

MAGB1

OIML R-49 FLOWMETER DATA-SHEET



- ◆ OIML R 49, edition 2013, for accuracy class 2
- ◆ Compact and remote version
- ◆ Available for DN25 – DN300
- ◆ Remote reading via Pulse output or RS485 communication



What is OIML?

OIML is an inter-governmental body, established in 1955. Its main objective is to achieve international harmonization for legal metrology, providing an important basis for measurement credibility, eliminating technical barriers to the trade in measuring instruments and promoting international trade by confidence in measurement capability. A main output of OIML's work is the production of International Recommendations (such as R49), which are technically based models for legal control of measuring instruments.

MAGB1 have been type tested and internationally proven and endorsed to the highest accuracy class 2 for cold and hot potable water meters – OIML R49-1 (Organisation Internationale de Métrologie Légale). For full details, OIML R49 is available to download from www.oiml.org. Its requirements are in line with other international standards, such as EN14154 and ISO4064. MAGB1 flowmeter has been evaluated by type approval at the Czech Metrology Institute to OIML R49 and passed the very highest accuracy designations for sizes DN25 to DN300 (1 to 6 in. NB).

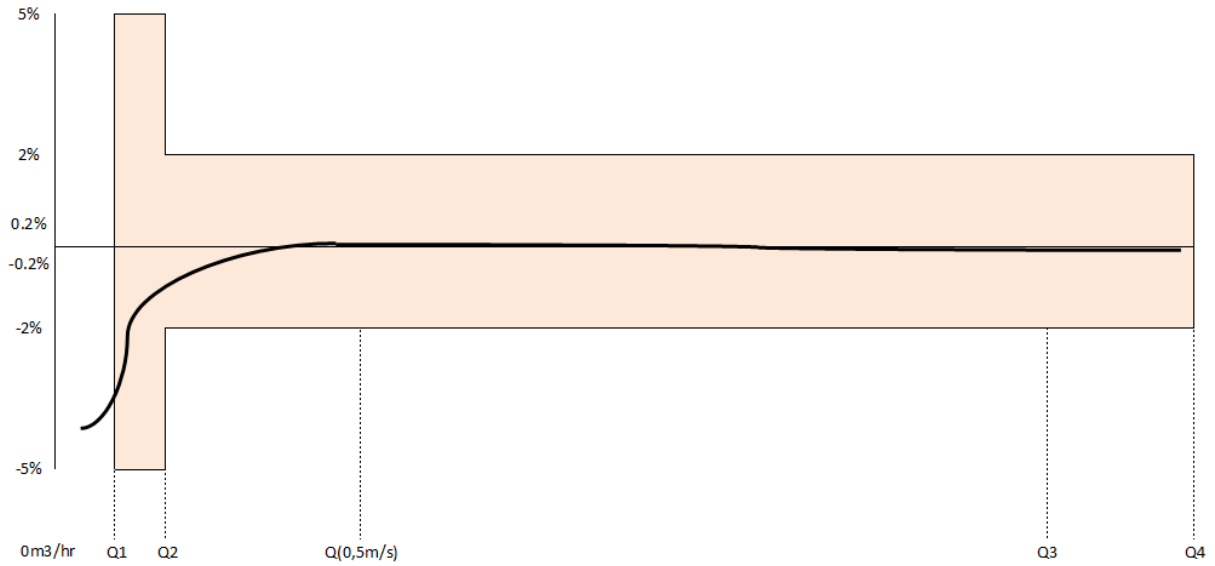
The OIML R49-1 certificate of conformity is available on OIML website (https://www.oiml.org/en/oiml-cs/certificat_view).

