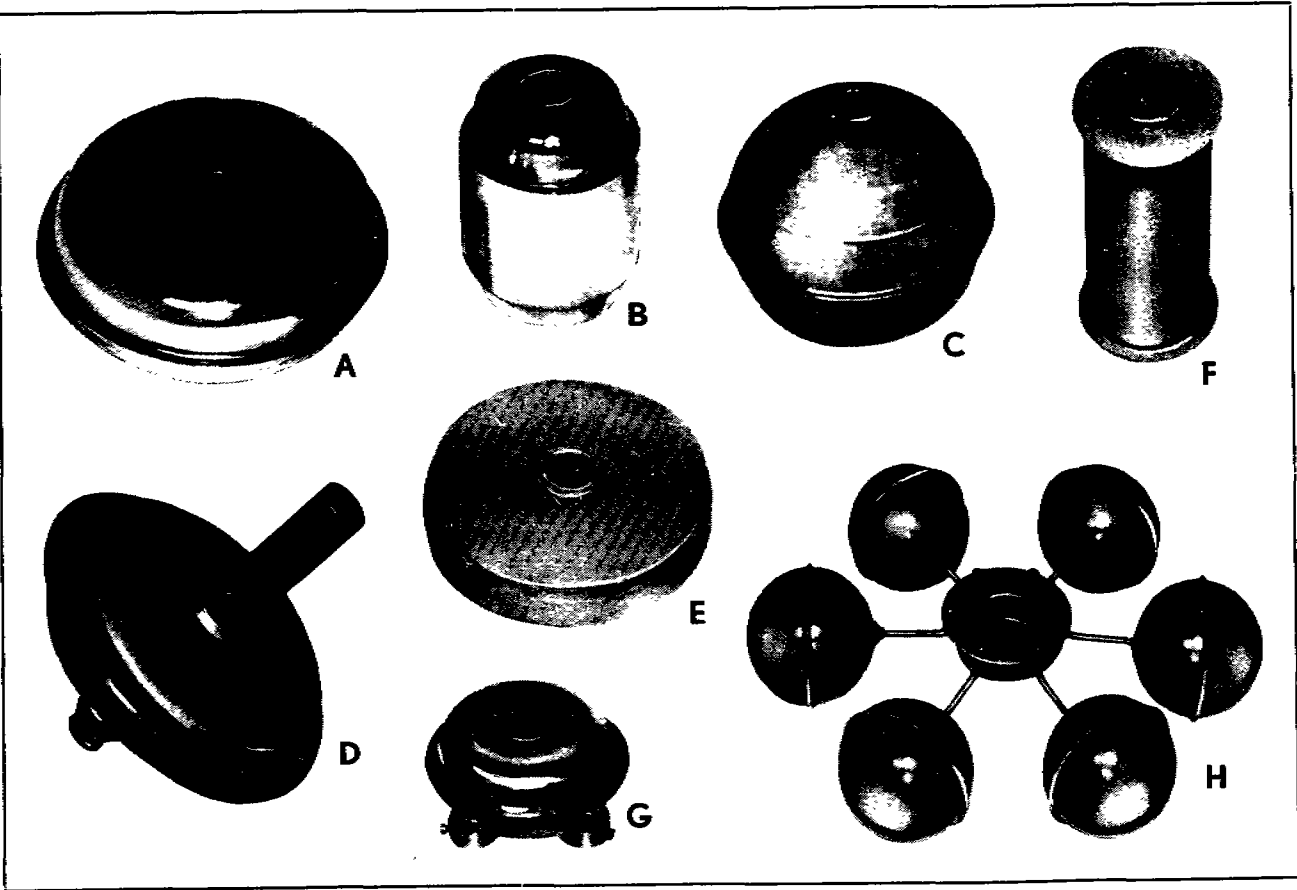
Minimum difference in liquid density 0.5 kg/cm³
* Stainless Steel
** Polypropylene, PVC, Polyethylene

Floats, special design

12	305	2½	64	0.96	1000	70.0	250	480*	H	for high pressure applications
7½	190			0.85*	500	35.0	100	220**	E	

Other special float designs available for special applications

- * Stainless Steel
- ** Polypropylene, PVC, Polyethylene
- ☐ Recommended float design

