

MDM460 Differential Pressure Transmitting Controller



Features

- RS485 semi-duplex communication interface to transmit data signal and do long-distance calibration; easy for netting and connecting with MODEM interface to achieve data wireless transmitting;
- Using piezoresistive pressure/differential pressure sensor and digital correction compensation; high accuracy;
- Strict testing and aging, stable performance; aluminum-alloy electronic housing; IP65 Protection;
- Key setting and calibration, easy installation;
- LED measuring value display and LCD status information display;
- Max.5 relay to control;
- Optional pressure port and standard output signal;

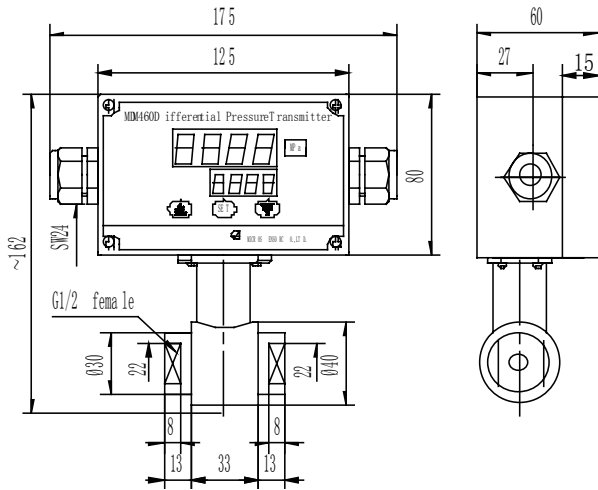
Introduction

MDM460 intelligent transmitting control could measure and control differential pressure accurately in rugged open environment. It can use RS485 netting and display local measure value, and provide analog standard signal or relay control signal. The product could be used for differential pressure measuring, transmitting, displaying and transforming of chemi-industry, metallurgy, ocean, aviation, measurement, science, etc.

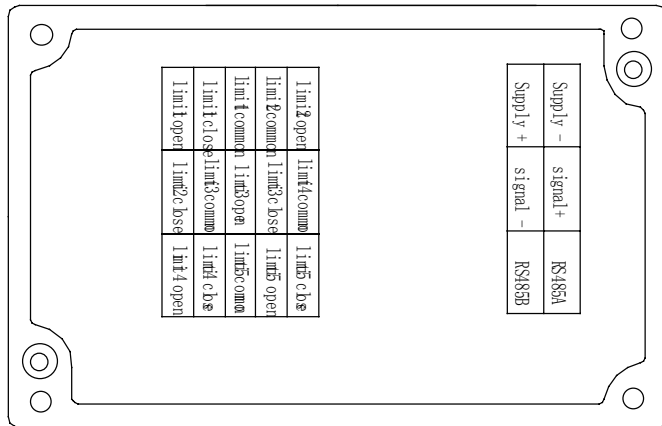
Specification

Pressure range	0~35kPa...3.5MPa
Static pressure	≤20MPa
Output signal	analog 4~20mADC, 0~10/20mADC or 0/1~5VDC; digital RS485
Accuracy	+0.25%FS(typ.); +0.5%FS(max.) including analog output's lin.,rep. and hys.
Zero temp.drift	+0.03%FS/°C (≤100kPa), +0.02%FS/°C (>100kPa)
FS temp.drift	+0.03%FS/°C (≤100kPa), +0.02%FS/°C (>100kPa)
Long-term stability	≤+0.5%FS/year
Relay quantity	1~5
Load	240V/5A(AC)or 30V/5A(DC)
Relay life	>100000 times
Indicator	4 digit 0.56 inch LED digit indicator; 4 digit 0.36 inch LED situation display indicator
display range	-1999~9999
Power supply	220VAC±15% or 220VDC or 24VDC
Max.consumption	≤3.5W
Environment temp.	-10°C ~60°C
Frequency	0~300Hz
Media temp.	-10°C ~80°C
Acceleration	≤3×9.81ms ⁻²
Storage temp.	-40°C ~125°C
Impact	≤10×9.81ms ⁻²
Pressure port	stainless steel 1Cr18Ni9Ti
Diaphragm	stainless steel 316L
Electronic housing	aluminum-alloy
Sealing	Viton or full-welded
Pressure port	Optional
Protection	Controller Body IP65; Probe IP68

