




**ANWENDUNG**

- ◆ Schiffbau
  -  ABS, BV, DNV, GL, KRS, LR, NKK, RINA, RMRS, CCS
- ◆ Motorenbau
  - ◇ Schienenfahrzeuge
- ◆ Maschinenbau
- ◆ Hydraulik
  - ◇ HLK
  - ◇ Kältetechnik
  - ◇ Prozess Techn.
  - ◇ Wasseraufbereitung
  - ◇ Autoindustrie
  - ◇ Prüfstände
  - ◇ Ex
  - ◇ Lebensmittelindustrie
  - ◇ Autoklaven

**APPLICATIONS**

- ◆ Construction navale
  -  ABS, BV, DNV, GL, KRS, LR, NKK, RINA, RMRS, CCS
- ◆ Constr. de moteurs
  - ◇ Véhicules sur rail
- ◆ Machines-outils
- ◆ Hydraulique
  - ◇ CVC
  - ◇ Réfrigération
  - ◇ Techn. de procédés
  - ◇ Traitement de l'eau
  - ◇ Industrie automobile
  - ◇ Banc d'essai à frein
  - ◇ Ex
  - ◇ Industrie alimentaire
  - ◇ Autoclavage

**APPLICATIONS**

- ◆ Shipbuilding
  -  ABS, BV, DNV, GL, KRS, LR, NKK, RINA, RMRS, CCS
- ◆ Engine manufacturing
  - ◇ Railways
- ◆ Machine tools
- ◆ Hydraulics
  - ◇ HVAC
  - ◇ Refrigeration
  - ◇ Process technology
  - ◇ Water treatment
  - ◇ Automotive industry
  - ◇ Test benches
  - ◇ Ex
  - ◇ Food Industry
  - ◇ Autoclaves



**HAUPTMERKMALE**

- ◆ Sensor: Dünnschicht auf Stahl
- ◆ Messbereich: 0...2.5 bis 0...2500 bar
- ◆ Ausgangssignal: 4...20 mA  
0.5...4.5 VDC (ration.)
- ◆ NLH (BSL durch 0): ± 0.1 % d.S. typ.  
oder ± 0.3 % d.S. typ.
- ◆ Betriebstemperatur: -40 ... +125°C

**CARACTÈRES DISTINCTIFS**

- ◆ Capteur: Couche mince sur acier
- ◆ Plage de mesure: 0...2.5 à 0...2500 bar
- ◆ Signal de sortie: 4...20 mA  
0.5...4.5 VDC (ration.)
- ◆ NLH (BSL par 0): ± 0.1 % E.M. typ.  
ou ± 0.3 % E.M. typ.
- ◆ Température de service: -40 ... +125°C

**MAIN CHARACTERISTICS**

- ◆ Sensor: Thin film on steel
- ◆ Measuring range: 0...2.5 to 0...2500 bar
- ◆ Signal output: 4...20 mA  
0.5...4.5 VDC (ration.)
- ◆ NLH (BSL through 0): ± 0.1 % FS typ.  
or ± 0.3 % FS typ.
- ◆ Operating temperature: -40 ... +125°C

**VORTEILE**

- ◆ Schiffszulassung
- ◆ verschiedene Genauigkeitsklassen
- ◆ Nenndruckbereich bis 2500 bar (Common Rail) mit Hochdruck-Gewindeanschluss
- ◆ Surge
- ◆ hohe Vibrationsfestigkeit
- ◆ gute Temperaturbeständigkeit
- ◆ komplett verschweisstes Sensorsystem aus Stahl ohne zusätzliche Dichtungen

**AVANTAGES PRINCIPAUX**

- ◆ approbations navales
- ◆ différente classe de précision
- ◆ Pression nominale jusqu'à 2500 bar (Common Rail) avec raccord de pression pour haute pression
- ◆ Surge
- ◆ grande résistance aux vibrations
- ◆ bonne résistance de température
- ◆ système de capteur en acier complètement soudé sans joints

**MAIN FEATURES**

- ◆ ship approvals
- ◆ different accuracy classes
- ◆ Nominal pressure up to 2500 bar (Common Rail) with high pressure threaded connection
- ◆ Surge
- ◆ high resistance of vibration
- ◆ good temperature resistance
- ◆ Completely welded steel sensor system without additional seals

