



Ultimate control
ultimate
precision

Water Meters

May 2023 v3.0

/ Product Catalog



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Multi-Jet

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Netafim, Orbia's Precision Agriculture business, is the world's largest irrigation company and the global leader in precision agriculture solutions committed to fight scarcity of food, water and land, for a sustainable future.

Founded in 1965, Netafim pioneered the drip revolution, creating a paradigm shift toward precision irrigation. Today, specializing in end-to-end solutions from the water source to the root zone, Netafim delivers irrigation and greenhouse projects, as well as landscape and mining solutions supported by engineering, project management and financing services. Netafim is also leading the way in digital farming, integrating real-time monitoring, analysis and automated control into one state-of-the-art system.

With 33 subsidiaries, 19 manufacturing plants, 2 recycling plants and 5000 employees worldwide, Netafim delivers innovative, tailor-made irrigation and fertigation solutions to millions of farmers, allowing smallholders to large-scale agricultural producers, in over 110 countries, to grow more with less™.

See how Netafim's solutions are driving sustainable agriculture and a food secure future at www.netafim.com

/ About Orbia

Orbia is a company driven by a shared purpose: to advance life around the world. Orbia operates in the Polymer Solutions (Vestolit and Alphagary), Building and Infrastructure (Wavin), Precision Agriculture (Netafim), Connectivity Solutions (Dura-Line) and Fluorinated Solutions (Koura) sectors.

The five Orbia business groups have a collective focus on expanding access to health and wellness, reinventing the future of cities and homes, ensuring food and water security, connecting communities to information and accelerating a circular economy with basic and advanced materials, specialty products and innovative solutions. Orbia has commercial activities in more than 110 countries and operations in over 50, with global headquarters in Boston, Mexico City, Amsterdam and Tel Aviv.

To learn more, visit: www.orbia.com



/ Multi-Jet

ARAD™ Multi-Jet™

Simple & reliable multi-jet meters, designed for accurate measurement of low flows.



model M 1/2- 1 1/4



model MS 1 1/2- 2



Light



Precision



Reliable

/ Benefits & Features

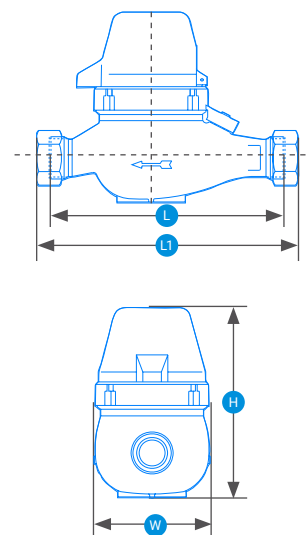
- **Measuring capabilities** Starting to measure in very low flows
- **Several options** Optional hot water and polymer versions
- **Outputs** All volumetric dry contact

/ Specifications & Recommendations

- **Maximum Working Pressure:** 10bar
- **Maximum Working Temperature:** 50°C, 90°C - for hot water
- The meter should be installed in horizontal position dial face up
- Pipeline must be flushed before installation
- The meter should be constantly full of water

→ Technical Dimensions

model		m15 (short)	m20	m25	m32	ms40	ms50
Diameter	mm	15	20	25	30	40	50
	inch	½	¾	1	1¼	1½	2
L - Length without couplings (mm)		165	190	260	260	300	300
L1 - Length with couplings (mm)		260	285	375	375	435	460
W - Width (mm)		95	95	105	105	125	160
H - Height (mm)		102	108	108	108	140	190
Weight (kg)		1.5	2	2.8	2.8	4.1	8
Weight with couplings (kg)		1.7	2.3	3.3	3.45	5.1	9.4
Weight (plastic body) (kg)		0.55	0.6	0.65	0.66	-	-



→ Performance Data

model	Nominal Size (inch)	Q1 Minimum Flowrate (m³/h)	Q2 Transitional Flowrate (m³/h)	Q3 Nominal Flowrate (m³/h)	Q4 Maximum Flowrate (m³/h)	R Q3/ Q1	Indicating Range (m³/h)	Accuracy Between Q4 & Q2	Accuracy Between Q2 & Q1
M15	½	0.032	0.051	1.6	2	50	999.999	±2%	±5%
M20	¾	0.050	0.080	2.5	3.125	50			
M25	1	0.080	0.128	4	5	50			
M32	1¼	0.126	0.202	6.3	7.875	50			
ms40	1½	0.100	0.160	10	12.5	100			
ms50	2	0.320	0.512	16	20	50			

→ Catalog Numbers

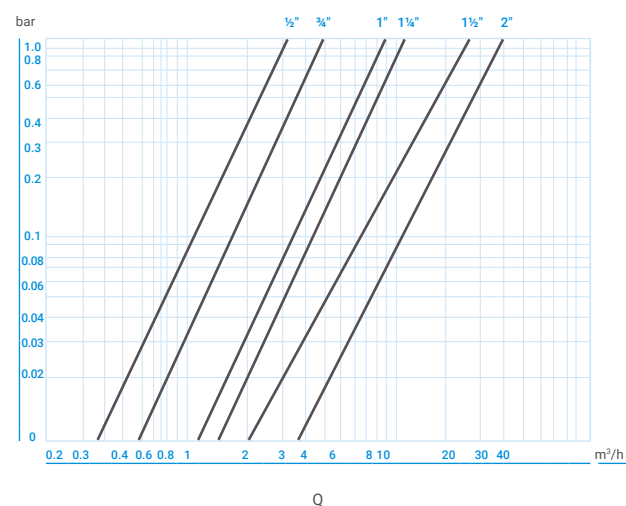
Brass Model

Diameter	Connection Type	Pulse Resolution	Catalog Number
½"	BSP	None	70240-000800
		1L	70240-000900
		10L	70240-001000
¾"		None	70240-001733
		1L	70240-021004
		10L	70240-021005
1"		None	70240-021020
		1L	70240-021021
		10L	70240-021022
1¼"		None	70240-021041
		1L	70240-021042
		10L	70240-021045
1½"		None	70240-021071
		10L	70240-021072
		100L	70240-021073
2"		None	70240-021550
		10L	70240-021551
		100L	70240-021552
		1m³	70240-021553

Plastic Model

Diameter	Connection Type	Pulse Resolution	Catalog Number
½"	BSP	1L	70240-000840
¾"		-	70240-021000
		1L	70240-021001

→ Head Loss



* Additional pulse resolutions available upon request

** Catalog numbers referring to metal Multi-Jets

GAER™ Multi-Jet™

A water meter with magnetic transmission and dry recording head.



Light



Precision



Reliable

/ Benefits & Features

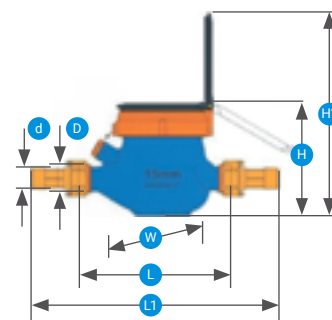
- **Built to last** High quality materials and strength to prevent corrosion problems
- **Recording register** IP68
- **Pressure** Minimum drop
- **Protected** Against magnetic field disturbances
- **Options** Supplied with check valve and pulse emitter
- **Water meter cleaning** Thanks to the inlet filter, can be cleaned without breaking the metrological seal

/ Specifications & Recommendations

- **Available Sizes:** 1/2" to 1 1/2" (DN15 – DN40) for plastic, 1/2" to 2" (DN15 – DN50) for brass
- **Maximum Working Pressure:** PN16 (brass), PN10 (plastic)
- **Maximum Fluid Temperature:** 30°C (plastic), 50°C (brass)
- BSP thread connection, Optional NPT

→ Technical Dimensions

Diameter	mm	15	20	25	32	40	50
	inch	½	¾	1	1¼	1½	2
L (mm)		165	190	260	260	300	300
L1 (mm)		259	294	380	384	431	448
d thread (inches)		¾	1	1¼	1½	2	2½
d thread (inches)		½	¾	1	1¼	1½	2
h (mm)		107.5	107.5	117.5	117.5	141.5	177
h1 (mm)		191	191	206.5	206.5	256.5	292
w (mm)		94	94	98	98	122	145



→ Performance Data

Diameter		Q1 Minimum Flowrate	Q2 Transition Flowrate	Q3 Nominal Flowrate	Q4 Maximum Flowrate	R Q3/ Q1	Maximum Recording Capacity	Minumum Reading
mm	inches	(l/h)	(l/h)	(m³/h)	(m3/h)		(m3)	(l)
15	½	31.25	50	2.5	3.125	80	99999,9999m³	0.05
20	¾	50	80	4	5			
25	1	78.75	126	6.3	7.875			
32	1¼	125	200	10	12.5		999999,9999m³	
40	1½	200	320	16	20			
50	2	312.5	500	25	31.25			

→ Catalog Numbers

Diameter	Connection Type	Pulse Resolution	Catalog Number for Metal Product	Catalog Number for Plastic Product
¾"	BSP	None	71670-000100	71670-000150
		1L	71670-000101	71670-000151
		10L	71670-000102	71670-000152
1"		None	71670-000110	71670-000160
		1L	71670-000111	71670-000161
		10L	71670-000112	71670-000162
1¼"		None	71670-000120	71670-000170
		1L	71670-000121	71670-000171
		10L	71670-000122	71670-000172
1½"		None	71670-000130	71670-000180
		1L	71670-000131	71670-000181
		10L	71670-000132	71670-000182
2"		None	71670-000140	-
		1L	71670-000141	-
		10L	71670-000142	-

/ Irrigation Type

ARAD™

Irrigation Type

Irrigation meters specially designed with free water passage to allow accurate measurement of water with high content of impurities.



Reliable



Durable



Robust

/ Benefits & Features

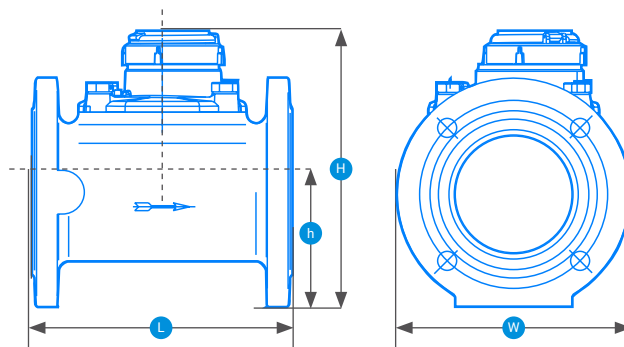
- Negligible head loss
Due to a full passage throughout the meter
- No deposit of solids
Thanks to continued flush of the bearings
- Simple maintenance
Replacement of the measuring unit

/ Specifications & Recommendations

- **Maximum Working Pressure:** 16bar
- **Maximum Working Temperature:** 60°C
- The meter can be installed in any position (horizontal, vertical or inclined)
- The meter must be always full of water while operating
- Prior to the installation of a new meter, the pipeline must be flushed out
- Straight pipe section of the same diameter D as the meter, having length of 10D and 5D shall be installed upstream and downstream of the meter respectively

→ Technical Dimensions

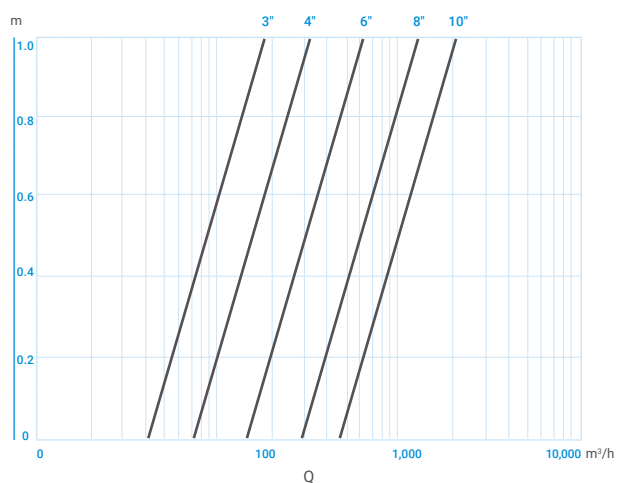
Diameter	mm	80	100	150	200	250
	inch	3	4	6	8	10
I - Length (mm) without couplings		230	250	300	350	400
w - Width (mm)		240	260	310	315	438
h - Height (mm)		90	110	129	160	258
h - Height (mm)		16.5	19	32	45	55.5
Weight (kg)		15.5	19	35	47	75



→ Performance Data

Diameter		Q1 Minimum Flowrate (m³/h)	Q2 Transitional Flowrate (m³/h)	Q3 Nominal Flowrate (m³/h)	Q4 Maximum Flowrate (m³/h)	Smallest Readable Unit (liter)	Maximum Register Capacity (m³/h)	Accuracy Between Q4 & Q2	Accuracy Between Q2 & Q1
mm	inch								
80	3	5	10	90	150	10	10 ⁷	±2%	±5%
100	4	7	11	125	250				
150	6	10	15	250	500				
200	8	18	30	450	900	100	10 ⁸		
250	10	20	70	750	1400				

