Multi-Jet Water Meter

MT-KD-P

15-50 mm

- The BarMeter **MT-KD-P Multi-Jet Water Meter** was designed to measure potable water.
- Working principle: while water passes through the water meter, several water jets make the impeller rotate. The impeller's rotations are proportional to quantity of water passing through and magnetically transmitted to the register, in which the reading of the water meter takes place.
- Its solid and sturdy construction makes the BarMeter **MT-KD-P Multi-Jet Water Meter** suitable for various applications.
- The BarMeter **MT-KD-P Multi-Jet Water Meter** ensures high sensitivity and accurate registration throughout a wide flow range.

Characteristics and Advantages

- Hermetically vacuum-sealed register
- Magnetic transmission
- Magnetic shield, for external magnetic field protection
- High-flow accuracy and steady curve characteristics
- Solid and robust design
- High scratch resistant glass
- Internal strainer
- Minimum friction wear due to negligable impeller weight, bearing flushing and hard metals
- External calibration
- Rotating star for flow indication, electronic calibration on the test bench and leak detection
- Internal Check valve - Optional

Compliance with Standards

- ISO 4064 Class B

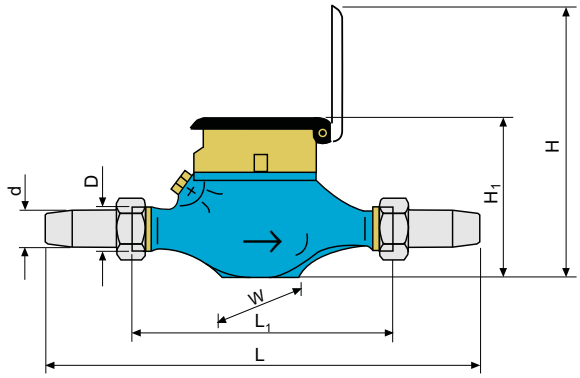
Multi-Jet Water Meter

MT-KD-P

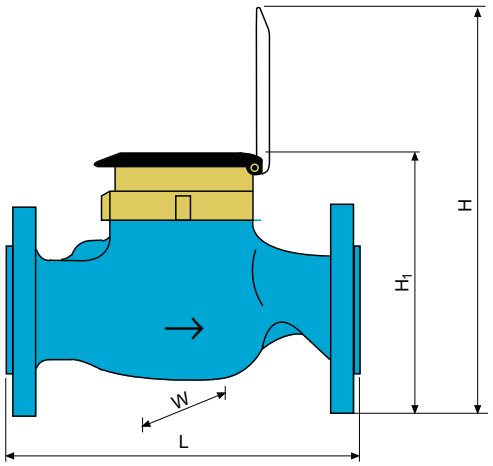
Operating Conditions

- Water temperature: up to 50°C
- Pressure rating: PN-10

Dimensions and Weights



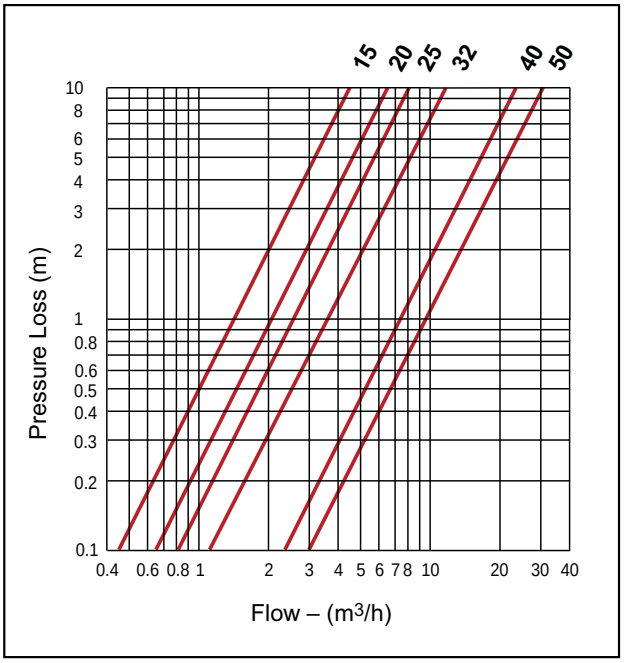
Threaded



Flanged

Nominal Size DN ∅	mm	15	20	25	32	40	50	50
	inch	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2"
