



Temperature Switch HTS 8000 for series applications

Integrated temperature probe

Customised designs thanks to
diverse electrical and mechanical
connections
Up to 2 switching outputs



Description:

The temperature transmitter series HTS 8000 has been specifically developed for the OEM market, e.g. in mobile applications. It is based on a silicon semiconductor device with corresponding evaluation electronics.

All parts in contact with fluid are in stainless steel, and are welded together.

The transistor output is available with either an N/C or an N/O function. The switch and switch-back point of the HTS 8000 is factory-set acc. to customer specification.

For the electrical connection, various built-in connection plugs are available.

The pressure resistance up to 600 bar and excellent EMC characteristics make the HTS 8000 ideal for use in harsh conditions.

Technical data:

Input data			
Measuring range ¹⁾	-25 .. +125 °C (-13 .. +257 °F)		
Probe length	mm	16	40
Probe diameter	mm	6.7	6.7
Pressure resistance	bar	600	600
Mechanical connection ²⁾	G1/4 A ISO 1179-2		
Tightening torque, recommended	20 Nm		
Parts in contact with fluid	Mech. connection: Stainless steel Seal: FKM		
Output data			
Switching output	- 1 PNP transistor output - 2 PNP transistor outputs (only in conjunction with electr. conn. M12x1, 4 pole) Switching current: ≤ 500 mA per output Switching cycles: > 100 million Switch points / switch-back points: acc. to customer specification Switch-on and switch-off delay: 32 ms standard (8 .. 2000 ms factory-set acc. to customer spec.)		
Accuracy (at room temperature)	≤ ± 1.5 °C (≤ ± 2.7 °F)		
Temperature drift (environment)	≤ ± 0.02 % FS / °C		
Response time acc. to DIN EN 60751	t ₅₀ =	4 s	4 s
	t ₉₀ =	8 s	8 s
Repeatability	≤ ± 1 % FS max.		
Environmental conditions			
Operating temperature range ³⁾	-40 .. +85 °C / -25 .. +85 °C (-40 .. +185 °F / -13 .. +185 °F)		
Storage temperature range	-40 .. +100 °C (-40 .. +212 °F)		
CE mark	EN 61000-6-1 / 2 / 3 / 4		
UL mark ⁴⁾	Certificate no. E318391		
Vibration resistance acc. to DIN EN 60068-2-6 at 10 .. 500 Hz	≤ 25 g		
Shock resistance acc. to DIN EN 60068-2-27	100 g / 6 ms / half-sine 500 g / 1 ms / half-sine		
Protection class acc. to DIN EN 60529 ⁵⁾	IP 67		
Other data			
Electrical connection	Various male connectors, e.g.: M12x1, Packard Metri Pack, Deutsch DT 04, AMP Superseal, AMP Junior Power Timer, jacketed cable		
Supply voltage when applied acc. to UL specifications	8 .. 32 V DC - limited energy - acc. to 9.3 UL 61010; Class 2; UL 1310/1585; LPS UL 60950		
Residual ripple of supply voltage	≤ 5 %		
Current consumption	≤ 20 mA with inactive switching outputs ≤ 0.52 A with 1 switching output ≤ 1.02 A with 2 switching outputs		
Weight	~ 145 g		

Note: Reverse polarity protection of the supply voltage, overvoltage, override and short circuit protection are provided.

FS (Full Scale) = relative to complete measuring range

¹⁾ Other measuring ranges on request

²⁾ Other mechanical connections on request

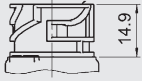
³⁾ -25 °C with FKM seal, -40 °C on request

⁴⁾ Environmental conditions acc. to 1.4.2 UL 61010-1; C22.2 No 61010-1

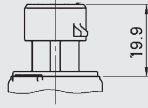
⁵⁾ With mounted mating connector in corresponding protection class

Dimensions:

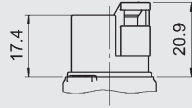
Male connector
DIN 72585-3 pole



Male connector
Metri-Pack
series 150 3 pole



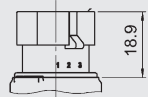
Male connection
DT04 3 pole



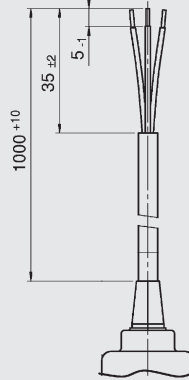
Male connector
Junior Power Timer
3 pole



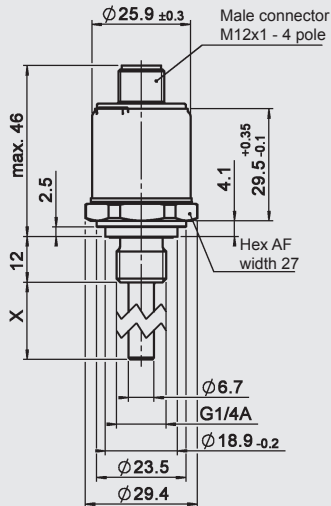
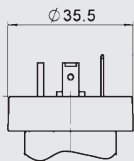
Male connector
Superseal series 1.5
3 pole



Jacketed cable



Male connector
EN175301-803
3 pole + PE



Note:

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

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

Subject to technical modifications.

Order details:

The electronic temperature switch HTS 8000 has been specially developed for OEM customers and is available for minimum order quantities of 500 units per type.

For precise specifications, please contact the Sales Department of HYDAC ELECTRONIC.

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