→ Head Loss



→ Catalog Numbers

Diameter	Flange Type	Pulse Resolution	Catalog Number
3"	ISO	None	70240-005950
		100L	70240-006010
	BSTD	None	70240-005980
		100L	70240-006000
	ANSI	None	70261-007500
		100L	70261-007550
4"	ISO	None	70240-006060
		100L	70240-006090
	BSTD	None	70240-006070
		100L	70240-006080
	ANSI	None	70261-007800
		100L	70261-007850

Diameter	Flange Type	Pulse Resolution	Catalog Number
6"	ISO	None	70240-006150
		100L	70240-006159
	BSTD	None	70240-006160
		100L	70240-006180
	ANSI	None	70240-006250
		1m³	70240-006277
8"	ISO	None	70240-006250
		1m³	70240-006277
	BSTD	None	70240-006260
		1m³	70240-006300
	ANSI	None	70261-008200
		1m³	70261-008300
10"	ISO	None	70240-006358
		1m³	70240-006390
	BSTD	None	70240-006360
		1m³	70240-006380
	ANSI	None	70261-008500
		1m³	70261-008550

→ **Catalog Numbers**

for irrigation type water meter with electronic register

Diameter	Flange Type	Pulse Resolution	Catalog Number
3"	ISO	100L x 1m³	70240-006051
	BSTD	100L x 1m³	70240-005935
4"	ISO	100L x 1m³	70240-006055
	BSTD	100L x 1m³	70240-005936
6"	ISO	100L x 1m³	70240-006235
	BSTD	100L x 1m³	70240-005937
8"	ISO	100L x 1m³	70240-008613
		1m³ x 10m³	70240-008614
	BSTD	100L x 1m³	70261-009849
		1m³ x 10m³	70240-008615
10"	ISO	1m³ x 10m³	70240-006420
	BSTD	1m³ x 10m³	70240-006421

* Additional diameters, flange types and pulse resolutions are available upon request

Note: must order

Description	Catalog Number
Pulse cable for digital register	70220-030000



GAER™

Irrigation Type

MAGNETIC REGISTER

A tangential turbine meter with magnetic transmission and super dry recording.



Reliable



Durable



Robust

/ Benefits & Features

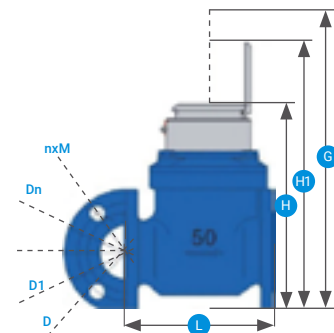
- **Corrosion prevention** Components made of high strength, quality materials, technical plastics and epoxy coated steel body
- **Comfortable reading** IP68 rotary recording for more comfortable reading
- **Resistance to blockage** Thanks to special design of the blade wheels, placed on the upper part of the body
- **inter-changeable measuring mechanism** Can be removed without disassembling the body

/ Specifications & Recommendations

- **Diameters:** 2"-12" (50mm-300mm)
- **Maximum working pressure:** standard 16 bar
- **Maximum fluid temperature:** 30°C
- **Body:** cast iron
- Connection by ISO PN16 flanges. Upon request, ISO PN10, ASME 125 and others

→ Technical Dimensions

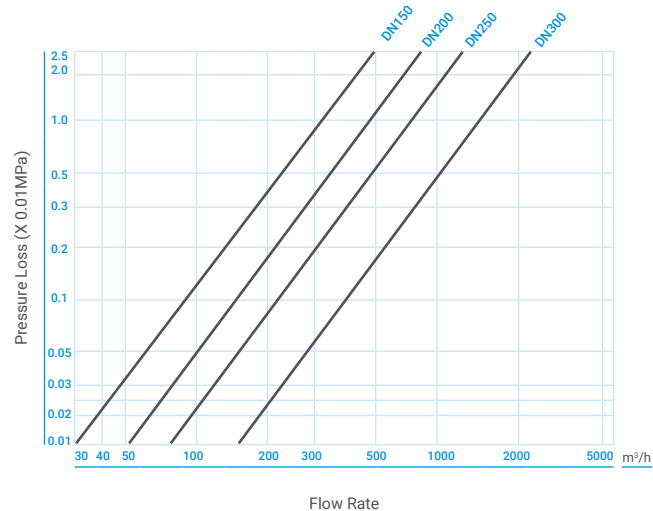
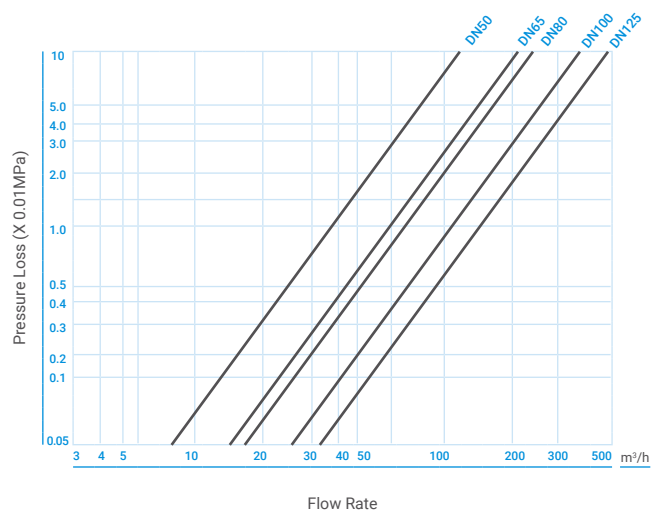
dn	50	65	80	100	125	150	200	250	300
l	200	200	225	250	250	300	350	450	500
h	252	262	279.5	289.5	303	332.5	389	442.5	498.5
h1	338	348	365.5	375.5	389	418.5	475	528.5	584.5
d	165	185	200	220	250	285	340	405	460
d1	125	145	160	180	210	240	295	355	410
n x M	4xM16		8xM16			8xM20	12xM20	12xM24	



→ Performance Data

dn (mm)	Q1 Minimum flowrate (m³/h)	Q2 Transitional flowrate (m³/h)	Q3 Nominal flowrate (m³/h)	Q4 Maximum flowrate (m³/h)	R Q3/ Q1	maximum reading capacity (m³)	minimum reading capacity (m³)	pressure loss (Δp)
50	3.15	5.04	63	78.75		999999,9999m³	0.001	25
65	3.15	5.04	63	78.75				10
80	5	8	100	125				
100	8	12.8	160	200				
125	12.5	20	250	312.5	20			
150	20	32	400	500				
200	31.5	50.4	630	787.5		9999999,9m³	0.01	
250	50	80	1000	1250				
300	80	128	1600	2000				

→ Head Loss



→ Catalog Numbers

Diameter	Connection Type	Pulse Resolution	Catalog Number
2"	ISO	None	71670-000190
		100L	71670-000193
	BSTD	None	71670-000191
		100L	71670-000194
	ANSI	None	71670-000192
		100L	71670-000195
3"	ISO	None	71670-000200
		100L	71670-000300
	BSTD	None	71670-000201
		100L	71670-000301
	ANSI	None	71670-000202
		100L	71670-000302
4"	ISO	None	71670-000210
		100L	71670-000310
	BSTD	None	71670-000211
		100L	71670-000311
	ANSI	None	71670-000212
		100L	71670-000312

Diameter	Connection Type	Pulse Resolution	Catalog Number
6"	ISO	None	71670-000220
		1m³	71670-000223
	BSTD	None	71670-000221
		1m³	71670-000224
	ANSI	None	71670-000222
		1m³	71670-000225
8"	ISO	None	71670-000230
		1m³	71670-000320
	BSTD	None	71670-000231
		1m³	71670-000321
	ANSI	None	71670-000232
		1m³	71670-000322
10"	ISO	None	71670-000229
		1m³	71670-000319
	BSTD	None	71670-000236
		1m³	71670-000318
	ANSI	None	71670-000325
		1m³	71670-000323

* Additional diameters, flange types and pulse resolutions available upon request

/ Woltman Type

ARAD™

Woltman Type

MECHANICAL REGISTER

Exceptionally accurate Woltman meters with top of the line performances. Suitable for a wide range of applications and flow measurements.



Standard model

WMR model



Accurate



Durable



Remarkable

/ Benefits & Features

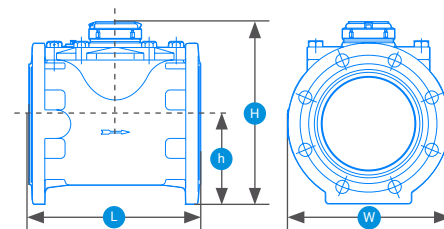
- **Corrosion prevention** Components made of high strength, quality materials, technical plastics and epoxy coated steel body
- **Comfortable reading** IP68 rotary recording for more comfortable reading
- **Resistance to blockage** Thanks to special design of the blade wheels, placed on the upper part of the body
- **inter-changeable measuring mechanism** Can be removed without disassembling the body

/ Specifications & Recommendations

- **Maximum Working Pressure:** 16bar
- **Maximum Working Temperature:** 60°C
- The meter shall be full of water while operating
- Prior to installation of a meter, the pipeline shall be thoroughly flushed
- **Requirements for Straight Pipe Section:** D5 / D3

→ Technical Dimensions

Diameter	mm	50*	50	65	80	100	150	200	250	300
	inch	2	2	2½	3	4	6	8	10	12
I - Length (mm)		200	200	200	230	250	300	350	450	500
w - Width (mm)		98	165	185	200	220	283	340	406	489
h - Height (mm)		40	239	254	259	275	344	377	463	505
h - Height (mm)		2.3	70	84	90	106	130	158	258	330
Weight (kg)		3.7	125	15	15.5	19	35.5	41	80	95



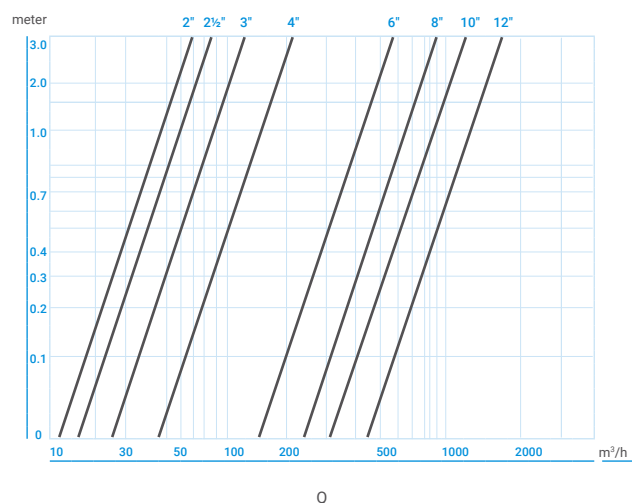
* Referring to WMR model. Length not including records, records add 75mm for each side.

→ Performance Data

Diameter		Q1 Minimum Flowrate	Q2 Transitional Flowrate	Q3 Nominal Flowrate	Q4 Maximum Flowrate	Starting Flow	Maximum Register Capacity	R Q3/ Q1	Accuracy Between Q4 & Q2	Accuracy Between Q2 & Q1
mm	inch	(m³/h)	(m³/h)	(m³/h)	(m³/h)	(m³/h)	(m³/h)			
50*	2	0.45	2	20	40	0.15	10 ⁶	44.4		
50	2	0.63	1.01	63	78.75	0.15	10 ⁶			
65	2½	0.63	1.01	63	78.75	0.15	10 ⁶			
80	3	1	1.6	100	125	0.25	10 ⁶	100		
100	4	1.6	2.56	160	200	0.3	10 ⁷ /10 ⁶			
150	6	2.5	4	250	312.5	0.8	10 ⁷ /10 ⁶			
200	8	12.6	20.16	630	787.5	2	10 ⁸			
250	10	20	32	1000	1250	3	10 ⁸	50		
300	12	20	32	1000	1250	4	10 ⁸			

* Referring to WMR model

→ Head Loss



→ Catalog Numbers

for woltman type water meter with mechanical register

Diameter	Connection Type	Pulse Resolution	Catalog Number
2"	BSP (WMR*)	None	70240-002400
		10L	70240-002500
		100L	70240-002550
	ISO	None	70240-021200
		10L	70240-021202
		100L	70240-021203
	BSTD	None	70240-021350
		10L	70240-021351
		100L	70240-021352
	ANSI	None	70240-021300
		10L	70240-021302
		100L	70240-021324
3"	ISO	None	70240-021208
		10L	70240-021210
		100L	70240-021211
	BSTD	None	70240-021358
		10L	70240-021360
		100L	70240-021361
	ANSI	None	70240-021304
		10L	70240-021305
		100L	70240-021306
4"	ISO	None	70240-021213
		10L	70240-021215
		100L	70240-021216
	BSTD	None	70240-021363
		10L	70240-021406
		100L	70240-021365
	ANSI	None	70240-021308
		10L	70240-021310
		100L	70240-021311

Additional diameters, flange types and pulse resolutions available upon request

* WMR models include records

Diameter	Connection Type	Pulse Resolution	Catalog Number
6"	ISO	None	70240-021219
		100L	70240-021221
		1m³	70240-021222
	BSTD	None	70240-021368
		100L	70240-021369
		1m³	70240-021370
	ANSI	None	70240-021312
		100L	70240-021314
		1m³	70240-021315
8"	ISO	None	70240-021223
		1m³	70240-021225
	BSTD	None	70240-021372
		1m³	70240-021373
	ANSI	None	70240-021317
		1m³	70240-021318
10"	ISO	None	70240-021226
		1m³	70240-021228
	BSTD	None	70240-021375
		1m³	70240-021376
	ANSI	None	70240-021320
		1m³	70240-021321

for woltman type water meter with electronic register

Diameter	Flange Type	Pulse Resolution	Catalog Number
2"	ISO	10L x 100L	70240-021199
	BSTD	10L x 100L	70240-021198
3"	ISO	10L x 100L	70240-007509
	BSTD	10L x 100L	70240-007508
	ANSI	10L x 100L	70240-021400
4"	ISO	10L x 100L	70240-003862
	BSTD	10L x 100L	70240-003861
	ANSI	10L x 100L	70240-021405
6"	ISO	100L x 1m³	70240-004665
	BSTD	100L x 1m³	70240-021390
	ANSI	100L x 1m³	70240-004130
8"	ISO	100L x 1m³	70240-008612
	BSTD	100L x 1m³	70240-008710
	ANSI	100L x 1m³	70240-004660

* Additional diameters, flange types and pulse resolutions are available upon request



Note: must order

Description	Catalog Number
pulse cable for digital register	70220-030000

GAER™

Woltman Type

MAGNETIC REGISTER

The Woltman water meter has a magnetic transmission and a dry recording head for measuring drinking water, irrigation channels and industry networks.



