

PRESSURE TRANSMITTER

ETRANS – DP01 Datasheet

Differential Pressure Sensor

Precise Measurement,
Ultimate Control

www.enelean.com



Turbine Flowmeter

MODEL Etran- ARF-4SS



Application Areas

Water & Salt Water Networks
Food Production & Transfer Lines
Alcohol & Beverage Measurement
Chemical Fluids & Solvents
Fuel Transfer & Consumption Monitoring
Industrial Automation Integration (PLC/SCADA)
Pressurized Tank Level Measurement
Steam & Hot Water Boiler Systems
Filter Clogging & Maintenance Monitoring
HVAC & Clean Room Pressurization
Oil & Gas Pipeline Monitoring
Hydraulic & Pneumatic System Control

Features

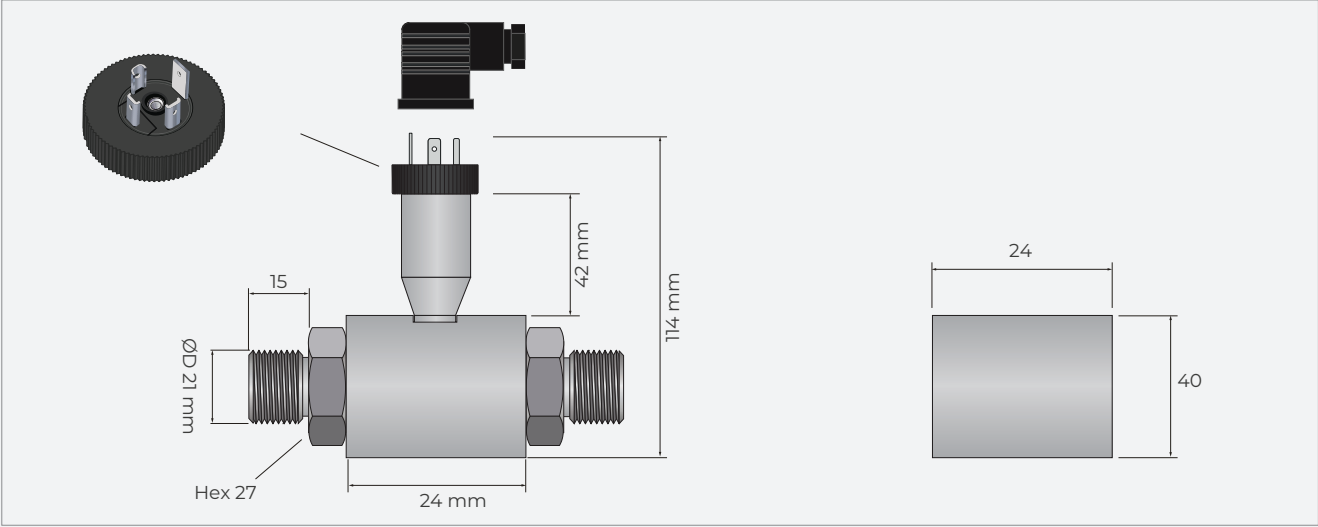
- Piezoresistive silicon pressure sensor produced by MEMS technology
- M20x1.5, G1/2, G1/4, G1/4 female, NPT1/4, NPT1/4 female,
- M12X1 and R1/4 female mechanical connection options
- Long life, excellent stability for many years
- EMC, short circuit and reverse polarity protection
- 4...20mA, 0...5VDC or 1...5VDC analog output options
- High Sensitivity: 0,5% FS
- Easy installation

Description

Reinmeer RM-DP01 is a reliable differential pressure transmitter designed to measure the pressure difference between two points in industrial processes with the highest precision. Thanks to its compact structure and advanced sensor technology, it delivers flawless performance in critical applications such as flow measurement in liquid, gas, and steam lines, filter clogging monitoring, and level control in closed tanks. While optimizing plant efficiency with standard output signals that provide full integration into PLC and SCADA systems, it offers long-lasting use with its durable housing resistant to harsh environmental conditions.



