

The selection is detailed on page 6



# PC70

## Intelligent Pressure Controller

### Working principle

The measured medium pressure acts on the pressure sensing membrane of the sensor, the sensor will be amplified, A/D conversion, sent to the CPU for processing, and then analog or digital output, so as to achieve the purpose of pressure display, control, transmission; The microprocessor can automatically compensate the zero drift, temperature drift and nonlinearity of the instrument to ensure the high precision of the instrument under the operating conditions.

### Product description

#### Robust and accurate field display

The durable stainless steel housing and independent battery power supply make it suitable for a wide range of flexible applications. Its precise and fast reading of pressure values makes it the perfect solution for field digital displays. The integrated pressure bar chart indicator function can store maximum and minimum pressure values for efficient analysis of its measured operating point.

#### Standard and enhanced

In low-light environments, the PC70 ADAPTS to the field environment with its backlight display.

In addition, it is also formulated with automatic shutdown function, zero setting function and password protection function.

#### Proven measurement techniques

LUDWIG has decades of experience in the manufacture of sensors that guarantee high precision and long-term reliability of stability and repeatability in the field of industrial pressure measurement.

### Product application

Mechanical engineering  
Liquid and gas measurement  
Pumps and compressors  
Service industry

### Functional characteristics

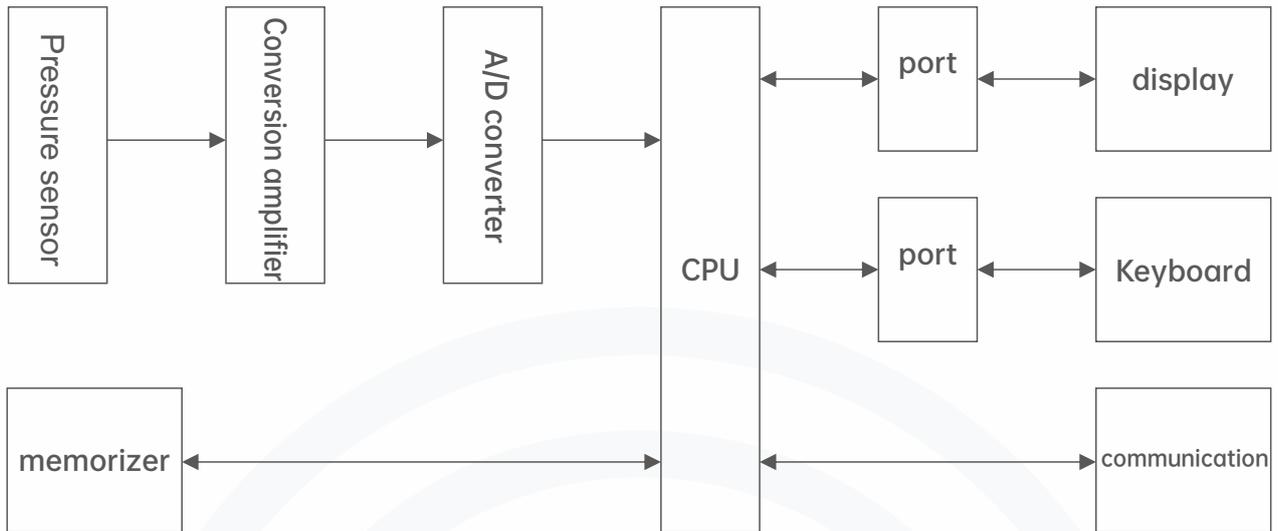
Pressure range: 0... 60 MPa  
Display accuracy:  $\pm 0.5\% \pm 1$  bit  
Option: Backlight



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For more product information, please visit [www.ludwig-schneider.com.cn](http://www.ludwig-schneider.com.cn)

Working principle diagram



Range

Manometer pressure							
MPa	Range	0 ... 0.5	0 ... 1	0 ... 2	0 ... 5	0 ... 10	0 ... 16
	Overtoltage limit	1	2	4	10	20	32
	Burst pressure	1.2	2.5	5	12	80	100
	Range	0 ... 25	0 ... 40	0 ... 60	-	-	-
	Overtoltage limit	50	80	120	-	-	-
	Burst pressure	120	170	140	-	-	-
psi	Range	0 ... 145	0 ... 300	0 ... 600	0 ... 1,450	0 ... 2,000	0 ... 3,000
	Overtoltage limit	290	580	1,450	2,900	4,640	7,250
	Burst pressure	360	725	1,740	11,600	14,500	17,400
	range	0 ... 5,000	0 ... 7,500	0 ... 10,000 <sup>1)</sup>	-	-	-
	Overtoltage limit	11,600	17,400	21,750	-	-	-
	Burst pressure	24,650	34,800	43,500	-	-	-

