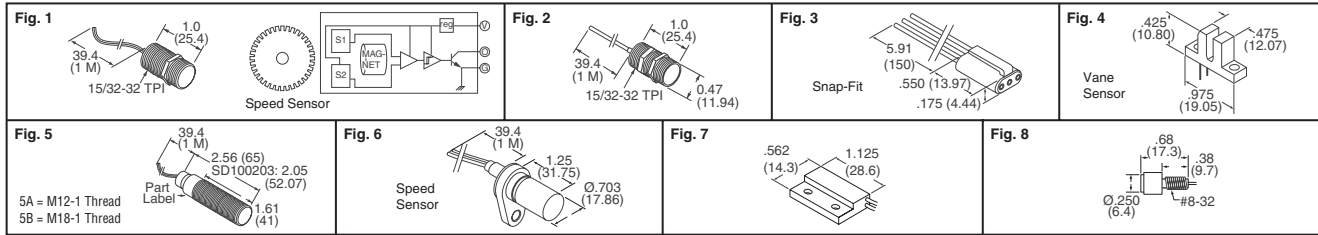


CHERRY Solid State Magnetic Hall Effect Sensors



Cherry magnetic sensors are used to detect changes in magnetic field polarities and the motion of ferrous metals such as gear tooth movements. Used for such applications as speed and proximity sensing, magnetic polarity detection and current flow monitoring. Solid state design for unlimited life.

Features:

- MP100 Series:**
 - Aluminum threaded barrel sensor for speed and position sensing
 - The threaded barrel allows precise positioning and adjustment
- GS100 Series:**
 - Barrel sensors intended for gear tooth speed sensing
 - High speed capability, ideal for sensing power gears, conveyor speed and other rotating gears
 - Built-in magnet supplies its own bias field
 - GS101202 is plastic housing with steel bushing

Fig.	Supply Voltage	Output Current	Terminal Type	Polarity	Digi-Key Part No.	Price Each	Cherry Part No.
1	4.5-24VDC	25mA	20AWG Wires	Gear Teeth	CH398-ND†	22.62 20.11 16.76 15.50	GS100701
2	4.75-24VDC	25mA	20AWG Wires	South Pole	CH396-ND†	18.29 16.26 13.55 12.54	MP100701
3	4.75-24VDC	25mA	24AWG Wires	South Pole	CH399-ND	4.54 4.05 3.37 3.12	MP101301
4	4.5-24VDC	25mA	PC Mount 24AWG Wires	Ferrous Vane	CH401-ND◆ CH712-ND◆	5.00 4.45 3.71 3.43 5.47 4.87 4.06 3.75	VN101501 VN101503
5A	4.5-24VDC	25mA	20AWG Wires 22AWG Wires	Gear Teeth	CH416-ND† CH414-ND*	22.62 20.11 16.76 15.50 40.38 35.90 29.92 27.67	GS100502 GS100102
5A	4.75-24VDC	25mA	20AWG Wires	South Pole	CH708-ND†	18.29 16.26 13.55 12.54	MP100502
5B	4.5-24VDC	25mA	12mm Conn. 22AWG Wires	Gear Teeth	CH705-ND* CH415-ND* CH706-ND*	44.02 39.14 32.62 30.17 41.56 36.94 30.79 28.48 38.42 34.16 28.46 26.33	GS100201 GS100202 GS100203
6	5-24VDC	25mA	20AWG Wires	Gear Teeth	CH417-ND	— — — 12.53	GS101202
7	4.5-24VDC	25mA	24AWG Wires	North Pole	CH400-ND◆	5.37 4.78 3.98 3.69	MP102103
8	Threaded Actuator, South pole magnet, Aluminum Housed	—	—	—	CH700-ND◆	3.84 3.42 2.85 2.64	AS101001

* Industrial Grade-Stainless Steel † Commercial Grade Aluminum ◆ RoHS Compliant



Rugged Stainless Steel Pressure Transducers Featuring Microfused Technology

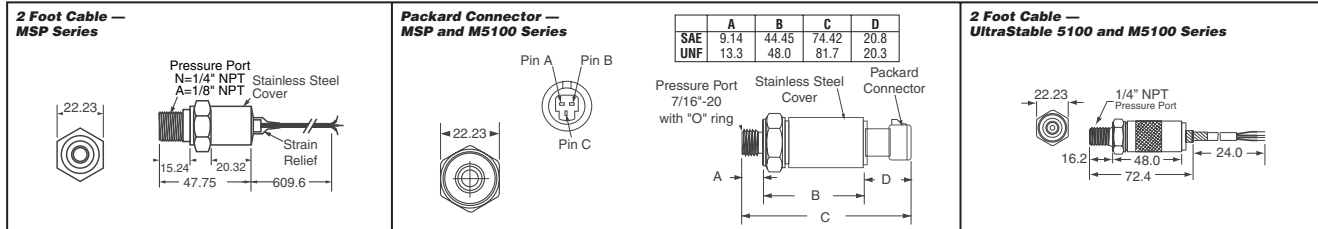
MSP Series:

The MSP pressure transducer is designed for high-volume, low-cost commercial, industrial and off road applications which require accurate measurement of gases or liquids. Operating ranges up to 10,000 psi is available with your choice of output signal in volts, millivolts, or milliamps. The MSP uses a micro machined silicon strain gauge inorganically bonded to a machined stainless steel diaphragm; no welds, no O-rings, no silicone oil. All wetted surfaces are stainless steel and all signal conditioning electronics

are housed in a stainless steel cover which provides protection from hostile environments. The housing is sealed and requires no maintenance. Each transducer is thoroughly tested and calibrated before shipment.

