

Single-jet vane-type water meter

JS SMART D+

DESCRIPTION

Smart D+ is the next generation of the „Smart“ series of single-jet dry water meters, featuring exceptional measurement accuracy, low water consumption and modern design. These new solutions have been designed to significantly increase the metrological and service life parameters. The water meter is interoperable with clip-on communication modules for automatic wired or wireless meter reading. The water meter design is MID Directive compliant, and is classed as operating in the R200 measurement range.

APPLICATION

Cold, i.e. Up to 50°C, water supply systems in single- and multi-family houses. The rotating counter facilitates water meter readings in the appropriate operating positions. Installation in horizontal pipelines (pipes) with a top (H↑) or side (H→) counter, and vertical pipelines with a side (V) counter.



Counter cover to protect the counter from external impacts in the water meter's working environment.

Hermetically-sealed counter (with increased leakproofness) resistant to fogging, completely separated from the wet part of the water meter.

Counter rotation lock when turned by more than 365°.

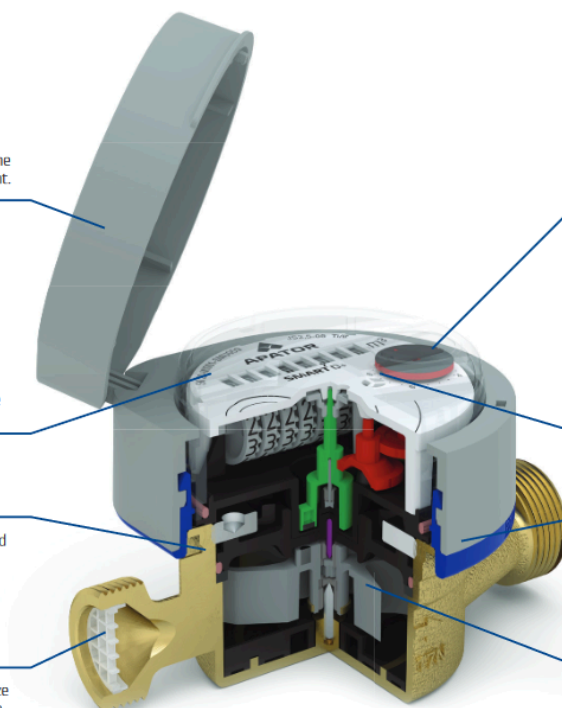
Water meter inlet filter to minimize water flow disturbances and at the same time protect the metering unit from contamination.

Dual counter reading detection system based on the induction and optical technologies used for the single pointer, which allows the choice of module appropriate for the installation environment.

Protection from external interference - a counter disc with an indicator of the force applied to compress the counter glass.

Counter cover with an additional snap ring to protect the meter from unauthorized interference, while acting as a seal.

Stable operation of the metering unit and magnetic coupling system, based on several structural and material improvements.



ADVANTAGES

- Exact measurements in the R range: up to 200-H and up to 80-V
- Low starting flow
- EN14154 compliant resistance to external magnetic fields
- No need for straight sections upstream or downstream of the UODO water meter
- Proprietary water meter counter cover design to increase resistance to adverse external impacts
- No need for copper wire and lead seal (compliant with RoHS Directive recommendations)
- Suitable for remote readings (radio, pulse or M-Bus)
- Hermetically-sealed counter, resistant to fogging, with clear numbers on the barrels in two colours for improved reading accuracy
- Alarm capability - meter with a communication module, capable of signalling removal of or damage to the module, disruption of operation, reverse flows, leakage, etc.
- Convenient reading, with the option of the swivel-set counter rotation of up to 365° relative to its axis
- Modern and ergonomic design
- Proven and durable structure
- Modern and ergonomic design

FEATURES

- MID-compliant EC-type examination certificate
- Pre equipped for AMR (optical and inductive) data communication modules
- Two-point rotor bearings and other solutions and materials used to ensure stable metrology over the service life
- Potable water approved certified materials
- Electronic diagnostics of metrological parameters
- Special magnetic coupling design
- Protection against mechanical interference - with a pin to deform the counter disc as permanent evidence of unauthorized interference

