



Electrical Installation

Sensors

MBS1250 H-D Pressure Transmitter



Revision history*Table of revisions*

Date	Changed	Rev
August 2015	Converted to Danfoss layout	BA
Feb 2009	First edition	AA

Contents**Literature references**

MBS1250 H-D pressure transmitter literature references.....	4
Latest version of technical literature.....	4

Product overview

Product image.....	5
Part numbers.....	5
Theory of operation.....	6
Electrical specifications.....	6

Electrical installation

Pinout.....	7
Pin compatibility.....	7
Mating connector.....	7

Literature references**MBS1250 H-D pressure transmitter literature references**

Literature title	Description	Literature number
<i>MBS1250 Heavy Duty Pressure Transmitter Data Sheet</i>	Complete product electrical and mechanical specifications	11058299
<i>MBS1250 Heavy-Duty Pressure Transmitter Compliant Function Block User's Guide</i>	Compliant function block set-up information	11062069

Latest version of technical literature

Danfoss product literature is online at: <http://powersolutions.danfoss.com/literature/>

Electrical Installation MBS1250 H-D Pressure Transmitter

Product overview
Product image
MBS1250 H-D pressure transmitter

Part numbers
Pressure transmitter ranges/part numbers

Pressure transmitter range	Danfoss material number		
	Pressure connection		
	SAE 4	SAE 6	G1/4
0 to 40 bar [580 psi]	11044499	11044545	11044551
0 to 160 bar [2320 psi]	11044500	11044546	11044562
0 to 250 bar [3626 psi]	11044501	11044547	11044563
0 to 400 bar [5800 psi]	11044542	11044548	11044564
0 to 500 bar [7250 psi]	11044543	11044549	11044565
0 to 600 bar [8700 psi]	11044544	11044550	11044566

Electrical Installation MBS1250 H-D Pressure Transmitter

Product overview
Theory of operation

Danfoss Heavy-Duty Pressure Transmitters convert measured pressure into a linear, temperature-compensated, output signal with a range of 10% to 90% of transmitter supply voltage. The PLUS+1[®] Compliant pressure transmitter function block requires that transmitter supply voltage be 5 Vdc regulated sensor power provided by a PLUS+1[®] Compliant control device.

A unique PLUS+1[®] Compliant pressure transmitter function block template is available for each transmitter range.

Be sure that the PLUS+1[®] Compliant function block template being used is appropriate for the range of the pressure transmitter installed in the system.

Electrical specifications
Pressure transmitter electrical specifications

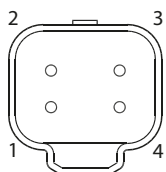
Nominal output signal	10 to 90% of supply
Supply voltage—V supply (polarity protected)	5 Vdc \pm 0.5 Vdc
Power consumption	4.5 mA at 5 Vdc
Output impedance	90 Ω
Load resistance	> 5 k Ω at 5 Vdc
Accuracy (at reference conditions)	\pm 0.5% full scale
Hysteresis and repeatability	$\leq \pm$ 0.1% full scale
Thermal zero point shift	< \pm 0.15% full scale/ 10K
Thermal sensitivity (span) shift	< \pm 0.15% full scale/ 10K
Response time liquids (10 to 90%)	< 1 ms

Electrical Installation MBS1250 H-D Pressure Transmitter

Electrical installation

Pinout

4 pin DEUTSCH Receptacle DT-04



Pinout and Wiring Information

Pin	Function
1	Supply -
2	Supply +
3	P. E. (not used)*
4	Output +

* Pin 3 connected to case; typically not used (P. E. = protective earth).

Pin compatibility

PLUS+1® module pin type/pressure transmitter pin compatibility

Pin	Function
2	Sensor power +
1	Sensor power -
4	AIN/CAN0 shield
4	AIN/CAN1 shield
4	AIN/CAN2 shield
4	DIN/AIN
4	DIN/AIN/FreqIN
4	AIN/Temp/Rheo

Mating connector

DEUTSCH connector

Description	Quantity	Ordering number
4 pin DEUTSCH Plug DT-06-45-E003 Series bag assembly	1	Danfoss 11028348



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