

KYTOLA® Model ML Metal Tube Flow Meter is designed for medium and large liquid flows in rough conditions. Reliable and accurate flow measurement is based on a variable area metering principle using a free-floating float.



- Stainless steel wetted parts
- High pressure and temperature resistance
- Scales up to 260 USGPM (60 000 L/h) H₂O
- ATEX version (II 2GD c TX) as option



ISO 9001 ISO 14001

METAL TUBE FLOW METER ML

FEATURES

- Reliable operation
- Compact and robust design
- Clear scale

TYPICAL APPLICATIONS

- Chemical and petrochemical industry
- Power plants
- General flow measurements

OPTIONS

- Low and high flow alarms
- Stainless steel AISI 316L display housing

PRODUCT KEY

Flow Range				ML						
H ₂ O (USGPM)	H ₂ O (L/h)	Flange		Thread						
0.5 – 4.5	100 – 1000	DN25	ANSI 1"	1"	25A					
0.7 – 7	160 – 1600	DN25	ANSI 1"	1"	25B					
1.2 – 12	250 – 2500	DN25	ANSI 1"	1"	25C					
2 – 18	400 – 4000	DN25	ANSI 1"	1"	25D					
3 – 27	600 – 6000	DN50	ANSI 2"	2"	50E					
5 – 45	1000 – 10000	DN50	ANSI 2"	2"	50F					
7 – 70	1600 – 16000	DN50	ANSI 2"	2"	50G					
10 – 110	2500 – 25000	DN50	ANSI 2"	2"	50H					
10 – 90	2000 – 20000	DN80	ANSI 3"	–	80I					
20 – 180	4000 – 40000	DN80	ANSI 3"	–	80J					
30 – 260	6000 – 60000	DN100	ANSI 4"	–	1SK					
Scale										
H ₂ O (L/min) at 70°F (20°C)										A
H ₂ O (L/h) at 70°F (20°C)										B
H ₂ O (m ³ /h) at 70°F (20°C)										C
H ₂ O (USGPM) at 70°F (20°C)										G
Connections										
DIN/EN 1092-1 PN40 form B1 (raised face) flange (ML100: PN16)										0
ANSI/ASME B16.5 class 150 raised face flange										1
ANSI/ASME B16.5 class 300 raised face flange (ML100: class 150)										2
G female thread 580 psi (40 bar)				ML25 G 1"	ML50 G 2"					5
NPT female thread 580 psi (40 bar)				ML25 NPT 1"	ML50 NPT 2"					6
Outputs										
Without sensors										0
Lower limit switch, NAMUR										1
Upper limit switch, NAMUR										2
Lower and upper limit switch, NAMUR										3
Lower limit switch, PNP/NPN, 5–36 VDC, 2-wire (NC/NO selectable)*										4
Upper limit switch, PNP/NPN, 5–36 VDC, 2-wire (NC/NO selectable)*										5
Lower and upper limit switch, PNP/NPN, 5–36 VDC, 2-wire (NC/NO selectable)*										6
Display Housing										
Aluminium display housing, safety glass										0
Stainless steel AISI 316 display housing, safety glass										H
Breather										
Without breather										0
Breather for display housing**										Y
ATEX										
Without ATEX										0
ATEX classified (if alarm sensors required, only options 1, 2 and 3 allowed)										Z

*) 3-wire limit switches on request

**) Breather in the display housing is recommended in case of wide variation of ambient or process temperature at the site of use.

DIMENSIONS, WEIGHTS AND PRESSURE CLASSES

All weights with aluminium display housing, with stainless steel display housing add 3.5 lb (1.6 kg). Measures A, B, C, D, ID and AV are in inches (millimeters).

DIN/EN

Size DN	PN	A	B	C	ID	Weight lb (kg)
25	40	7.20 (183)	6.50 (165)	4.25 (108)	1.38 (35)	10.1 (4.6)
50	40	8.19 (208)	8.23 (209)	5.00 (127)	2.68 (68)	19.0 (8.6)
80	40	9.96 (253)	9.69 (246)	5.75 (146)	4.02 (102)	29.5 (13.4)
100	16	10.35 (263)	10.47 (266)	6.14 (156)	4.92 (125)	27.6 (12.5)

