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HMA Group of Companies

Committed People <> Innovative Solutions



SELF POWERED CONTENTS GAUGE

MARINE
INDUSTRIAL
AND
VEHICULAR
LIQUID
LEVEL
APPLICATIONS



HYDROCARBONS

The 100 Series converts the hydrostatic head pressure of liquid in a vented tank to give accurate continuous remote contents gauging.

The gauge is completely self powered without the need of batteries, electrical or pneumatic supply. This makes it totally safe for use in flameproof/explosion proof and Zone 0 areas.

The principle of operation makes the 100 Series ideal for tanks or compartments with foaming, vaporising, or turbulent liquids. These are applications which result in significant errors for gauges using buoyancy, capacitance change or reflective principles. Hydrostatic head pressure operation greatly reduces indication errors caused by pitching and rolling of the tank, commonly experienced in marine and vehicular duties.

The gauge is supplied complete, only requiring site connection to the tank to provide accurate continuous reading, without need of additional services, site programming or calibration.

The 100 Series offers a choice of tank mounted

CHEMICALS

sensors to suit the application, including versions to match the original KDG standard tank connections.

The sensor diaphragm balances the hydrostatic pressure of the liquid within the tank. This pressure is transmitted to a precision capsule operated indicator via a fine bore, inert gas charged, sealed and sheathed capillary. The indicator scale may be calibrated in any unit of mass, head or volume. The 100 Series can be used for any shape vessel, tank or compartment and provide full-scale indication for level change.

The use of an inert gas filled and sealed capillary reduces temperature effect errors, and allows the dial indicator to be positioned above, below or at the same level as the tank sensor.

The use of a stainless steel fully weatherproof indicator together with the options offered for sensor wetted parts and capillary enable compatible construction for a wide range of liquids and hostile environments, where accurate continuous gauging is required.

WATER

SPECIFICATION

Accuracy

Maximum error $\pm 1.0\%$ of range

Overload

200% of range

Optional Temperature

Sensor – 10°C to $+ 100^{\circ}\text{C}$

Indicator – 10°C to $+ 50^{\circ}\text{C}$

Weatherproof Protection

Sensor – IP67

Indicator – IP65

Indicators

100mm, 160mm and 250mm diameter stainless steel

Capillary Length

3 metres (standard)

Up to 20 metres maximum (Code A or B)

Calibration

Dial marked in customer specified mass, head or volume units, and tank reference.

Measurement Range

Tank Depths 1 through 15 metres.

Sensor

E All type 316 stainless steel welded body and diaphragm. Rear screwed capillary connection; 3/4" BSP female running nut connection to tank.

EF All type 316 stainless steel welded flange and diaphragm. 4" Table E flanged connection to tank.

EFM As above but with Teflon® mask and gasket to process.

IF Type 316 stainless steel sensor welded to 20mm stainless steel support pole. Stainless steel 4" Table E flanged connection to tank.

IM Type 316 stainless steel sensor, stainless steel mounting bracket, stainless capillary to stainless steel top of tank bulkhead plate.

100	CODE	CONNECTION TO TANK			
	E	Stainless steel type 316, connection and all wetted parts, 3/4" BSP female running nut			
	EF	4" Table E stainless steel type 316 front flange and all wetted parts			
	EFM	Similar to EF above, but with teflon/mask & gasket.			
	IF	Stainless steel type 316 complete sensor and 20mm support pole, stainless steel 4" Table E flange			
	IM	Stainless steel type 316 complete sensor			
		CODE	INDICATOR		
		1	160mm stainless steel wall mounting (back flange)		
		2	160mm stainless steel panel mounting (U clamp)		
		3	100mm stainless steel wall mounting (back flange)		
		4	100mm stainless steel panel mounting (U clamp)		
	5	250mm stainless steel wall mounting (back flange)			
		CODE	INTERCONNECTING CAPILLARY		
		A	Fine bore heavy duty copper with outer sheath fire retardant grade plastic compound yellow colour.		
		B	Fine bore stainless steel within an outer of flexible stainless steel.		
			CODE	CAPILLARY LENGTH	
			3	3 metres	
			5	5 metres	
			10	10 metres	
			20	20 metres	
100	EF	1	A	10	TYPICAL ORDER CODE

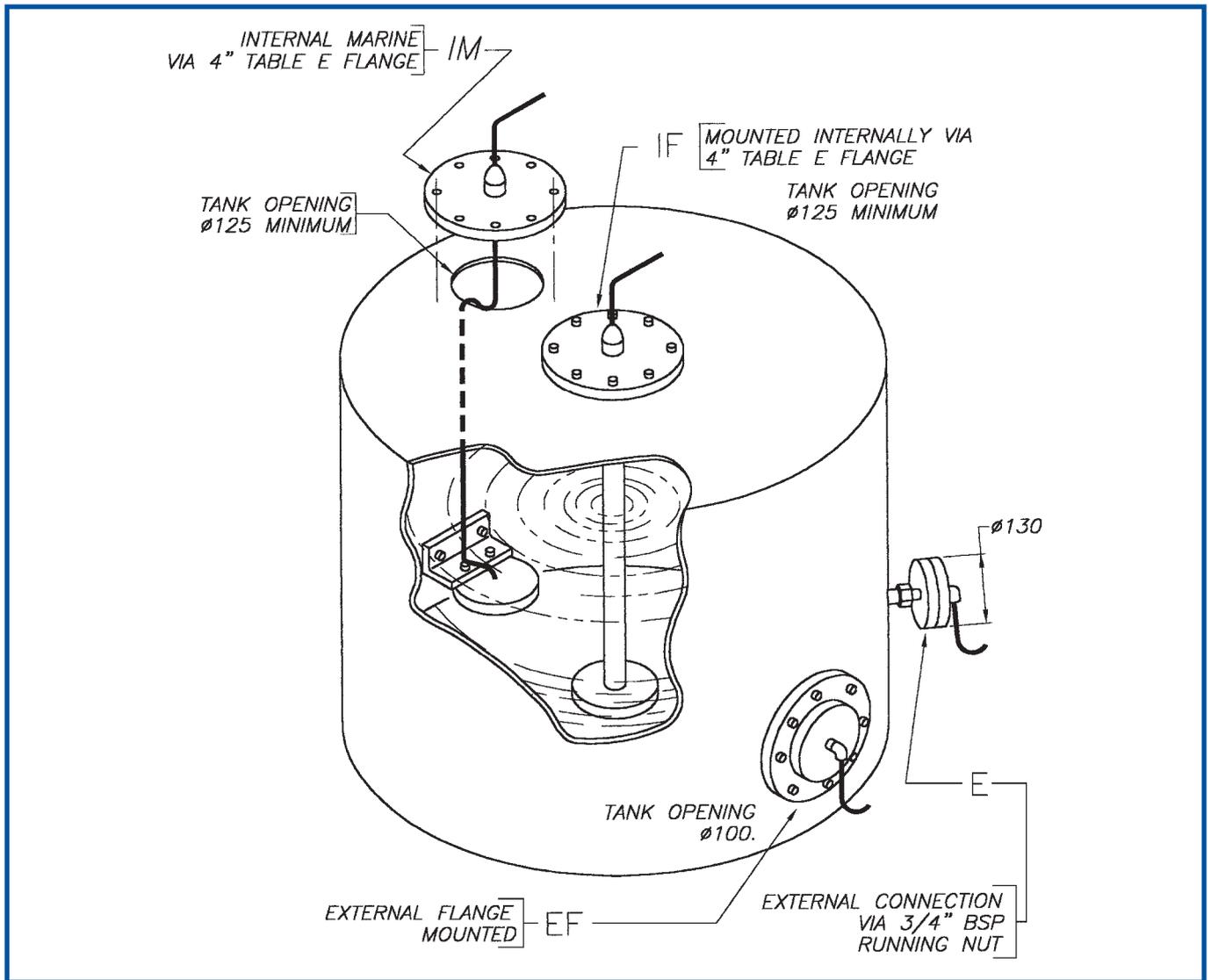
ALSO ADVISE DETAILS OF TANK SHAPE AND SIZE, LIQUID AND CALIBRATION UNITS. AT TIME OF ORDER OR COMPLETE OUR QUESTIONNAIRE FORM.