Accurate



Durable



Remarkable

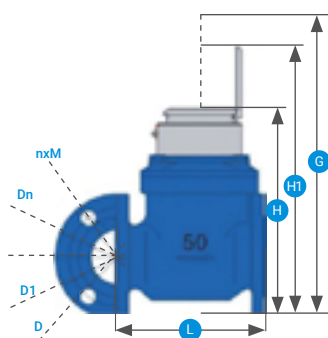
/ Benefits & Features

- **Non corrosive** Built with resistant materials
- **Recording register** IP68 for the head
- **360° head rotation** Ensures easy reading
- **Measuring units** Interchangeable
- **Pressure loss** Low
- **Protection** Against magnetic field disturbances
- **Optional** Dry contact pulse emitter
- **Body** Ductile iron with epoxy coating**

**Other materials (brass) on request

→ Technical Dimensions

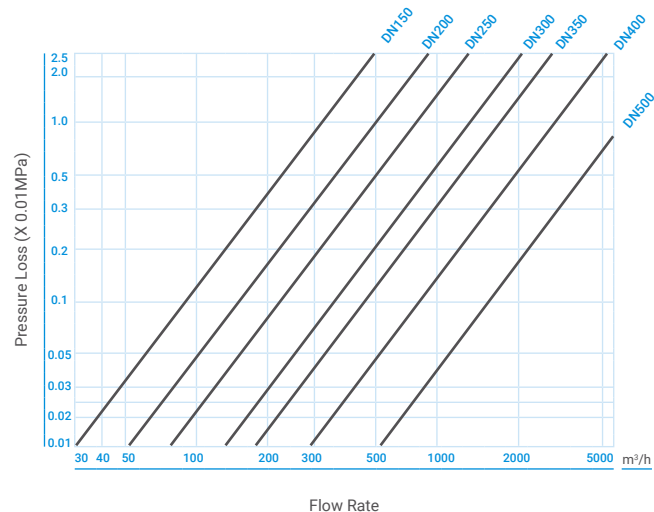
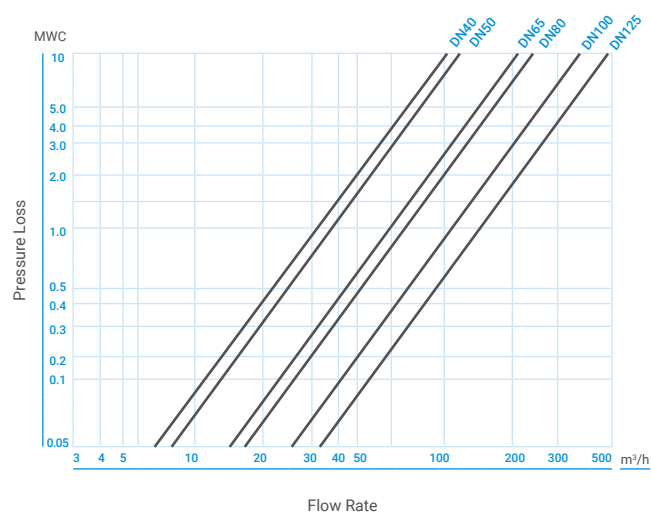
dn (mm)	40	50	65	80	100	125	150	200	250	300	350	400	500
dn (inches)	1½	2	2½	3	4	5	6	8	10	12	14	16	20
l	260	200	200	225	250	250	300	350	450	500	500	600	800
h	225	252	262	272	282	297	341	371	480	516	560	647	785
h1	303	339	349	359	369	384	428	458	578	603	603	723	838
G	360	400	400	400	400	400	500	500	710	730	730	830	930
d	150	165	185	200	220	250	285	340	405	460	520	580	715
d1	110	125	145	160	180	210	240	295	355	410	470	525	650
n x M	4 x M16			8 x M16			8 x M20	12 x M20	12 x M24		16 x M24	16 x M27	20 x M30
Weight (kg)	11.55	11.20	12.60	14.70	15.70	20.00	31.20	40.50	83.36	105.20	130.92	158.00	340.00



→ Performance Data

Diameter		Q1 Minimum Flowrate (m³/h)	Q2 Transitional Flowrate (m³/h)	Q3 Nominal Flowrate (m³/h)	Q4 Maximum Flowrate (m³/h)	R Q3/ Q1	Maximum Reading Capacity (m³)	Minimum Reading Capacity (L)	Accuracy Between Q4 And Q2	Accuracy Between Q2 And Q1
mm	inches									
40	1½	0.5	0.8	25	31.325	50	999,999.999	0.0005	±2%	±5%
50	2	0.5	0.8	40	50	80				
65	2½	0.7875	1.26	63	78.75					
80	3	0.7875	1.26	63	78.75					
100	4	1.25	2	100	125					
125	5	2.0	3.2	160	200					
150	6	3.125	5	250	312.5					
200	8	5	8	400	500					
250	10	7.875	12.6	630	787.5					
300	12	12.5	20	1000	1250					
350	14	12.5	20	1000	1250					
400	16	20	32	1600	2000					
500	20	31.25	50	2500	3125		99,999,999.9	0.05		

→ Head Loss



→ Catalog Numbers

Diameter	Connection Type	Pulse Resolution	Catalog Number
2"	ISO	None	71670-000240
		10L	71670-000243
		100L	71670-000330
	BSTD	None	71670-000241
		10L	71670-000244
		100L	71670-000331
	ANSI	None	71670-000242
		10L	71670-000245
		100L	71670-000332
3"	ISO	None	71670-000250
		10L	71670-000253
		100L	71670-000340
	BSTD	None	71670-000251
		10L	71670-000254
		100L	71670-000341
	ANSI	None	71670-000252
		10L	71670-000255
		100L	71670-000342
4"	ISO	None	71670-000260
		10L	71670-000263
		100L	71670-000350
	BSTD	None	71670-000261
		10L	71670-000264
		100L	71670-000351
	ANSI	None	71670-000262
		10L	71670-000265
		100L	71670-000352

Diameter	Connection Type	Pulse Resolution	Catalog Number
6"	ISO	None	71670-000270
		100L	71670-000273
		1m³	71670-000360
	BSTD	None	71670-000271
		100L	71670-000274
		1m³	71670-000361
	ANSI	None	71670-000272
		100L	71670-000275
		1m³	71670-000362
8"	ISO	None	71670-000280
		1m³	71670-000370
	BSTD	None	71670-000281
		1m³	71670-000371
	ANSI	None	71670-000282
		1m³	71670-000372
10"	ISO	None	71670-000279
		1m³	71670-000359
	BSTD	None	71670-000376
		1m³	71670-000373
	ANSI	None	71670-000269
		1m³	71670-000374

/ Ultrasonic Type

Sonata™

DUAL PULSE OUTPUT

Advanced and highly accurate ultrasonic water meter for irrigation applications.



Simple



Accurate



Reliable

/ Benefits & Features

- **Measuring start** From extremely low flow rates
- **Digital output channels** Two Independent

/ Specifications & Recommendations

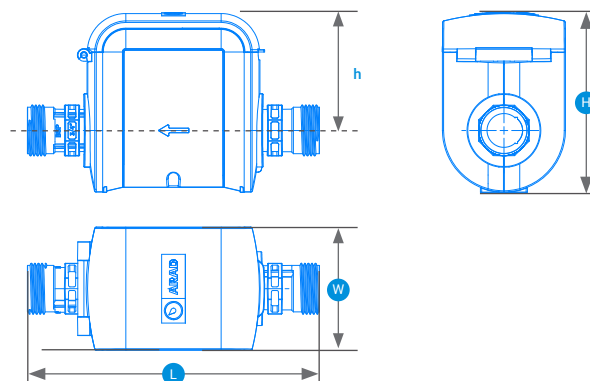
- **Maximum Working Pressure:** 16bar
- **Maximum Water Temperature:** 50°C
- The meter can be installed in any position (horizontal, vertical or inclined)
- Prior to the installation of a new meter, the pipeline must be flushed

→ Performance Data

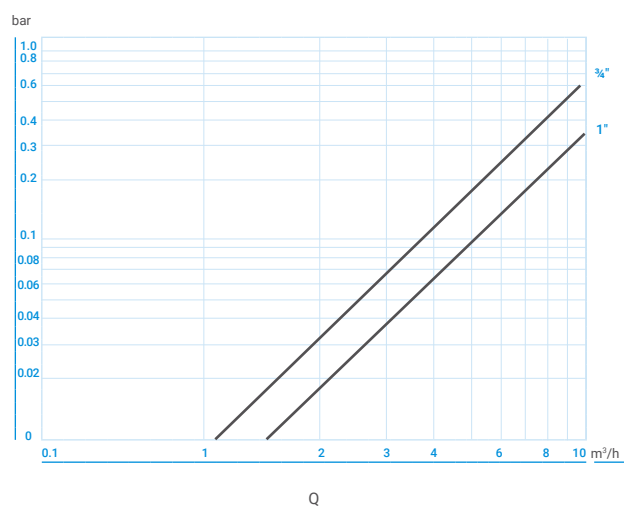
Model	Q1 Minimum Flowrate (l/h)	Q2 Transitional Flowrate (l/h)	Q3 Nominal Flowrate (m³/h)	Q4 Maximum Flowrate (m³/h)	Starting Flow (l/h)	Q3/Q1 (R Value)
Sonata 20	5	8.0	2.5	3.1	2	500
	8	12.8	4.0	5.0	2	
Sonata 25	12.6	20.2	6.3	7.9	3	

→ Technical Dimensions

model	¾"	1"
Size	DN20	DN25
L - Length (mm)	190	260
H - Overall height (mm)	117	121
h - Height above axis (mm)	80	82
W - Width (mm)	80	80
Threads	BSP	
Weight (kg)	0.900	



→ Head Loss



→ Catalog Numbers

Material	Size	End Connection	Catalog Number
Plastic	¾"	NPT	70240-001621
		BSP	70240-001622
	1"	NPT	70240-001623
		BSP	70240-001624

* All Sonata water meters come with couplings set

Octave™

ULTRASONIC TYPE

A high-end ultrasonic meter, with a revolutionary technology and no moving parts, designed for maximum accuracy and minimal maintenance.