**BESTELLINFORMATION / INFORMATION POUR LA COMMANDE / ORDERING INFORMATION**

**Lager Code** (kurze Lieferzeiten)/ **Numéro de stock** (délai de livraison bref)/ **Code for stock products** (short delivery time):

**EPN** (z.B./ Ex./e.g: EPN10.0A)

 siehe Katalog:/ regardez catalogue:/ see catalogue: „Standard Products“

**Varianten Code/ Numéro de variantes/ Custom build code**

XXXX.XX.XXXX.XX.XX.XX...  
8298

<b>Bereich</b>	0 ... 2.5	<b>Überdruck</b>	max. 5	<b>Berstdruck</b>	100	<b>75</b>
<b>Plage</b>	0 ... 4.0	<b>Surpression</b>	8	<b>Pression destruction</b>	100	<b>76</b>
<b>Range</b>	0 ... 6.0	<b>Over pressure</b>	12	<b>Burst pressure</b>	100	<b>77</b>
	0 ... 10		20		200	<b>78</b>
	0 ... 16		32		200	<b>79</b>
<b>[bar]</b>	0 ... 25	<b>[bar]</b>	50	<b>[bar]</b>	300	<b>80</b>
	0 ... 40		80		300	<b>81</b>
	0 ... 60		120		500	<b>82</b>
	0 ... 100		200		500	<b>83</b>
	0 ... 160		320		1000	<b>85</b>
	0 ... 250		500		1000	<b>74</b>
	0 ... 400		800		1500	<b>84</b>
	0 ... 600		1000		2000	<b>86</b>
	0 ... 1600		3000		4000	<b>89</b>
	0 ... 2000		3000		4000	<b>90</b>
	0 ... 2500		3000		4000	<b>91</b>
Sonderbereich nach Kundenwunsch, z. B.: plage sur demande du client, p. ex.:0...2400 bar / 0 ... 12 bar customized ranges on request, e.g.:						<b>XX</b>


<b>Sensor</b>	Relativdruck, Genauigkeit:/ Pression relatif, précision relatif:/ Relative pressure, accuracy:	0.3%	<b>23</b>
<b>Capteur</b>	Relativdruck, Genauigkeit:/ Pression relatif, précision relatif:/ Relative pressure, accuracy:	0.5%	<b>25</b>
<b>Sensor</b>			

<b>Druckanschluss</b>	<b>Für Bereiche/ pour plages/ for ranges: ≤ 600 bar</b>		
<b>Raccord de pression</b>	G 1/4"	aussen/ mâle/ male	(O-Ring / joint torique / O-ring) <b>17</b>
<b>Pressure connection</b>	R 1/4"	aussen/ mâle/ male	<b>*19</b>
	G 1/2"	aussen/ mâle/ male	(Manometer/ manomètre/ manometer) <b>11</b>
	1/4" NPT	aussen/ mâle/ male	<b>** 30</b>
	1/2" NPT	aussen/ mâle/ male	<b>** 51</b>
	<b>Für Bereiche/ pour plages/ for ranges: &gt; 600 bar</b>		
	M14x1.5	aussen/ mâle/ male	(Kegeldichtung/ joint conique/ conical seal: 58°) <b>28</b>
	M18x1.5	aussen/ mâle/ male	(Kegeldichtung/ joint conique/ conical seal: 58°) <b>29</b>
	* nur mit Ausführung 04/ seulement avec exécution 04/ only with execution 04		
	** auf Anfrage/ sur demande/ please ask us		

<b>Ausführung</b>	Gerätestecker/ Embase mâle/ Male electrical plug:	EN175301-803-A (DIN43650-A) Mat.: PA:	
<b>Exécution</b>	Normale Vibrationsbeständigkeit/ Résistance de vibration normale/ Normal vibration resistance ≤ 600 bar		<b>04</b>
<b>Execution</b>	Gerätestecker/ Embase mâle/ Male electrical plug:	EN175301-803-A (DIN43650-A) Mat.: PA:	
	Erhöhte Vibrationsbeständigkeit/ Résistance de vibration élargie/ extended vibration resistance		<b>05</b>
	Kabel abgeschirmt/Câble avec écran/ Cable with shield:		
	**Material/ Matériel/ Material: FDR 25 (Raychem)	4 x 0.5mm <sup>2</sup> (Cable length see „accessories“)	<b>78</b>
	Gerätestecker/ Embase mâle/ Male electrical plug DIN72585 Code 1, Mat.: PBT (Contacts Mat.: Zn)		<b>25</b>