OPTIONAL EXTRAS:

- Indicator dial with two scales (eg Litres/Kgs)
- For shallow tank with high overloads (Typically marine double bottom tanks), additional overload protection)
- Special tank connection flanges and fittings
- High temperature liquid calibration
- Two remote indicators from one tank sensor
- Tank isolation valve for E sensors
- Special calibration to maximum error $\pm 0.5\%$ of range

Teflon® is a registered trademark of Dupont.

TYPICAL SENSOR INSTALLATION



Order Code: 100EF1A3



Order Code: 100E1B3

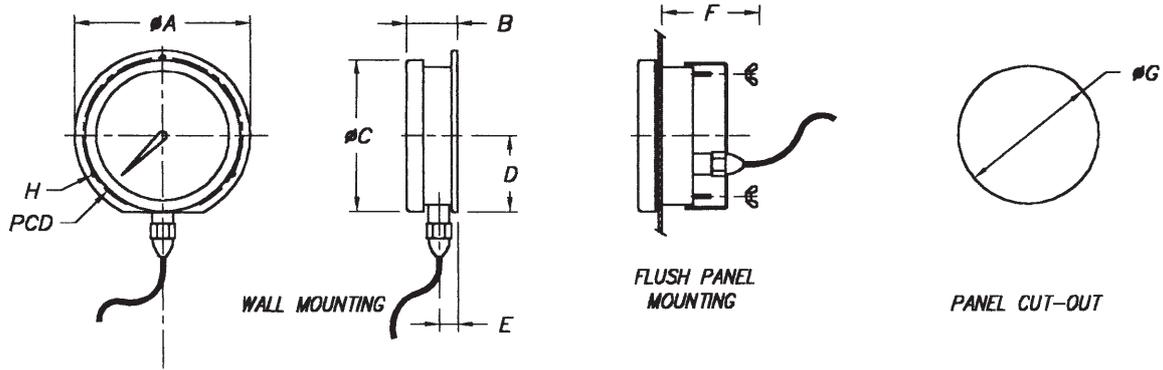


SENSOR APPLICATIONS

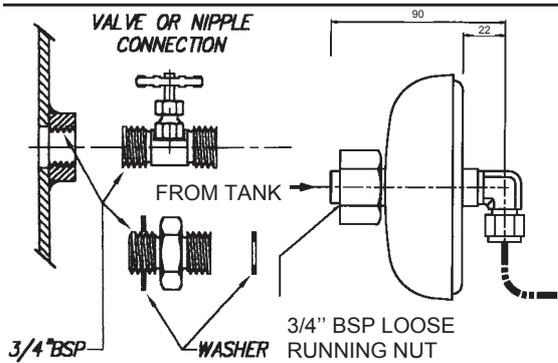
- IF Normally used on 'in-ground' and existing tanks or situations where tank connection is required above liquid level. Suitable for light and viscous liquids. Sensor bolts to tank top.
- E Most widely used; suitable for all but hygienic and viscous duties. Sensor screws onto male tank or valve 3/4" BSP connection.
- EF Suitable for viscous and hygienic duties where flush process contact is required.
- EFM Similar to EF but with Teflon[®] mask and gasket in contact with process fluid for corrosive applications.
- IM Mainly used in ship tanks or compartments where no external access is possible; and also solves limited head room problems. When using IM installation specify length between sensor and bulkhead plate and total length.

GENERAL OUTLINE

(Dimensions mm)

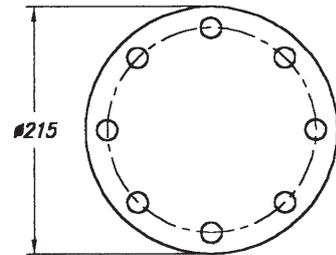


100 Series	DIMENSIONS IN mm								
	ØA	B	ØC	D	E	F	ØG	ØH	PCD
100 NOM. DIA.	133	52	112	55	18	80	100	5	117
160 NOM. DIA.	196	61	173	86	20	80	158	5	178
250 NOM. DIA.	285	58	250	142.5	20	—	—	6	270



4" FLANGE,
TABLE E, AS2129

(8) M16 BOLTS
ON 178 P.C.D.



ALTERNATIVE LEVEL TRANSMITTERS AND INDICATORS



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thermofluid
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Measurement Resources Pty Ltd : ABN 62 003 247 738

ELECTRONIC LEVEL TRANSMITTER

**MARINE - WATER
AND
PROCESS
INDUSTRIES
LIQUID LEVEL AND
CONTENTS
APPLICATIONS
HYDROSTATIC
OPERATION**



INTRINSICALLY SAFE

The 200A Series transmitters measures liquid level directly by the hydrostatic head pressure principle. Not subject to the inherent limitations and errors of buoyancy, capacitance change, or reflecting type sensors when applied to foaming, vaporising, or turbulent liquids. Hydrostatic head sensors are also ideally suited to marine and vehicular duties where the tank is subject to pitching and rolling.