Accurate



Durable



Remarkable

/ Benefits & Features

- High & low flows Suitable to changing conditions
- Precise Extremely high accuracy & negligible head loss
- Feature Programmable on clear display

/ Specifications & Recommendations

- **Maximum Working Pressure:** 16bar
- **Liquid Temperature:** 0.1 up to 50°C
- **Power Source:** 2 D size Li-battery: up to 15 years life time
- **Volume Display Options:** 1. Net (Forward less reverse) 2. Forward only 3. Reverse only 4. Forward & reverse alternating
- The meter must be full with water all the time
- For details view the installation manual

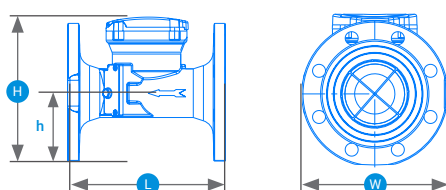
→ Performance Data

Meter Size	Q1 Minimal Flowrate (m³/h)	Q2 Transitional Flowrate (m³/h)	Q3 Permanent Flow Rate (m³/h)	Q4 Overload Flow Rate (m³/h)	Q3/Q1 (R Value)	Starting Flow (m³/h)
DN 40-1½"	0.160	0.256	40	50	250	0.025
DN 50-2"	0.080	0.125	40	50	500	0.025
DN 65-2½"	0.080	0.125	40	50	500	0.025
DN 80-3"	0.125	0.200	63	80	500	0.025
DN 100-4"	0.200	0.320	100	125	500	0.025
DN 150-6"	0.500	0.800	250	313	500	0.2
DN 200-8"	0.800	1.280	400	500	500	0.2
DN 250-10"	2	3.2	1000	1250	500	0.5
DN 300-12"	2	3.2	1000	1250	500	0.5

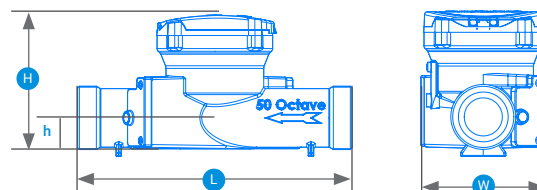
→ Technical Dimensions

Diameter	mm	40 Thrd.	50 Thrd.	50	65	80	100	150	200	250	300
	inch	1½ Thrd.	2 Thrd.	2	2½	3	4	6	8	10	12
L - Length without couplings (mm)		300	300	200	200	225	250	300	350	449	499
w- width (mm)		113	113	165	185	200	220	285	340	406	489
H - height (mm)		155	155	194	210	210	223	282	332	383	456
h - Height (mm)		35	35	40	90	90	103	140	165	203	245
Weight (kg) - Cast iron body			8	9	11.5	13	15	32	45	68	96
Weight (kg) - Polymer body		1.4	1.45								
Weight (kg) - Stainless steel body		4	4	6		7	9.5	16			

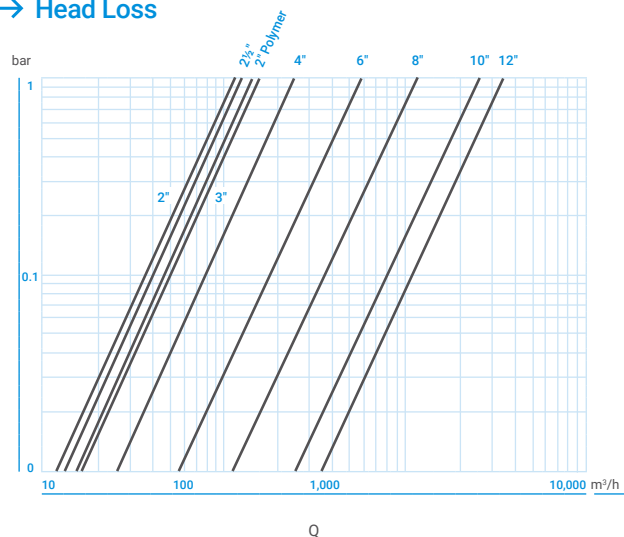
Flanged



Threaded



→ Head Loss



→ Catalog Numbers

Material	Diameter	Connection Type	Catalog Number
Cast iron	2"	ISO	70240-014020
		BSTD	70240-014000
		ANSI	70240-013975
	3"	ISO	70240-014120
		BSTD	70240-014100
		ANSI	70240-014155
	4"	ISO	70240-014250
		BSTD	70240-014200
		ANSI	70240-021452
	6"	ISO	70240-014300
		BSTD	70240-014350
		ANSI	70240-021453
	8"	ISO	70240-014400
		BSTD	70240-014450
		ANSI	70240-021454
	10"	ISO	70240-014490
		BSTD	70240-014500
		ANSI	70240-021455
	12"	ISO	70240-014550
		BSTD	70240-014560
		ANSI	70261-000485

Material	Diameter	Connection Type	Catalog Number
Plastic	1½"	BSP	70240-013910
	2"		70240-013986
Stainless steel	2"	BSP	70240-000205
		ISO	70240-000206
		BSTD	70240-000200
		ANSI	70240-021490
	3"	ISO	70240-000207
		BSTD	70240-000201
		ANSI	70240-021491
	4"	ISO	70240-000208
		BSTD	70240-000202
		ANSI	70240-021492
	6"	ISO	70240-000209
		BSTD	70240-000203
		ANSI	70240-021493

for Octave™ GIP

Description	Catalog Number
OCTAVE AG 2" DN16 + Transistor Module (10L x 100L)	70240-000120
OCTAVE AG 3" DN16 + Transistor Module (10L x 100L)	70240-000121
OCTAVE AG 4" DN16 + Transistor Module (10L x 100L)	70240-000122
OCTAVE AG 6" DN16 + Transistor Module (100L x 1m³)	70240-000123
OCTAVE AG 8" DN16 + Transistor Module (100L x 1m³)	70240-000124
OCTAVE AG 10" DN16 + Transistor Module (100L x 1m³)	70240-000125
OCTAVE AG 12" DN16 + Transistor. Module (100L x 1m³)	70240-000126

→ Module Type

Module Type	Catalog Number
Solid State Relay	70220-060410
Open Drain	70220-060400
4-20mA	70220-011565

Octave™ High Flow

ULTRASONIC TYPE

Designed for applications where significant volumes of water are transferred. The Octave™ high flow line is characterized by 2.5 time higher Q3 than Octave line.



Accurate



Durable



Remarkable

/ Benefits & Features

- Stainless steel body AISI 316 SS
- Flow High working
- Mechanical environment M1
- Floating Flanges ISO / ANSI / BS
- Low pressure loss $\Delta 0.1$ bar at Q3
- Electro - magnetic environment E1

/ Specifications & Recommendations

- **Temperature Class:** T50 (0.1°C – 50°C)
- **Maximum Admissible Pressure:** 16bar

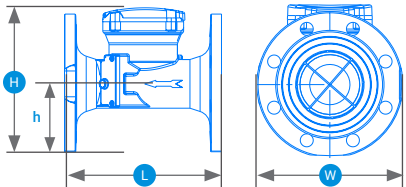
→ Performance Data

Meter Size	Q1 Minimal Flow Rate (m³/h)	Q2 Transitional Flow Rate (m³/h)	Q3 Permanent Flow Rate (m³/h)	Q4 Overload Flow Rate (m³/h)	Q3/Q1 (R Value)
DN 80-3"	0.64	1.024	160	200	250
DN 100-4"	1	1.6	250	312.5	250
DN 150-6"	2.52	4.032	630	787.5	250
DN 200-8"	4	6.4	1000	1250	250

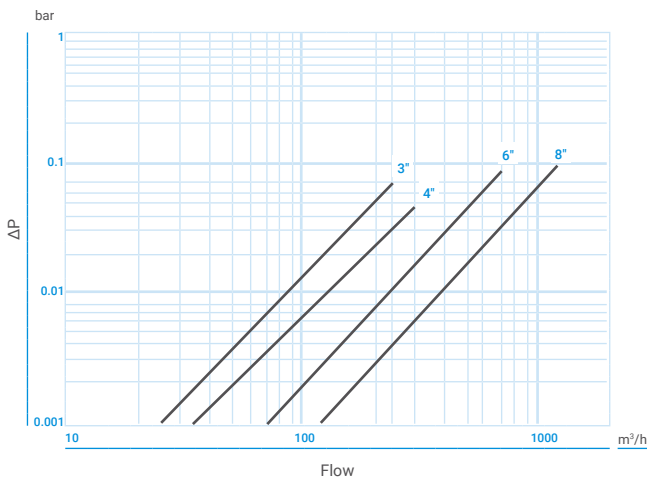
→ Technical Dimensions

Diameter	mm	80	100	150	200
	inch	3	4	6	8
L - Length (mm)		225	250	300	350
w- Width (mm)		200	220	285	340
H - Height (mm)		230	255	304	345.5
h - Height (mm)		110	115	143	172.5
Weight (kg)		11	14.3	22	32

Flanged



→ Head Loss



→ Catalog Numbers

Material	Diameter	Connection Type	Catalog Number
Stainless steel	3"	ISO	70240-000003
		BSTD	70240-000002
		ANSI	70240-000001
	4"	ISO	70240-000006
		BSTD	70240-000005
		ANSI	70240-000004
	6"	ISO	70240-000007
		BSTD	70240-000009
		ANSI	70240-000008
	8"	ISO	70240-000011
		BSTD	70240-000012
		ANSI	70240-000010

GMU 250

ULTRASONIC METERS

A robustly designed meter, with ultrasonic beam technology resulting in high accuracy measurement. Without moving elements in contact with the running water, the meters are very reliable, with no maintenance requirements and keep their accuracy during all their lifespan.



No moving
parts



Bidirectional
measurement



Robust

/ Benefits & Features

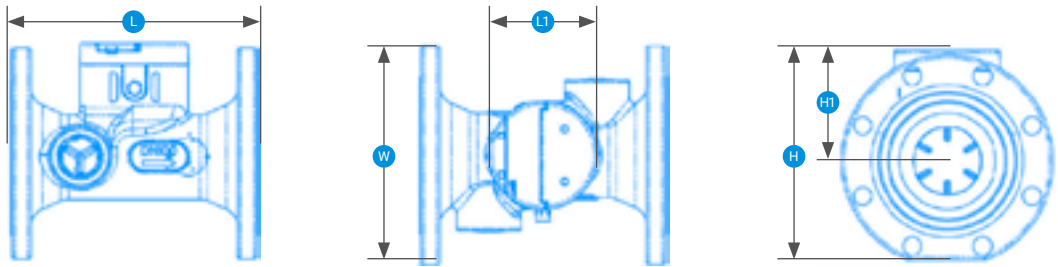
- High & low flows Suitable to changing conditions
- Precise Extremely high accuracy & negligible head loss
- Features Programmable on clear display

/ Specifications & Recommendations

- **Diameters (mm):** 40, 50, 65, 80, 100, 125, 150, 200
- **Available Connections:** ISO PN 16 Flanges
- **Maximum Pressure:** 16bar
- **Temperture Class:** T50
- **Flow Profile Sensitive Classes:** U5D0
- **Precision Class:** 2
- **Installation Position:** Horizontal & Vertical
- **Battery Power Source:** 10 years of useful life
- **Environmental Class:** E1

→ Technical Dimensions

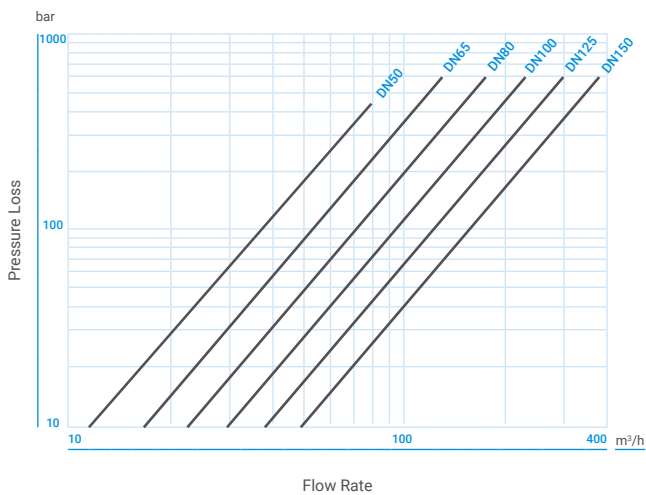
DN	50	65	80	100	125	150	200
Type of Flange	ANSI / ISO / BSI	ISO	ANSI / ISO / BSI	ANSI / ISO / BSI	ISO	ANSI / ISO / BSI	ISO
L - Total Length (mm)	200	200	225	250	250	300	350
H1 - Height (mm)	97	103	108	115	127	134	152
H - Total Height (mm)	182.5	198.5	215.5	233.5	259.5	275.5	312
C - Width (mm)	174	188	203	218	242	262	340
L1 - Length Cover (mm)	110	110	110	110	110	110	110
Weight (kg)	10	12	13	15	18	25	36



→ Performance Data

DN (mm)	Q1 Minimum Flow Rate (l/h)	Q2 Transitional Flow (l/h)	Q3 Nominal Flow Rate (m³/h)	Q4 Maximum Flow Rate (m³/h)
50	0.25	0.40	63.00	78.75
65	0.25	0.40	63.00	78.75
80	0.40	0.64	100.00	125.00
100	0.64	1.02	160.00	200.00
125	1.00	1.60	250.00	312.50
150	1.60	2.56	400.00	500.00
200	2.52	4.03	630.00	787.50

→ Head Loss



/ Fertilizer Meters

Model PB

Angle fertilizer meters, designed to accurately measure the flow of highly corrosive liquids.



