

#### 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'eau**
- ◇ 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



#### HAUPTMERKMALE

- ◆ Sensor: Dickschicht auf Keramik
- ◆ Messbereich: 0...0.2 bis 0...40 bar
- ◆ Ausgangssignal: 4...20 mA
- 0...5 VDC
- 0...10 VDC
- 0.5...4.5 VDC ratiometrisch
- ◆ NLH (BSL durch 0): ± 0.2 % d.S. typ.

#### CARACTÈRES DISTINCTIFS

- ◆ Capteur: Film épais sur céramique
- ◆ Plage de mesure: 0...0.2 bis 0...40 bar
- ◆ Signal de sortie: 4...20 mA
- 0...5 VDC
- 0...10 VDC
- 0.5...4.5 VDC ratiométrique
- ◆ NLH (BSL par 0): ± 0.2 % E.M. typ.

#### MAIN CHARACTERISTICS

- ◆ Sensor: Thick film on ceramic
- ◆ Measuring range: 0...0.2 bis 0...40 bar
- ◆ Signal output: 4...20 mA
- 0...5 VDC
- 0...10 VDC
- 0.5...4.5 VDC ratiometric
- ◆ NLH (BSL through 0): ± 0.2 % FS typ.

#### VORTEILE

- ◆ Wirtschaftlich
- ◆ Gute Medienverträglichkeit
- ◆ EMV-Schutz, IEC 61000
- ◆ Für OEM Anwendung
- ◆ Absolut- oder Relativ-Druckmessung

#### AVANTAGES PRINCIPAUX

- ◆ Economique
- ◆ Bonne compatibilité des médias
- ◆ Protection CEM, CEI 61000
- ◆ Pour application OEM
- ◆ Mesurage de pression absolue ou relatif

#### MAIN FEATURES

- ◆ Economical
- ◆ Good media compatibility
- ◆ EMC Protection, IEC 61000
- ◆ For OEM use
- ◆ Absolute or relative pressure measurement



baugleiche Modelle für Kältetechnik:  
version même construction pour réfrigération:  
identical construction for refrigeration:

DATA SHEET NO: **H72323**  
[www.trafag.com/H72323](http://www.trafag.com/H72323)

