HYDRAULICS

Pressure and temperature monitoring solutions

trafag
sensors controls

Pressure and temperature monitoring for hydraulic applications

Applications in mobile and stationary hydraulics are among the most demanding in terms of robust and reliable sensor requirements. Trafag pressure transmitters are used in applications from high accuracy test benching to heavy construction and agricultural equipment. They are proven for long term stability in extremely harsh environments from the dusty heat of deserts to the icy cold of sub-arctic forests. The reliable pressure transmitters with great long-term stability are highly prized for stationary hydraulics as well, for they avoid costly production interruptions.

Agricultural and forestry machines
Tractors, harvesting machines, transport machines

Renewable energies
Rotor control in wind power plants, solar tracking for photovoltaic systems

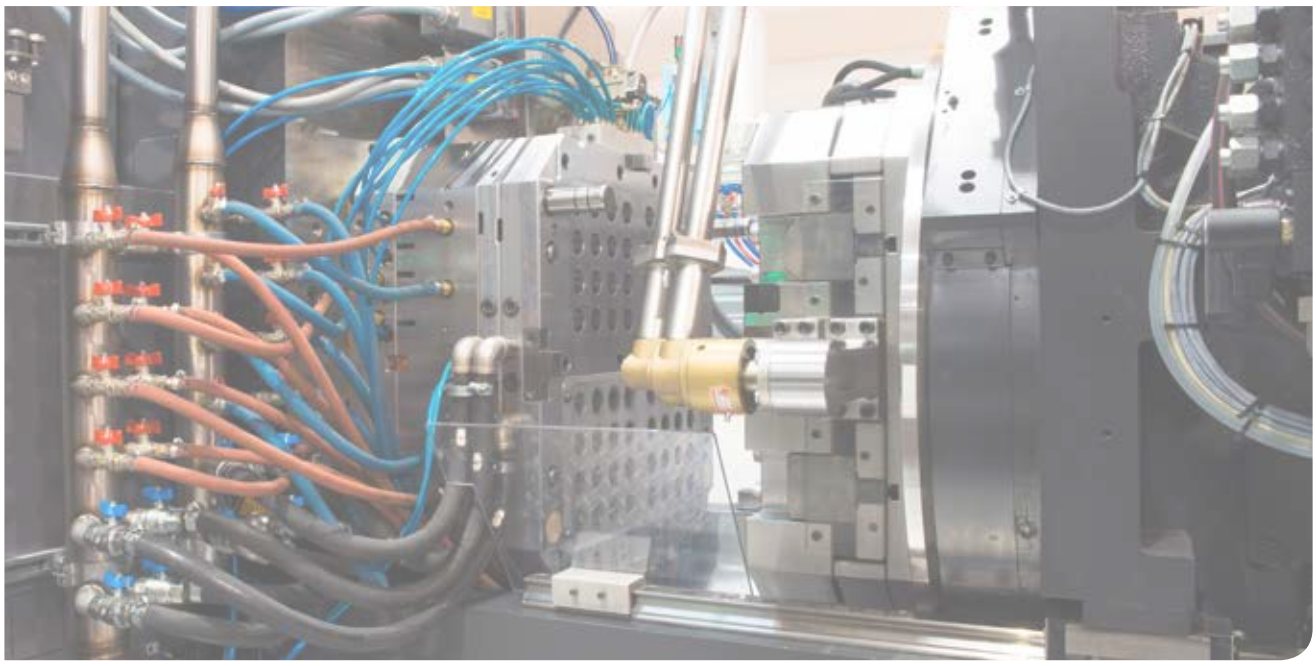
Construction machines
Excavators, mobile cranes, concrete pumps and mixers

Communal and special vehicles
Garbage collection, heavy transporters, firefighting vehicles

Machine and plant construction
Injection moulding machines, forming presses, stretch-blow machines

Test and inspection installations
Chassis test benches, material inspection systems, inspection of hydraulic components

Hydraulic components and subsystems
Valve block systems, power packs, tank monitoring



Products overview

Pressure transmitters

NAT 8252		**Industrial pressure transmitter** www.trafag.com/H72303	Compact and robust all-rounder with many design variants and options. First choice for standard applications with electric connection M12x1, industry standard or Deutsch DT04-3pole/-4pole.
NAH 8253		**Precision pressure transmitter** www.trafag.com/H72300	For applications in which high precision or absolute pressure measurement is required together with unusually high long-term stability. Optionally available with increased electric strength of 500 VAC.
NAH 8254		**Pressure transmitter with increased accuracy** www.trafag.com/H72304	For applications in which an increased precision is required or for standard applications with increased operating temperatures.
EPI 8287		**Industrial pressure transmitter** www.trafag.com/H72317	Robust all-rounder with many design variants and options. First choice for standard applications with electric connection EN 175301-803-A or when an AISI316L steel housing is desired.
EPN/EPNCR 8298		**Engine pressure transmitter** www.trafag.com/H72312	For high pressures up to 2500 bar.
ECT 8472		**Industrial pressure transmitter** www.trafag.com/H72324	If absolute pressure measurement is required or in contact with corrosive media (with housing options in various steel variants or titanium).
ECT 8473		**Industrial pressure transmitter with increased accuracy** www.trafag.com/H72326	For low pressure applications, absolute pressure measurements with increased precision and in contact with corrosive media.
CMP 8270		**CANopen Miniature transmitter** www.trafag.com/H72614	With CANopen output signal, available in various precision classes up to 0.1 %, absolute and relative pressure measurement, measurement ranges from 0.2 to 600 bar.
NAH 8254 20 kHz		**Pressure transmitter for highly dynamic pressure curves** www.trafag.com/H70604	For measurement of highly dynamic pressure curves and short-term pressure peaks with a signal cut-off frequency of 20 kHz.
FPT 8235		**Flush membrane transmitter** www.trafag.com/H72316	For applications with viscous or clogging media.

