

Trafag insight

Pressure switches - Pressure transmitters - Thermostats





Trafag – the hightech sensor company

Trafag, a Swiss-based company founded in 1942, is supported by a broad sales and service network in over 40 countries globally. This allows Trafag to offer customers personalised and competent advice and ensures the best possible service. High-performance development and production departments not only guarantee fast and reliable delivery of our high-quality, high-precision products, but also ensure that customisations can be implemented at low lead times.

Competent and customer-oriented

Technological competence, manufacturing expertise, and customer-orientation form the three cornerstones of Trafag as a company. Trafag is a completely independent company with headquarters in Bubikon, Switzerland, and further manufacturing companies in Germany and the Czech Republic. A fifth of its employees in Switzerland are involved in research and development, production technology, or applications engineering.

Application and solution-oriented

The direct availability of these resources enables Trafag to be extremely flexible in development and production as well as in capturing and implementing customer requirements. Modular engineering enables Trafag to efficiently adapt its standard products to the specific needs of customers and to develop special OEM solutions.

Market-oriented and always within reach

Trafag maintains an active presence in over 40 countries. A great number of customers in diverse industrial sectors such as mechanical engineering, hydraulics, engine manufacturing, shipbuilding, railway technology, and high-voltage technology appreciate the cooperation offered by our technically competent customer advisory service.

Adaptable and efficient

The ability to develop and manufacture its strategically important components in-house means that Trafag can manufacture at small and large scales at short notice. Rigorous quality management, in accordance with ISO 9001, state of the art production facilities under clean room conditions, and stringently monitored production processes ensure that Trafag meets the highest quality demands.

Markets and applications



Shipbuilding

- Propulsion
- Pumps
- Ballast water treatment
- Steering
- Separators
- Tank level



Hydraulics

- Construction machinery
- Agricultural machinery
- Injection molding machines
- Community vehicles
- Elevators



Engines

- Common rail injection
- Cooling water
- Oil pressure
- Fuel pressure
- Turbo charger





Railways

- Brake systems
- Pantograph
- Air compressors
- Control and safety systems
- Air-conditioning systems



Hydrogen

- Electrolyzer
- Fuel cells
- Hydrogen storage tanks
- Fueling stations



Test and measurement

- Engine and transmission test benches
- Mobile vehicle testing
- Testing of hydraulic components
- Material testing
- Brake and chassis test benches





Pressure transmitters and electronic pressure switches

Trafag pressure transmitters and electronic pressure switches are used for measuring and evaluating pressure. Over the decades, they have proven themselves in multitudes of demanding applications in harsh environments. Superior technology and precise manufacturing ensure that the transmitters work perfectly, especially where stringent requirements exist for long-term stability, vibration resistance, electromagnetic compatibility, shock resistance, or temperature insensitivity. Trafag pressure transmitters and electronic pressure switches are available in many different designs to suit pressure and electrical connections, measuring procedures, and electrical output signals. They are available with Ex and maritime approvals as well as railway conformity.

Sensor technology

Key components of Trafag's 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 as well as with the ASIC application-specific microchip. As a result, pressure sensors and electronics work in perfect unison and achieve a unique level of long-term stability and reliability, even under the most adverse environmental conditions.



Thin-film-on-steel sensor technology

- Excellent long-term stability
- Resistant to high media temperatures
- Completely welded stainless steel sensor system without O-rings
- Resistant to very high over pressures and ideal for nominal pressures up to 3000 bar



Thick-film-on-ceramic sensor technology

- Resistant to aggressive media
- Ideal for low measuring ranges
- Relative and absolute pressure measurement





trafag
sensors & controls

S/N : 999999-001
Type : 9M4.4279
Range : 1...16 bar (kg/cm²)
0.1...1.6 MPa
p-max : 200 bar/20 MPa
250V AC 6(1)A 24V DC 3(2)A



Mechanical pressure monitoring

Trafag's electromechanical pressure switches provide high vibration resistance and switch point precision in combination with an extremely robust and durable design. This results in switches that can be operated for decades without requiring maintenance, even under harsh conditions. Various designs with bellows, membrane, and piston sensors cover a wide variety of pressure ranges, media, and load profiles for many different applications. Pressostats are available with Ex- and maritime approvals as well as railway conformity.

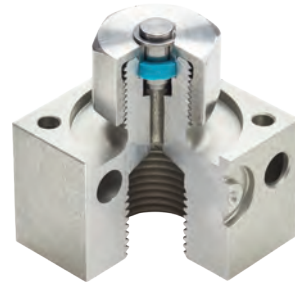
Bellows sensor

- High switching point precision and repeatability
- Stainless steel, bronze and brass designs
- Optionally welded/soldered design for absolute impermeability
- Measure liquid, vaporous and gaseous media



Piston sensor

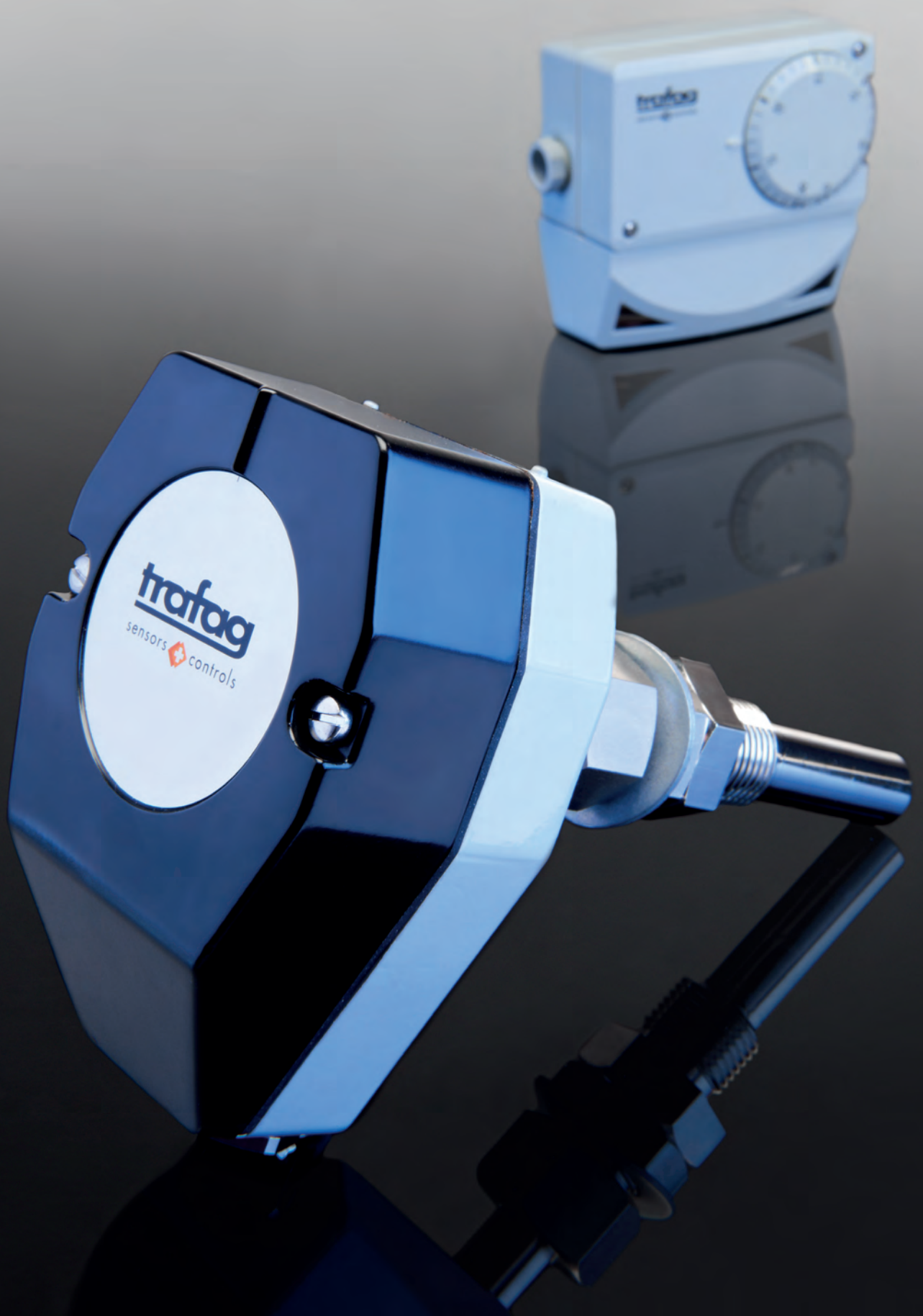
- Suitable for high pressure ranges
- Not sensitive to pressure surges
- Suitable for applications with many load cycles
- Ideal for hydraulic systems



