



Pressure sensors **DANA 6024** **DANA 6028**

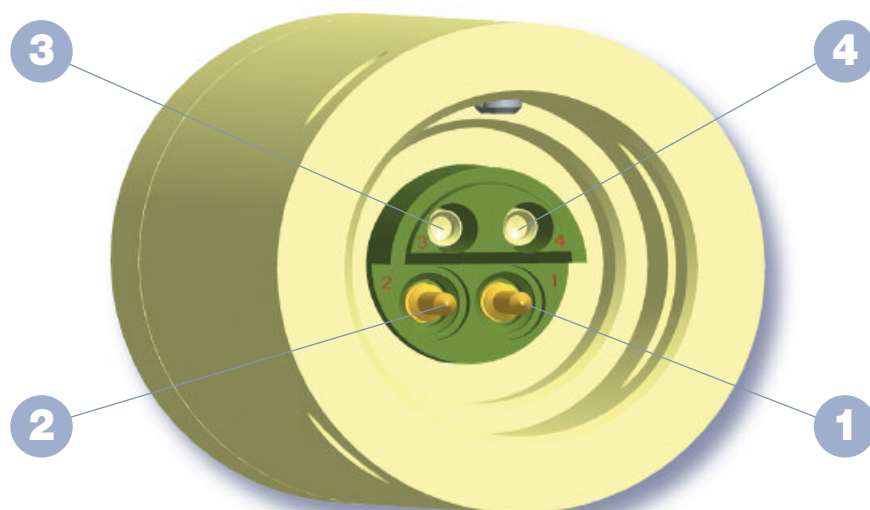
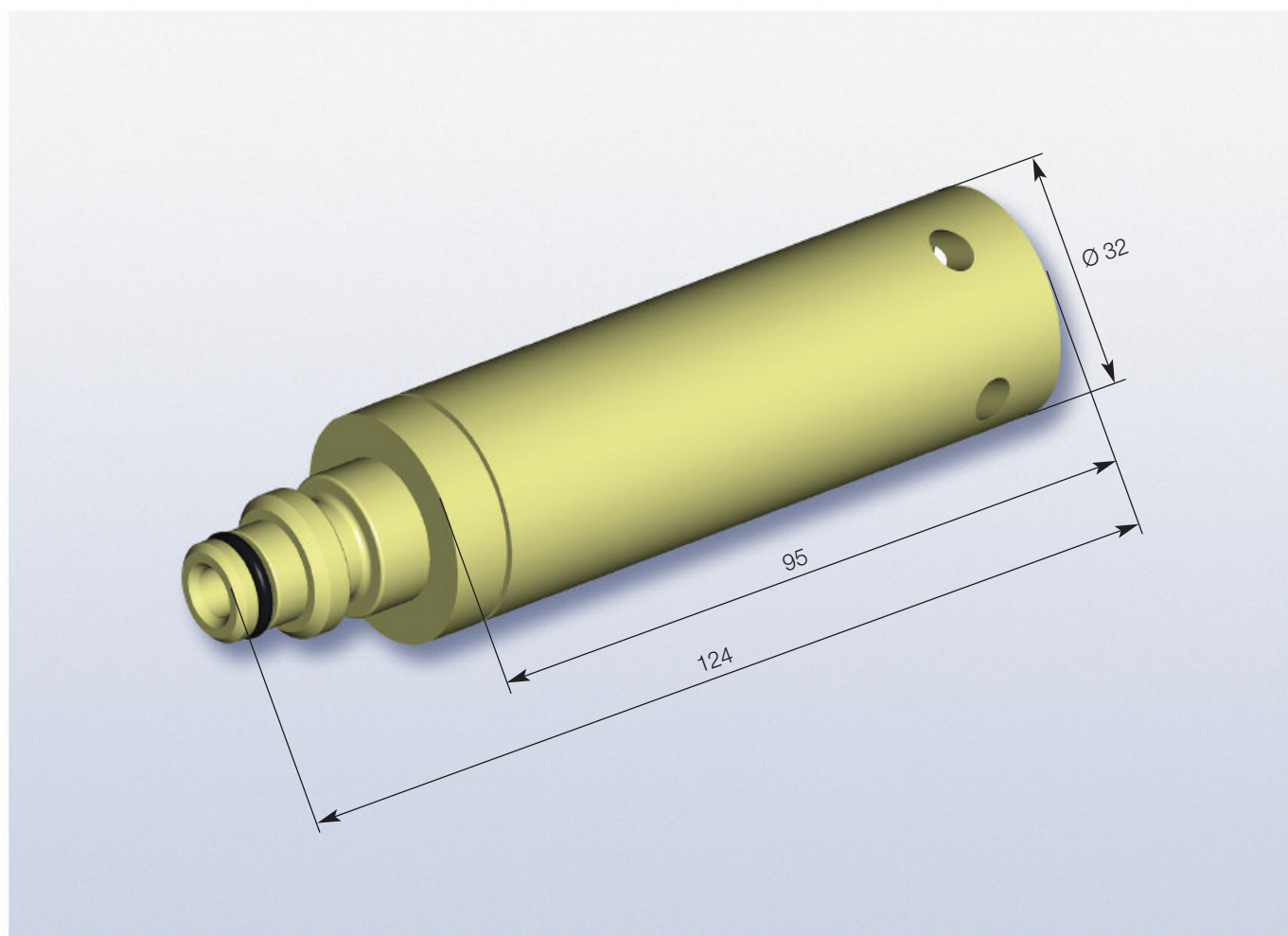
To electronically monitor the pressure of fluid media in hydraulic systems

