

MD-G305 SERIES HIGH FREQUENCY PRESSURE TRANSMITTER

TECHNICAL CHARACTERISTICS:

- ✓ High-frequency response design, the highest response frequency can reach 500kHz, and the response time is less than 2 μ s
- ✓ Min range 0 ~ 1kPa, max range 100MPa, compound range optional
- ✓ Flat package design eliminates lumen effects
- ✓ Resistant to instantaneous high temperature, can be used for high frequency pressure test of chemical explosion



MD-G305 series high-frequency pressure transmitter adopts the extremely high Young's elastic modulus of semiconductor silicon and excellent mechanical characteristics to make the sensor have a high natural frequency. Combined with the design of the cavity-free structure, it reduces frequency loss due to lumen effect, resulting in extremely high response frequency.

It is based on semiconductor silicon that can statically calibrate its accuracy, and with the unique high-frequency response circuit, the transmitter part also has a very high response bandwidth. It is also convenient for sensor calibration and long-term performance monitoring.

MD-G305 series is designed for scientific experiments such as military engineering, chemical explosion experiments, mechanics, civil engineering, rock mechanics, and hydraulic power machinery tests

APPLICATIONS:

- ◇ Dynamic pressure measurement
- ◇ Free-field pressure measurement
- ◇ High & low pressure dynamic measurement of hydraulic fluid
- ◇ Hydraulic and pneumatic systems
- ◇ Various blasting shock wave measurements
- ◇ Military engineering blasting

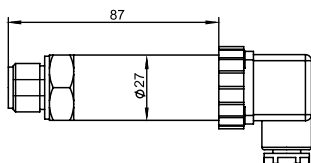
TECHNICAL PARAMETERS:

Range	-100...-10...-1...0 ~ 1...10...60...100kPa 0~0.1...1...10...60...100MPa
Overload pressure	≤10MPa 200%FS ; > 10MPa 150%FS
Response frequency	20kHz~500kHz(Depend on the range and structure)
Response time	2 μ s~50 μ s(Depending on the range and structure)
Accuracy	0.5%FS 0.25%FS
Long-term stability	Typical: \pm 0.25%FS/year
Zero temperature drift	Typical: \pm 0.03%FS/°C, Max: \pm 0.05%FS/°C
Sensitivity temperature drift	Typical: \pm 0.03%FS/°C, Max: \pm 0.05%FS/°C
Power supply	12~28VDC(typical 24VDC)
Output	0~10V / 0~5V
Operation temperature	-40~80°C
Compensation temperature	0~70°C
Storage temperature	-40~100°C
Electrical protection	Anti-reverse connection protection, anti-frequency interference design
IP rating	IP65(DIN Outlet) IP68(Straight out)
Measurement medium	Non-corrosive, non-conductive media compatible with silicon, 304 stainless steel
Connection	M20*1.5,G1/2(Other can be customized)
Shell material	304SS

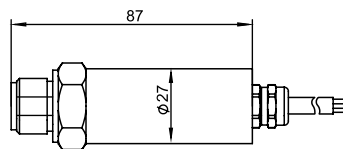


DIMENSION:

UNIT:mm



■ DIN



■ Straight out

OUTLET DEFINITION:

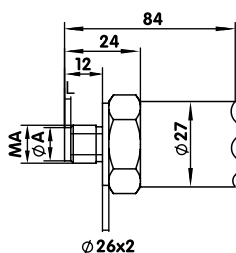

Voltage output 0-5V 0-10V	1	Power supply+
	2	Power supply-
	⊕	Output+

■ DIN



Voltage output 0-5V 0-10V	Power supply+	Red
	Power supply-	Black
	Output+	Green

■ Straight out

COMMON THREAD:

 Back-end part is optional:
 1. XS12 Aviation plug
 2. Horsman
 3. Straight out

MA	ΦA	L
M10*1	Φ8.5	2
M12*1	Φ10.5	2
G1/4	Φ11.5	2
M14*1.5	Φ12	2
M16*1.5	Φ14	2
M20*1.5	Φ17	2

SELECTION GUIDE:
MD - G305-60M - 1 - V2 - P2 - M20 - A - T1
Model:

 G305
 (High frequency)

Range:

 X M(0-X MPa)
 X k(0-X kPa)

Accuracy:

 1 (0.5% FS)
 2 (0.25% FS)

Output:

V1 (0-10V) V2 (0-5V)

Measurement
temperature:

T1 (-40~+80℃)

Electric connection:

A (DIN) B (Straight out)

Screw thread:

 M20(M20*1.5) G14 (G1/4)
 M10(M10*1) M12(M12*1)
 M14(M14*1.5) M16 (M16*1.5)

Power supply:

P2(12-28V)