Membrane sensor

- Resistant to high overpressures and insensitive to pressure surges
- Suitable for applications with many load cycles
- Measure liquid, vaporous and gaseous media





Temperature monitoring

For 70 years, Trafag thermostats have proven their robustness in withstanding the most adverse environmental conditions. Industry usage ranges from air conditioning applications to engine and ship manufacturing and even to offshore oil and gas platform production. The appeal of Trafag thermostats lies in their high switching point precision even after decades of operation under harsh conditions without maintenance. Trafag thermostats are available in various sensor and housing versions, with various Ex and maritime approvals as well as railway-compliant versions.

Measuring principle

A capillary tube filled with liquid reacts to a temperature change, according to thermal expansion. This expansion is detected using a precision structure which switches one or multiple microswitches.

Design variations

- Internal or external temperature set-point adjustment
- Internal or external measuring scale
- With or without a manual reset switch
- With or without DT-switching differential adjustment
- Switch designs for inside or outside applications
- Optional capillary tube safeguard
- Single or double-step circuit
- CE, EX, or maritime certifications



Sensor systems and accessories

- Sensors that are fixed or free mounting
- Copper (Cu), Cu nickel-plated or stainless steel sensor material
- Nickel-plated bronze or stainless steel protective sensor tube
- Additional capillary tube protection

Pressure transmitters

	NHT 8250	NAT 8252 NAH 8254	NAH 8253	NAE 8256	
					
Measuring principle	Thin-film-on-steel	Thin-film-on-steel	Thin-film-on-steel	Thin-film-on-steel	
Measuring range	0 ... 1 to 0 ... 600 bar 0 ... 15 to 0 ... 7500 psi	0 ... 0.2 to 0 ... 700 bar 0 ... 3 to 0 ... 10000 psi	0 ... 2.5 to 0 ... 600 bar 0 ... 30 to 0 ... 7500 psi	0 ... 0.2 to 0 ... 700 bar 0 ... 3 to 0 ... 10'000 psi	
Output signal	4 ... 20 mA, 0.5 ... 4.5 VDC, 0 ... 5 VDC, 1 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC, 0.1 ... 10.1 VDC, 0.5 ... 4.5 VDC ratiometric	4 ... 20 mA, 0 ... 5 VDC, 1 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC and more, 0.5 ... 4.5 VDC ratiometric, Switching output: 1 or 2 PNP	4 ... 20 mA, 0 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC, 0.5 ... 4.5 VDC ratiometric	4 ... 20 mA, Switching output: 1 or 2 PNP	
Accuracy @ +25°C typ.	± 0.5 % FS typ. ± 0.3 % FS typ.	± 0.3 % FS typ. ± 0.5 % FS typ.	± 0.3 % FS typ. ± 0.15 % FS typ. ± 0.1 % FS typ.	0.3 %: ± 0.3 % FS typ.	
Ambient temperature	-40°C ... +85°C	-40°C ... +125°C	-40°C ... +125°C	-40°C ... +125°C	
Media temperature	-40°C ... +85°C	-40°C ... +125°C	-40°C ... +125°C	-40°C ... +125°C	
Protection	IP65, IP67, IP68	IP65, IP67, IP68	Min. IP65	IP65, IP67, IP68	
Sensor (wetted parts)	Nitrogen-strengthened austenitic steel, hydrogen compatible	1.4542 (AISI630)	1.4542 (AISI630)	1.4542 (AISI630)	
Pressure connection (wetted parts)	1.4404 (AISI316L)	1.4542 (AISI630)	1.4542 (AISI630) 1.4301 (AISI304)	1.4542 (AISI630)	
Housing	1.4301 (AISI304)	1.4301 (AISI304)	1.4301 (AISI304)	1.4301 (AISI304)	
Electrical connections	Industrial standard, contact distance 9.4 mm; M12x1; MIL-C 26482; Cable IP67	M12x1; Cable IP67 (IP68) / Industrial standard, contact distance 9.4 mm; M12x1; MIL-C 26482; Deutsch DT04-3P/4P; Cable	Industrial standard, contact distance 9.4 mm; M12x1; MIL-C 26482; Cable IP67	M12x1; Cable IP67/IP68	
Applications	H ₂ fuelling stations Hydrogen compressors Fuel cells Vehicles with H ₂ drive Hydrogen tanks	Machine tools Hydraulics HVAC Refrigeration Process technologyWater treatmentMeasuring and test bench technology	Test benches Railways Machine tools Hydraulics	Shipbuilding	
Approval / Conformity	cULus Listed Ex-Zone 2 EC79/2009	cULus Listed		DNV EU RO Mutual Recognition Type Approval Certificate	
Data sheet	www.trafag.com/H72338	www.trafag.com/H72303 www.trafag.com/H72304	www.trafag.com/H72300	www.trafag.com/H72305	
Instructions	www.trafag.com/H73303	www.trafag.com/H73303 www.trafag.com/H73303	www.trafag.com/H73250	www.trafag.com/H73303	

