

# CORONA ER

ELECTRONIC METER | MULTI-JET

**DIEHL**  
Metering



## 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

- ▶ Inbuilt radio module 868 MHz
- ▶ 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

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## ELECTRONIC - BASIC FEATURES

CORONA ER	
Ambient class	OIML R49 class C / MID E2 + M1
Protection class	IP 54 or IP 68 for cold and warm water meter
Interfaces	Optical ZVEI, radio

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](http://www.diehl.com/metering) (Products - downloads)

## TECHNICAL DATA DISPLAY

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

## SUPPLY VOLTAGE

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

## INTERFACES - OVERVIEW

CORONA ER	
Optical	ZVEI interface for communication, M-Bus protocol
Radio	868 MHz, real data, Open Metering Standard

## RADIO INTERFACE - SPECIFICATION

CORONA ER		
Frequency	MHz	868
Protocol		Real data, open metering
Transmission power	mW	10
Transmission interval	sec.	64
Communication		IZAR OPTO HEAD BT and HYDRO-SET or IZAR@MOBILE

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## GENERAL

			CORONA ER					
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, also overhead							

## TECHNICAL DATA

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

<sup>1</sup> at R 125

## APPROVAL

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

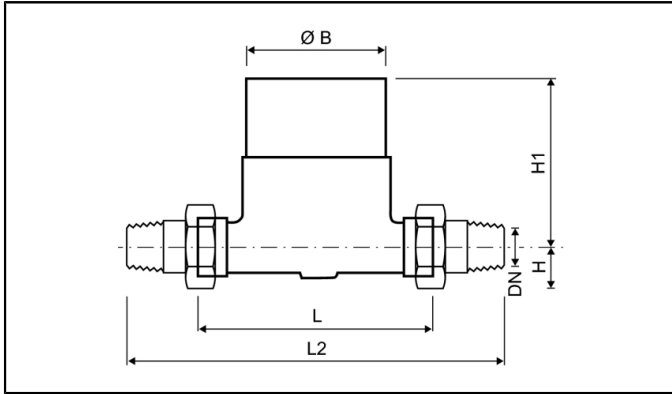
This product series contains articles with the following substances in a concentration of more than 0.1% weight by weight (w/w):

- Lead

# CORONA ER

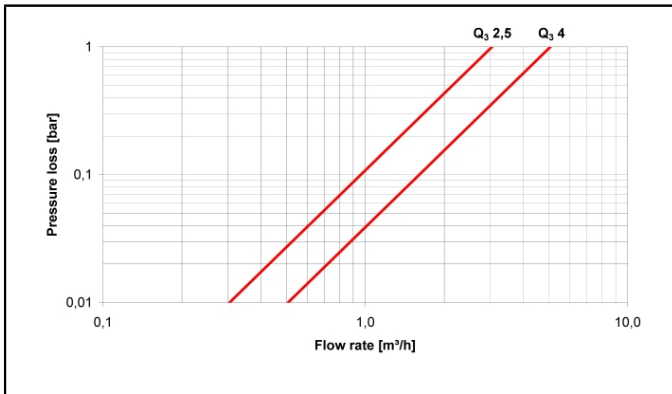
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## DIMENSIONS

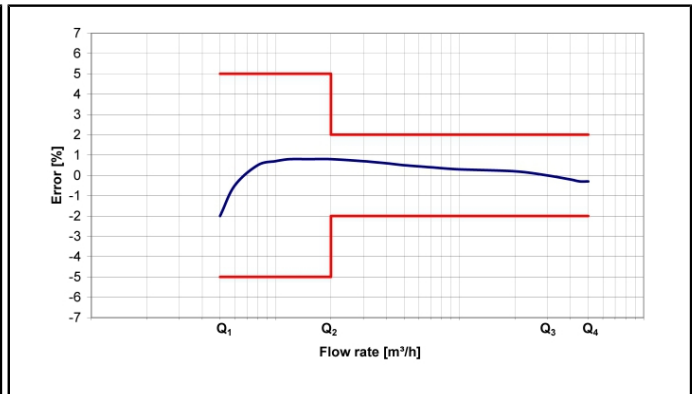


Nominal diameter	DN	mm	15	15	15	20	20	20
Permanent flow rate	Q <sub>3</sub>	m <sup>3</sup> /h	2.5	2.5	2.5	4	4	4
Overall length	L	mm	110	130	165	105	130	190
Overall length with coupling	L2	mm	186	206	241	181	206	266
Connection thread on meter		Inch	G <sup>3</sup> / <sub>4</sub> B	G <sup>3</sup> / <sub>4</sub> B	G <sup>3</sup> / <sub>4</sub> B	G1B	G1B	G1B
Connection thread of coupling		Inch	R <sup>1</sup> / <sub>2</sub>	R <sup>1</sup> / <sub>2</sub>	R <sup>1</sup> / <sub>2</sub>	R <sup>3</sup> / <sub>4</sub>	R <sup>3</sup> / <sub>4</sub>	R <sup>3</sup> / <sub>4</sub>
Height	H	mm	20	20	20	20	20	20
Height	H1	mm	75	75	75	75	75	75
Width	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