FEATURES

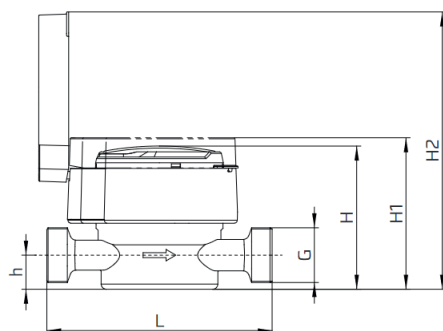
- Directive 2014/32/EC of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of Member States related to the making available on the market of measuring instruments
- The Polish Act of 13/04/2016 on market surveillance and compliance assessment systems
- EN-ISO 4064-1÷5 2014 (E) - Water meter for cold potable water and hot water
- EC type test certificate-cold water
- Classification of mechanical environmental conditions - class M1, as per Directive 2014/32/EC of the European Parliament and of the Council of 26 February 2014
- Classification of electromagnetic environmental conditions - class E1, E2, as per EN-ISO 4064:2014 and Directive 2014/32/EC of the European Parliament and of the Council of 26 February 2014
- PZH National Institute of Hygiene certificate (all materials used in JS water have Hygiene Certificates for use with potable water)

SPECIFICATIONS

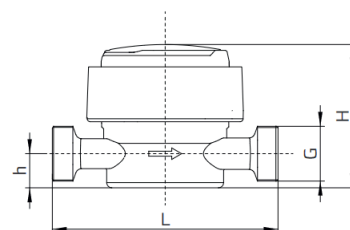
Parametr			SMART D+				
			JS1,6-02	JS2,5-02	JS2,5-G1-02	JS4-02	
Nominal diameter		DN	mm	15		20	
Permanent flow rate		Q ₃	m ³ /h	1,6	2,5		4
Maximum flow rate		Q ₄	m ³ /h	2	3,125		5
Transitional flow rate	H ↑	Q ₂	dm ³ /h	16	20		32
	V, H →			40	50		80
Minimum flow rate	H ↑	Q ₁	dm ³ /h	10	12,5		20
	V, H →			25	31,25		50
Starting flow		-	dm ³ /h	5	5		12
Measurement range R=Q ₃ /Q ₁		H		160	200		200
		V		80	80		80
Q ₂ /Q ₁ ratio		-	-	1,6			
Temperature class (rated operating temperature)		-	-	T50			
Flow profile sensitivity class		-	-	U0, D0			
Indicating range		-	m ³	99999			
Resolution of reading		-	m ³	0,00005			
Maximum pressure		P _{max}	MPa	1,6			
Maximum pressure loss		Δp	kPa	63			
Advisable error in the range: Q ₂ ≤ Q ≤ Q ₄			%	±2			
Advisable error in the range: Q ₁ ≤ Q < Q ₂			%	±5			
Water meter counter leakproofness class		-	-	IP65			
Inlet and outlet pipe threads		G	inch	G¾	G¾; G⅞	G1	G1
Dimensions		H	mm	69,5		70	
		H1	mm	73,5		74	
		H2	mm	134,2			
		h	mm	16,5		17	
Length		El*	mm	110	110	130	130
Diameter		D	mm	77			
		D**	mm	90			
Weight (w/o connection fittings)		-	kg	0,463	0,458	0,589	0,552

Water meter model - 02 (with eight-barrel counter and communication module mount)

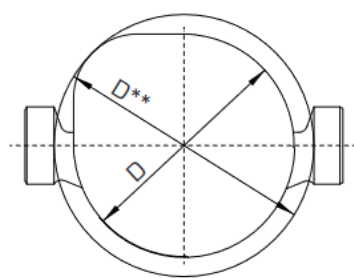
*Custom designs of body length L=105; 115 DN15 and 115 DN20 are available on special request



