

DW52x pressure sensor series

Pressure sensor, Ø38mm 135long, 12-30V DC, G1/2 "A, 2x PNP NC/NO, 0-5/10V / 0/4-20mA, M12 plug connector 4-pin, IP67, PC (plastic), TFT display, IO-Link



TFT color display with plain text display IO-Link_Schnittstelle

The pressure sensors of the DW5x series for pressure ranges from -1bar...+600bar are the "Swiss army knives" among the pressure sensors from ipf electronic. Highly flexible for use with liquid and gaseous media in all conceivable applications, these devices leave nothing to be desired in terms of convenient operation and technical features. The sensors with IO-Link interface have a switching output and a second variable output that can be defined as a switching, analog or alarm output as required. All settings of the DW5x can be checked before practical use in an application using an "offline test function" without having to apply pressure to the sensors.

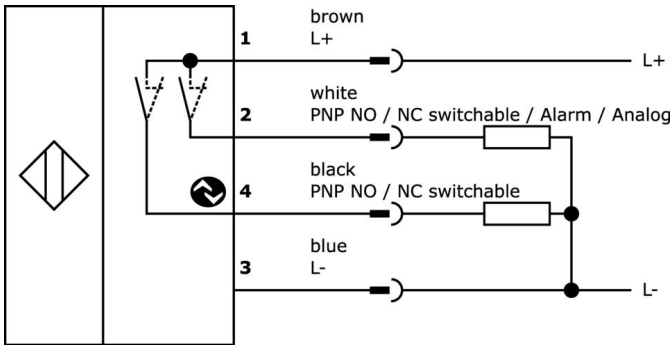
The focus is on the integrated, easy-to-read TFT color display with its extremely diverse options for different display modes. Just a few examples: Display of the pressure in plain text with trend display and accurate identification of the switching points or color display options for reaching previously defined switching points. But the potential of the easily switchable color display is far from exhausted.

The display is perfectly readable in any installation position, as the display can be rotated in 90° steps and the housing can also be continuously rotated by 305°. The sensors with full stainless steel measuring cell and integrated processor not only provide the pressure, but also determine a relative temperature value of the medium if required.

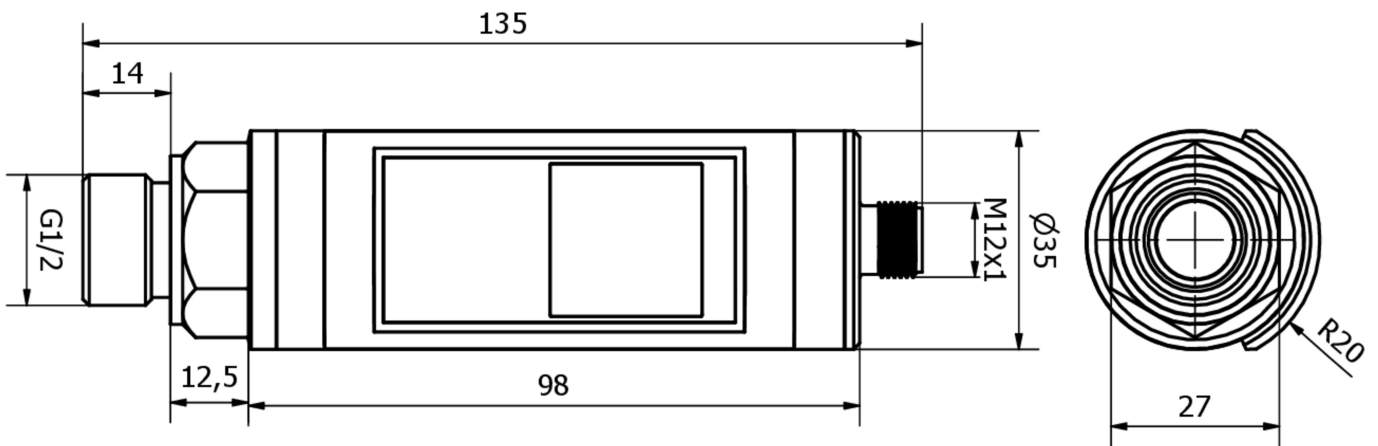
Article No.	DW52310D	DW52310K	DW52310T
Design	Cylinder plain		
Housing material	Plastic		
ardSOCA_Abmessungen	Ø38mm, 135mm long		
Degree of protection (IP)	IP67		
Measuring range pressure	0 - 10 bar	-1 - 10 bar	0 - 60 bar
Max. operating pressure	40 bar	40 bar	240 bar
Measurement method	Absolute	Relative	Absolute
Type of process connection	G1/2 inch A		
ardTEME_WerkstoffDesProzessa	Edelstahl 1.4305		
Seal material at process connection	Plastic (NBR)		
ardTEME_WerkstoffDerMesszelle	Stainless steel 1.4404		
ardSOCA_ElektrischerAnschluss	M12 4-pin plug connector		
ardSOCA_Betriebsspannung	10-30VDC		
No-load current	40 mA		
Number of switching outputs	2		
Type of switching output	PNP/NPN		
Switching frequency	50 Hz		
Rated switching current	250 mA		
Type of switching function	Programmable/configurable		
Type of alarm output	PNP		
Type of analog output	0 - 10V 0 - 20mA 0 - 5V 4 - 20mA		
Number of analog output channels	1		
ardTEEL_Schutzfunktionen	Verpolungsschutz Kurzschlusschutz		
Relative linearity deviation	0.25 %		
Relative repeat accuracy	0.15 %		
Relative measurement accuracy	0.15 %		
Temperature drift over entire measuring range	0.7 %		
Long-term drift per year	0.1 %		
Medium temperature	-20 - 80 °C		
Ambient temperature	-20 - 80 °C		
Display	TFT display		
Measuring display	Relative		
Setting procedure	Parameterization		
Response/decay time	10 ms		
Readiness delay	2000 ms		
ardTEEL_Lebensdauer	10 Millionen Lastwechsel		
IO-Link version	V1.1.4		