Products overview

Level measurement

ECL 8439		**Submersible pressure transmitters** www.trafag.com/H72336	Level probe for hydrostatic measurement of fill levels with 0.1 to 2 bar, measurement ranges configurable using smartphone app.
TFC		**Float level sensor** www.trafag.com/H20040	Float sensor for measurement of fill levels up to 2 m.
TFS		**Float level switch** www.trafag.com/H20041	Float switch for fill levels up to 2 m.

Electronic pressure switches and transmitters

DPS 8381		**Pressure switch with display and steel sensor** www.trafag.com/H72321	First choice for pressure measurement with display. Continuous analog signal as well as 1 to 2 switch outputs can be parameterized with app via NFC.
DPC 8380		**Pressure switch with display and ceramic sensor** www.trafag.com/H72320	For applications with absolute pressure measurement, low pressures or contact with corrosive media. Continuous analog signal as well as 1 to 2 switch outputs can be parameterized with app via NFC.
NAT 8252		**Industrial Pressure Switch** www.trafag.com/H72303	Compact, robust electronic pressure switch. Can be parameterized using SMI and smartphone app. First choice for standard applications.
NAH 8254		**Pressure switch with increased accuracy** www.trafag.com/H72304	For applications in which an increased precision is required of for standard applications with increased operating temperatures. Can be parameterized using SMI and smartphone app.
EPN-S 8320		**Electronic Pressure Switch** www.trafag.com/H72333	For applications with electrical connection EN 175301-803-A and special applications. Factory-set switch point or programmable on site with Trafag Sensor Communicator SC.

Products overview

Mechanical Pressure Switches

PST4B 9B4		**Pressure switch with bellow sensor** www.trafag.com/H72367	For low pressure ranges and pulsation-free pressure curves. Gas-tight variants available.
PST4K 9K4		**Pressure switch with piston sensor** www.trafag.com/H72369	For high pressure ranges and pressure curves with pulsations.
PST4M 9M4		**Pressure switch with membrane sensor** www.trafag.com/H72368	For medium pressure ranges and pressure curves with pulsations.

Temperature measurement and monitoring

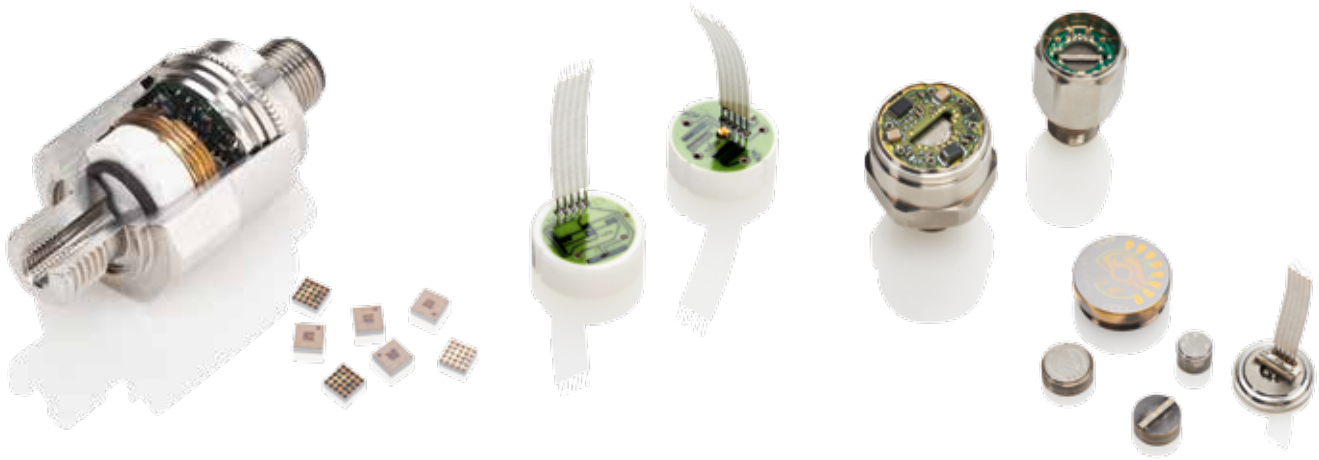
DTP 8180		**Temperature switch with display** www.trafag.com/H72352	Electronic temperature transmitter/switch with display. Continuous analog signal as well as 1 to 2 switch outputs can be parameterized with app via NFC.
ISP/ISPT 474		**Compact thermostat** www.trafag.com/H72113	Thermostat in block construction with switch output.

