

Digital Pressure Controller

Model PY807KZ

Applications

- High accuracy, high reliability
- Automatic zero stabilization function
- Full isolation, strong anti-interference ability
- Data backup function
- Multiple pressure unit switching

Special features

- Measuring ranges : -1 ... 25,00 bar
- Accuracy: up to 0.02 % F.S
- Large 6-digit digital display
- Automatic temperature 0 ~ 50 degrees compensation function
- Seamless switching between batteries and adapters, suitable for a variety of environments
- USB data export, data can be permanently saved



PY 807KZ Digital Pressure Controller

Description

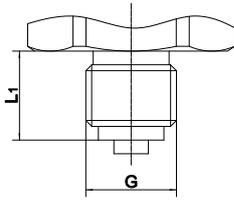
PY807KZ high precision pressure controller is a high precision single range digital pressure control instrument. It consists of high-precision measuring chip, high-precision pressure sensor and other components. Internal full isolation circuit, strong anti-interference ability. With three independent relay contact outputs or a 4~20mA output. Widely used in electric power, water, water treatment, petroleum, chemical, metallurgy and other industries.

It can also be used as a pressure standardizer to complete the calibration of a variety of pressure instruments such as general pressure gauges, precision pressure gauges, etc. It is very suitable for industrial sites and laboratories.

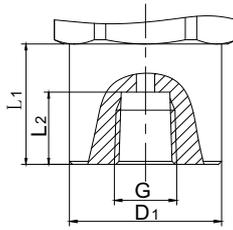
Specifications

Basic information	
Pressure types	
Pressure ranges	-1 ... 2,500 bar
Accuracy	0.02%FS , 0.05%FS , 0.1%FS , 0.2 % FS , 0.5 % FS
Temperature compensation	-10...50 °C
Power supply	DC24V±2V
Analog output	<ul style="list-style-type: none"> ■ 4~20mA DC (Load resistance ≤750Ω) ■ 0~10 mA DC (Load resistance ≤1.5KΩ) ■ 1~5V DC (Load resistance ≥250K) ■ 0~5V DC (Load resistance ≥250K)
Switching output	Three relay control outputs - ON/OFF (with differential)
Contact capacity	250VAC/3A, 30VDC/3A (resistive load)
Control/Alarm	Upper limit, lower limit or upper limit, lower limit control/alarm output can be selected. Alarm value with bring back difference (can be set freely)
Parameter setting	Panel touch key digital setting, parameter setting value is permanently saved after power failure, parameter setting value password locking
Units	
Pressure	bar ,mbar, Pa, kPa, MPa, PSI, kg/cm ² , mmH ₂ O, mmHg, inHg
Display	
Type	Multifunctional LCD, 6 digit, with background lighting
Functions	Bar Graph, Pressure Units, Pressure Measurement, Min/Max, Overpressure Indication 120 % of Full Scale Pressure (F.S)
Process connection	
Thread	1/4NPT, 1/2NPT, G1/2, G1/4,Others can be customized
Material	316L
Housing	
Dimensions	Ø 123 mm, D=45 mm H=145 mm
Ambient conditions	-20...70°C with air humidity ≤95%r.h.
Weight	650 g

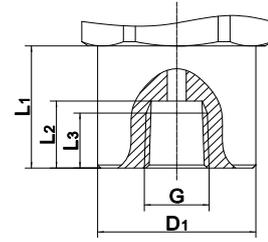
Process connections



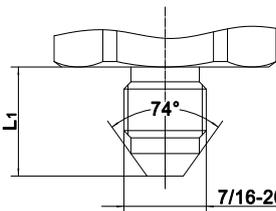
G	L ₁	Standard
G1/4 B	13	EN 837
G3/8 B	16	
G1/2 B	20	
M20×1.5	20	



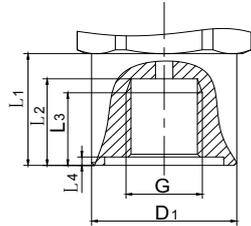
G	D ₁	L ₁	L ₂	Standard
NPT1/8	Φ25	20	12	ANSI/ASME B1.20.1
NPT1/4	Φ25	20	14	
NPT1/2	Φ25	25	19	



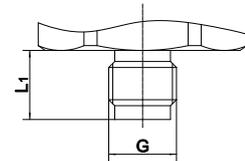
G	D ₁	L ₁	L ₂	L ₃	Standard
G1/8	Φ25	20	10	7.5	EN 837
G1/4	Φ25	20	13	10	



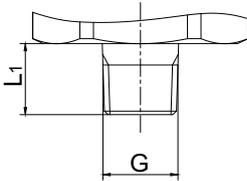
G	L ₁	Standard
7/16-20 UNF-74° cone	14	SAE J514 E



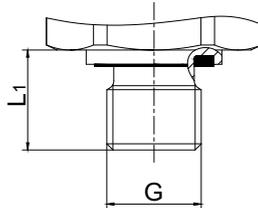
G	D ₁	L ₁	L ₂	L ₃	L ₄	Standard
G1/4	Φ25	20	15.5	13	1.5	ISO 1179-1



