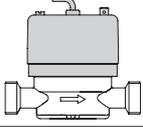
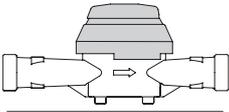
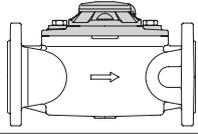
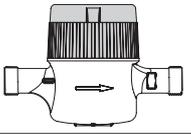
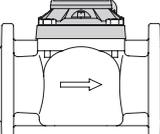
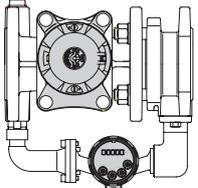
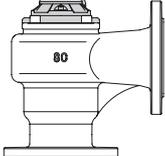
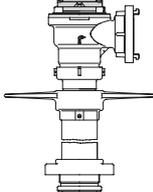
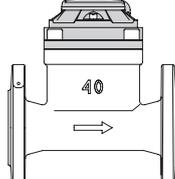




WATERMETER TYPES

<p>Vane-wheel water meters JS Smart+, JS Smart C+, JS Smart D+ DN15-20</p>  <p>CE, MID, HC, IP65, IP68*</p>	<p>Vane-wheel water meters with impulse transmitters JS-NK DN15-20</p>  <p>CE, MID, HC, IP65, IP68*</p>	<p>Vane-wheel water meters JS Master+, JS Master C+ DN25-40</p>  <p>CE, MID, HC, IP65, IP68*</p>	<p>Vane-wheel water meters JS Impero DN50-100</p>  <p>HC, IP65, IP68*</p>	<p>Volumetric water meters SV-RTK DN15-40</p>  <p>CE, MID, HC, IP65</p>
<p>Propeller water meters with horizontal water axes MWN DN40-300</p>  <p>CE, MID, WRAS, HC, IP65, IP68*</p>	<p>Compound water meters with spring valves DN50-150</p>  <p>CE, MID, HC, IP65, IP68*</p>	<p>Well water meters MK-01 DN50-150</p>  <p>CE, MID, HC, IP65, IP68*</p>	<p>Propeller water meters MWN50-GH, JS16-H, MH-01 DN40-65</p>  <p>CE, MID, HC, IP65, IP68*</p>	<p>Meters for irrigation water WI DN40-250</p>  <p>CE, MID, HC, IP65, IP68*</p>

* Special degree of IP rating available on request

TRANSPORTATION AND STOCK CONDITIONS

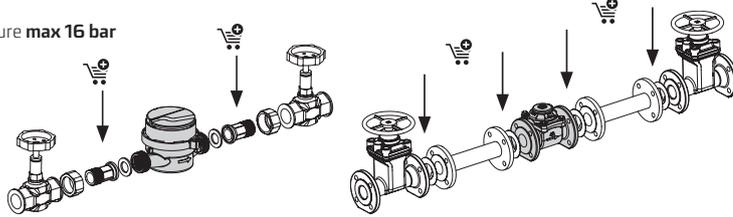
Protect against shock and vibration	Storage at temperatures above 0°C
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ESSENTIAL INFORMATION

H₂O max 30-50°C Types of water meters: JS, SV-RTK, MWN, MK-01, MH-01, MWN50-GH, JS16-H, MWN/JS-S
max 90-130°C Types of water meters: JS90, JS130, MWN130, transmitter: - NK

Ambient temperature range 5-55°C

Operating pressure max 16 bar

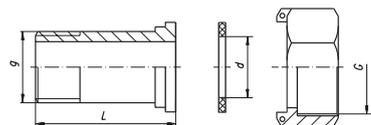


	Wrench**		Screwdriver	
DN15	17	29	25	Nm
DN15***	17	29	15	Nm
DN20	20	36	30	Nm
DN25	36	47	35	Nm
DN32	44	54	40	Nm
DN40	46	67	45	Nm
DN40-125	24	24	** Pipelines may feature other fastener sizes	
DN150-200	30	30		
DN250-300	36	36		

***body - composite construction

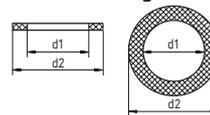
COMPONENTS REQUIRED TO INSTALL WATER METERS

