MECON
SAFETY CONTROL

MAG-FLUX® T4

Flow meter for use in test lines of water in fixed water extinguighing systems

VdS

made in Germany

ADVANTAGES

- Fast signal processing with a 16-bit microcontroller
- Low installation effort due to coupling connection
- Fully welded steel fitting
- Reliability (long-term stability, operational lifespan)
- Seperate design

The mag-flux® T4 from MECON sets new standards in flow measurement for sprinkler systems. Equipped with a state-of-the-art 16-bit microcontroller and an electrical 4 ... 20 mA output, this magnetic-inductive flow meter can be effortlessly integrated.

The measurement values can be conveniently evaluated on-site via a control center, enabling efficient and centralized monitoring. With a measurement accuracy of ±0.5%, the mag-flux® T4 guarantees precise and reliable results that are essential for the safety and efficiency of your systems.

During installation, the device impresses with its diverse connection options. Whether flange, thread, or the unique VdS-certified groove connection – the mag-flux® T4 can be installed flexibly and easily.

Choose the mag-flux® T4 and benefit from an advanced solution that exceeds your requirements for precision and reliability.

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TECHNICAL DATA

System

Measurement principle	Magnetic-inductive flow meter - synchronised DC field
Measurement accuracy	±0.5 % of the measured value from 1 m/s ... 10 m/s
	±0.4 % of the measured value +1 mm/s of < 1 m/s
Repeatability	±0.15 % of the measured value 0.5 m/s ... 10 m/s
Certifications	VdS G 419006

Flow sensor / transducer

Pressure limits	Thread connection ½“ ... 2“
	Coupling connection 2“/DN 50 ... 12“/DN 300
	Flange connection EN 1092-1 ½“/DN 15 ... 12“/DN 300

Mounting position

Inlet section	5 x D
Outlet section	2 x D

Operating conditions

Medium	Water
Medium temperature	4 °C ... 50 °C (39 °F ... 122 °F)
Minimum conductivity	>20 µS/cm
Ambient temperature	1 °C ... 50 °C (34 °F ... 122 °F)
Influence of the ambient temperature	±0.1 % per 10 K
Flow rate limits	0.1 ... 10 m/s

Pressure limits

Threaded connection	Max. 16 bar (232 psi)
Coupling connection	Max. 16 bar (232 psi)
Flange connection PN 16	Max. 16 bar (232 psi) DN 65 ... DN 300
Flange connection PN 25	Max. 25 bar (362 psi) DN 200 ... DN 300
Flange connection PN 40	Max. 25 bar (362 psi) DN 15 ... DN 150

Constructive design

Execution	Fully welded steel valve
Protection class	IP67 (seperate / remote version)
Corrosion protection class	C2 (slightly polluted atmo-sphere, dry climate)
Display	Line 1: Flow in l/min or USgpm
	Line 2: Velocity rate in m/s or feet/s

Materials

Measuring tube	Stainless steel
Coil space	Steel
Measuring tube lining	Hard rubber, PTFE
Electrode	Stainless steel, Hastelloy
Transducer M1	Die-cast aluminium housing

Electrical data

Auxiliary energy	230 V AC; -15 % / +10 %, 50/60 Hz
	115 V AC; -15 % / +10 %, 50/60 Hz
	24 V DC; ±15 %
Power input	10 W
Analogue output	Current output 4 ... 20 mA active
Load	Standard: ≤600 Ohm
Damping	3 s
Seepage suppression	<0.1 m/s

