

MCS-500C Description & Specifications

E169780

Part # MCS-500C-xxx*

(-xxx = optional wire length for Molded Cable)

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 with a Schrader Depressor; 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.

PSI to VDC Chart

Specifications

Pressure Range Housing Sealing Material	0 to 500 psi (sealed gauge) 304L stainless steel Rugged seal ideal
Electrical Connection	for outdoor environments
	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)
	UL873, ROHS compliant
Proof Pressure	1000 psi, 6.9 MPa
Burst Pressure	3600 psi, 24.8 MPa
Vibration	
	5.0Vdc +-0.5, max 10 mA
	0.5 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
Connection	¼" SAE Female Flare fitting with
*Ontional Cables	Schrader Depressor; 7/16-20 UNF thread

*Optional Cable:

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

Replace -xxx with: 20M, 40M or 60M Length......20 ft (6m), 40 ft (12m) or 60 ft (18m) (available in longer lengths).

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 ft
	3 conductor, 20 awg stranded
Shield	Foil shield with 25% overlap
	Stranded tinned copper drain

Packaging

Sensor (no cable)............ 0.12 lb - Box Dim. 6.75" x 4.25" x 2.25"

Bag Dim. with Cable 10" x 10" x 2"

with 20ft(6m) cable 0.74 lb (approx) with 40 ft (12m) cable 1.40 lb (approx) with 60ft (18m) cable 2.03 lb (approx)

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

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