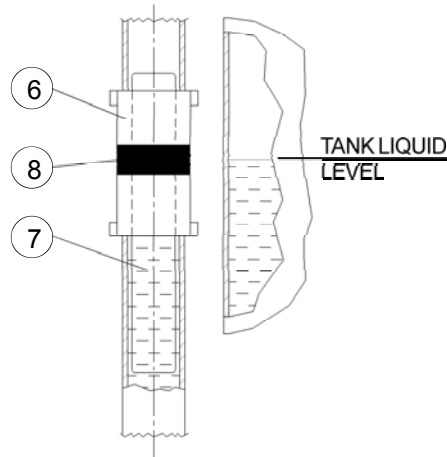


OPTION 'A'  
FLANGED CONNECTION

**PARTS LIST**

1	FLANGE	ST.STL. 316
2	COLLAR	ST.STL. 316
3	BY-PASS TUBE	ST.STL. 316
4	GUARD TUBE	POLYCARBONATE
5	DRAIN PLUG	ST.STL. 316
6	LEVEL INDICATOR	NYLON
7	FLOAT	ST.STL. 316
8	FOLLOWER	NYLON



**MAGNETIC OPERATION**

A vertical pipe column contains a fully sealed float. The float contains a set of permanent magnets which drives the follower, giving indication of the liquid level in the pipe.

**TECHNICAL SPECIFICATION**

Specific gravity = 0.7 - 1.3  
 Maximum working viscosity = 2000 cSt.  
 Indicator is suitable for more viscous fluids, with trace heating, see sheet 3.  
 Maximum working pressure = 22 bar.g (Industrial Applications)  
 = 18 bar.g (Marine Applications)  
 Maximum working liquid temperature = 180°C

By-pass tube assembly hydraulic test pressure = 36 bar.g at 20°C  
 By-pass tube dimensions 30.1 I/D x 1.65 thick ( 1" schedule 5s ).  
 'CENTRES' = to suit individual tank. 0.5m minimum, 5m maximum.  
 No indicator reading below 75mm.

**LEVEL MEASUREMENT**

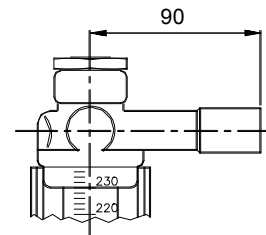
Transparent scale plate.

**WELDING SPECIFICATION**

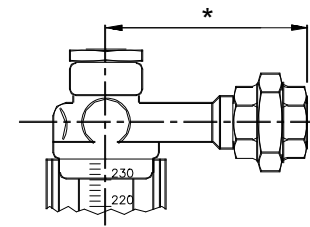
All welding assemblies are socket welds in accordance with BS3799.

**MARINE APPLICATION APPROVALS**

Lloyds, ABS, RINA, DNV.