DIMENSIONS AND WEIGHTS

Coupling connection

Nominal diameter	L (mm / in)		B (mm / in)	H (mm / in)	ØA (mm / in)	ØD (mm / in)	Weight (kg / lbs)
2“/DN 50	150 / 5.9	(0/-2.0)	80 / 3.2	57 / 2.2	60 / 2.4	140 / 5.5	10 / 22
2½“/DN 65	150 / 5.9	(0/-2.0)	80 / 3.2	63 / 2.5	76 / 3.0	155 / 6.1	11 / 24
3“/DN 80	150 / 5.9	(0/-2.0)	80 / 3.2	70 / 2.8	89 / 3.5	170 / 6.7	13 / 29
4“/DN 100	200 / 7.9	(0/-2.0)	120 / 4.7	86 / 3.4	114 / 4.5	210 / 8.3	14 / 31
5“/DN 125	200 / 7.9	(0/-2.0)	120 / 4.7	98 / 3.9	140 / 5.5	240 / 9.5	15 / 33
6“/DN 150	200 / 7.9	(0/-2.0)	120 / 4.7	117 / 4.6	168 / 6.6	285 / 11.2	27 / 60
8“/DN 200	300 / 11.8	(0/-2.0)	200 / 7.9	143 / 5.6	219 / 8.6	350 / 13.8	34 / 75
10“/DN 250	300 / 11.8	(0/-3.0)	200 / 7.9	180 / 7.1	273 / 10.8	440 / 17.3	42 / 93
12“/DN 300	300 / 11.8	(0/-3.0)	200 / 7.9	213 / 8.4	324 / 12.8	520 / 20.5	

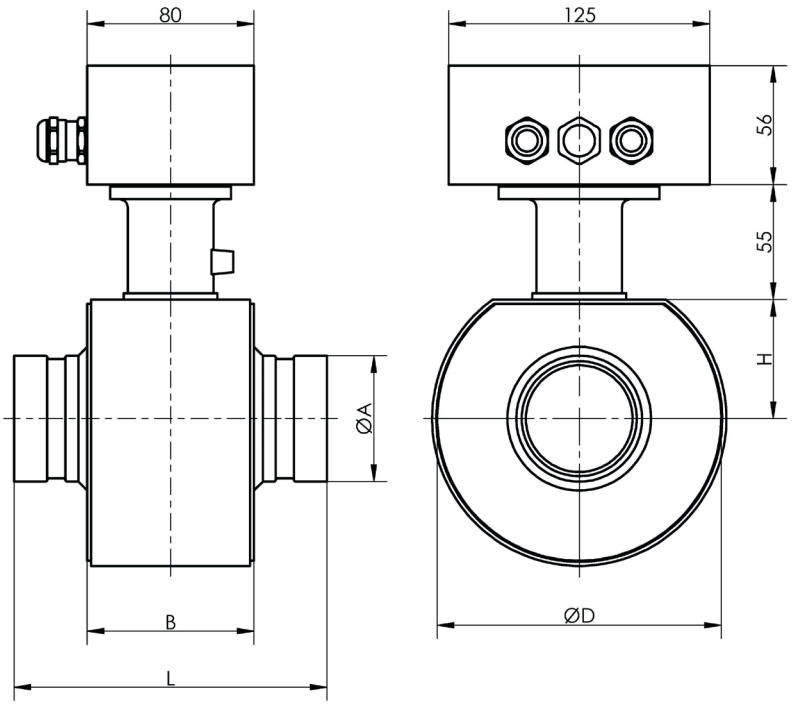

Fig. 1: Dimensions mag-flux® Coupling connection seperate design

Flange connection

Nominal diameter	L (mm / in)		B (mm / in)	H (mm / in)	ØD (mm / in)	Weight (kg / lbs)
½"/DN 15	200 / 7.9	(0/-2.0)	80 / 3.2	53 / 2.1	130 / 5.1	7 / 15
¾"/DN 20	200 / 7.9	(0/-2.0)	80 / 3.2	53 / 2.1	130 / 5.1	7 / 15
1"/DN 25	200 / 7.9	(0/-2.0)	80 / 3.2	53 / 2.1	130 / 5.1	8 / 18
1¼"/DN 32	200 / 7.9	(0/-2.0)	80 / 3.2	53 / 2.1	130 / 5.1	9 / 20
1½"/DN 40	200 / 7.9	(0/-2.0)	80 / 3.2	53 / 2.1	130 / 5.1	10 / 22
2"/DN 50	150 / 5.9	(0/-2.0)	80 / 3.2	57 / 2.2	140 / 5.5	11 / 24
2½"/DN 65	150 / 5.9	(0/-2.0)	80 / 3.2	63 / 2.5	155 / 6.1	13 / 29
3"/DN 80	150 / 5.9	(0/-2.0)	80 / 3.2	70 / 2.8	170 / 6.7	16 / 35
4"/DN 100	200 / 7.9	(0/-2.0)	120 / 4.7	86 / 3.4	210 / 8.3	18 / 40
5"/DN 125	200 / 7.9	(0/-2.0)	120 / 4.7	98 / 3.9	240 / 9.5	22 / 49
6"/DN 150	200 / 7.9	(0/-2.0)	120 / 4.7	117 / 4.6	285 / 11.2	26 / 57
8"/DN 200	300 / 11.8	(0/-2.0)	200 / 7.9	143 / 5.6	350 / 13.8	46 / 101
10"/DN 250	300 / 11.8	(0/-3.0)	200 / 7.9	180 / 7.1	440 / 17.3	62 / 137
12"/DN 300	300 / 11.8	(0/-3.0)	200 / 7.9	213 / 8.4	520 / 20.5	

