

DM700I LOOP POWERED INDICATOR

- > (4 to 20) mA LOOP POWERED
- > PUSH BUTTON PROGRAMMING
- > CUSTOM LINEARISATION
- > 4 DIGIT LED DISPLAY
- > DM700XI ATEX OPTION

> INTRODUCTION

The DM700 is a loop powered indicator which incorporates a high efficiency LED display. Designed for use with our SCH4 ABS heads and SCH15 stainless steel head (non ATEX) available. The units are sealed to IP67.

The DM700I is microprocessor based and set-up is achieved by means of three push buttons, located on the back of the display module inside the housing. By following a simple menu structure, this device can have a number of standard linearisations applied, such as square root, or a custom characteristic can be entered.



> FEATURE HIGHLIGHTS

LOOP POWERED

The instrument is powered by the (4 to 20) mA loop current and can be connected at any point in the control loop circuit. The DM700I draws a minimal load from the loop needing no additional power supply.

ATEX

An ATEX version is available for use in hazardous gas and dust areas (ABS housing only).

ADJUSTABLE RESOLUTION

Display resolution to 0000, 000.0, 00.00 or 0.000

TEMPERATURE TRANSMITTER COMPATIBLE

As well as working with any (4 to 20) mA signal the DM700I has space inside its housing to mount a standard 33 mm centre, head mount, (4 to 20) mA temperature transmitter.

Any of the Status Instruments range of temperature transmitters can be used with the DM700I to give a local temperature display.

HART TRANSPARENT

If connected to a HART (4 to 20) mA control loop HART messages will pass through the DM700I.



DM700I LOOP POWERED INDICATOR

ELECTRICAL INPUT mA		SPECIFICATIONS @20 °C
Type/ options/ function	Range	Accuracy/ stability/ notes
(4 to 20) mA	> 3.8 mA to < 21.0 mA	± 0.02 % of full scale
Loop voltage drop		< 4.0 V @ 20 mA
HART transparent		Yes
Maximum current *1	To avoid permanent damage	90 mA for < 60 s
Protection		Reverse current
Thermal drift	Zero Span	± 0.002 %/ °C ± 0.01 %/ °C
*1 Fuse protection for the current loop is highly recommended		

DISPLAY	
Type/ options/ function	Description
Display height	7.6 mm
LED	4 digits, high intensity, red
Range	-1999 to 999
Decimal place	Programable 0000, 000.0, 00.00, 0.000
Update rate	250 ms

PUSH BUTTON CONFIGURATION USER INTERFACE		
Type/ options/ function	Description	Notes
Linearity	Linear, square root, $X^{3/2}$, $X^{5/2}$ or user interpolation (20 co-ordinate pairs)	
Scaling	Mode	Standard or automatic
	Engineering unit value	Low and high engineering values
	Segments for interpolation	mA to engineering value pairs Maximum of 20
Offset		In engineering units
Menu time out		60 s or 1 hour
Display resolution		1, 0.1, 0.01, 0.001
Passcode	Menu lockout	4-digit number

ENVIRONMENTAL	
Function	Description
Ambient temperature	Operating (-20 to 75) °C: Storage (-50 to 85) °C
Ambient humidity	(10 to 90) % RH non-condensing
Protection	IP67, cable/ probe entries must be sealed to IP67 to maintain
Connections	Screw terminal, 1.5 mm ² maximum wire size

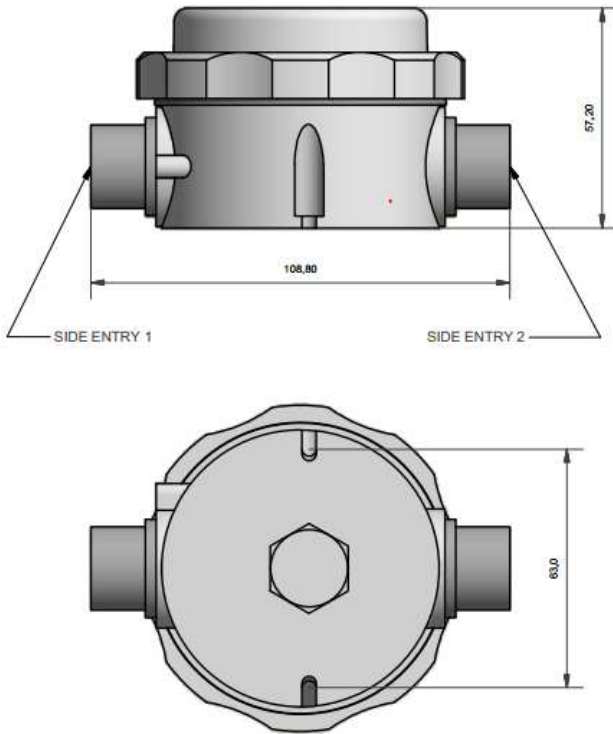
MECHANICAL	
Function	Description
Enclosure	ABS grey base, grey clamp ring
Display cover	Polycarbonate, clear
Case entries	See ORDER CODES below
Weight (approximate)	150 g



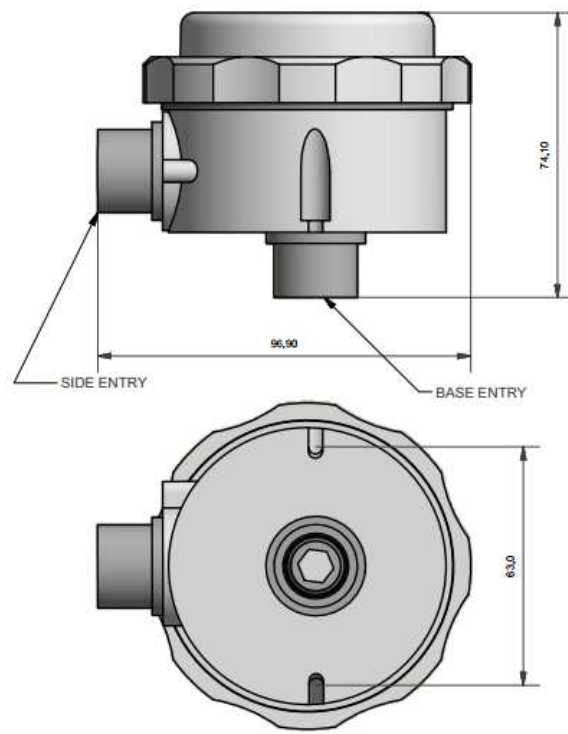
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APPROVALS	
Function	Description
EMC	BS EN 61326
Ingress protection	BS EN 60529
RoHS	Directive 2011/65/EU
ATEX: DM700XI only	ATEX II 1G EEX ia IIC

MECHANICAL 2 x side entry B type body



1 x side entry 1 x base entry C type body



DM700 ORDER CODE							
For ATEX add X		Case type			Entry options		
			Base entry	Side 1			Side 2
DM700		I	A	00	Entry option	00	16 = M16 20 = M20 24 = M24 BP = ½ "BSP NT = ½ "NPT 00 = no entry
DM700		I	B	00	Entry option	Entry option	
DM700		I	C	Entry option	Entry option	00	
DM700/ = non ATEX version		A = 1 x side entry					
DM700/X = ATEX version		B = 2 x side entry					
		C = 1 x side entry + 1 x base entry					
Example, non ATEX, 1 x M24 base entry with 1 x M20 side entry							
DM700		I	/C	/24	/20	/00	
For further options please contact sales@status.co.uk							

To maintain full accuracy annual calibration is required contact support@status.co.uk for details
 The data in this document is subject to change. Status Instruments assumes no responsibility for errors