OPTION 'B'  
STUB PIPE FOR WELDING  
MINIMUM O/D 20mm



OPTION 'C'  
UNION CONNECTIONS  
\* DEPENDING ON CONNECTION SIZE

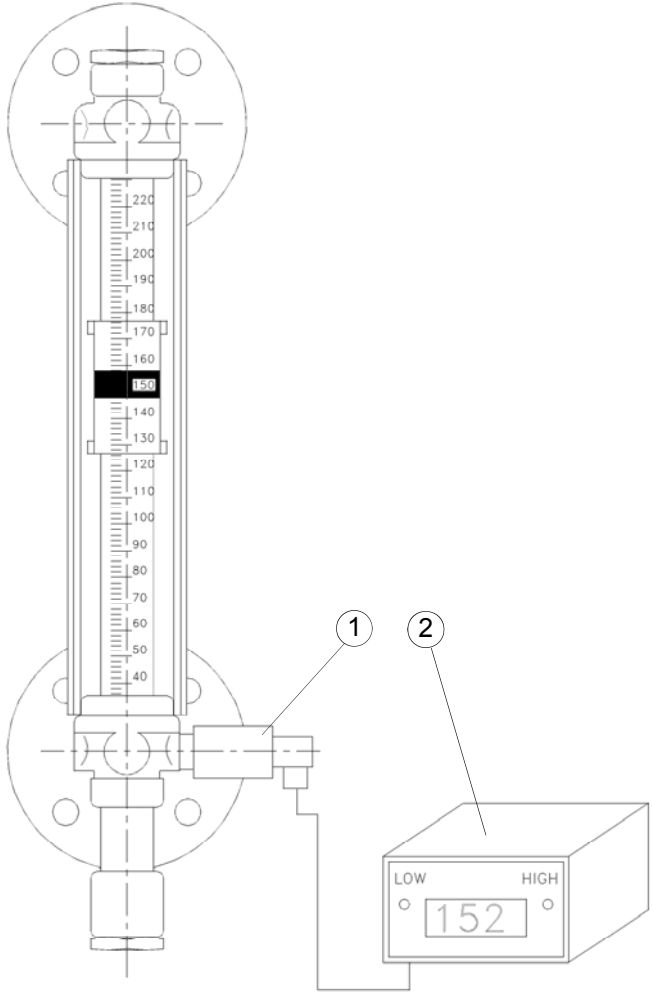


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MAGNETIC LIQUID LEVEL INDICATOR  
BASIC VERSION

SEEMAG G35

SHEET 1 OF 6 SHEETS



**PARTS LIST**

1	PRESSURE TRANSMITTER
2	DIGITAL PANEL METER

**PRESSURE TRANSMITTER**

[Marine & intrinsically safe versions available]

Pressure transmitter should only be used on atmospheric systems.

The pressure transmitter works independently from the Seemag and can be used for continuous reading and switching points.

Output signal: 4-20mA  
 Supply voltage: 12-28 Vdc

Operating temperature range:  
 Ambient: -25 +85°C  
 Fluid: -25 +100°C

**DIGITAL READOUT**

[Optional]

Digital linearised panel meter which requires a d.c. current input usually driven by a pressure transmitter. High & low switching points incorporated within panel meter.

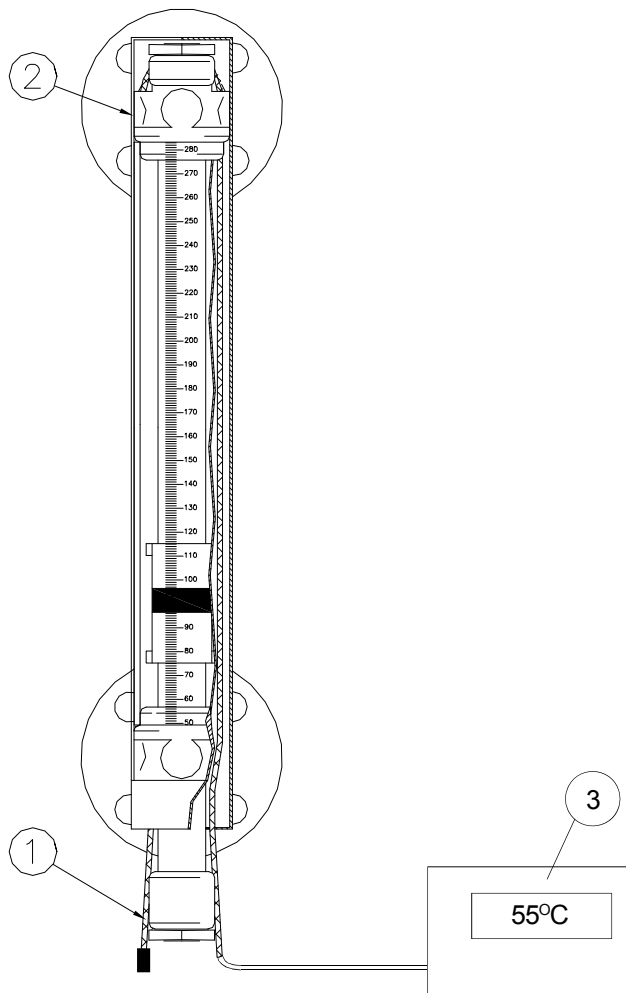
Transmitter input: 4-20mA  
 Power supply: 240Vac 50Hz  
 Internal supply: 24V to power transmitter  
 Environmental: Operating temp. 0-50 Deg. C



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MAGNETIC LIQUID LEVEL INDICATOR  
 WITH PRESSURE TRANSMITTER  
 & DIGITAL READOUT

SEEMAG G35



### PARTS LIST

1	60 W/M HEATING CABLE
2	INSULATED ENCLOSURE
3	CONTROL BOX

### TRACE HEATING

A continuous loop of trace heating cable is attached to the rear guard tube of the indicator. The cable is terminated at one end to a control box which can be used to regulate the temperature in the indicator via a temperature probe.

### CONTROL BOX

Voltage supply 220-240V  
With temperature display and probe.