Accessories

CAN2USB		**CANopen Configuration tool** www.trafag.com/H70696	Interface with PC software for analysis and configuration of the CANopen pressure transmitter CMP 8270.
SMI		**Sensor Master Interface** www.trafag.com/H72618	For configuration of the electronic pressure switch NAT 8252 and NAH 8254 as well as the level sensor ECL 8439.
SC		**Sensor Communicator** www.trafag.com/H73699	For configuration of the pressure transmitter NAH 8253, EPN/EPNCR 8298, CMP 8270 and of the electronic pressure switch EPN-S 8320.

Sensor technology

Key components of Trafag pressure transmitters are pressure sensors based on thin-film-on-steel technology (welded design without O-ring) or thick-film-on-ceramic technology. Both sensor technologies come from Trafag's own production and were developed in-house together with the ASIC (application-specific microchip). As a result, pressure sensors and electronics work in perfect partnership and achieve a unique level of long-term stability and reliability, even under the most adverse environmental conditions.



NAT 8252

Industrial Pressure Transmitter

Features

- Excellent long-term stability
- Optional: 5-fold overpressure resistance

Technical Data	
Measuring principle	Thin-film-on-steel
Measuring range	0 ... 2.5 to 0 ... 600 bar 0 ... 30 to 0 ... 7500 psi
Output signal	4 ... 20 mA, 0.5 ... 4.5 VDC, 0 ... 5 VDC, 1 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC, 1 ... 10 VDC, 0.1 ... 10.1 VDC, 0.5 ... 4.5 VDC ratiometric
Accuracy @ 25°C typ.	± 0.5 % FS typ.
Media temperature	–40°C ... +125°C
Ambient temperature	–40°C ... +125°C

Data sheet www.trafag.com/H72303

NAH 8253

Precision pressure transmitter

Features

- Accuracy classes 0.1%, 0.15%, 0.3%
- Relative and absolute pressure measurement
- Optional: 500 VAC dielectrical strength

Technical Data	
Measuring principle	Thin-film-on-steel
Measuring range	0 ... 2.5 to 0 ... 600 bar 0 ... 30 to 0 ... 7500 psi
Output signal	4 ... 20 mA, 0 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC, 0.5 ... 4.5 VDC ratiometric
Accuracy @ 25°C typ.	± 0.3 % FS typ. ± 0.15 % FS typ. ± 0.1 % FS typ.
Media temperature	-40°C ... +125°C
Ambient temperature	-40°C ... +125°C

Data sheet www.trafag.com/H72300

Sensor Communicator SC
see page 22

NAH 8254

Pressure transmitter with increased accuracy

Features

- Measuring accuracy 0.3 %
- Excellent long-term stability
- Optional: 5-fold overpressure resistance

Technical Data	
Measuring principle	Thin-film-on-steel
Measuring range	0 ... 0.2 to 0 ... 600 bar 0 ... 3 to 0 ... 7500 psi
Output signal	4 ... 20 mA, 0.5 ... 4.5 VDC, 0 ... 5 VDC, 1 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC, 1 ... 10 VDC, 0.1 ... 10.1 VDC, 0.5 ... 4.5 VDC ratiometric
Accuracy @ 25°C typ.	± 0.3 % FS typ.
Media temperature	–40°C ... +125°C
Ambient temperature	–40°C ... +125°C

Data sheet www.trafag.com/H72304

trafag sensors controls

EPI 8287

Industrial pressure transmitter

Features

- Accuracy classes 0.3%, 0.5%
- Optional: 5-fold overpressure resistance
- Optionally with housing material AISI316L

Technical Data	
Measuring principle	Thin-film-on-steel
Measuring range	0 ... 2.5 to 0 ... 600 bar 0 ... 30 to 0 ... 7500 psi
Output signal	4 ... 20 mA, 0 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC, 0.5 … 4.5 VDC ratiometric
Accuracy @ 25°C typ.	± 0.5 % FS typ. ± 0.3 % FS typ.
Media temperature	–40°C ... +125°C
Ambient temperature	–40°C ... +125°C

Data sheet www.trafag.com/H72317

EPN/EPNCR 8298

Engine pressure transmitter

Features

- Nominal pressure up to 2500 bar (Common Rail) with high pressure threaded connection
- High vibration resistance

Technical Data	
Measuring principle	Thin-film-on-steel
Measuring range	0 ... 2.5 to 0 ... 2500 bar
Output signal	4 ... 20 mA 0.5 ... 4.5 VDC ratiometric
Accuracy @ 25°C typ.	± 0.5 % FS typ. ± 0.3 % FS typ.
Media temperature	-40°C ... +125°C
Ambient temperature	-40°C ... +125°C
Approval / conformity	ABS, BV, CCS, DNV-GL, KRS, LRS, NKK, RINA, RMRS

Data sheet www.trafag.com/H72312

Sensor Communicator SC
see page 22

ECT 8472

Industrial pressure transmitter

Features

- Excellent media compatibility
- Relative or absolute pressure measurement
- Titanium version optional
- Frontal membrane optional

Technical Data	
Measuring principle	Thick-film-on-ceramic
Measuring range	0 ... 1 to 0 ... 400 bar 0 ... 15 to 0 ... 5000 psi
Output signal	4 ... 20 mA, 0 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC, 0.5 ... 4.5 VDC ratiometric
Accuracy @ 25°C typ.	± 0.5 % FS typ.
Media temperature	-25°C ... +125°C 400 bar/5000 psi: -10°C ... +125°C
Ambient temperature	-25°C ... +125°C

