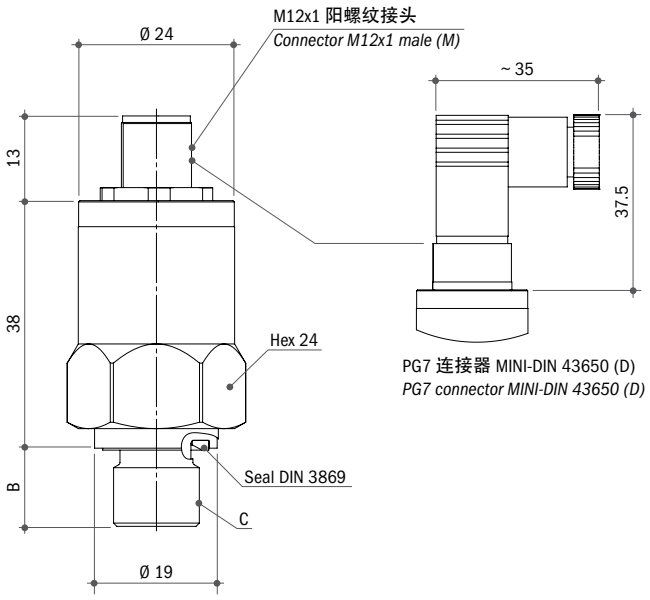
PTE 压力传感器
Pressure Transducer



电源电压	24Vdc; (10÷35Vdc, 电流 ≤ 30mA 输出电流); (12÷35Vdc 电流 ≤ 8mA 输出电压)	*Supply voltage*	*24Vdc;* *(10÷35Vdc, I ≤ 30mA output I);* *(12÷35Vdc I ≤ 8mA output V)*
电流信号输出	4-20mA（2引脚）； 电流限制：30mA	*Output signal current*	*4-20mA (2pins);* *current limitation: 30mA*
电压信号输出	0÷10V（3引脚）； 最小负载 3 KΩ	*Output signal voltage*	*0÷10V (3pins);* *minimum load 3 KΩ*
接线保护	防止电源反极性和输出信号电源短路	*Wiring protection*	*Against reverse polarity on power supply* *and short-circuit on output signal*
响应时间	≤ 5ms	*Response time*	*≤ 5ms*
技术	压阻式	*Technology*	*Piezoresistive*
稳定性	≤ ±0.3% F.S./年 @ 25°C	*Stability*	*≤ ±0.3% F.S./year @ 25°C*
精度	≤ 1% F.S. @ 25°C	*Accuracy*	*≤ 1% F.S. @ 25°C*
线性/滞后性/重复性	≤ ±0.4% F.S.	*Linearity/Hysteresis/Repeatability*	*≤ ±0.4% F.S.*
工作温度	-25°C...+100°C	*Operating temperature*	*-25°C to 100°C*
流体温度	-25°C...+125°C	*Fluid temperature*	*-25°C to 125°C*
储存温度	-40°C...+135°C	*Storage temperature*	*-40°C to 135°C*
接液部件材料	本体：AISI 316 不锈钢 密封件：聚氨酯、NBR	*Wetted parts material*	*Body: AISI 316 stainless steel* *Seals: polyurethane, NBR*
传感器材料	陶瓷氧化铝 96%	*Sensor material*	*Ceramic Al2O3 96%*
流体相容性	油、水、水-乙二醇和其他流体 请联系我们的技术部门	*Fluid compatibility*	*Oil, water, water-glycol, and other fluid* *please contact our technical office*
拧紧扭矩	20 Nm	*Tightening torque*	*20 Nm*
电气连接和防护等级 (EN 60529)	M12 1x4 引脚阳螺纹接头 - IP67 Mini-DIN 43650 连接器 - IP65	*Electrical connection and* *protection degree (EN 60529)*	*M12 1x4 pins male connector - IP67* *Mini-DIN 43650 connector - IP65*
电磁兼容性（EMC）	2014/30/UE 指令和 EN 61326-1 (2013) 标准	*Electromagnetic comp. (EMC)*	*2014/30/UE Directive* *and EN 61326-1 (2013) standard*
符合RoHs标准	2011/65/EU (ROHs) 和 2012/19/EU 指令 (WEEE)	*RoHs conformity*	*2011/65/EU (ROHs)* *and 2012/19/EU Directives (WEEE)*

