

GM45* - GASES VELOCITY FLOW RATE TRANSMITTERS

Thermal mass flowmeter, not affected by temperature and pressure variations in the medium. No moving parts. Most suitable to measure aeriforms so as dirty gases in harsh, polluted, caustic environments, knowing their stable state and concentration in the mixture, to perform best repeatability.

Wetted parts built in stainless steel S.S. 316L. Rugged electronic housing, waterproof, compact design mounting on top the sensor tube. Scrolling fitting helps to control the insertion length through the wall pipes.

Kinds of gas:

- Carbon dioxide
- Argon
- Air
- Natural gas
- Hydrogen
- Methane
- Oxygen

Mean applications:

- Health firms, pharmaceutical, food, energy, companies

Versions:

- Mod. GM45I Insertion model
- Mod. GM45L On-line model

Options:

- ATEX II 2G ex d ii T4
- On board display
- Serial communication by Hart, ModBus, Wireless blueTooth
- Reverse direction measuring



Mod. GM45I



Mod. GM45L

TECHICAL SPECIFICATIONS

Measurement range:	Standard 0.4-92.7 Nm/s Large 0.8-185 Nm/s
Accuracy:	+/- 1.5% MV + 0.3% f.s. r @ +23°C +/-3 ambient conditions, < 90%RH, test pressure 6 barg
Repeatability:	0.25% VM
Response time t95:	<5 seconds; sample timing: 200 msec
Diameters:	Mod. GM45I DN25...DN1500 Mod. GM45L DN15...DN80
Connections:	Mod. GM45I 1/2" G ISO 228-1 Mod. GM45L threads ISO 7-1, flanged UNI EN 1092-1, ANSI / B16.5, JIS B2220
Process temperature:	Mod. GM45I = -40...+150°C Mod. GM45L = -40...+100°C
Room temperature:	-40...+65°C
Working pressure:	Mod. GM45I = 16 bar Mod. GM45L = 40 bar
Configurable output:	2x 4-20 mA analog, max 400 Ohm, sourcing/sinking 1x digital pulses / On-Off (1/1, 10/1 or 100/1 pulse per unit)
Power supply:	16...30 Vdc, 5W
Protection degree:	IP67 -NEMA 4X
Material:	stainless steel S.S.316L



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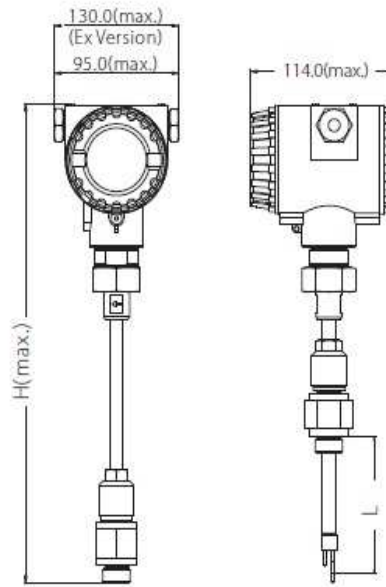
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TECHNICAL SPECIFICATIONS

