



UIB1 Digital Pressure Transmitter

Description

UIB1 digital pressure transmitter is new generation digital transmitter, it is an intelligent pressure transmitter with high accuracy & stability for pressure measurement. This product is designed by using the newest achievements of digital techniques in the sensor manufacturing domain, and the design techniques of the most advanced piezoresistive pressure transmitter, as well as precise digital temperature compensation and non-linearity compensation technology.

UIB1 digital pressure transmitter uses ultra low power monolithic and the high accuracy power source management electric circuit, which is advantageous for the computer system to carry on the data transmission through the digital interface, thus to realize the transmitter's digitization.

UIB1 has already widely been used in scientific research and petroleum, chemical industry, medicine, electric power etc.

Features

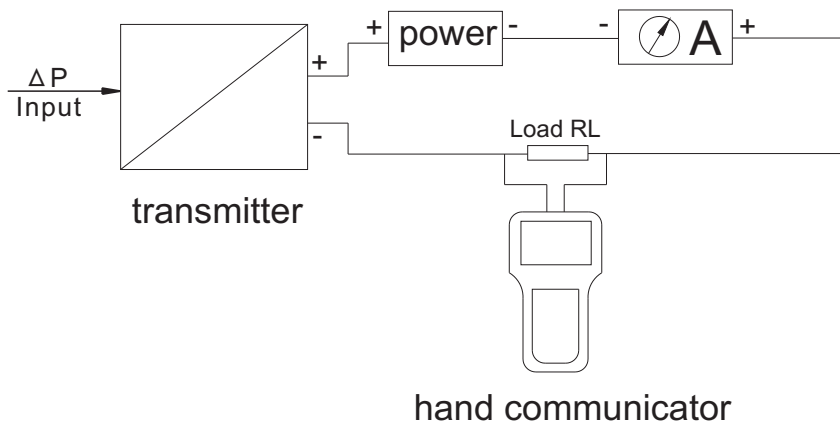
- Using digital compensation technology and non-linearity revision technology
- Advanced circuit design and software design
- HART protocol or MODBUS protocol (Rs485 interface) ,high accuracy, good long-term stability
- Digital communication technology