Data sheet www.trafag.com/H72324

ECT8473

Industrial pressure transmitter with increased accuracy

Features

- Measuring ranges from 100 mbar
- Excellent media compatibility
- Relative or absolute pressure measurement
- Titanium version optional
- Frontal membrane optional

Technical Data	
Measuring principle	Thick-film-on-ceramic
Measuring range	0 ... 0.1 to 0 ... 40 bar 0 ... 1.5 to 0 ... 500 psi
Output signal	4 ... 20 mA, 0 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC, 0.5 ... 4.5 VDC ratiometric
Accuracy @ 25°C typ.	± 0.3 % FS typ. (± 0.5 % FS typ., ± 1 % FS typ.)
Media temperature	-25°C ... +125°C
Ambient temperature	-25°C ... +125°C

Data sheet www.trafag.com/H72326

trafag sensors controls

CMP 8270

CANopen miniature pressure transmitter

Features

- Different accuracy classes to 0.1 %
- Measurement of pressure and temperature
- CANopen bus protocol DS301/DS404 supports CAN 2.0A/B
- LSS (DS 305 V2.0)
- Optional: 500 VAC dielectrical strength

Technical Data	
Measuring principle	Thin-film-on-steel
Measuring range	0 ... 0.2 to 0 ... 600 bar 0 ... 3 to 0 ... 7500 psi
Output signal	Bus protocol CANopen DS404
Accuracy @ 25°C typ.	± 0.5 % FS typ. ± 0.15 % FS typ. ± 0.1 % FS typ.
Media temperature	-50°C ... +135°C
Ambient temperature	-40°C ... +125°C

Data sheet www.trafag.com/H72614

NAH 8254 20 kHz

Pressure transmitter for highly dynamic pressure curves

Features

- Cut-off frequency 20 kHz
- For highly dynamic pressure curves
- Analogue signal processing
- Measuring accuracy 0.3 %
- Excellent long-term stability

Technical Data	
Measuring principle	Thin-film-on-steel
Measuring range	0 ... 0.2 to 0 ... 600 bar 0 ... 3 to 0 ... 7500 psi
Output signal	4 ... 20 mA, 0.5 ... 4.5 VDC ratiometric
Accuracy @ 25°C typ.	± 0.3 % FS typ.
Media temperature	–40°C ... +125°C
Ambient temperature	–40°C ... +125°C

Flyer www.trafag.com/H70604

FPT 8235

Flush membrane transmitter

Features

- Flush membrane with smooth and plain surface
- Completely welded sensor system
- Accuracy NLH 0.1% FS typ.
- Excellent long-term stability

Technical Data	
Measuring principle	Thin-film-on-steel
Measuring range	0 ... 1 to 0 ... 100 bar 0 ... 15 to 0 ... 1500 psi
Output signal	4 ... 20 mA, 0 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC
Accuracy @ 25°C typ.	± 0.4 % FS
Media temperature	-40°C ... +125°C
Ambient temperature	-40°C ... +85°C

Data sheet www.trafag.com/H72316

ECL 8439

Submersible pressure transmitter

Features

- Suitable for thick and viscous media
- Different materials for optimum media compatibility
- Lightning protection integrated
- Configurable measuring ranges

Technical Data	
Measuring principle	Thick-film-on-ceramic
Measuring range	0 ... 0.1 to 0 ... 2.0 bar 0 ... 1.5 to 0 ... 30 psi
Output signal	4 ... 20 mA
Accuracy @ 25°C typ.	± 0.3 % FS typ. Range 0 ... 0.1 to 0 ... 0.2 bar: ± 0.5 % FS typ.
Media temperature	max. -25°C ... +70°C
Ambient temperature	max. -25°C ... +70°C

Data sheet www.trafag.com/H72336

Configuration of the measuring ranges

Sensor Master Interface SMI

Features

- Fast and easy operation via Android App "Sensor Master Communicator SMC"
- Measuring range adjustment on submersible pressure transmitter ECL
- Read out of sensor data
- Reset pressure measurement instruments to factory settings

Technical Data	
Ambient temperature	0°C ... +40°C
Supply voltage	5 VDC, ±0.25, 1 A (Supply via USB interface)
Protection	IP20
Storage temperature	-10°C ... +50°C
Dimensions	LxWxH: 120x76x27 mm
Communication SMC/SMI	via Bluetooth LE
Operation Interface	via Android App "Sensor Master Communicator SMC"

Data sheet www.trafag.com/H72618

TFC

Float level sensor

Features

- Measuring resolution 5, 10, 20 mm
- Analogue output 4 ... 20 mA, 0 ... 5 VDC, 0 ... 10 VDC
- Optional : Temperature sensor PT1000
- Protection IP65

Parameters

Type	TFCO	TFCS	TFCP
Float	Spansil – Butadiene – Acrylonitrile Copolymer	Stainless steel AISI316	PVDF – PP – PVC
Ambient temperature	-30 ... + 55°C	-30 ... + 55°C	-30 ... + 55°C
Media temperature	to 105°C, optional 120°C	to 105°C, optional 150°C	to 130°C (PVDF) to 90°C (PP) to 60°C (PVC)
Working pressure [1)]	max. 20 bar	max. 50 bar	max. 6 bar (PVDF or PVC) max. 3 bar (PP)

