

CORONA E (PHASED OUT)

Electronic Meter | Multi-Jet



APPLICATION

Fully electronic compact water meter with impeller scanning for recording volume. Highly accurate recording of all billing data at medium temperatures up to 90 °C.

FEATURES

- Electronic sensor control for recording flow rate
- Lithium battery, lifetime up to 12 years
- Optical ZVEI interface equipped as standard
- Adjustable reading date for billing
- Rotatable integrator
- Single-line 7-digit display for easy meter reading

ELECTRONIC - BASIC FEATURES

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Ambient class	OIML R49 class C / MID E2 + M1
Protection class	IP 54 or IP 68 for cold and warm water meter
Interfaces standard	Optical ZVEI
Interfaces optional ¹	M-Bus, L-Bus, pulse

¹ Possible combinations
 - M-Bus / pulse / pulse
 - L-Bus / forward pulse
 - only M-Bus

Note: IZAR@SET / HYDRO-SET Software for configuration of meters, readout of measured values and printout of meter logs. Available under www.diehl.com/metering (Products - downloads)

TECHNICAL DATA DISPLAY

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Display indication	LCD, 7-digit
Unit	m ³ /h - l/h - m ³ - l
Total values	99,999.99
Values displayed	Flow rate

SUPPLY VOLTAGE

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Operating voltage	UN	VDC	3.0 (lithium battery)
Battery lifetime			Up to 12 years
Nominal power	PN	μW	30

INTERFACES - OVERVIEW

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Optical	ZVEI interface for communication, M-Bus protocol
M-Bus	According to EN 1434-3. Data reading and parametrization are via two wires with polarity reversal protection. (Meter is powered with energy via M-Bus Master)
L-Bus	Interface for the radio module IZAR RADIO EXTERN
Pulse	Output for volume

PULSE INTERFACE - SPECIFICATION

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Pulse rates	l/pulse	Decadic 0.1 ... 100
Display		2 digits after comma
Pulse value 1	l/pulse	0.1 (factory setting)
Pulse value 2	l/pulse	1 (factory setting)
Pulse variants		Two forward pulses; one forward and one backward pulse; pulse and direction signal

Note: In the field the pulse values can be configured as desired in the specified value range.

VOLUME- / PULSE

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Output type		Open collector
Max. frequency	Hz	90
Max. input voltage	V	30
Max. input current	mA	27
Max. voltage drop at active output	V/mA	2/27
Max. current through inactive output	μ A/V	5/30
Max. reverse voltage without destroying outputs	V	6
Min. pulse duration	ms	5.5 (at max. frequency of 90 Hz)
Max. pulse duration	s	2
Min. pulse pause	ms	5.5

GENERAL

CORONA E		
Temperature range	°C	30 (for cold water meter) / 90 (for warm water meter)
Ambient operating temperature	°C	1 ... 55
Ambient storage temperature	°C	-20 ... 55
Nominal pressure	PN	bar 10 / 16
Mounting position		In any position

TECHNICAL DATA

Nominal diameter	DN	mm	15	15	15	20	20	20
Permanent flow rate	Q ₃	m ³ /h	2.5	2.5	2.5	4	4	4
Overall length	L	mm	110	130	165	105	130	190
Overload flow rate	Q ₄	m ³ /h	3.125	3.125	3.125	5	5	5
Transitional flow rate	Q ₂	l/h	32	32	32	51	51	51
Minimum flow rate	Q ₁	l/h	20 ¹	20 ¹	20 ¹	32 ¹	32 ¹	32 ¹
Starting flow rate		l/h	3 - 4	3 - 4	3 - 4	5 - 6	5 - 6	5 - 6
Pressure loss at Q ₃	Δp	mbar	615	615	615	620	620	620
Flow rate at 0.1 bar pressure loss		m ³ /h	0.962	0.962	0.962	1.607	1.607	1.607

¹ at R 125

APPROVAL

Nominal diameter	DN	mm	15	15	15	20	20	20
Permanent flow rate	Q ₃	m ³ /h	2.5	2.5	2.5	4	4	4
Overall length	L	mm	110	130	165	105	130	190
MID (DE-07-MI001-PTB008) - T30			•	•	•			
MID (LNE 12552) - T90			•	•	•			
MID (LNE 13629) - T30/T90						•	•	•
Dynamic range (Q ₃ /Q ₁)	R		80 / 100 / 125	80 / 100 / 125	80 / 100 / 125	80 / 100 / 125	80 / 100 / 125	80 / 100 / 125