- Rugged and maintenance-free design
- Electr. connection via SKK plug connectors
- Voltage or current output
- Pressure ranges from 0 to 600 bar available
- Hydr. connection via Steck-O
- Different country-specific approvals
- Type of protection: IP67 acc. to EN 60529/IEC 529
- Different country-specific approvals (ATEX/IECEx to name but a few)



Monitoring the leg pressure in a shield support underground

DANA 602x



Electrical connection

Pin 1: +12,5 VDC

Pin 2: Output signal
(0.5 to 4.5 VDC -
voltage output;
4 to 20 mA -
current output)

Pin 3: not used

Pin 4: GND

DANA 602x

FUNCTION AND DESIGN

The pressure sensor is used for electronically monitoring the pressure of a hydraulic system.

The hydraulic pressure measured in the line is output as electrical signal – depending on the sensor type either as voltage or as current. If the pressure in the line changes the signal will also change proportionally to the pressure.

The pressure sensor consists of a cylindrical housing made of high-grade steel or brass into which a metal diaphragm is integrated.

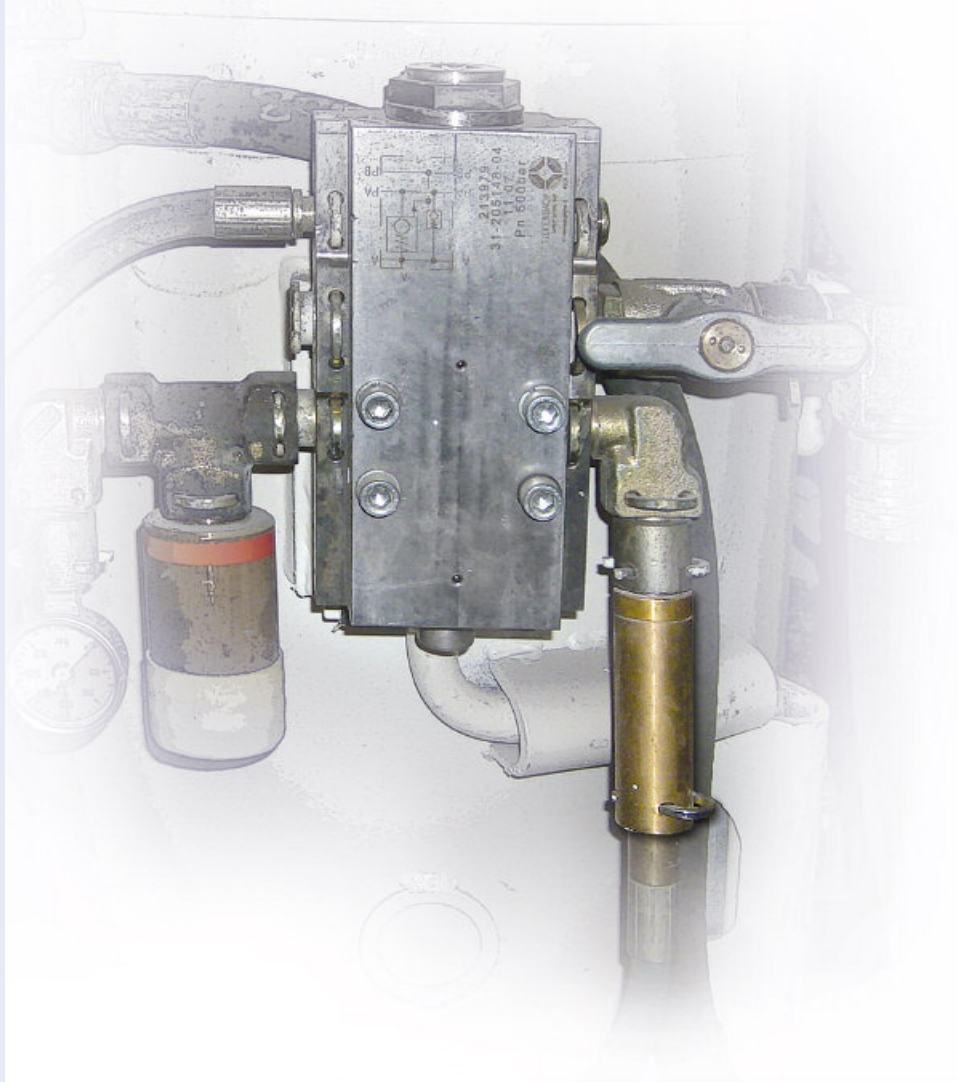
Located at the lower end of the housing is the hydraulic port. Via this port acc. to DIN 20043 the pressure sensor can be placed in the hydraulic system quickly and easily.

