



**Delta  
Perdana**

**THE FOREMOST  
NAME IN  
HIGH QUALITY  
WATER METER**



**DPM 15B - 40B**



**VOLUMETRIC ROTARY  
PISTON WATER METER**

GPRO Valve Sdn Bhd  
7, Lot 752 Jalan Subang 3, Tmn. Perindustrian Sg. Penaga,  
47610 Subang Jaya, Selangor, malaysia.  
Tel: +6 03 8023 6900 Whatsapp: +6 017 717 6900  
Website: [www.gprovalve.com.my](http://www.gprovalve.com.my)  
Email: [info@gprovalve.com.my](mailto:info@gprovalve.com.my)



## VOLUMETRIC ROTARY PISTON WATER METER / DPM - 15B / 15S / 20B / 25B / 40B

### Application

- Measuring the volume of cold water passing through the pipeline.

### Working Conditions

- Water temperature:  $\leq 50^{\circ}\text{C}$
- Water pressure:  $\leq 1.6\text{ MPa}$

### Construction

- The meter mainly consists of an upper body, a lower body, a chamber, a piston and a register.

### Working principle

- The working principle is based on calibrated chamber of known capacity and a rotary piston activated by the energy of the flow that is passing through.
- The piston rotates while the chamber fills up and empties with a constant volume of water. By counting these cycles, the register indicates the total volume that has been registered.

### Selection Unit of Measurement

- Cubic meter ( $\text{m}^3$ )

### Features

- Ensure high sensitivity and accurate registration throughout a wide flow range.
- Low starting flow rate.
- Requires no calibration throughout life span.
- Engineered Liquid-sealed register for easy and long term clear reading.
- Corrosion resistant body
- Internal check-valve.
- Internal strainer
- Can be equipped with reed switch option.

### Compliance with Standard

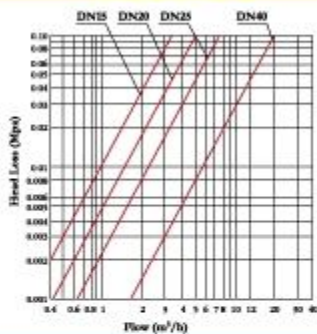
- Technical data conforms to the ISO 4064 standards.

### Items Included

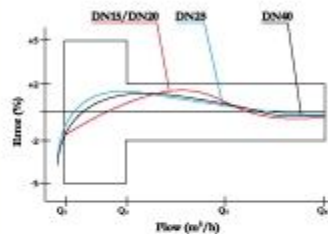
- With every water meter, there will be two pieces of coupling, two pieces of gaskets and two pieces of meter threads protectors.

Note : To protect the meter threads, store the meter with thread protectors in place.

Head Loss Curve



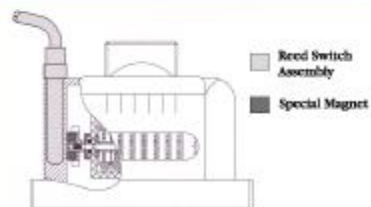
Accuracy Curve



With Reed Switch Option



Sectional View



**\* Read Switch Features:-**

**(A) Description**

- The special version DPM-15B/15S/20B/25B/40B Water Meter can be equipped with a reed switch assembly for connection to remote reading systems without breaking the meter seal.
- The reed switch pulser transmit electric signal per a preset water quantity.

**(B) Data Output Options**

- Special meter comes with the following variations :  
DPM-15B /15S /20B /25B: 2 pulse for 1 liter.  
DPM40B: 2 pulse for 10 liter.

**(C) Technical Information**

- The reed switch pulser consists of a plastic housing with a reed switch.

Pulser wiring	2 core cable, 1.5m (L) x 3.5mm (ø)
Reed switch	single type
Power	external (Vmax-24AV/DC, Imax-0.01A)

**Installation**

- The meter can be installed in any position but the flow direction must follow the marking as stated on the body in figure 1.
- The pipeline should be properly cleansed before installing the meter.
- This meter can only be used for cold water and not for hot water, or any other corrosive chemicals.
- Installation of the meter is highly recommended on a properly aligned pipe stand.
- The meter should not be installed submerge under water.

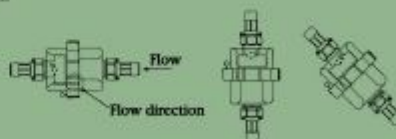
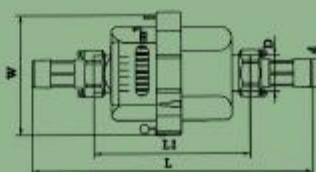


Figure 1



**Dimension And Weights**

	DN	15	20	25	40	
Normal diameter	DN	15	20	25	40	
Thread Connection	D	G¾B	G1B	G1½B	G2B	
Connector thread	d	R½	R¾	R1	R1½	
Body length	mm	LI	115	130	170	300
Overall length	mm	L	209	234	290	431
Width	mm	W	91	96	112	174
Weight without connectors	kg		0.93	1.2	1.8	6.5
Weight with connectors	kg		1.10	1.48	2.32	7.54

**Technical Specifications**

Diameter	DN	15	20	25	40	
Maximum flow rate	m³/h	Q₄	3.0	5.0	7.5	20.0
Nominal flow rate	m³/h	Q₃	2.5	4.0	6.0	16.0
Transition flow rate	l/h	Q₂	26	40	65	160
Minimum flow rate	l/h	Q₁	16	25	40	100
Starting flow rate	l/h		4	5	6	8
Maximum reading	m³		9999.99998		9999.99998	
Minimum reading	m³		0.00002		0.00002	

**Maximum Permissible Error (MPE):**

- MPE at flow rate Q₁ : ± 5%.
- MPE at flow rate Q₂, Q₃, Q₄ : ± 2%.

# VOLUMETRIC ROTARY PISTON WATER METER / DPM - 15B / 15S / 20B / 25B / 40B

NO	NAME	QTY
1	Hinge pin	1
2	Lid	1
3	Wire and lead seal	1
4	Upper body	1
5	O-ring	1
6	Register	1
7	Transmission assembly	1
8	Spring	1
9	Clamp	1
10	Slide	1
11	Shaft	1
12	Cover	1
13	Dog	1
14	Piston	1
15	Bushing	1
16	Division plate	1
17	Measuring chamber	1
18	Inlet strainer	1
19	Non-return valve	1
20	Body O-ring	1
21	Lower body	1
22	Retaining ring	1
23	Gasket	2
24	Coupling end tail	2
25	Brass Coupling nut	2
26	Screw	1
27	Reed switch assembly	1
28	Upper body for reed switch (optional)	1
29	Register for reed switch (optional)	1

### Detailed Parts List



### With Reed Switch Option



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