

FEATURES:

- Counter may be rotated through 360°.
- Accuracy $\pm 2\%$ to Class B. EEC approved.
- Can pass small solids without jamming.
- Low head losses ideal for gravitational flows
- Optional Pulse Output can be retro-fitted
RD10: 1 pulse / 10 Litres, RD100: 1 pulse / 100 Litres
- Ideal as a resettable meter when connected to ManuFlo ME5-T-B Indicator.
- Table D flanged ends for process applications.
- Hermetically sealed register (IP68).
- Powder coating affords maximum corrosion protection.
- With NMI-M10 - AS4747 Australian Pattern Approval including NSW DPIE
- Not affected by external magnetic fields.



The WPD is a high capacity in-line Woltmann helical rotary type meter with a precision injection moulded measurement mechanism suitable for high and sustained flows associated with bulk metering. Low pressure loss characteristics are due to minimum restriction and no change in flow direction as water flows through the meter.

Standard Features

- The WPD range exceeds Measurement Class 2 requirements of the Australian Standard AS 3565.1-1998 (Meters for cold potable water) in horizontal, vertical and inclined pipelines. The counter can be rotated 360°. Flanges are drilled to Australian Standard AS 2129 Table D. Maximum working pressure is 1600 kPa (PN16. Optional PN25 is available). Maximum working temperature is 50°C. As standard with NMI-M10 - AS4747 Australian Pattern Approval including NSW DPIE.

Measurement Mechanism

The measurement mechanism provides optimum long term accuracy, extended wear life and reduced maintenance.

The balanced rotor has a specific gravity of 1.0 to minimise bearing loads and reduce friction. This ensures that even the slightest movement of water will be translated to the rotor, giving improved flow sensitivity at low flows.

Remote / Electronic Reading

All WPD meters can be fitted with pulse output capability, either at time of order or the optional pulse units can easily be retrofitted on site without breaking the calibration seal or interrupting the supply. The reed switch pulse units give 1 pulse per 10 Litres, which can be used for datalogging or to connect to an external resettable Totaliser Indicator e.g. ManuFlo ME5-T-B.

Materials

All WPD meters are manufactured from the highest quality materials, ensuring maximum resistance to wear and corrosion. The meter body is powder coated for protection in all environments.

Options

- Reed switch pulse unit (RD10) for use with data loggers, remote counters and process control equipment.
10 litres/p for 40, 50, 65, 80 & 100mm
100 litres/p for 150mm.
- Integral mounted or remote battery operated totalising counters with LCD display (ManuFlo ME5-T-B or FRT303-B).
- PN25 pressure rating.

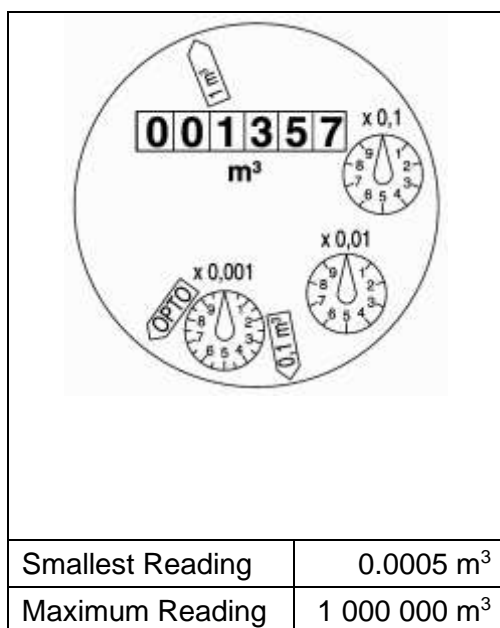



WPD65-RD10 65mm meter with pulser wired to **ME5-T-B** LCD resettable counter integral mounted with **BM** bracket.

IDEAL FOR CUSTODY WATER TRANSFER APPLICATIONS.

COUNTER

OPTIONAL PULSER



RD10

1 pulse / 10 or 1000 litres
40, 50, 65, 80, 100mm



150mm > is 100 or 1000 ltr./p.