The 200A transmitter is based on the well proven Linear Variable Differential Transformer (L.V.D.T.) produced in volume over several years by Measurement Resources. Improved assembly techniques use advanced electron beam fusion welding and temperature aging to ensure long term stability. The transmitter also features:

- ◆ Use of a flush Hastelloy diaphragm
- ◆ Cable outer sheath in Teflon *
- ◆ Improved temperature coefficient, over a wider range
- ◆ Meeting International requirements for RFI/EMI and surge immunity
- ◆ Reduced sensor mass
- ◆ Optional integral digital indicator
- ◆ Wider choice of process connections

SUBMERSIBLE - SCREWED FLANGED - HYGIENIC MODELS

Providing easier installation, improved performance, greater compatibility with corrosive, viscous and sanitary processes over a wider process and ambient temperature, greater surge and lightning immunity.

The 200A Series uses split architecture with a sensor in contact with the liquid, an interconnecting cable to the transmitter which encloses all active electronics. This arrangement improves stability and accuracy by removing the electronics from the process liquid and process temperature. Presenting span, zero and sensor adjustment in an accessible convenient form assisting commissioning and any through life calibration or adjustments.

The sensor can be screwed or flanged to the process tank or vessel, or alternatively submerged within the liquid.

The transmitter produces an industry standard two wire 4-20mA 24V dc output suitable for use with propriety systems or conventional monitors.

* Teflon® is a registered trademark of Dupont.

MARINE APPROVED

SPECIFICATION

Accuracy - $\pm 0.25\%$ of full range output; includes effects of linearity hysteresis and repeatability. (Optional 0.1% some models)

Overload - 500% of nominal range

Operating Temperature - Sensor - -10 to 95°C ; (Optional $+150^{\circ}\text{C}$); Transmitter -10 to $+55^{\circ}\text{C}$. (Optional 60°C)

Temperature Coefficient - $\pm 0.05\%/^{\circ}\text{C}$ range and zero. (Optional $\pm 0.02\%/^{\circ}\text{C}$)

Weatherproof Protection - Transmitter - IP65
Sensor - Submersible

Span Adjustment - 0-30% to 0-100% of nominal range

Zero Adjustment - $\pm 10\%$ of span

Power Supply - 12 to 30 Volts DC loop powered

Output - 2 wire 4-20mA DC

Maximum Load

Supply voltage - 10 = OHMS
0.02

Construction

Sensor - Stainless steel 316L body, Hastelloy C376 diaphragm. (Nylon protection. end cap on IS sensor installation), (Optional Monel 400 diaphragm or all inconel construction). Support pole and flanges stainless steel
Cable - Heavy Duty TPE screened integral vent
Transmitter - GRP internal screen and breather

Optional Indicator - Digital integral with transmitter. Linear display hydrostatic head or mA output

Weight - Depends on flange/connection. Typical IS sensor, 3M cable, transmitter - 2kg.

