

8.2 Air-mass sensors HFM with digital interface



Product type

HFM-8-PTH 4.7

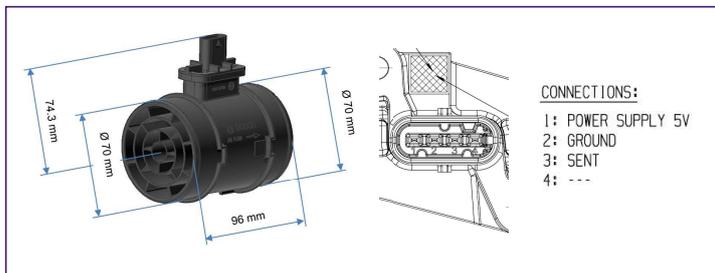
Part number

0 280 218 07T

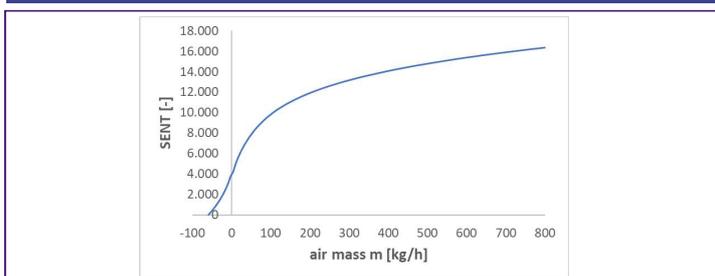
Picture



Dimensional drawing



Air-mass characteristic curve at ambient temperature



Technical data

Features	With integrated pressure, humidity and intake air temperature sensor	
Interface	SENT	
Nominal airflow	\dot{m}_N	480 kg/h
Measuring range airflow	\dot{m}	-60 ... +800 kg/h
Measuring range pressure	kPa	10 ... 120
Measuring range humidity	%rH	0 ... 100
Rated supply voltage	U_N	5 V
Supply-voltage range	U_V	4,85 ... 5,15 V
Relative accuracy ¹⁾	$\Delta \dot{m} / \dot{m}$	± 1.5 %
Temperature range ²⁾	°C	-40 ... +130
Pressure drop at \dot{m}_N	Δp	≤ 7 hPa
Current input	I_V	< 0,03 A
Time constant	τ_{63} ³⁾	≤ 10 ms
Time constant	$\tau\Delta$ ⁴⁾	≤ 30 ms

1) for $0,025 \leq \Delta \dot{m} / \dot{m} \leq 1,0$
 2) short-time (≤ 3 min.) to 140 °C
 3) Time required for step response of output voltage to 63 % of final value given an abrupt change in air mass from 10 kg/h to 310 kg/h
 4) Delay on switch-on and after any change in flow rate until the output voltage has attained the relative measurement deviation $|\Delta \dot{m} / \dot{m}| \leq 5 \%$.

Accessories

Connector	4-pin	Hirschmann 872-975-...02 Option 1, Spec. 2, Code A

Accessories are not included in the scope of delivery of the sensor and therefore to be ordered separately as required.

[▶ Product groups](#)