NSL 8257	NAR 8258	CMP 8270	CMP 8271	NAI 8273
		 	 	 
Thin-film-on-steel	Thin-film-on-steel	Thin-film-on-steel, piezoresistive	Thin-film-on-steel	Thin-film-on-steel
0 ... 0.2 to 0 ... 2.5 bar 0 ... 3 to 0 ... 30 psi	0 ... 6 to 0 ... 700 bar 0 ... 100 to 0 ... 10000 psi	0 ... 0.2 to 0 ... 600 bar 0 ... 3 to 0 ... 7500 psi	0 ... 2.5 to 0 ... 700 bar 0 ... 30 to 0 ... 10000 psi	-0.2 ... 0.2 to 0 ... 700 bar
4 ... 20 mA, 0 ... 5 VDC, 0 ... 10 VDC, 0.5 ... 4.5 VDC ratiometric	4 ... 20 mA, Switching output: 1 or 2 PNP	Bus protocol CANopen DS404	Bus protocol CANopen DS404	IO-Link 1.1, COM3, min. process cycle time 1 ms, Smart Sensor Profile ED2, 2 Switching outputs PNP/NPN/ Push-Pull configurable
0.15 ... 0.8 % FS typ.	± 0.3 % FS typ.	± 0.5 % FS typ. ± 0.3 % FS typ. ± 0.15 % FS typ. ± 0.1 % FS typ.	± 0.5 % FS typ. ± 0.3 % FS typ.	± 0.5 % FS typ. ± 0.3 % FS typ.
-40°C ... +125°C	-40°C ... +85°C (EN 50155: OT6)	-40°C ... +125°C	-40°C ... +125°C	-40°C ... +105°C
-40°C ... +125°C	-40°C ... +85°C	-50°C ... +135°C	-40°C ... +125°C	-40°C ... +125°C
Min. IP65	IP65, IP67, IP68	Min. IP67	Min. IP67	IP65, IP67
1.4542 (AISI630)	1.4542 (AISI630)	1.4542 (AISI630)	1.4542 (AISI630)	1.4542 (AISI630)
1.4542 (AISI630)	1.4542 (AISI630)	1.4542 (AISI630) 1.4301 (AISI304)	1.4542 (AISI630)	1.4542 (AISI630)
1.4301 (AISI304)	1.4301 (AISI304)	1.4301 (AISI304)	1.4301 (AISI304)	1.4301 (AISI304)
Industrial standard, contact distance 9.4 mm; M12x1; MIL-C 26482	Industrial standard, contact distance 9.4 mm; M12x1; Cable IP67, IP68	M12x1	M12x1	M12x1
Shipbuilding Engine manufacturing Machine tools	Railways	Engine manufacturing Railways Machine tools Hydraulics Process technology Test benches	Hydraulics Machine tools Engine manufacturing Process technology	Machine tools Hydraulics Pneumatics Process technology
DNV	EN 50155 (Railway) EN 45545-2 (Fire protection) EN 61373 (Shock, vibration) EN 50121-3-2 (EMC)			
www.trafag.com/H72302	www.trafag.com/H72307	www.trafag.com/H72614	www.trafag.com/H72619	www.trafag.com/H72621
www.trafag.com/H73250	www.trafag.com/H73303	www.trafag.com/H73614 www.trafag.com/H73615 www.trafag.com/H73616	www.trafag.com/H73619 www.trafag.com/H73620	www.trafag.com/H73621 www.trafag.com/H73664

Pressure transmitters

	FPT 8236	FPI 8237	EPR 8283	EPI 8287	
		 			
Measuring principle	Thin-film-on-steel	Thin-film-on-steel	Thin-film-on-steel	Thin-film-on-steel	
Measuring range	-0.5 ... 0.5 to 0 ... 100 bar -5 ... 10 to 0 ... 1500 psi	-0.5 ... 0.5 to 0 ... 100 bar -7.2 ... 7.2 to 1500 psi	0 ... 2.5 to 0 ... 600 bar 0 ... 30 to 0 ... 7500 psi	0 ... 2.5 to 0 ... 700 bar 0 ... 30 to 0 ... 10000 psi	
Output signal	4 ... 20 mA, 0 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC, 0.5 ... 4.5 VDC ratiometric	IO-Link 1.1, COM3, min. process cycle time 1 ms, Smart Sensor Profile ED2, 2 Switching outputs PNP/NPN/Push-Pull configurable	4 ... 20 mA	4 ... 20 mA, 0 ... 5 VDC, 0.5 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC, 0.5 ... 4.5 VDC ratiometric	
Accuracy @ +25°C typ.	± 0.5 % FS typ.	± 0.5 % FS typ.	± 0.5 % FS typ. ± 0.3 % FS typ.	± 0.5 % FS typ. ± 0.3 % FS typ.	
Ambient temperature	-10°C ... +125°C	-10°C ... +105°C	-40°C ... +125°C	-40°C ... +125°C	
Media temperature	-10°C ... +125°C	-10°C ... +125°C	-40°C ... +125°C	-40°C ... +125°C	
Protection	IP65, IP67, IP68	IP65, IP67	IP65, IP67, IP68	IP65, IP67, IP68	
Sensor (wetted parts)	1.4462 (AISI318 LN)	1.4462 (AISI318 LN)	1.4542 (AISI630)	1.4542 (AISI630)	
Pressure connection (wetted parts)	1.4462 (AISI318 LN) 1.4542	1.4462 (AISI318 LN) 1.4542	1.4542 (AISI630) or 1.4404 (AISI316L)	1.4542 (AISI630) or 1.4404 (AISI316L)	
Housing	1.4542	1.4542	1.4542 (AISI630) or 1.4404 (AISI316L) 3)	1.4542 (AISI630) or 1.4404 (AISI316L)	
Electrical connections	EN175301-803-A (DIN43650-A); M12x1; Cable	M12x1	EN175301-803-A (DIN43650-A); M12x1; MIL-C 26482; Cable	EN175301-803-A (DIN43650-A); M12x1; MIL-C 26482; DIN72585; Cable	
Applications	Machine tools Food Industry Process technology Water treatment Hydraulics	Machine tools Food Industry Process technology Water treatment Hydraulics	Railways	Machine tools Hydraulics Industrial applications	
Approval / Conformity	cULus Listed		EN 50155 (Railway) EN 45545-2 (Fire protection)	cULus Listed	
Data sheet	www.trafag.com/H72343	www.trafag.com/H72622	www.trafag.com/H72319	www.trafag.com/H72317	
Instructions	www.trafag.com/H73343	www.trafag.com/H73621	www.trafag.com/H73317	www.trafag.com/H73317	

EPN 8288	EPR 8293	EPN/EPNCR 8298	NAP 8842/8843	ESH 8845
				
Thin-film-on-steel	Thin-film-on-steel	Thin-film-on-steel	Piezoresistive	Piezoresistive
0 ... 2.5 to 0 ... 600 bar 0 ... 30 to 0 ... 7500 psi	0 ... 2.5 to 0 ... 600 bar	0 ... 2.5 to 0 ... 2500 bar	0 ... 0.1 to 0 ... 1000 bar	0 ... 0.1 to 0 ... 100 bar
4 ... 20 mA, 0 ... 10 VDC	4 ... 20 mA	4 ... 20 mA 0.5 ... 4.5 VDC ratiometric	4 ... 20 mA 0 ... 10 VDC	4 ... 20 mA, 0 ... 5 VDC, 0 ... 10 VDC
± 0.5 % FS typ. ± 0.3 % FS typ.	± 0.5 % FS typ. ± 0.3 % FS typ.	± 0.5 % FS typ. ± 0.3 % FS typ.		0.05 % FS
-40°C ... +125°C	-40°C ... +125°C	-40°C ... +125°C	0°C ... +70°C	-40°C ... +125°C
-40°C ... +125°C	-40°C ... +125°C	-40°C ... +125°C	0°C ... +80°C	-40°C ... +125°C
IP65	IP65, IP67	IP65, IP67, IP69K	Min. IP65	Min. IP40
1.4542 (AISI630)	1.4542 (AISI630)	1.4542 (AISI630)	1.4435 (AISI316L)	1.4435 (AISI316L)
1.4542 (AISI630) or 1.4404 (AISI316L)	1.4542 (AISI630) or 1.4404 (AISI316L) 1.4301 (AISI304)	1.4542 (AISI630) or 1.4404 (AISI316L)	1.4435 (AISI316L)	1.4435 (AISI316L)
1.4542 (AISI630) or 1.4404 (AISI316L)	1.4301 (AISI304) 1.4542 (AISI630) or 1.4404 (AISI316L)	1.4301 (AISI304) 1.4542 (AISI630) or 1.4404 (AISI316L)	1.4435 (AISI316L)	1.4435 (AISI316L)
EN175301-803-A (DIN43650-A)	EN175301-803-A (DIN43650-A); MIL-C 26482	EN175301-803-A (DIN43650-A); MIL-C 26482; DIN72585; Cable	Cable; DIN43650-A; Binder 723; MIL-C 26482	EN175301-803-A; M12x1; MIL-C 26482; Binder 723
Shipbuilding Engine manufacturing Machine tools Hydraulics	Railways	Shipbuilding Engine manufacturing Machine tools Hydraulics	Shipbuilding Machine tools Hydraulics HVAC Process technology Water treatment	Test benches Test equipment
DNV EU RO Mutual Recognition Type Approval Certificate	EN 50155 (Railways)	ABS, BV, CCS, DNV, KRS, LRS, NKK, RINA, RMRS	DNV	
www.trafag.com/H72318	www.trafag.com/H72311	www.trafag.com/H72312	www.trafag.com/H72230	www.trafag.com/H72354
www.trafag.com/H73317	www.trafag.com/H73311	www.trafag.com/H73311	www.trafag.com/H73208	www.trafag.com/H73227

