

## Pressure Transducers for Refrigeration Applications



MCS-150AC ▲

Absolute pressure uses absolute zero as a definitive reference point



MCS-200C ▲



MCS-500C ▲



MCS-667C ▲

Differential Pressure Transducers ►



◀ MCS-050-DIFFB

# PRESSURE TRANSDUCERS

CE and UL approved



5580 Enterprise Pkwy., Fort Myers, FL 33905  
Office: (239) 694-0089 Fax: (239) 694-0031

[www.mcscontrols.com](http://www.mcscontrols.com)

**For Refrigeration Applications, Neoprene sealed**



The cable is available in either 20', 40 or 60' lengths with a removable Packard connector to provide easy serviceability.

## The right sensors helps create more stable HVAC systems

The **MCS-150AC**, **MCS-200C**, **MCS-500C** and the **MCS-667C** are designed for use in refrigerant chiller system. The above pressure transducers have a Neoprene sealing material.

MCS carries an extensive line of pressure transducers, including the **MCS-150AB** absolute pressure transducer which uses absolute zero as a definitive reference point, absolute pressure remains precise and accurate regardless of changes in ambient or process temperature.

When specifying sensors, consider quality, accuracy, consistency, ease of installation and replacement, and interoperability. High performing sensors help reduce the design costs, development and testing cycle time.

## Heavy duty pressure transducers

Higher pressure applications within HVAC systems – rooftop cooling towers, boilers, pumps and chillers – require pressure transducers that are durable, CE compliant, designed for IP66K sealing protection, and able to withstand wide temperature ranges and contact with harsh media (e.g., refrigerants, driving rains, hydraulic fluids and compressed air up to 1000 psi). With stainless steel housing and ports, these transducers can minimize moisture infiltration and shorts at the sensor location, and in turn, downtime and replacement costs.

## Heavy duty pressure transducers provide two measurements:

1. The amount of pressurized air being delivered to the application
2. The presence of air pressure leaks

These measurements come from continuously monitoring the pressure of the compressor outlet, chiller outlet, evaporator coil outlet and the cooling tower supply, ultimately providing data to regulate the flow of heating/cooling media during partial load conditions.

**MCS PRESSURE TRANSDUCERS PROVIDE THE SECURITY AND ASSURANCE  
THAT YOUR HVAC SYSTEM NEEDS**

# MCS-050-DIFFB

Differential Pressure Transducers



The MCS-050-DIFFB Transducer sensors exceeds the latest heavy industrial CE requirements including surge protection and reverse polarity protection. The amplified and mV output pressure transducer has two pressure ports for high and low pressures and all wetted parts are made of 316L stainless steel.

- As Low As  $\pm 0.1\%$  Pressure Non Linearity
- Tank Level Measurement
- Rugged Construction:  
Can Withstand 50g Shock/20g Vibration
- Filter Performance Monitoring
- Up to  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$  Operating Temperature Range
- Corrosive Fluids and Gas Measurement Systems
- Excellent Stability
- Flow Measurements
- Measure Differential Pressure Across Chiller Barrels
- Proof of Flow
- Can Be Used to Calculate Flow Rat

## \*Optional Cable:

MCS-050-DIFFB Transducer is available with an optional cable as shown below, please specify the length needed: Available 20' 40' or 60' wire length.

The cable has 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.

Connector.....Packard with Silicone seal  
Type.....3-conductor, 20 awg stranded  
Shield.....Foil shield with 25% overlap  
Drain.....Stranded tinned copper drain





**Providing HVAC/R  
Solutions Worldwide**

## ***The MCS Commitment***

*The founders of Micro Control Systems Inc. have been in the manufacture of Microprocessor Controls their entire careers and have over eight decades of combined HVAC/R Microprocessor Controls experience. MCS was founded to meet the needs of the Utility and HVAC/R Industries with products based on the following design criteria:*

- ◆ **Quality & Service**
- ◆ **Cost Effectiveness**
- ◆ **Ease of Use**

*Our commitment is to provide practical solutions for the industries needs and to be both a leader and partner in the effective use of Microprocessor Controls.*

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