

PRESSURE TRANSMITTER Serie ECT-8472

ANWENDUNG

- ◇ Schiffbau
- ◇ Motorenbau
- ◇ Schienenfahrzeuge
- ◆ **Maschinenbau**
- ◆ **Hydraulik**
- ◇ HLK
- ◇ Kältetechnik
- ◇ Prozess Techn.
- ◆ **Wasseraufbereitung**
- ◇ Autoindustrie
- ◇ Prüfstände
- ◇ Ex
- ◇ Lebensmittelindustrie

APPLICATIONS

- ◇ Construction navale
- ◇ Constr. de moteurs
- ◇ Véhicules sur rail
- ◆ **Machines-outils**
- ◆ **Hydraulique**
- ◇ CVC
- ◇ Réfrigération
- ◇ Techn. de procédés
- ◆ **Traitement de l'eaux**
- ◇ Industrie automobile
- ◇ Banc d'essai à frein
- ◇ Ex
- ◇ Industrie alimentaire

APPLICATIONS

- ◇ Shipbuilding
- ◇ Engine manufacturing
- ◇ Railways
- ◆ **Machine tools**
- ◆ **Hydraulics**
- ◇ HVAC
- ◇ Refrigeration
- ◇ Process technology
- ◆ **Water treatment**
- ◇ Automotive industry
- ◇ Test benches
- ◇ Ex
- ◇ Food Industry



1/4" BSP standard

1/2" BSP with adapter



Applications

- Machine tools
- Hydraulics
- Water treatment

Features

- Economical
- Good media compatibility
- Relative or absolute pressure measurement
- Titanium version optional

Technical Data

Measuring principle	Thick film on ceramic	Accuracy @ 25°C typ.	± 0.5 % FS typ.
Measuring range	0 ... 1 to 0 ... 400 bar 0 ... 15 to 0 ... 5000 psi	Media temperature	-25°C ... +125°C 400 bar/5000 psi: -10°C ... +125°C
Output signal	4 ... 20 mA, 0 ... 5 VDC, 1 ... 6 VDC, 0 ... 10 VDC, 0.5 ... 4.5 VDC ratiom.	Ambient temperature	-25°C ... +85°C (Cable PVC 22: -5°C ... +60°C)

Ordering information/type code

				8472 . XX				XX	XX	XX	XX	XX	XX	
Measuring range ¹⁾	Pressure measurement range [bar]	Over pressure [bar]	Burst pressure [bar]		Pressure measurement range [psi]	Over pressure [psi]	Burst pressure [psi]							
	0 ... 1.0	3.2	4.8	71	0 ... 15	45	70	G1						
	0 ... 1.6	3.2	4.8	73	0 ... 20	45	70	G3						
	0 ... 2.5	5	7.5	75	0 ... 30	60	90	G5						
	0 ... 4	8	12	76	0 ... 50	100	150	G6						
	0 ... 6	12	15	77	0 ... 100	200	250	G7						
	0 ... 10	20	25	78	0 ... 150	300	375	G8						
	0 ... 16	32	40	79	0 ... 250	500	625	G9						
	0 ... 25	50	75	80	0 ... 400	800	1200	H0						
	0 ... 40	80	100	81	0 ... 500	1000	1250	H1						
	0 ... 60	120	180	82	0 ... 1000	2000	3000	H2						
	0 ... 100	200	300	83	0 ... 1500	3000	4500	H3						
	0 ... 160	320	480	85	0 ... 2000	4000	6000	H5						
	0 ... 250	500	750	74	0 ... 3000	6000	9000	G4						
	0 ... 400 ²⁾	800	1000	84	0 ... 5000 ²⁾	10000	12500	H4						
	Sensor	Relative pressure, 1.4305			57	Absolute pressure, 1.4305 ³⁾			87					
Relative pressure, 1.4404/1.4435 ⁴⁾			59	Absolute pressure, 1.4404/1.4435 ^{3) 4)}			89							
Relative pressure, 1.4462			52	Absolute pressure, 1.4462 ³⁾			82							
Relative pressure, Titanium Grade 5			53	Absolute pressure, Titanium Grade 5 ³⁾			83							
Pressure connection	G1/4" female										10			
	G1/4" male										17			
	G1/2" male ⁴⁾										21			
	1/4"NPT male ⁴⁾										30			
	G3/4" frontal membrane, max. nominal pressure 60 bar ^{4) 7)}										52			
Electrical connection	Male electrical plug EN 175301-803-A, Mat. PA										05			
	Male electrical plug M12x1, 5-pole, Mat. PA										35			
	Male electrical plug Packard Metri Pack										51			
	Male electrical plug industrial standard (contact distance 9.4mm) Mat. PBT										01			
	Cable IP67, Mat. PVC (cable gland PA6-3), -5°C ... +60°C ^{5) 6)}										22			
	Cable IP68, max. 3m, medium +10°C...+35°C, Pmax. 1 bar rel./abs.										68			
Output	Signal output	Load resistance		I (supply)		U (supply)								
	4 ... 20 mA	(U _{supply} -9V) / 20mA				9 ... 30 VDC		19						
	0 ... 5 VDC	> 2.5 kΩ		< 10 mA		10 ... 30 VDC		14						
	1 ... 6 VDC	> 5.0 kΩ		< 10 mA		10 ... 30 VDC		16						
	0 ... 10 VDC	> 5.0 kΩ		< 10 mA		15 ... 30 VDC		17						
	0.5 ... 4.5 VDC ratiometric	> 5.0 kΩ		< 10 mA		5 VDC ± 0.25 VDC		23						

