



M5200

Industrial Pressure Transducer

SPECIFICATIONS

- Wide Temperature Range
- Compact
- Variety of Pressure Ports and Electrical Configurations
- Optional Stainless-Steel Snubber
- CE Compliant and Weatherproof
- UL Certified
- Gage, Sealed, Compound

FEATURES

- Heavy Industrial CE Approval
- 10 V/m EMI Protection
- Reverse Polarity Protection on Input
- Short Circuit Protection on Output
- ± 0.2 Accuracy
- ± 1.0 Total Error Band
- Compact Outline
- - 0°C to +12 °C Operating Temperature
- Weatherproof

APPLICATIONS

- Industrial Process Control and Monitoring
- Advanced HVAC Systems
- Refrigeration Systems
- Automotive Test Stands
- Off-Road Vehicles
- Pumps and Compressors
- Hydraulic/Pneumatic Systems
- Agriculture Equipment
- Energy Generation and Management

STANDARD RANGES

Range (psi)	Range (Bar)	Gage	Sealed	Compound
0 to 0 0	0 to 3.	•		•
0 to 100	0 to 00	•		•
	0 to 010	•		•
0 to 200		•		•
0 to 300	0 to 020	•		•
0 to 00	0 to 03	•		•
0 to 01k	0 to 0 0	•	•	•
0 to 03k	0 to 200	•	•	•
0 to 0 k	0 to 3 0	•	•	•
0 to 0 k	0 to 00	•	•	•
0 to 10k	0 to 00	•	•	•
0 to 1 k	0 to 01k	•	•	•

广州工控传感科技有限公司
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PERFORMANCE SPECIFICATIONS

Ambient Temperature: 25°C (unless otherwise specified)

PARAMETERS	MIN	TYP	MAX	UNITS	NOTES
Accuracy combined non-linearity, hysteresis, and repeatability	-0.2		0.2	F.S.	BFSL
Isolation, Body to any Lead	100				@ 00V _{DC}
Dielectric Strength			2	mA	@ 00V _{AC} , 1min
Pressure Cycles	1.00E+			0 FS Cycles	
Proof Pressure	2X			Rated	
Burst Pressure	X		20k psi	Rated	
Long Term Stability 1 year	-0.2		0.2	F.S.	
Total Error Band 1 - PH	-1.0		1.0	F.S.	Over compensated temperature range
	-1.		1.	F.S.	Over compensated temperature range
KTtotal Error Band 31 L, 3k psi	-2.0		2.0	F.S.	Over compensated temperature range
Compensated Temperature	-20		+	°C	
Operating Temperature	- 0		+12	°C	Except cable 10 °C max
Storage Temperature	- 0		+12	°C	Except cable 10 °C max
Load Resistance R _L		R _L 100k			Voltage Output
Load Resistance R _L		Supply Voltage - V / 0.02A			Current Output
Current Consumption				mA	Voltage Output
Rise Time 10 to 0		2ms Voltage Output	3ms Current Output		Without Snubber
Wetted Material		1 - PH or 31 L Stainless Steel Port,	31 L Stainless Steel Snubber		
Gage Pressure Reference Vent		Under 1k psi, customer to ensure venting through mating connector			
Bandwidth		DC to 1KHz Typical			
Shock		0g, 11msec Half Sine Shock per MIL-STD-202G, Method 213B, Condition A			
Vibration		±20g, MIL-STD- 10C, Procedure 1 .2, Fig 1 .2-2, Curve L			

For custom configurations, consult factory.

Notes

Compensated Temperature The temperature range over which the product will produce an output proportional to pressure within the specified performance limits.

Operating Temperature The temperature range over which the product will produce an output proportional to pressure but may not remain within the specified performance limits.

Storage Temperature The temperature range over which the product can be stored safely in occasions without pressure applied or power input and remains rated performance. Beyond this temperature range may cause permanent damage to the product.

All configurations are built with supply voltage reverse and output short-circuit protections.

