Metex Corporation Limited
91 Kelfield St. Unit 4 • Toronto, Ontario • M9W 5A3
Telephone 416-240-1920 • Fax 416-240-7021
Website: www.metexcorporation.com

HYDROMETER

DATA SHEET CONTACT WATER METERS M-TXK / M-THXK M-TSXK / M-TFXK
MODELS 420/421/422/425

APPLICATION

- ❑ For remote transmission of flow rates, proportional control of pumps, motors, etc.
- ❑ Metering with digital preselection of quantity

FEATURES

- ❑ Cold water up to 30 °C (safe up to 50 °C)
- ❑ Warm water up to 90 °C
- ❑ Horizontal installation
- ❑ Installation in rising pipes with housing
- ❑ Available as downpipe meter for 90 °C
- ❑ Overall and flange dimensions to DIN ISO 4064
- ❑ Nominal diameters DN 15 - 50 mm
- ❑ Nominal operating pressure PN up to 16 bar / DIN 2401
- ❑ Protection class IP 65
- ❑ 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 unclean water
- ❑ Encapsulated, waterproof counter prevents condensation of the transparent cover; can be rotated to any position for easy reading
- ❑ Integrated measurement outputs as standard
- ❑ Sensors can be retrofitted on site for remote digital reading and analogue flow rate measurement

SPECIAL VERSIONS

- ❑ Available with plastic or carbide alloy bearing
- ❑ Nominal operating pressure PN up to 25/40 to DIN 2401 on request
- ❑ Counter extension for use up to 120 °C

NOTE

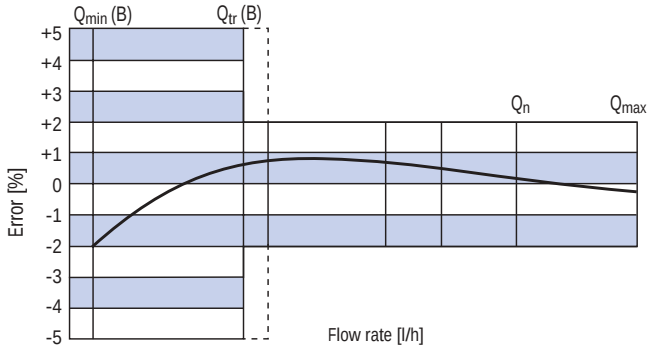
HYDROMETER model 423/424 contact water meters can be supplied calibrated if required. The meter is tested for compliance with the figures specified in the calibration regulations.



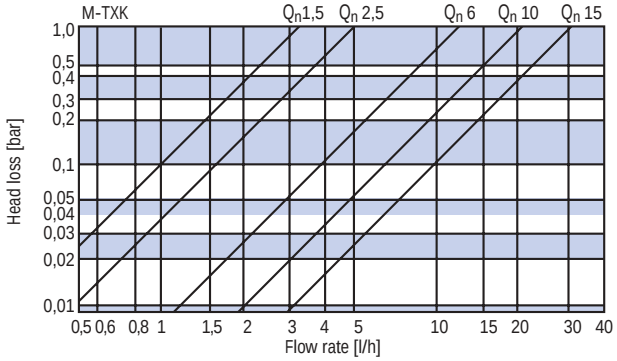
Contact meter for installation of sensors



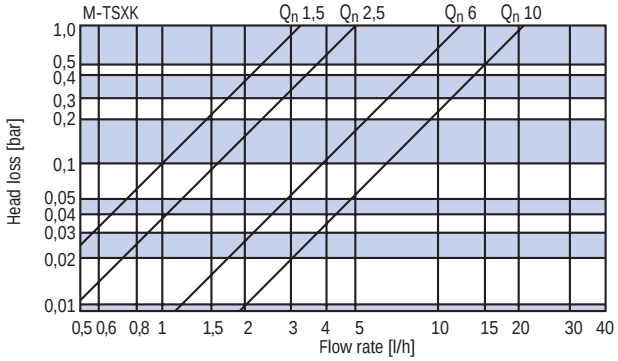
TYPICAL ERROR GRAPH MODELS 420/421/422/425



HEAD LOSS GRAPHS MODELS 420/421



HEAD LOSS GRAPHS MODELS 422/425



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DATA SHEET CONTACT WATER METERS M-TXK / M-THXK M-TSXK / M-TFXK
MODELS 420/421/422/425

TECHNICAL DATA

Type				M-TXK / M-THXK						M-TSXK / M-TFXK			
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
Flow rate at 1 bar head loss for 90 °C			m³/h	3.2	3.4	5.1	12	20	34	3.2	5	12	20
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	1000	1500	150	250	600	1000
Lower measuring range limit		Q_{min}	l/h	50	50	90	120	200	280	50	90	120	200
Starting flows			l/h	12-15		20-25	40-50	60-70	80-90	12 -15	20-25	40-50	60-70
Coupling thread	old designation	AG	inch	R ³/₄	R 1		R 1¼	R 2	Flange	R 1		R 1¼	R 2
on meter DIN ISO 228 T1	new designation	AG	inch	G ³/₄ B	G 1 B		G 1¼ B	G 2 B	DIN	G 1 B		G 1¼ B	G 2 B
Coupling thread to DIN 2999			inch	R ½	R ¾		R 1	R 1½	2501	R ¾		R 1	R 1½
Overall length		L	mm	165	190		260	300	270	105		150	200
		L1	mm	245	288		378	438	-	203		268	338
Height		H	mm		120		125	140	165	154		165	177
		h	mm	35			45	50	83	15		32	22
Cover diameter		Ø B	mm	96			102	137	166	96		102	136
Width		A	mm	-						82		95	120
Dial indication range				min. 0.1 l / max. 100 000 m³									
Measurement	Reed switch model 570	k =	m³	0.1 / 1									
outputs	IR transmitter model 571	k =	l	0.05		0.1				0.05	0.1		
Weight without coupling			kg	1.5	1.7		2.5	4.7	11.7	2.1		3.1	5.5
Weight with coupling			kg	1.7	2.1		3.1	5.9	-	2.5		3.7	6.7

Subject to minor technical changes in the course of further development.