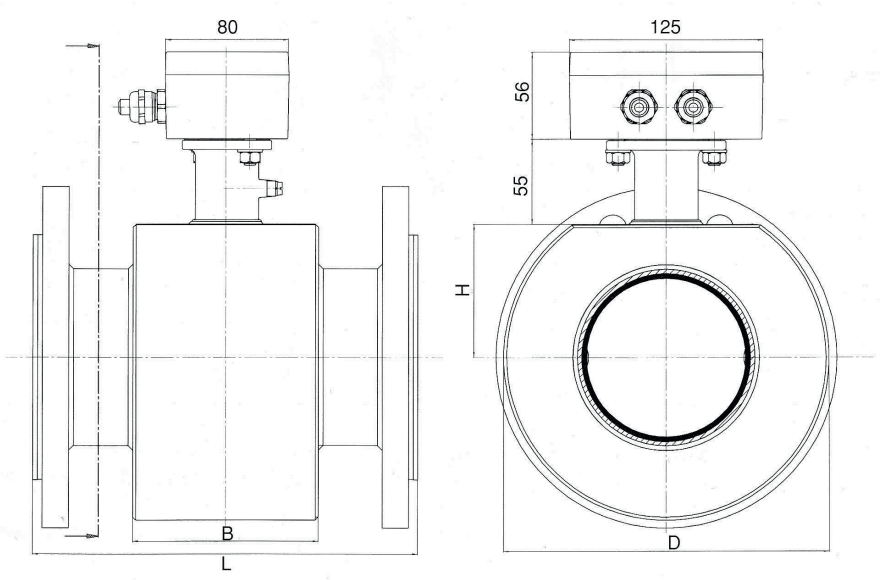

Fig. 2: Dimensions mag-flux® Flange connection seperate design

PTFE with threaded connection

Nominal diameter	L (mm / in)		B (mm / in)	H (mm / in)	ØD (mm / in)	Ød* (mm / in)
G ½“	200 / 7.9	(0/-2.0)	80 / 3.2	53 / 2.1	130 / 5.1	14.0 / 0.6
G ¾“	200 / 7.9	(0/-2.0)	80 / 3.2	53 / 2.1	130 / 5.1	19.0 / 0.8
G 1“	200 / 7.9	(0/-2.0)	80 / 3.2	53 / 2.1	130 / 5.1	27.0 / 1.1
G 1 ¼“	200 / 7.9	(0/-2.0)	80 / 3.2	53 / 2.1	130 / 5.1	33.0 / 1.3
G 1 ½“	200 / 7.9	(0/-2.0)	80 / 3.2	53 / 2.1	130 / 5.1	38.0 / 1.5
G 2“	150 / 5.9	(0/-2.0)	80 / 3.2	57 / 2.2	140 / 5.5	48.5 / 1.9