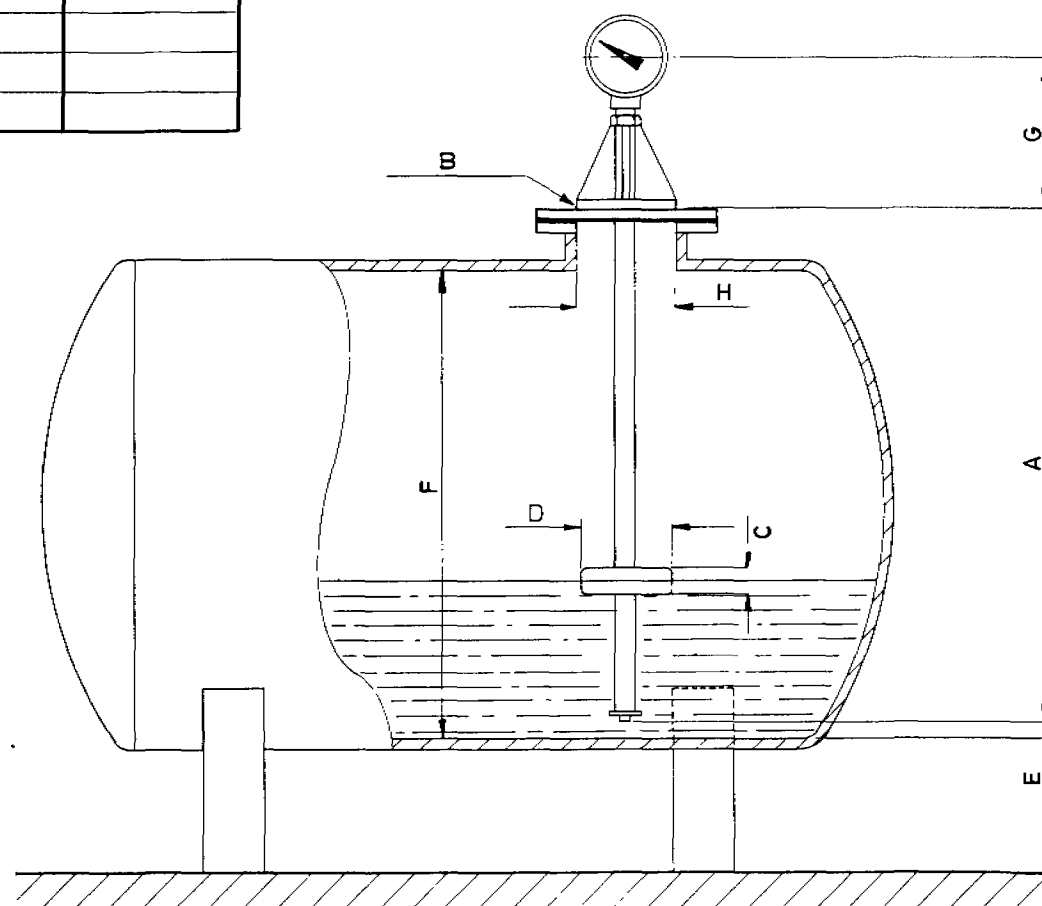


ORDERING INFORMATION

Tank or vessel no.
Tag no.
Tank material
Tank shape (cylindrical - vertical - horizontal)
Contents
% concentration
Specific gravity
Viscosity
Max. temperature
Max. pressure
Level range
Scale range
Eye level reading
Flange type
Float diameter
Float shape
Guide tube material
Float material
Mounting flange material
Transmission (electric or pneumatic)
Max. and min. level switches
Special requirements

DIMENSIONS

DRAWING	1	2
A		
B		
C		
D		
E		
F		
G		
H		
J		



DRAWING 2



BROOKS
INSTRUMENT DIVISION
EMERSON ELECTRIC
HATFIELD, PENNSYLVANIA, U.S.A.

DESIGN SPECIFICATIONS

DS-5300
June, 1967

DS-5300

BROOKS MAGLINK*

Continuous level measurement and control systems

DESCRIPTION

The "Maglink" liquid level system is specially designed for use in pressurized tanks or in open vessels in chemical service, where severe conditions of corrosion, temperature and pressure may occur.

All parts in contact with the liquid are made from stainless steel, plastic, or special materials, and thus enables the equipment to be used for most applications in the chemical, food and allied industries, e.g. liquified gases, acids, etc.

The "Maglink" magnetic system has a sufficiently strong coupling to withstand even the most severe fluctuations in liquid level within the tank.

PRINCIPLE OF OPERATION

Any change in liquid level moves the float, which contains an annular magnet. The float traverses a sealed guide tube. The flux linkage between the float magnet and the tape magnet within the tube transmits the movement via the tape, to the indicating mechanism in the head. Backlash in the indicator mechanism is completely dispensed with by means of a constant torque spring, which also serves as a take-up device for the tape and compensates for the weight of the magnet.

The density of the liquid is accommodated by the range of floats available.

DESIGN FEATURES

Sealed system - for pressure or vacuum service
Materials of construction for corrosive service
High accuracy
No calibration required
Remote transmission, pneumatic or electric
Good readability - 250 mm direct reading dial
Eye level reading
Explosion proof
Unaffected by foam
Simple to operate and maintain
Operates on any liquid specific gravity
Interface measurement

MATERIALS OF CONSTRUCTION

Guide tubes and mounting flanges Standard: 316 Stn. Stl., Polypropylene, PVC, Polyethylene
Optional: Teflon, Glass
Floats Standard: 316 Stn. Stl., Polypropylene, PVC, Polyethylene
Optional: Glass, Lead-coated Polypropylene
Cases Die-cast Aluminum,
Windows Standard: Glass
Optional: Acrylic Plastic
Extension tube for remote indication Standard: PVC
Optional: 316 Stn. Stl.
Mounting flange 2" ASA 150 lbs.