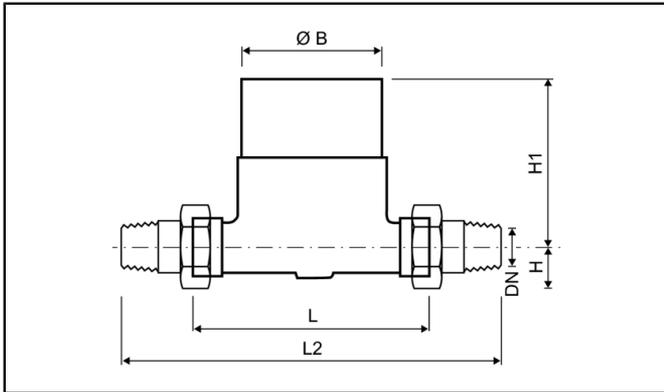
REACH

Information pursuant to Article 33 (1) of Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006:

This product series contains articles with the following substances in a concentration of more than 0.1% weight by weight (w/w):

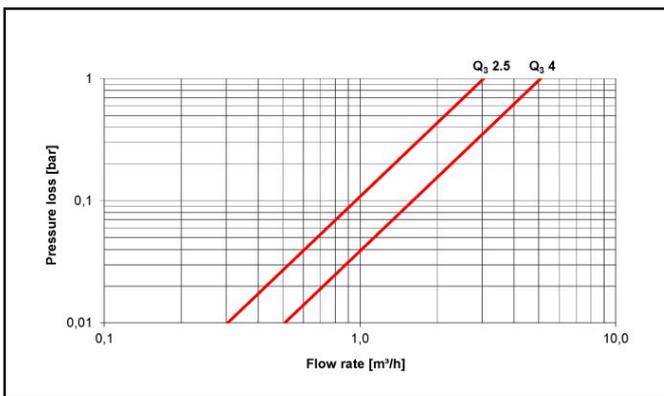
- Lead (CAS no.: 7439-92-1)
- 1,2-dimethoxyethane (CAS no.: 110-71-4)

DIMENSIONS

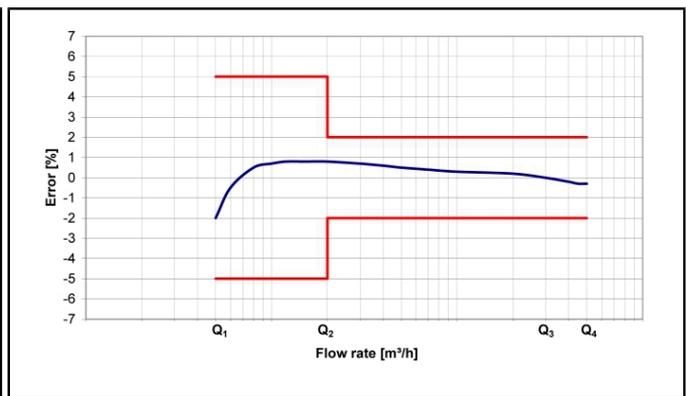


Nominal diameter	DN	mm	15	15	15	20	20	20
Permanent flow rate	Q ₃	m ³ /h	2.5	2.5	2.5	4	4	4
Overall length	L	mm	110	130	165	105	130	190
Overall length with coupling	L2	mm	186	206	241	181	206	266
Connection thread on meter		Inch	G ³ / ₄ B	G ³ / ₄ B	G ³ / ₄ B	G1B	G1B	G1B
Connection thread of coupling		Inch	R ¹ / ₂	R ¹ / ₂	R ¹ / ₂	R ³ / ₄	R ³ / ₄	R ³ / ₄
Height	H	mm	20	20	20	20	20	20
Height	H1	mm	75	75	75	75	75	75
Diameter	Ø B	mm	62	62	62	62	62	62
Weight without coupling		kg	0.8	1	1.3	0.8	1	1.5
Weight with coupling		kg	1	1.2	1.5	1.3	1.5	2

PRESSURE LOSS GRAPH / TYPICAL ERROR GRAPH



Pressure loss graph



Typical error graph

Economic Actor Information

Applicable regulation and legal obligations for products may change.

DIEHL METERING monitors applicable regulation to ensure their products comply at the date of placing on the market.

Each economic actor making products available on the market thereafter must independently keep informed about the current applicable regulation.

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