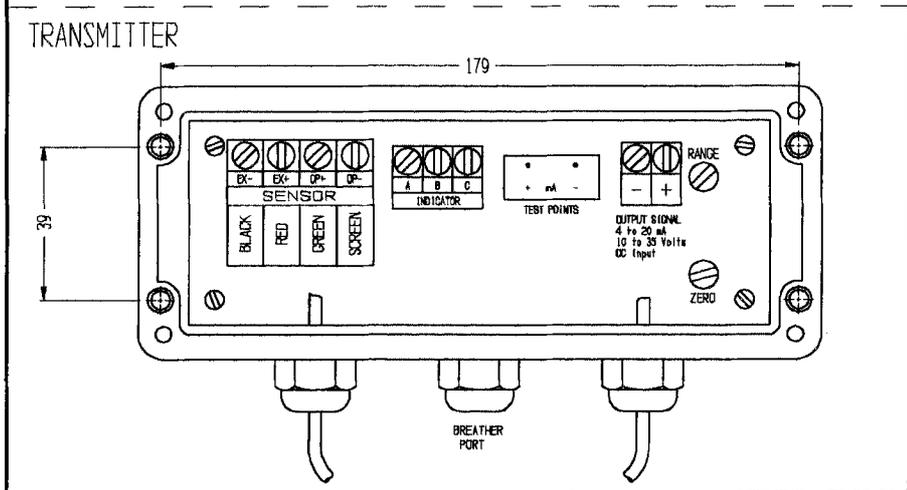
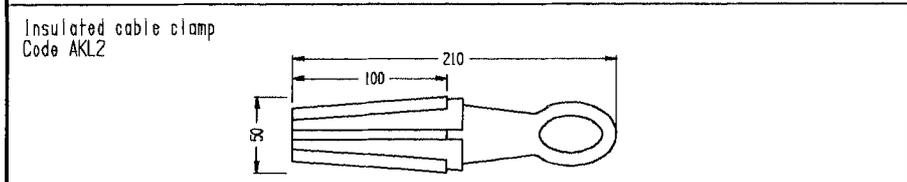
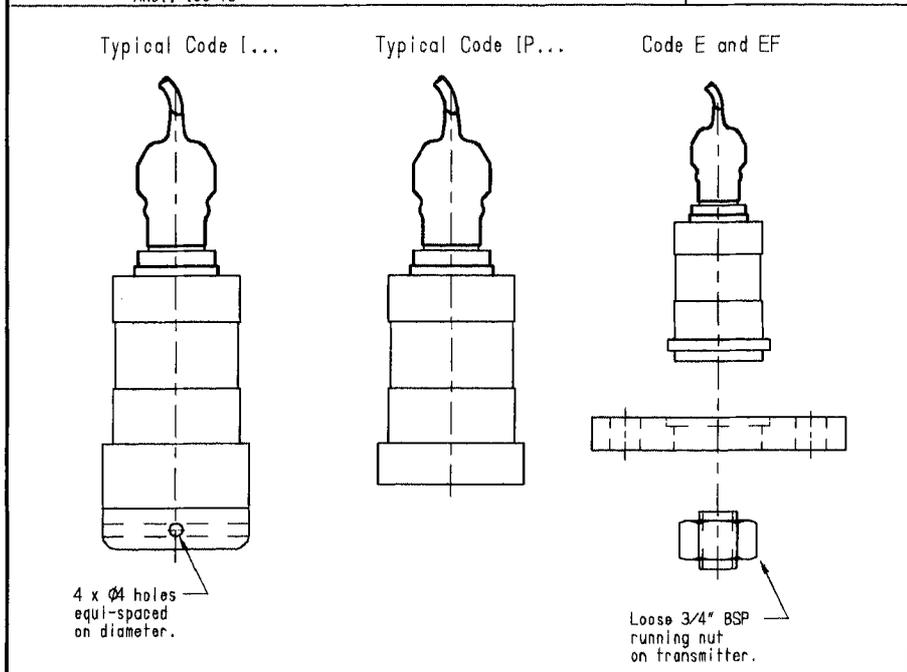
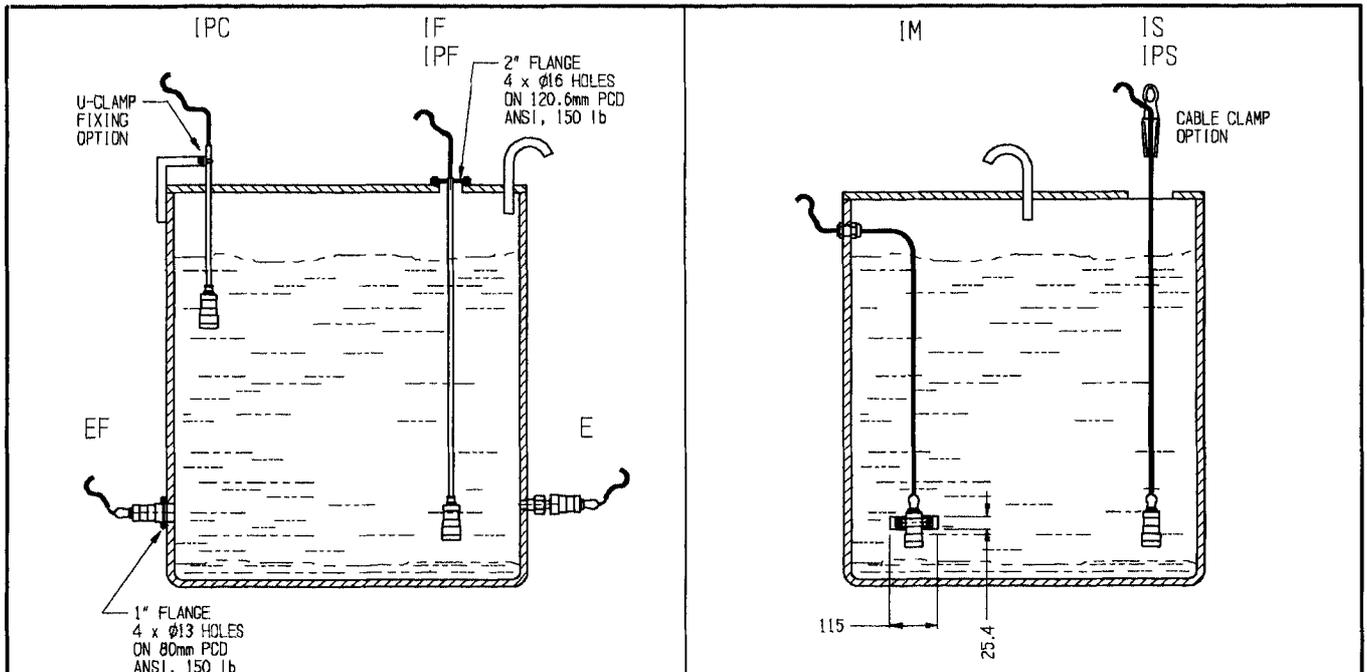
200A	CODE	SENSOR INSTALLATION ARRANGEMENT					
	IS	Submersible sensor suspended by cable (Optional cable clamp)					
	IM	Internally mounted via tank fixing clamp (included in price)					
	IF	Internally mounted via stainless steel pipe with 2" 150lb ANSI stainless steel flange connection through tank top (up to 2m pipe in price)					
	EF	Externally flanged to tank 1" 150lb ANSI stainless steel flange connection					
	E	Externally screwed 3/4" BSP stainless steel running nut connection					
	IPF	Internally mounted submersible sensor secured via stainless steel pipe (sensor diaphragm totally open to process fluid), used on sanitary duties 2" 150lb ANSI stainless steel flange.					
	IPC	Similar to IPF, but pipe U bolt mounting					
	IPS	Similar to IPF, but sensor suspended on cable					
	EH	External hygienic 2" BSM/RJT connection					
	EHT	External hygienic 2" Triclover connection					
	EHA	External hygienic 2" 3A standard connection					
		CODE	SENSOR MATERIALS IN CONTACT WITH PROCESS				
		SC	Stainless steel type 316L body Hastelloy diaphragm		Stainless steel support pipe and flanges		
		SM	Stainless steel type 316L body Monel diaphragm		nylon cap on IS sensor		
		CODE	ACCURACY, LINEARITY, HYSTERESIS AND REPEATABILITY				
		S	0.25% of nominal range				
		H	0.1% of nominal range				
		CODE	NORMAL RANGE				
		1	0-1 metres hydrostatic head at SG 1.0				
		2	0-2 metres hydrostatic head at SG 1.0				
		4	0-4 metres hydrostatic head at SG 1.0				
		8	0-8 metres hydrostatic head at SG 1.0				
		16	0-16 meters hydrostatic head at SG 1.0				
		32	0-32 metres hydrostatic head at SG 1.0				
		50	0-50 metres hydrostatic head at SG 1.0				
		CODE	SPAN				
		XX	Specify actual span in mm				
		CODE	CABLE INTERCONNECTING SENSOR TO TRANSMITTER				
		X	Cable length in metres (3m included in base price)				
200A	IS	SC	S	2	1700	7	TYPICAL ORDER CODE

ADVISE DETAILS OF TANK SHAPE AND SIZE WHEN USED WITH MONITOR FOR CONTENTS GAUGE APPLICATIONS.