<b>Ausgangssignal</b>	Output	Load resistance	I <sub>SUPPLY</sub>	U <sub>SUPPLY</sub>	
<b>Signal de sortie</b>	4...20mA	(U <sub>supply</sub> -9V)/20mA		9...32 VDC	<b>19</b>
<b>Output</b>	0.5...4.5V DC	≥15.0 kΩ	≤12 mA	5 VDC ±0.25 VDC ratiometrisch/ ratiométrique/ ratiometric	<b>23</b>
	(nur Ausführungen Nr. 25 und 78/ seulement exécutions No. 25 et 78/ only executions No. 25 and 78)				

<b>Zubehör</b>	Druckspitzendämpfung/ Élément d'amortissement à pointe de surpression/ Pressure peak damping element:	
<b>Accessoires</b>	Loch/ Trou/ Hole: ø 1.0mm	<b>40</b>
<b>Accessories</b>	ø 0.3mm	<b>43</b>
	ø 0.5mm	<b>45</b>
	Kabeldose/ Fiche femelle/ Female electrical connector: EN175301-803-A (DIN43650-A)/ NBR, -40...90°C	<b>58</b>
	Output 4...20mA & Gerätestecker/ Output 4...20mA & embase mâle/ Output 4...20mA & male electrical plug	
	EN175301-803-A (DIN43650-A): Pin 1 ⊕, Pin 2 ⊖	<b>92</b>
	**Kabellänge/ Longueur du câble/ Cable length:	
	1.5 m	<b>1M</b>
	3.0 m	<b>3M</b>
	5.0 m	<b>5M</b>

 Trafag entwickelt und produziert auch speziell auf Ihre Bedürfnisse zugeschnittene Produkte. Bitte fragen Sie uns an.  
Trafag développe et fabrique des produits adaptés à vos besoins spécifiques en se basant sur votre cahier des charges. Contactez-nous s.v.p.  
Trafag develops and manufactures customized products according to your specifications to meet your requirements. Please contact us.

ÄNDERUNGEN VORBEHALTEN - SOUS RÉSERVE DE MODIFICATIONS - SUBJECT TO CHANGE

**SPEZIFIKATIONEN**

**SPECIFICATIONS**

**SPECIFICATIONS**

**HAUPTMERKMALE**

Sensor: Dünnschicht auf Stahl (s. Material)  
Messbereich: 0...2.5 bis 0...2500 bar  
Ausgangssignal: 4...20mA  
0.5...4.5 VDC (ration.)

**CARACTÈRES DISTINCTIFS**

Capteur: Couche mince sur acier (voir matière)  
Plage de mesure: 0...2.5 à 0...2500 bar  
Signal de sortie: 4...20 mA  
0.5...4.5 VDC (ration.)

**MAIN CHARACTERISTICS**

Sensor: Thin film on steel (see material)  
Measuring range: 0...2.5 to 0...2500 bar  
Signal output: 4...20 mA  
0.5...4.5 VDC (ration.)

**GENAUIGKEIT**

**Messgenauigkeit 0.5%**  
(Bestell.-Nr. 25)

TFB @ -25...+85°C: ± 2.0 % d.S. typ.  
Genauigkeit @ +25°C: ± 0.5 % d.S. typ.  
NLH @ +25°C (BSL durch 0): ± 0.3 % d.S. typ.  
TK Nullpunkt und Spanne: ± 0.03 % d.S./K typ.  
Langzeitstabilität  
1 Jahr @ +25°C: ± 0.2 % d.S. typ.

**PRÉCISION**

**Précision de mesure 0.5%**  
(No. commande 25)

TEB @ -25...+85°C: ± 2.0 % E.M. typ.  
Précision @ +25°C: ± 0.5 % E.M. typ.  
NLH @ +25°C (BSL par 0): ± 0.3 % E.M. typ.  
CT point zéro et écart: ± 0.03 % E.M./K typ.  
Stabilité à long terme  
1 année @ +25°C: ± 0.2 % E.M. typ.

