



**ANWENDUNG**

- ◆ Schiffbau  GL, KRS
  - ◇ Motorenbau
  - ◇ Schienenfahrzeuge
  - ◇ Maschinenbau
  - ◇ Hydraulik
  - ◇ HLK
  - ◇ Kältetechnik
  - ◇ Prozess Techn.
  - ◇ Wasseraufbereitung
  - ◇ Autoindustrie
  - ◇ Prüfstände
- ◆ Ex
  - SEV 11 ATEX 0145 X
  - ◇ Lebensmittelindustrie
  - ◇ Autoklaven

**APPLICATIONS**

- ◆ Construction navale  GL, KRS
  - ◇ 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
  - SEV 11 ATEX 0145 X
  - ◇ Industrie alimentaire
  - ◇ Autoclavage

**APPLICATIONS**

- ◆ Shipbuilding  GL, KRS
  - ◇ Engine manufacturing
  - ◇ Railways
  - ◇ Machine tools
  - ◇ Hydraulics
  - ◇ HVAC
  - ◇ Refrigeration
  - ◇ Process technology
  - ◇ Water treatment
  - ◇ Automotive industry
  - ◇ Test benches
- ◆ Ex
  - SEV 11 ATEX 0145 X
  - ◇ Food Industry
  - ◇ Autoclaves



**HAUPTMERKMALE**

- ◆ Sensor: Piezoresistiv
- ◆ Messbereich: 0...0.1 bis 0...1000 bar
- ◆ Ausgangssignal: 4...20 mA  
4...20 mA mit Blitzschutz
- ◆ NLH (BSL durch 0): ± 0.1 % d.S. typ.  
± 0.25 % d.S. typ.  
± 0.5 % d.S. typ.

**CARACTÈRES DISTINCTIFS**

- ◆ Capteur: Piézorésistif
- ◆ Plage de mesure: 0...0.1 à 0...1000 bar
- ◆ Signal de sortie: 4...20 mA  
4...20 mA avec protection de parafoudre
- ◆ NLH (BSL par 0): ± 0.1 % E.M. typ.  
± 0.25 % E.M. typ.  
± 0.5 % E.M. typ.

**MAIN CHARACTERISTICS**

- ◆ Sensor: Piezoresistive
- ◆ Measuring range: 0...0.1 to 0...1000 bar
- ◆ Signal output: 4...20 mA  
4...20 mA with lightning protection (Surge)
- ◆ NLH (BSL through 0): ± 0.1 % FS typ.  
± 0.25 % FS typ.  
± 0.5 % FS typ.

**VORTEILE**


- ◆ Explosionsschutz Ex ia IIC T3...T6
- ◆ Kleine Druckbereiche (bis 100mbar)
- ◆ Varianten mit frontbündigen Membranen
- ◆ Medientemperaturen bis 150°C
- ◆ EMV-Schutz, IEC 61000
- ◆ Optionaler Blitzschutz (IEC 61000-4-5)

**AVANTAGES PRINCIPAUX**

- ◆ Protection contre l'explosion Ex ia IIC T3...T6
- ◆ Petits plages de pression (jusqu' à 100mbar)
- ◆ Modifications avec membranes frontales
- ◆ Température du fluide à 150°C
- ◆ Protection CEM , CEI 61000
- ◆ Optional: Protection de parafoudre (IEC 61000-4-5)

**MAIN FEATURES**

- ◆ Explosion-proof Ex ia IIC T3...T6
- ◆ Low pressure ranges (to 100mbar)
- ◆ Versions with frontal flush diaphragm
- ◆ Media temperature to 150°C
- ◆ EMC Protection, IEC 61000
- ◆ Option: Lightning protection (IEC 61000-4-5)

 baugleiche Modelle mit anderen Spezifikationen:  
version même construction avec d'autres spécifications:  
identical construction with other specifications:

DATA SHEET NO: **H72230**  
[www.trafag.com/data sheets](http://www.trafag.com/data sheets)

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

**Lager Code** (kurze Lieferzeit)/ **Número de stock** (delai de livraison bref)/ **Code for stock products** (short delivery time): **EXNA** (z.B./ Ex./ e.g: EXNA0.2A)

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

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

XXXX.XX.XX.XX.XX.XX.XX.XX...

