G2 misuratori

THE VALUE OF METERING

CE MID

SMART METERS

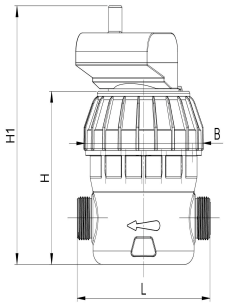
VOLUMETRIC Smart meter, **rotary piston**, 8-digit-rolls direct reading with data transmission via **radio frequency 868 Mhz**, with the protocols listed below

- Meter with radio module Mod. VSF-R-CLW **LoRaWAN** protocol for **fixed network** and **LoRa for Walk-by/Drive-by**
-Counter with radio module Mod. VSF-R-WMB **W-Mbus OMS** protocol **for Walk-by/Drive-by**
-Counter with radio module Mod. VSF-R-W+L **LoRaWAN protocol for fixed network and LoRa for Walk-by/Drive-by + W-Mbus OMS protocol for Walk-by/Drive-by**: the system automatically switches between fixed network and Walk-by/Drive-by protocols.

- ❑ With sizes DN 15-20, dry dial, for clean water, temperature class T50
- ❑ All models are MID-approved according to the current Directive (module B+D), in compliance with EN 14154 and OIML R49, achieving an R (Q3/Q1) up to 1000
- ❑ U0-D0: no straight pipework upstream and downstream of the meter required
- ❑ All models are certified for use with drinking water according to D.M. 174 of 6 April 2004
- ❑ Transmitted Data: Sensor ID, consumption data, hardware status, alarms, battery level, leaks
- ❑ Transmitted consumption data, net compensated for any reverse flows
- ❑ Multi-level cryptographic data security
- ❑ Transmitted data: Sensor ID, consumption data, hardware status, alarms, battery level, losses
- ❑ Data security via multi-level encryption
- ❑ Modification of configuration data possible from fixed network remotely and/or via radio terminal
- ❑ Available on request IP 68 version with mineral glass and copper can register
- ❑ **Available on request LoRaWAN protocol with 915Mhz frequency**

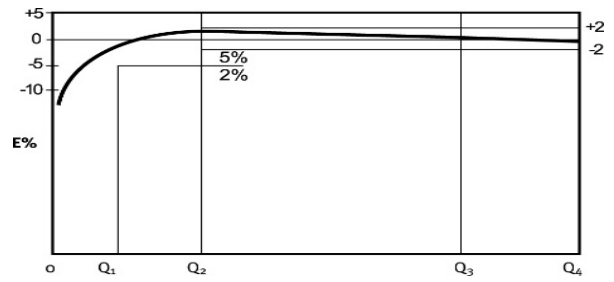
SMART METERS

Technical Data - DN	*15*	*20*
Permanent flow rate Q3 (m³/h)	***2,5***	***4***
Overload flow rate Q4 (m³/h)	*3,125*	*5*
Transitional flow rate Q2 (l/h)	8	*12,8*
Minimum flow rate Q1 (l/h)	5	*8*
Measuring range R (other R's available on request)	*500HV*	*500HV*
Starting flow	*0,5*	*0,5*
Pressure loss class ΔP (bar)	*0,63*	*0,63*
Maximum permissible operating pressure MAP (bar)	*Composite/Brass*	*Brass*
Working environmental temperature	*-25° +55°C*	
Dial indication range min / max (m³)	*16*	*16*
L) Meter length without fittings (mm)	*0,0001 / 100.000*	*0,0001 / 100.000*
Length of meter including fittings (mm) (other lengths available on request)	*110*	*190*
H) Maximum height of standard model (mm)	*190*	*290*
H1) Maximum overall height with pulse emission (mm)	*105*	*130*
B) Maximum overall diameter (mm)	*150*	*170*
Weight with fitting kit (kg)	*98,5*	*90*
Weight without fitting kit (kg)	*0,69*	*1.8*
Permanent flow rate Q3 (m³/h)	*0,49*	*1.5*

