

HYDAC INTERNATIONAL



Electronic Temperature Transmitter with HSI Sensor Recognition ETS 4548-H

Description:

The electronic temeprature transmitter ETS 4548-H with HSI sensor recognition has been specially developed for use in conjunction with HYDAC measuring instruments HMG 500, HMG 510, HMG 3000 and CMU 1000. For data transmission, the ETS 4548-H has an HSI interface (HYDAC Sensor Interface). The HSI sensors are automatically recognized via the HSI interface by the abovementioned HYDAC measuring instruments and all the necessary basic settings are taken from each sensor.

Like all temperature transmitters in the ETS 4000 series, the ETS 4548-H features a robust design and excellent EMC characteristics. Based on a silicon semiconductor device and corresponding evaluation electronics, the temperature sensor is designed to measure temperatures in the range -25 to +100 °C.

Special features:

- Automatic recognition by, and voltage supply from, HYDAC measuring instruments HMG 500, HMG 510, HMG 3000 or CMU 1000
- Automatic transfer of measuring range, measured value and measurement unit
- Robust design
- Pressure resistant to 600 bar
- Excellent EMC characteristics
- Standard protection class IP 67

Technical enecifications:

Input data Measuring principle Silicon semiconductor device Measuring ranges -25 +100 °C Pressure resistance 600 bar Overload pressure 1000 bar Mechanical connection C1/4 A DIN 3852 Torque value 20 Nm Parts in contact with medium Mech. conn.: Stainless steel Seal: FPM Output data Seal: FPM Output signal HSI (HYDAC Sensor Interface) Automatic sensor recognition Accuracy ≤ ± 1.5 % FS typ. Rise time to DIN EN 60751 tso: 4 stor: 4 s	rechnical specifications:	
Measuring ranges -25 +100 °C Pressure resistance 600 bar Overload pressure 1000 bar Mechanical connection C1/4 A DIN 3852 Torque value 20 Nm Parts in contact with medium Mech. conn.: Stainless steel Seal: FPM Output data HSI (HYDAC Sensor Interface) Output signal HSI (HYDAC Sensor Interface) Automatic sensor recognition Accuracy Accuracy ≤ ± 1.5 % FS typ. Rise time to DIN EN 60751 tso: 4 s tan: 6 s tan: 6 s Ambient conditions Operating temperature range Operating temperature range -25 +100 °C Storage temperature range -40 +100 °C Fluid temperature range -40 +120 °C € mark EN 61000-6-1 / 2 / 3 / 4 Vibration resistance to Seat DIN EN 60068-2-6 at 10 500 Hz Protection class to DIN 40050 IP 67 (when an IP 67 connector is used) Other data Via HYDAC measuring instruments HMG 500, HMG 510, HMG 3000 or CMU 1000	Input data	
Pressure resistance 600 bar Overload pressure 1000 bar Mechanical connection C1/4 A DIN 3852 Torque value 20 Nm Parts in contact with medium Mech. conn.: Stainless steel Seal: FPM Output data Seal: FPM Output signal HSI (HYDAC Sensor Interface) Automatic sensor recognition Accuracy ≤ ± 1.5 % FS typ. Rise time to DIN EN 60751 tso: 4 stan: 6 s		Silicon semiconductor device
Overload pressure 1000 bar Mechanical connection C1/4 A DIN 3852 Torque value 20 Nm Parts in contact with medium Mech. conn.: Stainless steel Seal: FPM Output data Seal: FPM Output signal HSI (HYDAC Sensor Interface) Automatic sensor recognition Accuracy ≤ ± 1.5 % FS typ. Rise time to DIN EN 60751 tso: 4 s ton: 6 s Ambient conditions Operating temperature range Operating temperature range -25 +100 °C Storage temperature range -40 +100 °C Fluid temperature range -40 +120 °C C mark EN 61000-6-1 / 2 / 3 / 4 Vibration resistance to DIN EN 60068-2-6 at 10 500 Hz Protection class to DIN 40050 IP 67 (when an IP 67 connector is used) Other data Voltage supply Voltage supply Via HYDAC measuring instruments HMG 500, HMG 510, HMG 3000 or CMU 1000	Measuring ranges	-25 +100 °C
Mechanical connection G1/4 A DIN 3952 Torque value 20 Nm Parts in contact with medium Mech. conn.: Stainless steel Seal: FPM Output data Seal: FPM Output signal HSI (HYDAC Sensor Interface) Automatic sensor recognition Accuracy ≤ ± 1.5 % FS typ. Rise time to DIN EN 60751 tso: 4 stor: 6 s Ambient conditions Operating temperature range Operating temperature range -25 +100 °C Storage temperature range -40 +100 °C Fluid temperature range -40 +120 °C C € mark EN 61000-6-1 / 2 / 3 / 4 Vibration resistance to DIN EN 60068-2-6 at 10 500 Hz Protection class to DIN 40050 IP 67 (when an IP 67 connector is used) Other data Voltage supply Voltage supply Via HYDAC measuring instruments HMG 500, HMG 510, HMG 3000 or CMU 1000	Pressure resistance	600 bar
Torque value Parts in contact with medium Parts in contact with medium Mech. conn.: Stainless steel Seal: FPM Output data Output signal Accuracy Accuracy Rise time to DIN EN 60751 Topic 1 so: 4 so topic 1 so: 4 so topic 1 so: 4 so topic 2 so to	Overload pressure	1000 bar
