

U Series Diaphragm Meters For I & C Gas

- ▶ Manufactured to EN1359
- ▶ Ideally suited to meter replacement activities
- ▶ Long-term accuracy and reliability
- ▶ low pressure loss
- ▶ Maintenance free
- ▶ Integral LF pulse output
- ▶ Excellent turn-down performance
- ▶ Flow rates to 160m³/hour
- ▶ All models OFGEM approved
- ▶ All models ATEX certified

Actaris 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. Actaris' 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 Actaris factory in Manchester was opened in 1919 and was one of the first gas meter factories to achieve ISO9001 and ISO14001 accreditation.



▶ The "U" Series industrial meter range

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 its 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.

Design Features

The "U" Series of diaphragm meters cover flow rates from 0.04m³/h to 160m³/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:-

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.



▶ The "U" Series industrial meters are part of the Stretford manufactured product range

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.

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

Terne-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.

Meter Modules

Actaris can provide meter modules equipped with meters from the MDA16 through to turbine meters for flows of up to 6500m³/hr.

Diaphragm meter modules for medium pressure feature:-

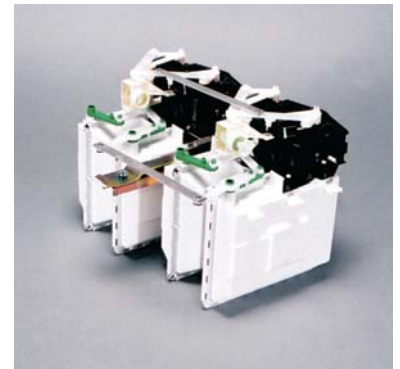
- ▶ Modules constructed with Actaris MDA ("U") Series diaphragm meters can offer very cost effective metering where rangeability is a key issue.
- ▶ Built to IGE/GM/1
- ▶ Flow rates from 16m³/h to 160m³/h
- ▶ British Manufactured meters for long life and reduced maintenance.
- ▶ Can be supplied with Kiosk.



U16 - Innovation with experience

The U16 meter was a departure from previous metering techniques. Rather than the common meter engine arrangement, the U16 utilises two U6 measuring units. The close-coupling was developed by engineers in Manchester to produce a lower-cost U16, while retaining the best accuracy and stability characteristics of previous meters.

This version of the U16 has been in production for nearly 10 years. Externally, it has the case strength required for UK installations while internally the metering engines work together providing excellent metrological performance and minimal pressure absorption.



- ▶ The U16 measuring unit assembly includes two U6 measuring units.

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 Actaris factory is located within 1 mile of both Old Trafford Football and Cricket grounds.

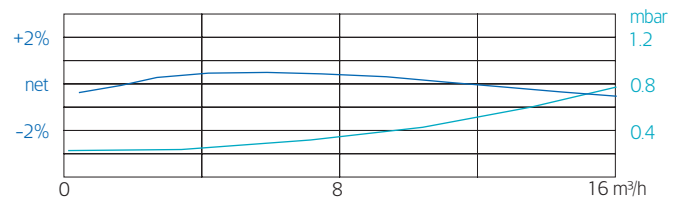
Stretford's main function is the production of high volume quality diaphragm gas meters for

domestic and commercial and industrial applications with flow rates up to 160 m³/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. Actaris UK Water division is also based at the Stretford site.

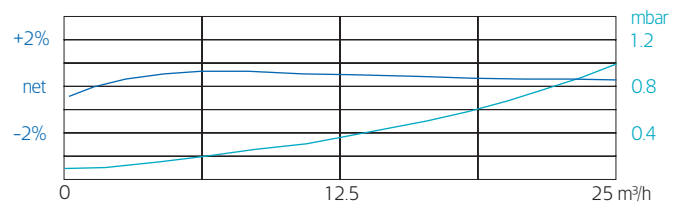


Typical Accuracy and Pressure Absorption

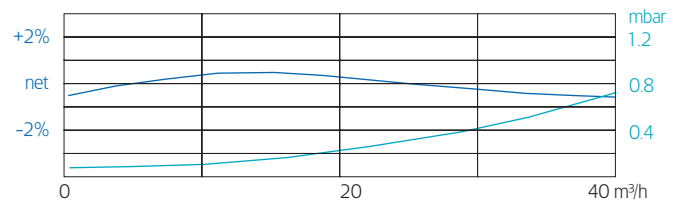
MDA16



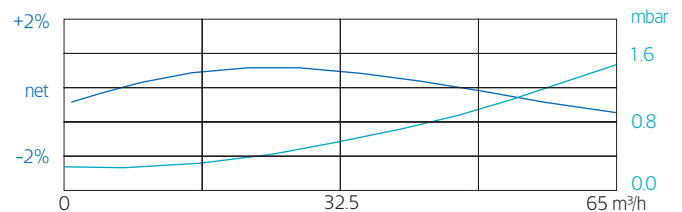
MDA25



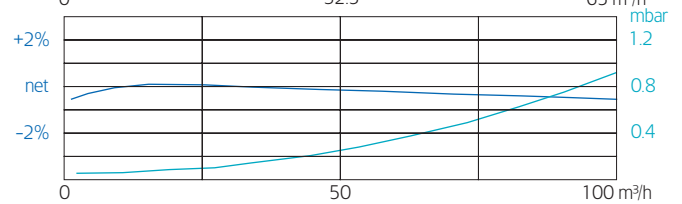
MDA40



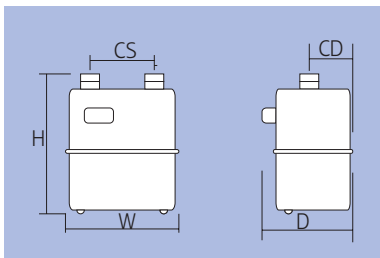
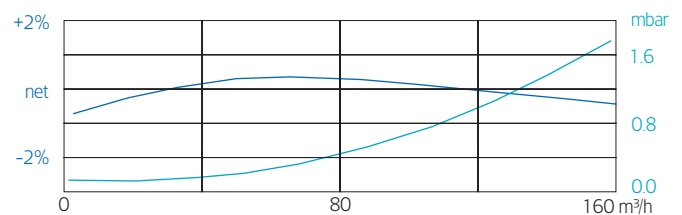
MDA65



MDA100



MDA160



Meter Model	Capacity m³/h	Depth mm	Width mm	Height mm	Connection Size	Connection separation mm	Connection Distance mm	Working Pressure mbar	Pressure Absorption mbar	Cyclic Volume l	Weight kg
MDA16	16	346	343	283	1 1/4" Male BS746	152.4	160	75	1.22	4	9.5
MDA25	25	308	406	415	2" Male BS746	250	135	75	1.62	10	16.4
MDA40	40	381	553	496	2" Male BS746	280	178	75	1.22	20	28.0
MDA65	65	385	614	545	65mm PN10	335	178	75	2.36	25	41.8
MDA100	100	552	775	630	80mm PN10	430	271	75	1.32	50	70.0
MDA160	160	552	775	660	100mm PN10	430	271	75	2.91	71.4	75.0