CE Compliance

EN 022 Emissions Class A B

IEC 1000- -2 Electrostatic Discharge Immunity kV contact/1 kV air

IEC 1000- -3 Radiated, Radio-Frequency Electromagnetic Field Immunity 10V/m, 0M-1GHz

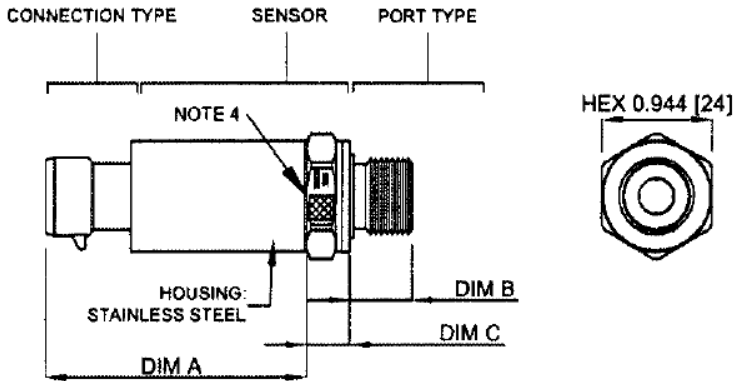
IEC 1000- - Electrical Fast Transient Immunity 1kV

IEC 1000- - Surge Immunity V+ to V- / - to V₀

IEC 1000- - Immunity to Conducted Disturbances Induced by Radio Frequency Fields 1 0K 0MHz, 10V level for voltage output models, 3V level for current output model

IEC 1000- - Pulse Magnetic Field Immunity 100A/m peak

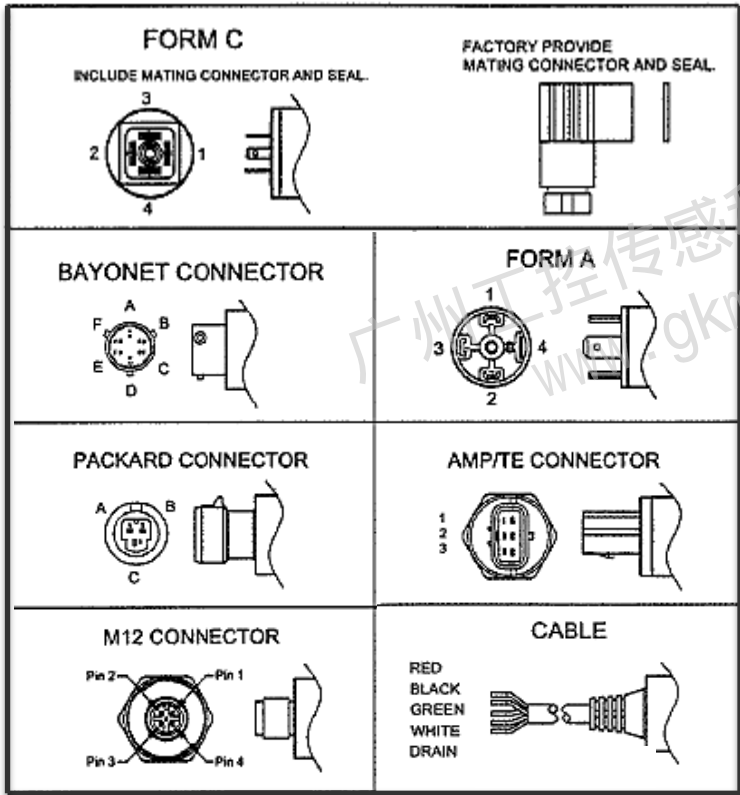
DIMENSIONS



Refer to installation instructions for recommended torque.

Note

CODE	CONNECTION TYPE	DIM A
1		
E		
2		
3		
4		
5		
6		
7		
8		
B		
9		
D		
M		
N		
P		
R		
A		



PRESSURE PORT TYPE			
CODE	PORT	DIM B	DIM C REF.
2	1/ -1 BSPP		
3	G3/ JIS B23 1		
4	/1 -20UNF MALE SAE J1 2 - 2 STRAIGHT THREAD, O-RING BUNA-N 0SH- 0 O-RING not provided by TE		
5	1/ -1 NPT		
6	1/ -2 NPT		
B	G1/ JIS B23 1		
E	1/ -1 BSPT		
F	1/ -1 BSPP FEMALE without snubber		
P	/1 -20UNF FEMALE SAE J 13 STRAIGHT THREAD WITH INTEGRAL VALVE DEPRESSOR		
N	/1 -20UNF FEMALE SAE J 13 STRAIGHT THREAD		
Q	M10 x 1.0 mm ISO 1 -2		
S	M12 x 1. mm ISO 1 -2		
U	G1/ DIN 3 2 FORM E, GASKET DIN3 -1 NBR Gasket not provided by TE		
W	M20 x 1. mm ISO 1 -2		
G	M1 x 1. mm ISO 1 -2		

