DTH08

Calorimetric Flowmeter for Low Flows

- **measuring range from 0,001...2 l/min, 0,025...5 l/min, 0,05...10 l/min**
- **wetted parts made of stainless steel 1.4571**
- **no moving parts**
- **low pressure loss**
- **easy handling**
- **max. pressure: 10 bar**
- **max. temperature: 70 °C**

Description:

The calorimetric flow meter DTH08 is used for measurement and monitoring of liquid media. Due to its compact design it can be used for many applications. Depending on the version, the instrument can be equipped with an analogue output (4...20 mA or 0...10 V) and a switching output or a frequency output. The evaluation electronics records the flow velocity and temperature of the medium. Both parameters can be assigned to the analogue output or the switching output (see table 1).

Typical applications:

The devices of the series DTH08 are used for cost-effective measurement and monitoring of flows of aqueous media. Due to their low flow resistance and their insensitivity to contamination by solids, they offer a very good alternative to conventional flow meters.

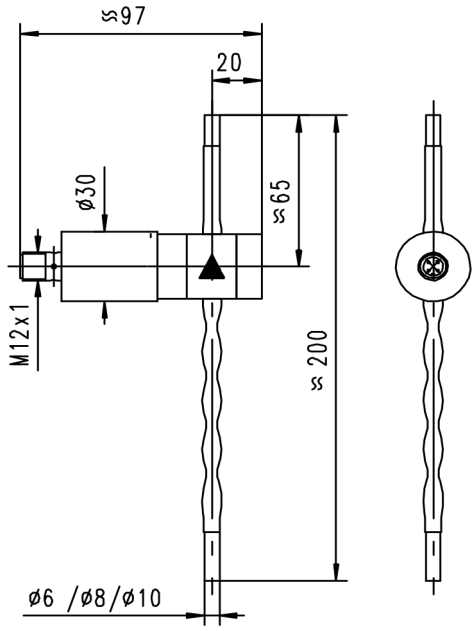
PKP Prozessmesstechnik GmbH
Borsigstr. 24 • D-65205 Wiesbaden
+49 (0) 6122-7055-0 • +49 (0) 6122 7055-50
info@pkp.de • www.pkp.de

PKP Process Instruments Inc.
10 Brent Drive • Hudson, MA 01749
+1-978-212-0006 • +1-978-568-0060
info@pkp-usa.com • www.pkp-usa.com

Output Combinations (table 1):

code	flow rate		temperature	
	analogue	switch output/ frequency output	analogue	switch output// frequency output
1	x			
2		x		
3	x	x		
4	x			x
5		x	x	

Dimensions:



Electrical Data:

Power supply:	24 VDC ± 10 %
Power consumption:	max. 100 mA (150 mA peak)
Switched output:	transistor output „push pull" (short-circuit and reverse polarity proof) I_{out} = 100 mA max.
Switching hysteresis:	flow rate 1 % FS temperature ca. 1 °C
Analogue output:	4…20 mA load 500 Ohm max. or 0…10 V / load, min. 1 KOhm

Technical Data:

Process connection:	pipe connection with Ø 6/8/10 mm for compression fitting
Max. pressure:	10 bar (other on request)
Max. medium temp.:	0…70 °C
Temperature gradient:	4 °C/s
Accuracy:	± 5 % of m.V.
Pressure loss:	max. 0,3 bar with maximum flow
Connection:	plug, 4-pole acc. to DIN
Protection class:	IP40

Order Code:

Order number: DTH08. 1. 1. 1. 0. 1. 0

Calorimetric flowmeter for low flows

Measuring range:
1 = 0,001–2 l/min, diameter = 6 mm
2 = 0,025–5 l/min, diameter = 8 mm
3 = 0,05–10 l/min, diameter = 10 mm
S = special measuring range

Analogue- or switch output combinations (see table 1):
1 = analogue output for flows
2 = switch output or frequency output for flows
3 = analogue and switch output or frequency output for flows
4 = analogue output for flows and switch output or frequency output for temperature
5 = switch output or frequency output for flows and analogue output for temperature

Analogue output:
0 = no analogue output
1 = 4…20 mA standard
2 = 4…20 mA inverted
3 = 0…10 V standard
4 = 0…10 V inverted

Switching signal
0 = no switch output
1 = minimum switch point
2 = maximum switch point
3 = frequency output, max. 2000 Hz

Electrical connection:
1 = plug connection M12 x 1, 4-pin

Options:
0 = without
E = output signal adjusted
9 = please specify in plain text

Accessory:

Order code: SM12. 4. 2. G. 0

M12-plug with PVC cable

Number of poles:
4 = 4-pole

Cable length:
0 = without cable for self assembly
2 = 2 m PVC cable (standard)
5 = 5 m PVC cable
10 = 10 m PVC cable

Construction:
G = straight
W = angled

Option:
0 = without
9 = please specify in writing

PKP Prozessmesstechnik GmbH
Borsigstr. 24 • D-65205 Wiesbaden
+49 (0) 6122-7055-0 • +49 (0) 6122 7055-50
info@pkp.de • www.pkp.de

PKP Process Instruments Inc.
10 Brent Drive • Hudson, MA 01749
+1-978-212-0006 • +1-978-568-0060
info@pkp-usa.com • www.pkp-usa.com