**ACCURACY**

**Measuring accuracy 0.5%**  
(Ordering No 25)

TEB @ -25...+85°C: ± 2.0 % FS typ.  
Accuracy @ +25°C: ± 0.5 % FS typ.  
NLH @ +25°C (BSL through 0): ± 0.3 % FS typ.  
TC zero point and span: ± 0.03 % FS/K typ.  
Long term stability  
1 year @ +25°C: ± 0.2 % FS typ.

**Messgenauigkeit 0.3%**  
(Bestell.-Nr. 23)

TFB @ -25...+85°C: ± 0.5 % d.S. typ.  
Genauigkeit @ +25°C: ± 0.3 % d.S. typ.  
NLH @ +25°C (BSL durch 0): ± 0.1 % d.S. typ.  
TK Nullpunkt und Spanne: ± 0.005 % d.S./K typ.  
Langzeitstabilität  
1 Jahr @ +25°C: ± 0.2 % d.S. typ.

**Précision de mesure 0.3%**  
(No. commande 23)

TEB @ -25...+85°C: ± 0.5 % E.M. typ.  
Précision @ +25°C: ± 0.3 % E.M. typ.  
NLH @ +25°C (BSL par 0): ± 0.1 % E.M. typ.  
CT point zéro et écart: ± 0.005 % E.M./K typ.  
Stabilité à long terme  
1 année @ +25°C: ± 0.2 % E.M. typ.

**Measuring accuracy 0.3%**  
(Ordering No 23)

TEB @ -25...+85°C: ± 0.5 % FS typ.  
Accuracy @ +25°C: ± 0.3 % FS typ.  
NLH @ +25°C (BSL through 0): ± 0.1 % FS typ.  
TC zero point and span: ± 0.005 % FS/K typ.  
Long term stability  
1 year @ +25°C: ± 0.2 % FS typ.

**ELEKTRISCHE DATEN**

Ausgangssignal/ Speisespannung  
4...20 mA: 24 (9...32) VDC  
0.5...4.5 VDC: 5 VDC ratiometrisch  
Anstiegszeit: typ. 1 ms/10...90%  
Nenndruck

**SPECIFICATIONS ÉLECTRIQUES**

Signal de sortie/ Tension d'alimentation  
4...20 mA: 24 (9...32) VDC  
0.5...4.5 VDC: 5 VDC ratiométrique  
Sensibilité de réponse: typ. 1 ms/10...90%  
pression nominale

**ELECTRICAL DATA**

Output/ Supply voltage  
4...20 mA: 24 (9...32) VDC  
0.5...4.5 VDC: 5 VDC ratiometric  
Rise time: typ. 1 ms/10...90%  
nominal pressure

**UMGEBUNGSBEDINGUNGEN**

Betriebstemperatur: -40...+125°C  
Medientemperatur: -40...+125°C  
Schutzart: Ausf. 04/05<sup>2)</sup>: IP65  
Ausf. 25<sup>2)</sup>/78: IP69K  
Feuchtigkeit: max. 95% relativ  
Vibration: Ausführung 04: 10g (50...2000 Hz)  
Ausführung 05: 15g (50...2000 Hz)  
Ausführung 25: 15g rms  
Ausführung 78: 20g rms  
Stoß: 50g/ 3 ms

**CONDITIONS D'ENVIRONNEMENT**

Température de service: -40...+125°C  
Température de médias: -40...+125°C  
Protection: Exécution 04/05<sup>2)</sup>: IP65  
Exécution 25<sup>2)</sup>/78: IP69K  
Humidité: 95% max. relatif  
Vibration: Exécution 04: 10g (50...2000 Hz)  
Exécution 05: 15g (50...2000 Hz)  
Exécution 25: 15g rms  
Exécution 78: 20g rms  
Choc: 50g/ 3 ms

**ENVIRONMENTAL CONDITIONS**

Operating temperature: -40...+125°C  
Media temperature: -40...+125°C  
Protection: Execution 04/05<sup>2)</sup>: IP65  
Execution 25<sup>2)</sup>/78: IP69K  
Humidity: max. 95% relative  
Vibration: Execution 04: 10g (50...2000 Hz)  
Execution 05: 15g (50...2000 Hz)  
Execution 25: 15g rms  
Execution 78: 20g rms  
Shock: 50g/ 3 ms