[1)] Depending on float type

Data sheet www.trafag.com/H20040

TFS

Float level switch

Features

- Up to 6 switch points
- Protection IP65
- Optional: Temperature sensor PT1000 or thermostat
- Potted electrical contacts

Parameters

Type	TFSO	TFSS	TFSP
Float	Spansil – Butadiene – Acrylonitrile Copolymer	Stainless steel AISI316	PVDF – PP – PVC
Ambient temperature	-30 ... + 55°C	-30 ... + 55°C	-30 ... + 55°C
Media temperature	to 105°C, optional 120°C	to 105°C, optional 150°C or 180°C	to 130°C (PVDF) to 90°C (PP) to 60°C (PVC)
Working pressure [1)]	max. 20 bar	max. 50 bar	max. 6 bar (PVDF or PVC) max. 3 bar (PP)

[1)] Depending on float type

Data sheet www.trafag.com/H20041

DPS 8381

Display pressure switch and transmitter

NFC

Features

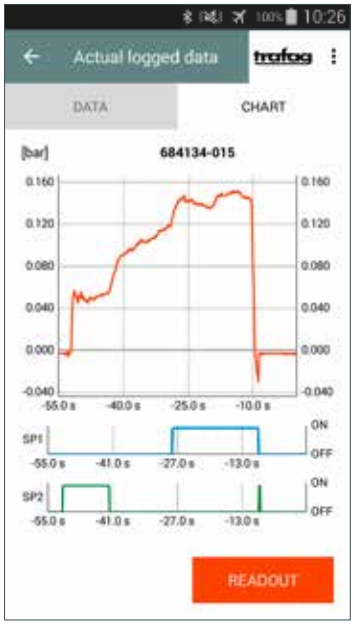
- Parameterization also via NFC-smartphone App (Android)
- Display and electrical connection are independently rotatable 335°/343°
- Analogue output switchable mA or V
- Integrated datalogger
- Pressure range adjustable

Technical Data	
Measuring principle	Thin-film-on-steel
Measuring range	0 ... 2.5 to 0 ... 600 bar 0 ... 30 to 0 ... 7500 psi adjustable
Output signal	4 ... 20 mA, 0 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC, switchable mA or V
Switching output	2 transistors PNP
Accuracy @ 25°C typ.	± 0.5 % FS typ.
Media temperature	-25°C ... +85°C
Pressure unit for display	bar, psi, MPa, kPa, m WC, mm WC, %, user scale
Logger	Ring buffer: 3518 data points Sampling time: 0.1 ... 999.9 s, Off (0)

Data sheet www.trafag.com/H72321

Configuration App Trafag Sensor Master

With the free Android app "Trafag Sensor Master", available in the Google Play Store, the parameters of the Trafag display pressure switches DPS 8381, DPC 8380 and of the temperature switch DTP 8180 can be set very simple through a smartphone. In addition to a variety of parameters for the switchpoints, the measurement range can be scaled. Communication is conducted via the NFC interface on the display. Through this interface, the measurement values of the internal data logger can also be read out and then processed further via smartphone.



DPC 8380

Display pressure switch and transmitter

NFC

Features

- Parameterization also via NFC-smartphone App (Android)
- Display and electrical connection are independently rotatable 335°/343°
- Analogue output switchable mA or V
- Integrated datalogger
- Pressure range adjustable

Technical Data	
Measuring principle	Thick-film-on-ceramic
Measuring range	0 ... 0.2 to 0 ... 100 bar 0 ... 2.5 to 0 ... 1500 psi adjustable
Output signal	4 ... 20 mA, 0 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC, switchable mA or V
Switching output	2 transistors PNP
Accuracy @ 25°C typ.	± 0.5 % FS typ.
Media temperature	-25°C ... +85°C
Pressure unit for display	bar, psi, MPa, kPa, m WC, mm WC, %, user scale
Logger	Ring buffer: 3518 data points Sampling time: 0.1 ... 999.9 s, Off (0)

Data sheet www.trafag.com/H72320

DTP 8180

Temperature switch and transmitter

NFC

Features

- Parameterization also via NFC-smartphone App (Android)
- Display and electrical connection are independently rotatable 335°/343°
- Analogue output switchable mA or V
- Integrated datalogger
- Temperature measuring range adjustable

Technical Data	
Measuring principle	PT 1000, DIN EN 60751 class A, 2 conductors
Measuring range	-50°C ... +150°C / -58°F ... 302°F adjustable 50 ... 100 % FS
Output signal	4 ... 20 mA, 0 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC, switchable mA or V
Switching output	2 transistors PNP
Accuracy @ 25°C typ.	± 0.5 % FS typ.+ temperature sensor error
Temperature unit for display	°C, °F, K
Logger	Ring buffer: 3518 data points Sampling time: 0.1 ... 999.9 s, Off (0)

Data sheet www.trafag.com/H72352

NAT 8252

Industrial pressure switch

Features

- 1 or 2 PNP transistors
- Parameterization via smartphone App (Android)
- Switching current up to 400 mA
- Excellent long-term stability
- Optional: 5-fold overpressure resistance

Technical Data	
Measuring principle	Thin-film-on-steel
Measuring range	0 ... 2.5 to 0 ... 600 bar 0 ... 30 to 0 ... 7500 psi
Output signal	Switching output: 1 or 2 PNP transistors
Accuracy @ 25°C typ.	± 0.5 % FS typ.
Media temperature	–40°C ... +125°C
Ambient temperature	–40°C ... +125°C