ANSI/ASME 150 lbs

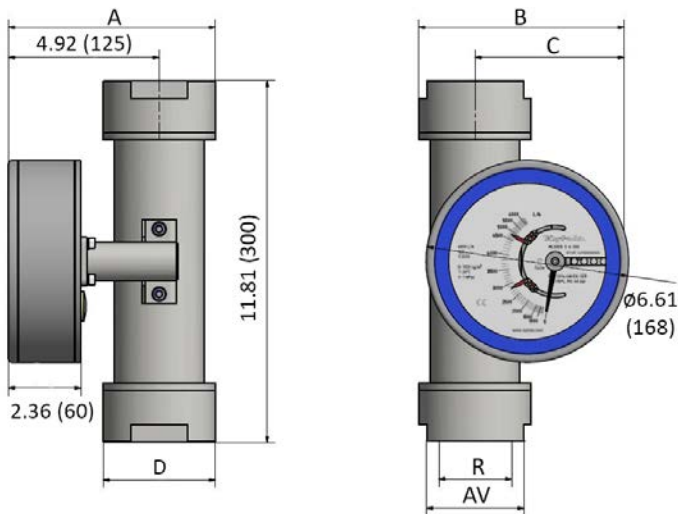
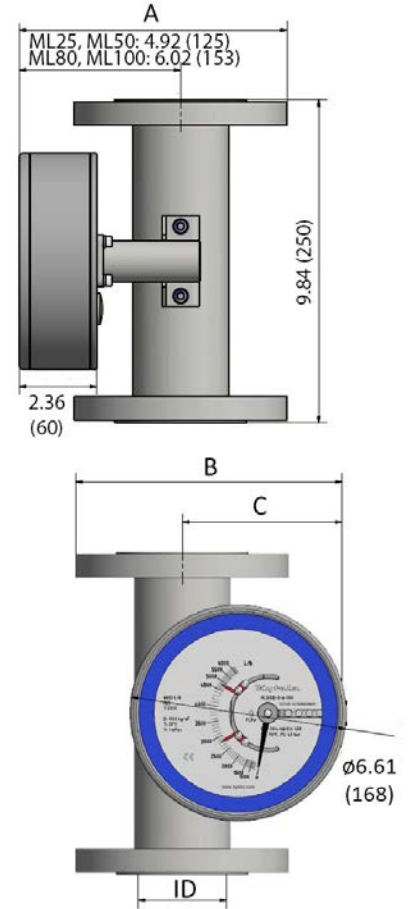
Size	CL	A	B	C	ID	Weight lb (kg)
1"	150	7.05 (179)	6.38 (162)	4.25 (108)	1.38 (35)	8.4 (3.8)
2"	150	7.91 (201)	7.99 (203)	5.00 (127)	2.68 (68)	16.5 (7.5)
3"	150	9.76 (248)	9.49 (241)	5.75 (146)	4.02 (102)	28.4 (12.9)
4"	150	10.51 (267)	10.63 (270)	6.14 (156)	4.92 (125)	33.5 (15.2)

ANSI/ASME 300 lbs

Size	CL	A	B	C	ID	Weight lb (kg)
1"	300	7.36 (187)	6.69 (170)	4.25 (108)	1.38 (35)	10.6 (4.8)
2"	300	8.19 (208)	8.23 (209)	5.00 (127)	2.68 (68)	19.6 (8.9)
3"	300	10.16 (258)	9.88 (251)	5.75 (146)	4.02 (102)	35.0 (15.9)

G/NPT female thread

Size	PN	A	B	C	D	AV	Weight lb (kg)
1"	40	6.10 (155)	5.43 (138)	4.25 (108)	2.36 (60)	1.97 (50)	8.2 (3.7)
2"	40	6.77 (172)	6.81 (173)	5.00 (127)	3.66 (93)	3.15 (80)	13.9 (6.3)



Model	ML
Flow tube	Stainless steel AISI 316L
Connectors	Stainless steel AISI 316L
Float	Stainless steel AISI 316L
Display housing	Aluminium or stainless steel AISI 316L
Display housing window	Safety glass
Seals	Viton®
Protection class	IP65
Pressure class	DIN/EN flanges PN40 (ML100: PN16) ANSI/ASME flanges class 150 or class 300 (ML100: class 150) Female threads 580 psi (40 bar)
Max process temperature	+230°F (+110°C) without alarm sensors +212°F (+100°C) with NAMUR alarm sensors +176°F (+80°C) with PNP/NPN alarm sensors
Max ambient temperature	+176°F (+80°C)
Connections	DIN/EN 1092-1 PN40 form B1 (raised face) flange (ML100: PN16) ANSI/ASME B16.5 class 150 raised face flange ANSI/ASME B16.5 class 300 raised face flange NPT/G female thread 580 psi (40 bar) (only ML25, ML50)
Electrical connection	ISO M20x1.5 thread for cable gland (cable gland on request)
Accuracy	±5% F.S. H ₂ O, +70°F (+20°C)