



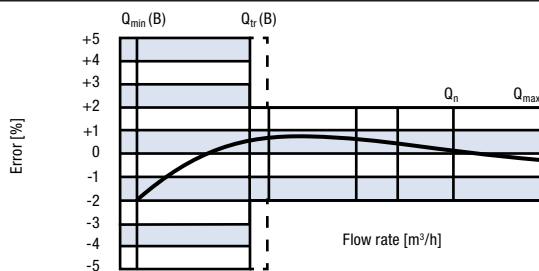
#### APPLICATION

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

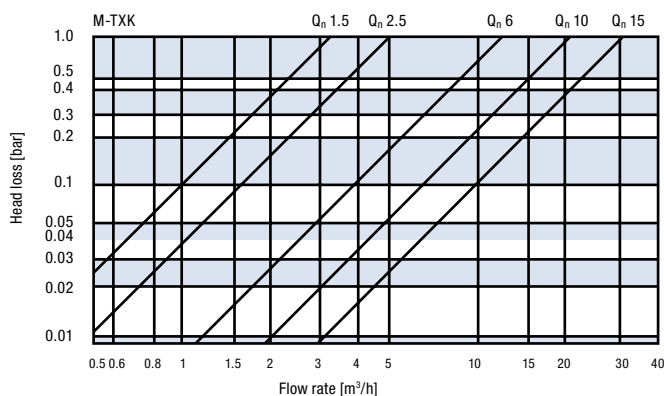
#### FEATURES

- 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

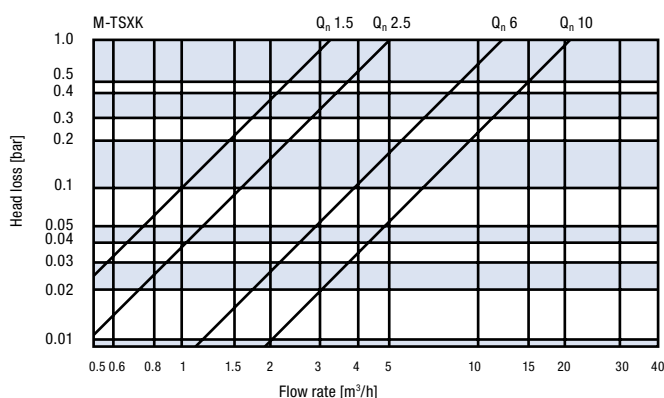
#### TYPICAL ERROR GRAPH MODELS 420 / 421 / 422 / 425



#### HEAD LOSS GRAPHS MODELS 420 / 421



#### HEAD LOSS GRAPHS MODELS 422 / 425



#### 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 420 / 421 / 422 / 425 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.

#### Explanation of type designations:

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

## CONTACT WATER METERS M-TXK / M-THXK M-TSXK / M-TFXK

### MODELS 420 / 421 / 422 / 425

#### TECHNICAL DATA

Type	420							421 / 422 / 425				
Model			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 <sub>n</sub>	m <sup>3</sup> /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)	m <sup>3</sup> /h		4.6	4.8	7	12	24	34	3.4	6	12	22
Flow rate at 1 bar head loss for 90 °C	m <sup>3</sup> /h		3.2	3.4	5.1	12	20	34	3.2	5	12	20
Maximum flow rate	Q <sub>max</sub>	m <sup>3</sup> /h	3	3	5	12	20	30	3	5	12	20
Transition flow rate	Q <sub>t</sub>	l/h	150	150	250	600	1000	1500	150	250	600	1000
Lower measuring range limit	Q <sub>min</sub>	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 on meter DIN ISO 228 T1	AG	Inch	G ¾ B	G 1 B		G 1 ¼ B	G 2 B	Flange DIN 2501	G 1 B		G 1 ¼ B	G 2 B
Coupling thread to DIN 2999	Inch		R ½	R ¾		R 1	R 1 ½		R ¾	R 1	R 1 ½	
Overall length	L	mm	165	190		260	300	270	105		150	200
	L <sub>1</sub>	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 m <sup>3</sup>											
Measurement output Reed switch model 570	k =	m <sup>3</sup>	0.1 / 1									
Measurement output 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

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.