Outline Construction (Unit: mm)



Electrical Connection

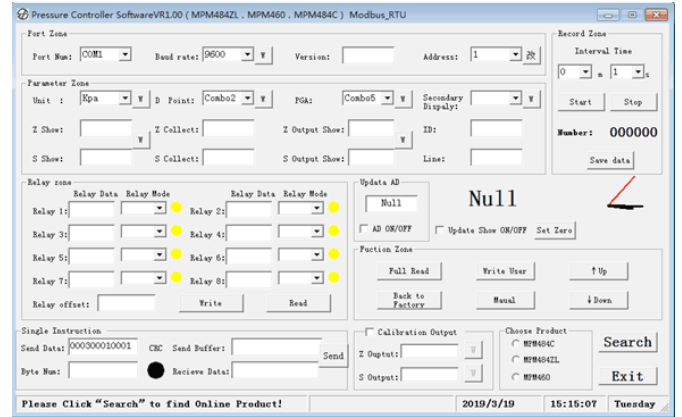


Assistant Software

RS485 Interface's software

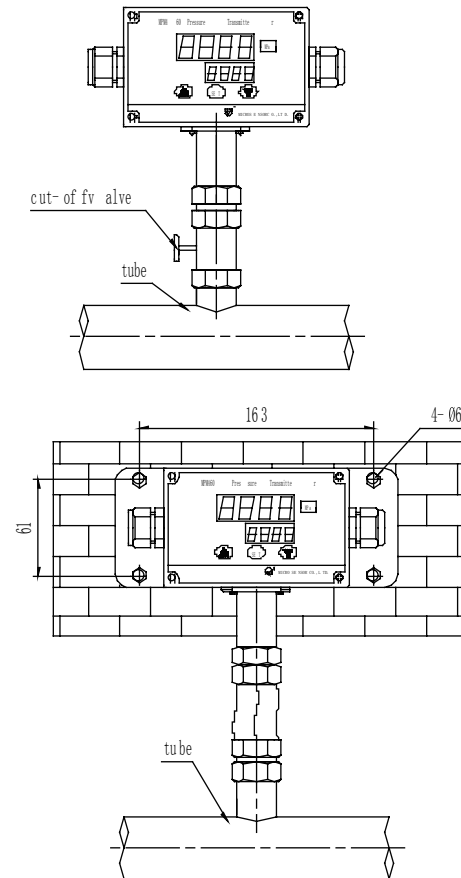
Setonline Software

Communicate with RS485 interface through RS232/485 transforming module, display measuring pressure, level, differential pressure value, zero, analog output and transmitter address.



Note: software "Setonline" could be downloaded from our official website, www.microsensor.cn

Application Example



Order Guide

MDM460		Multi-functional Intelligent Differential Pressure Transmitting Controller							
Range		Pressure range: kPa or MPa							
		Differential pressure	Pressure (kPa)	Overpressure kPa		Pressure (kPa)	Overpressure kPa		
				+	-		+	-	
				0~35	70	35	0~700	1400	700
				0~70	150	70	0~1000	2000	1000
				0~100	200	100	0~2000	4000	1000
				0~200	400	200	0~3500	7000	1000
			0~350	700	350				
		Code		Output signal					
		E		4~20mADC					
		F		1~5VDC					
		J		0~5VDC					
		Q		0~10mADC					
		U		0~20mADC					
		R ₈		RS485 interface					
				Construction material					
				Code	Diaphragm	Pressure port	Housing		
				22	SS 316L	SS	Aluminum-alloy		
				25	Tantalum	SS	Aluminum-alloy		
				35	Tantalum	Hastelloy C	Aluminum-alloy		
				Code		Others			
				C ₄	G1/4 female				
				J _n	Relay quantity, n=1~5				
				V ₁	Power supply 24VDC				
				V ₂	Power supply 220VAC				
MDM460	[0~200]kPa	F	22	C ₄ J ₁ V ₁	the whole spec				

Notes

1. Please note power supply, accuracy, relay quantity; the default is 24VDC power supply, accuracy 0.5%FS and no relay control;
2. If the user needs communication software and instruction for RS485 interface, please note in the order;
3. For MDM460 product, please pay attention to overpressure of positive and negative cavity should be suitable to max. Pressure; we suggest to install tri-valve between measured point and transmitter to make pressure adding on positive and negative cavity slowly.