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

|                                                                                                                      |                                                                             |                                                  |                     |                       |                                             |                          |
|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|--------------------------------------------------|---------------------|-----------------------|---------------------------------------------|--------------------------|
|                                                                                                                      |                                                                             |                                                  |                     |                       |                                             | XXXX.XX.XXXX.XX.XX.XX... |
| Varianten Code/ Numéro de variantes/ Custom build code                                                               |                                                                             |                                                  |                     |                       |                                             | 8473                     |
| Bereich                                                                                                              | <sup>1)</sup> 0 ... 0.2                                                     | Überdruck                                        | max. 2.0            | Berstdruck            | 3.0                                         | 68                       |
| Plage                                                                                                                | <sup>1)</sup> 0 ... 0.4                                                     | Surpression                                      | 2.0                 | Pression d'éclatement | 3.0                                         | 69                       |
| Range                                                                                                                | 0 ... 0.6                                                                   | Over pressure                                    | 2.0                 | Burst pressure        | 3.0                                         | 70                       |
|                                                                                                                      | 0 ... 1.0                                                                   |                                                  | 3.2                 |                       | 4.8                                         | 71                       |
| [bar]                                                                                                                | 0 ... 1.6                                                                   | [bar]                                            | 3.2                 | [bar]                 | 4.8                                         | 73                       |
|                                                                                                                      | 0 ... 2.5                                                                   |                                                  | 5                   |                       | 7.5                                         | 75                       |
|                                                                                                                      | 0 ... 4                                                                     |                                                  | 8                   |                       | 12                                          | 76                       |
|                                                                                                                      | 0 ... 6                                                                     |                                                  | 12                  |                       | 15                                          | 77                       |
|                                                                                                                      | 0 ... 10                                                                    |                                                  | 20                  |                       | 25                                          | 78                       |
|                                                                                                                      | 0 ... 16                                                                    |                                                  | 32                  |                       | 40                                          | 79                       |
|                                                                                                                      | 0 ... 25                                                                    |                                                  | 50                  |                       | 75                                          | 80                       |
|                                                                                                                      | 0 ... 40                                                                    |                                                  | 80                  |                       | 100                                         | 81                       |
| <sup>1)</sup> siehe Seite 3/ voir page 3/ see page 3                                                                 |                                                                             |                                                  |                     |                       |                                             |                          |
| Sonderbereich nach Kundenwunsch, z. B.:                                                                              |                                                                             |                                                  |                     |                       |                                             |                          |
| Plage à spécifier par le client, p. ex.:                                                                             |                                                                             |                                                  |                     |                       |                                             | XX                       |
| Customized ranges on request, e.g.:                                                                                  |                                                                             |                                                  |                     |                       |                                             |                          |
| Sensor                                                                                                               | relativ/ relatif /relative                                                  | Druckanschl./ Racc. de pression/ Pressure conn.: | CuZn                |                       |                                             | 55                       |
| Capteur                                                                                                              | relativ/ relatif /relative                                                  | Druckanschl./ Racc. de pression/ Pressure conn.: | 1.4305              |                       |                                             | 54                       |
| Sensor                                                                                                               | relativ/ relatif /relative                                                  | Druckanschl./ Racc. de pression/ Pressure conn.: | 1.4404/1.4435       |                       |                                             | <sup>3)</sup> 56         |
|                                                                                                                      | absolut/ absolue/ absolute                                                  | Druckanschl./ Racc. de pression/ Pressure conn.: | CuZn                |                       |                                             | <sup>3)</sup> 85         |
|                                                                                                                      | absolut/ absolue/ absolute                                                  | Druckanschl./ Racc. de pression/ Pressure conn.: | 1.4305              |                       |                                             | <sup>3)</sup> 84         |
|                                                                                                                      | absolut/ absolue/ absolute                                                  | Druckanschl./ Racc. de pression/ Pressure conn.: | 1.4404/1.4435       |                       |                                             | <sup>3)</sup> 86         |
| <sup>3)</sup> auf Anfrage/ sur demande/ please ask us                                                                |                                                                             |                                                  |                     |                       |                                             |                          |
| Druckanschluss                                                                                                       | G 1/4"                                                                      | innen/ femelle/ female                           |                     |                       |                                             | 10                       |
| Raccord de pression                                                                                                  | G 1/4"                                                                      | aussen/ mâle/ male                               |                     |                       |                                             | 17                       |
| Pressure connection                                                                                                  | G 1/2"                                                                      | aussen/ mâle/ male                               |                     |                       |                                             | 21                       |
|                                                                                                                      | NPT 1/4"                                                                    | aussen/ mâle/ male                               |                     |                       |                                             | 30                       |
| Ausführung                                                                                                           | Gerätestecker/ Embase mâle/ Male electrical plug:                           | EN175301-803-A                                   | Mat.: PA            |                       |                                             | 05                       |
| Exécution                                                                                                            |                                                                             | M12,1, 5-pol.                                    | Mat.: PA            |                       |                                             | 35                       |
| Execution                                                                                                            | **Kabel/ Câble/ Cable: (Cable length see „accessories“)                     | Mat.: PVC (cable gland: PA6-3)                   |                     |                       |                                             | 22                       |
| Ausgangssignal                                                                                                       | Output                                                                      | Load resistance                                  | I <sub>SUPPLY</sub> | U <sub>SUPPLY</sub>   |                                             |                          |
| Signal de sortie                                                                                                     | 4 ... 20 mA                                                                 | (U <sub>Supply</sub> -9V)/ 20mA                  |                     | 9 ... 30 VDC          |                                             | 19                       |
| Output                                                                                                               | 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                                                              | > 5.0 kΩ                                         | <10 mA              | 5 VDC ±0.25 V         | rationométrisch/ ratiométrique/ ratiometric | 23                       |
| Zubehör                                                                                                              | O-Ring                                                                      |                                                  |                     | FKM                   |                                             | 61                       |
| Accessoires                                                                                                          |                                                                             |                                                  |                     | CR                    |                                             | 62                       |
| Accessories                                                                                                          |                                                                             |                                                  |                     | EPDM                  |                                             | 63                       |
|                                                                                                                      | Druckspitzendämpfung/ Elément d'amortissement à pointe de surpression/      |                                                  |                     | ø 0.3 mm              |                                             | 43                       |
|                                                                                                                      | 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                       |
| <b>Anschlussbelegung spezial/ Raccordement électrique spécial/ Special electrical connection:</b>                    |                                                                             |                                                  |                     |                       |                                             |                          |
| >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                       |