Pressure transmitters

	ECT 8472	ECT 8473	ECTN 8477	ECR 8478	
					
Measuring principle	Thick-film-on-ceramic	Thick-film-on-ceramic	Thick-film-on-ceramic	Thick-film-on-ceramic	
Measuring range	0 ... 1 to 0 ... 400 bar 0 ... 15 to 0 ... 5000 psi	0 ... 0.1 to 0 ... 40 bar 0 ... 1.5 to 0 ... 500 psi	0 ... 0.1 to 0 ... 250 bar 0 ... 1.5 to 0 ... 3000 psi	0 ... 0.1 to 0 ... 60 bar 0 ... 1.5 to 0 ... 1000 psi	
Output signal	4 ... 20 mA, 0 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC, 0.5 ... 4.5 VDC ratiom.	4 ... 20 mA, 0 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC, 0.5 ... 4.5 VDC ratiom.	4 ... 20 mA	4 ... 20 mA	
Accuracy @ +25°C typ.	± 0.5 % FS typ.	± 0.3 % FS typ. (± 0.5 % FS typ., ± 1 % FS typ.)	± 0.3 % FS typ. (± 0.5 % FS typ., ± 1 % FS typ.)	± 0.3 % FS typ. (± 0.5 % FS typ., ± 1 % FS typ.)	
Ambient temperature	-25°C ... +125°C	-25°C ... +125°C	-25°C ... +125°C	-25°C ... +125°C	
Media temperature	-25°C ... +125°C	-25°C ... +125°C	-25°C ... +125°C	-25°C ... +125°C	
Protection	IP65, IP67, IP68	IP65, IP67, IP68	IP65, IP67, IP68	IP65, IP67	
Sensor (wetted parts)	Ceramic, Al2O3 (96 %)	Ceramic, Al2O3 (96 %)	Ceramic, Al2O3 (96 %)	Ceramic, Al2O3 (96 %)	
Pressure connection (wetted parts)	1.4305 (AISI303) 1.4404/1.4435 (AISI316L) 1.4462 (AISI318LN) Titanium Grade 5	1.4305 (AISI303) 1.4404/1.4435 (AISI316L) 1.4462 (AISI318LN) Titanium Grade 5	1.4404/1.4435 (AISI316L) 1.4462 (AISI318LN) Titanium Grade 5	1.4404 (AISI316L)	
Housing	1.4305 (AISI303) 1.4404/1.4435 (AISI316L) 1.4462 (AISI318LN) Titanium Grade 5	1.4305 (AISI303) 1.4404/1.4435 (AISI316L) 1.4462 (AISI318LN) Titanium Grade 5	1.4404/1.4435 (AISI316L) 1.4462 (AISI318LN) Titanium Grade 5	1.4404/1.4435 (AISI316L)	
Electrical connections	EN175301-803-A (DIN43650-A); M12x1; Cable	EN175301-803-A (DIN43650-A); M12x1; Cable	EN175301-803-A (DIN43650-A); M12x1; Cable	EN175301-803-A (DIN43650-A); M12x1	
Applications	Machine tools Hydraulics Water treatment	Machine tools Hydraulics Water treatment	Shipbuilding Engine manufacturing	Railways	
Approval / Conformity	cULus Listed	cULus Listed	DNV EU RO Mutual Recognition Type Approval Certificate	EN 50155 (Railway) EN 45545-2 (Fire protection)	
Data sheet	www.trafag.com/H72324	www.trafag.com/H72326	www.trafag.com/H72322	www.trafag.com/H72337	
Instructions	www.trafag.com/H73324	www.trafag.com/H73324	www.trafag.com/H73324	www.trafag.com/H73324	

Pressure transmitters

EXNT 8292	EXNA 8852/8853	EXNA 8854	ZEN...
			
Thin-film-on-steel	Piezoresistive	Piezoresistive	Switch amplifier
0 ... 0.4 to 0 ... 2000 bar 0 ... 5 to 0 ... 30000 psi	0 ... 0.1 to 0 ... 1000 bar	0 ... 0.1 to 0 ... 1000 bar	
4 ... 20 mA	4 ... 20 mA	4 ... 20 mA	Output: Signal, Relays
± 0.5 % FS typ. ± 0.3 % FS typ.			
Max. -40°C ... +120°C	T3/T4: -25°C ... +85°C T6: -25°C ... +55°C	T3: -40°C ... +125°C T4: -40°C ... +85°C T6: -40°C ... +50°C	-20°C ... +60°C
Max. -40°C ... +120°C	T3: -25°C ... +150°C T4: -25°C ... +100°C T6: -25°C ... +55°C	T3: -40°C ... +150°C T4: -40°C ... +100°C T6: -40°C ... +50°C	
Min. IP65, IP67	Min. IP65	Min. IP65	IP20
1.4542 (AISI630), optional hydrogen-compatible steel	1.4435 (AISI316L)	1.4435 (AISI316L) or titanium	
1.4542 1.4404 Optional hydrogen-compatible steel	1.4435 (AISI316L)	1.4435 (AISI316L) or titanium	
1.4301 (AISI304)	1.4435 (AISI316L)	1.4435 (AISI316L) or titanium	
EN175301-803-A; M12x1; MIL-C 26482; Binder 723; Cable	EN175301-803-A (DIN43650-A); M12x1; MIL-C 26482; Binder 723; Cable	EN175301-803-A; M12x1; MIL-C 26482; Binder 723; Cable	
Ex Zones 0, 1, 2 (gas); 20, 21, 22 (dust) and mining Hydrogen Shipbuilding	Ex Zone 0, 1, 2 / Gas Ex Zone 20, 21, 22 / Dust Ex Underground Mining Shipbuilding	Ex Zone 0, 1, 2 / Gas Ex Zone 20, 21, 22 / Dust Ex Underground Mining	
DNV, KRS, RMRS ATEX, IECE, UKEX, according to the norm EN/IEC 60079-0 / EN 60079-11 / EN 60079-26 / EN 50303	DNV	DNV Ex according to standards, IEC/EN 60079-0 /-11/-26, EN 50303	
www.trafag.com/H72329	www.trafag.com/H72227	www.trafag.com/H72334	
www.trafag.com/H73329	www.trafag.com/H73227	www.trafag.com/H73227	

