Pressure transducers DMU 02
Industrial version

- **Extremely resistant to shock, pulsation and vibration**
- **High overload safety**
- **Dynamic pressure resistance at high load changes**
- **Wetted area without seals due to welding**
- **No transmission liquid**


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Application

For electronic pressure measurement in industrial applications, e.g. hydraulic, pneumatic, gas industry, refrigeration, automation, medical, as well as general mechanical and plant engineering applications.

Description

Pressure transducers convert physical pressure into an electrical signal proportional to the pressure. DMU 02 is equipped with a piezo-resistive polysilicon thin-film measuring cell.

Technical specifications

Measuring accuracy
Deviation from the characteristic curve according to IEC 60770 – limit point calibration (non-linearity, hysteresis, repeatability): <±0.5 % FSO

Measuring ranges
Relative pressure:
-1/0 to -1/+24 bar
0/0.6 to 0/2000 bar

Overpressure safety
≤ 250 bar at least 2 x FS
(burst pressure at least 3 x FS)
≤ 250 bar at least 1.5 x FS
(burst pressure at least 2 x FS)
≥ 1,000 bar at least 1.2 x FS
(burst pressure at least 1.5 x FS)

Operating temperature range

Medium:	-40/+125 °C
Ambient:	-40/+105 °C
Storage:	-40/+125 °C

Temperature error band
In compensated range
-20/+85 °C ≤ 0.15 % FSO/10 K

Dynamic characteristics
Response time < 1 ms

Process connection
G½B (EN 837-1/7.3)

Material

Housing:	Stainless steel 304
Pressure connection:	Stainless steel 630
Seal:	Without

Supply voltage
DC 9–32 V
EX version: DC 20–27 V

Output signal
4–20 mA, 2-wire
0–10 V, 3-wire

Load
$4–20\ mA \leq \frac{U_B - U_{Bmin}}{0.02\ A}$

At least 100 Ohm with EX version
0–10 V > 5 kOhm

Current input
4–20 mA < 25 mA
0–10 V < 20 mA

Electrical protection
Short circuit proof and protected against reverse polarity

Electrical connection/degree of protection
Connector and junction box as per ISO 4400 (DIN 43650-A), IP 65

CE conformity (EMC)
EMC Directive 2014/30/EU

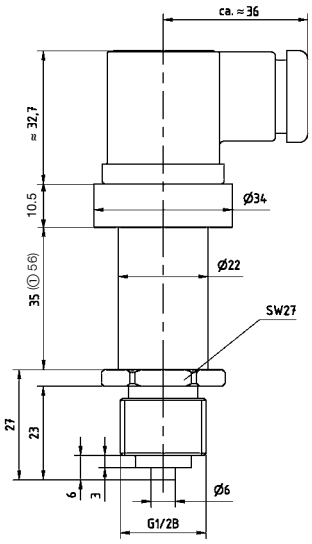
Options

- Other connection threads
- Fixed cable connection
- Other connectors
- Other output signals
- Cleaned for oxygen
- EX version (II 1G Ex ia IIB T4) Ex

工业型压力变送器 DMU 02

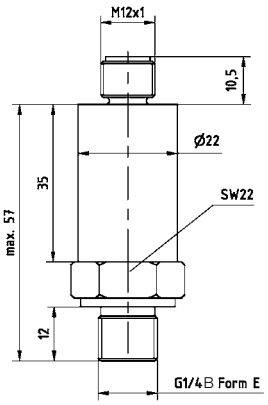
尺寸和电气连接

插头 ISO 4400 (DIN 43650-A)

