



# Diaphragm Gas Meters

## MDA Series for Industrial and Commercial use

Itron manufacture an extensive range of industrial gas meters in their factories in both the UK and Germany. The range encompasses Diaphragm, RPD and Turbine technologies. Itrons extensive experience and breadth of technology allows users to select the best technology meter for a specific task, secure in the knowledge that they are selecting from meters with performance second to none.

The Manchester site at Stretford has been famous for the manufacture of high quality diaphragm meters for many years, and the "U" series meters are highly regarded technically around the world. The Itron factory in Manchester was opened in 1919 and was one of the first gas meter factories to achieve ISO9001 and ISO14001 accreditation.

### Replacing Industrial Meters.

Managing the replacement of meters in the UK is becoming an increasingly competitive business, and savings have to be made where this is possible. The U series meters offer the Meter Asset Manager financial benefits in two distinct areas: size for size

replacement, and pressure drop matching.

### Size for size Replacement

When ownership issues or service life of a meter force it's replacement, then the simplest solution is to use a meter of identical dimensions. This means that there is no need to spend time and money modifying pipework: if the meter height, width, and depth are the same, then the work is straightforward. Meters that only have the same connections may require that the pipework be altered to allow for different heights, widths, and depths, an expensive business, especially on the larger sizes of meters.

### Pressure Drop Match

Replacing a meter with one of similar design and technology means that only a simple check of meter outlet pressure should be necessary after installation. Meters of different design may require adjustment of regulators and safety devices to deliver gas to the customer at their required pressures and flow rates.

### > Long-term performance

- High accuracy and reliability
- Low pressure loss.

### > New Design Features

- Pulse-ready index
- New 5 litre engine for MDA25 & MDA40 Models.

## Design Features

The "U" Series of diaphragm meters cover flow rates from 0.04m<sup>3</sup>/h to 160m<sup>3</sup>/h. Diaphragm meter technology gives long life, accuracy and the ability to register very small gas flows. The high performance of the modern Diaphragm meter is due to a combination of the use of proven material technology, a stable design, and diligence in manufacturing. Key features are:-

### *Fixed stroke measuring units*

The U series meters all feature fixed stroke measurement units leading to enhanced stability and accuracy and allowing all calibration to be performed in the index.

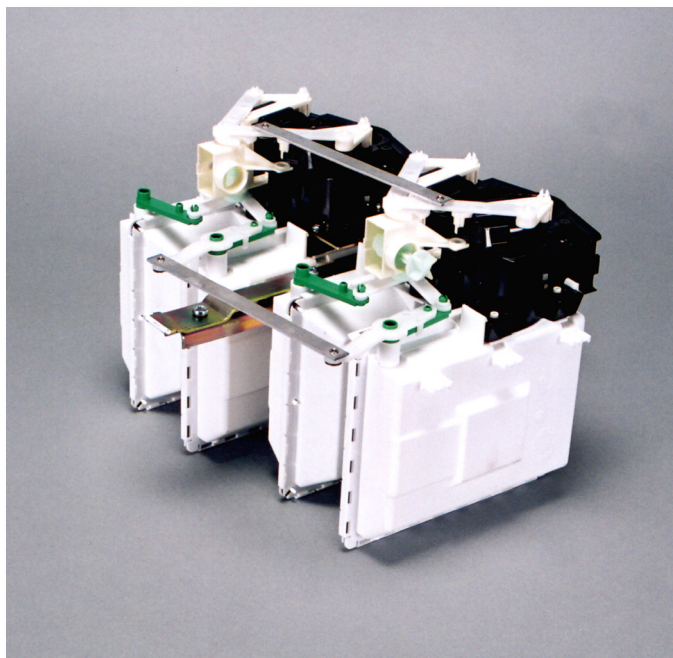
### *Life lubricated bearings*

Modern materials and the latest moulding and machining techniques mean that there is no requirement for lubrication of the meter during its normal operating life. In fact, there is no routine maintenance requirement for the U series meters.

#### > MDA16



#### > MDA25



### *Synthetic Diaphragms*

A strong partnership with our suppliers means that Diaphragms are manufactured to a specification unique to UK requirements. These diaphragms are designed to operate for extended periods while exposed to the worst that the gas network can deliver.

### *Radial Valve Design*

Radial valves constructed from low friction materials give the U series meters exceptional low flow accuracy, and deliver low pressure drop across the whole flow range.

### *Casework*

Coated steel casework, insulating feet, and an integral support bar mean that the U series range are extremely robust and can be installed with confidence in almost any application.

## Manchester

Manchester has a long association with the manufacture of Gas meters. Parkinson Cowan opened the factory in 1919 and it was latterly part of the Schlumberger group of companies. Occupying about 4 Hectares, the Itron factory is located within 1 mile of both Old Trafford Football and Cricket grounds.

Stretford's main function is the production of high volume quality diaphragm gas meters for domestic and commercial and industrial applications with flow rates up to 160 m<sup>3</sup>/hr. Additionally, Stretford has facilities to test repair and badge R.P.D. and Turbine Gas Meters manufactured by sister companies, and also to manufacture Gas Metering Modules for commercial and industrial applications. Itron UK Water division is also based at the Stretford site.

## Aerial view of Stretford factory



## Full range of UK diaphragm meters.



### > MDA40



### > MDA65



### > MDA100

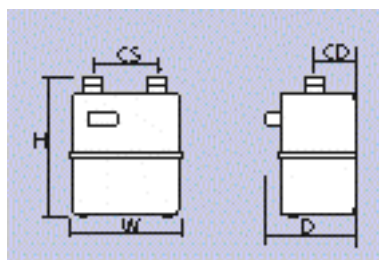


### > MDA160



Model Number		MDA16	MDA25	MDA40
Capacity	m <sup>3</sup> /h	16	25	40
Working Pressure	mbar	75	75	75
Pressure Absorption	mbar	1.22	1.62	1.22
Cyclic Volume	litre	4	5	10
Depth	mm	346	308	381
Width	mm	343	406	553
Height	mm	283	415	496
Connection Size	BS 746	11/4"	2"	2"
Connection Separation	mm	152.4	250	280
Connection Distance	mm	160	135	178
Weight	kg	9.5	16.4	28.0

Model Number		MDA65	MDA100	MDA160
Capacity	m <sup>3</sup> /h	65	100	160
Working Pressure	mbar	75	75	75
Pressure Absorption	mbar	2.36	1.32	2.91
Cyclic Volume	litre	25	50	71.4
Depth	mm	385	552	552
Width	mm	614	775	775
Height	mm	545	630	660
Connection Size	PN10, DN	65	80	100
Connection Separation	mm	335	430	430
Connection Distance	mm	178	271	271
Weight	kg	41.8	70.0	75.0



### About Itron Inc.

Itron Inc. is a leading technology provider to the global energy and water industries. Our company is the world's leading provider of metering, data collection and utility software solutions, with nearly 8,000 utilities worldwide relying on our technology to optimize the delivery and use of energy and water. Our products include electricity, gas and water meters, data collection and communication systems, including automated meter reading (AMR) and advanced metering infrastructure (AMI); meter data management and related software applications; as well as project management, installation, and consulting services. To know more, start here: [www.itron.com](http://www.itron.com)

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