Pressure transmitters

	N 8202	ND 8204	NPN 8264
			
Measuring principle	Thin-film-on-steel	Thin-film-on-steel	Thin-film-on-steel
Measuring range	0 ... 1.0 to 0 ... 600 bar	0 ... 1 to 0 ... 16 bar	0 ... 2.5 to 0 ... 250 bar
Output signal	4 ... 20 mA	4 ... 20 mA (P1-P2)	4 ... 20 mA
Accuracy @ +25°C typ.	± 0.5 % FS typ.	± 0.8 % FS typ	± 0.5 % FS typ. ± 0.3 % FS typ.
Ambient temperature	-25°C ... +85°C	-25°C ... +85°C	-40°C ... +100°C
Media temperature	-25°C ... +125°C	-25°C ... +125°C	-40°C ... +100°C
Protection	Min. IP65	Min. IP65	IP65, IP69K
Sensor (wetted parts)	1.4542 (AISI630)	1.4542 (AISI630)	1.4542 (AISI630)
Pressure connection (wetted parts)	1.4542 (AISI630)	1.4542 (AISI630)	1.4542 (AISI630)
Housing	AlSi10Mg/ Epoxy coated	AlSi10Mg/ Epoxy coated	1.4301 (AISI304)
Electrical connections	Terminal screw 0.75 ... 2.5 mm ²	Terminal screw 0.75 ... 2.5 mm ²	EN175301-803-A (DIN43650-A); Cable
Applications	Shipbuilding Engine manufacturing	Shipbuilding Engine manufacturing	Shipbuilding Engine manufacturing Railways
Approval / Conformity	ABS, BV, DNV, KRS, LRS		ABS, BV, CCS, DNV, KRS, LRS, NKK, RINA, RMRS
Data sheet	www.trafag.com/H72206	www.trafag.com/H72218	www.trafag.com/H72313
Instructions	www.trafag.com/H70722	www.trafag.com/H73218	www.trafag.com/H73313

Level transmitters

	ECL 8439	NAL 8838	EXNAL 8858
			
Measuring principle	Thick-film-on-ceramic	Piezoresistive	Piezoresistive
Measuring range	0 ... 0.1 to 0 ... 6.0 bar 0 ... 1.5 to 0 ... 100 psi	0 ... 0.1 to 0 ... 25 bar	0 ... 0.1 to 0 ... 25 bar
Output signal	4 ... 20 mA	4 ... 20 mA 0 ... 10 VDC	4 ... 20 mA
Accuracy @ +25°C typ.	± 0.3 % FS typ. ± 0.5 % FS typ.		
Ambient temperature	max. -25°C ... +70°C	-5°C ... +50°C	T4/T6: -5°C ... +50°C
Media temperature	max. -25°C ... +70°C	-5°C ... +50°C	T4/T6: -5°C ... +50°C
Protection	IP68 (6.0 bar/60 m)	Min. IP68	Min. IP68
Sensor (wetted parts)	Ceramic, Al2O3 (96%)	1.4435 (AISI316L) or titanium	1.4435 (AISI316L)
Pressure connection (wetted parts)	1.4404 (AISI316L) or 1.4462 (AISI318LN)	1.4435 (AISI316L) or titanium	1.4435 (AISI316L) or titanium
Housing	1.4404 (AISI316L) or 1.4462 (AISI318LN) OEM-version: Screwed cable gland brass nickel-plated	1.4435 (AISI316L) or titanium	1.4404 (AISI316L) or titanium
Electrical connections	Cable PUR/PE	Cable PUR/Teflon/PE	Cable PUR or FEP
Applications	Shipbuilding Process technology Water treatment	Shipbuilding Process technology Water treatment	Shipbuilding Ex SEV 11 ATEX 0145 X
Approval / Conformity	DNV EU RO Mutual Recognition Type Approval Certificate	DNV	DNV
Data sheet	www.trafag.com/H72336	www.trafag.com/H72228	www.trafag.com/H72231
Instructions	www.trafag.com/H73336	www.trafag.com/H73227	www.trafag.com/H73227

Electronic pressure switches

	EPN-S 8320	DPC 8380	DPS 8381	NAI 8273	
					
Measuring principle	Thin-film-on-steel	Thick-film-on-ceramic	Thin-film-on-steel	Thin-film-on-steel	
Measuring range	0 ... 2.5 to 0 ... 600 bar 0 ... 30 to 0 ... 7500 psi	0 ... 0.2 to 0 ... 100 bar 0 ... 2.5 to 0 ... 1500 psi adjustable	0 ... 2.5 to 0 ... 600 bar 0 ... 30 to 0 ... 7500 psi adjustable	-0.2 ... 0.2 to 0 ... 700 bar	
Output signal	Switching output: 1 PNP	4 ... 20 mA, 0 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC, switchable mA or V	4 ... 20 mA, 0 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC, switchable mA or V	IO-Link 1.1, COM3, min. process cycle time 1 ms, Smart Sensor Profile ED2, 2 Switching outputs PNP/NPN/ Push-Pull configurable	
Accuracy @ +25°C typ.	± 0.5 % FS typ. (Switchpoint)	± 0.5 % FS typ. ± 0.3 % FS typ.	± 0.5 % FS typ.	± 0.5 % FS typ. ± 0.3 % FS typ.	
Ambient temperature	-25°C ... +85°C	-25°C ... +85°C	-25°C ... +85°C	-40°C ... +105°C	
Media temperature	-40°C ... +125°C	-25°C ... +85°C	-25°C ... +85°C	-40°C ... +125°C	
Protection	IP65, IP69K	IP67	IP67	IP65, IP67	
Sensor (wetted parts)	1.4542 (AISI630)	Ceramic, Al2O3 (96 %)	1.4542 (AISI630)	1.4542 (AISI630)	
Pressure connection (wetted parts)	1.4542 (AISI630) or 1.4404 (AISI316L) 1.4301 (AISI304)	1.4305 (AISI303) 1.4404/1.4435 (AISI316L) 1.4462 (AISI318LN) Titanium Grade 5	1.4542 (AISI630) or 1.4404 (AISI316L)	1.4542 (AISI630)	
Housing	1.4301 (AISI304)	Zinc based die-casting alloy nickel plated display housing plastic	Zinc based die-casting alloy nickel plated display housing plastic	1.4301 (AISI304)	
Electrical connections	EN175301-803-A (DIN43650-A); Cable	Male electrical connector M12x1, 5-pole Male electrical connector M12x1, 4-pole	Male electrical connector M12x1, 5-pole Male electrical connector M12x1, 4-pole		
Applications	Shipbuilding Engine manufacturing Railways HVAC	Machine tools HVACRefrigeration	Machine tools Hydraulics Process technology	Machine tools Hydraulics Pneumatics	
Approval / Conformity	DNV EN 50155 (Railways) EN 45545-2 (Fire protection, railways)	cULus Listed	cULus Listed		
Data sheet	www.trafag.com/H72333	www.trafag.com/H72320	www.trafag.com/H72321	www.trafag.com/H72621	
Instructions	www.trafag.com/H73333	www.trafag.com/H73320	www.trafag.com/H73320	www.trafag.com/H73621 www.trafag.com/H73664	