**smallest permissible inside diameter of pipe*

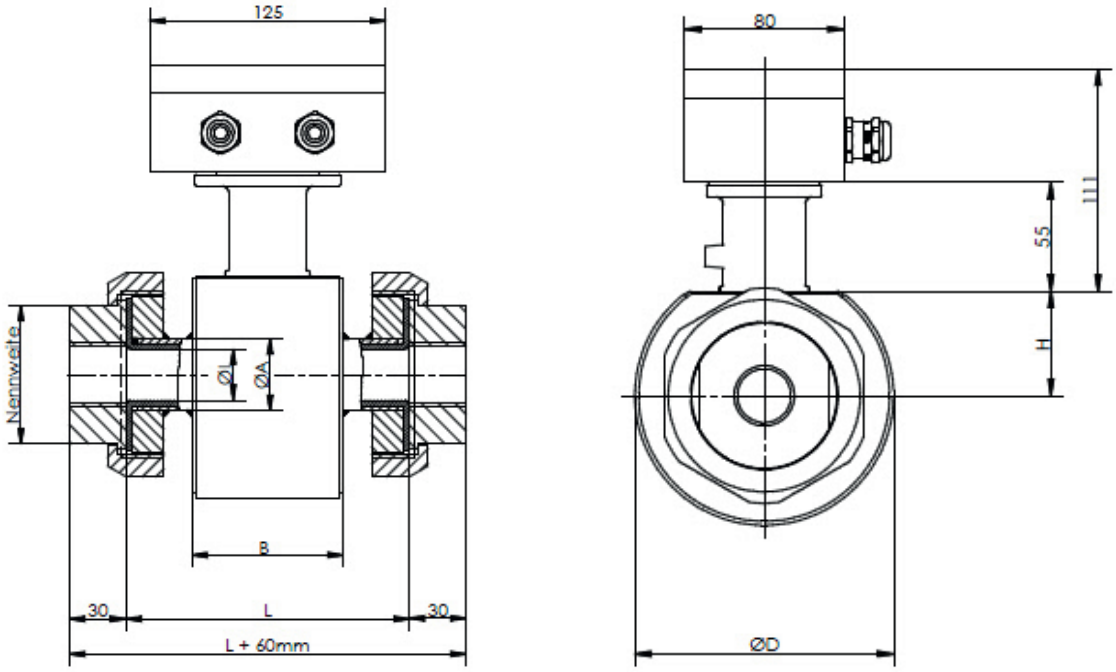

Fig. 3: Dimensions mag-flux® T4 PTFE with threaded connection separate design

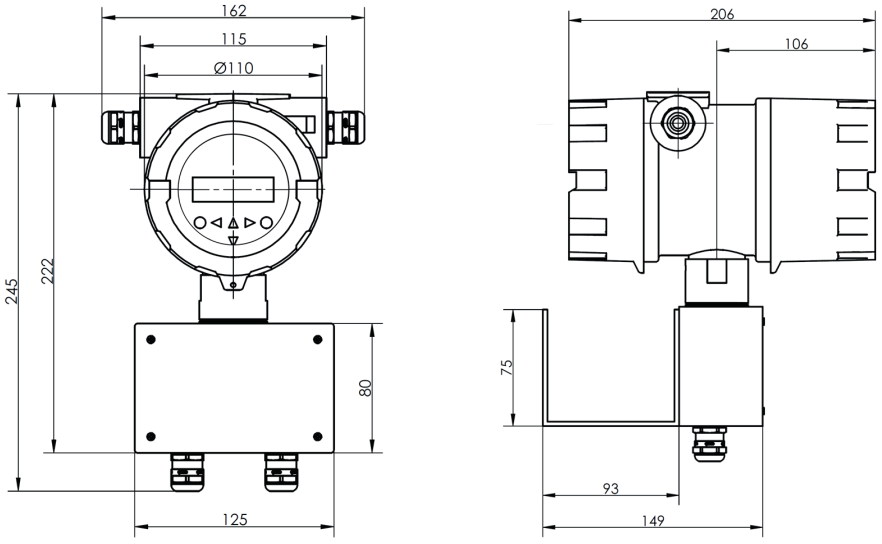

Fig. 4: Dimensions of transducer mag-flux® M1

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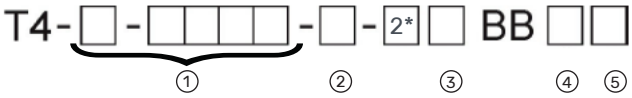
PRODUCT AND ACCESSORIES