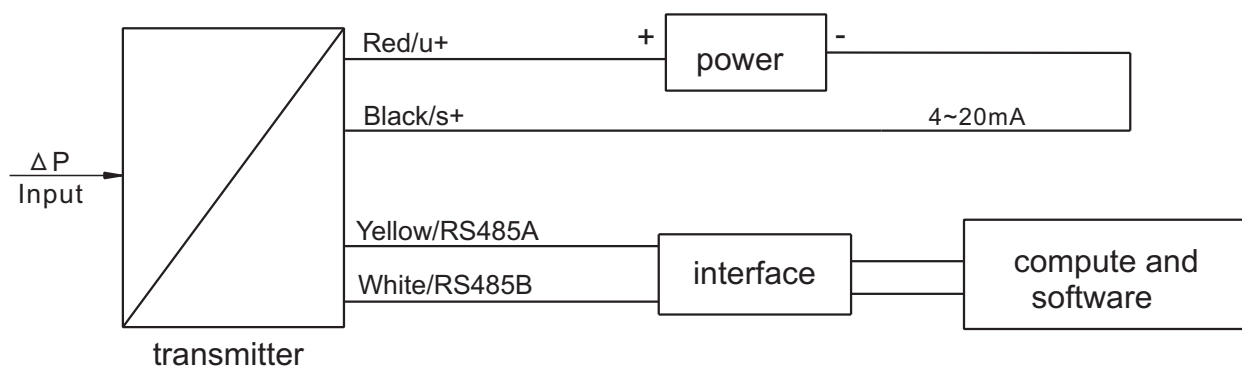
Specifications

pressure medium	gas or liquid compatible to stainless steel
pressure ranges	-1...0bar~0.1...1000bar
pressure type	gauge(G), absolute(A), sealed gauge(S), differential(D)
overload pressure	150%FS
output signal	Digital signal or digital signal with 4/20mA analog signal
communication	MODBUS RTU protocol(RS485 interface)or HART protocol
accuracy	0.1%FS,0.25%FS(standard), 0.5%FS
load resistance	$R_L = (U - 12V) / 0.02A$ U:loop voltage(V)
long-term stability	<0.2%FS/year
supply voltage	12~36VDC
compensated temperature range	-10~70°C
operating temperature range	-30~100°C
storage temperature range	-40~120°C
temperature coefficient of zero	0.2%FS/10°C
temperature coefficient of span	0.2%FS/10°C
insulation resistance	100MΩ@50VDC
process connection	G1/2 or others
electrical connection	hirschmann connector or others
material of wetted part	1Cr18Ni9Ti
material of pressure membrane	316L
material of housing	1Cr18Ni9Ti

Electrical connection

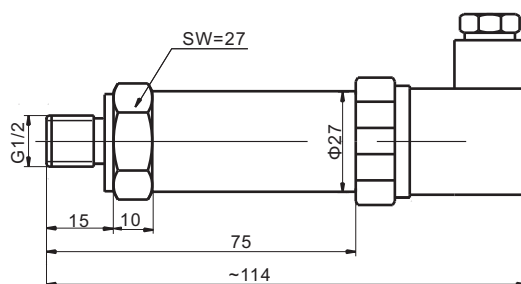


Wiring for HART transmitter connecting with hand communicator

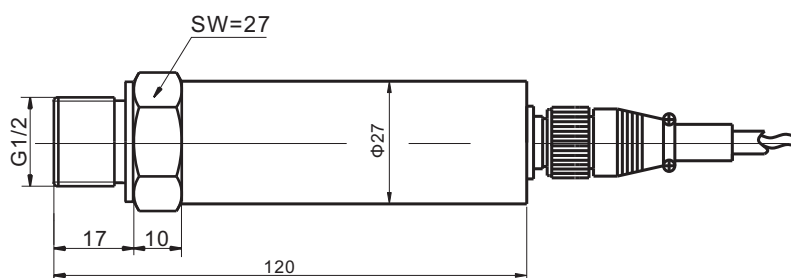


Electrical connection of RS485 interface

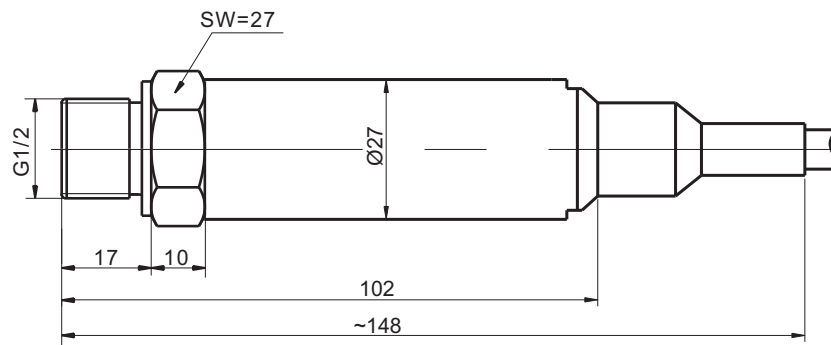
Dimensions



Hirschmann connector



Aviation connector



Water-proof connector

Ordering code

UIB1											
		range	measuring range: -1...0bar~0.1bar...1000bar								
		(X1~X2)bar	X1: lower limit of actual measuring range, X2: higher limit of actual measuring range								
			code	pressure type							
			G	gauge							
			A	absolute							
			S	sealed gauge							
			D	differential							
				code	accuracy						
				B	0.1%FS						
				C	0.25%FS						
				D	0.5%FS						
					code	output and communication					
					R	MODBUS RTU protocol with 4~20mA					
					Z	MODBUS RTU protocol without 4~20mA					
					H	HART protocol with 4~20mA					
						code	others				
						E1	hirschmann connector				
						E2	Aviation connector				
						E3	water-proof connector				
						E4	3m PVC cable (lock nut)				
						Ez	other electrical connection				
						P1	cavity type G1/4				
						P2	cavity type G1/2				
						P3	cavity type 1/4NPT				
						P4	cavity type M20×1. 5				
						P8	flush diap.(G1/2) range≤350 bar				
						Pz	customer request				
UIB1	(0~20)bar	G	B	R	E1P2						