Relativ/ Relatif/ Relative  
Absolut/ Absolue/ Absolute

8852  
8853

<b>Bereich</b>	0 ... 0.1	<b>Überdruck max.</b>	3	<b>Berstdruck max.</b>	200	<b>66</b>
<b>Plage</b>	0 ... 0.16	<b>Surcharge surpression</b>	3	<b>Pression destruction</b>	200	<b>67</b>
<b>Range</b>	0 ... 0.2	<b>Over pressure</b>	3	<b>Burst pressure</b>	200	<b>68</b>
	0 ... 0.4		3		200	<b>69</b>
<b>[bar]</b>	0 ... 0.6	<b>[bar]</b>	3	<b>[bar]</b>	200	<b>70</b>
	0 ... 1.0		3		200	<b>71</b>
	0 ... 1.6		4.8		200	<b>73</b>
	0 ... 2.5		7.5		200	<b>75</b>
	0 ... 4.0		12		200	<b>76</b>
	0 ... 6.0		18		200	<b>77</b>
	0 ... 10		30		200	<b>78</b>
	0 ... 16		48		200	<b>79</b>
	0 ... 25		75		200	<b>80</b>
	0 ... 40		120		850	<b>81</b>
	0 ... 60		180		850	<b>82</b>
	0 ... 100		300		850	<b>83</b>
	0 ... 160		480		850	<b>85</b>
	0 ... 250		750		850	<b>74</b>
	0 ... 400		850		850	<b>84</b>
	0 ... 600		850		850	<b>86</b>
	0 ... 1000		1500		1500	<b>88</b>
Sonderbereich nach Kundenwunsch, z.B.: Plage à spécifier par le client, p. ex.: -1... +4 bar, 0...5 bar, 0...12 bar Customized ranges on request, e.g.:						<b>XX</b>

<b>Sensor</b>	Typ 05 (Genauigkeit NLH/ Précision NLH/ Accuracy NLH: ± 0.5 % FS)	<b>P5</b>
<b>Capteur</b>	Typ 02 (Genauigkeit NLH/ Précision NLH/ Accuracy NLH: ± 0.25 % FS)	<b>P2</b>
<b>Sensor</b>	Typ 01 (Genauigkeit NLH/ Précision NLH/ Accuracy NLH: ± 0.1 % FS)	<b>P1</b>
Genauigkeit NLH / Précision NLH/ Accuracy NLH: siehe Tabelle/ voir table/ see table		


<b>Druckanschluss</b>	G 1/4" innen/ femelle/ female	<b>10</b>
<b>Raccord</b>	G 1/4" aussen/ mâle/ male	<b>15</b>
<b>Pressure connection</b>	G 1/4" aussen/ mâle/ male DIN16288 (Manometer/ manomètre/ manometer)	<b>20</b>
	G 1/2" aussen/ mâle/ male	<b>21</b>
	G 1/2" aussen/ mâle/ male Membrane: vorne liegend/ frontal/ frontal	<b>31</b>
	G 1/2" aussen/ mâle/ male Membrane: frontbündig/ en face/ flush	<b>32</b>
	G 1/2" aussen/ mâle/ male DIN16288 (Manometer/ manomètre/ manometer)	<b>11</b>

<b>Ausführung</b>	PUR Kabel/ Câble PUR/ PUR Cable: Länge/ Longueur / Length ..... [mm] (IP67)	<b>22</b>
<b>Exécution</b>	Gerätestecker/ Embase mâle/ Male electrical plug DIN43650 A (Mat.: PA) (IP65)	<b>04</b>
<b>Execution</b>	Binder 723 (Mat.: Zn) (IP67)	<b>14</b>
	MIL-C 26482 (Mat.: Al) (IP40)	<b>02</b>

<b>Ausgangssignal</b>	4...20mA	<b>19</b>
<b>Signal de sortie</b>	4...20mA mit Blitzschutz/ avec protection de parafoudre / with lightning protection (Surge)	<b>09</b>
<b>Output</b>		

<b>Zubehör</b>	Kabeldose/ Fiche femelle/ Female electrical connector	DIN43650 A	<b>58</b>
<b>Accessoires</b>		Binder 723	<b>37</b>
<b>Accessories</b>		MIL-C-26485, 6-pol.	<b>32</b>
	Spez. Ölfüllung/ Remplissage d'huile special/ Special oil filling	Aseol	<b>94</b>
		Halocarbon	<b>95</b>
	Temperaturklasse/ Class de température/ Temperature class	T3	<b>T3</b>
		T4	<b>T4</b>
		T6	<b>T6</b>

**Dämpfungselemente und Snubber/ Élément d'amortissement à pointe de surpression et Snubber/ Damping elements and Snubber:**  
siehe Datenblatt/ voir spécification /see specification sheet H72258

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**SPEZIFIKATIONEN**

**HAUPTMERKMALE**

Sensor: Piezoresistiv  
Messbereich: 0...0.1 bis 0...1000 bar  
Ausgangssignal: 4...20 mA

**SPÉCIFICATIONS**

**CARACTÈRES DISTINCTIFS**

Capteur: Piézorésistif  
Plage de mesure: 0...0.1 à 0...1000 bar  
Signal de sortie: 4...20 mA

**SPECIFICATIONS**

**MAIN CHARACTERISTICS**

Sensor: Piezoresistive  
Measuring range: 0...0.1 to 0...1000 bar  
Signal output: 4...20 mA