Specification

Climatic environment class	B
Electromagnetic class	E1 for compact, E2 for remote
Pressure class:	MAP10
Temperature class	T50
Pressure loss	ΔP 10
Accuracy class	2
Flow direction	Positive
Maximum permissible error for the lower flowrate zone /MPE1	+/-5%
Maximum permissible error for the upper flowrate zone (MPE0)	+/- 2% for water having a temperature <30°C +/-3 % for water having a temperature > 30°C
Flow profile sensitivity classes	U5 D3
Orientation limitation	Any
Low flow cut off	1% from nominal flowrate
Max. cable length for remote version	6 m
Output options	2 options: Pulse output or RS485 communication



Accuracy graph



Q3/Q1 ratio is described in following table:

DN	R	Flow Rate [m3/hr]				R	Flow Rate [m3/hr]				R	Flow Rate [m3/hr]			
		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4
25	50	0,32	0,51	16,00	20,00	100	0,16	0,26	16,00	20,00	160	0,10	0,16	16,00	20,00
32	50	0,50	0,80	25,00	31,25	100	0,25	0,40	25,00	31,25	160	0,16	0,25	25,00	31,25
40	50	0,80	1,28	40,00	50,00	100	0,40	0,64	40,00	50,00	160	0,25	0,40	40,00	50,00
50	50	1,26	2,02	63,00	78,75	100	0,63	1,01	63,00	78,75	160	0,39	0,63	63,00	78,75
65	50	2,00	3,20	100,00	125,00	100	1,00	1,60	100,00	125,00	160	0,63	1,00	100,00	125,00
80	50	3,20	5,12	160,00	200,00	100	1,60	2,56	160,00	200,00	160	1,00	1,60	160,00	200,00
100	50	4,00	6,40	200,00	250,00	100	2,00	3,20	200,00	250,00	160	1,25	2,00	200,00	250,00
125	50	8,00	12,80	400,00	500,00	100	4,00	6,40	400,00	500,00	160	2,50	4,00	400,00	500,00
150	50	12,60	20,16	630,00	787,50	100	6,30	10,08	630,00	787,50	160	3,94	6,30	630,00	787,50
200	50	16,00	25,60	800,00	1000,00	100	8,00	12,80	800,00	1000,00	160	5,00	8,00	800,00	1000,00
250	50	20,00	32,00	1000,00	1250,00	100	10,00	16,00	1000,00	1250,00	160	6,25	10,00	1000,00	1250,00
300	50	32,00	51,20	1600,00	2000,00	100	16,00	25,60	1600,00	2000,00	160	10,00	16,00	1600,00	2000,00

Test report number: 6015-PT-P3014-16

OIML Certificate No.: R49/2013-CZ-16.03

How to order your MAGB1 OIML R49 flowmeter?

MAGB1 can be ordered only in this configuration



Model	Ordering code							
MAGB1 IP68 OIML	1	2	3	4	5	6	7	
								Version
			C					Compact
			W					Remote: WALL mounting kit (including 6m cable)
			P					Remote: PANEL mounting kit (including 6m cable)
			R					Remote: DIN-Rail mounting kit (including 6m cable)
								Connection type
				D				DIN
				A				ANSI
								Size
					25 / 1			25 mm / 1"
					32 / 1.1.4			32 mm / 1.1/4"
					40 / 1.1/2			40 mm / 1.1/2"
					50 / 2			50 mm / 2"
					65 / 2.1/2			65 mm / 2.1/2"
					80 / 3			80 mm / 3"
					100 / 4			100 mm / 4"
					125 / 5			125 mm / 5"
					150 / 6			150 mm / 6"
					200 / 8			200 mm / 8"
					250 / 10			250 mm / 10"
					300 / 12			300 mm / 12"
								Liner material
						HR		Hard rubber
						SR		Soft rubber
						PT		PTFE
						NR		Hygienic rubber
								Connecting flange pressure rating*
						150		150 psi
						300		300 psi
						10		PN10
						16		PN16
						25		PN25
						40		PN40
								Electrodes
							HA	Hastelloy C
							TI	Titanium
							PL	Platinum
								Communication
							485	RS485 communication module

*Please note the meters are only MAP10