Pattern Approval Sign

Installation

D95	Nominal Diameter DN 40 ... DN 300
6.132.36	Marking: Metrological class B 30 °C
D80	Nominal Diameter DN 400
6.132.01	Marking: Metrological class B 30 °C

Pipe	horizontal vertical inclined	
Meter head	upwards sideways	

Installation Requirements

Unrestricted straight pipe in front of the meter 3 x DN (DN400 5 x DN)
No abrupt restrictions directly behind the meter

PERFORMANCE TABLE:**Performance data WP-Dynamic 50 °C**

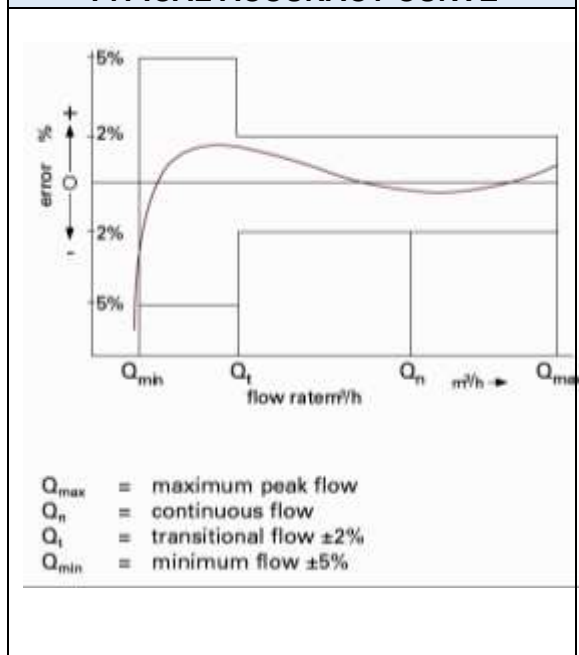
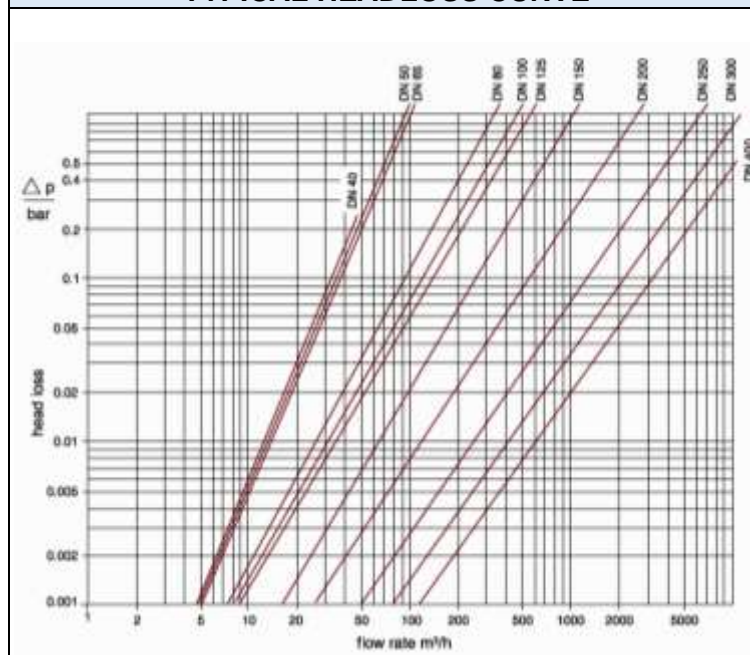
Nominal Diameter	DN	40	50	65	80	100	125	150	200	250	300
Size of meter (acc. to EEC)	Q_n	10	15	25	40	60	100	150	250	400	600
Q_{max}	maximum peak flow once in life time 24 h Q_{max} or 5 min. $1,2 \times Q_{max}$ ($\pm 2\%$)	m^3/h	60	90	120	200	300	350	600	1200	2000
Q_n	continuous flow ($\pm 2\%$)	m^3/h	40	50	70	120	230	250	450	800	1250
Q_t	transitional flow ($\pm 2\%$)	m^3/h	0.8	0.7	0.8	0.8	1.8	2.0	4.0	6.0	11.0
Q_{min}	minimum flow ($\pm 5\%$)	m^3/h	0.30	0.30	0.40	0.50	0.80	1.00	1.8	4.0	6.0
	starting flow	m^3/h	0.15	0.15	0.20	0.25	0.25	0.5	1.0	1.5	3.0