安装和调试 / *Installation and commissioning*

1. 安装：PTE传感器必须尽可能地靠近被测量的压力点安装，注意流体流向不淌急。
2. 调试：根据电气连接图进行接线。在连接和断开传感器连接器之前，请断开电源。
3. 处置：产品必须按照2011/65/EU（ROHs）和2012/19/EU（WEEE）指令，作为电气/电子废物单独处置。

1. *Installation: the PTE transducer must be installed as near as possible to the point where the pressure is measured, taking care that the oil flow is not turbulent.*
2. *Commissioning: cable as shown in the electric scheme. Switch-off the power supply before connecting and disconnecting the transducer connector.*
3. *Disposal: the product must be disposed separately as electric / electronic waste, following 2011/65/EU (ROHs) and 2012/19/EU (WEEE) directives.*

PTE 压力传感器 *Pressure Transducer*

CE

如何订购 / *HOW TO ORDER*

PTE	100	G	A	V	W	M	R14	SG

型号 / *Model*

PTE

压力 / *Pressure*

/	范围 / *Range*	过载 / *Overload*	爆破 / *Burst*
2	0 ÷ 2	4	6
5	0 ÷ 5	10	12
10	0 ÷ 10	15	20
20	0 ÷ 20	35	50
50	0 ÷ 50	100	120
100	0 ÷ 100	150	200
200	0 ÷ 200	300	400
250	0 ÷ 250	350	500
400	0 ÷ 400	500	650

压力 / *Pressure*

G	相对 / *Relative*
A	绝对的 / *Absolute**

* 仅适用于5-10巴 / *Only for 5-10 bar*

精度 / *Accuracy*

A	≤ 1 % F.S.

输出 / *Output*

V	0 - 10 V
I	4 - 20 mA

本体 / *Body*

W	316不锈钢 *Stainless Steel 316*

选项 / *Options*

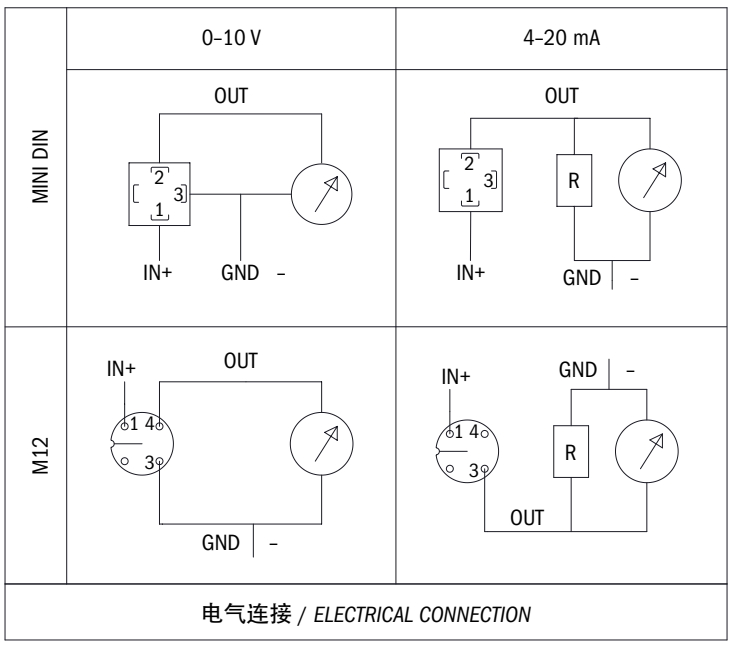
SG	脱脂 / *Degrased*
TG	测试气体 / *Tested gas*
SM	阻尼器 / *Damper*
-	无选项 / *No options*

