



MCS-500C-xxx*

Description & Specifications



Part # **MCS-500C-xxx***

Description

The **MCS-500C** pressure transducer is specially designed for use in HVAC/refrigeration applications, in the most demanding environments, where low cost is needed yet maintaining high accuracy, long term reliability, and long life.

Features include, high accuracy, wide temperature range, refrigerant media compatibility and rugged design for outdoor use.

The MCS-500C pressure transducer is UL and RoHS compliant. It is capable of surviving high vibration. MCS-500C is a sealed gage pressure transducer ideal for outdoor environments, 1/4" SAE Female Flare fitting & Schrader valve; 7/16-20 UNF pipe thread which creates a leak-proof, all metal sealed system that makes the MCS-500C ideal for use with rugged HVAC environments using refrigerant Media.

Specifications

- Pressure Range.....0 to 500 psi (sealed gauge)
- Housing 304L stainless steel
- Sealing Material.....Rugged seal ideal for outdoor environments
- Electrical Connection.....IP67
- Operating Temperature....-40°C to 125°C (-40°F to 257°F)
- Storage Temperature.....-40°C to 150°C (-40°F to 302°F)
- Accuracy.....± 1% F.S. typical over -25°C to 125°C (-13°F to 257°F)
- Agency Approvals.....UL873, ROHS compliant
- Proof Pressure.....1000 psi, 6.9 MPa
- Burst Pressure.....3600 psi, 24.8 MPa
- Vibration11 g (50 to 2000 Hz)
- Supply Voltage5.0Vdc +/-0.5, max 10 mA
- Output Voltage0.5 VDC to 4.5 VDC typical
- Supply Current.....8 mA max @ 5 VDC with no load
- Output Current.....2.5 mA max sink or source
- Connection1/4" SAE Female Flare fitting & Schrader valve; 7/16-20 UNF thread

*Optional Cable:

MCS-500C Transducer is available with an optional cable as shown below, please specify the length needed:

Replace -xxx with: 20M' 40M' or 60M' wire length.



NOTE: IF -XXX IS OMITTED, MCS-500C TRANSDUCER IS SHIPPED WITHOUT THE OPTIONAL CABLE.

The cable has a removable 3 position connector to provide easy serviceability. The wire is sealed and crimped to the Packard connector providing a liquid tight environment and strain relief.



- Connector.....3 position Silicone seal
- Length.....20M', 40M' or 60M' feet
- Type.....3-conductor, 20 awg stranded
- Shield.....Foil shield with 25% overlap
- Drain.....Stranded tinned copper drain

PSI to VDC Chart

PSI	SI (vdc)	PSI	SI (vdc)	PSI	SI (vdc)	PSI	SI (vdc)	PSI	SI (vdc)
0	0.50	100	1.30	200	2.10	300	2.90	400	3.70
10	0.58	110	1.38	210	2.18	310	2.98	410	3.78
20	0.66	120	1.46	220	2.26	320	3.06	420	3.86
30	0.74	130	1.54	230	2.34	330	3.14	430	3.94
40	0.82	140	1.62	240	2.42	340	3.22	440	4.02
50	0.90	150	1.70	250	2.50	350	3.30	450	4.10
60	0.98	160	1.78	260	2.58	360	3.38	460	4.18
70	1.06	170	1.86	270	2.66	370	3.46	470	4.26
80	1.14	180	1.94	280	2.74	380	3.54	480	4.34
90	1.22	190	2.02	290	2.82	390	3.62	490	4.42
								500	4.50