APPLICATION

- ❑ Contact water meter for proportional control of pumps, motors, etc.
- ❑ Metering with digital preselection of quantity and remote transmission of flow rates

FEATURES

- ❑ Cold water up to 30 °C (safe up to max. 50 °C)
- ❑ Horizontal installation, installation and connection dimensions to DIN ISO 4064
- ❑ Installation in rising pipes with housing, installation and connection dimensions to DIN 19648 Part 3
- ❑ Operating pressure up to max. 16 bar
- ❑ Multi-jet impeller meter in completely dry-running design with magnetic coupling. Only the impeller operates in the wet chamber to prevent faults due to sediment.
- ❑ Encapsulated waterproof counter. Reading not obstructed by condensation of the transparent cover; can be rotated to any position for easy reading
- ❑ Compact design in subassemblies simplifies maintenance and repair
- ❑ Built-in pulse contact cast in a waterproof enclosure and easily replaceable
- ❑ Contact rating max. 24 V (SELV), 0.2 A

SPECIAL VERSIONS

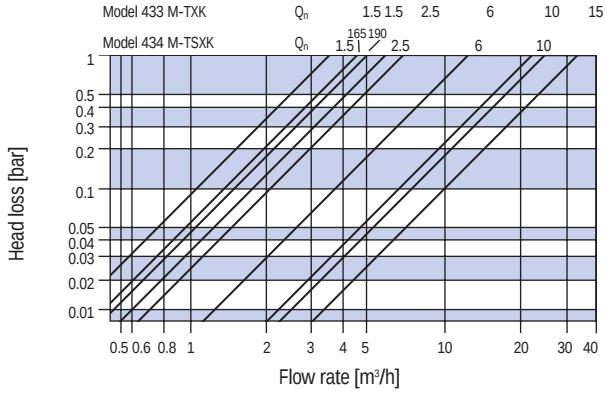
- ❑ Pulse contact is available with screw connection or 1-m cable

HYDROMETER model 433/434 contact water meters can be supplied calibrated if required. The meter is tested for compliance with the figures specified in the calibration regulations.

