

MBS1250 Heavy Duty Pressure Transmitter

Product Electrical Installation















# MBS1250 Heavy Duty Pressure Transmitter **SAUER** MBS1250 Heavy Duty Pressure Product Electrical Installation Revisions

**Revisions History** 

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Date	Page	Changed	Rev
20 Feb, 2009			AA

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# **SAUER** MBS1250 Heavy Duty Pressure Product Electrical Installation MBS1250 Heavy Duty Pressure Transmitter Contents

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#### Literature References Refer to MBS1250 Heavy Duty Pressure Transmitter Data Sheet 11058299 for complete product electrical and mechanical specifications.

Refer to MBS1250 Heavy Duty Pressure Transmitter Compliant Function Block User Manual **11062069** for compliant function block set-up information.

Technical literature is available at: www.sauer-danfoss.com



# MBS1250 Heavy Duty Pressure Transmitter Product Electrical Installation Product Overview

**Product Image** 



### **Part Numbers**

### Pressure Transmitter Ranges/Part Numbers

	Sauer-Danfoss material number		
Measuring range	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

# Description/Theory of Operation

Sauer-Danfoss MBS1250 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<sup>™</sup> *GUIDE pressure transmitter compliant function block* requires that transmitter supply voltage be 5 Vdc regulated sensor power provided by a PLUS+1 control device.

A unique *PLUS*+1 *GUIDE pressure transmitter compliant function block* template is available for each transmitter range.

Be sure that the *PLUS*+1 *GUIDE compliant function block* template being used is appropriate for the range of the pressure transmitter installed in the system.



# MBS1250 Heavy Duty Pressure Transmitter **SAUER MBS1250 Heavy Duty Pressure Product Electrical Installation Product Overview**

### Electrical Specifications

### Pressure Transmitter Electrical Specifications

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



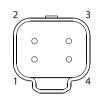
# **SAUER DANFOSS** MBS1250 Heavy Duty Pressure Transmitter Product Electrical Installation **Electrical Installation**

### Pinout

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).

### 4 pin Deutsch® Receptacle DT-04



2398

### **Pin Compatibility**

### PLUS+1 Module Pin Type/Pressure Transmitter Pin Compatibility

PLUS+1 module pin type	Acceptable use: device pin number
Sensor power +	2
Sensor power -	1
AIN/CAN0 shield	4
AIN/CAN1 shield	4
AIN/CAN2 shield	4
DIN/AIN	4
DIN/AIN/FreqIN	4
AIN/Temp/Rheo	4

### **Mating Connector**

### Pressure Transmitter Mating Connector

Mating connector	Sauer-Danfoss material number
4 pin Deutsch <sup>®</sup> Plug	11028348
DT-06-45-E003 Series bag assembly	



SAUER<br/>DANFOSSMBS1250 Heavy Duty Pressure Transmitter<br/>Product Electrical Installation Notes

Notes



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