Body thread (inch)	D	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/4"	Flanged
Connectors thread (inch)	d	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	–
Length (mm)	L	259/284	284/322	306/376/389	376	435	504	280
	L_1	165/190	190/228	190/260/273	260	300	350	–
Width (mm)	W	98	98	103	103	126	130	165
Height (mm)	H	200	200	200	225	260	290	270
Height (mm)	H_1	115	115	115	128	136	161	180
Weight without connectors (kg)		1.4/1.5	1.5/1.7	1.8/2.8/2.8	2.8	4.5	6.5	13.0
Weight with connectors (kg)		1.6/1.7	1.8/2.0	2.4/3.4/3.4	3.6	5.5	8.3	–

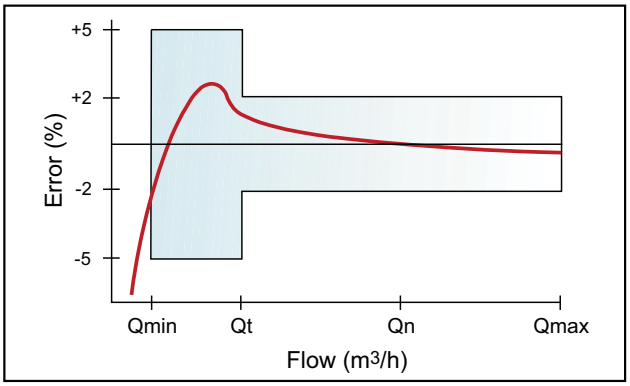
Pressure Loss Curve



Metrological Data

Nominal Size DN ∅	mm	15	20	25	32	40	50
	inch	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Qn – Nominal Flow	m3/h	1.5	2.5	3.5	6	10	15
Qmax – Max. Flow	m3/h	3	5	7	12	20	30
Qt – Transitional Flow	m3/h	0.12	0.20	0.28	0.48	0.80	3.0
Qmin – Min. Flow	l/h	30	50	70	120	200	450

Accuracy Curve



Multi-Jet Water Meter

MT-KD-P

MT-KD-P Water Meter with Reed Switch Option

- The need to keep water sources under constant control, even where it is difficult to reach and read the water meter, has created a demand for systems that are capable of transmitting data to external data outlets, such as remote reading or control systems.
- The Special Version MT-KD-P Water Meter can be equipped with a Reed Switch Pulser which may be connected to remote reading systems. The Reed Switch Pulser sends out electric signals per a preset water quantity.
- The Special Version MT-KD-P comes in several model variations, which indicate different pulse rates. To choose the variation best suited to your needs, please consult the table below.

