

PRODUCT OVERVIEW

LEVEL MEASUREMENT

MAC Sensor Co.,LTD.
Changsha City,Hunan,China
<http://www.macsensor.com>

TEL: +86-731-89975636 / 89975645

L704 Series Submersible Diesel Pressure Level Transmitter



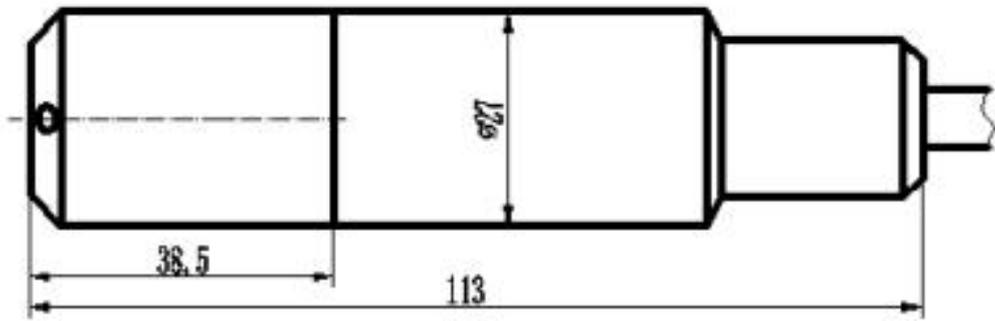
Profiles

L704 series digital pressure level transducer with high stable and reliable, uses imported pressure chips and highly accurate circuit board into the stainless steel housing. Integrated construction and standard signal provide the user with easy and convenient application in the local working place. The special cable connects with housing, can be immersed into the media for a long time. L704 series digital pressure level transducers are a high accuracy digital and intellectual product development by MACSENSOR to meet the market needs of worldwide. L704 designed incorporating with monolithic computer technology and sensor digital conversion technology, which core component adopts 24-bit AD MCU micro-processor to ensure high quality of the transducer relaying on its strong function and high speed operation capacity. The overall designed framework is to meet the requirements of increasingly enhanced industrial site application with a view to reliability, stability, high accuracy and the product also features strong function and without manually operating device to ensure good interaction. Application of digital signal processing technology is made for good disturbance immunity. It also features zero point automatic stable follow up capacity and temperature automatic compensation.

Specifications

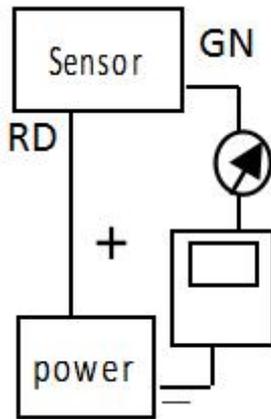
| Model | L704 | | | |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------|--------------|
| Parameter | | | | |
| Pressure Range | -1...0-0.05Bar...50 Bar Optional | | | |
| Programmable | Zero point adjustable for RS485 output | | | |
| Overload | 150% F.S. | | | |
| Burst Pressure | 300% F.S. | | | |
| Accuracy(Linearity Hysteresis Repeatability) | ≤±0.5%F.S; ≤±0.25%F.S; ≤±0.15%F.S Including non-lin., rep. and hys. Optional | | | |
| Long-term Stability | Standard: 0.1%F.S±0.05%/Year | Max: 0.15%F.S±0.05%/Year | | |
| Temp Compensation | -10℃~60℃ | | | |
| Working Temp. | -20℃~70℃ | | | |
| Storage Temp. | -30℃~100℃ | | | |
| Medium compatible | Compatible with 316 Stainless Steel or Titanium Alloy or PTFE materials. | | | |
| Output | 4-20mA or 4-20mA +HART | 0-5V/0.5-4.5V/1-5V/0-10V | RS485 | RS485+4-20mA |
| Power Supply | 12~ 36 Vdc | 12~ 30Vdc/5Vdc | 10~ 30Vdc | 12~ 30 V DC |
| Baud rate | 9600 (standard), 2400,4800,19200, 115200 by customized | | | |
| Data format | 1 start bit, 8 data bits, 1 stop bit | | | |
| Sampling rate | 10 points/second to 1 point/50 minutes | | | |
| Insulate resistance | >100M Ω @50V dc | | | |
| Zero Temp. Drift | Typical: 0.05%FS/℃ | Max: 0.1%FS/℃ | | |
| FS Temp. Drift | Typical: 0.05%FS/℃ | Max: 0.1%FS/℃ | | |
| Electronic connection | Fixed cable and water proof IP68 | | | |
| Mounting Type | None (standard type), G1/4" male, 1/4"NPT male/Female, others by customized. | | | |
| Response time | ≤1ms | | | |
| Pressure Type | Gauge pressure, absolute pressure optional | | | |
| Certificate approval | Exia IICT6 and CE Certificate. | | | |
| EMC Standard | electromagnetic radiation:EN50081-1/-2 electromagnetic susceptibility:EN50082-2 | | | |
| Lighting Proof | None (standard type); Air conducts withstand voltage 8000V Shell and Cable conduct withstand voltage 4000V. This function is customized. | | | |
| Water Proof | IP68 | | | |

