

Dataflow - 4 to 20mA and Pulse Output Flow Transmitters

Flowmeters

Features & Benefits



- 4 to 20mA output.
- Pulse output available for totalising/batching.
- Works in any plane.
- Accepts reverse flow.
- Maximum flow 150 l/min.
- Negligible pressure drop.
- Pressures up to 10 bar.
- Low cost. Simple to install.
- For use with most liquids.
- Factory calibrated. Accuracy $\pm 2\%$.
- DIN 43650 plug connection (included).

Specification

Construction:

Borosilicate glasstube.
Nitrile seals.
Body – Glass filled nylon.
Rotor and locator – Acetal.
Washers and shaft – Stainless steel.
Rotor tips – Stainless steel.

Max. working pressure:
10 bar oil/water.

Flow indication:

Min: 2 l/min.
Max: 150 l/min.
Accepts reverse flow.

Accuracy:

$\pm 2\%$ FSD.

Temp range:

+5°C to +80°C oil.
+5°C to +60°C water.

Connections:

1" BSP parallel threads.

Weight:

0.7Kg.

Calibration 4 to 20mA:

4mA = 0 l/min,
20mA = 100 l/min.

Calibration pulse output per litre:

'K' factors.
Oil = 51.14
Water = 44.25

Electrical details 4 to 20mA:

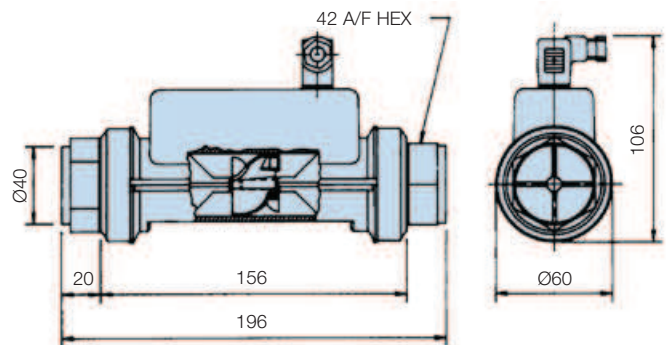
Supply = 24Vdc.

Pulse output:

Supply = 24Vdc.
(open collector transistor).



Installation Details



Ordering Information

Standard products table

Product number	Supersedes	Description
DFT980	DFT.980	Dataflow "Pulse" output transmitter
DFT990	DFT.990	Dataflow 4-20mA transmitter

Note 1: Part numbers featured with bold highlighted codes will ensure a 'standard' product selection.
Note 2: Alternate displayed part number selection will require you to contact Parker Filtration for availability.



Dataflow 4-20mA transmitter can be connected to a Digital Display Unit (DDU1001 or DDU1002)

Digital Display Specification (DFT 990 only)

For indicator options please refer to MS150 section of the catalogue, reference DDU1001 and DDU1002 indicators

4 to 20mA On-Site Calibration

Set your system to zero flow. Connect a multimeter across terminals 1 (+20mA) and \ominus (0mA) (Dia. 2). Set the zero to read 4mA on your multimeter (Dia. 1). Set your system to full flow and set the span to read 20mA on your multimeter. (Dia. 1)

Note: Minimum span setting = 30 l/min

Diagram 1

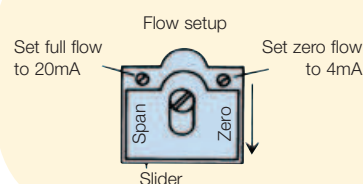
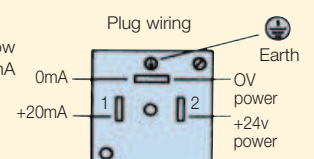


Diagram 2



Dataflow Compact - Inline Flow Transmitter

Flowmeters

Features & Benefits



- Pulse output signal for flows up to 25 l/min.
- Lightweight and robust.
- Operates in any plane. Simple to install.
- Low cost flow measurement.
- Negligible pressure drop.
- Accepts reverse flow.
- $\frac{3}{8}$ BSP male connection.
- Water or compatible clear fluids only.
- Ideal for washing machines, showers and vending machines.

Specification

Construction:

Body Grilamid – TR55.
Rotor 18% PTFE filled nylon.
Shaft Stainless steel.
Shaft Retainers Grilamid TR55.

Operation:

Infra-red.

Maximum working pressure:
20 bar.

Pressure drop:
Max 0.1 bar at 15 l/min.

Flow range:
1 to 25 l/min.
(Accepts reverse flow).

Calibration:
'K' Factor 752 pulses per litre, typical.
Subject to application.

Accuracy:
±2% typical.



Repeatability:

±1%.

Temperature range:
+5°C to +70°C.

Overall dimensions:
52mm x 29mm x 27mm.

Weight:
16 grams.

Connections:
 $\frac{3}{8}$ BSP

Cable length:
300mm.

Power supply:
5 Vdc.

Output signal:
5 Vdc - square wave

Dataflow Compact – The Low Cost Transmitter

The Dataflow Compact Transmitter was designed to offer OEM's and end users alike a means of monitoring low flows on liquids with an electronic output signal – but at LOW COST. Fluid passes through the one piece sensor body impacting on the twin vaned turbine rotor, causing it to rotate at a speed proportional to the flow rate. Two opposing photo-transistors are mounted either side of the rotor and externally of the clear sensor body, these generate a continuous signal.

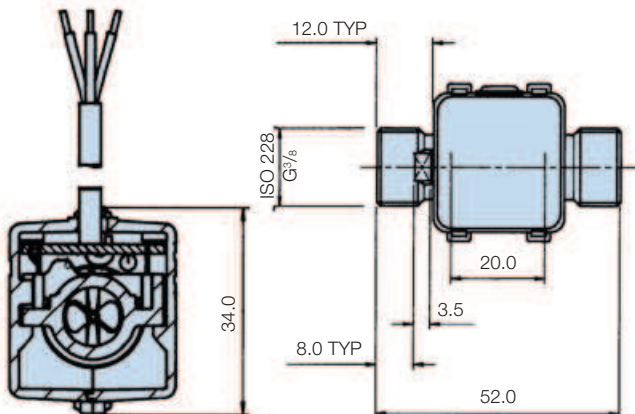
As the rotor spins each blade obscures the infra red signal. This is then converted into an industry standard pulse output signal – compatible with inexpensive display units for flow rate, totalising, batch control and large, central control systems. The lightweight Grilamid body with its virtually unrestricted flow path, offers negligible pressure drop for flows up to 25 l/min and withstanding pressures up to 20 bar.

Flow Rate • Totalising • Batch Control and applications in many industries

Dataflow Compact Transmitters are small and very robust having been developed and tested extensively in industry applications where space is a restriction. Dataflow Compact with its Grilamid body and BSP connections can be installed almost anywhere and once installed will give accurate and reliable output signalling.

Installation Details

Red wire +5V supply
Green wire Output signal
Blue wire 0V supply



Ordering Information

Standard products table

Product number	Supersedes	Description
DFC9000100	DFC.9000.100	Dataflow compact flow transmitter

Note 1: Part numbers featured with bold highlighted codes will ensure a 'standard' product selection.
Note 2: Alternate displayed part number selection will require you to contact Parker Filtration for availability.