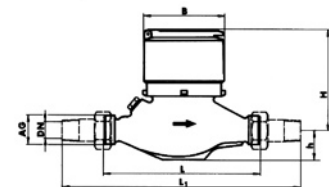
#### ORDER REFERENCES

Model	Q <sub>n</sub> / PN	Type des.	Ov. length	Temp.	Connection	M.Cl.	Article number
420	1.5 m <sup>3</sup> /h / 16	M-TXK	165 mm	30 °C	G ¾ B	A•H	420 000 01
420	1.5 m <sup>3</sup> /h / 16	M-TXK	190 mm	30 °C	G 1 B	A•H	420 000 00
420	1.5 m <sup>3</sup> /h / 16	M-TXK	190 mm	90 °C	G 1 B	A•H	420 000 35
420	1.5 m <sup>3</sup> /h / 16	M-THXK	190 mm	90 °C	G 1 B	A•H	420 000 64
420	2.5 m <sup>3</sup> /h / 16	M-TXK	190 mm	30 °C	G 1 B	A•H	420 000 06
420	2.5 m <sup>3</sup> /h / 16	M-TXK	190 mm	90 °C	G 1 B	A•H	420 000 39
420	2.5 m <sup>3</sup> /h / 16	M-THXK	190 mm	90 °C	G 1 B	A•H	420 000 65
420	6 m <sup>3</sup> /h / 16	M-TXK	260 mm	30 °C	G 1 ¼ B	A•H	420 000 14
420	6 m <sup>3</sup> /h / 16	M-TXK	260 mm	90 °C	G 1 ¼ B	A•H	420 000 43
420	6 m <sup>3</sup> /h / 16	M-TXK	260 mm	90 °C	G 1 ½ B	A•H	420 000 93
420	6 m <sup>3</sup> /h / 16	M-THXK	260 mm	90 °C	G 1 ¼ B	A•H	420 000 67
420	10 m <sup>3</sup> /h / 16	M-TXK	300 mm	30 °C	G 2 B	A•H	420 000 22
420	10 m <sup>3</sup> /h / 16	M-TXK	300 mm	90 °C	G 2 B	A•H	420 000 51
420	10 m <sup>3</sup> /h / 16	M-THXK	300 mm	90 °C	G 2 B	A•H	420 000 68
420	15 m <sup>3</sup> /h / 16	M-TXK	270 mm	30 °C	FL DIN 2501		420 000 28
421	1.5 m <sup>3</sup> /h / 16	M-TXKZE	190 mm	120 °C	G 1 B	A•H	421 000 00
421	2.5 m <sup>3</sup> /h / 16	M-TXKZE	190 mm	120 °C	G 1 B	A•H	421 000 04
421	3.5 m <sup>3</sup> /h / 16	M-TXKZE	260 mm	120 °C	G 1 B	A•H	421 000 06
421	6 m <sup>3</sup> /h / 16	M-TXKZE	260 mm	120 °C	G 1 ¼ B	A•H	421 000 08
421	10 m <sup>3</sup> /h / 16	M-TXKZE	300 mm	120 °C	G 2 B	A•H	421 000 15
421	15 m <sup>3</sup> /h / 16	M-TXKZE	270 mm	120 °C	FL DIN 2501		421 000 20
422	1.5 m <sup>3</sup> /h / 16	M-TSXK	105 mm	30 °C	G 1 B	A•H	422 000 18
422	2.5 m <sup>3</sup> /h / 16	M-TSXK	105 mm	30 °C	G 1 B	A•H	422 000 01
422	2.5 m <sup>3</sup> /h / 16	M-TSXK	105 mm	90 °C	G 1 B	A•H	422 000 11
422	6 m <sup>3</sup> /h / 16	M-TSXK	150 mm	30 °C	G 1 ¼ B	A•H	422 000 04
422	6 m <sup>3</sup> /h / 16	M-TSXK	150 mm	90 °C	G 1 ¼ B	A•H	422 000 19
422	10 m <sup>3</sup> /h / 16	M-TSXK	200 mm	30 °C	G 2 B	A•H	422 000 07
422	10 m <sup>3</sup> /h / 16	M-TSXK	200 mm	90 °C	G 2 B	A•H	422 000 24
425	2.5 m <sup>3</sup> /h / 16	M-TFXK	105 mm	30 °C	G 1 B	A•H	425 000 01
425	2.5 m <sup>3</sup> /h / 16	M-TFXK	105 mm	90 °C	G 1 B	A•H	425 000 13
425	6 m <sup>3</sup> /h / 16	M-TFXK	150 mm	30 °C	G 5/4 B	A•H	425 000 16
425	6 m <sup>3</sup> /h / 16	M-TFXK	150 mm	90 °C	G 5/4 B	A•H	425 000 09

\* 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.

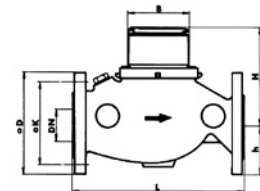
#### MODELS 420 / 421

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