Water meter with cover

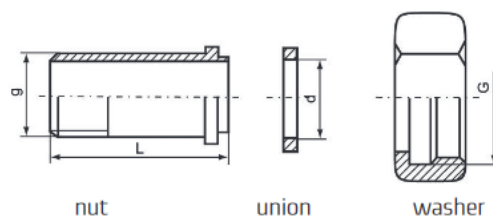


Water meter w/o cover

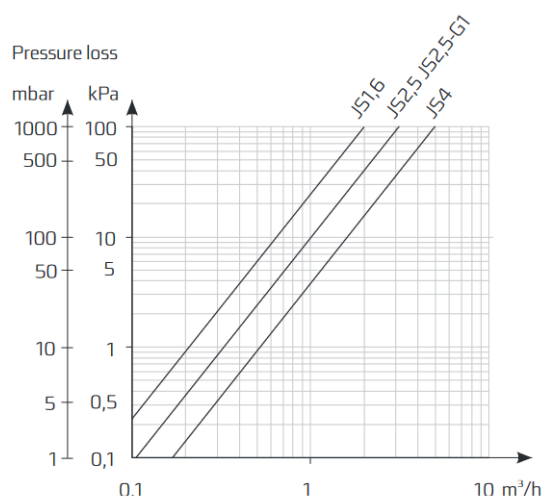


CONNECTION FITTINGS

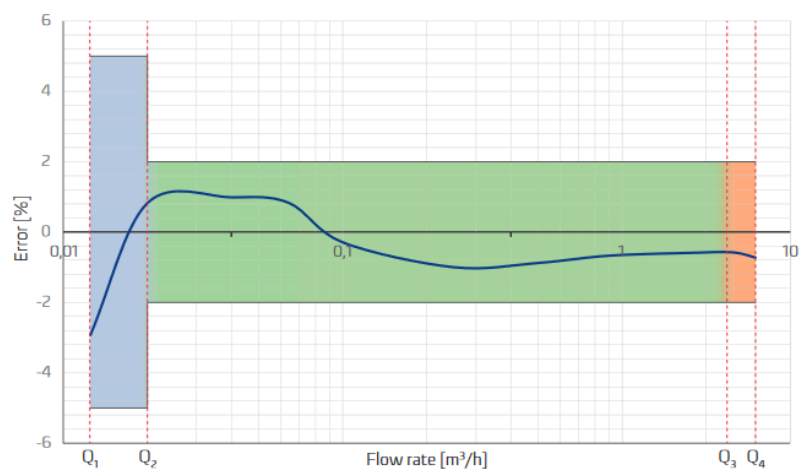
DN	G	g	d	El
	inch	inch	mm	mm
15	3/4	1/2	17	40
20	1	3/4	23	50



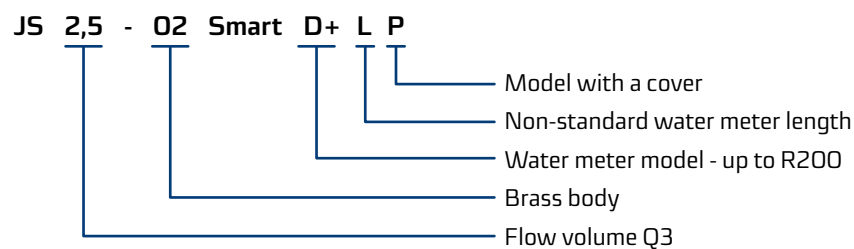
PRESSURE LOSS CHART



PRESSURE LOSS CHART



PŘÍKLAD OBJEDNÁVACÍHO KÓDU



Available options:

- Water meter unions, w/o check valve
- Disposable clamps with snap-on seals made of plastic, with unique numbering (a safeguard against mechanical manipulation of the water meter unions)

CONTACTS

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Your distributor:

The manufacturer reserves the right to change design, technical specifications and accessories without prior notice.

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