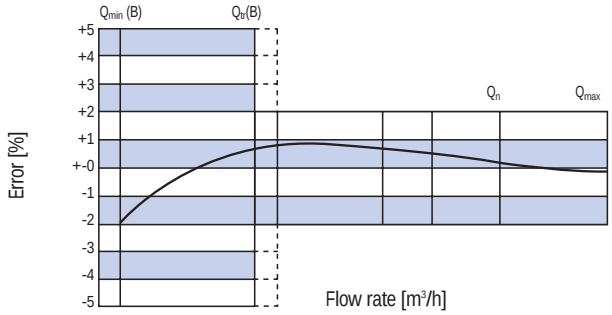




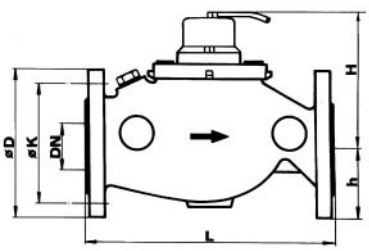
HEAD LOSS DIAGRAM



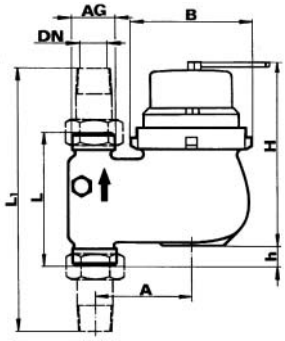
TYPICAL ERROR GRAPH FOR MODEL 433/434



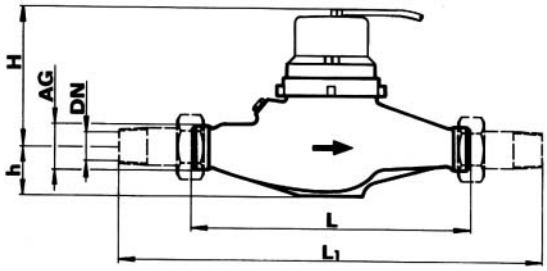
MODEL 433
FLANGE
DN 50/PN 16



MODEL 434
RISING PIPE METER
DN 20-40/PN 16



MODEL 433 METER THREAD DN 15-40/PN 16



HYDROMETER

DATA SHEET CONTACT WATER METER FOR COLD WATER M-TXK / M-TSXK
MODEL 433/434

TECHNICAL DATA

Type				M-TXK						M-TSXK			
Nominal diameter		DN	mm	15	20	20	25	40	50	20	20	25	40
Nominal flow rate		Q_n	m³/h	1.5	1.5	2.5	6	10	15	1.5	2.5	6	10
Flow rate at 1 bar head loss for 30 °C (max. 50 °C)			m³/h	4.6	4.8	7	12	24	34	3.4	6	12	22
Maximum flow rate		Q_{max}	m³/h	3	3	5	12	20	30	3	5	12	20
Transition flow rate		Q_t	l/h	150	150	250	600	1,000	1,500	150	250	600	1,000
Lower measuring range limit		Q_{min}	l/h	30	30	50	90	160	200	30	50	90	160
Starting flows			l/h	12-15		20-25	40-50	60-70	80-90	12-15	20-25	40-50	60-70
Meter thread	old desig.	AG	inch	R ³/₄	R 1		R 1¼	R 2	Flange DIN 2501	R 1		R 1¼	R 2
to DIN ISO 228/Part 1	new desig.	AG	inch	G ³/₄ B	G 1 B		G 1¼ B	G 2 B		G 1 B		G 1 ¼ B	G 2 B
Coupling thread DIN 2999 (ISO 7/1)			inch	R ½	R ¾		R 1	R 1½		R ¾		R 1	R 1½
Flange to	Outer Ø	D	mm	-					165	-			
DIN 2501	Hole pitch Ø	K	mm	-					125	-			
	Number of bolts		Quantity	-					4	-			
Overall length		L	mm	165	190		260	300	270	105		150	200
	with coupling	L1	mm	245	288		378	438	-	203		268	338
Height		H	mm	136			147	161	218	134		145	157
		h	mm	41			44	46	83	14		31	21
Width		A	mm	-						82		95	120
		B	mm	96			102	137	166	96		102	130
Dial indication range				Min. 0.1 l / max. 100,000 m³									
Weight	without coupling		kg	1.5	1.7		2.5	4.7	11.7	2.1		3.1	5.5
	with coupling		kg	1.7	2.1		3.1	5.9	-	2.5		3.7	6.7

* The M-TXK Qn 6 is also available with G 1½ B meter thread to DIN ISO 4064. The M-TSXK Q_n 6 is also available with G 1½ B meter thread to DIN 19648/Part 3. The M-TSXK DN 25 is also available on request with the old overall length of 135 mm and DN 40 with the overall length of 150 mm.

AVAILABLE PULSE RATES

0.5 · 1 · 2 · 2.5 · 3 · 4 · 5 · 10 · 20 · 25 · 30 · 40 · 50 · 100 · 200 · 250 · 300 · 400 · 500 · 1000 litres/pulse

The measuring range limit differs for pulse sequences 0.5 to 5 litres/pulse. Other versions and pulse rates available on request. Minor technical changes may occur in the course of further development.

ORDER REFERENCES

Model	Q_n/PN	Type designation	l/pulse	Overall length	Temperature	Connections	*Metrol. cl.	Article number
433	1.5 m³/h / 16	M-TXK	1	190 mm	30 °C	G 1 B/cable	A•H	433 000 00
433	1.5 m³/h / 16	M-TXK	10	190 mm	30 °C	G 1 B/cable	A•H	433 000 02
433	2.5 m³/h / 16	M-TXK	1	190 mm	30 °C	G 1 B/cable	A•H	433 000 20
433	2.5 m³/h / 16	M-TXK	10	190 mm	30 °C	G 1 B/cable	A•H	433 000 24
433	2.5 m³/h / 16	M-TXK	100	190 mm	30 °C	G 1 B/cable	A•H	433 000 28
433	6 m³/h / 16	M-TXK	1	260 mm	30 °C	G 1¼ B/cable	A•H	433 000 47
433	6 m³/h / 16	M-TXK	10	260 mm	30 °C	G 1¼ B/cable	A•H	433 000 51
433	6 m³/h / 16	M-TXK	100	260 mm	30 °C	G 1¼ B/cable	A•H	433 000 55
433	10 m³/h / 16	M-TXK	1	300 mm	30 °C	G 2 B/cable	A•H	433 000 84
433	10 m³/h / 16	M-TXK	10	300 mm	30 °C	G 2 B/cable	A•H	433 000 90
433	10 m³/h / 16	M-TXK	100	300 mm	30 °C	G 2 B/cable	A•H	433 000 94
433	10 m³/h / 16	M-TXK	1.000	300 mm	30 °C	G 2 B/cable	A•H	433 000 95
433	15 m³/h / 16	M-TXK	1	270 mm	30 °C	FL 50-DIN 2501	A•H	433 001 19
433	15 m³/h / 16	M-TXK	10	270 mm	30 °C	FL 50-DIN 2501	A•H	433 001 24
433	15 m³/h / 16	M-TXK	100	270 mm	30 °C	FL 50-DIN 2501	A•H	433 001 28
433	15 m³/h / 16	M-TXK	1.000	270 mm	30 °C	FL 50-DIN 2501	A•H	433 001 29
434	1.5 m³/h / 16	M-TSXK	1	105 mm	30 °C	G 1 B/cable	A•H	434 000 00
434	2.5 m³/h / 16	M-TSXK	1	105 mm	30 °C	G 1 B/cable	A•H	434 000 02
434	2.5 m³/h / 16	M-TSXK	10	105 mm	30 °C	G 1 B/cable	A•H	434 000 04
434	6 m³/h / 16	M-TSXK	1	150 mm	30 °C	G 1¼ B/cable	A•H	434 000 08
434	6 m³/h / 16	M-TSXK	10	150 mm	30 °C	G 1¼ B/cable	A•H	434 000 10

* tested to the metrological class indicated!

Note: The types listed in the order references are standard meters. All versions can of course be supplied as per technical data.

Explanation of type designations:

M: multi-jet meter **K:** pulse output **T:** dry runner **S:** rising pipe version **X:** counter type

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