Applications:

- Pumps and Compressors
- Hydraulic / Pneumatic Systems
- Energy and Water Management
- Pressure Instrumentation
- Process Control, Off Road Refrigeration, HVAC.



	MSP-100	MSP-300	MSP-340	MSP-400	MSP-600	MSP-610	U5100	M5100
Pressure Range (PSIG)	0-100 - 500	0-100 - 10,000	0-100 - 1,000	1,000 - 5,000	0-25 - 5,000	0-100 - 500	0-15 - 500	0-25 - 10,000
Accuracy (combined linearity, hysteresis and repeatability)	±0.20% of FS	±1% of FS	±1% of FS	±0.50% of FS	±0.25% BSL	±0.25% of FS	±1% of FS	±0.25% of FS
Pressure Overload	1.5X	2X	2X	2X	2X	2X	3X	2X
Burst Pressure	3X		5x or 20,000 PSI whichever is less			4X	4X	5X
Outputs VDC or mA	0-100mV	0-100mV, 1-5V, 0.5-4.5V, 4-20mA	0-100mV, 0.5-4.5V	1-5V, 4-20mA	0.5-4.5V, 1-5V, 4-20mA	0.5-4.5V, 1-5V, 4-20mA	0.5-4.5V, 1-5V, 4-20mA	0.5-4.5V, 1-5V, 4-20mA
Zero Offset (millivolt output) (amplified output)	±2% of FS ±2% of FS	±3% of FS ±2% of FS	±3% of FS ±2% of FS	±2% of FS	—	—	—	—
Span Tolerance	±2% of FS	±2% of FS	±2% of FS	±2% of FS	—	—	—	—
Long-Term Stability, Typical (1 year)	±0.25%	±0.25%	±0.25%	±0.25%	±0.25%	±0.25%	±0.1%	±0.25%
Operating Temperature (°C)	0 - 55	-20 - 85	-20 - 85	-40 - 85	-40 - 125	-40 - 125	-40 - 125	-40 - 125
Compensated Range (°C)	0 - 55	0 - 55	0 - 55	0 - 70	-20 - 85	—	-20 - 85	-20 - 85
Thermo Zero Shift	<±2% of FS	<±2% of FS	<±2% of FS	<±1.5% of FS	—	—	—	—
Thermo Span Shift	<±2% of FS	<±2% of FS	<±2% of FS	<±1.5% of FS	—	—	—	—
Total Error Band	N/A	N/A	N/A	N/A	1.5% of FS	1.0% of FS	±0.75% of FS	1.0% of FS
EMI/RFI Protection, CE Mark	No	No	No	Yes	Yes	—	—	—
UL Listed	No	Yes	No	Yes	Yes	—	—	—

Operating Pressure Range PSIG	Voltage Supply (VDC)	Digi-Key Part No.	Price Each		Measurement Specialties Part No.
			1	10	
MSP-100 Series					
Calibrated 100mV Output — O-Ring Seal, 2 Foot Cable — RoHS Compliant					
100	5	MSP6900-ND	47.69	39.96	MS121-00000U-100PG
250		MSP6901-ND	47.69	39.96	MS121-00000U-250PG
500		MSP6902-ND	47.69	39.96	MS121-00000U-500PG
MSP-300 Series					
0mV - 100mV Output — 4 Wire Unamplified 1/4" NPT, 2 Foot Cable					
100	5	MSP3101P1-ND◆	58.76	49.24	2000130
250		MSP3251P1-ND◆	58.76	49.24	2000199

Operating Pressure Range PSIG	Voltage Supply (VDC)	Digi-Key Part No.	Price Each		Measurement Specialties Part No.
			1	10	
500	5	MSP3501P1-ND◆	58.76	49.24	2000255
1000		MSP3102P1-ND	58.76	49.24	2000045
2500		MSP3252P1-ND◆	58.76	49.24	2000222
5000		MSP3502P1-ND◆	58.76	49.24	2000096
10000		MSP3103P1-ND	58.76	49.24	2000157
0.5V - 4.5V Output — Ratiometric Output Voltage to Input Voltage 3 Wire Supply Current 10mA Maximum 1/4" NPT, 2 Foot Cable					
100	5	MSP3101P2-ND◆	75.55	63.30	2000131
250		MSP3251P2-ND◆	75.55	63.30	2000202

◆ RoHS Compliant

(Continued)

Free shipping on orders over £50! All prices are in British pound sterling and include duties.

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