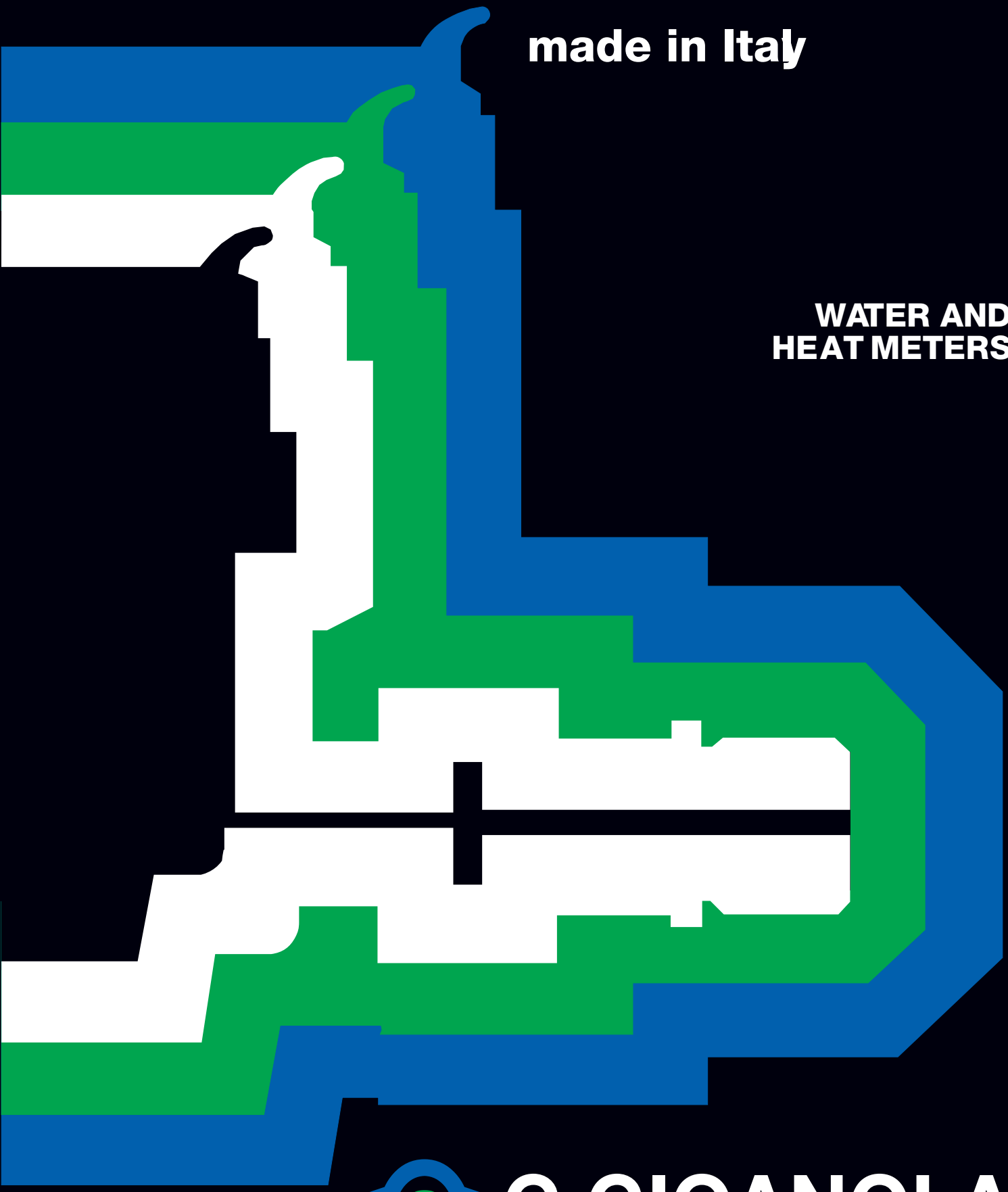
SISMA water meters

made in Italy

WATER AND HEAT METERS



G.GIOANOLA

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SUPERDRY
8 DIGIT COUNTER
ROTATING THROUGH 360° FOR EASY READING DRY DIAL

