Pressure transducer with integrated

Service Automation

Mobile Hydraulics

Rexroth **Bosch Group**

RE 30266/01.04 Replaces: 12.00

1/4



- Accuracy class 0.5
- Measurement range 315 bar
- G 1/4 connection thread
- Parts that are in contact with the medium are of stainless steel
- Compact design
- CE mark

HM 16-1X/315 C13- A Pressure transducer Further details in clear text with integrated electronics Connection cable (length 0.5 m) for A =Series 10 to 19 = 1Xthe SYDFEE and SYDFEC systems (10 to 19: unchanged technical data C13 = 3-pin plug M12x1 with connection cable and connection allocation) for the SYDFEE and SYDFEC systems Measurement range 315 bar = 315

Ordering details

Overview of contents

electronics

Type HM 16

Series 1X

Contents

Features

Ordering details

Unit dimensions

Technical data

Technical data (for applications outside these parameters, please consult us!)

Input variables		
Auxiliary power	U _B	19 to 36 VDC
Current consumption	1	4 mA
Measurement range	p _N in bar	315
Overload protection	p _{max} in bar	780
Burst pressure	<i>p</i> in bar	1500
Dead volume	V	approx. 200 mm ³
Output variables		
Output signal	U	0.5 to 5 VDC
Balancing error:		
– Zero point		< 0.15 % ¹⁾
– End value		< 0.3 % ¹⁾
Temperature co-efficients in the nominal temperature range		
- Highest TC of the zero point		< 0.2 %/ 10 K
- Highest TC of the span		< 0.2 %/ 10 K
Characteristic curve deviation		type < 0.2 $\%$ ¹⁾ (limit point adjustment)
Hysteresis		< 0.1 % ¹⁾
Repeatability		< 0.05 % ¹⁾
Adjustment time (10 to 90 %) t		< 1 ms
Long term drift (1 year) under reference conditions		< 0.2 % ¹⁾
Ambient conditions		
Nominal temperature range	ϑ	– 20 to + 80 °C
Limiting temperature range ϑ		– 40 to + 85 °C
Storage temperature range	ϑ	- 40 to + 125 °C
Medium temperature range	ϑ	– 40 to + 90 °C
Mechanical data		
Pressure connection		G1/4 external thread to DIN 3852 form E (pressure chanel with a $\emptyset = 0.6$ mm orifice); profile seal to DIN 3869, material FKM
Tightening torque	М	15 Nm
Electrical connections		3-pin M12 plug with connection cable 3 x 0.34 mm2 (0.5 m long)
Weight	т	0.16 kg
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1) Referring to the full measuring range

IF Note!

For details regarding the environmental simulation test covering EMC (electro-magnetic compatibility), climate and mechancial loading see RE 30 266-U (declaration regarding environmental compatibility).

Connection allocation

C13 plug (with connection cable) (3-pin M12 plug; viewed on the contact side)

- 1 -> Supply voltage + (+ UB)
- 3 -> Supply voltage (0 V)
- 4 -> Output signal (0.5 to 5 V)

Contacts 2 and 5 are not used. (The connection diagram depicts a 5-pin plug)



Unit dimensions (dimensions in mm)



- 1 G 1/4 pressure connection to DIN 3852
- 2 Profile seal to DIN 3869, material FKM (Material No. 0001 2502)
- 3 Connection cable (with a 3-pin M12plug); 0.5 m long
- 4 Minimum installation length

Notes

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