Light
weight



Chemical
resistant



Accurate

/ Benefits & Features

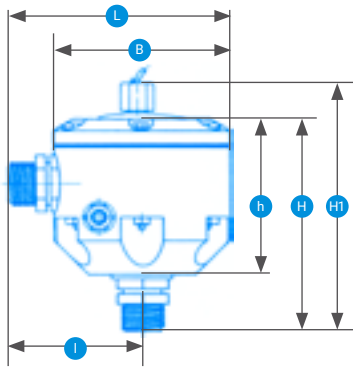
- Small & lightweight Compatible with all automation systems
- Sturdy Made of materials to withstand all fertilizers
- Outputs Electrical and totalizing registers

/ Specifications & Recommendations

- **Maximum Working Pressure:** 10bar
- **Maximum Working Temperature:** 50°C
- The meter should be installed with dial face in horizontal position

→ Technical Dimensions

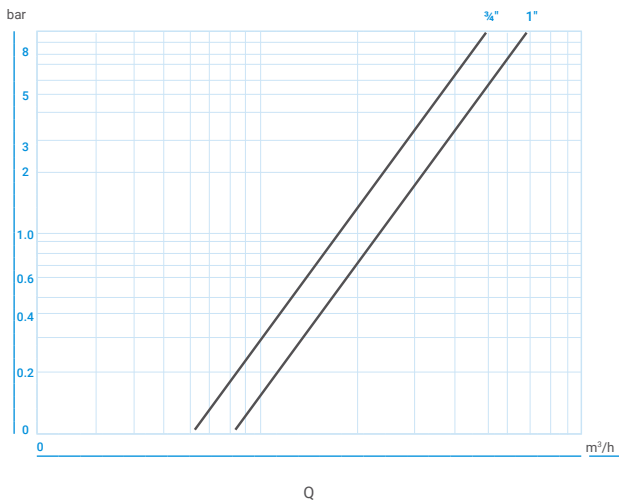
Diameter	(mm)	20	25
	(inch)	¾	1
L - Length (mm)			150
I - Length (mm)			90
H - Height (mm)			150
H1 - Height with reed switch (mm)			170
h - Height (mm)			115
B - Width (mm)			120
Weight (kg)			0.875



→ Performance Data

Nominal Size		Q1 Minimum Flow Rate (l/h)	Q2 Transitional Flow Rate (l/h)	Q3 Nominal Flow Rate (m³/h)	Q4 Maximum Flow Rate (m³/h)	Minimum Register Capacity (m³)	Minimum Register Capacity (liter)	Accuracy Between Q4 & Q2	Accuracy Between Q2 & Q1
inch	mm								
¾	20	50	200	2.5	5	105	0.1	2% ±	5% ±
1	25	100	400	5	10	105	0.1		

→ Head Loss



→ Catalog Numbers

Model	End Connection Size	Connection Type	Pulse Resolution	Catalog Number
PB	¾"	BSP	1L	70240-005300
			10L	70240-005320
			100L	70240-005325
	1" *		1L	70240-005400
			10L	70240-005500
			100L	70240-005600

Model SF

Straight fertilizer meters, designed to accurately measure the flow of highly corrosive liquids.



Light
weight



Chemical
resistant



Accurate

/ Benefits & Features

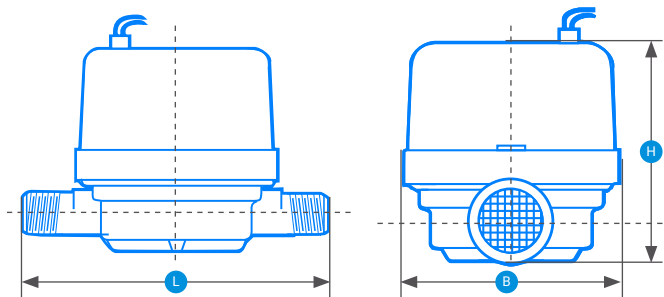
- Small & lightweight Compatible with all automation systems
- Sturdy Made of materials to withstand all fertilizers
- Outputs Electrical and totalizing registers

/ Specifications & Recommendations

- **Maximum Working Pressure:** 10bar
- **Maximum Working Temperature:** 50°C
- The fertilizer meter should be installed in horizontal position

→ Technical Dimensions

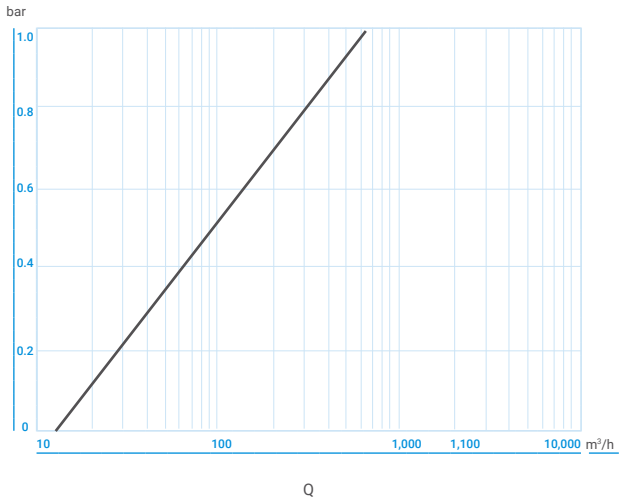
Diameter	mm	15
	inch	½
I - Length (mm)		110
h - Height (mm)		81
B - Width (mm)		77
Weight (kg)		0.28



→ Performance Data

Model		Qmax Maximum Flow Rate (l/h)	Qt Lowest Flow Rate Measured Between ±2% (l/h)	Qmin Lowest Flow Rate Measured Between ±5% (l/h)	Loss of Head at Maximum Flow Rate (bar)
15	½	750	50	25	0.12

→ Head Loss



→ Catalog Numbers

Model	End Conn.size	Connection Type	Pulse Resolution	Catalog Number
SF	¾" **	BSP	0.1L	70240-005700
			1L	70240-005720
			10L	70240-005740

Model KD

Compact meter, resistant to fertilizers and similar chemicals. Transmits electrical data to automated control systems.



Light
weight



Chemical
resistant



Accurate

/ Benefits & Features

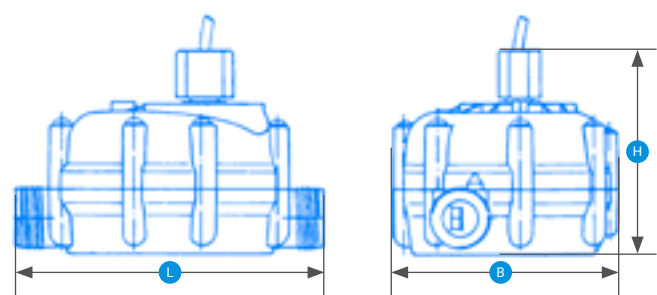
- **Small & lightweight** Compatible with all automation systems
- **Sturdy** Made of materials to withstand all fertilizers
- **Outputs** Electrical and totalizing registers

/ Specifications & Recommendations

- **Maximum Working Pressure:** 10bar
- **Maximum Working Temperature:** 50°C
- The fertilizer meter should be installed in horizontal position

→ Technical Dimensions

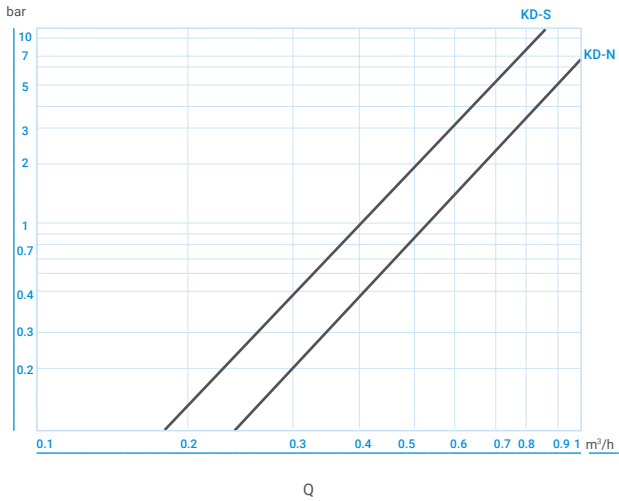
Diameter	mm	15
	inch	½
I - Length (mm)		136
h - Height (mm)		86
B - Width (mm)		100
Weight (kg)		0.3



→ Performance Data

Model	Minimum Flow Rate (m³/h)	Maximum Flow Rate (m³/h)
N-KD	750	60
S-KD	500	200

→ Head Loss



→ Catalog Numbers

Model	End Connection Size	Connecction Type	Pulse Resolution	Catalog Number
KD	¾"	BSP	0.05L	70220-001100
			0.1L	70220-001200
			0.25L	70220-001300
			1L	70220-001400
			10L	70220-001500

/ Hydrometers

Model BM

The BM hydrometers series is designed for remote control irrigation and for industrial applications. The hydrometer is especially suited for automated operation.



Compact



Durable



Robust

/ Benefits & Features

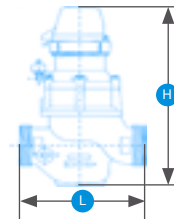
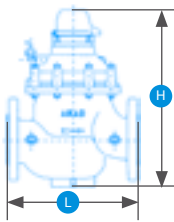
- **Hydrometer use** In a variety of pressure and flow regulation applications
- **High-pressure operation** Thanks to double-chambered hydraulic valve
- **Hydraulic commands** Remote and automatic transmission

/ Specifications & Recommendations

- **Maximum Working Pressure:** 16bar
- The meter should be installed in horizontal or vertical position
- The meter must be always full of water while operating
- Prior to the installation of a new meter, the pipeline must be flushed out

→ Technical Dimensions

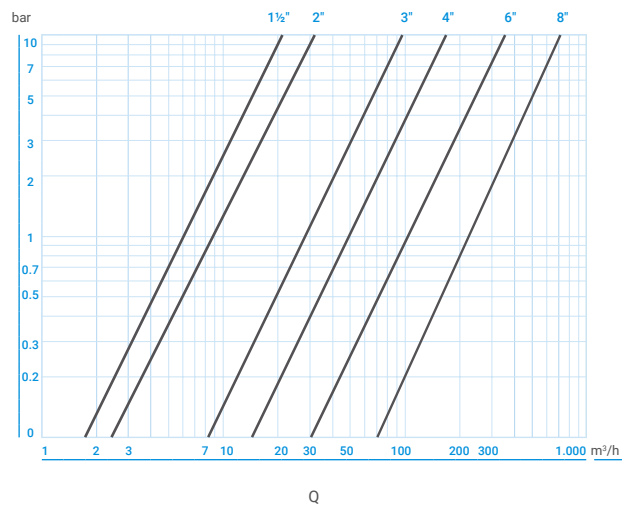
Nominal Size	(mm)	40	50	80	100	150	200
	(inch)	1½	2	3	4	6	8
L - Length (mm)		160	190	285	324	500	600
H - Height (mm)		266	331	433	456	581	782
h - (mm)		-	-	-	-	-	-
A - (mm)		-	-	-	-	-	-
W - Width (mm)		124	124	205	230	380	450
Weight (kg)		4.5	6.5	24.5	30.5	120	150
Weight with couplings (kg)		5.5	8	-	-	-	-



→ Performance Data

Nominal Size		Qmax Maximum Flow Rate (m³/h)	Qn Nominal Flow Rate (m³/h)	Qt Transitional Flow Rate (m³/h)	Qmin Minimum Flow Rate (m³/h)	Minimum Register Capacity (m³/h)	Minimum Register Capacity (liter)	Accuracy Between Qmax & Qt	Accuracy Between Qt & Qmin
(mm)	(inch)								
40	1½	30	20	1.3	0.4	10 ⁶	1	±2%	±5%
50	2	50	30	3	0.45	10 ⁶	1		
80	3	130	65	8	1.2	10 ⁶	1		
100	4	200	100	12	1.8	10 ⁷	10		
150	6	300	150	30	4.5	10 ⁷	10		
200	8	540	270	50	7.5	10 ⁷	10		

→ Head Loss



Model KB

VOLUMETRIC VALVE

A volume based irrigation device, consisting of a water meter, a volume control dial and a valve all contained in a single unit.