Pressure peak damping element: compatible for pressure connection No. 17&30 ø 0.5 mm 45
 ø 1.0 mm 40

Kabeldose/ Fiche femelle/ Female electrical connector EN175301-803-A (DIN43650-A) 58
 M12x1, 5-pol. 33

Anschlussbelegung spezial/ Raccordement électrique spécial/ Special electrical connection:
 >Details siehe „Elektrischer Anschluss“/ details voir „Raccordement électrique“/ details see „electrical connection“
 Ausführung/Execution No. 05 (EN175301-803-A) &
 Output No. 19 (4...20 mA) 92
 Outputs No. 14 (0...5 VDC), No. 16 (1...6 VDC), No.17 (0...10 VDC), 98
 No.23 (0.5...4.5 VDC)

****Kabellänge/ Longueur du câble/ Cable length:** 1.5 m 1M
 3.0 m 3M
 5.0 m 5M

8472 . XX XX XX XX XX XX

Accessories	O-Ring FKM (-20°C ... +125°C)	61
	O-Ring CR ≤ 60 bar (-25°C ... +100°C) ⁸⁾	62
	O-Ring EPDM (-25°C ... +125°C)	63
	Pressure peak damping element ø 1.0 mm (for pressure connections 17 and 30)	40
	Pressure peak damping element ø 0.3 mm (for pressure connections 17 and 30)	43
	Pressure peak damping element Ø 0.4 mm (for pressure connections 17 and 30)	44
	Pressure peak damping element ø 0.5 mm (for pressure connections 17 and 30)	45
	Female electrical connector EN 175301-803-A (DIN 43650-A)	58
	Female electrical plug M12x1, 5-pole	33
	Female electrical connector industrial standard	34
	Special electrical connection: Pin 1 + , Pin 2 - (Only for output 4...20mA and male electrical plug EN175301-803-A / DIN43650-A)	92
	Special electrical connection: Pin 1 out , Pin 2 - , Pin 3 + (Only for output 0...5 VDC, 1...6 VDC, 0...10 VDC, 0.5...4.5 VDC and male electrical plug EN175301-803-A / DIN43650-A)	98
	Special electrical connection: Pin 1 + , Pin 2 - , Pin 3 out (Only for output 0...5 VDC, 1...6 VDC, 0...10 VDC, 0.5...4.5 VDC and male electrical plug EN175301-803-A / DIN43650-A)	97
	Special electrical connection: Pin 1 + , Pin 2 - (Only for male electrical plug Packard Metri Pack 3-pol.)	99
	Cable length 1.5 m	1M
	Cable length 3.0 m	3M
	Cable length 5.0 m	5M

¹⁾ Extended overpressure as well as customized pressure ranges upon request

²⁾ Media -10°C ... +125°C

³⁾ Absolute ranges max. 40 bar

⁴⁾ Please ask us

⁵⁾ Cable length see accessories

⁶⁾ More materials and cables with venting tubes for low pressure ranges upon request

⁷⁾ Not for sensors 57 and 87

⁸⁾ Not for pressure connection G3/4" frontal membrane

i Identical construction for refrigeration: Data sheet No. H72323

Standard products (extra short lead time)

