



Technical Information

H1 Axial Piston Pumps and Motors Pressure Sensor



Revision History*Table of Revisions*

Date	Changed	Rev
Jan 2014	Converted to Danfoss Layout - DITA CMS	BA
Nov 2010	First edition	AA

Technical Information Pressure Sensor

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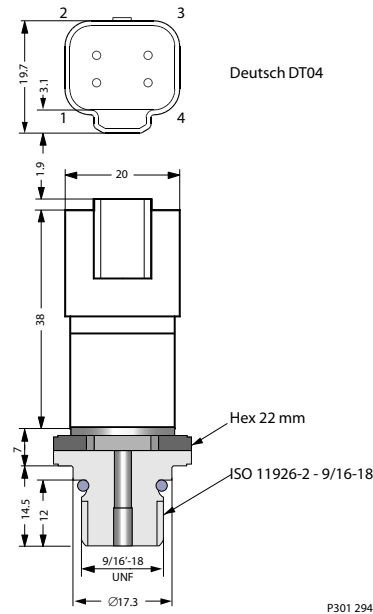
Product Overview

Description

The compact heavy duty OEM pressure transmitter MBS 1250 is designed for use in severe hydraulic applications.

The integrated pulse-snubber offers a high degree of protection against cavitations and liquid hammer, and the well thought out design results in excellent vibration stability and an exceptional robustness. The high degree of EMI protection equips the pressure transmitter to meet the most stringent industrial requirements.

Dimensions



Deutsch DT04	Output signal 10-90% of supply
1	Supply -
2	Supply +
3	Not used
4	Output +

Mating Connector Kit Order Number

Description	Quantity	Ordering number
Mating connector	1	Deutsch® DT06-4S
Wedge lock	1	Deutsch® W4S
Socket contact (16 and 20 AWG/0.5-1.3 mm ²)	3	Deutsch® 0462-201-1631 (female)
Plug for not used pin 3	1	Plug Deutsch 114017
Danfoss mating connector kit	1	11084525

Technical Information Pressure Sensor

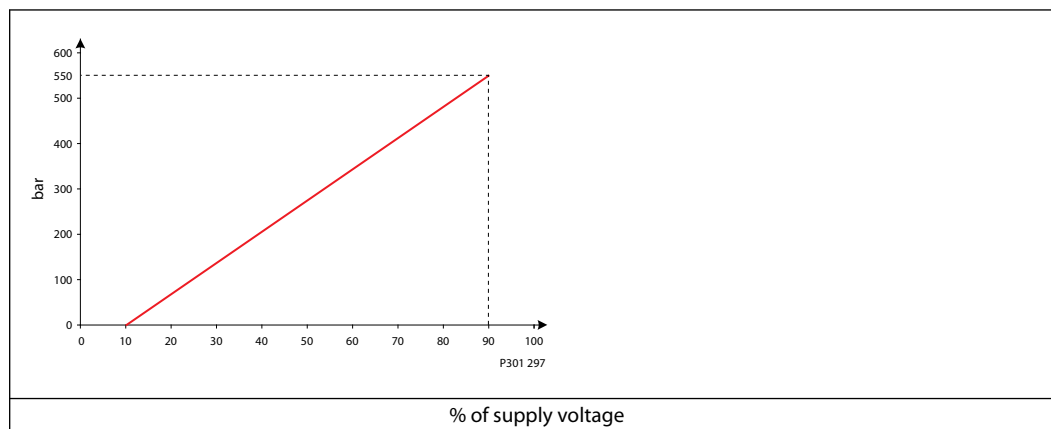
General Data

Pressure Sensor

Technical Data

	Min.	Nom.	Max.	Units	Comments
Pressure range charge pressure	0		55	bar	Part Number 11082093
Pressure range high pressure	0		550	bar	Part Number 11082094
Proof pressure	3x pressure range				
Burst pressure	7x pressure range				
Lifetime	>10 ⁷ pressure cycles				
	0 ... 100% FS				
Output signal range (see below graphic)	10	50	90	% Ratio metric output voltage	
Accuracy			±0.50	% FS	
Stability			±0.10	% /year	
Compensated temperature	-40		125	°C	
Thermal zero point shift			± 0.15	%FS/10K	
Thermal sensivity (span) shift			± 0.15	% FS/10K	
Hysteresis and repeatability			± 0.10	% FS	

Pressure vs. Output Signal



Technical Data

	Min.	Nom.	Max.	Units	Comments
Supply voltage	4.5	5.0	5.5	V DC	Regulated supply voltage must be provided. Sensor has reverse polarity protection and 35V over voltage protection.
Supply - current consumption			4.5	mA	
Load resistance [RL] (to 0V)	10			kΩ	
Output impedance			90	Ω	
Wire fault detection	Short to supply				
Wire fault detection	Short to ground				

General Data
Technical Data (continued)

		Min.	Nom.	Max.	Units	Comments
Protection code IP-class		IP67 and IP69K			IP67 w/o connector installed	
					IP69k depends on mating connector	
EMC-emission test levels		EN 61000-4-8, EN 61000-4-3, EN 61000-4-2, EN 61000-4-6, EN 61000-4-4, EN 61000-4-5, EN 55022, EN 61000-6-3				
EMC-immunity (EMI)	Standard	EN 61000-4-3				
	Strip line	100V/m, 80Mhz-1Ghz				
	Absorber lines chamber	30V/m, 1.4Ghz-2.7Ghz				
ESD	Standard	EN 61000-4-2:				
	Air discharge	15 kV				
	Contact discharge	8 kV				
Automotive electrical transients		Comply with ISO7637				
Operating fluids		Hydraulic fluids according to Manual 520L0463				
Operating temperature range		-40		125	°C	
Ambient temperature range		-40		100	°C	
Storage/transport temperature		-40		125	°C	
Assembly torque		35		38	Nm	



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