Compact



Reliable



Robust

/ Benefits & Features

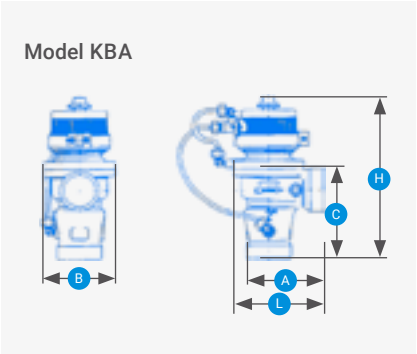
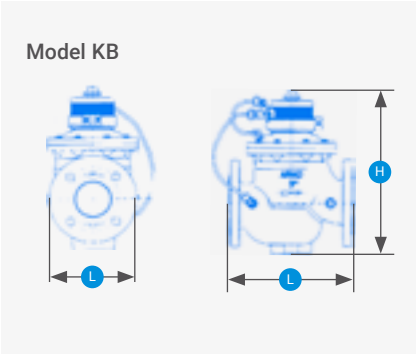
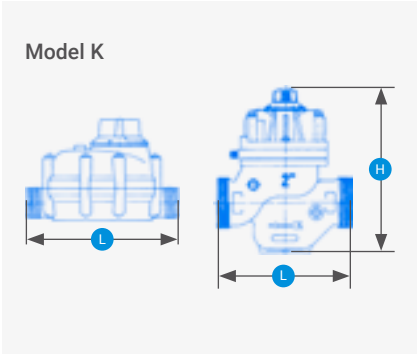
- **Precise** Extremely high accuracy & negligible head loss
- **Easy to use** Simple maintenance
- **Flexible** Field replaceable measuring unit
- **Safe seal** Hermetically sealed register with glass lens
- **No deposit of solids** Thanks to continued flush of the bearings

/ Specifications & Recommendations

- **Maximum Working Temperature:** 60°C
- The meter should be installed in horizontal position

→ Technical Dimensions

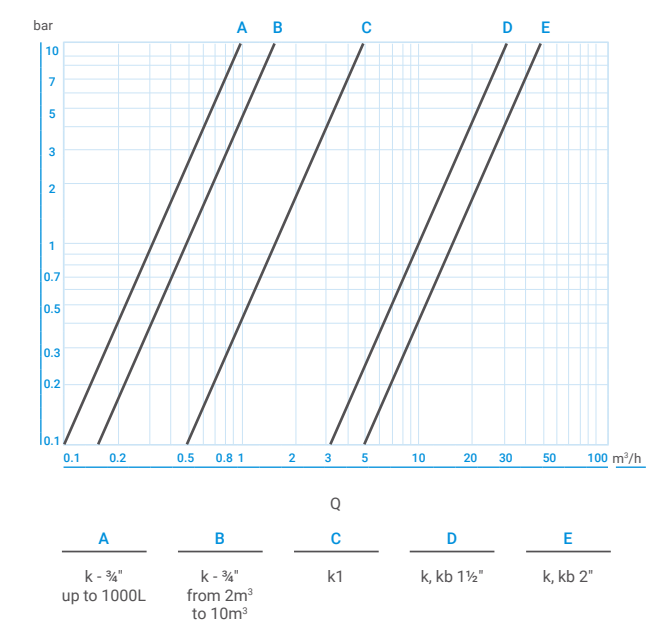
Model		K				KA	KB		KBA
Nominal size	(mm)	20	25	40	50	50	40	50	50
	(inch)	¾	1	1½	2	2	1½	2	2
L – Length without couplings (mm)		130	200	160	190	158	160	190	190
H – Height (mm)		86	115	203	235	265	203	235	290
A – (mm)		-	-	-	-	96	-	-	97
C – (mm)		-	-	-	-	122	-	-	122
B – Width (mm)		102	90	126	126	126	126	126	126
Weight (kg)		0.3	0.5	2.3	4.4	4	2.9	4.7	4.5
Weight with couplings (kg)		-	-	3.3	5.8	5.4	3.9	6.1	-



→ Performance Data

Model	Nominal Size (inch)	Maximum Working Pressure (bar)	Minimum Working Pressure (bar)	Qmax Maximum Flow Rate (m³/h)	Qmin Minimum Flow Rate (m³/h)	Regulated Flow Rate
K/KA	¾"	10	0.5	1.5	0.08	±2%
	1"	8	0.5	5	0.5	
	1½"	10	1	15	1.5	
	2"	10	1	30	2	
KB/KBA	1½"	10	1.3	15	1.5	
	2"	10	1.3	30	2	

→ Head Loss



Ultraf™

An ultrasonic water meter, a hydraulic valve, and a smart system all in one, for water measurement, pressure control and pressure management.



Innovative



Simplifying



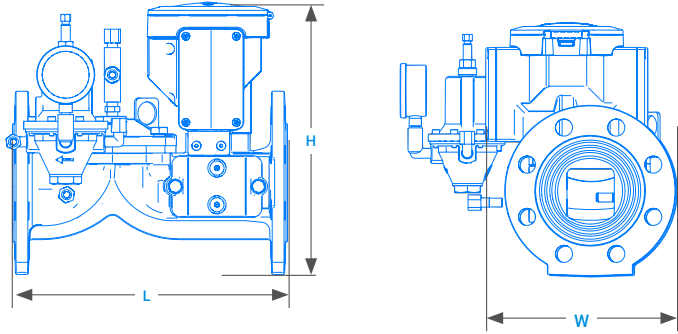
Reliable

/ Benefits & Features

- **Simple to use** Easy installation and operation, and low maintenance
- **Space saving** Single compact unit
- **Clever design** No moving parts
- **Power** Battery operated with extended life
- **Protection** High level, according to IP68
- **Bluetooth app.** Use with field programming
- **Optional cards** Digital and analog output
- **Precise** Extremely high accuracy & negligible head loss

→ Technical Dimensions

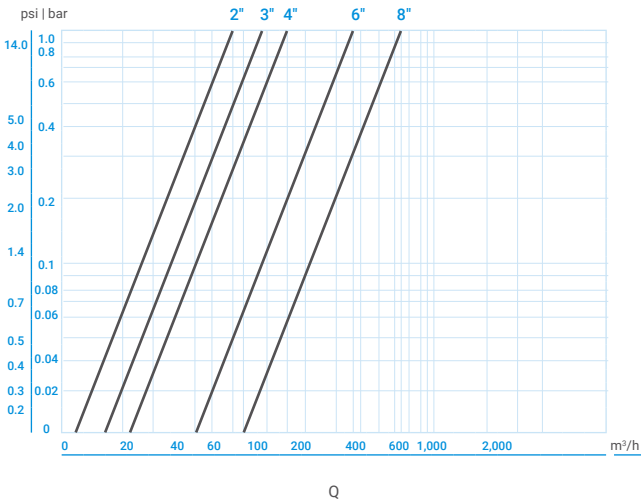
Diameter	mm	50	80	100	150	200
	inch	2	3	4	5	8
Length (mm)		260	300	350	500	600
Height (mm)		270	300	320	380	420
Width (mm)		190	223	240	320	370
Weight (kg)		10	15	23	44	67

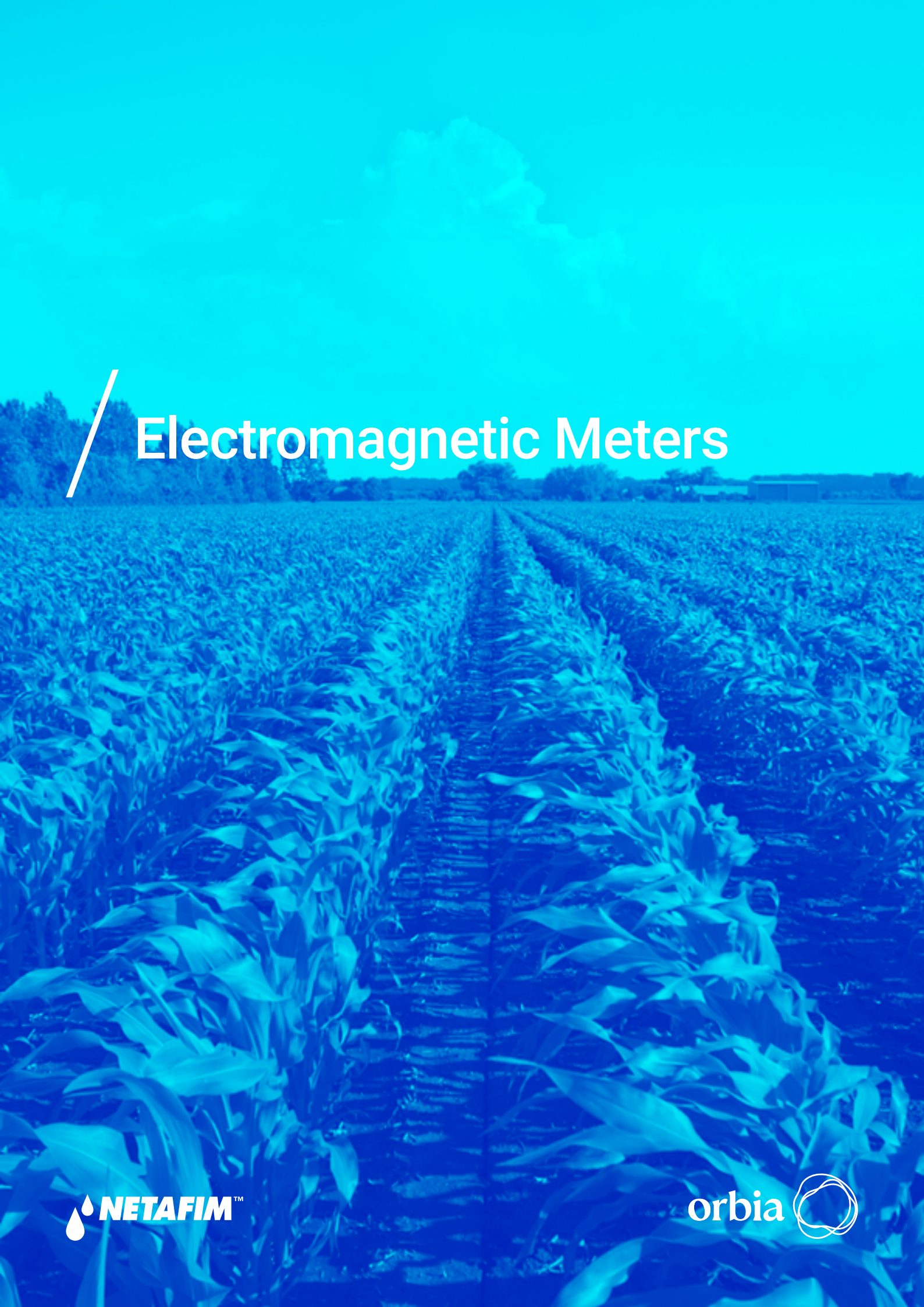


→ Hydraulic Performance

Flow Rate (m ³ /h)	Q1 Minimum Flow Rate ()	Q2 Transitional Flow Rate ()	Q3 Permanent Flow Rate ()	Q4 Overload Flow Rate ()	Max. Flow for Short Period (m ³ /h)
DN 40-1½"	0.16	0.256	16	20	30
DN 50-2"	0.25	0.4	25	31.25	50
DN 80-3"	0.63	1	63	78.75	125
DN 100-4"	0.80	1.28	100	125	200
DN 150-6"	2.0	3.2	250	312.5	400
DN 200-8"	3.2	4	400	500	600

→ Head Loss





/ Electromagnetic Meters

MAG 8000

Specially designed for control and monitoring of drinking water and irrigation networks, with the advantage of being powered by batteries.



Extremely accurate



Highly resistant



Maximum reliability

/ Benefits & Features

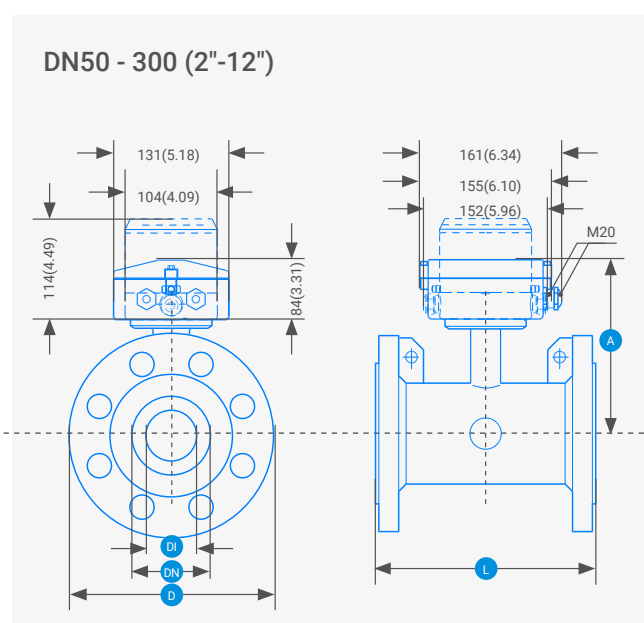
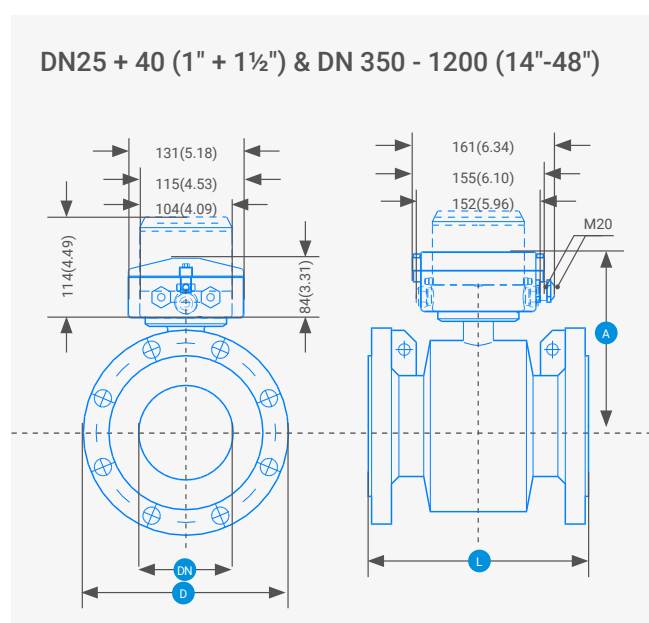
- | | |
|------------------------|---|
| → Design | Compact and optionally remote version with separate converter |
| → Installation lengths | Standardized |
| → Power | Battery operated |
| → Installation | For underground flood |
| → Accuracy | Precise measurement of first flow thanks to installed sensor |
| → Easy care | No maintenance |