MID
2004/22/CE

MODELS
USF-8/15 - USC-8/15
USF-8/20 - USC-8/20

- Single jet **Super Dry** turbine water meter
- Rotating counter through 360° for easy reading in any installation position
- Straight reading on 8-digit roller counter: 5 black digit for cubic metres and 3 red digits for litres
- For turbid, calcareous water with suspended sediments: a completely dry and unsubmerged register. The impeller is the only part in contact with water.
- USF-8 model for cold water, measuring range R80, temperature classes 30°C and 50°C
- USC-8 model for hot water, measuring range R80, temperature classes 70°C and 90°C
- USF-SA-8 FROST PROTECTION model for cold water, measuring range R80, temperature classes 30°C and 50°C equipped with water volume increase compensation system when frosting
- Protective cover and glass wiper available as options
- **U0-D0**: straight pipe not required upstream or downstream the meter
- May be installed in any position
- All models are **MID** approved according to the European Directive **2004/22/EC** (module B+D) and in compliance with the norms **EN 14154/2007** and **OIML R49/2006**; all models are also available approved in accordance with European Directive **75/33/EEC** Metrological Class B
- All models may be supplied with a pulse-emitting device or pre-equipped to retrofit a pulse-emitting device, upon request

SUPER DRY 8 DIGIT COUNTER

Nominal size of the meter			15 - 1/2	20 - 3/4				
Q_3	**Permanent flow rate**	**m³/h**	**2,5**	**4,0**				
Q_4	Maximum flow rate for short period	m³/h	3,125	5,0				
Q_2	Transitional flow rate with measuring range R80 [MPE ±2%]	l/h	50	80				
Q_1	Minimum flow rate with measuring range R80 [MPE ±5%]	l/h	31,25	50				
S	Accuracy at measuring range R80	l/h	7	15				
ΔP	Pressure loss class	bar	0,63	0,63				
MAP	Maximum allowed working pressure	bar	16	16				
	Dial register from/to	m³	0,0001 / 100.000	0,0001 / 100.000				
A	Lenght without couplings	mm	110-80 115-170	130				
	Lenght with couplings	mm	190-160 195-250	228				
B	Maximum diameter	mm	72	72				
C	Height with open lid	mm	138	143				
D	Height with closed lid	mm	70	74				
E	Height of tube	mm	16	19				
	Weight with couplings	kg	0,660	0,840				
	Weight without couplings	kg	0,500	0,600				

MODELS:
Cold water – Temperature Class T30-T50 (°C)

USF-8/15 R80
USF-8/20 R80

Hot water – Temperature Class T70-T90 (°C)

USC-8/15 R80
USC-8/20 R80

Cold water – Temperature Class T30-T50 (°C)
With system that compensates the water increase when frosting

USF-8-SA/15 R80
USF-8-SA/20 R80

Different "R" values available upon request

The Company's policy is one of continuous product improvement and the right is reserved to modify the specification contained herein without notice.

PULSED WATER METER

REED SWITCH PULSE EMITTER – TECHNICAL DATA

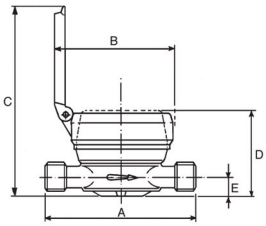
- Contact ratings : 24 V - 0,2 A
- Standard length of screened cable supplied: 2 m

PULSE VALUES K

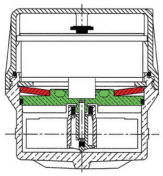
- Number of litres per pulse available (**pulse value must be stated when ordering**): 0,25 – 0,5 – 1

AVAILABLE OPTIONS ON REQUEST

- A non-return valve can be fitted upon request;
- All models can be customised with the serial number (also in bar code format) marked on the dial;
- Nickel-plated housing available upon request;
- Teflon-coated housing for demineralized water available upon request.