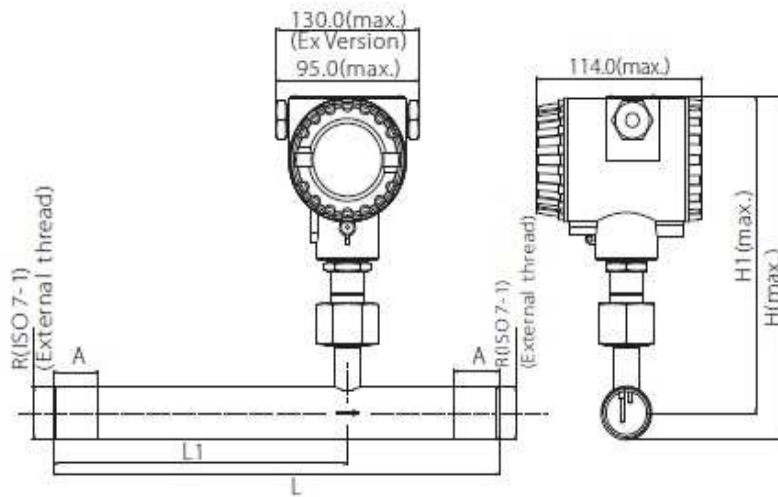
Mod. GM45I

mm	L	H
standard	220	469
B option	160	409
C option	300	549



Mod. GM45L

Threaded model



Nominal ends	DN	O.D. esternal diameter x thickness	Overall lenght L	Entrance distance L1	Total height H	H1	R external thread	Thread lenght mm A
1/2"	DN15	21.3X2.6	300	210	210.8	200.15	R1/2"	20
3/4"	DN20	26.9X2.6	475	275	213.6		R3/4"	20
1"	DN25	33.7X3.2			217.0		R1"	25
1"1/4	DN32	42.4X3.2			221.3		R1"1/4	25
1"1/2	DN40	48.3X3.2			224.3		R1"1/2	25
2"	DN50	60.3X3.6			230.3		R2"	30



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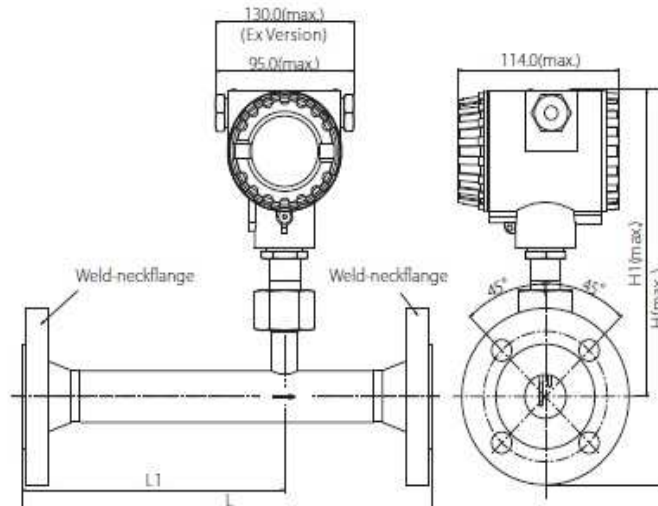
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TECHNICAL SPECIFICATIONS

Mod. GM45L

Flanged model



DN	O.D. external diameter x thickness	Overall length L	Entrance distance L1	Total height H	H1
DN15	21.3X2.6	300	210	247.65	200.15
DN20	26.9X2.6			252.65	
DN25	33.7X3.2			257.65	
DN32	42.4X3.2			270.15	
DN40	48.3X3.2			275.15	
DN50	60.3X3.6			282.65	
DN65	76.1X3.6			300.55	208.05
DN80	88.9X4.0			314.45	214.45

Flow ranges table

	DN	Di mm	Standard m3/h	Average m3/h	High m3/h
1/2"	15	16.1	0,2-45.6	0.4-91.0	0.48-110.16
3/4"	20	21.7	0.4-89.1	0.9-177.8	1.09-215.3
1"	25	27.3	0.6-147.7	1.2-294.7	1.82-356.85
1"1/4	32	36.0	1.1-266.3	2.1-531.5	3.15-643.51
1"1/2	40	41.9	1.5-366.7	2.9-731.9	4.36-886.18
2"	50	53.1	2.4-600	4.8-1198	7.26-1450
2"1/2	65	68.9	4.1-1027	8.2-2049	12.1-2480.4
3"	80	80.9	5.7-1424	11.4-2841	16.94-3442
4"	100	100	8.7-2183	17.4-4357	24.2-5272.7
5"	125	125	20-3419.6	38-6824.4	45.9-8263
6"	150	150	20-4930	39-9839	70.18-11913
8"	200	200	35-8786	70-17533	106.4-21229
10"	250	250	55-13744	110-27429	165,7-33211
12"	300	300	79-19815	158-39544	239.6-47880



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