Dimension and Drawing

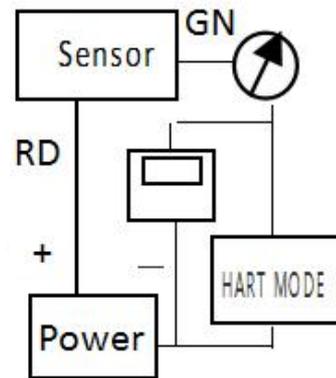


Unit, mm

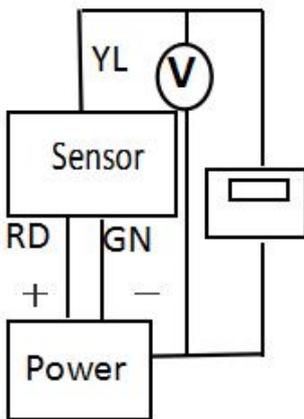
Electrical Wires Connection



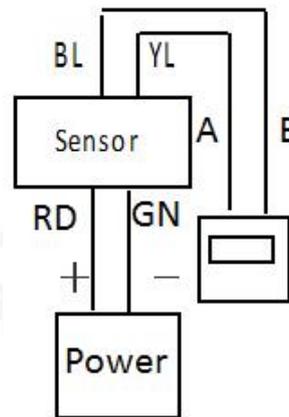
Current output, 2-wire



Hart protocol output



Voltage output, 3-wire



RS485 output

Part Number Code Table For Pressure Range

| | | | | | | | |
|-----|-------|-----|-------|-----|-------|-----|------------|
| 000 | -1-0 | 016 | 0-1.5 | 032 | 0-12 | 048 | 0-150 |
| 001 | -1-1 | 017 | 0-1.6 | 033 | 0-15 | 049 | 0-200 |
| 002 | -1-9 | 018 | 0-1.7 | 034 | 0-16 | 050 | 0-250 |
| 003 | -1-10 | 019 | 0-1.8 | 035 | 0-20 | 051 | 0-300 |
| 004 | -1-16 | 020 | 0-1.9 | 036 | 0-25 | 052 | 0-350 |
| 005 | -1-20 | 021 | 0-2.0 | 037 | 0-30 | 053 | 0-400 |
| 006 | -1-25 | 022 | 0-2.1 | 038 | 0-35 | 054 | 0-450 |
| 007 | -1-30 | 023 | 0-2.2 | 039 | 0-40 | 055 | 0-500 |
| 008 | -1-35 | 024 | 0-2.3 | 040 | 0-50 | X | Customized |
| 009 | -1-40 | 025 | 0-2.5 | 041 | 0-60 | | |
| 010 | -1-65 | 026 | 0-3 | 042 | 0-65 | | |
| 011 | 0-0.5 | 027 | 0-4 | 043 | 0-70 | | |
| 012 | 0-1.0 | 028 | 0-5 | 044 | 0-80 | | |
| 013 | 0-1.1 | 029 | 0-6 | 045 | 0-90 | | |
| 014 | 0-1.2 | 030 | 0-7 | 046 | 0-100 | | |
| 015 | 0-1.3 | 031 | 0-8 | 047 | 0-125 | | |

Order Information

| | | | | | | | | | | |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------|------------|----------|----------|----------|----------|-----------|----------|
| P/N | L704 | 010 | E5 | S17 | F | 1 | 1 | G | D1 | N |
| Selection | (Model) | | | | | | | | | |
| Range | Refer to <i>PART NUMBER CODE TABLE FOR RESSURE RANGE</i> on previous page and select your requested range code here. | | | | | | | | | |
| Output | E5=4-20mA(2 wires) E6=0-5V(3 wires) E7=0-10V(3 wires) E8=0.5-4.5V(3 wires) E0=1-5V(3 wires) E11=RS485(MODBUS) E14=4-20mA+Hart E20=RS485+4-20mA X= By Customized | | | | | | | | | |
| Power Supply | S6=5Vdc S17=10-30Vdc S37=12-36Vdc S10=12-30Vdc X= By Customized | | | | | | | | | |
| Pressure & Level Units | B=Bar P=PSI K=kPa H=H ₂ O F=m Fuel | | | | | | | | | |
| Accuracy | 0=1%F.S. 1=0.5%F.S 2=0.25%F.S 4=0.15%(by customized) | | | | | | | | | |
| Cable Length | 1=Cable 1m 2=Cable 2m 3=Cable 3m X=Cable x m | | | | | | | | | |
| Pressure Type | G=Gauge Pressure A=Absolute Pressure | | | | | | | | | |
| Measuring Medium | CW=Water D1=0.84g/cm ³ density diesel D2=0.83g/cm ³ density diesel D3=0.85g/cm ³ density diesel D4=0.86g/cm ³ density diesel X=Others Liquid and Density By Customized | | | | | | | | | |
| Others Function (Optional) | N=Standard Type (with short filter) MFC= POM material cap AW=Additional weight FC=FEP Cable | | | | | | | | | |