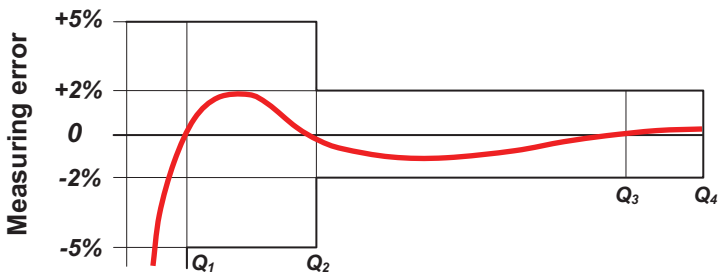


FROST PROTECTION SYSTEM

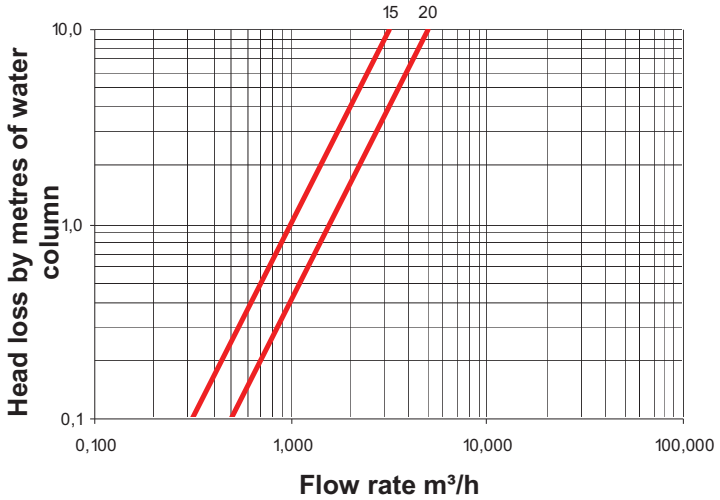


The water volume increase is absorbed by the Bauer Spring which will bring to normal conditions the pressure plate after de-frost, keeping unchanged the measuring accuracy characteristics.

TYPICAL ERROR CURVE



HEADLOSS DIAGRAM



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- Single jet turbine water meter, straight reading on 5-digit roller counter
- DARF model for cold water, dry dial, measuring range R80, for turbid, calcareous water with suspended sediments, temperature classes 30°C and 50°C
- DARC model for hot water, dry dial, measuring range R80, for turbid, calcareous water with suspended sediments, temperature classes 70°C and 90°C
- Ideal for installation in areas with highly variable changes in pressure
- **U0-D0**: straight pipe not required upstream or downstream of meter
- May be installed in any position
- All models are **MID** approved according to the strict European Directive **2004/22/EC** (module B+D) and in compliance with the norms **EN 14154/2007** and **OIML R49/2006**; all models are also available approved in accordance with European Directive **75/33/EEC** Metrological Class B
- All models can be supplied fitted with a pulse-emitting device or pre-equipped to retrofit a pulse-emitting device, upon request

DOMUS

DRY DIAL

Nominal size of the meter			15 - 1/2	20 - 3/4	25 - 1	32 - 1.1/4	40 - 1.1/2	
Q_3	**Permanent flow rate**	**m³/h**	**2,5**	**4,0**	**6,3**	**10**	**16**	
Q_4	Maximum flow rate for short period	m³/h	3,125	5,0	7,875	12,5	20	
Q_2	Transitional flow rate with measuring range R80 [MPE ±2%]	l/h	50	80	126	200	320	
Q_1	Minimum flow rate with measuring range R80 [MPE ±5%]	l/h	31,25	50	78,75	125	200	
S	Accuracy at measuring range R80	l/h	10	15	20	20	25	
ΔP	Pressure loss class	bar	0,63	0,63	0,63	0,63	0,63	
MAP	Maximum allowed working pressure	bar	16	16	16	16	16	
	Dial register from/ to	m³	0,0001/ 100.00	0,0001/ 100.00	0,0001/ 100.00	0,0001/ 100.00	0,0001/ 100.00	
A	Lenght without couplings	mm	110-115	130	160	160	200	
	Lenght with couplings	mm	190-195	228	260	280	340	
B	Maximum diameter	mm	80	80	100	100	110	
C	Height with open lid	mm	175	175	185	185	195	
D	Height with closed lid	mm	108	108	128	128	142	
E	Height of tube	mm	24	24	34	34	42	
	Weight with couplings	kg	1,050	1,250	1,850	2,150	3,540	
	Weight without couplings	kg	0,890	1,010	1,380	1,440	2,500	

MODELS:

