



Combined Liquid Flow Transducer/Transmitter

Stock No. 257-026 (Type One)

Stock No. 285-790 (Type Two)

General

These two sturdy turbine flow sensors are designed to operate with most liquids. Two types are available with type one combining a 4-20mA flow transmitter within the same housing. The output signal of this device is 4-20mA, proportional to the flow. The unit is supplied factory calibrated to 4-100 l/minute but may be field calibrated as follows:-

- Set system to zero flow and connect a multimeter between terminals 1 (+20mA) and \perp (0mA).
- Adjust zero pot to read 4mA on meter.
- Set system to full flow with multimeter still connected as (a) above. (Max. flow = 150 l/minute).
- Adjust span pot to read 20mA on meter.

Type two provides a pulse output proportional to flow rate. This is factory calibrated (2 l/m-150 l/min.) and is not user adjustable.

WARNING

This product contains components manufactured from glass filled polyester and borosilicate glass. Although robustly constructed and rigorously tested, we recommend the following precautions are taken:-

- DO NOT over-tighten pipe fittings (Max. Torque 60Nm).
- Only use pipe fittings and sealing methods recommended for use with the End Couplings provided.
- DO NOT use tapered male pipe fittings.
- Although it should not be necessary, P.T.F.E. tape may be used, but must not be allowed to enter pipework.
- Support pipework and mount the unit in such a way as to minimise side loading, mechanical shock loads and vibrations etc.
- In use the glass body of this meter is subjected to pressure and must under NO circumstances be subjected to physical abuse.
- DO NOT use if any form of damage occurs, or is suspected to have occurred during handling or installation.
- Protect from frost.
- This unit is intended for permanent installation and should not be used for temporary applications.

Maximum working temperature +80°C (+60° with water).
Maximum working pressure 10 bar.

Technical Specification

Construction	
Body	Polyester
Glasstube	Borosilicone
Seals	Nitrile
Washers and shaft	Stainless steel
Rotor and locator	Acetal
Rotor tips	Stainless steel
Calibration (Type 1)	4-100 l/min. on water } as 4mA - 0 l/min } factory 20mA - 100 l/min } set
Type 2 'K' factors	Oil - 51.14 pulses per litre Water - 44.25 pulses per litre
Maximum flow rate (field calibration)	150 l/min
Maximum working pressure	10 bar Oil/Water
Minimum flow indication	2 l/m (Max 150 l/m)
Temperature range	5 to 80°C Oil 5 to 60°C Water
Accuracy	±2%
Connections	1" BSP Parallel threads
Electrical details	Supply 24V ---
Output (type 1)	4-20mA
(type 2)	Pulsed
Pulse output connections	
Pin 1	+ve o/p
Pin 2	+ve supply
Pin 3	-ve o/p (not shown on diagram)
Pin 4	Earth (-ve supply)