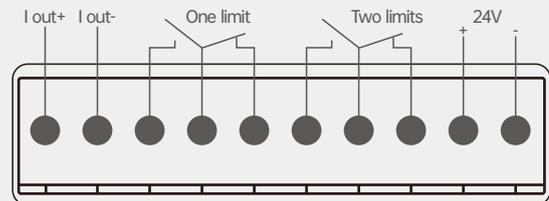
## Hardware function

### Backlight

The PC70 is backlit, so it can be light even in poor light conditions. Loose read display value.



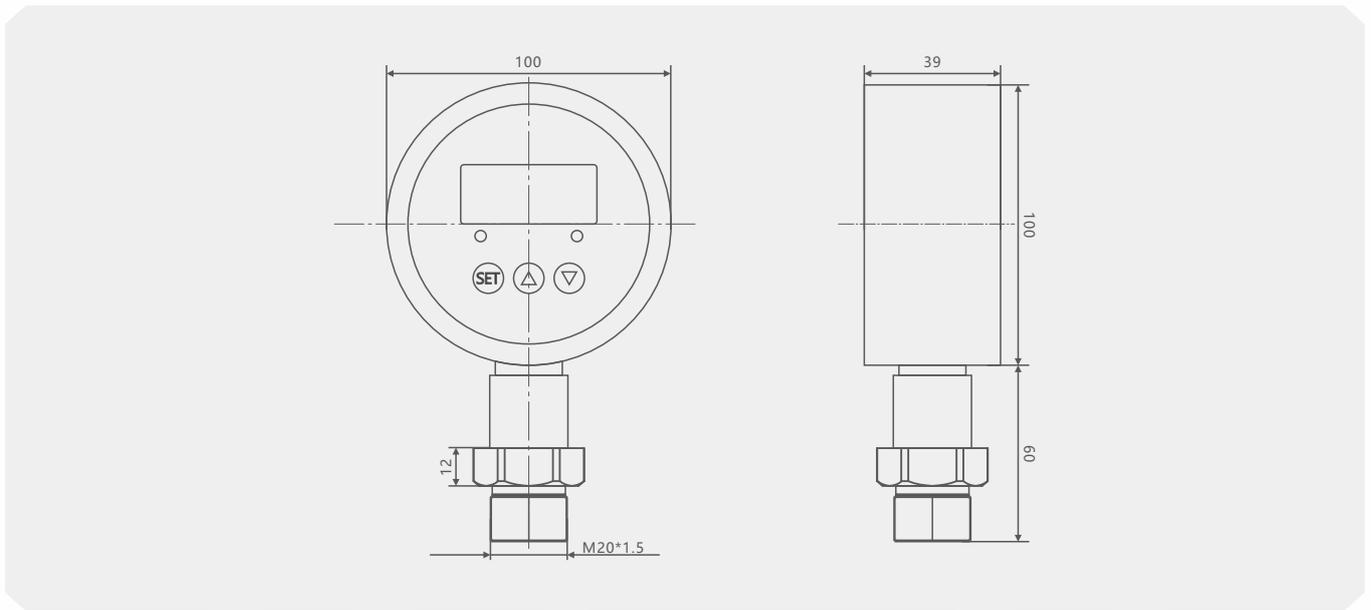
### Electrical connection



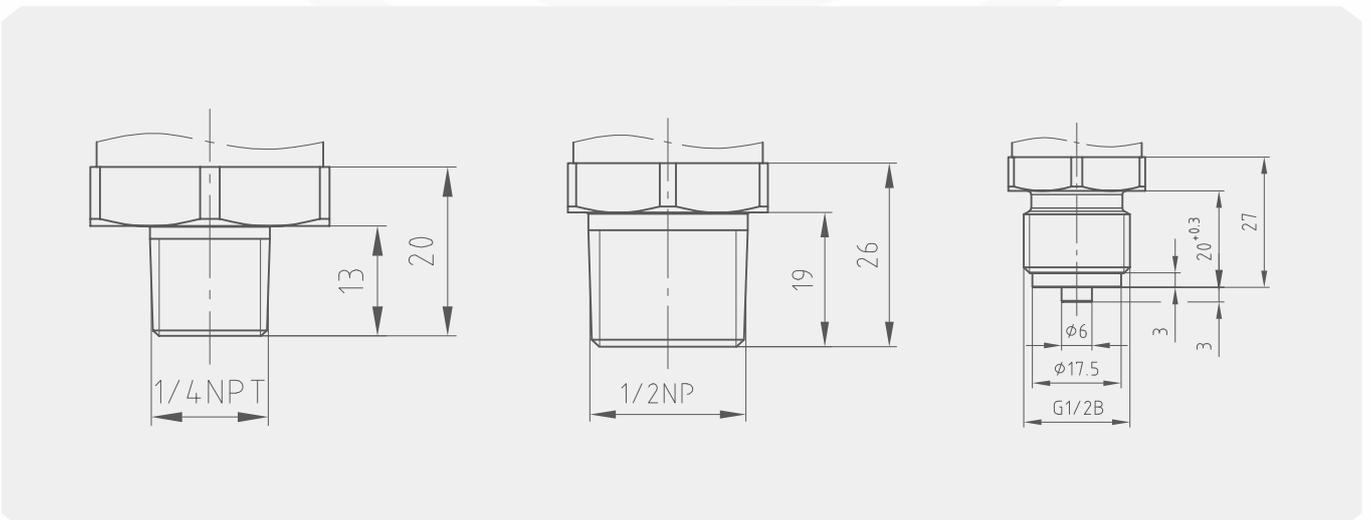
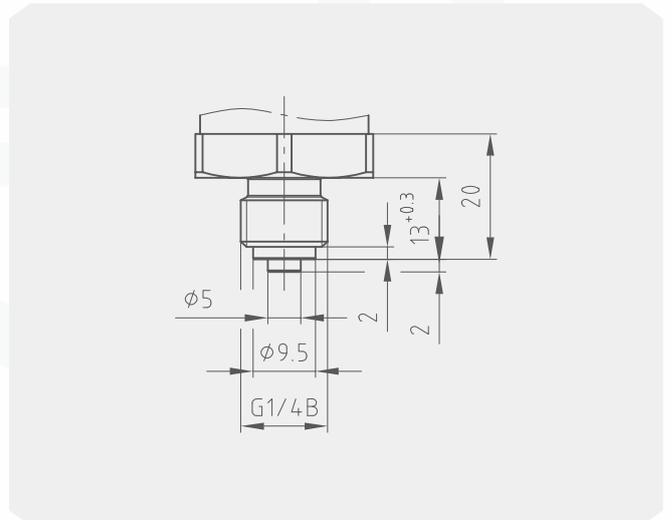
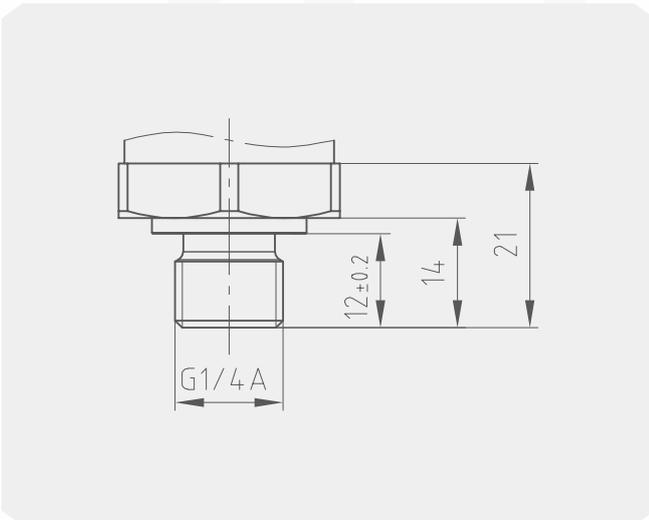
## Technical parameter