WIRING

Current Output Wiring				
CONNECTION	+SUPPLY	-SUPPLY	NC. PINS	P REF VENT
Bayonet	A	B	C,D,E	F
Packard, A	A	B	C	Hole Through Connector
Packard, B	B	A	C	Hole Through Connector
Cable	RED	BLK		In Cable
M12	1	3	2,	Hole Through Connector
AMP/TE	1	2	3	Hole Through Connector
FORM C	1	2	3,	Threads Through Connector
FORM A1	1	2	3,	Threads Through Connector

Voltage Output Wiring					
CONNECTION	+SUPPLY	+OUTPUT	COMMON	NC. PINS	P REF VENT
Bayonet	A	B	C	D,E	F
Packard, A	A	C	B		Hole Through Connector
Packard, B	B	C	A		Hole Through Connector
Cable	RED	WHT	BLK		In Cable
M12	1	2	3		Hole Through Connector
AMP/TE	1	3	2		Hole Through Connector
FORM C	1	2	3		Threads Through Connector
FORM A1	1	3	2		Threads Through Connector
FORM A2	3	1	2		Threads Through Connector
FORM A3	1	2	3		Threads Through Connector

Notes:

Customers should not use these connections

CONNECTION TYPES

CONNECTION	DESCRIPTION	MATING HOUSING P/N	MATING TERMINAL P/N	RUBBER SEAL P/N
Bayonet	BAYONET PTIH-10- P OR EQUIV	PT0 A-10- S ML-C-2 2	-	-
Packard	3-PIN METRI-PACK 1 0	120 0 0	12103 1, QTY 3	-
M12	BINDER SERIES 13, 0 3 31 0 OR EQUIV	-POS FEMALE CONNECTOR	-	-
AMP/TE	AMP / TE 3-PIN ECONOSEAL J SERIES	1 3 -2 1 3 -	1 1 30-1 AWG 20 2 1 1 2-1 AWG 1 20 QTY 3	1 2 -1 AWG 20 2 1 2 -2 AWG 1 20 QTY 3
FORM C	INDUSTRIAL STANDARD . MM FORM C	HIRSCHMANN 33 02 -100,OR, ATAM KD0 000B SEAL INCL.	-	HIRSCHMANN 30 1 -002
FORM A1, A2, A3	DIN EN 1 301- 03-A 1 MM	HIRSCHMANN 31 -100,OR, ATAM KA2 000B SEAL INCL.	-	HIRSCHMANN 30 01-002

Note:

Suggested vented M12 mating connector P/N MB12FWAFF0 ST- and MB12FWAFF0 ST-3 at www.finecables.com

WEATHERPROOF

CONNECTION	IP CODE
Bayonet	IP
Packard	IP
Cable	IP
M12	IP
AMP/TE	IP
FORM C	IP
FORM A	IP

Note: Weatherproof ratings are met when the mating connectors are installed properly, and the cable termination is to dry and clean area.

OUTPUTS

Code	Supply Voltage	Max Input Current	Output Signal	Pressure Rating	
3	± 0.25V, PROTECTED TO 30V	10mA	0. V- . V RATIOMETRIC		
4	30V	10mA	1 V		
5	30V	2 mA	20mA		
6	30V	10mA	0 V		
7	12 30V	10mA	0 10V		
8	30V	10mA	1 V		
9	30V	10mA	0. . V		

ORDERING INFORMATION

M 2 _ 1 - 1 0 00 1 2 _ 100P G

Output	
Code	Output
3	0. to . V Ratiometric
4	1 to V
5	to 20mA
6	0 to V
7	0 to 10V
8	1 to V
9	0. to . V

Pressure Ranges	
PSI STD	BAR STD
050P	3. B
100P	00 B
200P	010B
300P	020B
500P	03 B
01KP	0 0B
03KP	200B
05KP	
07KP	00B

Pressure Reference	
G	Gauge
S	
C	Compound

*Only available for voltage output

Note Refer to online installation instruction for recommended torque.
Installation instructions are available on our website in [English](#) and [Chinese](#).