

Sensor



QMS 70 SAP-T

QMS 70 SAP-T



Features :

- test sensor for granulate and powder high speed flow control
- continuous and pulse flow operation
- auto-adjust functionality for pulse flow applications
- independent of material transparency, colour etc. and environmental light and abrasive effects
- for material flow speeds up to 40 m/s and more
- analog output 0 ... 10 V
- +24V +/- 10% operation voltage
- robust steel housing 240 x 188 x 123 mm
- easily to install, flange mounting for material guiding pipes, ceramic plate armed tunnel

Description :

The QMS 70 - SAP - T is an unique sensor to control the mass flow of powders, granulates or similar materials. Due to the measuring principle and the high measuring rate, the QMS 70 - SAP gives user instantaneously many information about the flow behaviour of the material right before it gets processed, filled, mixed etc...

The QMS 70 - SAP - T enables to control not only the material flow concerning weight but also enables to control the mass distribution. This enables user to regulate the material flow concerning continuous mass flow as well as material pulses.

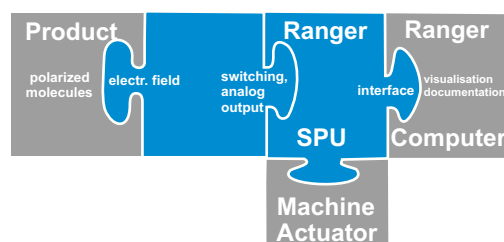
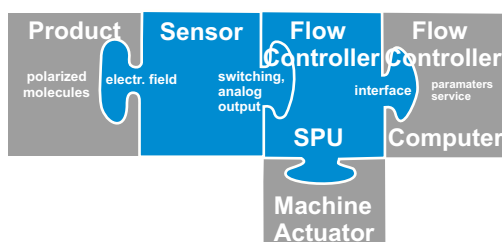
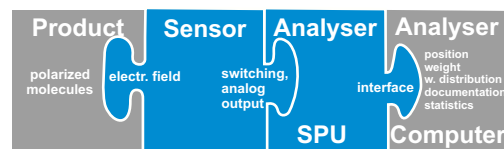
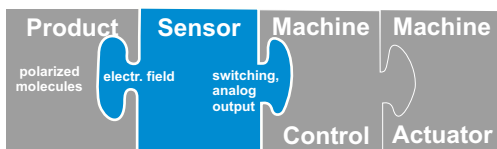
The QMS 70 - SAP - T outputs a 0...10 V analogue signal proportional to the mass quantity just being in the sensor's measuring field. This voltage can be used by the production line control unit or/and can be used by the inspection system HST Analyser or the control system HST Flow Controller. Due to the high speed characteristics of the QMS 70-SAP-T mass profiles can be evaluated, visualized and controlled.

Example for Application see p. 215

Building Blocks :

Hossbach equipment

machine line device



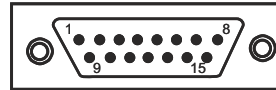
QMS 70 SAP-T

Plug Connections : analog output

8-pin male M12 sensor connector

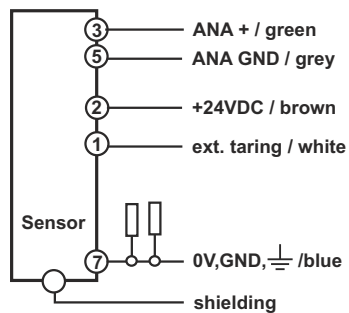


15 pin male SUB-D sensor cable connector



sensor version sensor+profiler	8 pin male sensor connector*)	cable color	15 pin male SUB-D cable connector **)	function
	pin 1	white	pin 5	taring input +24V *)
pin 2	brown	pin 12	power supply +24V	
pin 3	green	pin 3	analog output 0...+10V	
pin 4	yellow	pin 4	not to connect	
pin 5	grey	pin 2	analog output GND	
pin 6	rose	pin 1	not to connect	
pin 7	blue	pin 11	power supply 0V/GND	
pin 8	red	pin 8	not to connect	
shielding	blanc	pin 11	shielding	
			don't use pin 1,5,6,7,9,10,13,14,15 *) only active for "interval measuring" sensor version	

sensor connector pins



sensor cable



Technical Data :

sensitivity :	high	external taring :	during material flow interrupts	operation temperature range :	0...40° C
measurement mode :	permanent, auto-taring	output :	two switching outputs, 24V/50mA, PNP	storage temperature range :	0...50°C
lowest detectable weight quantity :	< 10 mg		analog voltage output 0...10V	meets or exceeds standard and requirements :	EN 50011 class A EN 61326-1:2006
accuracy :	typical 1...3 % depending on material quantity and material characteristics	operation voltage :	+24VDC +/- 10% 40mA typ.	protection type	IP 61
evaluation time :	< 1ms	mounting :	8 pre/drilled bolt holes, M5, on lateral sides		
active sensing area :	appr. 90 x 90 mm	dimension :	240 x 188 x 144 mm		
measurement by :	double sided electrode				CE

