1.2 Air-mass sensors HFM with digital interface



Product type

HFM-7-IPH

Part number

0 281 006 426



Dimensional drawings

Technical data With integrated pressure, humidity and ambient-temperature sensor. Features Nominal airflow 640 kg/h Measuring range airflow -40 ... 800 kg/h Measuring range pressure kPa 12,5 ... 115 %rH Measuring range humidity 14 V Rated supply voltage U_N 6 ... 17 V Supply-voltage range U_{V} Relative accuracy 1) $\Delta \dot{m} / \dot{m}$ ± 5 % Temperature range 2) °С < 12 hPa Pressure drop at $\dot{m}_{\rm N}$ Δр Current input < 0,06 A I_V τ₆₃ 3) Time constant ≤ 25 ms Time constant τΔ 4) ≤ 30 ms

1) for 0,04 s \(\Delta m / m\) \(s \) 1.3
2) short time (s 3 min,) to 1.03 °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 \(\lambda m / m \rightarrow \rightarrow s \).

Air-mass characteristic curve at ambient temperature