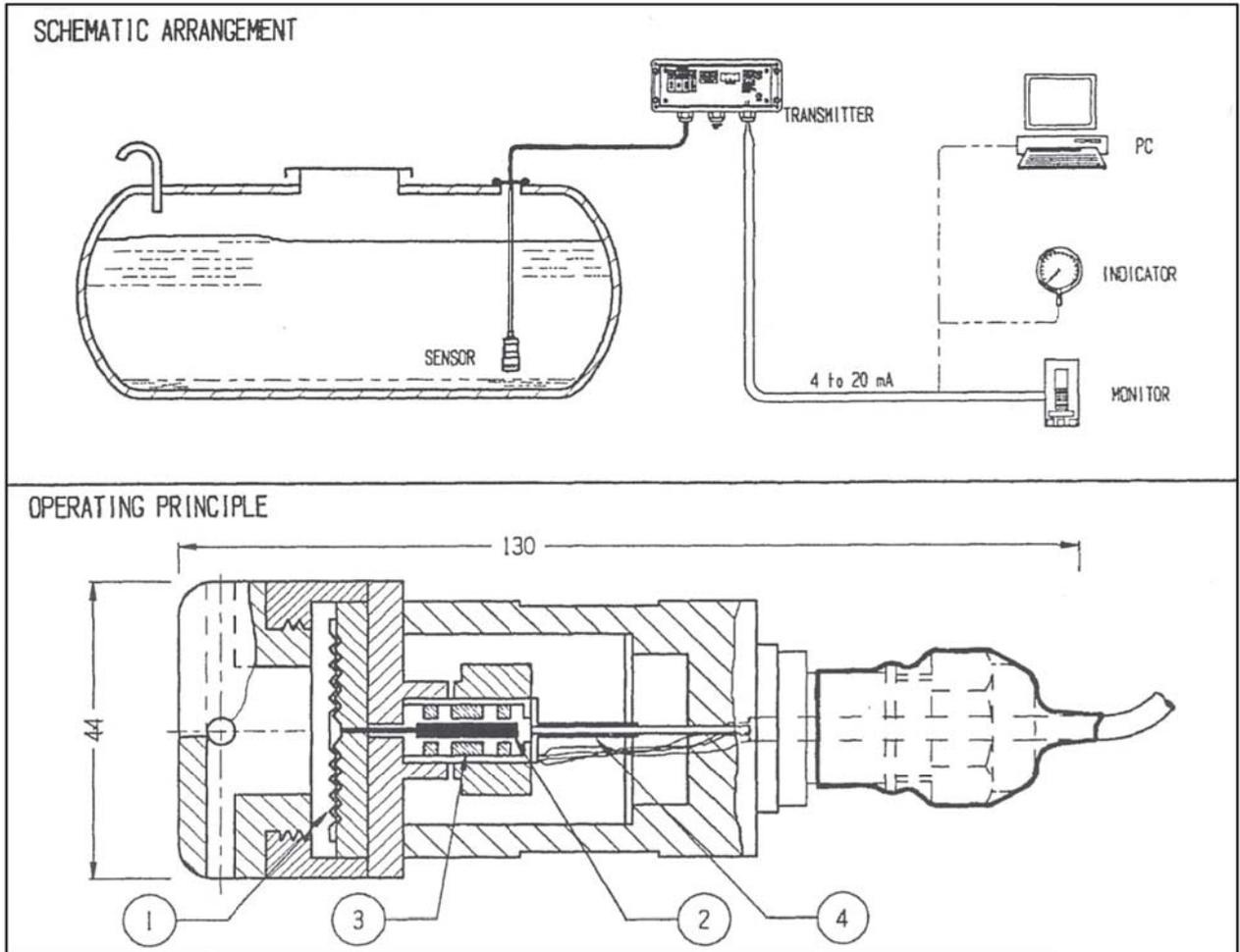
Optional Extras

- Integral digital indicator
- All inconel construction
- Reference port for sealed tanks
- Special ranges
- Remote analogue and digital indicators
- Intrinsically safe barriers
- Mains to 28 volt D.C. power supply
- Cable clamp ALK2 for suspended version
- Spring loaded dry break (non-return valve) and spigot
- Extended temperature range.

SENSOR INSTALLATION



- Typical Model Application**
- IS** Water, diesel tanks, wells and reservoirs.
 - IM** Low viscosity liquids; marine and vehicular restricted headroom tank access.
 - IF** Water, diesel, inground tanks.
 - EF** Chemical and viscous products; storage and process tanks.
 - E** Water, fuel low viscosity liquids; storage and process tanks.
 - IPF** Sanitary and viscous products; storages and process tanks.
 - IPC** Sanitary and viscous products; clamp U bolt fixing pit, well and open channel flow.
 - IPS** Paint, ink, sewage wells.
 - EH** } Food, beverage; storage and process tanks.
 - EHT** }
 - EHA** }



The rated diaphragm 1 converts hydrostatic head pressure to linear movement. Deflecting the core 2 within the matched windings of a hollow cylindrical Linear Variable Differential Transformer (L.V.D.T.) 3. A breather tube 4 references the inside of the diaphragm to atmosphere for depth or vented tank duties, on sealed tanks the breather is connected to tank top. The L.V.D.T generates high level linear output enabling active electronics to be remote from the sensor with improved stability, reliability and accessibility.

ALTERNATIVE LEVEL TRANSMITTERS AND INDICATORS



FLOAT LEVEL SWITCH

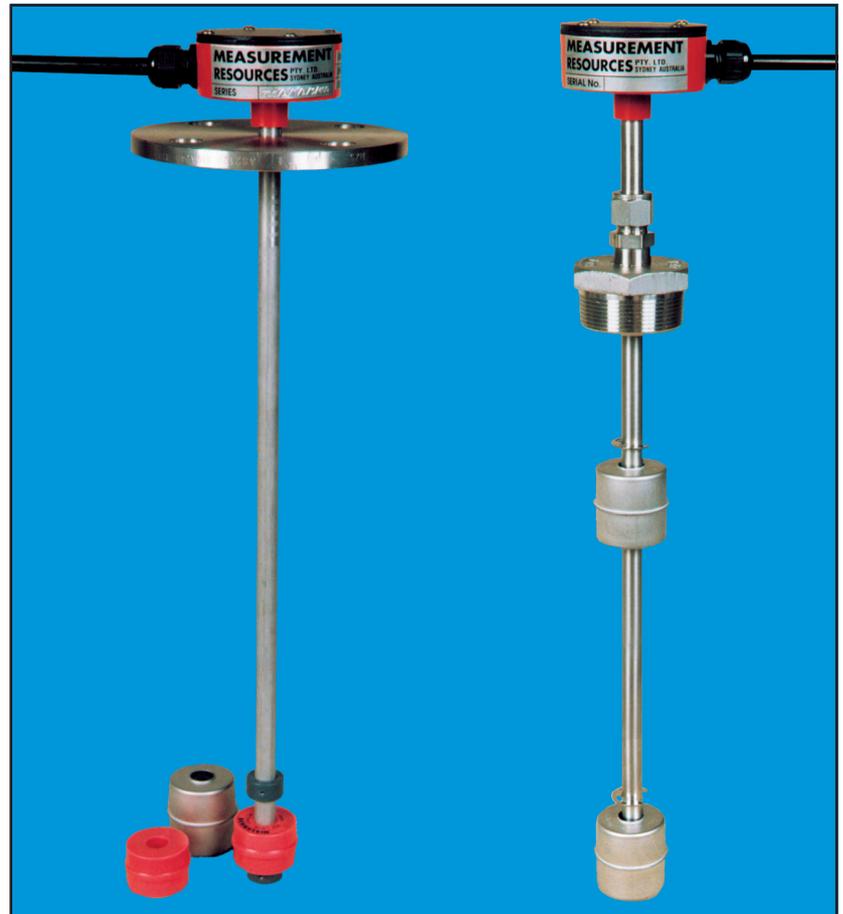
Industrial

Marine

Liquid Level

Control-
alarm duties

Large bouyant
floats for lower
specific gravity



Single or Multi Point

A versatile range of top or side installation, vertical float level switches offering 1, 2 or 3 switch actions per unit. Designed for alarm and control applications in water, oils and chemical storage tanks and process vessels using the proven magnet and reed switch technology. A permanent magnet is contained within the float which, being bouyant, moves up and down with liquid level change.