Description code
The description code is made up as follows:



**Electronics M1 separated with 5 m (16.4 ft) cable between sensor and transducer*

Lining Hard rubber (e.g. water)

①	Connection	Flow range	
H-K050	Coupling connection 2“/DN 50	0 ... 1 180 l/min	0 ... 310 USgpm
H-K065	Coupling connection 2 ½“/DN 65	0 ... 2 000 l/min	0 ... 525 USgpm
H-K080	Coupling connection 3“/DN 80	0 ... 3 000 l/min	0 ... 800 USgpm
H-K100	Coupling connection 4“/DN 100	0 ... 4 700 l/min	0 ... 1 250 USgpm
H-K125	Coupling connection 5“/DN 125	0 ... 7 350 l/min	0 ... 1 950 USgpm
H-K150	Coupling connection 6“/DN 150	0 ... 10 600 l/min	0 ... 2 800 USgpm
H-K200	Coupling connection 8“/DN 200	0 ... 18 850 l/min	0 ... 5 000 USgpm
H-K250	Coupling connection 10“/DN 250	0 ... 29 500 l/min	0 ... 7 800 USgpm
H-K300	Coupling connection 12“/DN 300	0 ... 42 410 l/min	0 ... 11 200 USgpm
H-D015	Flange connection EN 1092-1 DN 15, PN 40	0 ... 106 l/min	0 ... 28 USgpm
H-D020	Flange connection EN 1092-1 DN 20, PN 40	0 ... 188 l/min	0 ... 50 USgpm
H-D025	Flange connection EN 1092-1 DN 25, PN 40	0 ... 295 l/min	0 ... 78 USgpm
H-D032	Flange connection EN 1092-1 DN 32, PN 40	0 ... 480 l/min	0 ... 130 USgpm
H-D040	Flange connection EN 1092-1 DN 40, PN 40	0 ... 750 l/min	0 ... 200 USgpm
H-D050	Flange connection EN 1092-1 DN 50, PN 40	0 ... 1 180 l/min	0 ... 310 USgpm
H-D065	Flange connection EN 1092-1 DN 65, PN 16	0 ... 2 000 l/min	0 ... 525 USgpm
H-H065	Flange connection EN 1092-1 DN 65, PN 40	0 ... 2 000 l/min	0 ... 525 USgpm
H-D080	Flange connection EN 1092-1 DN 80, PN 16	0 ... 3 000 l/min	0 ... 800 USgpm
H-H080	Flange connection EN 1092-1 DN 80, PN 40	0 ... 3 000 l/min	0 ... 800 USgpm
H-D100	Flange connection EN 1092-1 DN 100, PN 16	0 ... 4 700 l/min	0 ... 1 250 USgpm
H-H100	Flange connection EN 1092-1 DN 100, PN 40	0 ... 4 700 l/min	0 ... 1 250 USgpm
H-D125	Flange connection EN 1092-1 DN 125, PN 16	0 ... 7 350 l/min	0 ... 1 950 USgpm
H-H125	Flange connection EN 1092-1 DN 125, PN 40	0 ... 7 350 l/min	0 ... 1 950 USgpm
H-D150	Flange connection EN 1092-1 DN 150, PN 16	0 ... 10 600 l/min	0 ... 2 800 USgpm
H-H150	Flange connection EN 1092-1 DN 150, PN 40	0 ... 10 600 l/min	0 ... 2 800 USgpm
H-D200	Flange connection EN 1092-1 DN 200, PN 16	0 ... 18 850 l/min	0 ... 5 000 USgpm
H-H200	Flange connection EN 1092-1 DN 200, PN 25	0 ... 18 850 l/min	0 ... 5 000 USgpm
H-D250	Flange connection EN 1092-1 DN 250, PN 16	0 ... 29 500 l/min	0 ... 7 800 USgpm
H-H250	Flange connection EN 1092-1 DN 250, PN 25	0 ... 29 500 l/min	0 ... 7 800 USgpm
H-D300	Flange connection EN 1092-1 DN 300, PN 16	0 ... 42 410 l/min	0 ... 11 200 USgpm
H-H300	Flange connection EN 1092-1 DN 300, PN 25	0 ... 42 410 l/min	0 ... 11 200 USgpm