Article No.	DW523104	DW523105	DW523106	DW523107
Design	Cylinder plain			
Housing material	Plastic			
ardSOCA_Abmessungen	Ø38mm, 135mm long			
Degree of protection (IP)	IP67			
Measuring range pressure	0 - 100 bar	0 - 250 bar	0 - 400 bar	0 - 600 bar
Max. operating pressure	400 bar	1000 bar	1200 bar	1200 bar
Measurement method	Absolute			
Type of process connection	G1/2 inch A			
ardTEME_WerkstoffDesProzessa	Edelstahl 1.4305			
Seal material at process connection	Plastic (NBR)			
ardTEME_WerkstoffDerMesszelle	Stainless steel 1.4404			
ardSOCA_ElektrischerAnschluss	M12 4-pin plug connector			
ardSOCA_Betriebsspannung	10-30VDC			
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Type of analog output	0 - 10V 0 - 20mA 0 - 5V 4 - 20mA			
Number of analog output channels	1			
ardTEEL_Schutzfunktionen	Verpolungsschutz Kurzschlusschutz			
Relative linearity deviation	0.25 %			
Relative repeat accuracy	0.15 %			
Relative measurement accuracy	0.15 %	0.15 %	0.15 %	0.25 %
Temperature drift over entire measuring range	0.7 %	0.7 %	1 %	1 %
Long-term drift per year	0.1 %	0.1 %	0.1 %	0.2 %
Medium temperature	-20 - 80 °C			
Ambient temperature	-20 - 80 °C			
Display	TFT display			
Measuring display	Relative			
Setting procedure	Parameterization			
Response/decay time	10 ms			
Readiness delay	2000 ms			
ardTEEL_Lebensdauer	10 Millionen Lastwechsel			
IO-Link version	V1.1.4			

Connection



Dimensional drawing



Extract accessories program

VK505321

Connection cable, 5m, M12
 Female (socket) 4pin Angular, Free conductor end, 4x0.34mm², PUR (Polyurethane), Ø5.5mm, 250V, -25-90°C, IP67, Shielded, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicon...

VK505325

Connection cable, 5m, M12
 Female (socket) 4pin Straight, Free conductor end, 4x0.34mm², PUR (Polyurethane), Ø5.5mm, 250V, -25-90°C, IP67, Shielded, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silico...

VY000005

IO-Link master, 41x24x67mm, IO-Link, M12, With USB interface

AD000019

Accessories pressure, profile seal G1/2", Ø24mm 1,5high, fluorocarbon rubber FKM, green

You can find further accessories on our homepage



Installation

Mounting / installation may only be carried out by a qualified electrician!



Disposal

WEEE number according to § 6 para. 3 ElektroG: 40951076

Safety warnings

- / Before initial operation, please make sure to follow all safety instructions that may be provided in the product information.
- / Never use these devices in applications where the safety of a person depends on their functionality.