**GENAUIGKEIT**

**PRÉCISION**

**ACCURACY**

Bereiche / Plage / Range	[bar]	0.1...0.5	0.5...2	2...25	25...600	>600
Genauigkeit NLH <sup>1)</sup> / Précision NLH <sup>1)</sup> / Accuracy NLH <sup>1)</sup>	[± % FS]					
	<b>P5</b>	0.5	0.5	0.5	0.5	0.5
	<b>P2</b>	0.25	0.25	0.25	0.25	0.25
	<b>P1</b>	—	0.1	0.1	0.1	—
Temp.koeffizient/ Influence therm./ Temp. coefficient [± % FS/K]						
Nullpunkt/ Point zéro/ Zero point	0...70°C	0.06	0.03	0.015	0.015	0.015
	Option -25...85°C	0.08	0.04	0.02	0.02	0.02
Spanne/ Sensibilité/ Span	0...70°C	0.015	0.015	0.015	0.015	0.015
	Option -25...85°C	0.02	0.02	0.02	0.02	0.02
Langzeitdrift/ Dérive à long terme/ Long term drift	[1 Jahr]	< 4 mbar	< 4 mbar	< 0.2% FS	< 0.2% FS	< 0.2% FS

<sup>1)</sup> BSL durch Null/ BSL par zéro/ BSL through zero

**ELEKTRISCHE DATEN**

Speisespannung: 4...20mA: 10...30 VDC  
Bürde: 4...20 mA:  $R_L \leq (U_S - 9V) / 20mA$   
Reproduzierbarkeit: ±0.05% d.S.  
Anstiegszeit: typ. 1 ms/ 10...90%  
Nennndruck  
Zenerbarriere: 30 VDC/ 100mA/ 1W

**SPÉCIFICATIONS ÉLECTRIQUES**

Tension d'alimentation: 4...20mA: 10...30 VDC  
Charge: 4...20mA:  $R_L \leq (U_S - 9V) / 20mA$   
Reproductibilité: ±0.05% E.M.  
Sensibilité de réponse: 1 ms/10...90% typ.  
pression nominale  
Zenerbarrière: 30 VDC/ 100mA/ 1W

**ELECTRICAL DATA**

Supply voltage: 4...20mA: 10...30 VDC  
Load: 4...20mA:  $R_L \leq (U_S - 9V) / 20mA$   
Repeatability: ±0.05% FS  
Rise time: typ. 1 ms/10...90%  
nominal pressure  
Zenerbarrier: 30 VDC/ 100mA/ 1W

**UMGEBUNGSBEDINGUNGEN**

**CONDITIONS D'ENVIRONNEMENT**

**ENVIRONMENTAL CONDITIONS**

Temp.klasse/ Classe temp./ Temp. class	[°C]	T3	T4	T6
Betriebstemp./ Temp. de service/ Operating temp.	[°C]	-25...+85	-25...+85	-25...+55
Medientemp./ Temp. du fluide/ Media temp.	[°C]	-25...+150	-25...+100	-25...+55
Lagertemp./ Temp. de stockage/ Storage temp.	[°C]	-25...+85	-25...+85	-25...+55

Normen/ Normes/ Normes: EN 1127-1, EN 60079-0, EN 60079-11, EN 60079-26, EN 61241-11

Schutzart: <sup>2)</sup> min. IP65  
Feuchtigkeit: max. 95% relativ  
Vibration: 6g (25...2000 Hz)  
Schock: 50g/ 1 ms

Protection: <sup>2)</sup> min. IP65  
Humidité: 95% max. relatif  
Vibration: 6g (25...2000 Hz)  
Choc: 50g/ 1 ms

Protection: <sup>2)</sup> min. IP65  
Humidity: max. 95% relative  
Vibration: 6g (25...2000 Hz)  
Shock: 50g/ 1 ms

**EMV-SCHUTZ**

Emission: IEC 61000-6-3  
Immunität: IEC 61000-6-2

**CEM PROTECTION**

Emission: CEI 61000-6-3  
Immunité: CEI 61000-6-2

**EMC PROTECTION**

Emission: IEC 61000-6-3  
Immunity: IEC 61000-6-2

**MECHANISCHE DATEN**

Material  
Sensor: 1.4435 (AISI316L)  
Gehäuse: 1.4435 (AISI316L)  
O-Ring (medienberührend): FKM 70°Sh  
Gerätestecker: siehe Bestellinformationen  
Anziehdrehmoment: 25 Nm  
Gewicht: ~ 220 g