/ Specifications & Recommendations

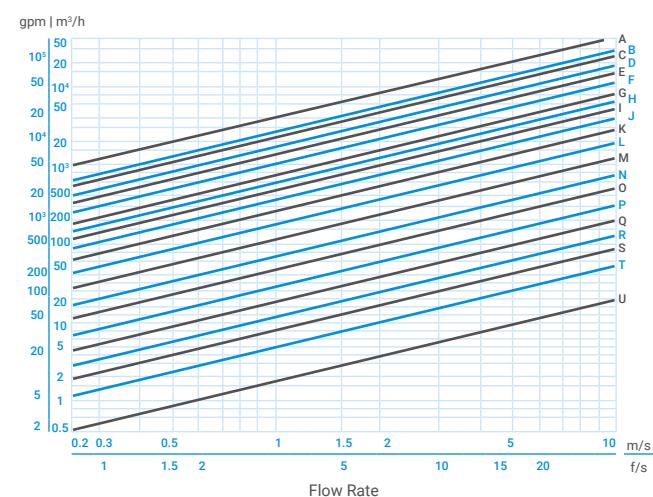
- | | |
|---|--|
| → Ambient Temperature: -20 to + 60°C. | → Flanges According to Regulations: |
| → Fluid Temperature: 0 to 70°C. | EN 1092-1 (DIN 2501), ANSI 16.5 class 150, AWWA C-207, AS 4087 |
| → Accuracy: 0.4% (on request, 0.2%) | → Powered by lithium batteries with a duration of 5 years. Possibility of feeding with package additional external batteries |
| → DIN 50-600 flanges (other flange standards available upon request) | → Two passive pulse outputs. One of these outputs is configurable as an alarm. |
| → Materials: | → Internal Data Logger with storage capacity of 26 records |
| ● Coating: EPDM | → As a standard, the totalizer reading units and flow are, respectively, m ³ and m ³ /h |
| ● Hastelloy C electrodes | |
| → Approved for billing | |
| → Suitable for drinking, irrigation and drinking water sea, not suitable for wastewater | |

→ Technical Dimensions

DN Nominal Counter Size (mm / inch.)	A Height (mm)	L - Length According to EN 1092-1, PN 16 (mm)	DI Diameter (mm)	Weight (kg)
50 / 2	195	200	42	11
65 / 2½	201	200	55	13
80 / 3	207	200	67	15
100 / 4	214	250	81	17
125 / 5	224	250	101	22
150 / 6	239	300	131	28
200 / 8	264	350	169	50
250 / 10	291	450	212	71
300 / 12	317	500	265	88
350 / 14	369	550	350	111
400 / 16	394	600	400	126
450 / 18	425	600	450	175
500 / 20	450	600	500	225
600 / 24	501	600	600	299



→ Head Loss



A DN1200 (48") D DN800 (32") G DN500 (20") J DN350 (14") M DN200 (8") P DN100 (4") S DN50 (2")
 B DN1000 (40") E DN700 (28") H DN450 (18") K DN300 (12") N DN150 (6") Q DN80 (3") T DN40 (1½")
 C DN900 (36") F DN600 (24") I DN400 (16") L DN250 (10") O DN125 (5") R DN65 (2½") U DN25 (1")

Water Meters

Description Guide

Sample description

ARAD¹ M.JET² PL³ 1"⁴ BSP⁵ EV⁶ 10L⁷ W/CPLG⁹

1 Brand

ARAD	ARAD
GAER	GAER
OTHER	OTH

2 Model

M.JET	Multi jet
IRT	Irrigation
WWM	Woltman
WTSB BYO	Woltman Bayonet
SONATA	Ultrasonic Sonata
OCTAVE	Ultrasonic Octave
GMU	Ultrasonic GMU250
SF	Fertilizer SF
PB	Fertilizer PB
KD	Fertilizer KD

3 Material

PL	Plastic polymers
MT	Cast / ductile iron
SST	Stainless steel

4 Size

1/2"	1/2"
3/4"	3/4"
1"	1"
1.5"	1 1/2"
2"	2"
2.5"	2 1/2"
3"	3"
4"	4"
6"	6"
8"	8"
10"	10"
12"	12"

5 Connection Type

BSP	Threaded BSP
NPT	Threaded NPT
ISO	Flanged ISO PN16
BSTD	Flanged BSTD
ANSI	Flanged ANSI 150

6 Output

NO	No output
EV	Volume output
EVD	Dual volume output
ER	Electric output
EF	Photo diode
DIG	Octave modules

7 Pulse Rate #1

-	None
0.1L	0.1L
1L	1L
10L	10L
100L	100L
1M3	1M ³
10M3	10M ³

8 Pulse Rate #2

-	None
0.1L	0.1L
1L	1L
10L	10L
100L	100L
1M3	1M ³
10M3	10M ³

9 Accessories

W/CPLG	WITH COUPLINGS
--------	----------------



/ Spare Parts

→ Multi-Jet

Couplings sets



Product Picture	Product Description	Catalog Number
	BRASS COUPLING SET - 1/2"	70220-002900
	BRASS COUPLING SET - 3/4"	70220-003000
	BRASS COUPLING SET - 1"	70220-003100
	BRASS COUPLING SET - 1.25"	70220-003110
	BRASS COUPLING SET - 1.5"	70220-003200
	BRASS COUPLING SET - 2"	70220-003300
	COUPLINGS SET 3/4 BSP POLYMER	70220-003010
	COUPLINGS SET 1 BSP POLYMER	70220-000120
	COUPLINGS SET POLYMER BSP FOR 1 1/2"	70220-000121
	COUPLINGS SET POLYMER NPT FOR 1 1/2"	70220-000122

→ ARAD Multi-Jet

EV registers

Product Picture	Model	Diameter	Output	Catalog Number
	M	1"	10L	70220-002763*
		1.5"	10L	70220-002766*
		2"	10L	70220-002773*
			100L	70220-002774*
	MS	1.5"	10L	70220-081216
			100L	70220-081217

* Reed switch not included

→ ARAD Irrigation Type

Registers



Product Picture	Type	Diameter	Output	Catalog Number
	EV	3"	100L	70220-002862*
			100L	70220-002863
			1M ³	70220-002864*
			10M ³	70220-002889
		4"	100L	70220-002872*
			1M ³	70220-002874*
			1M ³	70220-080600
			10M ³	70220-080590
		6"	100L	70220-002875*
			1M ³	70220-002877
			1M ³	70220-002865
			10M ³	70220-002866*
	ER	3"	100L & 1M ³	70220-000001
		4"	100L & 1M ³	70220-080610
		6"	100L & 1M ³	70220-081150
		8"	100L & 1M ³	70220-081200
		10"	100L & 10M ³	70220-002901
	EF	3"	10L	70220-002861
		4"	10L	70220-081100
		6"	10L	70220-013861

* Reed switch not included

Mechanism (meters w/body)

Product Picture	Type	Diameter	Output	Catalog Number
	EV	3"	1M ³	70220-007910
		4"	1M ³	70220-007925
		6"	100L	70220-007940
			1M ³	70220-007945
		8"	100L	70220-007960
			1M ³	70220-007965
		10"	1M ³	70220-007980
			10M ³	70220-007985



→ GAER Irrigation Type

Mechanism

Product Picture	Type	Diameter	Output	Catalog Number
	EV	3"	100L/1M ³	71680-000031
		4"	100L/1M ³	71680-000032
		6"	1M3/10M ³	71680-000033
		8"	1M3/10M ⁴	71680-000034
		10"	1M3/10M ³	71680-000035



→ Woltman Type

Measuring Units

Product Picture	Diameter	Output	Measuring Unit	Catalog Number
	4"	1M ³	WSTsb 4 x10	70220-009279
	8", 10", 12"		WTII 8 COVER 19	70220-009270

→ Arad Woltman Byonet

Registers

Product Picture	Type	Diameter	Output	Catalog Number
	EV	2"	10l	70220-011400
			100l	70220-011410
		2.5"	10l	70220-011420*
			100l	70220-011425*
		3"	10l	70220-011430
			100l	70220-011435
		4"	10l	70220-011440
			100l	70220-011445
			1M ³	70220-011450
		6"	100l	70220-011455
			1M ³	70220-011460
		8"	1M ³	70220-011465
			10M ³	70220-011470
		10"	1M ³	70220-011475
			10M ³	70220-011480
		12"	1000l	70220-011485

* Reed switch not included

→ ARAD Woltman Byonet

Register Accessories

Product Picture	Product Description	Catalog Number
	WSTSB BYO REGISTER HOUSING	70220-081503
	WSTSB BYO COVER DRILLED IP168	70220-081500
	STOPPER PIN PPS	70220-008568
	WSTSB BYO REED SWITCH HOUSING 1.5m IP68 W/LID	70220-081501

→ Accessories

Octave modules

Product Picture	Product Description	Catalog Number
	Solid State Relay	70220-060410
	Open Drain	70220-060400
	4-20 mA	70220-011565
	4-20mA + SSR	70220-011576
	NFC COMMUNICATION KIT	70220-000470

Reed switch

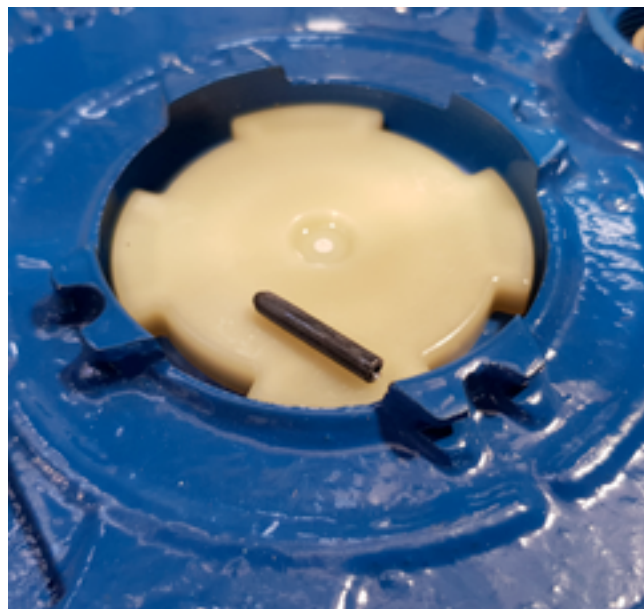
Product Picture	Product Description	Catalog Number
	Gray / Black Reed to Gray magnet	70220-005300
	Blue Reed to small Red magnet	70220-005400

/ Woltman BayoNet™ Register Replacement

Woltman BayoNet™ Register Replacment

/ Step 1

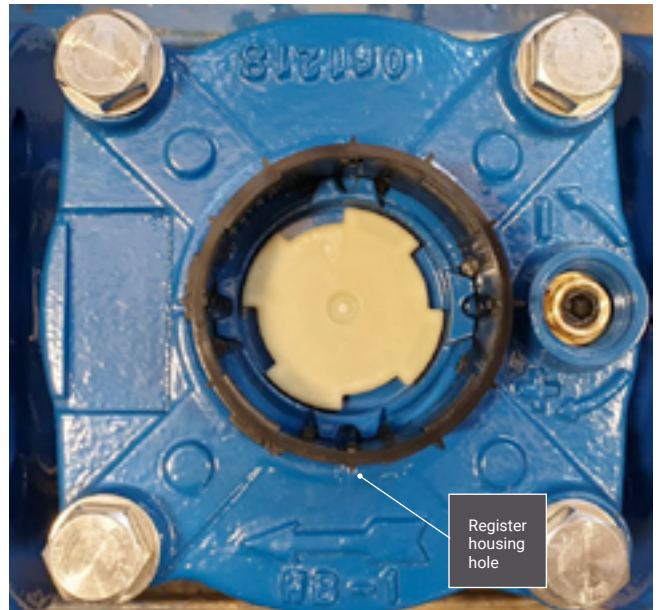
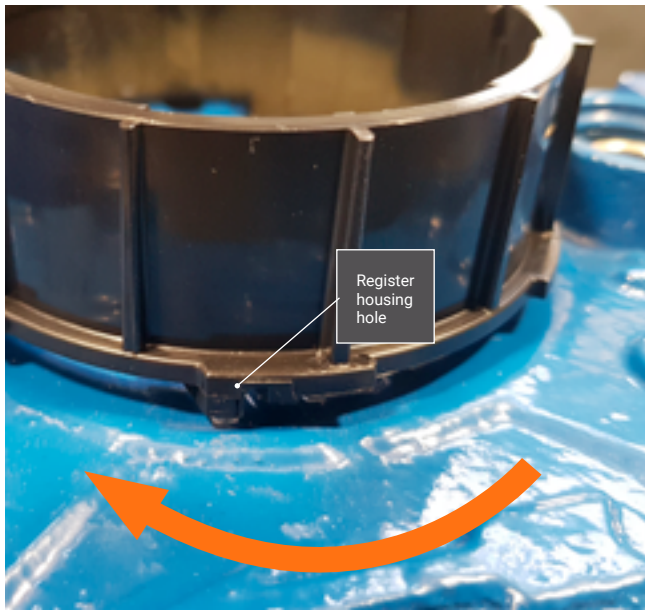
→ Disassemble The Register



- Place a nail/screwdriver on stopper pin
- Push the nail inside with hammer, the stopper pin will break and you can turn the shroud counterclockwise and take the register out

/ Step 2

→ Assemble Register Housing



Assemble the register housing by spinning it clockwise until it locks, locate 'register housing hole' above the arrow mark on cover

NOTE: There are two holes in the register housing choose one of them.