Couplings available from Apator Powogaz



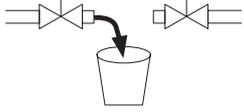
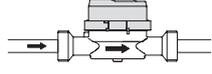
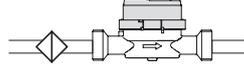
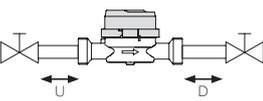
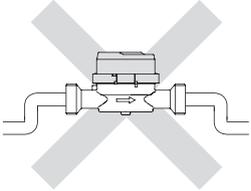
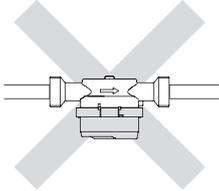
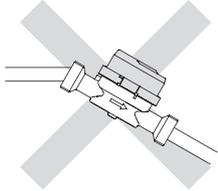
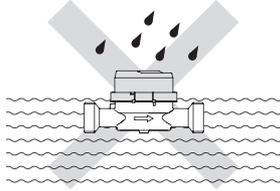
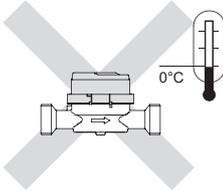
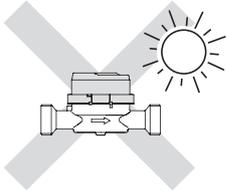
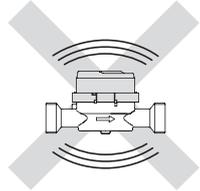
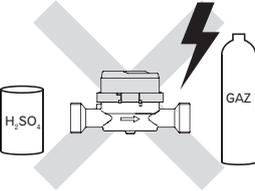
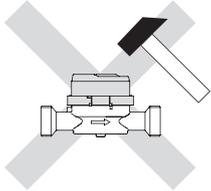
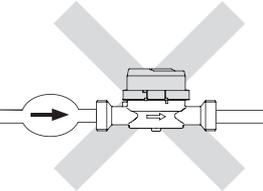
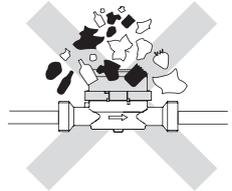
	[G]	[g]	[d]	[L]	Indeks
Set of couplings with gaskets DN 15 mm	3/4"	1/2"	17 mm	37,5	0616-100-018
Set of couplings with gaskets DN 20 mm	1"	3/4"	23 mm	45,5	0616-100-019
Set of couplings with gaskets DN 25 mm	1 1/4"	1"	29 mm	46,5	0616-100-021
Set of couplings with gaskets DN 32 mm	1 1/2"	1 1/4"	36 mm	56,0	0616-100-026
Set of couplings with gaskets DN 40 mm	2"	1 1/2"	43 mm	66,0	0616-100-020
Set of couplings with gaskets DN 50 mm	2 1/2"	2"	54 mm	76,0	0616-100-035

Gaskets for flange connections compliant with PN-EN 1514-1:2001

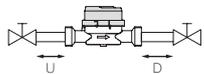
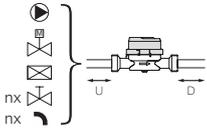


	d1	d2
DN40	49	92
DN50	61	107
DN65	77	127
DN80	89	142
DN100	115	162
DN125	141	192
DN150	169	218
DN200	220	273
DN250	273	329
DN300	324	384

✂ INSTALLATION AND OPERATION GUIDELINES

 <p>Installation shall be performed by persons with authorisations related to the use of water supply and sewage networks</p>	 <p>Close all valves prior to installation/dismantling</p>	 <p>When installing/dismantling the valves, place a vessel underneath the device</p>	 <p>Install the water meter in line with the flow of water</p>	 <p>It is recommended to install a sediment filter before the water meter</p>
 <p>Straight sections before and after the water meter should comply with the specifications listed in the table below </p>	 <p>Protect from air locks, do not install at the highest point of the installation</p>	 <p>Do not install the water meter face down</p>	 <p>Protect from strain resulting from installing the water meter on non-coaxial installations</p>	 <p>Protect from flooding</p>
 <p>Protect from freezing</p>	 <p>Protect from high temperatures and UV radiation</p>	 <p>Do not expose to vibrations</p>	 <p>Do not use near acids, gas and electrical installations</p>	 <p>Protect from impact</p>
 <p>Protect from the hydrodynamic water hammer effect</p>	 <p>Protect from contaminants at the installation site</p>	 <p>SERVIS SERVICE</p> <p>Send damaged water meters to the service centre</p>	 <p>Do not place the used device together with municipal waste. Take it to a waste segregation point – comply with the rules of recycling.</p> <p>IMPORTANT: Detailed information on the operation of the device can be found at www.apator.com</p>	

✂ INSTALLATION POSSIBILITIES AND REQUIREMENTS

						
JS, JS90, JS130	✓	✓	-	 *)	U0 D0	U5 D3
JS (DN50-100)	✓	-	-		U0 D0	U3 D2
SV-RTK	✓	✓	✓		U0 D0	U5 D3
MWN, MWN130, MWN50GH	✓	✓	-	 *)	U0 D0	U3 D2
MWN/JS	✓	-	-		U0 D0	U6 D4
WI	✓	✓	✓		U5 D3	U10 D6
MH-01, JS16-H	✓	-	-		U0 D0	-