Structure



Pressure Range (BAR)	Min. -1 / Max. 40
Overload (BAR)	F.S × 2

TECHNICAL FEATURES

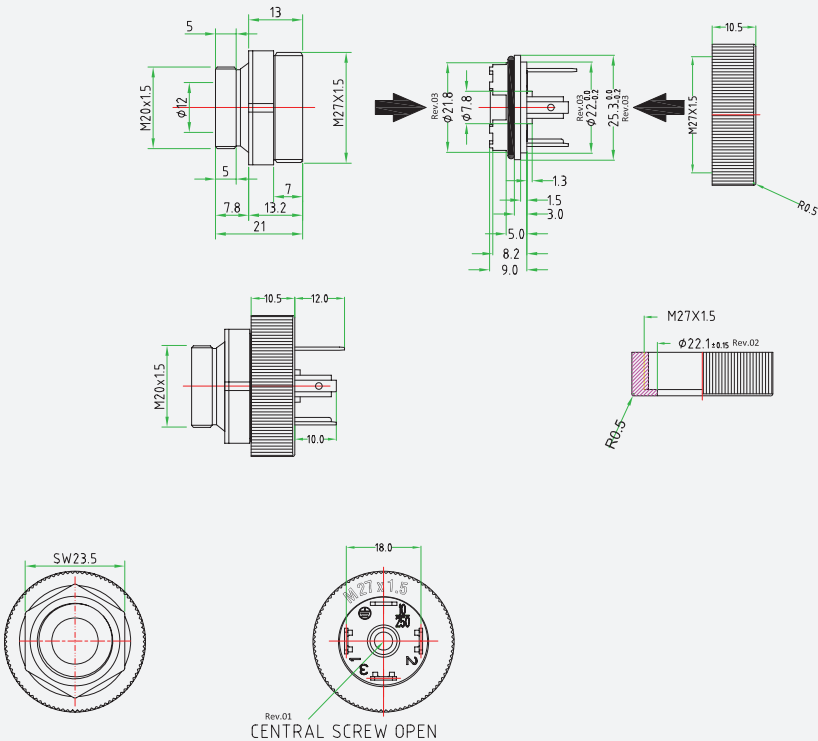
Working Principle	Measuring Principle	Piezoresistive Measuring Cell
Inputs	Measurement Variables	Relative and Absolute Pressure
	Measuring Range	Max. 40 BAR
Outputs	Current Output	4-20 mA / 4-20 mA + HART / Optional 0-10 V /etc.
Precision	Accuracy	±0.2%, ±0.1%, or ±0.025% FS
	Zero Point	±0,2 mV/V
Temperature Effect	Zero	±0,02 % TS/K
Operating Conditions	Operating Temperature	-40° ~ 135°C
	Protection Class	IP65
Power Supply	Power Supply Voltage	10...36 VDC (for mA) / 11...28VDC (for Voltage) /etc.
Materials	Sensor	Stainless Steel 316L, Hastelloy C, other materials
	Process Connection	Stainless Steel 316L, Hastelloy C, other materials
	O-Ring	Viton /NBR
	Outer Box	Stainless Steel
	Terminal	Plastic
Process Connections		G1/4", G1/2", etc.
Size and Weight	Weight	Approximately 0,35 kg
	Size	Ø 27 × 114mm

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Connector Structure

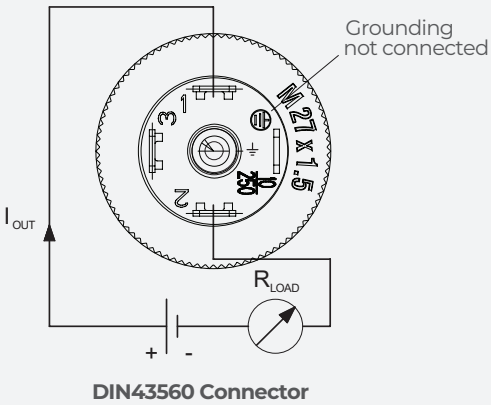
DIN43560 Connector



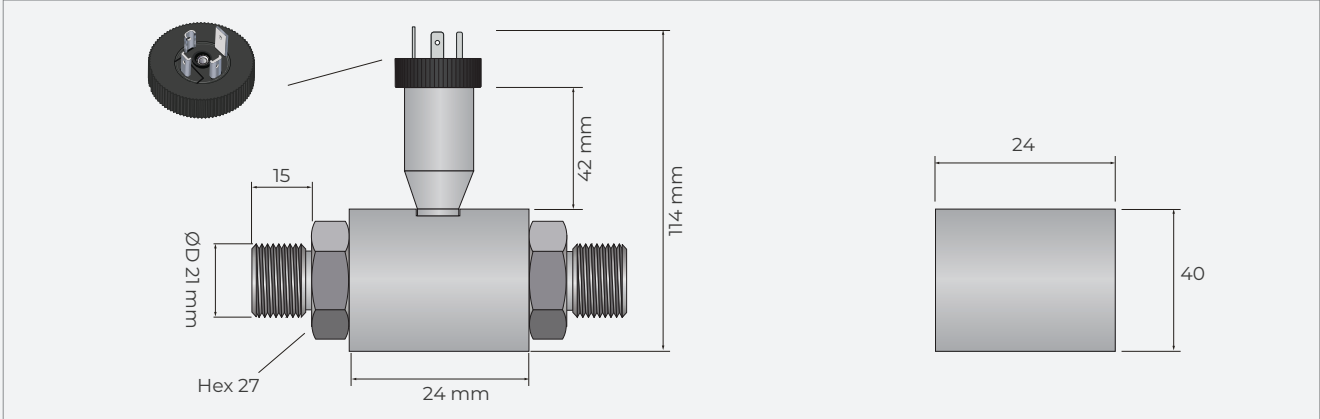
Electrical connection

0-5VDC or 1-5VDC Connections (3-wire)	
Pin No	Signal
1	+VDC Supply
2	GND
3	0...5VDC / 1...5VDC Analog Output