①	Connection	Flow range	
H-A015	Flange connection ANSI B16.5 ½“ 150RF	0 ... 106 l/min	0 ... 28 USpm
H-A020	Flange connection ANSI B16.5 ¾“ 150RF	0 ... 188 l/min	0 ... 50 USgpm
H-A025	Flange connection ANSI B16.5 1“ 150RF	0 ... 295 l/min.	0 ... 78 USgpm
H-A032	Flange connection ANSI B16.5 1 ¼“ 150RF	0 ... 480 l/min.	0 ... 130 USgpm
H-A040	Flange connection ANSI B16.5 1½“ 150RF	0 ... 750 l/min.	0 ... 200 USgpm
H-A050	Flange connection ANSI B16.5 2“ 150RF	0 ... 1 180 l/min	0 ... 310 USgpm
H-A065	Flange connection ANSI B16.5 ½“ 150RF	0 ... 2 000 l/min	0 ... 525 USgpm
H-A080	Flange connection ANSI B16.5 3“ 150RF	0 ... 3 000 l/min	0 ... 800 USgpm
H-A100	Flange connection ANSI B16.5 4“ 150RF	0 ... 4 700 l/min	0 ... 1 250 USgpm
H-A125	Flange connection ANSI B16.5 5“ 150RF	0 ... 7 350 l/min	0 ... 1 950 USgpm
H-A150	Flange connection ANSI B16.5 6“ 150RF	0 ... 10 600 l/min	0 ... 2 800 USgpm
H-A200	Flange connection ANSI B16.5 8“ 150RF	0 ... 18 850 l/min	0 ... 5 000 USgpm
H-A250	Flange connection ANSI B16.5 10“ 150RF	0 ... 29 500 l/min	0 ... 7 800 USgpm
H-A300	Flange connection ANSI B16.5 12“ 150RF	0 ... 42 410 l/min	0 ... 11 200 USgpm

Lining PTFE (e.g. foam agent*)

①	Connection	Flow range	
P-D015	Flange connection EN 1092-1 DN 15, PN 40	0 ... 106 l/min	0 ... 28 USgpm
P-D020	Flange connection EN 1092-1 DN 20, PN 40	0 ... 188 l/min	0 ... 50 USgpm
P-D025	Flange connection EN 1092-1 DN 25, PN 40	0 ... 294 l/min	0 ... 78 USgpm
P-D032	Flange connection EN 1092-1 DN 32, PN 40	0 ... 482 l/min	0 ... 130 USgpm
P-D040	Flange connection EN 1092-1 DN 40, PN 40	0 ... 753 l/min	0 ... 200 USgpm
P-D050	Flange connection EN 1092-1 DN 50, PN 40	0 ... 1 180 l/min	0 ... 310 USgpm
P-D065	Flange connection EN 1092-1 DN 65, PN 16	0 ... 2 000 l/min	0 ... 525 USgpm
P-H065	Flange connection EN 1092-1 DN 65, PN 40	0 ... 2 000 l/min	0 ... 525 USgpm
P-D080	Flange connection EN 1092-1 DN 80, PN 16	0 ... 3 000 l/min	0 ... 800 USgpm
P-H080	Flange connection EN 1092-1 DN 80, PN 40	0 ... 3 000 l/min	0 ... 800 USgpm
P-D100	Flange connection EN 1092-1 DN 100, PN 16	0 ... 4 700 l/min	0 ... 1 250 USgpm
P-H100	Flange connection EN 1092-1 DN 100, PN 40	0 ... 4 700 l/min	0 ... 1 250 USgpm
P-D125	Flange connection EN 1092-1 DN 125, PN 16	0 ... 7 350 l/min	0 ... 1 950 USgpm
P-H125	Flange connection EN 1092-1 DN 125, PN 40	0 ... 7 350 l/min	0 ... 1 950 USgpm
P-D150	Flange connection EN 1092-1 DN 150, PN 16	0 ... 10 600 l/min	0 ... 2 800 USgpm
P-H150	Flange connection EN 1092-1 DN 150, PN 40	0 ... 10 600 l/min	0 ... 2 800 USgpm
P-D200	Flange connection EN 1092-1 DN 200, PN 16	0 ... 18 850 l/min	0 ... 5 000 USgpm
P-H200	Flange connection EN 1092-1 DN 200, PN 25	0 ... 18 850 l/min	0 ... 5 000 USgpm
P-D250	Flange connection EN 1092-1 DN 250, PN 16	0 ... 29 500 l/min	0 ... 7 800 USgpm
P-H250	Flange connection EN 1092-1 DN 250, PN 25	0 ... 29 500 l/min	0 ... 7 800 USgpm
P-D300	Flange connection EN 1092-1 DN 300, PN 16	0 ... 42 410 l/min	0 ... 11 200 USgpm
P-H300	Flange connection EN 1092-1 DN 300, PN 25	0 ... 42 410 l/min	0 ... 11 200 USgpm