Located at the upper end of the pressure sensor is the SKK24 connector for the electrical connection. The sensor cable which transmits the signal values to the evaluation unit is connected there.

When pressure is applied the metal diaphragm integrated into the housing is expanded by the hydraulic pressure. This dynamic deformation is detected by means of a measuring bridge and converted into a standardized analog voltage or current signal (depending on the type of sensor).

Via the software of the evaluation unit the maximum pressure of the measuring range and the maximum output value are put in relation.

The pressure sensor thus knows which output value refers to which pressure.





DANA 602x

TECHNICAL DATA

Nominal voltage	12.5 VDC
Current consumption	< 28 mA - current output; < 6 mA - voltage output
Temperature range	-20°C to +60°C
Accuracy	± 1.5% of the final value
Effective internal capacitance	1.2 µF - current output; negligible for voltage output
Effective internal inductance	negligible
Power supply	9 VDC (max. 13.5 VDC)
Type	Piezoresistive pressure sensor
Material	corrosion-free
Weight	420 grams
Fitting position	any
Pressure meas. ranges	0 to 10 bar 0 to 450 bar 0 to 100 bar 0 to 500 bar 0 to 200 bar 0 to 600 bar Other pressure ranges upon request
Output signal (depending on variant)	0.5 to 4.5 VDC 4 to 20 mA
Type of connection electr.	Plug connector SKK24
Type of connection hydr.	Plug connector DN10, DN12, DN12SSO acc. to DIN 20043
Type of protection	IP67 acc. to EN60529/IEC 529
Ex-approval	I M2 EX ia I acc. to Directive 94/9/EC
Certificate No..	IBExU10 ATEX 1130

TYPE CODE AND ORDERING DETAILS

DANA 602	*	/	***	/	DN**	Plug size DN10, DN12, DN12SSO
						End of pressure range in bar
			4			➤ Voltage range 0.5 to 4.5 VDC
			8			➤ Output signal 4 to 20 mA
						Series
						Pressure sensor

TYPICAL EXAMPLE

DANA 602 4 / 450 / DN10	■ Pressure sensor ■ Series 602 ■ Output voltage 0.5 to 4.5 VDC ■ Pressure measuring range 0 to 450 bar ■ Plug connector Steck-O DN10
DANA 602 8 / 200 / DN12SSO	■ Pressure sensor ■ Series 602 ■ Output voltage 4 to 20 mA ■ Pressure measuring range 0 to 200 bar ■ Plug connector Steck-O DN12SSO

Subject to technical alterations · Version 11/14

We give impulses >>>

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