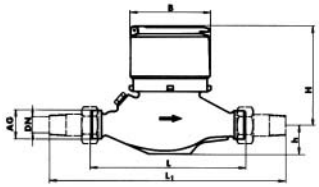
Available pulse rates:
100 · 1000 l/pulse. Other versions and pulse rates available on request.
Note: Please indicate separately when ordering:
Order the pulse output without resistance for a low-resistance load, e.g. mechanical counters.

ORDER REFERENCES

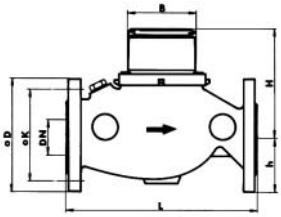
Model	Q_n/PN	Type designation	Overall length	Temperature	Connection	*Metrol. cl.	Article number
420	1.5 m³/h / 16	M-TXK	165 mm	30 °C	G ³/₄ B	A•H	420 000 01
420	1.5 m³/h / 16	M-TXK	190 mm	30 °C	G 1 B	A•H	420 000 00
420	1.5 m³/h / 16	M-TXK	190 mm	90 °C	G 1 B	A•H	420 000 35
420	1.5 m³/h / 16	M-THXK	190 mm	90 °C	G 1 B	A•H	420 000 64
420	2.5 m³/h / 16	M-TXK	190 mm	30 °C	G 1 B	A•H	420 000 06
420	2.5 m³/h / 16	M-TXK	190 mm	90 °C	G 1 B	A•H	420 000 39
420	2.5 m³/h / 16	M-THXK	190 mm	90 °C	G 1 B	A•H	420 000 65
420	6.0 m³/h / 16	M-TXK	260 mm	30 °C	G 1¼ B	A•H	420 000 14
420	6.0 m³/h / 16	M-TXK	260 mm	90 °C	G 1¼ B	A•H	420 000 43
420	6.0 m³/h / 16	M-TXK	260 mm	90 °C	G 1½ B	A•H	420 000 93
420	6.0 m³/h / 16	M-THXK	260 mm	90 °C	G 1¼ B	A•H	420 000 67
420	10.0 m³/h / 16	M-TXK	300 mm	30 °C	G 2 B	A•H	420 000 22
420	10.0 m³/h / 16	M-TXK	300 mm	90 °C	G 2 B	A•H	420 000 51
420	10.0 m³/h / 16	M-THXK	300 mm	90 °C	G 2 B	A•H	420 000 68
420	15.0 m³/h / 16	M-TXK	270 mm	30 °C	Flange/DIN 2501		420 000 28
421	1.5 m³/h / 16	M-TXKZE	190 mm	120 °C	G 1 B	A•H	421 000 00
421	2.5 m³/h / 16	M-TXKZE	190 mm	120 °C	G 1 B	A•H	421 000 04
421	3.5 m³/h / 16	M-TXKZE	260 mm	120 °C	G 1 B	A•H	421 000 06
421	6.0 m³/h / 16	M-TXKZE	260 mm	120 °C	G 1¼ B	A•H	421 000 08
421	10.0 m³/h / 16	M-TXKZE	300 mm	120 °C	G 2 B	A•H	421 000 15
421	15.0 m³/h / 16	M-TXKZE	270 mm	120 °C	Flange DIN 2501		421 000 20
422	1.5 m³/h / 16	M-TSXK	105 mm	30 °C	G 1 B	A•H	422 000 18
422	2.5 m³/h / 16	M-TSXK	105 mm	30 °C	G 1 B	A•H	422 000 01
422	2.5 m³/h / 16	M-TSXK	105 mm	90 °C	G 1 B	A•H	422 000 11
422	6.0 m³/h / 16	M-TSXK	150 mm	30 °C	G 1¼ B	A•H	422 000 04
422	6.0 m³/h / 16	M-TSXK	150 mm	90 °C	G 1¼ B	A•H	422 000 19
422	10.0 m³/h / 16	M-TSXK	200 mm	30 °C	G 2 B	A•H	422 000 07
422	10.0 m³/h / 16	M-TSXK	200 mm	90 °C	G 2 B	A•H	422 000 24
425	2.5 m³/h / 16	M-TFXK	105 mm	30 °C	G 1 B	A•H	425 000 01
425	2.5 m³/h / 16	M-TFXK	105 mm	90 °C	G 1 B	A•H	425 000 13
425	6.0 m³/h / 16	M-TFXK	150 mm	30 °C	G ⅝ B	A•H	425 000 16
425	6.0 m³/h / 16	M-TFXK	150 mm	90 °C	G ⅝ B	A•H	425 000 09

Note: The types listed in the order references are standard meters. All versions can of course be supplied as per technical data.
* tested to the metrological class indicated!

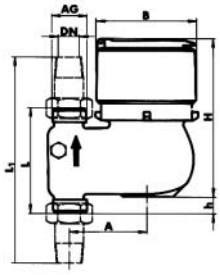
MODELS 420/421
Coupling thread DN 15-40 / PN 16



MODELS 420/421
Flange DN 15-40 / PN 16



MODELS 422/425
Rising pipe/downpipe version
DN 15-40 / PN 16



Explanation of type designations

M: multi-jet meter
H: carbide bearing
S: rising pipe version
F : downpipe version
K: pulse output
T: dry runner
X: counter type
ZE : counter extension

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