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## SPEZIFIKATIONEN

### HAUPTMERKMALE

Sensor: Dickschicht auf Keramik (s. Material)  
Messbereich: 0...0.2 bis 0...40 bar  
Ausgangssignal: 4...20 mA  
0...5 VDC  
1...6 VDC  
0...10 VDC  
0.5...4.5 VDC ratiometrisch

### GENAUIGKEIT

TFB @ -25...+85°C: ± 1.0 % d.S. typ.  
Genauigkeit @ +25°C: ± 0.3 % d.S. typ.  
NLH @ +25°C (BSL durch 0) ± 0.2 % d.S. typ.  
TK Nullpunkt und Spanne: ± 0.02 % d.S./K typ.  
Langzeitstabilität  
1 Jahr @ +25°C: ± 0.2 % d.S. typ.

<sup>1)</sup> Bereich 0...0.2 und 0...0.4:

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.

### ELEKTRISCHE DATEN

Ausgangssignal/ Speisespannung  
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: 5 VDC ratiometrisch  
Anstiegszeit: typ. 1 ms/ 10...90%  
Nennndruck  
Einschaltverzögerung: max. 1.5 s

### UMGEBUNGSBEDINGUNGEN

Betriebstemperatur: -25 ...+85°C  
Medientemperatur  
CuZn: -25 ...+85°C  
1.4305/1.4435: -25 ...+125°C  
Schutzart: <sup>2)</sup> min. IP65  
Feuchtigkeit: max. 95% relativ  
Vibration: 4g (10...2000 Hz)  
Stoß: 50g/ 8 ms

### EMV-SCHUTZ

(Ausgangssignal: 4...20mA)

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

### MECHANISCHE DATEN

Material  
Sensor: Keramik, Al<sub>2</sub>O<sub>3</sub> (96%)  
Druckanschluss 55/85: CuZn39Pb3  
54/84: 1.4305 (AISI303)  
56/86: 1.4404/1.4435 (AISI316L)  
O-Ring (medienberührend): FKM 70°Sh  
CR, EPDM  
Gerätestecker: siehe Bestellinformation  
Anziehdrehmoment: 15...20 Nm  
Gewicht: ~ 110 g

## SPÉCIFICATIONS

### CARACTÈRES DISTINCTIFS

Capteur: Film épais sur céramique (voir matière)  
Plage de mesure: 0...0.2 bis 0...40 bar  
Signal de sortie: 4...20 mA  
0...5 VDC  
1...6 VDC  
0...10 VDC  
0.5...4.5 VDC ratiométrique

### PRÉCISION

TEB @ -25...+85°C: ± 1.0 % E.M. typ.  
Précision @ +25°C: ± 0.3 % E.M. typ.  
NLH @ +25°C (BSL par 0) ± 0.2 % E.M. typ.  
CT point zéro et écart: ± 0.02 % E.M./K typ.  
Stabilité à long terme  
1 année @ +25°C: ± 0.2 % E.M. typ.

<sup>1)</sup> Plage 0...0.2 et 0...0.4:

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.

### SPÉCIFICATIONS ÉLECTRIQUES

Signal de sortie/ Tension d'alimentation  
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: 5 VDC ratiométrique  
Sensibilité de réponse: typ. 1 ms/ 10...90%  
pression nominale  
Retard à l'enclenchement: max. 1.5 s

### CONDITIONS D'ENVIRONNEMENT

Température de service: -25 ...+85°C  
Température de médias  
CuZn: -25 ...+85°C  
1.4305/1.4435: -25 ...+125°C  
Protection: <sup>2)</sup> min. IP65  
Humidité: 95% max. relatif  
Vibration: 4g (10...2000 Hz)  
Choc: 50g/ 8 ms