**EMV-SCHUTZ**

(Ausgangssignal: 4...20mA)

Emission: EN/IEC 61000-6-4  
Immunity: EN/IEC 61000-6-2

**CEM PROTECTION**

(Signal de sortie: 4...20mA)

Emission: EN/CEI 61000-6-4  
Immunité: EN/CEI 61000-6-2

**EMC PROTECTION**

(Output: 4...20mA)

Emission: EN/IEC 61000-6-4  
Immunity: EN/IEC 61000-6-2

**MECHANISCHE DATEN**

Material  
Sensor: 1.4548 (AISI630)  
Gehäuse: 1.4542 (AISI630) / 1.4301 (AISI304)  
O-Ring (medienberührend): FKM 70°Sh  
Gerätestecker/Kabel: siehe Bestellin-  
formation  
Anziehdrehmoment: übrige: 25 Nm  
Druckanschluss 28/29: 30 Nm  
Gewicht (ohne Kabel): ~ 80...110 g

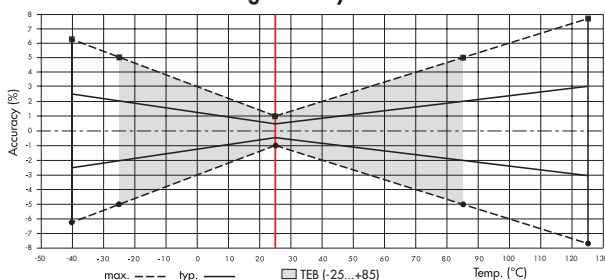
**SPECIFICATIONS MÉCANIQUES**

Matière  
Capteur: 1.4548 (AISI630)  
Boîtier: 1.4542 (AISI630) / 1.4301 (AISI304)  
O-Ring (contact. de médias): FKM 70°Sh  
Embase mâle/Câble: voir information pour la  
commande  
Couple de serrage: reste : 25 Nm  
Raccord de pression 28/29: 30 Nm  
Poids (sans câble): ~ 80...110 g

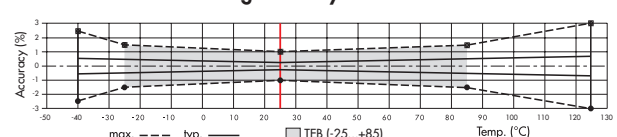
**MECHANICAL DATA**

Material  
Sensor: 1.4548 (AISI630)  
Housing: 1.4542 (AISI630) / 1.4301 (AISI304)  
O-Ring (media contacting): FKM 70°Sh  
Male electrical plug/Cable: see ordering  
information  
Mounting torque: others: 25 Nm  
Pressure connection 28/29: 30 Nm  
Weight (without cable): ~ 80...110 g

**Measuring accuracy 0.5%**

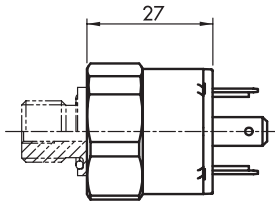


**Measuring accuracy 0.3%**

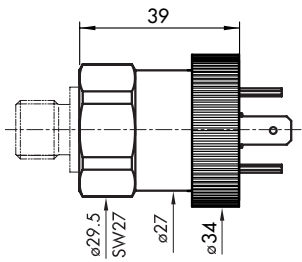


<sup>2)</sup> Ausführung/ Exécution/ Execution 05/25: nur mit vorschriftsmässig montierter Kabeldose gültig/ valable seulement avec fiche femelle montée selon instructions/ provided female connector is mounted according to instructions

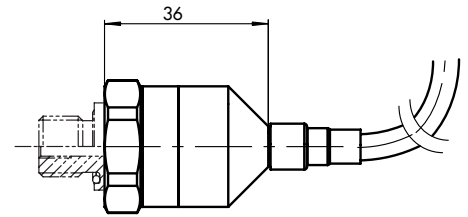
**MASSBILDER / COTES D'ENCOMBREMENT / DIMENSIONS**