/ Step 3

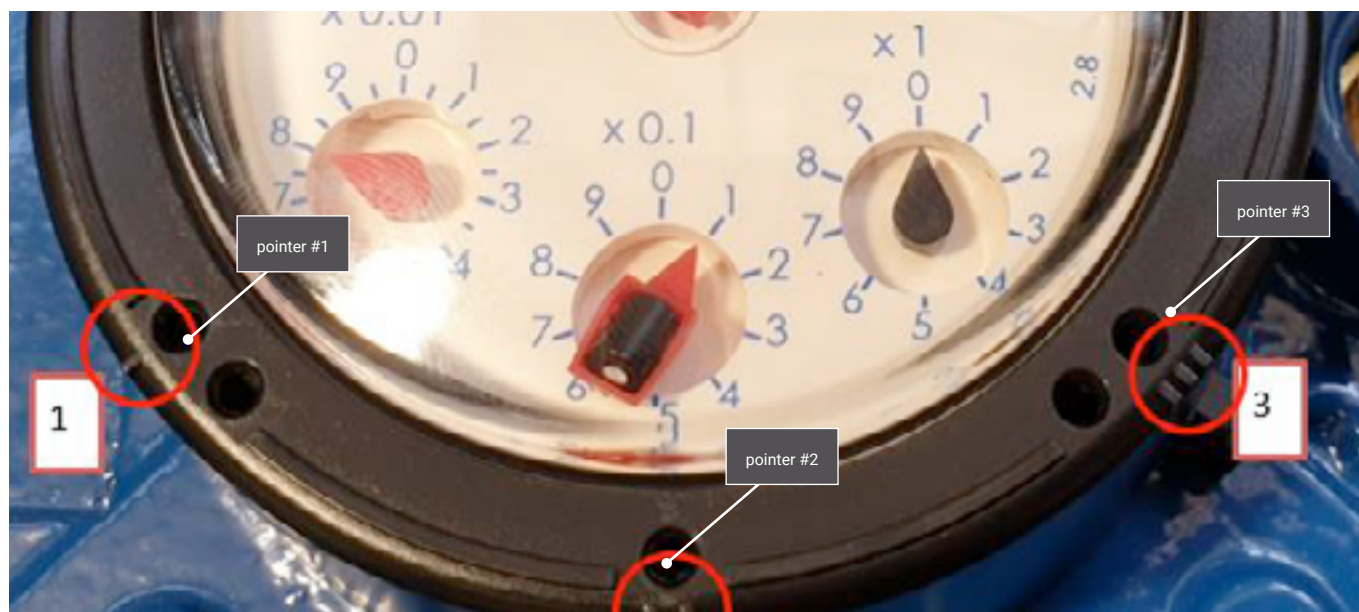
→ Locating The Register



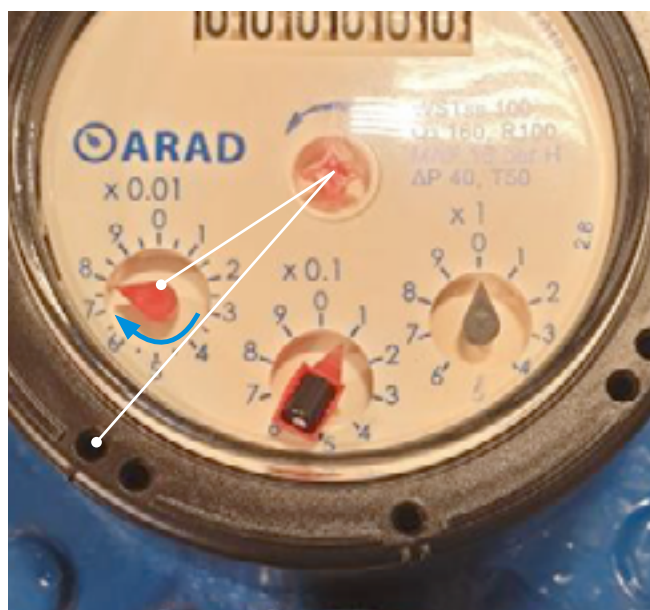
Locate the register such all three little pointers are above the calibration screw as shown

/ Step 4

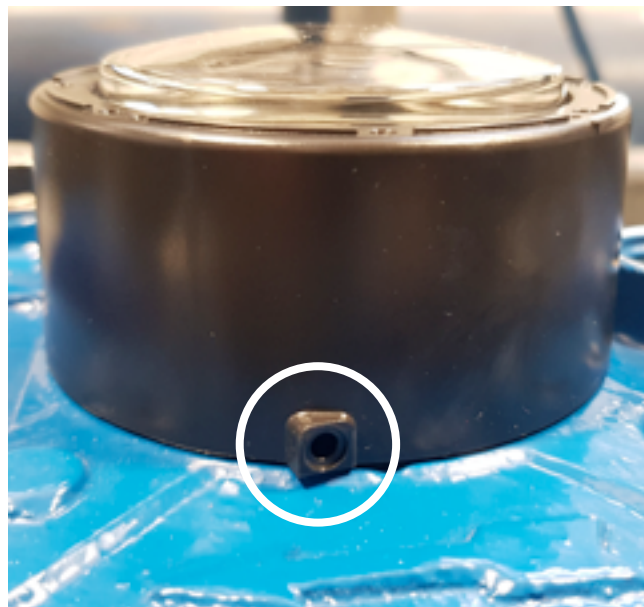
→ Locating Plastic Shroud



- The shroud fixed firmly by spinning clockwise same as in the register housing
- Pay attention to marks on the shroud that represent the location of 3 pointers
- #1 is the smallest pointer, #2 is the middle pointer, #3 is the highest pointer mark as X1 in this example



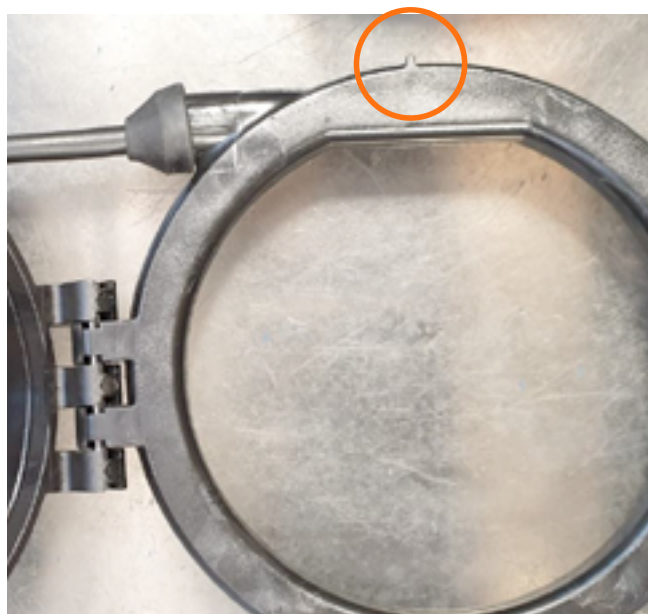
First, locate the shroud 15° distant from pointers and then spin the shroud clockwise (make sure that the register doesn't move) until all pointer located in front of their numbering



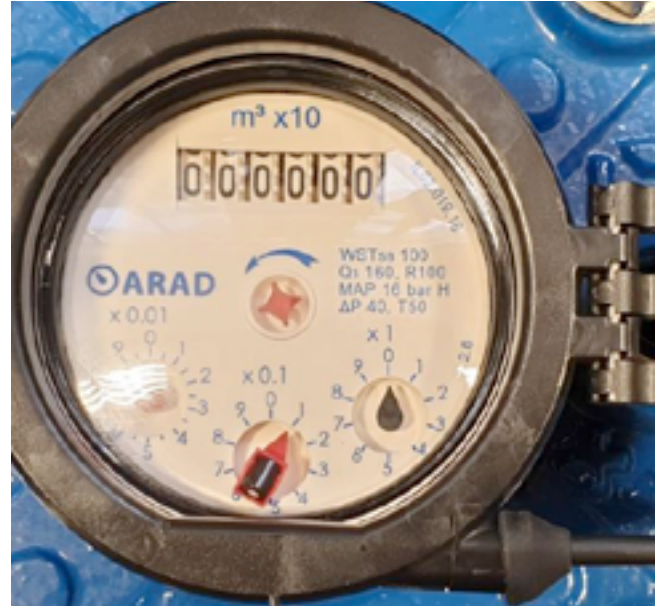
Now the hole in the register housing (from step #1) and the hole in the shroud are concentric

/ Step 5

→ Assembling Ev Ring



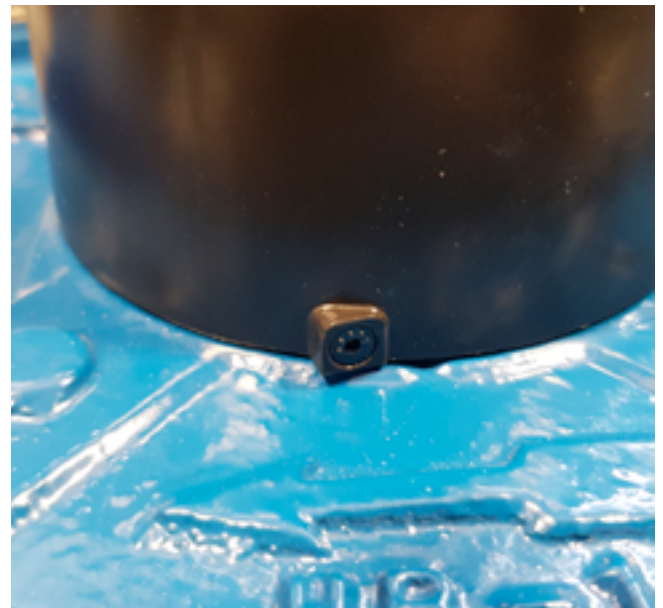
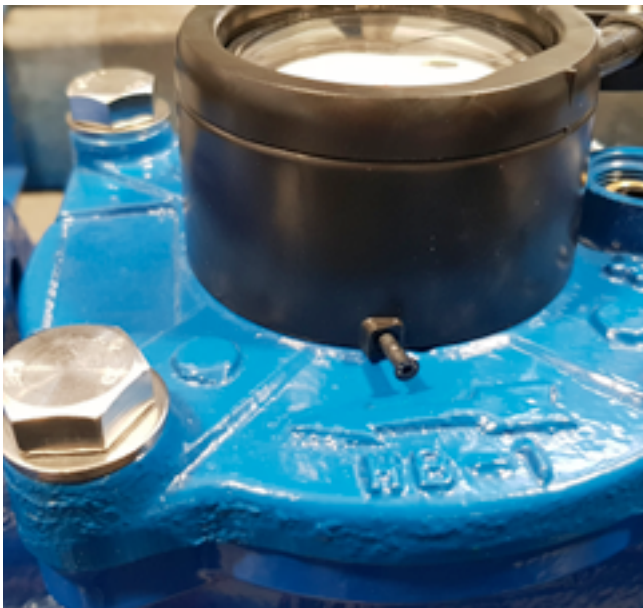
The EV ring marks with small arrow that shows the location and how to assemble the ring on the register



Make sure to locate this small arrow in front of the pointer that has the magnet

/ Step 6

→ Stopper Pin



- Insert the stopper pin into the hole of shroud
- Push the pin inside until it locked

/ Catalog Numbers

Product Description	Catalog Number
WSTSB BYO REGISTER HOUSING	70220-081503
WSTSB BYO COVER DRILLED IP168	70220-081500
STOPPER PIN PPS	70220-008568
WSTSB BYO REED SWITCH HOUSING 1.5m IP68 W/LID	70220-081501
ARAD REGISTER WST SB BYO 2" EV 10L	70220-011400
ARAD REGISTER WST SB BYO 2" EV 100L	70220-011410
ARAD REGISTER WST SB BYO 2.5" F/EV 10L	70220-011420
ARAD REGISTER WST SB BYO 2.5" F/EV 100L	70220-011425
ARAD REGISTER WST SB BYO 3" EV 10L	70220-011430
ARAD REGISTER WST SB BYO 3" EV 100L	70220-011435
ARAD REGISTER WST SB BYO 4" EV 10L	70220-011440
ARAD REGISTER WST SB BYO 4" EV 100L	70220-011445
ARAD REGISTER WST SB BYO 4" EV 1M ³	70220-011450
ARAD REGISTER WST SB BYO 6" EV 100L	70220-011455
ARAD REGISTER WST SB BYO 6" EV 1M ³	70220-011460
ARAD REGISTER WST SB BYO 8" EV 1M ³	70220-011465
ARAD REGISTER WST SB BYO 8" EV 10M ³	70220-011470
ARAD REGISTER WST SB BYO 10" PULSE 1M ³	70220-011475
ARAD REGISTER WST SB BYO 10" PULSE 10M ³	70220-011480
ARAD REGISTER WST SB BYO 12" PULSE 1000L	70220-011485



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