Data sheet www.trafag.com/H72303

Setting the switching points

Sensor Master Interface SMI

Features

- Fast and easy operation via Android App "Sensor Master Communicator SMC"
- Parameterization of switching points on NAx pressure switches
- Read out of sensor data
- Reset pressure measurement instruments to factory settings

Technical Data	
Ambient temperature	0°C ... +40°C
Supply voltage	5 VDC, ±0.25, 1 A (Supply via USB interface)
Protection	IP20
Storage temperature	-10°C ... +50°C
Dimensions	LxWxH: 120x76x27 mm
Communication SMC/SMI	via Bluetooth LE
Operation Interface	via Android App "Sensor Master Communicator SMC"

Data sheet www.trafag.com/H72618

NAH 8254

Pressure switch with increased accuracy

Features

- Switching accuracy 0.3 %
- 1 or 2 PNP transistors
- Parameterization via smartphone App (Android)
- Switching current up to 400 mA
- Optional: 5-fold overpressure resistance

Technical Data	
Measuring principle	Thin-film-on-steel
Measuring range	0 ... 0.2 to 0 ... 600 bar 0 ... 3 to 0 ... 7500 psi
Output signal	Switching output: 1 or 2 PNP transistors
Accuracy @ 25°C typ.	± 0.3 % FS typ.
Media temperature	–40°C ... +125°C
Ambient temperature	–40°C ... +125°C

Data sheet www.trafag.com/H72304

Sensor Master Interface SMI

EPN-S 8320

Electronic pressure switch

Features

- Rugged design for harsh environments
- Wide temperature range
- Excellent long-term stability
- Very compact design
- Switchpoint factory set or programmable on site with Trafag Sensor Communicator SC

Technical Data	
Measuring principle	Thin-film-on-steel
Measuring range	0 ... 2.5 to 0 ... 600 bar 0 ... 30 to 0 ... 7500 psi
Output signal	Transistor (open source)
Accuracy @ 25°C typ.	± 0.5 % FS typ. (Switchpoint)
Media temperature	-40°C ... +125°C
Ambient temperature	-40°C ... +125°C
Approval / conformity	DNV-GL, RMRS

Data sheet www.trafag.com/H72333

Sensor Communicator SC
see page 22

PST4B 9B4

Picostat Pressure switch with bellow sensor

Features

- Improved vibration resistance
- For low pressure ranges
- High repeatability

Technical Data	
Measuring principle	Bellow
Measuring range	-0.6 ... 3.4 to 4 ... 40 bar -8 ... 45 to 60 ... 500 psi
Output signal	1 Floating change-over contact (SPDT)
Switching differential	Not adjustable
Repeatability	± 0.5 % FS typ.
Media temperature	Standard: –25°C ... +125°C sensor 789/790/791: –40°C ... +125°C
Approval / conformity	ABS, BV, CCS, DNV-GL, GL, KRS, LR, NKK, RINA, RMRS EN60730-1/ EN60730-2-6: Typ 2.B.H

Data sheet www.trafag.com/H72367

PST4K 9K4

Picostat Pressure switch with piston sensor

Features

- High pressure ranges
- Robust even with pulsating pressure curves

Technical Data	
Measuring principle	Piston
Measuring range	1 ... 10 to 40 ... 400 bar 14 ... 150 to 580 ... 5800 psi
Output signal	1 Floating change-over contact (SPDT)
Switching differential	Not adjustable
Repeatability	± 1.0 % FS typ.
Media temperature	–25°C ... +125°C
Ambient temperature	-25°C ... +85°C
Approval / conformity	ABS, BV, CCS, GL, KRS, LRS, RINA, EN60730-1/ EN60730-2-6: Typ 2.B.H

Data sheet www.trafag.com/H72369

PST4M 9M4

Picostat Pressure switch with membrane sensor

Features

- For medium pressure ranges
- Robust even with pulsating pressure curves

Technical Data	
Measuring principle	Membrane
Measuring range	1 ... 10 to 10 ... 100 bar 14 ... 150 to 150 ... 1500 psi
Output signal	1 Floating change-over contact (SPDT)
Switching differential	Not adjustable
Repeatability	± 2.0 % FS typ.
Media temperature	0°C ... +80°C
Ambient temperature	0°C ... +80°C
Approval / conformity	ABS, BV, CCS, GL, KRS, LRS, RINA, EN60730-1/ EN60730-2-6: Typ 2.B.H

Data sheet www.trafag.com/H72368

ISP/ISPT 474

Picotherm Thermostat

Features

- Compact design
- Rugged housing
- High repeatability
- Protection IP65
- Any mounting position possible

Technical Data	
Measuring range	+5°C ... +95°C to +20°C ... +150°C
Output signal	Floating change-over contact
Switching differential	Not adjustable
Repeatability	± 1 % FS typ.
Approval / conformity	Marine EU RO MR Type Approval