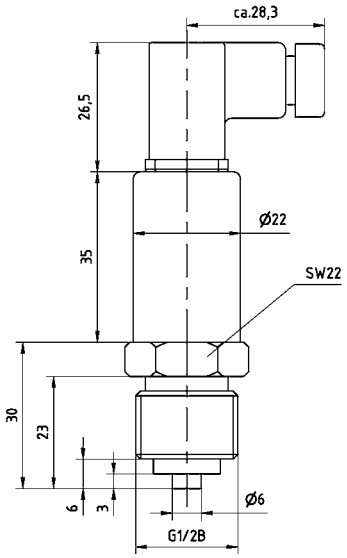


① EX 防爆型

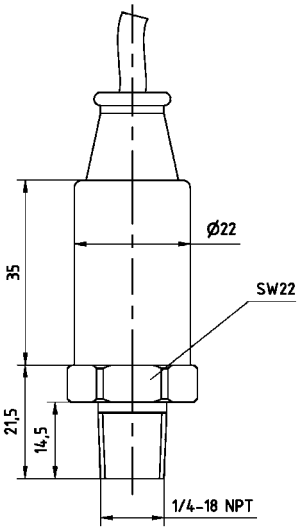
M12 接头



插头 DIN 43650-C



固定电缆连接



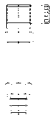
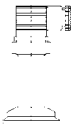
插针分配表

		电气连接		
		ISO 4400 (DIN 43650-A, EN 175301-803)	M 12 x 1 (4-pin) EN 61076-2-101	电缆出口
2线系统:	电源 + 电源 – 接地端	1 2 接地端	1 3 –	红色 黑色 –
3线系统:	电源 + 电源 - 信号 接地端	1 2 3 接地端	1 3 4 –	红色 黑色 白色 –

工业型压力变送器 DMU 02 / DMU Vario

选型表

DG: H, PG: 4

型号	DMU 02	DMU 02 HD 高压	DMU 02 Vario 可编程	DMU 02 Vario FBO 凸起带 O 型圈	DMU 02 Vario CP 卡箍
结构					
测量原理	测量元件为多晶硅 – 不锈钢压变电阻 (薄膜)				
测量精度 (IEC 60770)	0.5 % FSO	0.5 % FSO	0.3 % FSO		
与介质接触部件材质	不锈钢 630	不锈钢630	不锈钢 630/316 L	不锈钢 316 L/FKM	不锈钢 316 L
过程连接	G½B EN 837	M18 x 1.5 外螺纹	G½B EN 837	G½B DIN 3852-A	ISO 2852 1"
电源	DC 9–32 V				
输出	4–20 mA				
系统	2-wire				
电气连接	插头和接线盒符合 ISO 4400 (DIN 43650-A)				
偏差补偿	---	---	用磁铁在外部进行零位校正		
量程	代码	代码	代码	代码	代码
-1/0 bar	32801	---	32833	32863	32892
-1/+1.5 bar	32802	---	32834	32864	32893
-1/+3 bar	32803	---	32835*	32865	32894
-1/+5 bar	32804	---	32836	32866	32895
-1/+9 bar	32805	---	32837*	32867	32896
-1/+24 bar	32806	---	32838*	32868	32897
量程					
0/600 mbar	32807		32841	---	---
量程					
0/1 bar	32808	---	32842*	32872	32901
0/1.6 bar	32809	---	32843	32873	32902
0/2.5 bar	**32810**	---	32844*	32874	32903
0/4 bar	**32811**	---	32845	32875	32904
0/6 bar	**32812**	---	32846	32876	32905
0/10 bar	**32813**	---	32847*	32877	32906
0/16 bar	**32814**	---	32848	32878	32907
0/25 bar	**32815**	---	32849	32879	32908
0/40 bar	32816	---	32850*	32880	32909
0/60 bar	32817	---	32851	32881	---
0/100 bar	32818	---	32852	32882	---
量程					
0/160 bar	32819	---	32853*	32883	---
0/250 bar	**32820**	---	32854	32884	---
0/400 bar	**32821**	---	32855	32885	---
0/600 bar	32822	---	32856	32886	---
0/1,000 bar	32823	---	32857*	---	---
0/1,600 bar	---	32829	---	---	---
0/2,000 bar	---	32830	---	---	---

* 可用编程工具按1：4降低量程（无* = 固定量程）