C	螺纹 / *Thread*	B
R14	G 1/4" BSPP	12
R18	G 1/8" BSPP	10

电气连接 / *Electric connection*

M	M12 阳接头 / *Male*
D	Mini DIN 43650

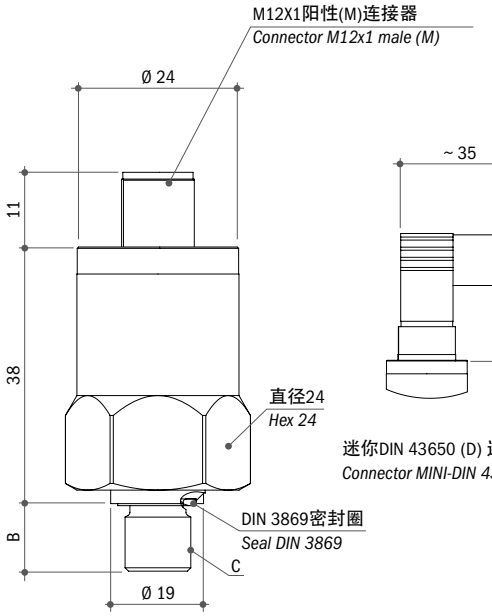
电气连接 / *ELECTRICAL CONNECTIONS*



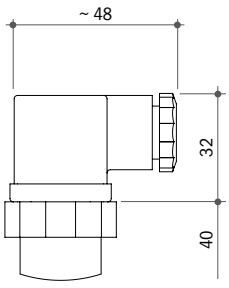
最大的电阻R分流(Ω)来自：
The max. resistance R shunt (Ω) is given from:

$$R\ 分流\ \Omega = \frac{V\ 电源\ /\ supply - 7.5}{0.03}$$

PTL 压力传感器
Pressure Transducer



迷你DIN 43650 (D) 连接器
Connector MINI-DIN 43650 (D)



PG09 DIN 43650 (T) 连接器
PG09 connector DIN 43650 (T)

电源电压	24Vdc; (10÷30Vdc) (I ≤ 24mA)	*Supply voltage*	*24Vdc; (10÷30Vdc) (I ≤ 24mA)*
电流信号输出	4-20mA (2引脚)	*Output signal current*	*4-20mA (2pins)*
电压信号输出	0÷10V (3引脚); 最小负载 1kΩ	*Output signal voltage*	*0÷10V (3pins); minimum load 1kΩ*
接线保护	防止电源极性反转和输出信号短路	*Wiring protection*	*Against reverse polarity on power supply and short-circuit on output signal*
响应时间	≤ 10ms	*Response time*	*≤ 10ms*
技术	压阻式	*Technology*	*Piezoresistive*
稳定性	≤ ±0.5% F.S./年 @ 25°C	*Stability*	*≤ ±0.5% F.S./year @ 25°C*
准确度	≤ 1% F.S. @ 25°C	*Accuracy*	*≤ 1% F.S. @ 25°C*
线性/滞后/可重复性	≤ ±0.7% F.S.	*Linearity/Hysteresis/Repeatability*	*≤ ±0.7% F.S.*
工作温度	-25°C至+100°C	*Operating temperature*	*-25°C to +100°C*
流体温度	-25°C至+125°C	*Fluid temperature*	*-25°C to +125°C*
存储温度	-40°C至+135°C	*Storage temperature*	*-40°C to +135°C*
浸润部件材料	本体：AISI 316不锈钢 密封件：丁腈橡胶	*Wetted parts material*	*Body: AISI 316 stainless steel Seals: NBR*
传感器材料	陶瓷 Al2O3 96%	*Sensor material*	*Ceramic Al2O3 96%*
流体兼容性	油，水，水-乙二醇， 用于其他液体 请联系我们的技术部门	*Fluid compatibility*	*Oil, water, water-glycol, and other fluid please contact our technical office*
螺纹连接	G 1/4" 平行	*Process thread*	*G 1/4" parallel*
拧紧扭矩	20 Nm	*Tightening torque*	*20 Nm*
电气连接和保护等级 (EN 60529)	IP65	*Electrical connection and protection degree (EN 60529)*	*IP65*
电磁兼容性 (EMC)	2014/30/EU指令和产品标准 EN 55032:2015, EN55035:2020	*Electromagnetic comp. (EMC)*	*2014/30/UE Directive and EN 55032:2015, EN55035:2020*
符合RoHs标准	2011/65/EU (ROHs) 和2012/19/EU指令(WEEE)	*RoHs conformity*	*2011/65/EU (ROHs) and 2012/19/EU Directives (WEEE)*