Temperature transmitter

NAE 8256		NAR 8258		DTP 8180	
					
Thin-film-on-steel		Thin-film-on-steel		Measuring principle	PT 1000, DIN EN 60751 class A, 2 conductors
0 ... 0.2 to 0 ... 700 bar 0 ... 3 to 0 ... 10'000 psi		0 ... 6 to 0 ... 700 bar 0 ... 100 to 0 ... 10000 psi		Measuring range	-50°C ... +150°C / -58°F ... 302°F adjustable 50 ... 100 % FS
4 ... 20 mA, Switching output: 1 or 2 PNP		4 ... 20 mA, Switching output: 1 or 2 PNP		Output signal	4 ... 20 mA, 0 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC, switchable mA or V
0.3 %: ± 0.3 % FS typ.		± 0.3 % FS typ.		Accuracy @ +25°C typ.	± 0.5 % FS typ. + temperature sensor error
-40°C ... +125°C		-40°C ... +85°C (EN 50155: OT6)		Ambient temperature	-25°C ... +85°C
-40°C ... +125°C		-40°C ... +85°C			
IP65, IP67, IP68		IP65, IP67, IP68		Protection	IP67
1.4542 (AISI630)		1.4542 (AISI630)		Sensor (wetted parts)	1.4404/1.4435 (AISI316L)
1.4542 (AISI630)		1.4542 (AISI630)			
1.4301 (AISI304)		1.4301 (AISI304)		Housing	Steel, die cast metal galvanised display housing plastic
M12x1; Cable IP67/IP68		Industrial standard, contact distance 9.4 mm; M12x1; Cable IP67, IP68		Electrical connections	Male electrical connector M12x1, 5-pole Male electrical connector M12x1, 4-pole
Shipbuilding Engine manufacturing Hydraulics		Railways		Applications	Machine tools Hydraulic power units Cooling and lubrication systems
DNV EU RO Mutual Recognition Type Approval Certificate		EN 50155 (Railway) EN 45545-2 (Fire protection) EN 61373 (Shock, vibration) EN 50121-3-2 (EMC)			
www.trafag.com/H72305		www.trafag.com/H72307		Data sheet	www.trafag.com/H72352
www.trafag.com/H73303		www.trafag.com/H73303		Instructions	www.trafag.com/H73352

Mechanical pressure switches

	9R5	PST4B 9B4	PST4K 9K4	PST4M 9M4	PSTD 9D0	P/PS 900/904/912	
							
Measuring principle	Steel bellow welded	Bellow	Piston	Membrane	Bellow	Bellow	
Setting range	-0.8 ... 2 to 7 ... 12 bar -11 ... 29 to 102 ... 174 psi	-0.6 ... 3.4 to 4 ... 40 bar -8 ... 45 to 60 ... 500 psi	1 ... 10 to 40 ... 400 bar 14 ... 150 to 580 ... 5800 psi	1 ... 10 to 10 ... 100 bar 14 ... 150 to 150 ... 1500 psi	-1 ... 6 and -1 ... 8 bar	-0.9 ... 1.5 to 10 ... 100 bar 5 ... 50 to 125 ... 1500 psi	
Output signal	1 Floating change-over contact (SPDT)	1 Floating change-over contact (SPDT)	1 Floating change-over contact (SPDT)	1 Floating change-over contact (SPDT)	1 Floating change-over contact (SPDT)	1 Floating change-over contact (SPDT)	
Pressure connections		G1/8" f, G1/4" f, M10x1.0 f, G1/4" m	G1/8" f, G1/4" f, M10x1.0 f	G1/8" f, G1/4" f, M10x1.0 f	G1/4" f	G1/4" f, G1/2" m, 1/4"NPT f	
Electrical connections	EN 175301-803-A (DIN 43650-A)	EN175301-803-A (DIN43650-A)	EN175301-803-A (DIN43650-A)	EN175301-803-A (DIN43650-A)	EN175301-803-A (DIN43650-A)	Screw terminal	
Switching differential	Not adjustable	Not adjustable	Not adjustable	Not adjustable	Not adjustable	Not adjustable	
Media temperature	-40°C ... +85°C	-25°C ... +125°C with sensor 789/790/791: -40°C ... +125°C	-25°C ... +125°C	0°C ... +80°C	-25°C ... +120°C	-40°C ... +150°C	
Ambient temperature	-40°C ... +85°C (EN 50155: OT6)	-25°C ... +85°C with sensor 789/790/791: -40°C ... +85°C	-25°C ... +85°C	0°C ... +80°C	-25°C ... +85°C	-25°C ... +70°C	
Protection	IP65 / IP67	IP65	IP65	IP65	IP65	IP65	
Housing / Pressure connection	1.4301, 1.4306, 1.4307 PA66 A3X2G5 cULus Listed94-V0	Aluminium EN AW-6026 AlMgSiPb0.4 anodized	Aluminium EN AW-6026 AlMgSiPb0.4 anodized	Aluminium EN AW-6082 AlMgSi1 anodized	Brass CuZn39Pb3	AlSi10Mg/ Epoxy coated	
Sealing	See ordering information	HNBR 75 Sh, FPM, EPDM	PTFE	FKM	-	NBR	
Applications	Railway	Shipbuilding Engine manufacturing Railways Machine tools	Shipbuilding Engine manufacturing Railways Machine tools	Shipbuilding Engine manufacturing Railways Machine tools	Shipbuilding Engine manufacturing Machine tools Hydraulics	Shipbuilding Engine manufacturing Railways Machine tools	
Approval / Conformity	EN 50155 (Railway) EN 45545-2 (Fire protection) EN 61373 (Shock, vibration) EN 60730-1/ EN 60730-2-6: Type 2.B.H	ABS, BV, CCS, KRS, LR, RINA EN60730-1/ EN60730-2-6: Type 2.B.H	BV, CCS, KRS, RINA EN60730-1/ EN60730-2-6: Type 2.B.H	BV, CCS, KRS, RINA EN60730-1/ EN60730-2-6: Type 2.B.H	DNV EN60730-1/ EN60730-2-6: Type 2.B.H	DNV EU RO Mutual Recognition Type Approval Certificate	
Type of protection							
Data sheet	www.trafag.com/H72370	www.trafag.com/H72367	www.trafag.com/H72369	www.trafag.com/H72368	www.trafag.com/H72273	www.trafag.com/H72252	
Instructions	www.trafag.com/H73370	www.trafag.com/H73367	www.trafag.com/H73367	www.trafag.com/H73367	www.trafag.com/H73273	www.trafag.com/H71261	