**SPÉCIFICATIONS MÉCANIQUES**

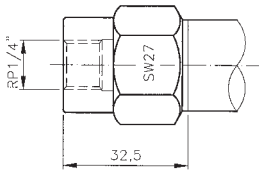
Matière  
Capteur: 1.4435 (AISI316L)  
Boîtier: 1.4435 (AISI316L)  
O-Ring (contact. de médias): FKM 70°Sh  
Embase mâle: voir information pour la commande  
Couple de serrage: 25 Nm  
Poids: ~ 220 g

**MECHANICAL DATA**

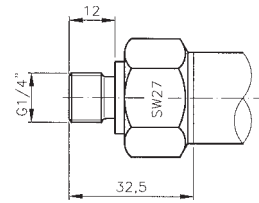
Material  
Sensor: 1.4435 (AISI316L)  
Housing: 1.4435 (AISI316L)  
O-Ring (media contacting): FKM 70°Sh  
Male electrical plug: see ordering information  
Mounting torque: 25 Nm  
Weight: ~ 220 g

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

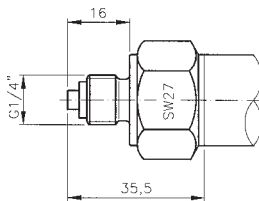
**MASSBILDER & EL. ANSCHLUSS / COTES D'ENCOMBREMENT & RACCORDEM. ÉLECTR. / DIMENSIONS & EL. CONNECTION**



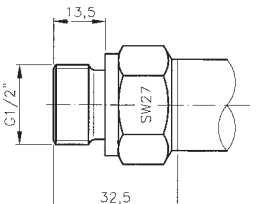
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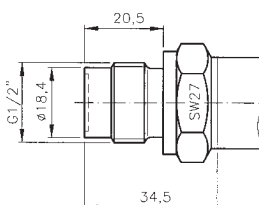
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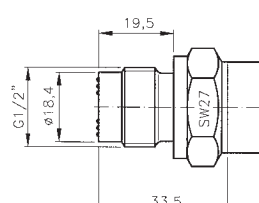
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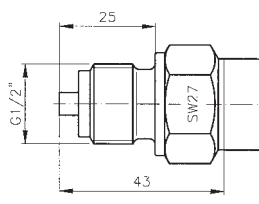
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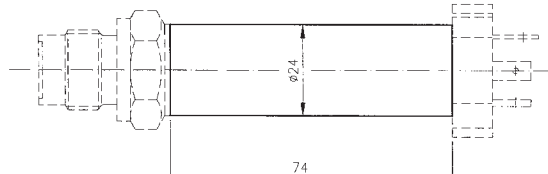
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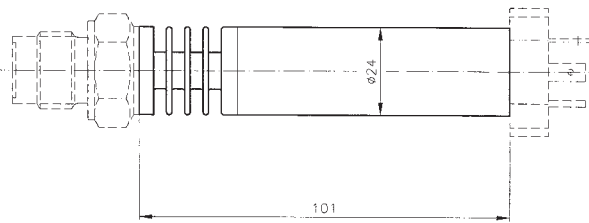
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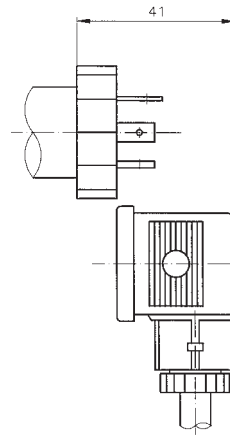
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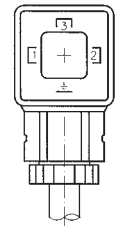
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885X.XX.XX.XX.XX.XX.T6...



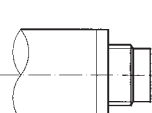
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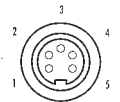
**Pin 4...20mA**  
1 +Vin  
2 Pout  
3 ⏏



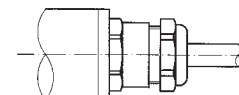
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**Pin 4...20mA**  
1 Pout  
3 +Vin  
5 ⏏



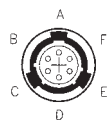
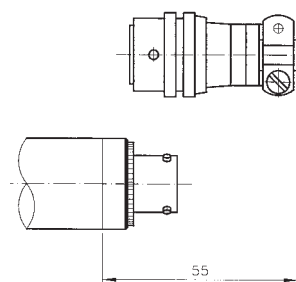
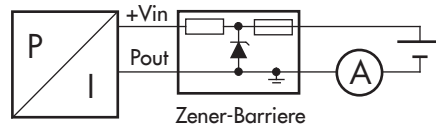
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PG9

**Farbe/ Couleur/ Color 4...20mA**  
weiss/ blanc/ white +Vin  
gelb/ jaune/ yellow Pout  
braun/ brun/ brown ⏏

885X.XX.XX.XX.22.XX.XX...



**Pin 4...20mA**  
A +Vin  
C Pout  
F ⏏

885X.XX.XX.XX.02.XX.32...