Cold water – Temperature Class T30-T50 (°C)

DRY dial

DARF/15 R80
DARF/20 R80
DARF/25 R80
DARF/32 R80
DARF/40 R80

MODELS:

Hot water – Temperature Class T70-T90 (°C)

DRY dial

DARC/15 R80
DARC/20 R80
DARC/25 R80
DARC/32 R80
DARC/40 R80

Different "R" values available upon request

PULSED WATER METERS (DN25-32-40)

REED SWITCH PULSE EMITTER – TECHNICAL DATA

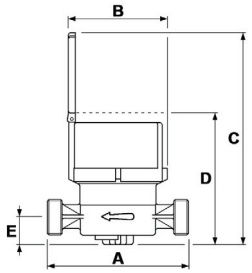
- Contact ratings : 24 V - 0,2 A
- Standard length of screened cable supplied: 2 m

PULSE VALUES K

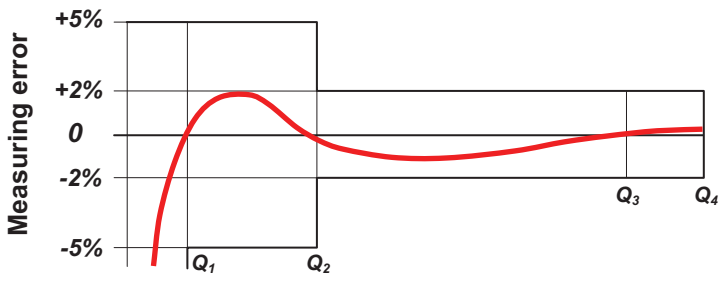
- Number of litres per pulse available (**pulse value must be stated when ordering**): 0,25 – 0,5 – 1 – 2,5 – 5 –10 – 25 – 50 – 100 – 250 – 500 – 1000

AVAILABLE OPTIONS ON REQUEST

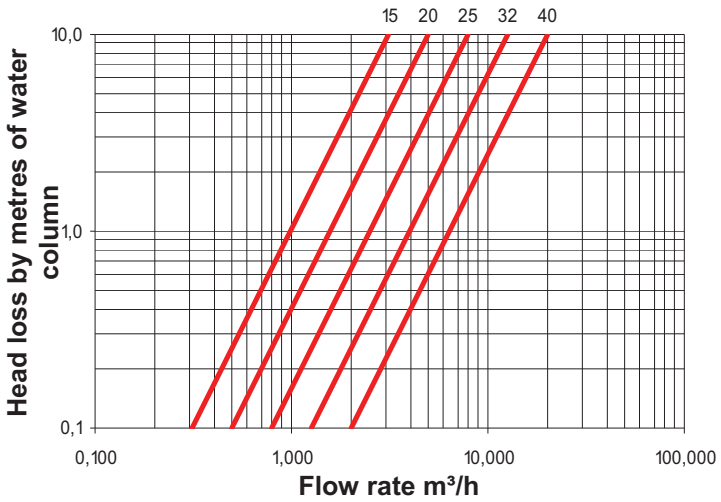
- A non-return valve can be fitted on DN15 and DN20 models upon request
- All models can be customised with the serial number (also in bar code format) marked on the dial
- DN 15 and DN 20 chrome-plated models available upon request
- Glass wiper available upon request



TYPICAL ERROR CURVE



HEADLOSS DIAGRAM



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WOLTMANN WATER METER

REMOVABLE MECHANISM TYPE

DN mm		inches
50	-	2
65	-	2.1/2
80	-	3
100	-	4
125	-	5
150	-	6
200	-	8
250	-	10
300	-	12
400	-	16

- A high capacity helical vane (Woltmann) type water meter
- WARF model for cold water up to 50°C; dry dial for use with turbid, heavily calcareous water with suspended sediments
- No gears in the wet area; only one moving part – the impeller – in contact with water
- It has the advantage that the measuring element may be quickly removed and replaced on-site with a precalibrated measuring mechanism
- Straight reading on 6-digit roller counter
- Cast iron PN 16 flanged body polyester coated
- Suitable for horizontal, vertical or inclined installation without any loss of accuracy
- EEC Approved in accordance with European Directive **75/33/EEC** Metrological Class B; EEC approval in Metrological Class C available for diameters DN 40 – 50 – 65 – 80 – 100 – 150; MID MI001 approval according to European Directive 2004/22/EC available for diameters DN 40 – 50 – 65 – 80 – 100 – 150
- All models can be supplied fitted with a pulse-emitting device or pre-equipped to retrofit a pulse-emitting device, upon request

