

LOOP POWERED FIELD INDICATOR

DM400 SERIES

- IP67 ENCLOSURE
- 1 VOLT LOOP DROP (DM400)
- LOOP POWERED
- 5 YEAR WARRANTY
- ENGINEERING UNITS
- PROBE OR WALL MOUNTING



INTRODUCTION

The **DM400** is a loop powered indicator designed to be connected in series with a (4 to 20) mA current loop and to display digitally, in engineering units, the process variable represented by the current flowing. Coarse and fine potentiometers are provided for both SPAN and ZERO adjustment.

The **DM400** 3 ½ digit LCD display requires only 1 volt from the loop, and is incorporated into a cap which can be fitted to a standard SCH4*1 base. Sealed to IP67, the head assembly can be mounted on a probe assembly, wall or DIN rail. The **DM401** is a lower cost version of the **DM400** requiring 3 volts from the loop.

A wide selection of compatible probe assemblies are available with various immersion lengths and process connections.

The SCH4 base unit has a wide range of entry sizes and positions. The base will accept standard connecting blocks and most standard head mounting transmitters. It also has two M2.5 threaded inserts which enable a low cost terminal block to be fitted. Moulded in general purpose ABS, the external fixing points provide a simple and rapid means of mounting sensors directly onto ducts, dispensing with the need for separate mounting plates.

There are four base types available: single side entry, double sided entry, single side and bottom entry or as double sided and bottom entry. All ports may be used for sensor or cable entry as required.

SPECIFICATIONS @ 20 °C

INPUT	(4 to 20) mA, 2 wire (reverse polarity protected)		
	DM400	DM401	
Max. Current	± 125	± 63	mA
Min. Operating Current	3.8	3.8	mA
Max. Loop drop @ 20mA	1.0	3.0	V
Loop Ripple	20	n/a	µA
Fuse Protection	125	63	mA
Display	LCD, 3 ½ Digit LCD		
Display Range	-1000 to +1999 counts 3 ½ digit		
Offset	-1000 to +1000 counts at 4 mA		
Span	200 to 2000 counts (16 mA change)		
Decimal Point	3 positions plus blank		
Accuracy	± 0.1 % rdg, ± 1 count		
Offset Stability	0.02 % FRO/°C maximum		
Span Stability	0.02 % FRO/°C maximum		

GENERAL	
Ambient	(0 to 50) °C operating
Case Size	85 mm diameter x 114 mm overall with SCH4*1 case fitted.

APPROVALS	
EMC	BS EN61326

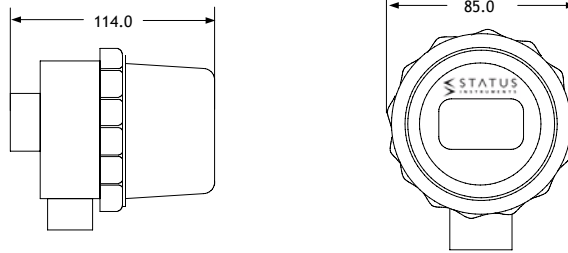
NOTES:

- *1 See SCH4 data sheet for details (order separately)
- *2 Default range (0 to 100) °C unless otherwise specified.
- *3 Can easily be re-ranged
- *4 Units must be specified at time of ordering.

LOOP POWERED FIELD INDICATOR

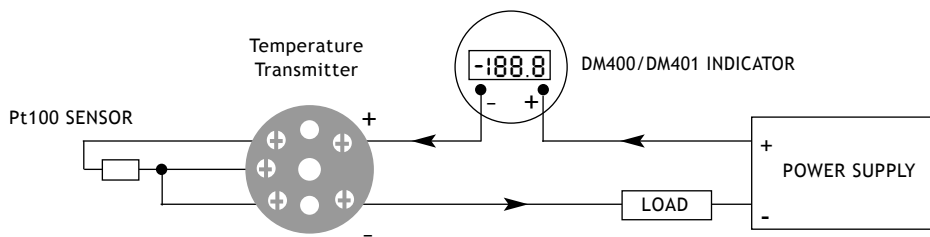
MECHANICAL DETAILS

Typical Installation on SCH4 Connecting head. (All dimensions in mm)



DM400/DM401 TYPICAL APPLICATION

Consult Systems Certificate for full details of I/S installations



ACCESSORIES

Mounting kits are available for mounting the SCH4 directly onto a pipe or wall or where it is not practical to use the fixing points on the body. The pipe mounting kit is supplied complete with 1 metre of stainless steel strap and fitting instructions.

ORDER CODE

Pipe Mounting Kit	PMK/SCH4
Wall Mounting Kit	WMK/SCH4

ORDER CODE: SCH4 CONNECTING HEAD

SCH	BODY	CAP	BASE	SIDE	SIDE	OPTION
4	TYPE	TYPE	ENTRY	ENTRY	ENTRY	
				A	B	
1 Side Port	A					
2 Side Ports	B					
1 Side & 1 Base Port	C					
2 Sides & 1 Base Port	D					
Low Profile Cap Standard	L					
High Profile Cap	D					
No Cap Fitted	O					
Not Fitted	00					
M16 Thread	16					
M20 Thread	20					
M24 Thread	24					
½" BSP Thread	.5 BSP					Cap Retaining Chain 2
½" NPT	.5 NPT					Cap Retaining Strap 3

Example SCH4/C/O/24/20/00/03

The DM400 assembly on a B style base with a single M24 base entry and an M20 side entry fitted with a cap retaining strap.

ORDER CODE

MODEL	Lo / Hi	UNITS
DM400	Standard version*2	
DM401	Low cost version*2	
Low Reading @ 4 mA*1		
High Reading @ 20 mA*1		
°C	mbar	m
°F	in wg	l/s
%	ft wg	l/min
bar	m wg	l/hr
bar g	mm Hg	gal/min
bar abs	kg/cm ²	gal/hr
		%RH
		K
Any of the above units are standard		

*NOTES:

1. If not specified, unit will be calibrated (0 to 100) °C
2. Order SCH4 Connecting Head separately (see Data Sheet)