*) acceptable deviation from the vertical mounting $\pm 3^\circ$



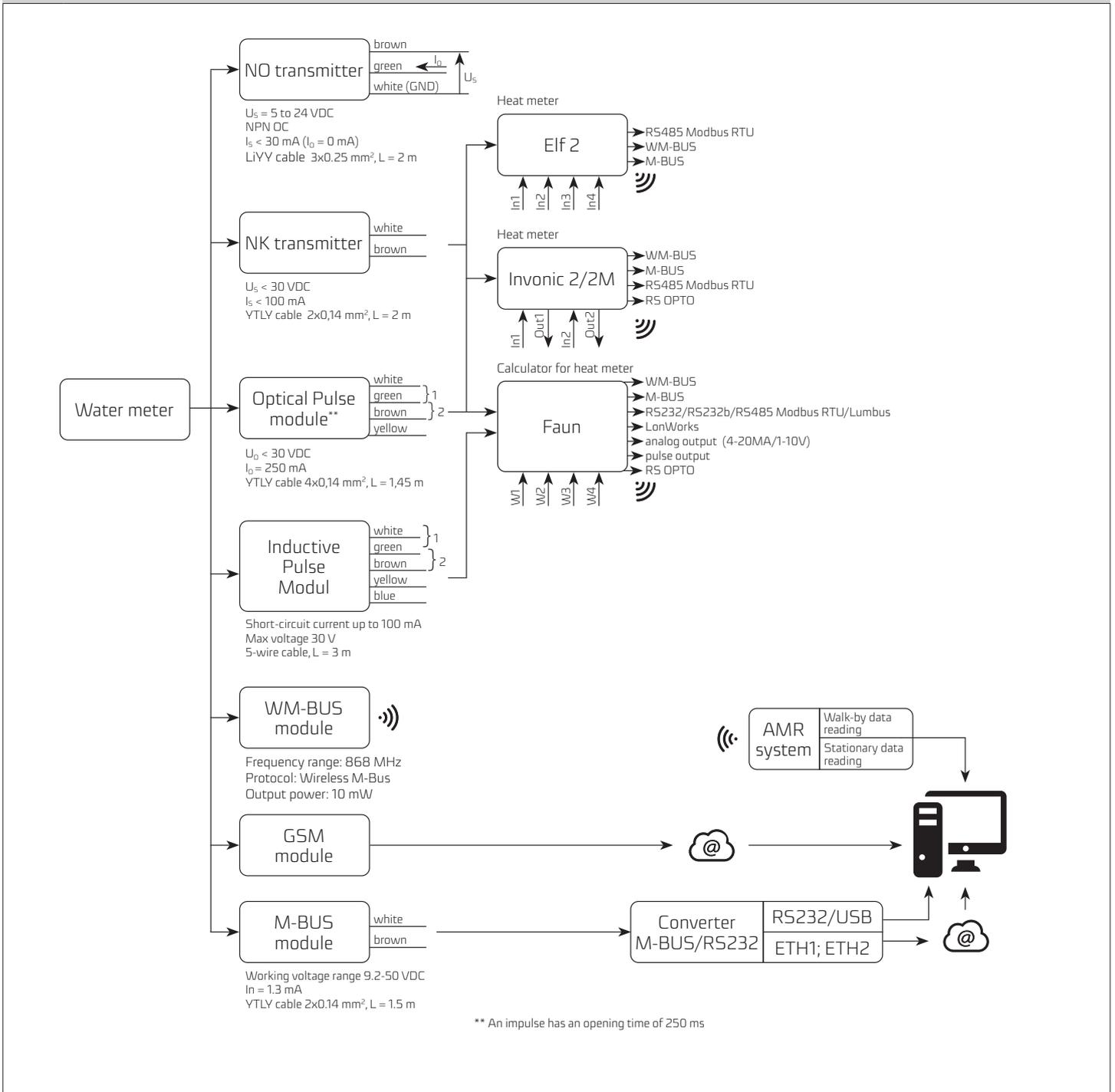
CLASSIFICATION OF ENVIRONMENTAL CONDITIONS

Mechanical class acc. to RMG from 18 December 2006 (MID) - **M1**

Electromagnetic class acc. to RMG from 18 December 2006 (MID) - **E1**

Climatic and mechanical class acc. to PN-EN 14154-3:2005 + A1 - **B**

CONFIGURATION OF A SPECIFIC WATER METER WITH A TRANSMITTER OR A SLEEVE - DETAILS FROM THE MANUFACTURER



Apator Powogaz S.A. reserves the right to modify and improve the manufactured devices without notice.



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