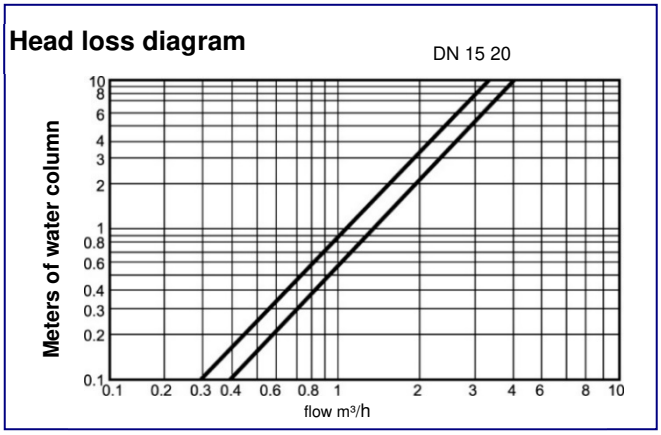


Newly developed mod. VSF DN 15, dry dial, for clean water, temperature class T50, ensuring:
- Maximum quietness (< 20dB)
- Reduced overall dimensions
- Filter system for high resistance of suspended particles

Typical error curve



Head loss diagram



Radio module specifications

Counter detection	Inductive sensor
Battery life	10 years
Environmental operating conditions	-10 °C ... +55 °C
Radio transmission activation	Via actuator on instrument body
Storage temperature	-20 °C ... +60 °C
Degree of protection	IP68
Certification	CE, European Electromagnetic Compatibility Directive

Technical characteristics of Wireless M-Bus protocol OMS certified

	Walk-by/Drive-by
Network type	Freq. 868 Mhz W-MBus OMS compliant
Transmitted data	Sensor ID, consumption data, hardware status, battery level, alarms: mechanical fraud (removal), reverse flow, low battery, leakage,temperature on site on request
Change configuration data	Possible via radio terminal
Transmission distance	Up to 500 mt in optimal conditions

Technical characteristics certified LoRaWAN protocol and LoRa model VSF-R-CWL

	Fixed Network	**Walk-by/Drive-by**
Network type	Freq. 868 Mhz prot. LoRaWAN Freq. 868 Mhz prot. LoRa with proprietary protocol (on request 915Mhz frequency)	Freq. 868 Mhz prot. LoRaWAN Freq. 868 Mhz prot. LoRa with proprietary protocol
Transmitted data	Sensor ID, consumption data, hardware status, battery level, alarms: mechanical fraud (removal), reverse flow, low battery, leaks,temperature on site on request	
Change configuration data	Possible from remote landline or via radio terminal Possible via radio terminal	Possible from remote landline or via radio terminal Possible via radio terminal
Flexibility	Automatically switches between the 2 settings according to programming	
Activation	OTAA-ABP /	OTAA-ABP /
Transmission interval	1 single reading daily and	1 single reading daily and
Transmission distance	2 daily history transmissions Configurable by day and	2 daily history transmissions Configurable by day

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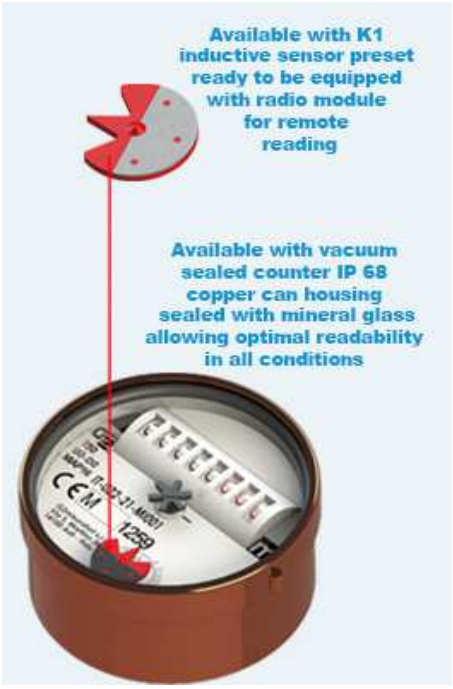
ISO 9001 • ISO 14001
ISO 45001

SMART METERS



The Company reserves the right to make changes to technical data and product illustrations.– 02/22

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