WOLTMANN

REMOVABLE MECHANISM TYPE

Nominal size of the meter			50	65	80	100	125	150	200	250	300	400
Q_{max}	Maximum flow rate	m³/h	100	120	170	300	350	410	730	1400	2000	3000
Q_n	Nominal continuous flow rate (EEC)	m³/h	15	25	40	60	100	150	250	400	600	1000
	Continuous flow allowed	m³/h	50	80	120	230	250	260	450	750	1000	2000
Q_t	Transitional flow rate with ±2% error	m³/h	0,7	0,8	0,8	1,8	2,0	3,5	15	15	40	50
Q_{min}	Minimum flow rate with ±5% error	m³/h	0,3	0,35	0,5	0,8	1,0	2,5	5	6	10	25
	Starting flow	m³/h	0,15	0,15	0,25	0,3	0,5	0,8	2	3	4	15
	Weight	kg	12	13	15,5	19	20,5	35	47	75	95	187
	Lenght L	mm	200	200	230	250	250	300	350	450	500	500
	Height H	mm	214	228	234	250	278	310	338	438	465	675
	Height h	mm	70	84	90	106	118	130	158	258	330	295
	Diameter B	mm	165	185	200	220	250	285	340	405	460	580

MODELS:

Cold water up to 50°C

WARF/50
WARF/65
WARF/80
WARF/100
WARF/125
WARF/150
WARF/200
WARF/250
WARF/300
WARF/400

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PULSED WATER METERS

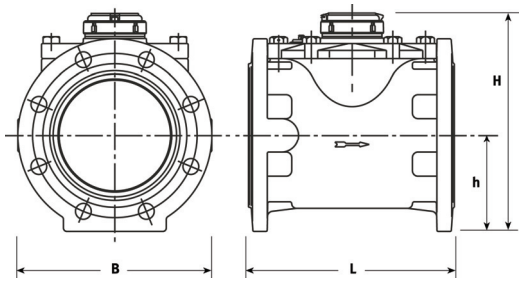
Pulse rates available for water meters with electrical output (to be stated when ordering)

WALF model from DN 50 to DN 125
Reed switch: K10 – K100 – K1000
Opto sensor + converter: analog power supply output 4/20 mA – 0/20 mA – 0/10 V
Opto sensor + divider: from K100 to K1000
Opto sensor + converter with display: instant flow rate reading

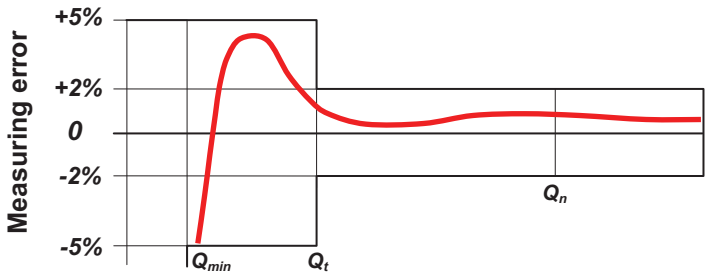
WALF model from DN 150 to DN 300
Reed switch: K100 – K1000 – K10000
Opto sensor + converter: analog power supply output 4/20 mA – 0/20 mA – 0/10 V
Opto sensor + divider: from K1000 to K10000
Opto sensor + converter with display: instantant flow rate reading

AVAILABLE OPTIONS ON REQUEST

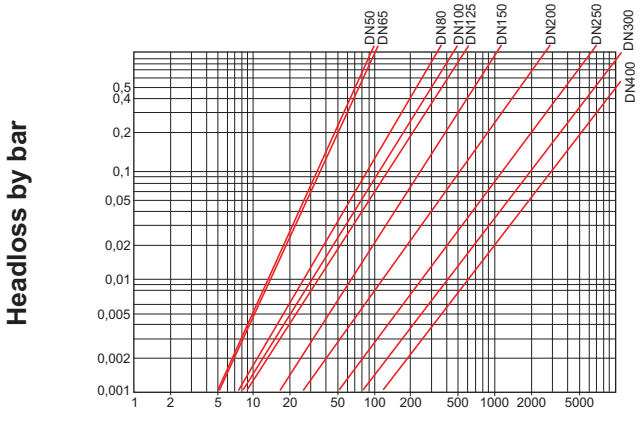
- WALC model for hot water up to 130°C with remote reading device (please refer to the specific data sheet)