安装和调试 / *Installation and commissioning*

1. 安装：PTL传感器应尽可能安装在靠近压力测量点的地方，注意流体流向不湍急。
2. 调试：根据电气连接图进行布线。在连接和断开换能器连接器之前，请关闭电源。
3. 处置：该产品必须按照2011/65/EU（ROHs）和2012/19/EU（WEEE）指令，作为电气/电子废物单独处置。

1. *Installation: the PTL transducer must be installed as near as possible to the point where the pressure is measured, taking care that the oil flow is not turbulent.*
2. *Commissioning: cable as shown in the electric scheme. Switch-off the power supply before connecting and disconnecting the transducer connector.*
3. *Disposal: the product must be disposed separately as electric / electronic waste, following 2011/65/EU (ROHs) and 2012/19/EU (WEEE) directives.*

PTL 压力传感器 *Pressure Transducer*

如何订购 / *HOW TO ORDER*

PTL	100	G	A	V	W	M	R14	SM

型号 / *Model*

PTL

压力 / *Pressure*

/	范围 / *Range*	过载 / *Overload*	爆破 / *Burst*
2	0 ÷ 2	3	5
5	0 ÷ 5	8	12
6	0 ÷ 6	9	15
10	0 ÷ 10	15	25
16	0 ÷ 16	24	40
20	0 ÷ 20	30	70
50	0 ÷ 50	75	125
100	0 ÷ 100	150	250
200	0 ÷ 200	300	500

压力 / *Pressure*

G	相对 / *Relative*

精度 / *Accuracy*

A	<1% F.S.

输出 / *Output*

V	0 - 10V
I	4 - 20 mA

本体 / *Body*

W	316不锈钢 *Stainless Steel 316*

选项 / *Options*

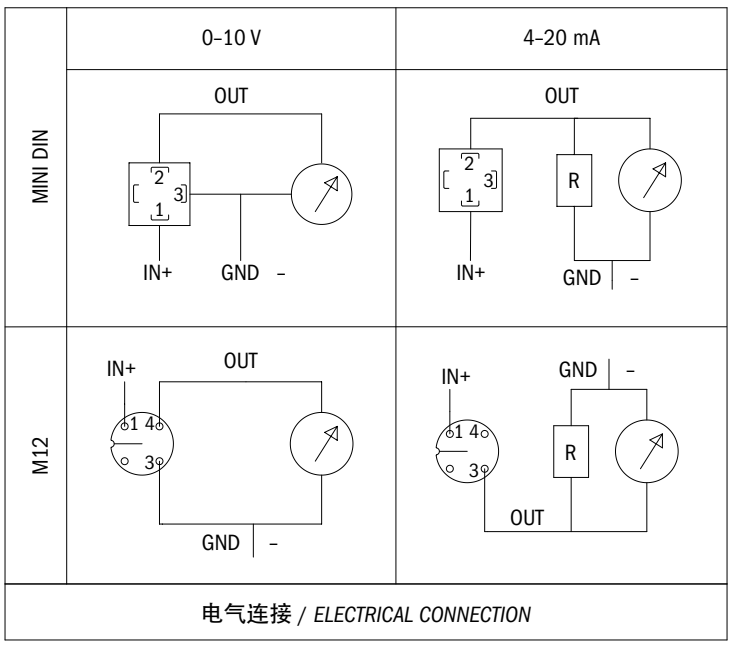
SM	阻尼器 / *Damper*

C	螺纹 / *Thread*	B
R14	G 1/4" BSPP	12

电气连接 / *Electric connection*

M	M12 阳接头 / *Male*	H=38.2 mm
D	Mini DIN 43650 PG7	H=34 mm
T	DIN 43650 PG9	H=40.2 mm