MT-KD-P with Reed-switch

Data Output Options

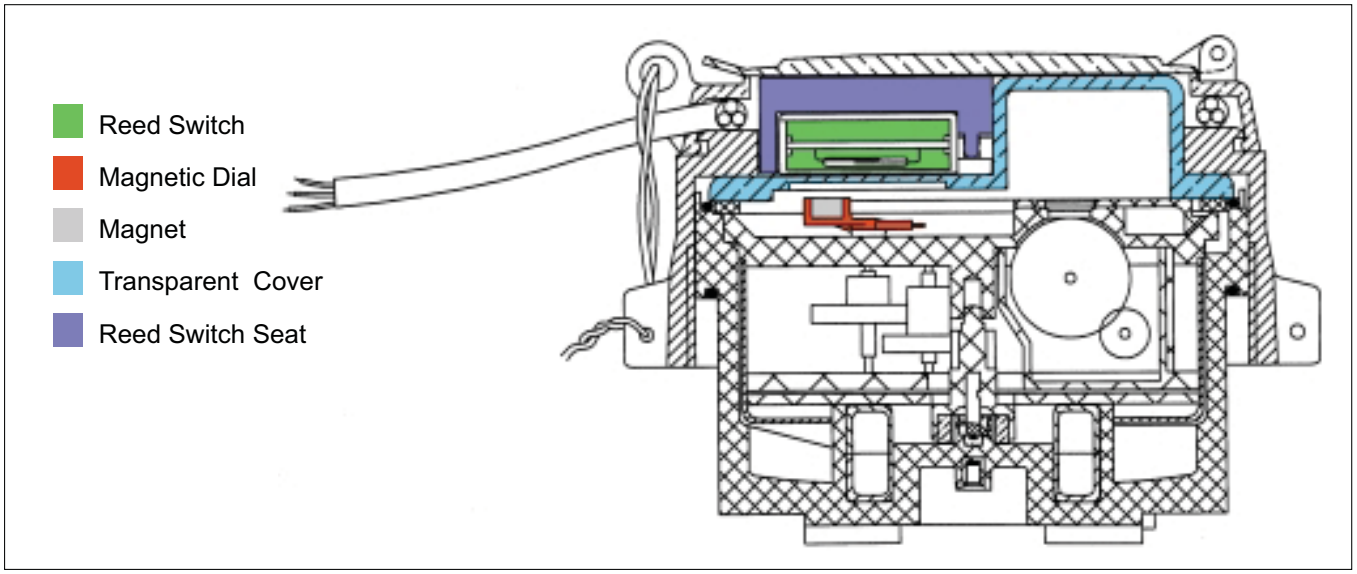
Reed Switch Pulse	1 Pulse for each			
Nominal Size DN	1 Liter	10 Liter	100 Liter	1000 Liter
15 mm – 1/2"	X	X	X	
20 mm – 3/4"	X	X	X	
25 mm – 1"	X	X	X	
32 mm – 1 1/4"	X	X	X	
40 mm – 1 1/2"		X	X	X
50 mm – 2"		X	X	X
Order Codes	S5	S4	S3	S2

For pulse preparation add Y/ to code.
For example, pulse preparation for 10 liters: **Y/S4**

Reed-switch Electric Data

- Switching voltage: 100 VAC/DC
- Switching current: 0.5 A max.

Register for the Out-put Option



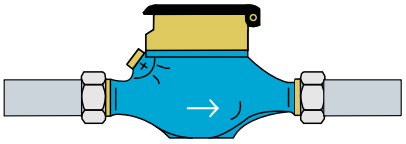
Multi-Jet Water Meter

MT-KD-P

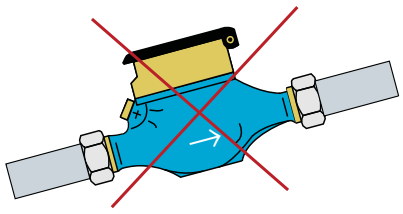
Installation Recommendations

- Follow arrow direction
- Keep MT-KD-P Multi-Jet water meter in a horizontal position
- Install a strainer upstream of the MT-KD-P to eliminate debris that could damage or stop the measuring element.
- Prior to installing a MT-KD-P in a new line, flush the line to remove debris.
- Ensure that the MT-KD-P is full of water during measuring.

Flow direction



Flow direction



Ordering Guide

Example: MT-KD-P – 15-165 – 1 – S4 – (–)

MT-KD-P	15-165	1	S4	(–)

TYPE
MT-KD-P

SIZES	Code
15 mm – 1/2" – 165	15-165
15 mm – 1/2" – 190	15-190
20 mm – 3/4" – 190	20-190
20 mm – 3/4" – 228	20-228
25 mm – 1" – 190	25-190
25 mm – 1" – 260	25-260
25 mm – 1" – 273	25-273
32 mm – 1 1/4"	32
40 mm – 1 1/2"	40
50 mm – 2"	50

CONNECTORS	Code
With connectors	1
Without connectors	2

OUTPUT PULSE OPTIONS	Code
1 Pulse for each – 1 liter	S5
1 Pulse for each – 10 liter	S4
1 Pulse for each – 100 liter	S3
1 Pulse for each – 1000 liter	S2
Output Pulse Preparation	
1 Pulse for each – 1 liter	Y/S5
1 Pulse for each – 10 liter	Y/S4
1 Pulse for each – 100 liter	Y/S3
1 Pulse for each – 1000 liter	Y/S2

CONECTIONS Flanged 50 mm only	Code
ISO-16	16
ANSI-125	A1
BST-D	BD
ASTE	AE
ABNT	B6