Performance data according to EEC-specification 30 °C class B

Nominal Diameter	DN	40	50	65	80	100	125	150	200	250	300
Size of meter (acc. to EEC)	Q_n	10	15	25	40	60	100	150	250	400	600
Q_{max}	maximum peak flow short time	m^3/h	30	30	50	80	120	200	300	500	800
Q_n	continuous flow	m^3/h	15	15	25	40	60	100	150	250	400
Q_t	transitional flow	m^3/h	3.0	3.0	5.0	8.0	12.0	20.0	30	50	80
Q_{min}	minimum flow	m^3/h	0.45	0.45	0.75	1.20	1.80	3.00	4.5	7.5	12.0

Maximum working pressure	1600 kPa
Maximum working temperature	50°C
Flanges	drilled to Australian Standard AS 2129 Table D

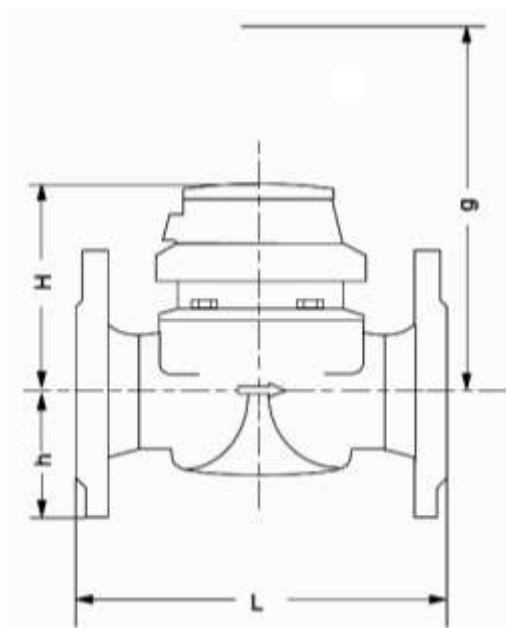
MATERIALS	
Body	cast iron
Measuring element	plastic
Rotor	plastic
Other materials used	brass, stainless steel

TYPICAL ACCURACY CURVE**TYPICAL HEADLOSS CURVE**

DIMENSIONS and WEIGHTS:

Nominal Diameter			DN	40	50	65	80	80	100	125	150	200	250	300
Size of meter (acc. to EEC)			Q _n	10	15	25	40	40	60	100	150	250	400	600
Dimensions	overall length	L *)	mm	220	200	200	200	225	250	250	300	350	450	500
	height	H	mm	120	120	120	150	150	150	160	177	206	231	256
		h	mm	69	73	85	95	95	105	118	135	162	194	226
		g	mm	200	200	200	270	270	270	280	356	441	466	491
Weights	meter		kg	7.4	7.7	10.0	13.6	14.0	18.0	20.5	35.5	50.5	72.3	99.3
	measuring element		kg	1.4	1.4	1.4	3.0	3.0	3.0	3.0	5.5	7.5	7.5	7.5
	body		kg	6.0	6.3	8.6	10.6	11.0	15.0	17.5	30.0	43.0	63.8	91.8

↑ ↑
ISO Short and Standard length

**NOTE:**

Overall Length is different with
mains water master billing meter for
Sydney Water NSW
e.g. 80mm size =413mm

ORDER CODES

Flowmeter Order Code	Size
WPD40	40 mm
WPD50	50 mm
WPD65	65 mm
WPD80	80 mm
WPD100	100 mm
WPD125	125mm
WPD150	150mm
WPD200	200mm
WPD250	250mm
WPD300	300mm

Option Order Code	Description
RD10	Reed Switch pulse output, 1 pulse / 10 Litres
RD100	As above but, 1 pulse / 100 litres
ME5-T-B	Resettable 5-digit Totaliser Indicator. IP65 enclosure. Internal Lithium battery powered
FRT303-B	LCD Flowrate, reset Total and Grand Totaliser indicator. IP65 enclosure. Internal Lithium battery powered
BM	Integral bracket mount plate: Makes ME5-T-B or FRT303-B as integral unit to meter
-PN25	PN25 pressure rating.
-HW	Hot water option to 120C

Due to continuous product improvement, specifications are subject to change without notice.

ManuFlo®™

Flow Measurement & Control Products

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a division of

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