Total float travel is restricted by stops to ensure positive magnetic linkage with the reed switch. Hermetically sealed reed switch contacts within the stem change over as the float passes. Switch operation is therefore a direct reading of liquid level eliminating electronic and mechanical transmission or calibration errors found in other systems.

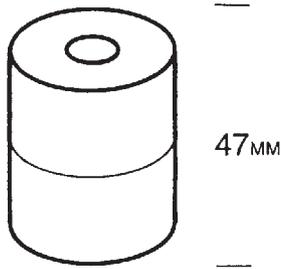
Custom Built

Choice of Float Materials

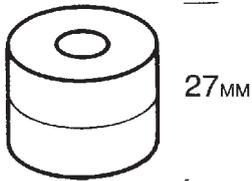
Typical applications are high and or low alarm and pump control. Materials in contact with the liquid and vapours include stainless steel, or polyophylene methylene floats. Stainless steel stems with top of tank terminal enclosure in aluminium. Stainless steel flange or screwed connections making for compatibility with most liquids.

All FLS Series switches are manufactured in Measurement Resources Sydney factory, where we have the expertise and facilities to build standard and non-standard units all within a tight QA/QC environment.

STANDARD FLOATS



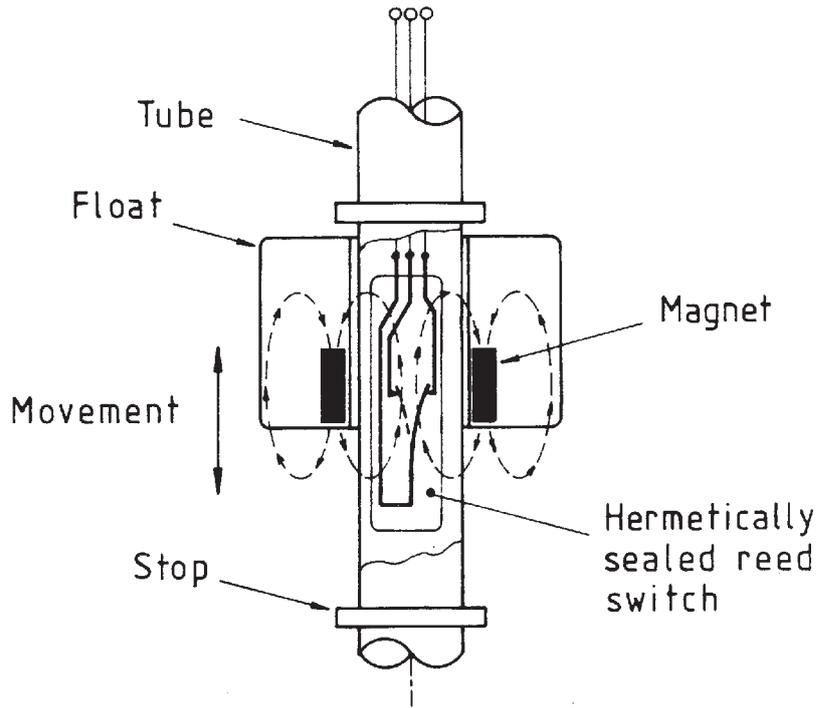
Ø 45MM
STAINLESS STEEL 304



Ø 40MM
POLYOPHLENE METHALENE

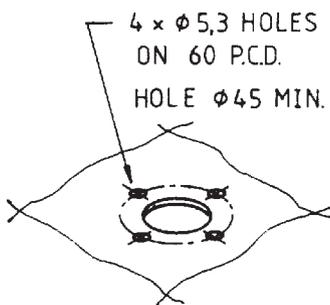
MAGNET REED SWITCH OPERATION

SHOWING STANDARD SINGLE POLE CHANGE OVER SWITCH OPERATION



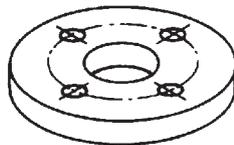
PROCESS CONNECTION

Standard Fitting

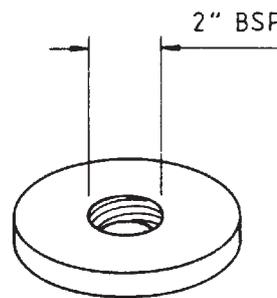


Bolted Flange

A.S. 2129 - TABLE 'E'
50mm NOM. BORE MIN.



Screw Fitting



SPECIFICATION

Switch Electrical Rating

0.5 amp 240 volts AC 30 V.A.

Terminal Enclosure

Die-cast aluminium alloy weatherproof to IP65

Electrical Entry

PG11 cable gland, Internal terminal strip

Process Connection

Flanged or screwed minimum opening to clear float (see above)

Switch Temperature Rating

-5° to + 70°C continuous

Specify Gravity

0.7 to 1.0

Pressure Rating Floats

Float code 2 - 2000 kPa @ 150°C

Float code 1 - 1000 kPa @ 100°C

FLOAT LEVEL SWITCHES

ORDER CODE

FLS FLOAT LEVEL SWITCH

FLS	CODE	NUMBER OF SWITCH ACTIONS (SEE BACK PAGE)						
	A	One switch action change over contact 3 way terminal						
	B	Two switch action change over contact 6 way terminal						
	C	Three switch action change over contact 9 way terminal						
	X	Special requirement (Consult Factory)						
		CODE	FLOAT MATERIAL					
		1	POM Polyophylene methalene					
		2	Stainless Steel type 304					
			CODE	STEM MATERIAL				
			A	Stainless Steel				
			B	Other Consult Factory				
				CODE	PROCESS CONNECTION			
				10	Standard fitting bolts to top of tank			
				11	Standard fitting bolts side of tank			
				12	Flanged 2" Table E Stainless Steel Bolts to top of tank			
				13	Screwed 2" B.S.P. Stainless Steel screws into top of tank			
					<i>All above top of tank process connections can be fitted with stem compression gland allowing switch point (or points) to be adjusted $\pm 70mm$ Add suffix ADJ to above code.</i>			
				99	Special requirement consult factory.			
					CODE	DIMENSION L1 (SEE BACK PAGE)		
					XX	Distance in mm from underside of connection to top switch point		
						CODE	DIMENSION L2 (SEE BACK PAGE)	
						XX	Distance in mm from underside of connection to middle switch point	
							CODE DIMENSION L (SEE BACK PAGE)	
						XX	Distance in mm from underside of connection to bottom switch point	
FLS	B	1	A	10	XX	XX	XX	TYPICAL ORDER CODE