①	Connection	Flow range	
P-G015	Threaded connection ½“	0 ... 106 l/min	0 ... 28 USgpm
P-G020	Threaded connection ¾“	0 ... 188 l/min	0 ... 50 USgpm
P-G025	Threaded connection 1“	0 ... 294 l/min	0 ... 78 USgpm
P-G032	Threaded connection 1¼“	0 ... 482 l/min	0 ... 130 USgpm
P-G040	Threaded connection 1½“	0 ... 753 l/min	0 ... 200 USgpm
P-G050	Threaded connection 2“	0 ... 1 180 l/min	0 ... 310 USgpm
P-A015	Flange connection ANSI B16.5 ½“ 150RF	0 ... 106 l/min	0 ... 28 USpm
P-A020	Flange connection ANSI B16.5 ¾“ 150RF	0 ... 188 l/min	0 ... 50 USgpm
P-A025	Flange connection ANSI B16.5 1“ 150RF	0 ... 295 l/min	0 ... 78 USgpm
P-A032	Flange connection ANSI B16.5 1 ¼“ 150RF	0 ... 480 l/min	0 ... 130 USgpm
P-A040	Flange connection ANSI B16.5 1½“ 150RF	0 ... 750 l/min	0 ... 200 USgpm
P-A050	Flange connection ANSI B16.5 2“ 150RF	0 ... 1 180 l/min	0 ... 310 USgpm
P-A065	Flange connection ANSI B16.5 ½“ 150RF	0 ... 2 000 l/min	0 ... 525 USgpm
P-A080	Flange connection ANSI B16.5 3“ 150RF	0 ... 3 000 l/min	0 ... 800 USgpm
P-A100	Flange connection ANSI B16.5 4“ 150RF	0 ... 4 700 l/min	0 ... 1 250 USgpm
P-A125	Flange connection ANSI B16.5 5“ 150RF	0 ... 7 350 l/min	0 ... 1 950 USgpm
P-A150	Flange connection ANSI B16.5 6“ 150RF	0 ... 10 600 l/min	0 ... 2 800 USgpm
P-A200	Flange connection ANSI B16.5 8“ 150RF	0 ... 18 850 l/min	0 ... 5 000 USgpm
P-A250	Flange connection ANSI B16.5 10“ 150RF	0 ... 29 500 l/min	0 ... 7 800 USgpm
P-A300	Flange connection ANSI B16.5 12“ 150RF	0 ... 42 410 l/min	0 ... 11 200 USgpm

② Electrode material

1	Stainless steel
2	Hastelloy C276

③ Auxiliary voltage

1	230 V AC, 50/60 Hz / 15 VA
2	115 V AC, 50/60 Hz / 15 VA
3	24 V DC ±15% / 15 W

④ Connector for transducer

1	Without (with cable gland M20 x 1.5)
4	230 V: 1 x circular connector M12 x 1 (5-pin) with 5 m (16.4 ft) cable; 1 x circular connector M12 x 1 (4 pin) with 5 m (16.4 ft) cable
5	24 V: 1 x circular connector M12 x 1 (5-pin) with 5 m (16.4 ft) cable

⑤ Measuring range display

L	l/min	m/s
G	USgpm	Feet/s