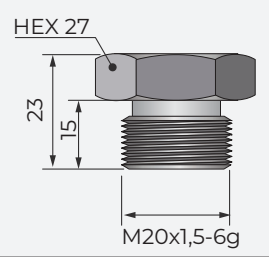
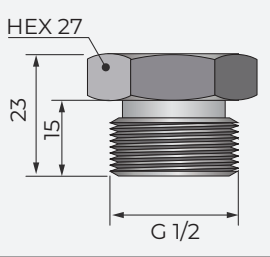
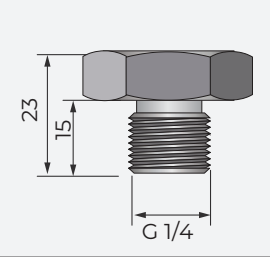
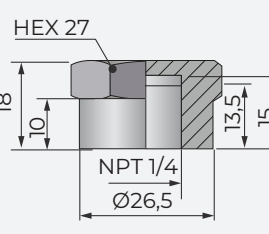
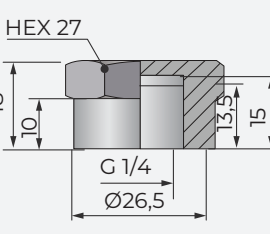
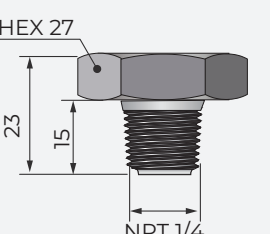
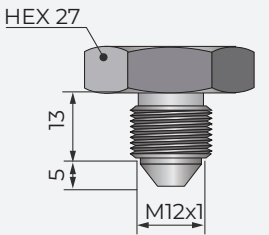
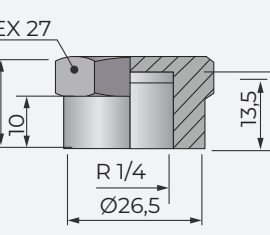
4-20mA Connections (2-wire)	
Pin No	Signal
1	+VDC Supply
2	4...20mA Analog Output



STRUCTURE



MECHANICAL CONNECTION

	M20x1,5-6g	G 1/2	G 1/4
Dimensions (mm)			
	15~25Nm	15~25Nm	15~25Nm
	NPT 1/4	G 1/4 Dişi	NPT 1/4 Dişi
Dimensions (mm)			
	15~25Nm	15~25Nm	15~25Nm
	M12x1	R 1/4	
Dimensions (mm)			
	15~25Nm	15~25Nm	

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PRESSURE RANGE SELECTION

The table above shows the available pressure range options and related overpressure limits for the RM-DP01 series. When creating the order code, please use the corresponding code from the 'Pressure Range Code' column that suits your measurement needs. Exceeding the specified overpressure limits may damage the sensor sensitivity.

Pressure Range Code	Pressure Range	Positive Overpressure	Negative Overpressure
0,1B	0 ~ 0,1 bar	300%FS	300%FS
0,2B	0 ~ 0,2 bar	300%FS	300%FS
0,35B	0 ~ 0,35 bar	300%FS	300%FS
0,7B	0 ~ 0,7 bar	300%FS	300%FS
1B	0 ~ 1 bar	300%FS	300%FS
2B	0 ~ 2 bar	300%FS	300%FS
2.5B	0 ~ 2.5 bar	200%FS	200%FS
5B	0 ~ 5 bar	200%FS	200%FS
6B	0 ~ 6 bar	200%FS	200%FS
10B	0 ~ 10 bar	200%FS	150%FS
16B	0 ~ 16 bar	200%FS	150%FS
25B	0 ~ 25 bar	200%FS	150%FS

Note: To ensure long-term operation of the device, it must be ensured that the maximum static pressure in the system does not exceed the 'Overpressure' limits specified in the table. %FS (Full Scale) represents the value calculated over the full scale.

RM-DP01 / - - - -
1 2 3 4 5

1 Model

Current output	☒	CO
Voltage output	☐	VO

2 Pressure

Different options from 100 mBar to 25 BarVoltage output	☒	25B
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3 Output Signal

0-5 VDC Analog Voltage	☒	V1
4-20 mA Analog Current	☐	A
*Please ask for other options	☐	X

4 Mechanical Connection

M20x1,5	☒	M20
G1/2	☐	G12
G1/4	☐	G14
G1/4 Female NPT1/4	☐	GF14
NPT1/4 Female	☐	NF14
M12x1	☐	M12
R1/4 Female	☐	RF14

5 Electrical Connection

DIN43650 Female Connector	☒	S
*Please ask for other options	☐	X

Contact us

Enelsan Istanbul Office Address
Şerifali, Barbaros Cd. No: 60, 34775 Ümraniye/İstanbul

Enelsan Factory 1 Address
Çerkeşli OSB Mahallesi İmes 4 Bulvarı No: 11 Dilovası/Kocaeli

Enelsan Factory 2 Address
Çerkeşli OSB Mahallesi İmes 14. Cadde No: 17 Dilovası/Kocaeli

Phone: +90 262 754 63 13
Fax: +90 262 754 93 93
sales@enelsan.com