

Technical Datasheet UIM-3/3F Metric

UIM Series Flowmeter

Technical data

Principle of operation	Broadband continuous wave- transit time
Sizes	150, 300 and 600lbs;2 - 16", other sizes on request
Flang type	ANSI, DIN, others on request
Pressure ranges	Up to 102 bar (1480 psi), other ranges on request
Ambient temperature	-40 to +60°C (-40 to +140°F)
Process temperature	-30 to +80°C (-22 to +176°F)
Typical uncertainty	1% (Qt - Qmax) factory calibration 2% (Qmin - Qt) factory calibration 0.5% (Qt-Qmax) flow calibration 1% (Qmin-Qt) flow calibration
Metrology	UIM-3F:AGA-9 compliant
Repeatability	0.1%
Turndown	100:1 (pipe size dependent)
Meter body materials	Carbon steel ASTM A350-LF2 Cl.1 Stainless steel ASTM A182-F316 Other materials on request
Transducers	All metal Ti C-rade 2; retractable version available as option
Pressure port	1/4" NPT female, others on request
Electronic enclosure material	Epoxy painted, low copper aluminum alloy
Electronic enclosure cable entry	M20x1.5 female 1/2" NPT female
Power supply	Main power: 14-28.8V, 6 OmW max I/O option board power 10.8 - 28.8V, 225mW max

User interface	128x128 dot matrix LC Display, 4 keys
Interface ports	1x USB (not intrinsically safe) 1x Frequency output
Optional interface ports	<u>I/O Option board</u> 1x RS485, two wire, externally powered 2x Digital, software configurable 1x 4-20mA loop powered output (pending) <u>PT Option board</u> Pressure and temperature sensors <u>4-20mA/HART Option board</u> 1x 4-20mA loop powered output (HART pending)
Communication protocols	MODBUS (RS485 and USB)
Hazardous area certification	ATEX EX II 1 G Ex ia IIC T4 Ga, Zone 0 IECEX Ex ia IIC T4 Ga FM-Class I, Division 1, Group A,B,C,D T4 (PENDING)
Ingress Protection	IP66, NEMA 4x

Flowranges and configurati-

Flowranges metric	Nominal size	Schedule	Internal diameter (mm)	Flow (m3/hr)			Turndown	
				Qmax	Qt	Qmin		
	2" / DN50	40		52,3	320	32	4	80
		80		49,3	280	28	4	70
	3" / DN80	40		77,9	610	61	7	88
		80		73,7	540	54	7	78
	4" / DN100	40		102,3	1000	100	12	84
		80		97,2	900	90	11	82
	6" / DN150	40		154,1	2020	202	21	97
		80		146,3	1820	182	19	96
8" / DN200	40		202,7	3490	349	35	100	
	80		193,7	3190	319	32	100	
10" / DN250	40		254,5	5500	550	55	100	
	80		242,9	5100	510	51	100	
12" / DN300	STD		304,7	7900	790	79	100	
	80		289,0	7100	710	71	100	
14" / DN350	STD		336,5	9700	970	97	100	
	80		317,5	8600	860	86	100	
16" / DN400	STD		387,3	12800	1280	128	100	
	80		363,5	11300	1130	113	100	
18" / DN450	STD		437,9	16300	1630	163	100	
	80		409,3	14300	1430	143	100	
20" / DN500	XS		482,6	19800	1980	198	100	
	80		455,6	17700	1770	177	100	
24" / DN600	XS		584,6	28100	2810	290	97	
	80		547,7	24600	2460	255	97	
30" / DN750	30		730,2	42300	4230	453	94	
	wt=35		692,0	38000	3800	407	94	

* Actual flowrange may vary depending on application

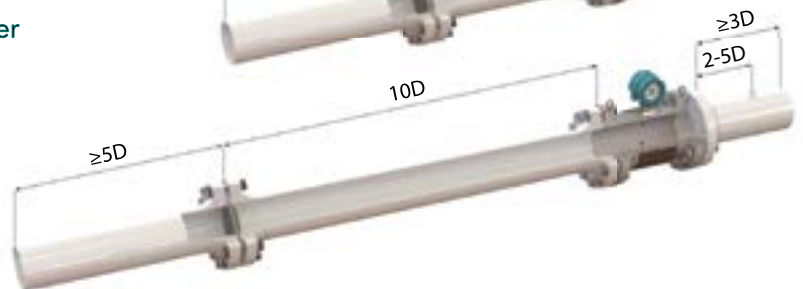
Configuration 1.
Recommended configuration without flow conditioner



Configuration 2.
Recommended configuration with flow conditioner



Configuration 3.
Conservative configuration with flow conditioner



Dimensions and weights

Dimensions and weights - metric	Nominal size (inch)	Rating	A- Length (mm)	B- Width (mm)	C - Height (mm)	Weight (kg)
	2" / DN50	150	260	155	340	25
		300	260	165	346	27
		600	280	165	360	30
	3" / DN80	150	300	190	372	35
		300	300	210	382	36
		600	320	210	400	44
	4" / DN100	150	300	230	410	43
		300	300	255	422	50
		600	350	275	447	78
	6" / DN150	150	350	280	457	57
		300	400	320	477	96
		600	400	355	510	123
	8" / DN200	150	450	345	515	145
		300	500	380	532	175
600		500	420	570	197	
10" / DN250	300	550	445	610	245	
	600	550	510	640	303	
12" / DN300	300	600	520	675	285	
	600	600	560	695	376	
14" / DN350	300	600	585	705	405	
	600	600	605	730	435	
16" / DN400	300	700	650	755	620	
	600	700	690	775	660	
18" / DN450	600	900	745	905	950	
20" / DN500	600	1000	815	940	1150	
24" / DN600	600	1100	940	1010	1500	
30" / DN750	600	1300	1130	1220	2450	

* Actual weights and dimensions may vary for specific designs