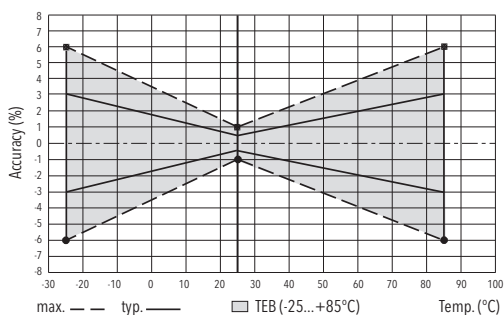
Product No.	Type Code	Pressure range [bar]	Over pressure max. [bar]	Signal output	Supply [VDC]
ECT1.0A	8472 71 5717 05 0000 0000 19 58 61	0 ... 1	3.2	4 ... 20 mA	9 ... 30
ECT2.5A	8472 75 5717 05 0000 0000 19 58 61	0 ... 2.5	5	4 ... 20 mA	9 ... 30
ECT6.0A	8472 77 5717 05 0000 0000 19 58 61	0 ... 6	12	4 ... 20 mA	9 ... 30
ECT10.0A	8472 78 5717 05 0000 0000 19 58 61	0 ... 10	20	4 ... 20 mA	9 ... 30
ECT16.0A	8472 79 5717 05 0000 0000 19 58 61	0 ... 16	32	4 ... 20 mA	9 ... 30
ECT25.0A	8472 80 5717 05 0000 0000 19 58 61	0 ... 25	50	4 ... 20 mA	9 ... 30
ECT40.0A	8472 81 5717 05 0000 0000 19 58 61	0 ... 40	80	4 ... 20 mA	9 ... 30
ECT100.0A	8472 83 5717 05 0000 0000 19 58 61	0 ... 100	200	4 ... 20 mA	9 ... 30
ECT250.0A	8472 74 5717 05 0000 0000 19 58 61	0 ... 250	500	4 ... 20 mA	9 ... 30
ECT1.0V	8472 71 5717 05 0000 0000 17 58 61	0 ... 1	3.2	0 ... 10 VDC	15 ... 30
ECT2.5V	8472 75 5717 05 0000 0000 17 58 61	0 ... 2.5	5	0 ... 10 VDC	15 ... 30
ECT6.0V	8472 77 5717 05 0000 0000 17 58 61	0 ... 6	12	0 ... 10 VDC	15 ... 30
ECT10.0V	8472 78 5717 05 0000 0000 17 58 61	0 ... 10	20	0 ... 10 VDC	15 ... 30
ECT16.0V	8472 79 5717 05 0000 0000 17 58 61	0 ... 16	32	0 ... 10 VDC	15 ... 30
ECT25.0V	8472 80 5717 05 0000 0000 17 58 61	0 ... 25	50	0 ... 10 VDC	15 ... 30
ECT40.0V	8472 81 5717 05 0000 0000 17 58 61	0 ... 40	80	0 ... 10 VDC	15 ... 30
ECT100.0V	8472 83 5717 05 0000 0000 17 58 61	0 ... 100	200	0 ... 10 VDC	15 ... 30
ECT250.0V	8472 74 5717 05 0000 0000 17 58 61	0 ... 250	500	0 ... 10 VDC	15 ... 30