Order Data :

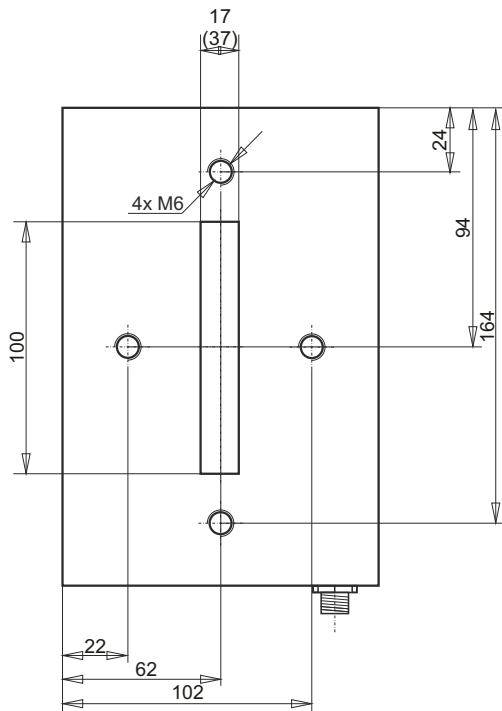
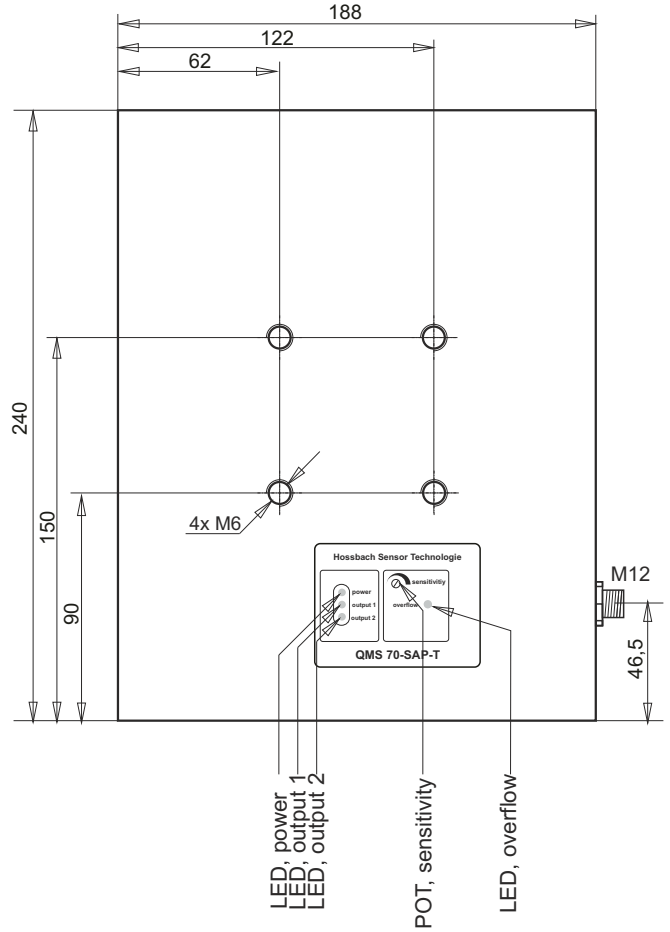
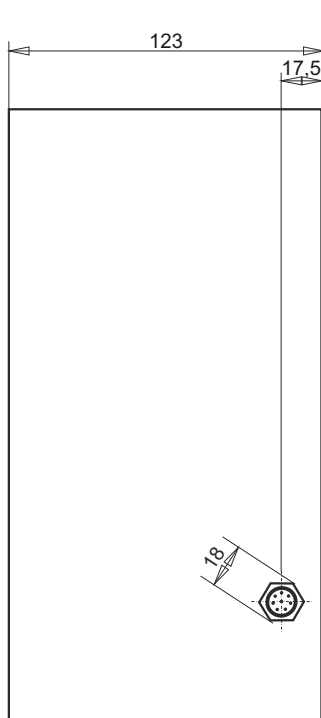
sensor version		order no.
QMS 70-SAP-T*)	for permanent, continuous measurement with analog output 0...10V	QMS70-SAP-T-PERM-ANA
QMS 70-SAP-T **)	for interval, intermittent measurement with analog output 0...10V	QMS70-SAP-T-INT-ANA
sensor including 5m connection cable		

*) for continuous material flow, occurring signal offset must be taken into account

***) for interrupted material flow, i.e. pulses auto-calibration will auto-zero any signal drifts

QMS 70 SAP-T

Dimension : [mm]



variations due to sensor version