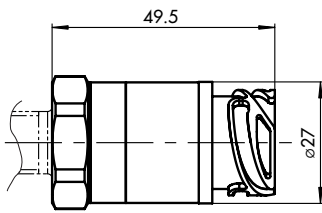
**8298.XX.XXXX.04.XX.XX**



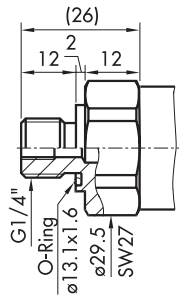
**8298.XX.XXXX.05.XX.XX**



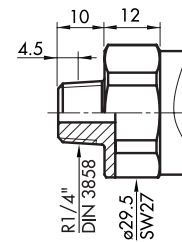
**8298.XX.XXXX.78.XX.XX**



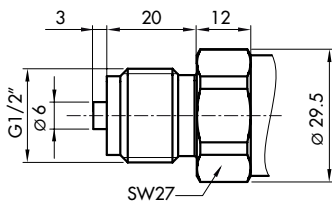
**8298.XX.XXXX.25.XX.XX**



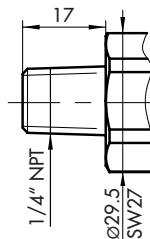
**8298.XX.XX17.XX.XX**  
Pressure ranges: ≤ 600 bar



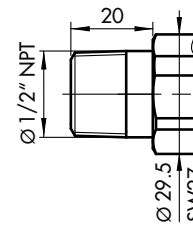
**8298.XX.XX19.04.XX**  
Pressure ranges: ≤ 600 bar



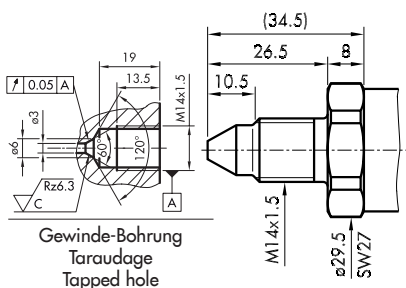
**8298.XX.XX11.XX.XX**  
Pressure ranges: ≤ 600 bar



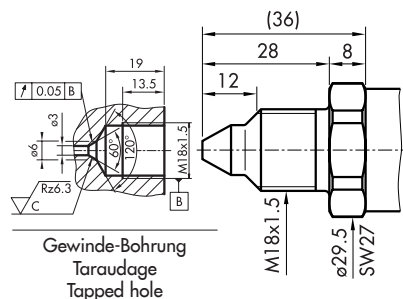
**8298.XX.XX30.XX.XX**



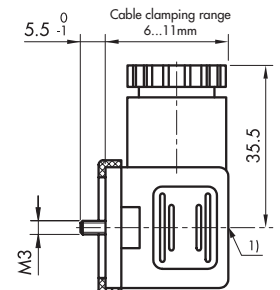
**8298.XX.XX51.XX.XX**



**8298.XX.XX28.XX.XX**  
Pressure ranges: ≤ 2500 bar

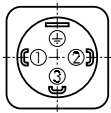


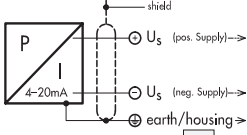

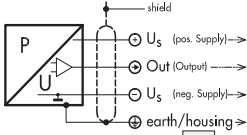


**8298.XX.XX29.XX.XX**  
Pressure ranges: ≤ 2500 bar



**8298.XX.XXXX.XX.XX.58**  
1) Torque moment 50...60 Ncm

**ELEKTRISCHER ANSCHLUSS / RACCORDEMENT ÉLECTRIQUE / ELECTRICAL CONNECTION**

Schutzart / Protection	IP65 <sup>2)</sup>	IP69K	IP69K <sup>2)</sup>
Ausführung Exécution Execution  Ausgangssignal Signal de sortie Output	EN175301-803A (DIN43650-A) <b>04/05</b> 	Cable* <b>78</b> Abschirmung écran / shield 	DIN 72585* Code 1 <b>25</b> 
 8298.XX.XXXX.XX. <b>19</b>	standard    with accessory <b>92</b> 2                    1 1                    2 	brown  black yellow/green	1  4 3
 8298.XX.XXXX.XX. <b>23</b>		brown blue black yellow/green	1 2 4 3

\*Entlüftung über das Kabelende/ Ventilation par extrémité du câble/ Ventilation via cable end

<sup>2)</sup> Ausführung/ Exécution/ Execution 05/25: nur mit vorschriftsmässig montierter Kabeldose gültig/ valable seulement avec fiche femelle montée selon instructions/ provided female connector is mounted according to instructions