MUESEN
PRODUCT

Pressure transmitter
MSP101P

- Fixed measuring ranges up to 350bar
- Compact construction
- Simple mounting
- Excellent long term stability
- Long operational life
- Low price
- Option: HART®-Communication

Characteristics

- Pressure transmitter MSP101P with silicon piezoresistive stainless steel sensor is suitable for a wide variety of liquids, gases and vapors.
- It is a compact, economical system that provides measurement in gauge or absolute gauge measurement.

Nomal Pressrue Range

- From: 0...35KPa
- Up to 0...350bar(gauge) 0...35bar(absolute)

Area for application

- Compressed air
- Non-aggressive gases
- Vacuum technology
- Pneumatics

Mounting Simplicity

- The MSP101P can be mounted in any orientation(Vertical, Horizontal, or inverted) without affecting its performance.
- M20X1.5 process connection(standard, others on request), 304SS
- 4 to 20mA output
- 10.5 to 45VDC power supply

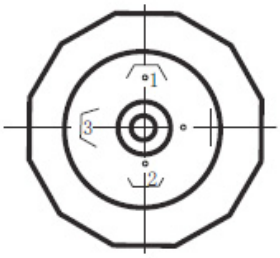
Technische Daten

Measuring range												
Pressure gauge (bar)	0.35	0.7	1	2	3.5	7	10	20	35	70	100	350
Max. permissible overload (bar)	3X or 50MPa, whichever is less											
Absolutdruck (bar)	0.35	0.7	1	2	3.5	7	10	20	35			
Max. permissible overload (bar)	3X or 50MPa, whichever is less											
Power supply (polarity protected)												
Supply voltage	10.5-45 VDC											
Output signal												
2-wire-system	Standard: 4...20mA Optional:HART-protocoll-communication											
3-witre-system(optional)	1...5 V											
Signal range-4 to 20 mA	3.8mA...20.8mA											
Signal on alarm	3.8mA/Option:22.8mA/Others on request											

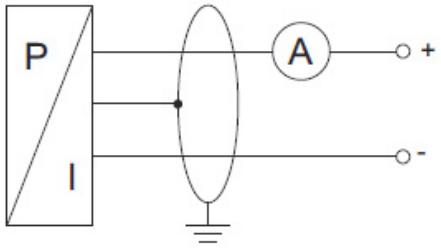
Electrical protection		
Instinct safe type	Ex ia Ⅱ T4–CT6	
Insulation resistance	250Ω	
Short–Circuit protection	Permanent	
Reverse polatity protection	No damage, and no function	
Overvoltage protection	500V	
Performance		
Accurace	Nominal range	〈0.2%
	Turndown 2:1	〈0.25%
	Turndown 3:1	〈0.3%
Power supply effect	Negligible	
Vibration effect	〈0.01% of URL/g when tested 200Hz in any axis relative	
Thermal effect	±0.02%/FS/10K	
Permissible load	≤1000Ω	
Switch on delay	Typically 0.15% per year	
Response time	≤200ms((without consideration of electronic damping)	
Self stability configuration	0 to 2%	
Filter configured	0 to 160μA	
Adjustability	Two buttons	
Conditions		
Compensated temperature	0...70℃	
Storage	–20 to +85℃	
Environment	–40 to +125℃	
Ingress protection	IP 65	
Materials		
Housing	304SS	
Sensor	Silicon piezoresistive stainless steel sensor	
Seals	FPM/Others: on request	
Process connection		
Standard	M20x1.5	
Optional	G1/2/NPT1/2/NPT1/4/G1/4 Others on request	
Others		
Display	4–digit, red LED display, digit height 7mm, digit width 4.85mm	
Display range	–1999–9999	
Weight	Approx. 190g (with Display)	

Elektrical Connection

Pin Configuration



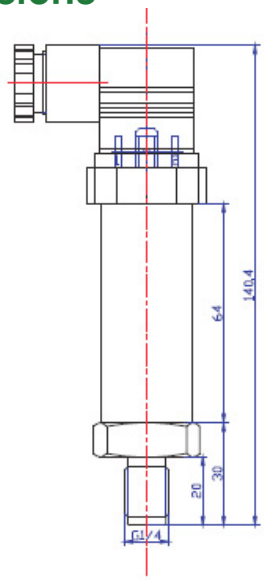
Wiring diagrams

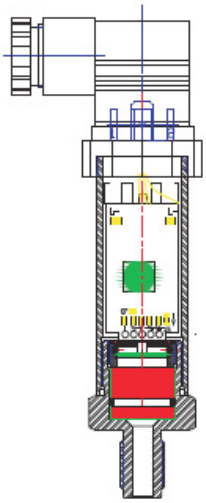


2-Leiter System:
1: Stromversorgung +
2: Stromversorgung -
3: GND
Versorgungsspannung: 10 bis 45VDC
Ausgangssignal: 4 bis 20mA

3-Leiter System:
1: Stromversorgung +
2: Stromversorgung - (Signal-)
3: Signal+
Versorgungsspannung: 10 bis 45VDC
Ausgangssignal: 1 bis 5V

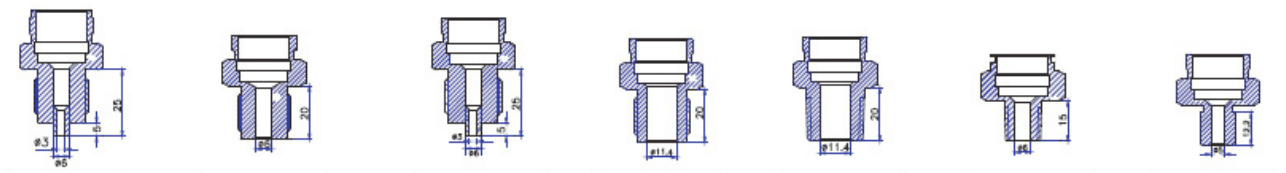
Dimensions





Dimensions in mm

Mechanical Connection



M20X1.5 EN	M20X1.5 DIN	G1/2 EN	G1/2 DIN	1/2 NPT	1/4 NPT	G1/4
Ordering code: 01	Ordering code: 02	Ordering code:03	Ordering code: 04	Ordering code: 05	Ordering code: 06	Ordering code:07

Standard Optional

Type	MSP101P																			
Pressure																				
	Gauge	G																		
	Absolute	A																		
Communication Type																				
	HART		H																	
	Digital		D																	
Meas. Range																				
	0...0.35			3	5	0	0													
	0...0.7			7	0	0	0													
	0...1			1	0	0	1													
	0...2			2	0	0	1													
	0...3.5			3	5	0	1													
	0...7			7	0	0	1													
	0...10			1	0	0	2													
	0...20			2	0	0	2													
	0...35			3	5	0	2													
	0...70			7	0	0	2													
	0...200			2	0	0	3													
	0...350			3	5	0	3													
	Others on request			9	9	9	9													
Process connection																				
	M20X1.5 EN							0	1											
	M20X1.5 DIN							0	2											
	G1/2 EN							0	3											
	G1/2 DIN							0	4											
	1/2NPT							0	5											
	1/4NPT							0	6											
	G1/4							0	7											
Seals																				
	FPM									0	1									
	Others on request									9	9									
Wetted Parts Material																				
	SUS304											0	1							
	Others on request											9	9							
Electrical connection																				
	Hirschmann GDM3009													0	1					
	Others on request													9	9					
LCD Display																				
	None																	N		
	With Display																	D		
Other Options																				
																			9	9

Typical model number: MSP101T–G–H–1001–01–01–01–01–D
* Absolute mear. Ragnges 〉 35 bar unavailable