Data sheet www.trafag.com/H72113

SMI

Sensor Master Interface

Features

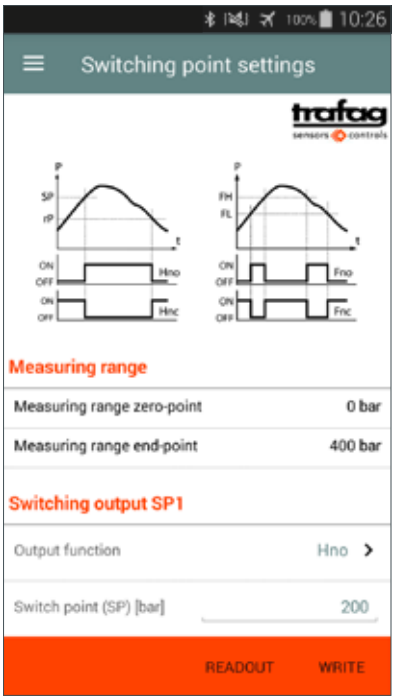
- Read out of sensor data
- Parameterization of switching points on NAx pressure switches
- Measuring range adjustment on submersible pressure transmitter ECL
- Fast and easy operation via Android App "Sensor Master Communicator SMC"
- Reset pressure measurement instruments to factory settings

Technical Data	
Ambient temperature	0°C ... +40°C
Supply voltage	5 VDC, ±0.25, 1 A (Supply via USB interface)
Protection	IP20
Storage temperature	-10°C ... +50°C
Dimensions	LxWxH: 120x76x27 mm
Communication SMC/SMI	via Bluetooth LE
Operation Interface	via Android App "Sensor Master Communicator SMC"

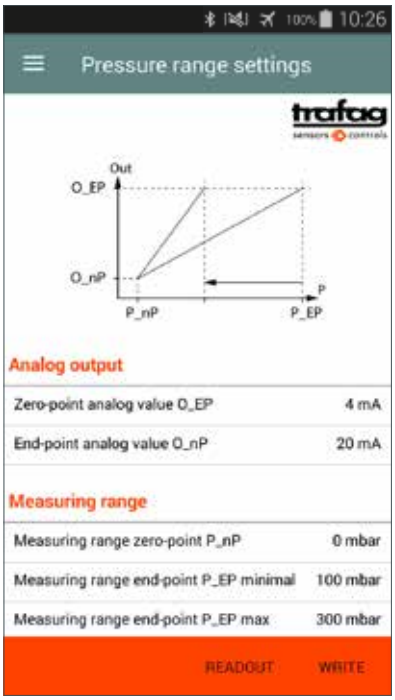
Data sheet www.trafag.com/H72618

Reading out device data

Parameterization of switching points on NAx pressure switches



Measuring range adjustment on submersible pressure transmitter ECL



CAN2USB

CANopen configuration tool

Features

- Configuration of Trafags pressure transmitter CMP 8270 via USB
- Easy to use visual user interface
- Integrated datalogger
- Complete set availabe at Trafag AG
- System requirements: Windows 7, Windows 8, Windows 10, USB 2.0 or higher

Technical Data

Configuration of CANopen devices is hard for non-experts. Most available software is developed for experts with much background knowledge and experience in programming such devices. Neither the software user interface nor the interface hardware, such as plugs and adapters, are designed for occasional users.
The CMP CANopen Configuration tool, developed and produced for Trafag CMP 8270 CANopen pressure transmitter, is the perfect solution for this: Easy-to-use software interface and a USB-to-CANopen dongle. It allows configuration of all CANopen parameters and access to the complete object dictionary. Live display of the actual measurements of pressure and temperature and an integrated logger with export function offers easy monitoring of the CANopen bus communication.

Flyer www.trafag.com/H70696

Content of delivery:

- CAN2USB adapter
- Cable from adapter to USB
- T-connector M12 F-F-M
- Terminator 120 Ω
- USB Memory stick with software and manual for CAN2USB and CMP 8270

Recommended accessory (not included):

- CMP0.6M: CANopen Pressure Transmitter 8270 CMP with pressure range 0 ... 0.6 bar
- C29161: Pressure applicator

trafag sensors controls

SC

Sensor Communicator

Features

- Read out of sensor data
- Adjustment of set point or zero point and span
- Real time pressure measuring
- Software update and battery charge with USB-interface

Technical Data

- Identification of device data: Model, signal output, type plate, manufacturing date
- Setting of switchpoint (8320 EPN-S)
- CANopen: Setting of Node-ID and baudrate
- Reset to factory settings

Content of delivery:

- 1 pce SC incl. batteries
- 1 pce USB-cable
- 1 pce Measuring bridge cable
- Adapter cable for corresponding device types can be ordered separately

Instruction www.trafag.com/H73699 en

DVB

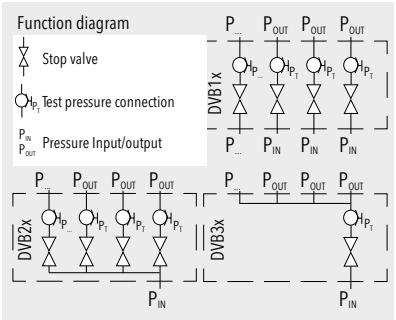
Diagnostic valve block

Features

- Function tests during operation (no interruption necessary) with stop valve and test connection

Technical Data

Pressure	-0.8 ... 100 bar
Ambient temperature	-20°C ... +120°C



Data sheet www.trafag.com/H72361

THP...