电气连接 / *ELECTRICAL CONNECTIONS*

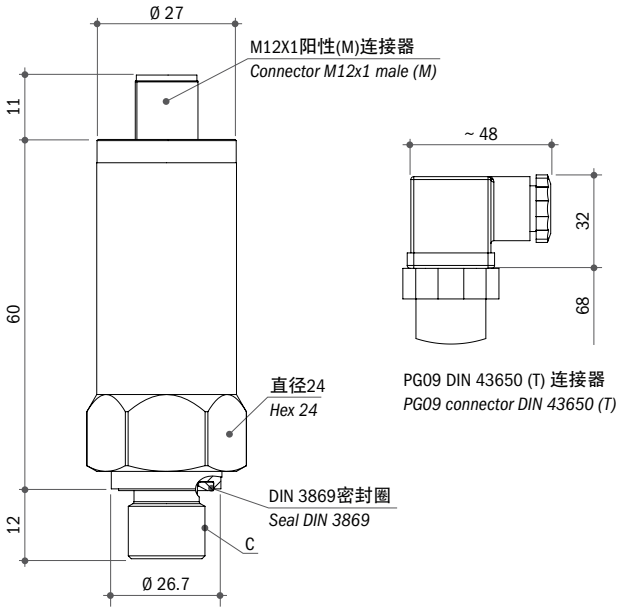


电气连接 / *ELECTRICAL CONNECTION*

最大的电阻R分流(Ω)来自：
The max. resistance R shunt (Ω) is given from:

$$R\ 分流\ \Omega = \frac{V\ 电源\ /\ supply - 7.5}{0.03}$$

PTH 压力传感器
Pressure Transducer



电源电压	24Vdc; (10÷30Vdc)	*Supply voltage*	*24Vdc; (10÷30Vdc)*
电流信号输出	4-20mA (2引脚) (I ≤ 20mA)	*Output signal current*	*4-20mA (2pins) (I ≤ 20mA)*
电压信号输出	0÷10V (3引脚); 最小负载5kΩ (I ≤ 3.5mA)	*Output signal voltage*	*0÷10V (3pins); minimum load 5kΩ (I ≤ 3.5mA)*
接线保护	防止电源极性反转和输出信号短路	*Wiring protection*	*Against reverse polarity on power supply and short-circuit on output signal*
响应时间	≤ 5ms	*Response time*	*≤ 5ms*
技术	压阻式	*Technology*	*Piezoresistive*
稳定性	≤ ±0.25% F.S./年 @ 25°C	*Stability*	*≤ ±0.25% F.S./year @ 25°C*
准确度	≤ 0.5% F.S.标准 (0.1%F.S.) @ 25°C	*Accuracy*	*≤ 0.5% F.S. standard (0.1%F.S.) @ 25°C*
线性/滞后/可重复性	≤ ±0.5% F.S.	*Linearity/Hysteresis/Repeatability*	*≤ ±0.5% F.S.*
工作温度	-25°C至+100°C	*Operating temperature*	*-25°C to +100°C*
流体温度	-25°C至+125°C	*Fluid temperature*	*-25°C to +125°C*
存储温度	-40°C至+135°C	*Storage temperature*	*-40°C to +135°C*
浸润部件材料	本体：AISI 316不锈钢 密封件：丁腈橡胶	*Wetted parts material*	*Body: AISI 316 stainless steel Seals: NBR*
传感器材料	硅胶	*Sensor material*	*Silicone*
流体兼容性	油，水，水-乙二醇， 用于其他液体 请联系我们的技术部门	*Fluid compatibility*	*Oil, air, water, water-glycol; for other fluid please contact our technical office*
螺纹连接	G 1/4" 平行	*Process thread*	*G 1/4" parallel*
拧紧扭矩	20 Nm	*Tightening torque*	*20 Nm*
电气连接和保护等级 (EN 60529)	IP65	*Electrical connection and protection degree (EN 60529)*	*IP65*
电磁兼容性 (EMC)	2014/30/EU指令和产品标准 EN 55032:2015. EN55035:2020	*Electromagnetic comp. (EMC)*	*2014/30/UE Directive and EN 55032:2015, EN55035:2020*
符合RoHs标准	2011/65/EU (ROHs) 和2012/19/EU指令(WEEE)	*RoHs conformity*	*2011/65/EU (ROHs) and 2012/19/EU Directives (WEEE)*