### EXAMPLE

Ambient air temperature = 20°C  
50°C - 60°C Liquid temperature in indicator maximum.



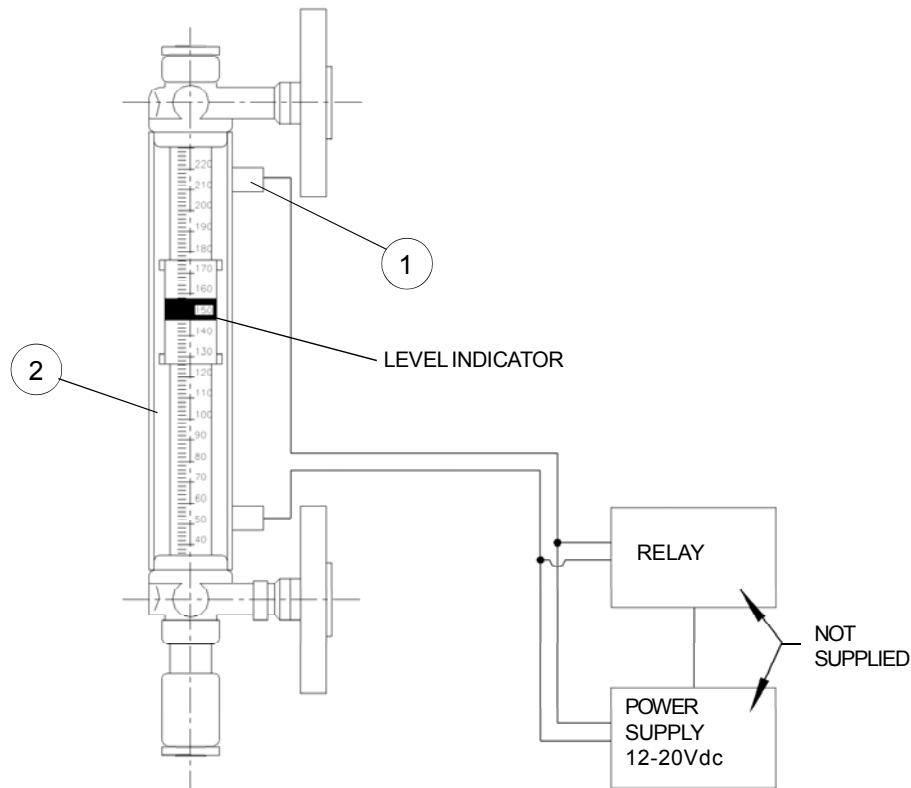
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MAGNETIC LIQUID LEVEL INDICATOR  
WITH TRACE HEATING

SEEMAG G35

SHEET 3 OF 6 SHEETS



### PARTS LIST

1	LEVEL TRANSDUCER
2	SEEMAG

### SWITCHING OPERATION

Level switches are of a magnetic hall effect design.

Switches are operated when the magnet in the base of the level indicator passes the switch, in either direction, causing it to be in one or the other state.

A power supply and relay are required to operate the switches (not supplied). Relays can then be terminated to pumps, alarms, switches or to a PC interface.

Switches are attached to rear guard tube and can be moved up or down to suit the required switching point.

Two switches are shown, but any number can be supplied.

### TECHNICAL SPECIFICATION

Switches require a 12-20 Vdc supply and suitable relay.

For suggested supply and relay combinations, see sheet 5.