Hand pump

Features

- For testing of pressure transmitters and pressure switches

Technical Data	
Connection	G1/4" female

Standard products (extra short lead time)		
Product No	**Range [bar]**	
THP30	-0.85 ... +25	
THP700	0 ... 700	Resolution 0.2 bar

V6/V7

Stop valve

Features

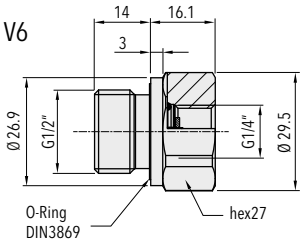
- Allows replacement of instruments without interruption of process (max. 40 bar)

Technical Data	
Material	1.4305 / FKM
Pressure	max. 600 bar
Media temperature	-25°C ... +125 °C

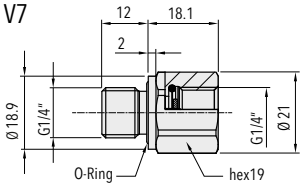
Data sheet www.trafag.com/H72258

Standard products (extra short lead time)		
Product No		**Connection**
V6	For water, air, light-crude, heavy oil	G1/2" male - G1/4" female
V7	For water, air, light-crude, heavy oil	G1/4" male - G1/4" female

V6



V7



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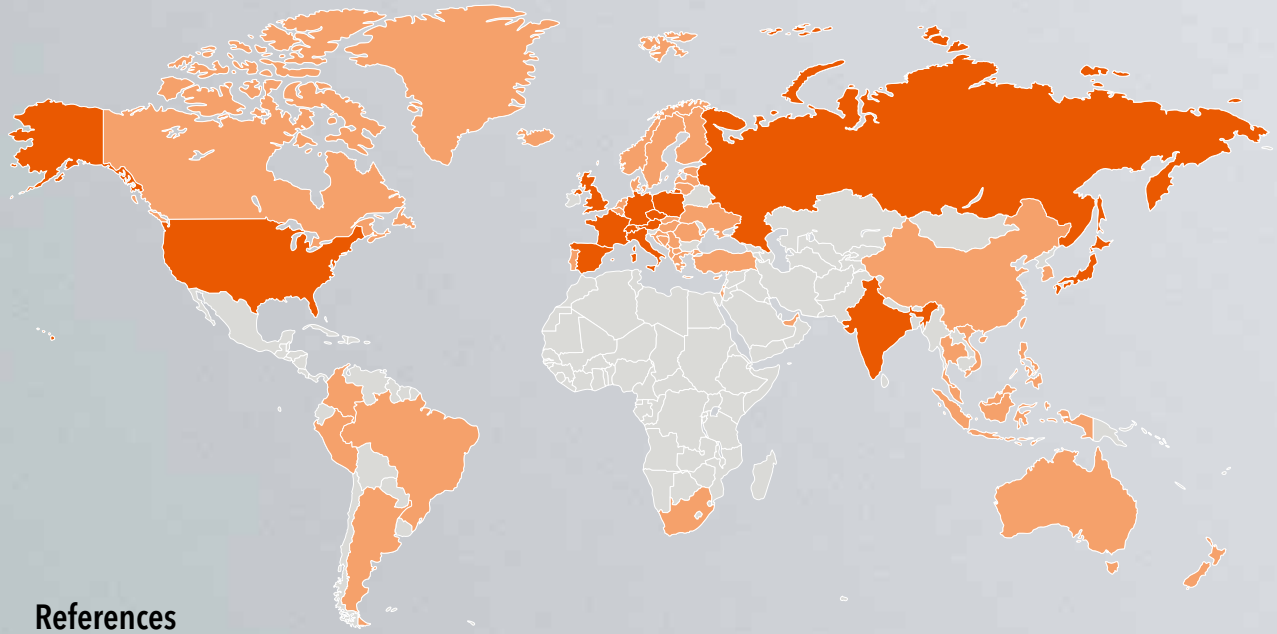
Thailand
Turkey
Ukraine
United Arab Emirates
Vietnam



References
ABB I AIT I AKG I Alstom I Areva T&D I Atos I AVL I Benninghoven I Bharat Heavy Electrical I Blohm & Voss I Bombardier I Bosch Rexroth I BMW Rolls-Royce Bühler I Caterpillar I Charmilles I CRRC I Dalian Marine Diesel Ltd. I Detroit Diesel I Deutsche Bahn AG I Doosan Group I Dräger I Electrolux I Elektrobudowa S.A. Faiveley I Fincantieri I Flender I Goninan I Greenfield I G&W I Hermetic Pumpen I Roche I Hudong Heavy Machinery I Hyundai Heavy IndustriesI I IAV Ingersoll Rand I Iveco I KOMA I MAN I B&W I Melag I Mitsubishi I MTU I Noske-Kaeser I Oilon I Ormat Turbines I Parker I PESA I Philips I PKN Orlen S.A. PMC I Polarteknik I Promeco I Queensland Rail I Reintjes I Renk I Rolls-Royce I Schindler I Schneider Electric I Schottel I Sciteq-Hammel I Siemens I SNCF STX Heavy Industries I Thermax Limited I Toshiba I Trumpf I Verolme Shipyard I Vesta I Viessmann I Voith I Wärtsilä I Westfalia Separator I W&H Yichang Marine Diesel Ltd. I York I ZF Marine

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