

# H4000

## Product Specification

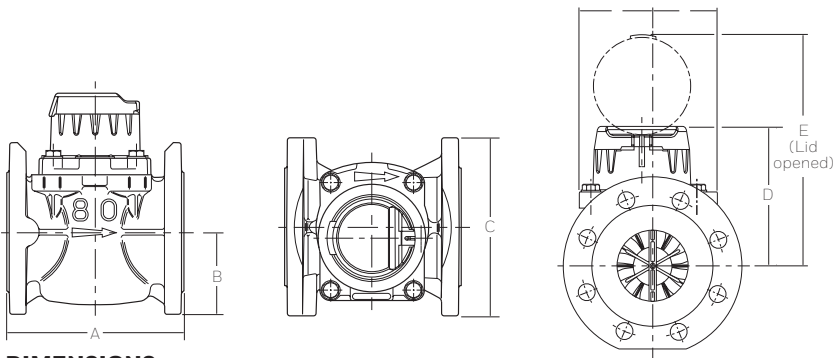


### H4000 PERFORMANCE (FORWARD FLOW)

METER SIZE (MM)	FLOW	UNITS	40	50	65	80	100	125	150	200	250	300
OVERLOAD FLOW RATE	qs±2%	m <sup>3</sup> /h	90	90	120	200	250	250	600	1000	1600	2000
PERMANENT FLOW RATE	qp±2%	m <sup>3</sup> /h	50	50	65	120	180	180	450	700	1000	1500
TRANSITIONAL FLOW RATE	qt±2%	m <sup>3</sup> /h	1	1	1.5	2	2	2	4	6	11	15
MINIMUM FLOW RATE (HORIZONTAL)	qmin±5%	m <sup>3</sup> /h	0.35	0.35	0.4	0.5	0.6	0.6	1.8	4	6	12
MINIMUM FLOW RATE (VERTICAL)	qmin±5%	m <sup>3</sup> /h	0.45	0.45	0.75	1.2	1.2	1.2	4.5	7.5	12	18
STARTING FLOW (APPROXIMATELY)		m <sup>3</sup> /h	0.15	0.16	0.17	0.22	0.25	0.25	0.9	1.2	1.8	1.8
HEADLOSS AT MAXIMUM FLOW		bar	0.84	0.49	0.69	0.27	0.43	0.58	0.33	0.32	0.37	0.58
MAXIMUM REGISTRATION		millions of m <sup>3</sup>	1	1	1	1	1	1	10	10	10	10
MAXIMUM WATER TEMPERATURE		°C	50	50	50	50	50	50	50	50	50	50
MAXIMUM WORKING PRESSURE		bar	16	16	16	16	16	16	16	16	16	16

### STANDARD 2004/22/EC MID MI-001

METER SIZE		mm	40	50	65	80	100	125	150	200	250	300
OVERLOAD FLOW RATE	Q4	m <sup>3</sup> /h	79	79	79	200	200	200	500	787.5	1250	2000
PERMANENT FLOW RATE	Q3	m <sup>3</sup> /h	63	63	63	160	160	160	400	630	1000	1600
TRANSITIONAL FLOW RATE	Q2	m <sup>3</sup> /h	0.81	0.81	1.6	2.05	2.05	2.05	3.2	6.3	10	20.48
MINIMUM FLOW RATE	Q1	m <sup>3</sup> /h	0.5	0.5	1	1.28	1.28	1.28	2	3.94	6.25	12.8
TURNDOWN RATIO R	Q3/Q1	R value	125	125	63	125	125	125	200	160	160	125
HEADLOSS AT Q3	ΔP	bar	0.39	0.24	0.19	0.18	0.18	0.24	0.15	0.12	0.15	0.37

