



Purpose

The PolluFlow ultrasound throughflow sensor with volume pulse output has been designed for use with all standard thermal meter computers. This refers in particular to applications based on thermal meter computers with analog outputs (0 –20 mA or 4 –20 mA) for links to automated building systems, since ultrasound thermal meters are not usually available for such outputs in compact form.

Special features

Registered under EN 1434 Class 2 (measurement scale 1 : 200)

No moving parts in through-flow sensor

Choice of horizontal or vertical installation

Detachable computer

LCD inside computer housing enables current throughflow to be read for servicing purposes

Major temperature zone for all throughflow sensors from 5 – 130 °C (briefly: 150 °C), hence ideally suited for so-called "6 °C / 12 °C refrigeration units" using water as a thermal medium

Can be upgraded for new M bus plug-in without damaging the calibration seal

Service-friendly design enables cost-effective reprocessing once calibration period has expired

NOWA capability (NOWA stands for 'standardised thermal heater adapter').

Technical specifications: computer

Environmental class	A under EN 1434-1 (ambient temperature: 5 ...55 °C)
Protection	IP 54
Display (inside housing)	8-digit LCD with special characters
Power supply	3.6 V or 230 V AC battery (+10 % / -15 %), 50 Hz – changeable on site
Plug-in sockets for optional modules	1 (for M bus plug-in)
Data interfaces	Optical - physical under EN 61107 - data telegram under EN 60870-5 Mini-Bus
Length of control lead to throughflow sensor	1.5 m (3 m also available)

Technical specifications: through-flow sensor

Precision class	2 under EN 1434-1 (all models)
Throughflow behaviour Rated qp to minimum qi throughflow Maximum qs to rated qp throughflow	100 : 1 (all models) 2 : 1 (all models)
Installation axis	either horizontal or vertical
Temperature zone	5 ...130 °C (briefly: 150 °C)

Models Available

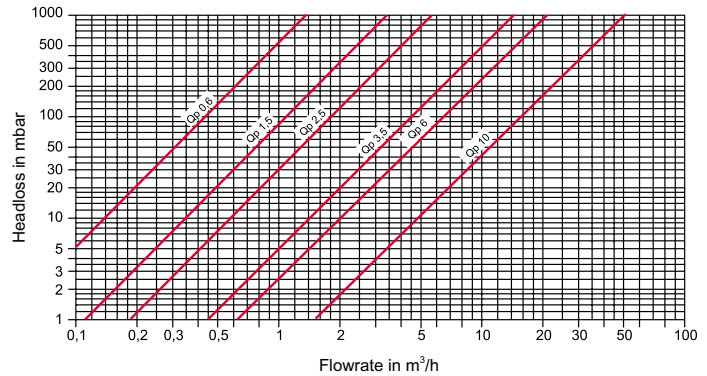
Nominal flowrate Qp in m³/h	0.6	0.6	1.5	1.5	2.5	2.5	3.5	6	10
Threaded version Pressure rating PN16									
Body length (mm)	110	190	110	190	130	190	260	260	300
Nominal bore	R 1/2"	R 3/4"	R 1/2"	R 3/4"	R 3/4"	R 3/4"	R 1"	R 1"	R 1 1/2"
Connection thread	G 3/4 B	G 1 B	G 3/4 B	G 1 B	G 1 B	G 1 B	G 1 1/4 B	G 1 1/4 B	G 2 B
Flanged version Pressure rating PN25									
Body length (mm)	190		190		190		260	260	300
Nominal diameter	DN 20		DN 20		DN 20		DN 25	DN 25	DN 40
Volume pulse output (open collector, galvanically separated, max. 28 V DC, max. 30 mA)									
Standard mode Pulse value (Liter)	1		1		1		1	1	10
Closing period : 125 ms Max. output frequency : 4Hz									
Fast mode Pulse frequency (liter)	0,025		0,1		0,1		0,1	0,25	0,25
Closing period : 16ms Max.output frequency : 4 Hz									

Models Available

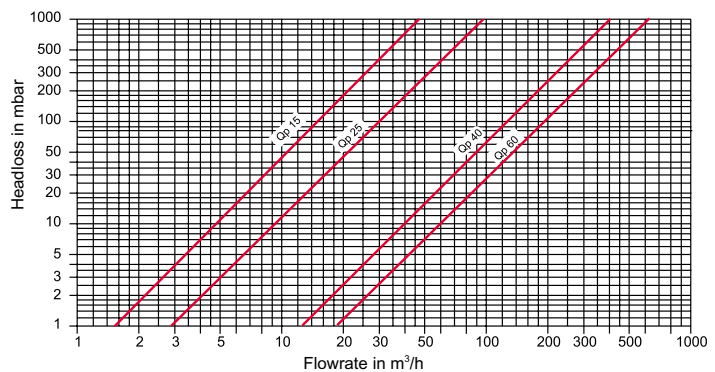
Nominal flowrate Qp in m3/h	15	25	40	60
Flanged version Pressure rating PN25*				
Body length (mm) Nominal diameter	270 DN 50	300 DN 65	300 DN 80	360 DN 100
Volume pulse output (open collector, galvanically separated, max. 28 V DC, max. 30 mA)				
Standard mode Pulse value (Liter) Closing period : 125 ms Max. ouput frequency : 4Hz	10	10	10	10
Fast mode * Pulse frequency (liter) Closing period : 16ms Max.ouput frequency : 32 Hz	1	1	1	2,5

* Please specify when you order

Headloss curves



Nominal flowrate Qp 0.6 to 10



Nominal flowrate Qp15 to 60

PolluFlow