PV/PVF 903/907/940/941	PK 944/947	PD 920/924/932	987/988	EXP 900/904/912	EXPK 944/947/953	EXPD 920/924/932
						
Bellow	Piston	Bellow	Bellow	Bellow	Piston	Bellow
-0.9 ... 1.5 to 4 ... 40 bar 5 ... 50 to 50 ... 500 psi	1 ... 10 to 60 ... 600 bar	-1 ... 6 to -1 ... 18 bar	-0.3 ... 1.3 to 1 ... 10 bar	-0.9 ... 1.5 to 4 ... 40 bar	1 ... 10 to 60 ... 600 bar	-1 ... 6 to -1 ... 18 bar
1 Floating change-over contact (SPDT)	1 Floating change-over contact (SPDT)	1 Floating change-over contact (SPDT)	1 or 2 floating change-over contacts (SPDT)	1 Floating change-over contact (SPDT)	1 Floating change-over contact (SPDT)	1 Floating change-over contact (SPDT)
G1/4" f, G1/2" m, 1/4" NPT f	G1/4" f, G1/2" m	G1/4" f, G1/8" f, G1/2" m	G1/4" m	G1/4" f, G1/2" m	G1/4" f, G1/2" m	G1/4" f, G1/8" f, G1/2" m
Screw terminal	Screw terminal	Screw terminal	Blade connector	Screw terminal	Screw terminal	Screw terminal
Adjustable	Not adjustable	Not adjustable	Not adjustable	Not adjustable	Not adjustable	Not adjustable
-40°C ... +150°C	NBR: -30°C ... +100°C FKM: -15°C ... +150°C	-40°C ... +150°C	-25°C ... +80°C	-40°C ... +150°C	NBR: -30°C ... +100°C FKM: -15°C ... +150°C	-50°C ... +150°C
-25°C ... +70°C	-20°C ... +70°C	-25°C ... +70°C	-25°C ... +70°C	-50°C ... +65°C	-50°C ... +65°C	-50°C ... +65°C
IP65	IP65	IP65	IP40 (Microswitch IP67)	IP66	IP66	IP66
AlSi10Mg/ Epoxy coated	AlSi10Mg/ Epoxy coated	AlSi10Mg/ Epoxy coated	PBTP, Crastin	AlSi10Mg/ Epoxy coated 1.4301 (AISI 304)	AlSi10Mg/ Epoxy coated 1.4301 (AISI 304)	AlSi10Mg/ Epoxy coated
NBR	NBR/FKM	NBR	-	NBR	NBR / FKM	NBR
Shipbuilding Engine manufacturing Railways Machine tools	Shipbuilding Engine manufacturing Railways Machine tools	Shipbuilding Engine manufacturing Railways Machine tools	Machine tools Medium voltage technology	⊕ II 2G / D	⊕ II 2G / D	⊕ II 2G / D
ABS, BV, CCS, DNV, LRS, RINA EN60730-1/ EN60730-2-6: Type 2.B.H	DNV EU RO Mutual Recognition Type Approval Certificate	DNV EU RO Mutual Recognition Type Approval Certificate	EN60730-1/ EN60730-2-6: Type 2.B.H	SEV 15 ATEX 0157 X IECEx SEV 17.0013X	SEV 15 ATEX 0157 X IECEx SEV 17.0013X	SEV 15 ATEX 0157 X IECEx SEV 17.0013X
				Areas with gas explosion hazards: II 2G Ex db eb IIC T6 Gb Areas with dust explosion hazards: II 2D Ex tb IIIC T80°C Db	Areas with gas explosion hazards: II 2G Ex db eb IIC T6 Gb; Areas with dust explosion hazards: II 2D Ex tb IIIC T80°C Db	Areas with gas explosion hazards: II 2G Ex db eb IIC T6 Gb; Areas with dust explosion hazards: II 2D Ex tb IIIC T80°C Db
www.trafag.com/H72257	www.trafag.com/H72259	www.trafag.com/H72253	www.trafag.com/H72272	www.trafag.com/H72263	www.trafag.com/H72270	www.trafag.com/H72256
www.trafag.com/H71261	www.trafag.com/H71261	www.trafag.com/H73256	www.trafag.com/H73272	www.trafag.com/H73171	www.trafag.com/H73171	www.trafag.com/H73171

Thermostats

	A/AS/ASE 645/650	IA/IAS 409/419	MSK 624/634	MP/MSP 664	
					
Designation of application	Room thermostat	Industrial room thermostat	Duct thermostat	Pipe mounting thermostat	
Measuring range	-45°C ... +15°C to 0°C ... +60°C	-30°C ... +30°C to 0°C ... +60°C	-30°C ... +40°C to +20°C ... +110°C	-10°C ... +35°C to +20°C ... +110°C	
Output signal	Floating change-over contact	Floating change-over contact	Floating change-over contact	Floating change-over contact	
Switching differential	Adjustable / not adjustable	Adjustable / not adjustable	Adjustable / not adjustable	Adjustable / not adjustable	
Ambient temperature	-30°C ... +70°C	-30°C ... +70°C	-30°C ... +70°C	-30°C ... +70°C	
Protection	IP54	IP65	IP54	IP54	
Applications	HVAC Refrigeration	HVAC	HVAC	Process technology Water treatment	
Approval / Conformity					
Data sheet	www.trafag.com/H72170	www.trafag.com/H72116	www.trafag.com/H72177	www.trafag.com/H72175	
Instructions	www.trafag.com/H73624	www.trafag.com/H73111	www.trafag.com/H73624	www.trafag.com/H73663	

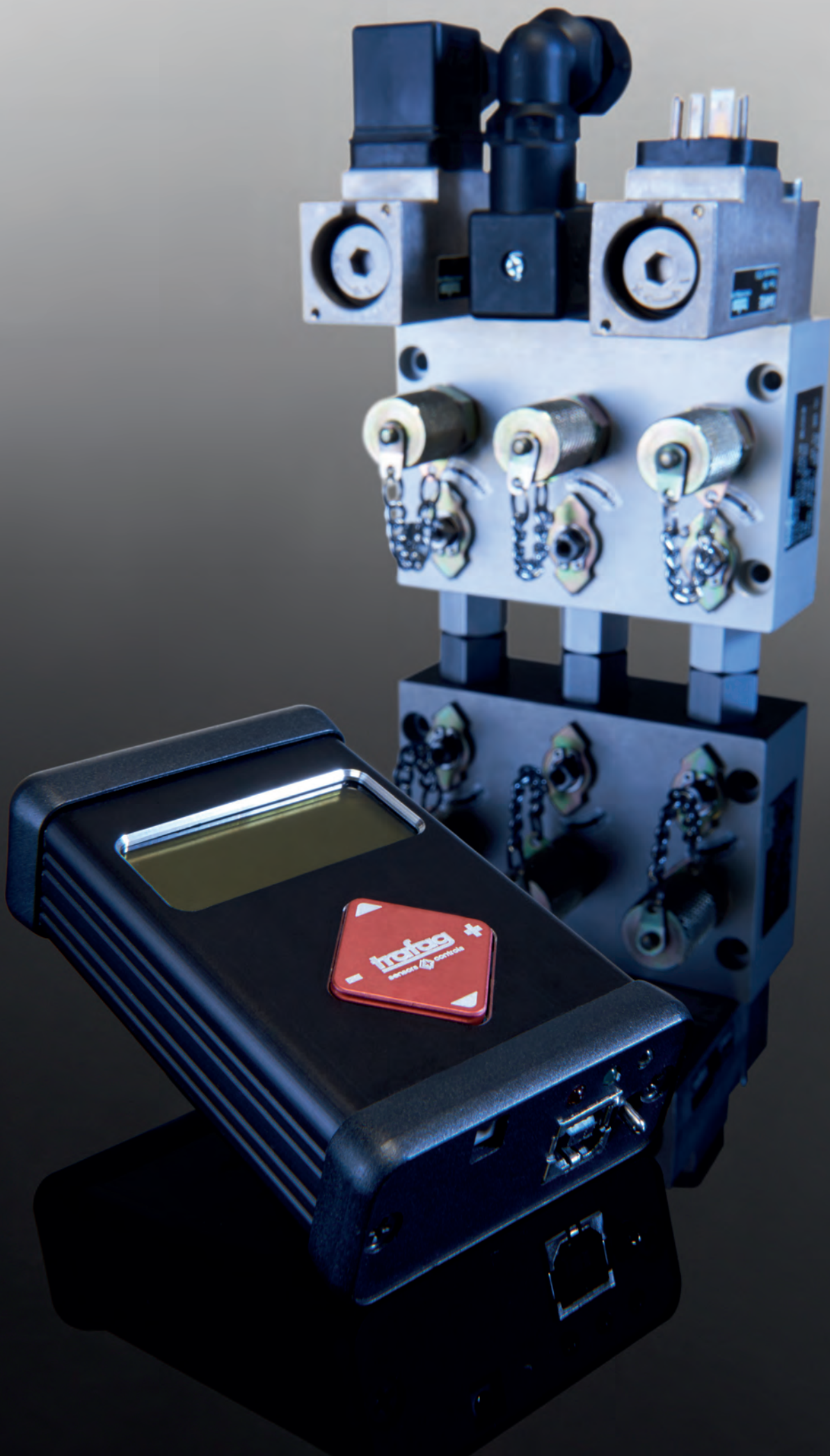
MST 624/634	M/MS 624/634	MS...R 630/632	F/F...R 990/991/992/993
			