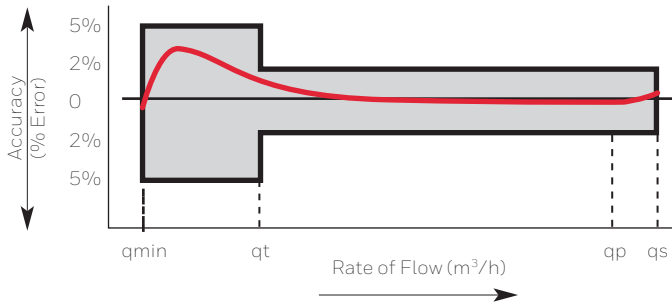


### DIMENSIONS

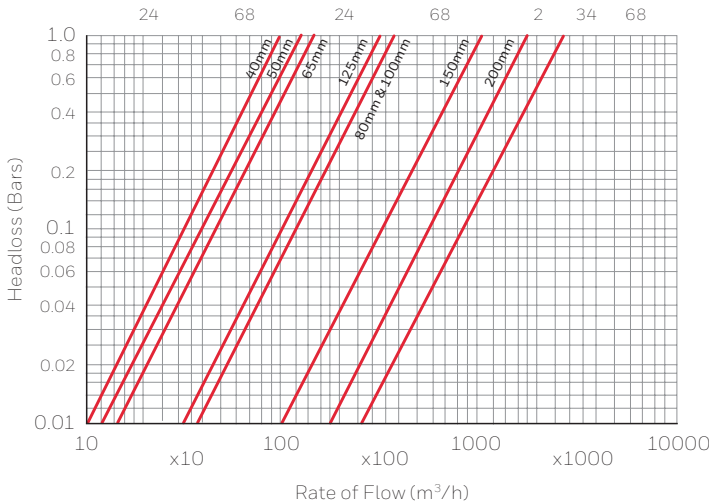
METER SIZE (mm)	UNITS	40	50	65	80	100	125	150	200	250	300
OVERALL LENGTH (ISO) (A)	mm	300	200/300	200/300	200/350	250/350	250	300/500	350	450	500
OVERALL LENGTH (KENT) (A)	mm	311	311	-	413	483	-	-	520	-	-
HEIGHT (B)	mm	78	78	86	94	106	118	135	165	198	225
HEIGHT (D)	mm	148	148	148	159	159	159	206	228	246	246
HEIGHT (E)	mm	236	236	236	247	247	247	294	316	334	334
FLANGE DIAMETER (C)	mm	151	166	186	201	228	251	286	341	409	461
WEIGHT (ISO)	kg	11.8	12.2/13.1	13/14.4	14.1/16.6	19.4/21	20.5	37.5/43.5	47.5	82	104
WEIGHT (KENT)	kg	12	13.3	-	17.6	23.6	-	-	54	-	-

# H4000 Product Specification

## TYPICAL ACCURACY CURVE



## TYPICAL HEADLOSS CURVE



## PULSE CONNECTIVITY

### Calculating pulse weights when fitted with PR7 inductive pulser:

Pulse weight is calculated by multiplying the register 'pulse factor' (P) by the PR7 'K-factor' (K);

$$\text{Pulse weight (litres per pulse)} = P \times K.$$

SIZE	PULSE FACTOR	K-FACTOR			
		K1	K10	K100	K1000
40mm	P:1	1 ltr	10 ltrs	100 ltrs	1,000 ltrs
50mm	P:1	1 ltr	10 ltrs	100 ltrs	1,000 ltrs
65mm	P:1	1 ltr	10 ltrs	100 ltrs	1,000 ltrs
80mm	P:1	1 ltr	10 ltrs	100 ltrs	1,000 ltrs
100mm	P:1	1 ltr	10 ltrs	100 ltrs	1,000 ltrs
125mm	P:1	1 ltr	10 ltrs	100 ltrs	1,000 ltrs
150mm	P:10	10 ltrs	100 ltrs	1,000 ltrs	10,000 ltrs
200mm	P:10	10 ltrs	100 ltrs	1,000 ltrs	10,000 ltrs
250mm	P:10	10 ltrs	100 ltrs	1,000 ltrs	10,000 ltrs
300mm	P:10	10 ltrs	100 ltrs	1,000 ltrs	10,000 ltrs

PR7 is an open collector pulse transmitter suitable for data logging, AMR and telemetry equipment. Check with your equipment supplier for full details of compatibility.

Pressure equipment directive 97/23/EC. This product is applicable in networks for the supply, distribution and discharge of water and associated equipment and is therefore exempt.

### For more information

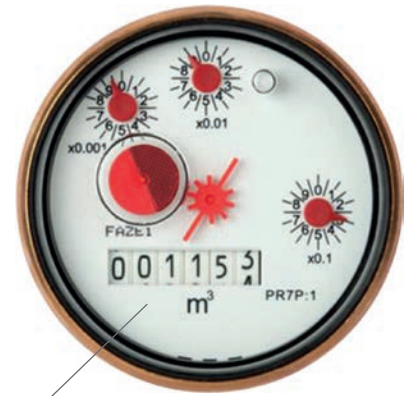
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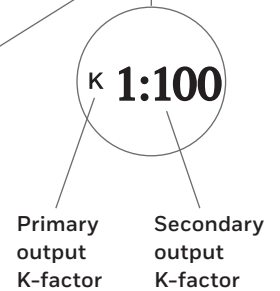


On this example 50mm H4000 register, the user can identify from the dial plate both the:

- Type of pulser to use, i.e. PR7
- Pulse factor, i.e. P:1



On the PR7 unit the user can identify from the label the K-factors for each output channel



Primary output K-factor

Secondary output K-factor

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