Specifications

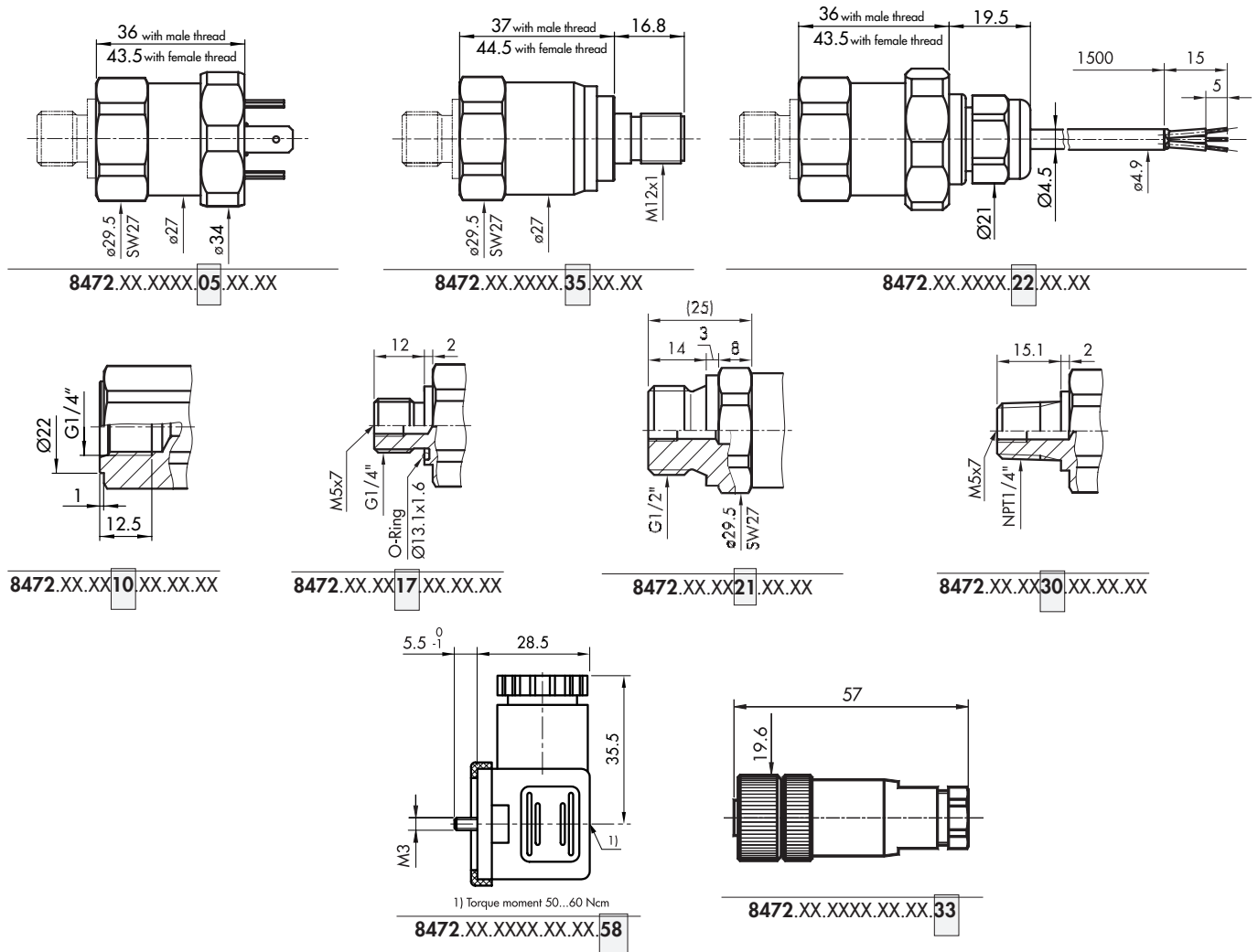
Accuracy	TEB typ. @ -25 ... +85°C	± 3.0 % FS typ.
	Accuracy @ 25°C typ.	± 0.5 % FS typ.
	NLH @ 25°C (BSL) typ.	± 0.2 % FS typ.
	TC zero point and span typ.	± 0.03 % FS/K typ.
	Long term stability 1 year typ.	± 0.3 % FS typ.
Electrical Data	Output / supply voltage	4 ... 20 mA: 24 (9...30) VDC 0 ... 5 VDC: 24 (10...30) VDC 1 ... 6 VDC: 24 (10...30) VDC 0 ... 10 VDC: 24 (15...30) VDC 0.5 ... 4.5 VDC ratiom.
	Rise time	Typ. 1 ms/ 10...90 % Nominal pressure
	Switch-on-delay	Max. 1.5 s
Environmental conditions	Media temperature	-25°C ... +125°C 400 bar/5000 psi: -10°C ... +125°C
	Ambient temperature	-25°C ... +85°C (Cable PVC 22: -5°C ... +60°C)
	Protection ¹⁾	Min. IP65
	Humidity	Max. 95 % relative
	Vibration	4g (10...2000 Hz)
	Shock	50g/ 8 ms
EMC Protection	Emission	EN/IEC 61000-6-3
	Immunity	EN/IEC 61000-6-2
Mechanical Data	Sensor	Ceramic, Al ₂ O ₃ (96 %)
	Housing / pressure connection	57/87: 1.4305 (AISI303) 59/89: 1.4404/1.4435 (AISI316L) 52/82: 1.4462 (AISI318LN) 53/83: Titanium Grade 5
	Sealing	FKM 70 Sh, CR, EPDM
	Male electrical plug	See ordering information
	Weight	~ 110 g
	Mounting torque	15 ... 20 Nm

¹⁾ Provided female connector is mounted according to instructions

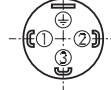
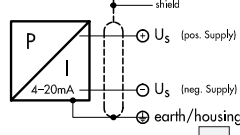
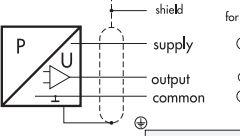
Measuring accuracy 0.5%



MASSBILDER / COTES D'ENCOMBREMENT / DIMENSIONS



ELEKTRISCHER ANSCHLUSS / RACCORDEMENT ÉLECTRIQUE / ELECTRICAL CONNECTION

Schutzart / protection ²⁾	IP65 ²⁾	IP65	IP67 ²⁾
Ausführung Exécution Execution	EN175301-803A (DIN43650-A)	Cable	M12x1 5-pol.
Ausgangssignal Signal de sortie Output	05 	22 	35 
 8472.XX.2XXX.XX.19	(Standard) 2 1 	1 2  white brown 	4 1 5 
 8472.XX.XXXX.XX.14/16/17/23	(Standard) 2 3 1 	3 1 2  white green brown 	2 4 3 5 

²⁾ nur mit vorschriftsmässig montierter Kabeldose gültig
valable seulement avec fiche femelle montée selon instructions
provided female connector is mounted according to instructions