TYPICAL ERROR CURVE



HEADLOSS DIAGRAM



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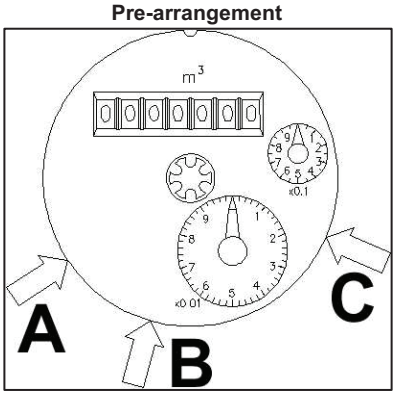
WIRF Woltmann meter for not filtered water, at free passage, for irrigation

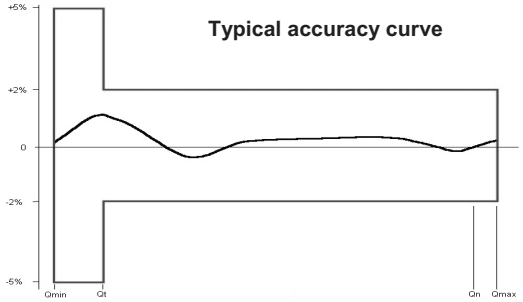
- Model WIRF DN 50...200, with cast iron body, painted with epossidic powder (internally and externally) , with flanges PN 10 or PN 16
- Designed for use with irrigation water, not filtered water, even with small suspended particles, directly from reservoirs,canals, rivers and artesian wells
- Transmission of movement through a magnetic joint
- 360° rotating dumpproof dial – direct reading on numbered drums
- The water flow through the meter at free passage , reduces head losses at their lowest; the smallstraight wings turbin, of tangential type, is only partially submerged in water
- Removable measuring insert
- Working temperature 30°C (max 50°C)
- Horizontal, vertical and inclined installation
- Pre-arranged counter for different pulse generators reed or opto electronic contact remote reading equipments (2 reed – 1 opto)
- Metallic lid with lock
- Available EEC approved according to Directive 75/33 and EEC official seal

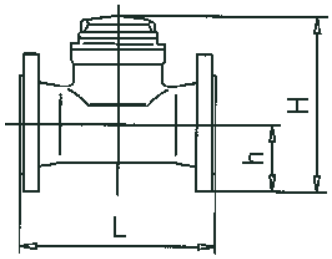
Technical Data	50	65	80	100	125	150	200
Qmax: maximum flow rate allowed for short period (m^3/h)	70	120	120	300	300	500	800
Q_n Nominal Flow rate (m^3/h)	35	60	60	150	150	250	400
Q_t (l/h)Transitional Flow rate with error ±2%	6	12	12	30	30	50	80
Q_{min} Minimum flow rate with error ±5% (l/h)	2,4	4,8	4,8	12	12	20	32
Dial register from/to (m^3)	$2 / 10^6$	$2 / 10^6$	$2 / 10^6$	$2 / 10^6$	$20 / 10^7$	$20 / 10^7$	$20 / 10^7$
L) Length (mm)	200	200	225	250	250	300	350
H) Maximum height to extract measuring insert(mm)	240	250	260	270	285	315	345
h)Tube-flat base interaxis (mm)	75	85	95	105	120	135	180
Pre-arrangement reed (B – C)	0,1 - 1	0,1 - 1	0,1 - 1	0,1 - 1	0,1 - 1	1 - 10	1 - 10
Pre-arrangement opto (A)	0,001	0,001	0,001	0,001	0,001	0,01	0,01
Weight (kg)	11	12	14	18	22	27	40

Pre-arrangement



Typical accuracy curve





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