G	L ₁	Standard
G1/8 B	10	EN 837



G	L ₁	Standard
NPT1/8	10	ANSI/ASME B1.20.1
NPT1/4	13	
NPT1/2	19	
R1/4	13	ISO 7
R3/8	15	
R1/2	19	



G	L ₁	Standard
G1/4 A	14	ISO 1179-2
G3/8 A	14.5	
G1/2 A	17	
M12×1.5	14	ISO 9974-2
M14×1.5	14	
M20×1.5	16.5	

Measuring ranges, gauge pressure

Overview pressure ranges				
Type	pressure ranges(bar)	Accuracy (± of full scale value)	media	Burst Pressure
GP0.16	0...0.16	0.05(0.1,0.2)	Gas/Liquid	4X
GP 0.25	0...0.25	0.05(0.1,0.2)	Gas/Liquid	4X
GP 0.4	0...0.4	0.05(0.1,0.2)	Gas/Liquid	3X
GP 0.6	0...0.6	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 1	0...1	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 1.6	0...1.6	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 2.5	0...2.5	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 4	0...4	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 6	0...6	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 10	0...10	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 16	0...16	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 25	0...25	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 40	0...40	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 60	0...60	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 100	0...100	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 160	0...160	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 250	0...250	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 400	0...400	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 600	0...600	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 1000	0...1000	0.05(0.1,0.2)	Gas/Liquid	3X
GP 1600	0...1600	0.05(0.1,0.2)	Gas/Liquid	2X
GP 2000	0...2000	0.05(0.1,0.2)	Gas/Liquid	1.5X
GP 2500	0...2500	0.05(0.1,0.2)	Gas/Liquid	1.5X

Measuring ranges, absolute pressure

Overview pressure ranges				
Type	pressure ranges(bar)	Accuracy (± of full scale value)	media	Burst Pressure
AP 0.25	0...0.25	0.05(0.1,0.2)	Gas	4X
AP 0.4	0...0.4	0.05(0.1,0.2)	Gas	3X
AP 0.6	0...0.6	0.05(0.1,0.2)	Gas	3X
AP 1	0...1	0.02(0.05,0.1,0.2)	Gas	3X
AP 1.6	0...1.6	0.02(0.05,0.1,0.2)	Gas	3X
AP 2.5	0...2.5	0.02(0.05,0.1,0.2)	Gas	3X
AP 4	0...4	0.02(0.05,0.1,0.2)	Gas	3X
AP 6	0...6	0.02(0.05,0.1,0.2)	Gas	3X
AP 10	0...10	0.02(0.05,0.1,0.2)	Gas	3X
AP 16	0...16	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
AP 25	0...25	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
AP 40	0...40	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
AP 60	0...60	0.02(0.05,0.1,0.2)	Gas/Liquid	3X

Measuring ranges, differential pressure

Overview pressure ranges				
Type	pressure ranges(mbar)	Accuracy (± of full scale value)	media	Burst Pressure
DP2.5	-2.5...2.5	0.1(0.2)	Gas	5X
DP 10	-10...10	0.05(0.1,0.2)	Gas	4X
DP 20	-20...20	0.05(0.1,0.2)	Gas	3X
DP 50	-50...50	0.02(0.05,0.1,0.2)	Gas	4X
DP 100	-100...100	0.02(0.05,0.1,0.2)	Gas	3X

Measuring ranges, vacuum and +/- measuring ranges

Overview pressure ranges				
Type	pressure ranges(bar)	Accuracy (± of full scale value)	media	Burst Pressure
VP -0.25	-0.25...0.25	0.05(0.1,0.2)	Gas/Liquid	3X
VP -0.4	-0.4...0.4	0.05(0.1,0.2)	Gas/Liquid	3X
VP -0.6	-0.6...0.6	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
VP 0	-1...0	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
VP0.6	-1...0.6	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
VP 1	-1...1	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
VP 1.6	-1...1.6	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
VP 2.5	-1...2.5	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
VP 4	-1...4	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
VP 6	-1...6	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
VP 10	-1...10	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
VP 40	-1...40	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
VP 60	-1...60	0.02(0.05,0.1,0.2)	Gas/Liquid	3X

Note:

The compensation temperature for 0.02 %FS is 20 ± 5 °C. The compensation temperature for 0.05 % FS is 0-50 °C. If the pressure is less than 100 mbar, the measuring medium is Gas. For pressures greater than 100 mbar, the measuring medium is Liquid or Gas.

Order code					
model	Accuracy	Pressure ranges	Unit	Output	Process connection
PY 807KZ	A002(0.02%F.S) A005(0.05%F.S) A010(0.1%F.S)	Table of reference measuring ranges	bar psi MPa kg/cm ² kPa mbar mmHg mmHO inHg Pa	A: 4~20mA DC B: 0~10 mA DC C: 1~5V DC D: 0~5V DC	1/4NPT 1/2NPT G1/2 M20*1.5 G1/4 Other
Example order number PY803KZ-A002-GP10(0...10)bar-A-1/4NPT -N PY807KZ with G1/4, 0.02%F.S, 4-20 mA, 10bar (Gauge)					