Power source	24V DC
material	304SS/316L
Reference condition	
▪ Temperature	5...35°C
▪ Atmospheric pressure	8.60...10.60Pa
▪ Humidness	< 80% r.h. (noncondensing)
▪ Dial position	In the vertical mounting position, calibrate downward by process connection
Accuracy	
▪ Accuracy under reference conditions	≤±0.5 %Full scale, ± 1 bit Includes nonlinearity, hysteresis, zero offset and end value deviation (measurement errors according to IEC 61298-2)
▪ Zero calibration accuracy	≤±0.1%FS (Power-on reset)
▪ Zero adjustment	≤±20% FS (Zero adjustment of DG-10-E peeling weighing function)
▪ The temperature error is 5... 35 °C	The mean temperature deviation of zero: ≤±0.15 % /10 K The mean temperature deviation of the range: ≤±0.15 % /10 K
▪ Long-term stability	≤±0.2% FS /年
Process connection	
▪ ISO1179-2 (Older versions conform to DIN 3852-E)	G1/4A
▪ EN 837	G1/4B G1/2B
▪ ANSI/ASME B1.20.1	1/4NPT 1/2NPT
Protection class (according to IEC60259)	IP65

## Size mm



## Process connection



## Attachments

Description	
	Rubber cover (black)
	Minimess coupler Maximum pressure strength 63MPa
	Sealing sleeve for process connection, according to ISO1179-2 (older DIN 3852-E) The material is NBR  Thread size G ¼ A ISO1179-2 standard (older version according to DIN 3852-E)

## Range table

Positive pressure	code	MPa	code	Bar	code	kPa	code	kg/cm <sup>2</sup>	code	Psi
	MP001	0/0.1	BP001	0/1	KP001	0/100	GP001	0/1	PP1E5	0/15
MP1E6	0/0.16	BP1E6	0/1.6	KP1E6	0/160	GP1E6	0/1.6	PP003	0/30	
MP2E5	0/0.25	BP2E5	0/2.5	KP2E5	0/250	GP2E5	0/2.5	PP006	0/60	
MP004	0/0.4	BP004	0/4	KP004	0/400	GP004	0/4	PP010	0/100	
MP006	0/0.6	BP006	0/6	KP006	0/600	GP006	0/6	PP016	0/160	
MP010	0/1	BP010	0/10	KP010	0/1000	GP010	0/10	PP020	0/200	
MP016	0/1.6	BP016	0/16	KP016	0/1600	GP016	0/16	PP030	0/300	
MP025	0/2.5	BP025	0/25	KP025	0/2500	GP025	0/25	PP040	0/400	
MP040	0/4	BP040	0/40	KP040	0/4000	GP040	0/40	PP060	0/600	
MP060	0/6	BP060	0/60	KP060	0/6000	GP060	0/60	PP100	0/1000	
MP100	0/10	BP100	0/100	KP100	0/10000	GP100	0/100	PP150	0/1500	
MP160	0/16	BP160	0/160	KP160	0/16000	GP160	0/160	PP200	0/2000	
MP250	0/25	BP250	0/250	KP250	0/25000	GP250	0/250	PP300	0/3000	
MP400	0/40	BP400	0/400	KP400	0/40000	GP400	0/400	PP400	0/4000	
MP600	0/60	BP600	0/600	KP600	0/60000	GP600	0/600	PP600	0/6000	

## PC70-Selection composition

Selection example **PC70** **A** **E** **MP001** **S** **H** **K** **N**

1 2 3 4 5 6 7

1.Dial diameter	<b>A</b>	100
2.Precision class	<b>C</b>	0.2%
	<b>D</b>	0.5%
	<b>E</b>	1.0%
3.Range range	<b>R( )</b>	See range table (page 5)
4.Liquid material	<b>S</b>	304SS
	<b>L</b>	316L
5.Process connection	<b>G</b>	1/2NPT
	<b>H</b>	M20*1.5
	<b>I</b>	G1/2B
	<b>T( )</b>	Other process connection
6.exportation	<b>K</b>	4-20mA
	<b>M</b>	4-20mA+2 switch points
7.Watch glass	<b>N</b>	PC plastic
8.certificate	<b>P</b>	EN10204
	<b>Q</b>	not have
9.Special requirements	<b>U</b>	degrease
	<b>V</b>	Oxygen application ≤160bar
	<b>W</b>	not have
	<b>T( )</b>	Other requirements
10.Additional description	<b>X</b>	Yes (remarks)
	<b>Y</b>	not have

## Instructions:

It indicates that the dial diameter of PC70 intelligent pressure controller is 100mm, the accuracy level is 1%, the measuring range is 0~0.1MPa, the liquid material is 304 stainless steel, the process connection is M20\*1.5, the output is 4-20mA, tWatch glass is PC plastic, and the item 8/9/10 in the above table is not required.

## Product Certification

Compliance and approval; Rodewieg pressure gauges meet key standards and certifications for process measurement technology; Thus guaranteeing the highest reliability in such Settings;