When option ADJ is specified in the order code, this results in the FLS being manufactured with the stem assembly being fixed to the tank connection via a stainless steel compression gland. This construction allows the complete terminal enclosure, stem and floats to be raised or lowered in relation to the top of the tank by ± 70 mm. Note all multi point models all switch points are moved.

NOTE: Maximum Stem Length 3000mm in Stainless Steel
Minimum Length 100mm in Stainless Steel

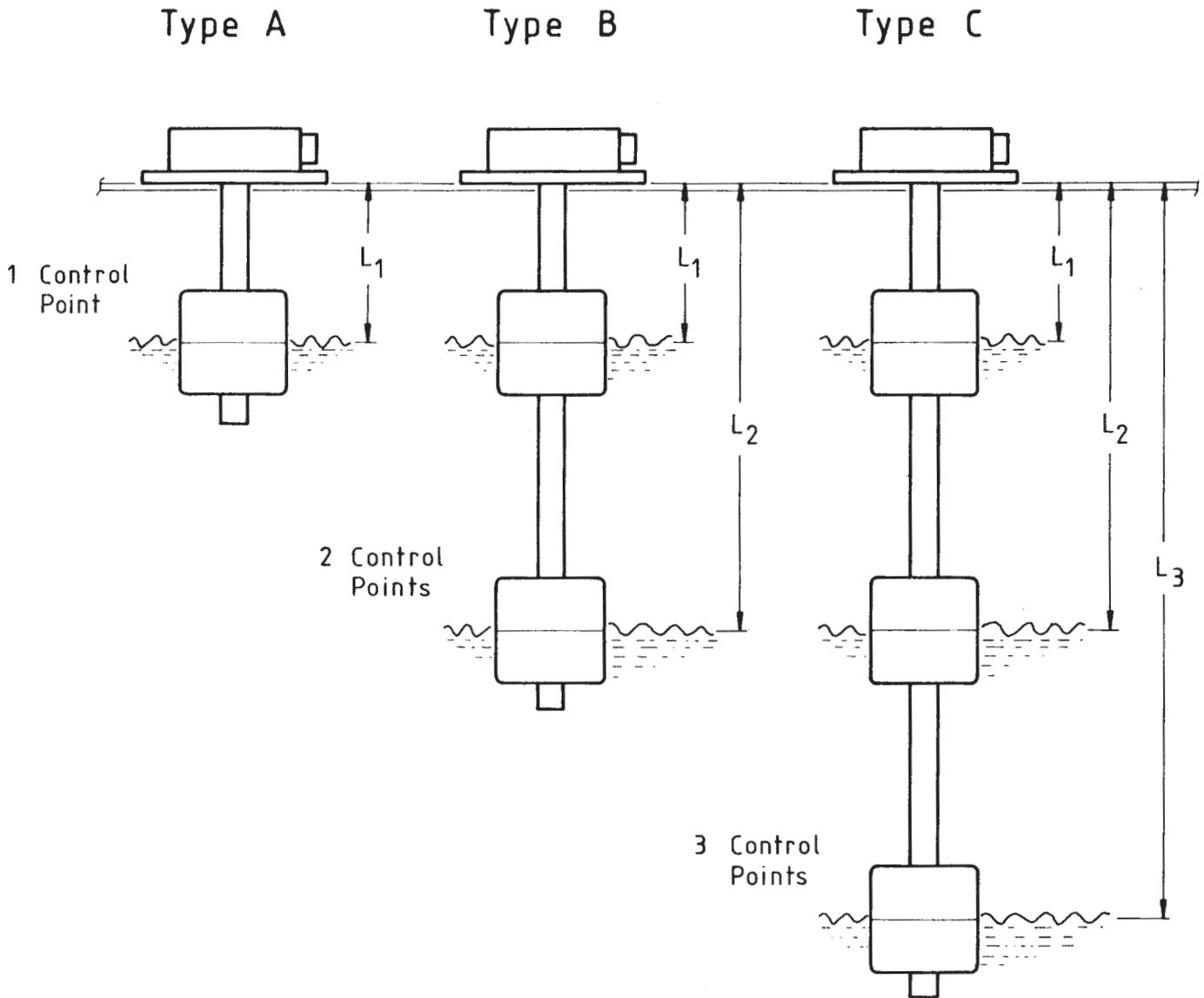
When more than three (3) switch actions are required a common interconnection is made to one side of each reed switch. This interconnection arrangement can be

provided on above standard models as requested. If required, special FLS can be manufactured with several switch points, or with process connections and material of construction to suit existing tank connections or processes. Please consult factory.

The FLS Series is part of Measurement Resources' extensive range of level indicators and controls including self-powered mechanical, pneumatic, hydrostatic and ultrasonic sensors. They are supported by analogue and digital indicator monitors and controllers.

Please ask for further information.

STANDARD SWITCHING OPTIONS



Measurement Resources Pty Ltd is committed to the development, manufacture and distribution of Level, Pressure, Temperature, Flow Sensors and Controls. It's market is Australasia and South East Asia. It regards quality of customer service and product as prime objectives. This Australian company is totally owned by the employees.

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PRINTED IN AUSTRALIA

FILL POINT & ALARM PANELS

Combination Tank Contents and Tank & Process Alarm Panels, incorporating our MM Series Tank monitor and RTK series Alarm Annunciators.



Single & Multiple Tanks

1 to 256 Process alarms.

