

MCS-500B-xx **Description & Specifications**



Part # MCS-500B-xx

Description

The MCS-500B pressure transducer is specially designed for use in high pressure 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-500B pressure transducer is CE, UL and RoHS compliant. It is capable of surviving high vibration. MCS-500B is a sealed gage pressure transducer with a cavity built out of stainless steel with a Neoprene sealing material, 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-500B ideal for use with rugged HVAC environments using refrigerant Media.

(For Refrigerant Applications)

Specifications

Pressure Range Housing	0 to 500 psi (sealed gauge) Stainless Steel
Sealing Material	
Electrical Connection	IP66*
	-40°F to 257°F (-40°C to 125°C)
	± 2.0% -40°F to -4°F (-40°C to -20°C) ± 1.5% -4°F to 32°F (-20°C to 0°C) ± 1.0% 32°F to 176°F (0°C to 80°C) ± 1.5% 176°F to 248°F (80°C to 120°C) ± 2.0% 248°F to 257°F (120°C to 125°C)
Agency Approvals Proof Pressure Burst Pressure Random Vibration Input Voltage Output Voltage Connection	CE, UL E343906, RoHS 3 x Full Scale = 1500 max 2500 5 G @ 33Hz 5vdc (± 0.25 Vdc)
Option Cable:	

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

When ordering replace -xx with:

The cable is available in either 20', 40 or 60' lengths with a removable Packard connector to provide easy serviceability. The wire is sealed and crimped to the Packard connector providing a liquid tight environment and strain relief.



*IP66 Rating

Able to protect against powerful water jets Water projected in powerful jets (12.5 mm nozzle) against the enclosure from any direction shall have no harmful effects. Water volume: 100 litres (26.42gals) per minute

Pressure: 100 kPa (14.50psi) at distance of 3m (9.84ft)

PSI to VDC Chart	
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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