Max. load current: 250mA

Operating conditions: 0-60°C



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MAGNETIC  
LIQUID LEVEL INDICATOR  
WITH LEVEL SWITCHING

SEEMAG G35

SHEET 4 OF 6 SHEETS

Number of Sensors	DC Output Level	PSU Input Voltage	Power Supply Stockist	Relay Stockist	Relay Contacts	Relay Coil Current	Relay Socket Stockist
2	+12Vdc	85-264Vac	RS 347-7138	RS 376-206	12A SPCO	55mA	RS 802-890
2	+24Vdc	85-264Vac	RS 347-7144	RS 376-212	12A SPCO	21mA	RS 802-890
2	+13Vdc	220-240Vac	RS 591-916	RS 376-206	12A SPCO	55mA	RS 802-890
2	+24Vdc	100-240Vac	RS 173-1654	RS 376-212	12A SPCO	21mA	RS 802-890
4	+12Vdc	85-264Vac	RS 347-7138	RS 376-206	12A SPCO	55mA	RS 802-890
4	+24Vdc	85-264Vac	RS 347-7144	RS 376-212	12A SPCO	21mA	RS 802-890
4	+13Vdc	220-240Vac	RS 591-916	RS 376-206	12A SPCO	55mA	RS 802-890
4	+24Vdc	100-240Vac	RS 173-1654	RS 376-212	12A SPCO	21mA	RS 802-890
2	+12Vdc	85-264Vac	RS 347-7138	RS 348-756	10A DPCO	136mA	RS 352-553
2	+24Vdc	85-264Vac	RS 347-7144	RS 384-784	10A DPCO	50mA	RS 352-553
2	+13Vdc	220-240Vac	RS 591-916	RS 348-756	10A DPCO	136mA	RS 352-553
2	+24Vdc	100-240Vac	RS 173-1654	RS 384-784	10A DPCO	50mA	RS 352-553
4	+12Vdc	85-264Vac	RS 347-7166	RS 348-756	10A DPCO	136mA	RS 352-553
4	+24Vdc	85-264Vac	RS 347-7144	RS 384-784	10A DPCO	50mA	RS 352-553
4	+13Vdc	220-240Vac	RS 591-916	RS 348-756	10A DPCO	136mA	RS 352-553
4	+24Vdc	100-240Vac	RS 173-1654	RS 384-784	10A DPCO	50mA	RS 352-553
2	+12Vdc	120 or 240Vac	FAR 200-931	FAR 466-670	5A 4PCO	75mA	FAR 466-736
2	+24Vdc	100-240Vac	FAR 768-431	FAR 466-682	5A 4PCO	38mA	FAR 466-736
2	+12Vdc	100-240Vac	FAR 768-420	FAR 735-498	20A 2NO	200mA	N/A
2	+24Vdc	100-240Vac	FAR 768-431	FAR 735-504	20A 2NO	100mA	N/A
4	+12Vdc	100-240Vac	FAR 768-420	FAR 466-670	5A 4PCO	75mA	FAR 466-736
4	+24Vdc	100-240Vac	FAR 768-431	FAR 466-682	5A 4PCO	38mA	FAR 466-736
4	+12Vdc	100-240Vac	FAR 768-420	FAR 735-498	20A 2NO	200mA	N/A
4	+24Vdc	100-240Vac	FAR 768-431	FAR 735-504	20A 2NO	100mA	N/A

RS = RS Componets

FAR = Farnell



SUGGESTED SUPPLY & RELAY COMBINATIONS

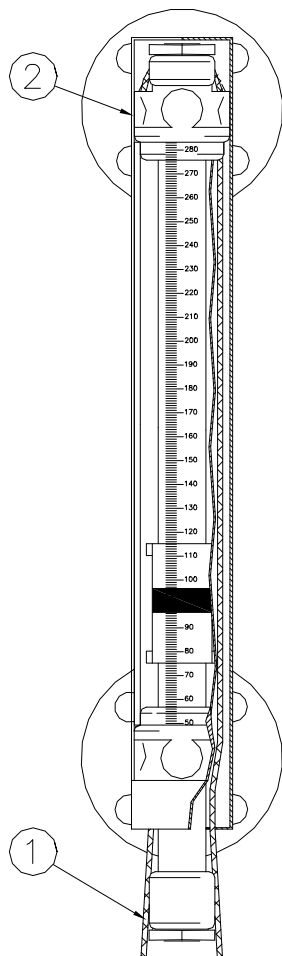
SHEET 5 OF 6 SHEETS

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MAGNETIC LIQUID LEVEL INDICATOR

SEEMAG G35



#### PARTS LIST

1	8mm O/D COPPER TUBE
2	ENCLOSURE

#### STEAM HEATING

8mm O/D Copper tube is attached to the rear guard tube in a continuous loop, from the bottom of the indicator.

The enclosure is then fitted around the indicator to protect the copper tube.

STEAM CAN BE FED THROUGH THE PIPE TO HEAT THE LIQUID IN THE BY-PASS TUBE.

#### EXAMPLE

Ambient air temperature = 20°C  
 Steam pressure 1.5 bar = 68°C Liquid temperature  
 Steam pressure 3 bar = 85°C Liquid temperature

#### NOTE

MAXIMUM WORKING TEMPERATURE SHOULD NOT EXCEED 180°C



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MAGNETIC LIQUID LEVEL INDICATOR  
 WITH STEAM HEATING

SEEMAG G35

SHEET 6 OF 6 SHEETS