Direct mounting thermostat	Remote sensing thermostat	Remote sensing thermostat with limiter	Frost protection thermostat
-30°C ... +40°C to +70°C ... +350°C	-30°C ... +40°C to +70°C ... +350°C	-30°C ... +40°C to +70°C ... +350°C	-5°C ... +15°C
Floating change-over contact	Floating change-over contact	Floating change-over contact	Floating change-over contact
Adjustable / not adjustable	Adjustable / not adjustable	Not adjustable	Not adjustable
-30°C ... +70°C	-30°C ... +70°C	-30°C ... +70°C	-30°C ... +70°C
IP54	IP54	IP54	IP 54
Machine tools HVAC	Railways Machine tools	Railways Machine tools	HVAC Refrigeration
www.trafag.com/H72174	www.trafag.com/H72172	www.trafag.com/H72173	www.trafag.com/H72123
www.trafag.com/H73624	www.trafag.com/H73624	www.trafag.com/H73624	www.trafag.com/H70821

Thermostats

	L/LF 736/754	L...R 755	I/IS 404/414	IS...R 410/412	
					
Designation of application	Remote sensing thermostat, skeleton type	Remote sensing thermostat with limiter, skeleton type	Industrial thermostat with remote sensor	Industrial thermostat with remote sensor and limiter	
Measuring range	-30°C ... +40°C to 70°C ... +350°C	-30°C ... +40°C to +70°C ... +350°C	-30°C ... +40°C to +70°C ... +350°C	-30°C ... +40°C to +70°C ... +350°C	
Output signal	Floating change-over contact	Floating change-over contact	Floating change-over contact	Floating change-over contact	
Switching differential	Adjustable / not adjustable	Not adjustable	Adjustable / not adjustable	Not adjustable	
Ambient temperature	-30°C ... +70°C	-30°C ... +70°C	-30°C ... +70°C	-30°C ... +70°C	
Protection	IP00	IP00	IP65	IP65	
Applications	Machine tools	Machine tools	Railways Machine tools	Machine tools Process technology	
Approval / Conformity					
Data sheet	www.trafag.com/H72122	www.trafag.com/H72124	www.trafag.com/H72110	www.trafag.com/H72138	
Instructions	www.trafag.com/H70211	www.trafag.com/H70211	www.trafag.com/H73111	www.trafag.com/H73111	

Thermostats

ISN/ISNT 471/472	ISP/ISPT 474	EXS 404/414	EXAS 409/419
			
Thermostat for shipbuilding	Compact thermostat for shipbuilding	Ex Industrial thermostat with remote sensor	Ex Industrial room thermostat
-10°C ... +80°C to +40°C ... +300°C	+5°C ... +95°C to +20°C ... +150°C	-30°C ... +40°C to +70°C ... +350°C	-30°C ... +30°C to 0°C ... +60°C
Floating change-over contact	Floating change-over contact	Floating change-over contact	Floating change-over contact
Not adjustable	Not adjustable	Not adjustable	Not adjustable
-30°C ... +70°C	-30°C ... +70°C	-30°C ... +70°C	-30°C ... +70°C
IP65	IP65	IP65	IP65
Shipbuilding Engine manufacturing	Shipbuilding Engine manufacturing	 II 2G / D	 II 2G / D
DNV EU RO Mutual Recognition Type Approval Certificate	DNV EU RO Mutual Recognition Type Approval Certificate	SEV 15 ATEX 0156 X IECEx SEV 17.0010X	SEV 15 ATEX 0156 X IECEx SEV 17.0010X
www.trafag.com/H72111	www.trafag.com/H72113	www.trafag.com/H72108	www.trafag.com/H72128
www.trafag.com/H73111	www.trafag.com/H73113	www.trafag.com/H73172	www.trafag.com/H73172



Accessories

Trafag offers a spectrum of original accessories that are ideally matched to our products. These include devices for monitoring or configuring transmitters such as hand pumps with precision pressure gauges or the Sensor Communicator, a handheld device providing direct access to the calibration values in the Trafag ASIC. Trafag also offers many accessories that meet specific application requirements and make installation easier, such as diagnostic valve manifolds, snubbers, and pressure peak damping elements. For thermostats, various protective pipes are available.

Accessories for pressure measuring instruments

- SMI Sensor Master Interface
- SC Sensor Communicator
- DVB Diagnostic Valve Block
- Hand pump with precision manometer
- Switch amplifier
- Venting box
- Cable hanger
- Pressure peak damping element
- Snubber
- Adapters for different pressure connections
- Stop valve



Accessories for temperature measuring instruments

- Protection tubes for direct mounting and remote sensors
- Duct mounting bracket
- Capillary tube holder
- Mounting brackets
- Screwed cable glands, maritime approved, for retrofit

Accessories for pressure measuring instruments



SMI

Sensor Master Interface

Parameterisation device for electronic pressure switches and pressure transmitters with configurable measuring ranges.

www.trafag.com/H72618



SC

Sensor Communicator

Handheld for parameterisation of pressure transmitters and electronic pressure switches.

www.trafag.com/H73699



DVB

Diagnostic Valve Block

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

www.trafag.com/H72361



THP...

Hand pump

Hand pump with precision manometer.



V6/V7

Stop valve

Stop valve for exchanging pressure transmitters without process interruption.

www.trafag.com/H72258



A.../D...

Adapters with manometer pressure ports

Pressure adapters with different thread combinations and materials.

www.trafag.com/H72258

Accessories for temperature measuring instruments



83.../84...

**Protection tubes for
remote sensors**

www.trafag.com/H72163



121.../141...

**Protection tubes for
direct mounting**

www.trafag.com/H72163



W.../K...

Thermostat sensor duct holder

www.trafag.com/H72106



K80140

Capillary tube holder

Worldwide represented, globally trusted, Swiss based

Subject to change	12/2024	H705501
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- Romania
- Serbia
- Singapore
- Slovakia
- South Africa
- Sweden
- Taiwan
- Thailand
- Turkey
- Ukraine
- United Arab Emirates
- Uruguay
- Vietnam

