

## QFM402

## Electromagnetic Flowmeter

## Overview

QFM402 Electromagnetic flowmeter is based on Faraday's law of electromagnetic induction, measuring the volume flow of conductive liquid. It mostly consists of sensor and transducer, converting the flow rate of the measured liquid in the pipe linearly into a current signal. In particular, the volume flow of strong corrosive liquids, such as strong acids and alkali, and uniform liquid-solid two-phase suspended liquids such as mud, pulp and paper pulp can also be measured.



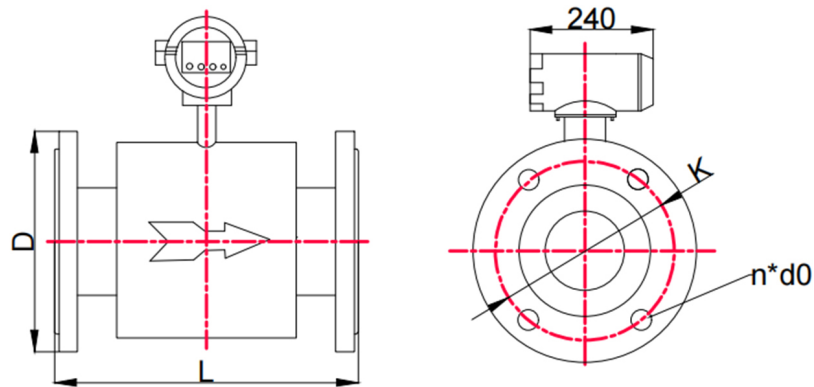
## Features

- Measurement is not affected by the variation of flow density, viscosity, temperature, pressure and conductivity
- Implementing 16 bits MCU, providing high integration and accuracy
- Flow measurement range up to 1500:1
- High definition LCD display with backlight
- RS485 or RS232 interface supports digital communication
- Intelligent empty pipe detection and electrodes resistance measurement diagnosing empty pipe and electrodes contamination accurately

## Performance Parameter

|                                |                                                                                                                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Medium Velocity Range          | 0.3~12m/s(extend to 0.1~15m/s)                                                                                                                                                                                    |
| Normal Diameter                | DN10~2600                                                                                                                                                                                                         |
| Normal Pressure                | 4.0MPa(DN10-150) ;1.6MPa(DN200-600) ;1.0MPa(DN700-1200) ;0.6MPa(DN400-2000)<br>Or other specified by order"                                                                                                       |
| Accuracy                       | 0.5%, 0.2%                                                                                                                                                                                                        |
| Fluid Temperature              | -25°C~180°C~250°C                                                                                                                                                                                                 |
| Conductivity                   | ≥5μ/cm                                                                                                                                                                                                            |
| Electrode Material             | Stainless Steel/Tantalum/Titanium/Hastelloy Alloy B/Hastelloy Alloy C/Platinum Iridium Alloy/<br>Stainless Steel Coating Tungsten Carbide/Ni                                                                      |
| Lining Material                | Chloroprene Rubber CR、Fluoroplastic ( F4、 F46、 PFA)、 Polyurethane、 Alumina Ceramic.                                                                                                                               |
| Body Flange And Shell Material | Carbon Steel、Stainless Steel、 others(Special order)                                                                                                                                                               |
| Installation Form              | Flange connection, clamp type, thread connection, insertion type                                                                                                                                                  |
| Protection Level               | IP65、 IP68                                                                                                                                                                                                        |
| Converter Power Supply         | 85~265V A.C、 11~40V D.C、 Lithium Battery                                                                                                                                                                          |
| Output Signal                  | Current/Pulse/Frequency/HART Agreement/RS232/RS485                                                                                                                                                                |
| Structure Type                 | Split Type、 Integral Type、 Plug-in Type                                                                                                                                                                           |
| Power Waste                    | 0.65W                                                                                                                                                                                                             |
| Environmental Temperature      | -25°C~60°C                                                                                                                                                                                                        |
| Converter Display Interface    | Chinese and English LCD display interface and operation interface can be switched(customizable other languages), can display instantaneous flow, cumulative flow, there are a variety of flow units for selection |
| Categories                     | Sanitary, diving, high pressure, scraper type, high temperature type, electromagnetic heat meter, etc                                                                                                             |