Parts in contact with medium Mech. conn.: Stainless steel Seal: FPM Output data Output signal Accuracy Accuracy Rise time to DIN EN 60751 Topic 1 4 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Mechanical connection	
Seal: FPM Output data Output signal HSI (HYDAC Sensor Interface)		20 Nm
Output signal HSI (HYDAC Sensor Interface) Automatic sensor recognition Accuracy ≤ ± 1.5 % FS typ. Rise time to DIN EN 60751 t ₅₀ : 4 s t ₅₀ : 4 s Ambient conditions -25 +100 °C Operating temperature range -40 +100 °C Storage temperature range -40 +120 °C Fluid temperature range -40 +120 °C € mark EN 61000-6-1 / 2 / 3 / 4 Vibration resistance to DIN EN 60068-2-6 at 10 500 Hz Protection class to DIN 40050 IP 67 (when an IP 67 connector is used) Other data via HYDAC measuring instruments HMG 500, HMG 510, HMG 3000 or CMU 1000	Parts in contact with medium	
Automatic sensor recognition Accuracy $\leq \pm 1.5 \% \text{ FS typ.}$ Rise time to DIN EN 60751 t_{50} : 4 s t_{50} : t_{5	Output data	
Rise time to DIN EN 60751	Output signal	Automatic sensor recognition
Ambient conditions	Accuracy	≤ ± 1.5 % FS typ.
Ambient conditions Operating temperature range -25 +100 °C Storage temperature range -40 +100 °C Fluid temperature range -40 +120 °C € mark EN 61000-6-1 / 2 / 3 / 4 Vibration resistance to ≤ 25 g DIN EN 60068-2-6 at 10 500 Hz Protection class to DIN 40050 Protection class to DIN 40050 IP 67 (when an IP 67 connector is used) Other data Voltage supply via HYDAC measuring instruments HMG 500, HMG 510, HMG 3000 or CMU 1000	Rise time to DIN EN 60751	
Operating temperature range -25 +100 °C Storage temperature range -40 +100 °C Fluid temperature range -40 +120 °C € mark EN 61000-6-1 / 2 / 3 / 4 Vibration resistance to ≤ 25 g DIN EN 60068-2-6 at 10 500 Hz Protection class to DIN 40050 Protection class to DIN 40050 IP 67 (when an IP 67 connector is used) Other data Via HYDAC measuring instruments HMG 500, HMG 510, HMG 3000 or CMU 1000		tani 6 S
Storage temperature range -40 +100 °C Fluid temperature range -40 +120 °C € mark EN 61000-6-1 / 2 / 3 / 4 Vibration resistance to ≤ 25 g DIN EN 60068-2-6 at 10 500 Hz Protection class to DIN 40050 Protection class to DIN 40050 IP 67 (when an IP 67 connector is used) Other data Via HYDAC measuring instruments HMG 500, HMG 510, HMG 3000 or CMU 1000		
Fluid temperature range -40 +120 °C (€ mark Vibration resistance to DIN EN 60068-2-6 at 10 500 Hz Protection class to DIN 40050 Other data Voltage supply Via HYDAC measuring instruments HMG 500, HMG 510, HMG 3000 or CMU 1000		
€ mark EN 61000-6-1 / 2 / 3 / 4 Vibration resistance to ≤ 25 g DIN EN 60068-2-6 at 10 500 Hz IP 67 (when an IP 67 connector is used) Other data Voltage supply via HYDAC measuring instruments HMG 500, HMG 510, HMG 3000 or CMU 1000		
Vibration resistance to DIN EN 60068-2-6 at 10 500 Hz Protection class to DIN 40050 Other data Voltage supply Via HYDAC measuring instruments HMG 500, HMG 510, HMG 3000 or CMU 1000		
DIN EN 60068-2-6 at 10 500 Hz Protection class to DIN 40050 Other data Voltage supply Via HYDAC measuring instruments HMG 500, HMG 510, HMG 3000 or CMU 1000		
Other data Voltage supply via HYDAC measuring instruments HMG 500, HMG 510, HMG 3000 or CMU 1000		≤ 25 g
Voltage supply via HYDAC measuring instruments HMG 500, HMG 510, HMG 3000 or CMU 1000	Protection class to DIN 40050	IP 67 (when an IP 67 connector is used)
HMG 500, HMG 510, HMG 3000 or CMU 1000	Other data	
Weight approx. 200 g		HMG 500, HMG 510, HMG 3000 or CMU 1000
	Weight	approx. 200 g

Reverse polarity protection of the supply voltage, excess voltage, override short circuit protection are provided.

FS (Full Scale) = relative to the complete measuring range Note:

E 18.333.1/03.1

Model code:

Mechanical connection

4 = G1/4 A DIN 3852 (male)

Electrical connection

8 = M12x1, 5-pole, male (connector not supplied)

Signal

H = HSI (automatic sensor recognition)

NI - 4 - -

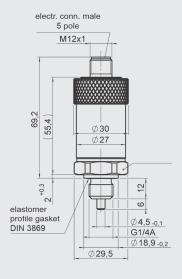
On instruments with a different modification number, please read the label or the technical amendment details supplied with the instrument.

Accessories

Modification number _ 000 = Standard

Appropriate accessories, such as electrical connectors, can be found in the Accessories section.

Dimensions:



Note:

The information in this brochure relates to the operating conditions and applications described.

For applications and operating conditions not described, please contact the relevant technical department.

Subject to technical modifications.

HYDAC

E 18.333.1/03.11

150 HYDAC