安装和调试 / *Installation and commissioning*

1. 安装：PTH传感器应尽可能安装在靠近压力测量点的地方，注意流体流向不湍急。
2. 调试：根据电气连接图进行布线。在连接和断开换能器连接器之前，请关闭电源。
3. 处置：该产品必须按照2011/65/EU（ROHs）和2012/19/EU（WEEE）指令，作为电气/电子废物单独处置。

1. *Installation: the PTH transducer must be installed as near as possible to the point where the pressure is measured, taking care that the oil flow is not turbulent.*
2. *Commissioning: cable as shown in the electric scheme. Switch-off the power supply before connecting and disconnecting the transducer connector.*
3. *Disposal: the product must be disposed separately as electric / electronic waste, following 2011/65/EU (ROHs) and 2012/19/EU (WEEE) directives.*

PTH 压力传感器 *Pressure Transducer*

CE

如何订购 / *HOW TO ORDER*

PTH	100	G	A	V	W	M	R14	SM

型号 / *Model*

PTH

压力 / *Pressure*

/	范围 / *Range*	过载 / *Overload*	爆破 / *Burst*
1	0 ÷ 1	3	4
10	0 ÷ 10	20	30
16	0 ÷ 16	32	48
50	0 ÷ 50	100	150
100	0 ÷ 100	200	300
250	0 ÷ 250	370	500
400	0 ÷ 400	600	800
600	0 ÷ 600	900	1200
1000	0 ÷ 1000	1500	2000

压力 / *Pressure*

G	相对 / *Relative*
A	绝对的 / *Absolute**
	* 仅适用于1-10巴 / *Only for 1-10 bar*

精度 / *Accuracy*

C	<0.5% F.S.
E	<0.1% F.S.

输出 / *Output*

V	0 - 10V
I	4 - 20 mA

本体 / *Body*

W	316不锈钢 *Stainless Steel 316*

电气连接 / *Electric connection*

M	M12 阳接头 / *Male*	H=60 mm
T	DIN 43650 PG9	H=68 mm

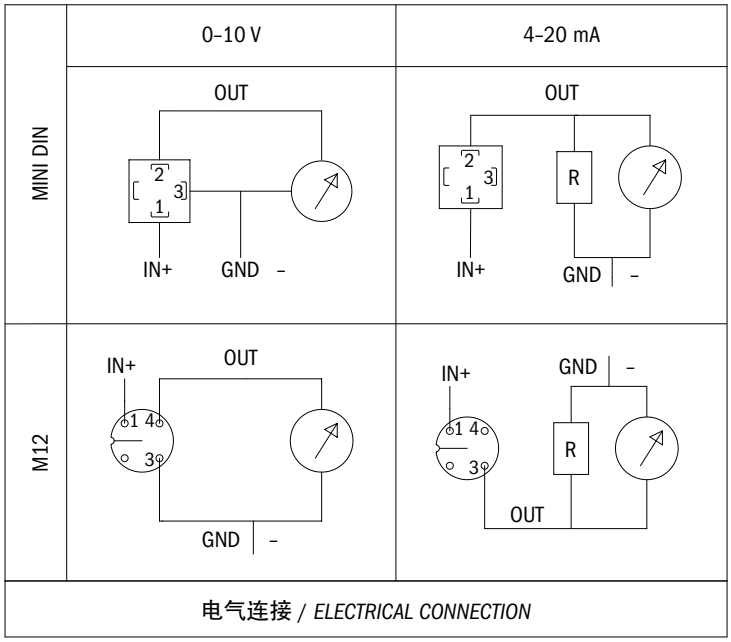
螺纹 / *Thread*

C		B
R14	G 1/4" BSPP	12

选项 / *Options*

SM	阻尼器 / *Damper*

电气连接 / *ELECTRICAL CONNECTIONS*



最大的电阻R分流(Ω)来自：
The max. resistance R shunt (Ω) is given from:

$$R\ 分流\ \Omega = \frac{V\ 电源\ /\ supply - 7.5}{0.03}$$