

DPR-LF

Mechanical Pulse Transmitter Index

KEY FEATURES

- Suitable for turbine, rotary or diaphragm meters with instrument drive. Direct mounting on meters.
- · Bi-directional 8 digits mechanical counter
- Reversing bevel gear mechanism permits mounting on CW or C CW instrument drive meters
- Flexible mounting by means of adaptable base plate
- Very low torque
- Two Isolated low frequency dry reed switch outputs
- Lead and lag phase difference on pulse outputs for reliably detecting forward and reverse rotation of meter
- · High permeability magnetic shielding of reed sensors against external magnetic interference
- Tamper activation by influence of external magnetic field
- Galvanized steel or Aluminum mounting stand for EVCs
- Nitrile Gaskets for all bottom, side and top parts
- Nickel plated internal metal parts for increased corrosion resistance
- Optional shaft and adaptor can be provided to fit any meters
- Maintenance free, durable design
- IP66 rugged, weather proof, reinforced polyamide housing
- Push-in terminals for easy field wiring

DPR-LF is a 8-digit, self-contained mechanical counter, pulse transmitter that can be interfaced to any turbine, rotary or diaphragm meters equipped with rotating instrument drive.

It can provide single or dual pulse outputs for each meter rotation utilizing two isolated magnetically operated reed sensors. These sensors provide individual pulse outputs for each rotation of drive. Phased sensor outputs allows detection of rotation direction and also validation of a correct rotation.

A separate tampering sensor is also provided for detecting external magnetic influences.

A reversing gear mechanism permits mounting on either CW or CCW rotating instrument drive.

The DPR-LF is housed in a reinforced polyamide enclosure with the bottom plate drilled to match the various meter mounting.

High Permeability Magnetic Shielding

Sensor assembly board is fully protected by means of high permeability 1.5 mm thick steel material to protect sensors from strong external magnetic influences. A separate magnetic tampering output is also provided which activates upon detection of such events.

Reed switches are shielded by 1.5mm stainless steel to protect them from external magnetic influences.



Broad Range of Mounting Options

DPR-LF may be mounted on rotary, diaphragm or turbine meters.



Supports CW or CCW rotating meters

EVC mounted on DPR-LF using the mounting stand.

A reversing gear mechanism permits mounting on either CW or CCW rotating instrument drive.

Set CW or CCW direction by moving the bevel gear up and down.





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BASIC SPECIFICATIONS

GENERAL

Dimensions	135H x 115W x 110D mm
Housing material	PA6 GF15, galvanized steel back cover
Counter	8 digits
Transparent	Polycarbonate
Gears and shaft	POM Polyacetal
Weight	490 g with stand
Stand	Galvanized steel. 2 mm thickness. Aluminum on request.

SWITCHES CHARACTERISTICS

Configuration	Form-A (normally open)
Contact rating	0.25 W
Voltage	5 VDC max.
Current	50 mA max.
Resistance	100 Ω series protection resistance per switch
Frequency	1 pulse per rotation
Magnetic protection	1 mm thick steel bottom of PCB. 2mm thick steel at back. Permeability > 8000

MOUNTING INSTRUCTIONS

1. Position DPR-LF over the meter.

2. Mount the encoder using relevant gasket and fixing bolts.

3. Set desired CW or CCW direction by moving the bevel gear up or down.





Mounting on Rotary Meter



Mounting Diaphragm Meter



Mounting on Tourbine Meter

Move bevel gear up for CW rotation.



EXPLODED DIAGRAM



Stand
 Back door
 Back door gasket
 Sensor PCB
 PCB holder
 Bevel gear lever
 Stopper metal bush
 Bevel gears bush
 Bevel gear shaft
 Stand gasket
 Shaft
 Lever
 Adaptor

15. Mounting screws
16. Chassis screw
17. Housing
18. Transparent gasket
19. Transparent
20. Gland
21. Chassis
22. Mechanical counter
23. Bevel gear part 1
24. Gear part 2
25. Gear part 3
26. Magnetic shield