## Dimensions



## Ordering Guide

|        |                                 |                                                                                                       |
|--------|---------------------------------|-------------------------------------------------------------------------------------------------------|
| QFM402 | Electromagnetic Flowmeter       |                                                                                                       |
| 015    | Code (Nominal Diameter XXX(mm)) |                                                                                                       |
|        | 15 (DN15)                       | 150 (DN150) 800 (DN800)                                                                               |
|        | 20 (DN20)                       | 200 (DN200) 900 (DN900)                                                                               |
|        | 25 (DN25)                       | 250 (DN250) Q10 (DN1000)                                                                              |
|        | 32 (DN32)                       | 300 (DN300) Q12 (DN1200)                                                                              |
|        | 40 (DN40)                       | 350 (DN350) Q14 (DN1400)                                                                              |
|        | 50 (DN50)                       | 350 (DN350) Q16 (DN1600)                                                                              |
|        | 65 (DN65)                       | 450 (DN450) Q18 (DN1800)                                                                              |
|        | 80 (DN80)                       | 500 (DN500) Q20 (DN2000)                                                                              |
|        | 100 (DN100)                     | 600 (DN600) Q22 (DN2200)                                                                              |
|        | 125 (DN125)                     | 700 (DN700) Q24 (DN2400)                                                                              |
|        | Q26 (DN2600)                    |                                                                                                       |
| S      | Code                            | Structured Type                                                                                       |
|        | S                               | Split type                                                                                            |
|        | I                               | Integral type                                                                                         |
|        | P                               | Plug-In type                                                                                          |
| 16     | Code                            | Normal Pressure (MPa)                                                                                 |
|        | 40                              | 4.0MPa                                                                                                |
|        | 16                              | 1.6MPa                                                                                                |
|        | 10                              | 1.0MPa                                                                                                |
|        | 06                              | 0.6MPa                                                                                                |
|        | XX                              | Other pressures can also be supported                                                                 |
| 1      | Code                            | Electrode Material                                                                                    |
|        | 1                               | Stainless Steel                                                                                       |
|        | 2                               | Tantalum                                                                                              |
|        | 3                               | Titanium                                                                                              |
|        | 4                               | Hastelloy Alloy B                                                                                     |
|        | 5                               | Hastelloy Alloy C                                                                                     |
|        | 6                               | Platinum Iridium Alloy                                                                                |
|        | 7                               | Stainless Steel Coating Tungsten Carbide                                                              |
|        | 8                               | Other materials are also available                                                                    |
| R      | Code                            | Lining Material                                                                                       |
|        | R                               | Chloroprene Rubber (Maximum Temperature 80 Degrees),Silicone Rubber (Maximum Temperature 250 Degrees) |
|        | F                               | Fluoroplastic F4, F46, PFA                                                                            |
|        | P                               | Polyurethane                                                                                          |
|        | A                               | Alumina Ceramic                                                                                       |
| A      | Code                            | Body Flange And Shell Material                                                                        |
|        | A                               | Carbon Steel                                                                                          |
|        | B                               | Stainless Steel                                                                                       |
|        | C                               | Others                                                                                                |
| Y      | Code                            | Shell Protection Grade                                                                                |
|        | Y                               | IP65                                                                                                  |
|        | Z                               | IP68                                                                                                  |
| E      | Code                            | Power Supply                                                                                          |
|        | E                               | 85~265V A.C 45~400Hz                                                                                  |
|        | F                               | 11~40V D.C                                                                                            |
|        | G                               | Lithium Battery                                                                                       |
| I      | Code                            | Output Signal                                                                                         |
|        | I                               | Current, Pulse, Frequency                                                                             |
|        | U                               | Hart agreement                                                                                        |
|        | V                               | RS232/RS485                                                                                           |