Overfill Prevention

Alarming and Status Indication



MINIATURE TANK LEVEL MONITOR

**LEVEL AND CONTENTS
INDICATION**

**PROCESS AND STORAGE VESSEL
DUTIES**

**DIGITAL LINEARISATION OF
VESSEL SHAPE**

**DIGITAL ENGINEERING UNIT
DISPLAY**

**ISOLATED DC POWER TO FIELD
TRANSMITTER**

ALARM OR CONTROL RELAY OUTPUT



**OPTIONS:- VERTICAL BAR GRAPH &
DIGITS OR HORIZONTAL DIGITS ONLY**

Designed to utilise microprocessor techniques to provide accurate reliable indication of level when used with Measurement Resources or propriety field mounted transmitter. The monitor provides:

- 5 Digit LED Display
- DC Power to field transmitter
- Isolated 4-20mA or 0-10 Volt Retransmission Output
- Programmable Relays for Alarm/Control
- Display Vertical Bar Graph OR Horizontal larger digits only
- RS232/RS485 Output Option
- Function Keys for Calibration

MM Series is a dedicated monitor, which is permanently hard wired to a tank/vessel mounted level transmitter from which it computes mass head or volume for any shape, displaying this digitally in engineering units and vertical bar graph. An alternative version the 6E provides horizontal 6 digit display without bar graph. The monitors 92mm x 45mm DIN size for suitable for high density or single unit panel mounting in an indoor environment protected from water. To provide easily read constant level indication and contents in engineering units.

All calibration data, output scaling, and switch settings are factory configured and in a nonvolatile memory. If required the monitor can be site configured with data entry via front panel function push buttons and internal switches. Typical applications include fuel and water compartments in marine application. Stock management of tank farms and warehouses, hydrocarbons chemical, beverage and pharmaceutical storage tanks and process vessels. Full electrical isolation between input/output/power supply make for easy interface with other systems, PLC, BMS, etc.

Specifications

Input
4-20mA

Linearising
Up to 32 points

Accuracy
0.0001% of reading

Conversion
Dual slope A/D

Humidity
5 to 95 % not condensing

Power Consumption
5W max

Relay Output
2 relay std

Bezel Size
96 x 48

Case Size
48 x 96 x 117mm

Display
51 Segment Vertical Bar Graph OR Horizontal six 14mm Digits. Alarm Indication lamps on both monitors

Sample Rate
10 Hz

Ambient Temperature
0 - 50 Deg

Panel Cut Out
92 x 45mm

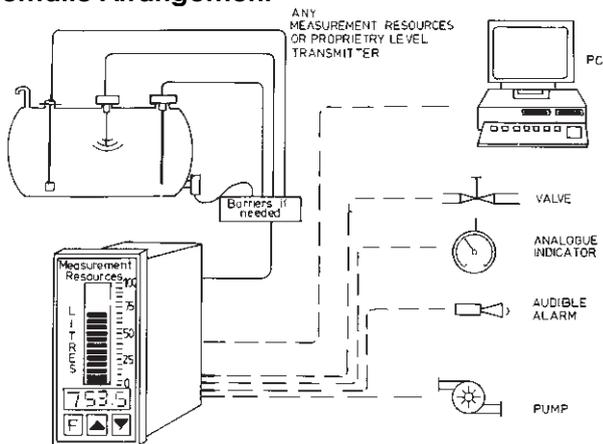
Analogue Output
4-20mA

Power Output to Transmitter
24VDC

Power Supply Input to Monitor
85-260V AC
10 - 72VDC

CODE	MOUNTING ARRANGEMENT				
MM	Panel Mounting				
	CODE	APPLICATION			
	WS	with an RS232 or RS485 serial port + cable			
	WO	No serial port			
		CODE	POWER SUPPLY		
		AC	85-260V AC powered		
		DC	10-72V DC powered		
			CODE	DISPLAY	
			6E	4-20mA input, 6-digit 14mm LED display, 5-button keypad + 6 alarm LEDs	
			5BP	4-20mA input, 5-digit 8mm LED display, 3-button keypad, 51-segment bar-graph + alarm LEDs	
				CODE	OPTIONS
				R2	2 relays + 24V DC excitation
				R4	4 x 5A relays + excitation
				R6	6 x 5A relays + excitation
				R2A	2 x 5A relays + excitation + analogue output (4-20mA/0-10V)
				R4A	4 x 5A relays + excitation + analogue output (4-20mA/0-10V)
				R6A	6 x 5A relays + excitation + analogue output (4-20mA/0-10V)
MM	WO	AC	5BP	R2	TYPICAL ORDER CODE

Schematic Arrangement



Typical Tank Farm Monitoring Panel



dPde palma SINCE
thermofluid

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Telephone: (61-2) 9816 3377 Fax: (61-2) 9816 3806
Email: admin@measurement-resources.com.au
Website: www.measurement-resources.com.au



Technical Note: DM200311 – FLS Bilge Level Switch



Typical FLS Series Bilge Switch with Terminal Housing

This technical note is intended to be used in conjunction with Measurement Resources standard brochure for the FLS series, float level switch (FLS-C-07), and covers a Bilge Switch version of this product.

The Bilge Switch is a special FLS designed for marine bilge applications, it is the companies understanding that bilge alarms do not need to be Type Approved but they do need to be fit for purpose. These devices have been supplied to passenger ferries and Navy Ships (HMAS Supply & Success).

SINGLE POINT

Measurement Resources Float Level Switch

Model: FLS-A-1-A-99(BSP 3/8")(SW)

- All wetted parts in: Stainless steel
- Float Material: POM
- Process connection: BSP Thread (BSP 3/8" Thread for flying lead)
- IP Rating
 1. IP65 with Terminal Housing
 2. IP68 with Flying Lead
- Tube Length: L= TBC (Typically 100 mm)
- Switch: L1= TBC (Typically 60mm)
- Stilling well: 60.30 x 2.00 mm
- Continuous operating Temp Range: -5 / 70°C
- Float designed for SG: $\geq 700 \text{ kg/m}^3$
- Terminal Housing: Die Cast Aluminium OR 5m flying lead

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DUAL POINT

Measurement Resources Float Level Switch

Model: FLS-B-1-A-99(G 3/8")(SW)

- All wetted parts in: Stainless steel
- Float Material: POM
- Process connection: BSP Thread (BSP 3/8" Thread for flying lead)
- IP Rating
 1. IP65 with Terminal Housing
 2. IP68 with Flying Lead
- Tube Length: L= TBC (Typically 230mm)
- Switch: L1= TBC (Typically 40mm)
- Switch: L2= TBC (Typically 180mm)
- Stilling well: 60.30 x 2.00 mm
- Continuous operating Temp Range: -5 / 70°C
- Float designed for SG: ≥ 700 kg/m³
- Terminal Housing: Die Cast Aluminium OR 5m flying lead

All other technical data in accordance with FLS-C-07

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