### CEM PROTECTION

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

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

### SPÉCIFICATIONS MÉCANIQUES

Matériau  
Capteur: Céramique, Al<sub>2</sub>O<sub>3</sub> (96%)  
Raccord de pression 55/85: CuZn39Pb3  
54/84: 1.4305 (AISI303)  
56/86: 1.4404/1.4435 (AISI316L)  
O-Ring (contact. de médias): FKM 70°Sh  
CR, EPDM  
Embase mâle: voir information pour la commande  
Couple de serrage: 15...20 Nm  
Poids: ~ 110 g

## SPECIFICATIONS

### MAIN CHARACTERISTICS

Sensor: Thick film on ceramic (see material)  
Measuring range: 0...0.2 bis 0...40 bar  
Signal output: 4...20 mA  
0...5 VDC  
1...6 VDC  
0...10 VDC  
0.5...4.5 VDC ratiometric

### ACCURACY

TEB @ -25...+85°C: ± 1.0 % FS typ.  
Accuracy @ +25°C: ± 0.3 % FS typ.  
NLH @ +25°C (BSL through 0) ± 0.2 % FS typ.  
TC zero point and span: ± 0.02 % FS/K typ.  
Long term stability  
1 year @ +25°C: ± 0.2 % FS typ.

<sup>1)</sup> Range 0...0.2 and 0...0.4:

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.

### 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: 5 VDC ratiometric  
Rise time: typ. 1 ms/ 10...90%  
nominal pressure  
Switch-on delay: max. 1.5 s

### ENVIRONMENTAL CONDITIONS

Operating temperature: -25 ...+85°C  
Media temperature  
CuZn: -25 ...+85°C  
1.4305/1.4435: -25 ...+125°C  
Protection: <sup>2)</sup> min. IP65  
Humidity: max. 95% relative  
Vibration: 4g (10...2000 Hz)  
Shock: 50g/ 8 ms

### EMC PROTECTION

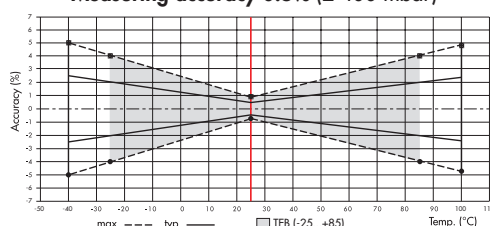
(Output: 4...20mA)

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

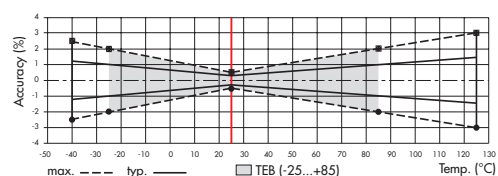
### MECHANICAL DATA

Material  
Sensor: Ceramic, Al<sub>2</sub>O<sub>3</sub> (96%)  
Pressure connection 55/85: CuZn39Pb3  
54/84: 1.4305 (AISI303)  
56/86: 1.4404/1.4435 (AISI316L)  
O-Ring (media contacting): FKM 70°Sh  
CR, EPDM  
Male electrical plug: see ordering information  
Mounting torque: 15...20 Nm  
Weight: ~ 110 g

Measuring accuracy 0.5% (≤ 400 mbar)

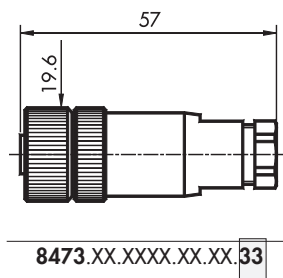
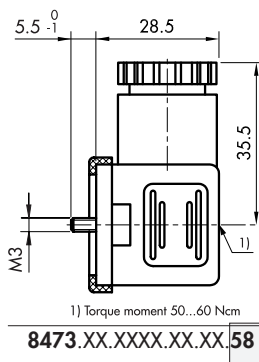
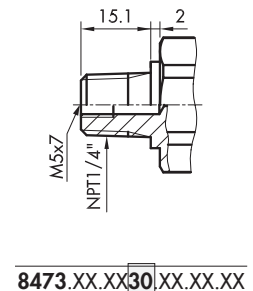
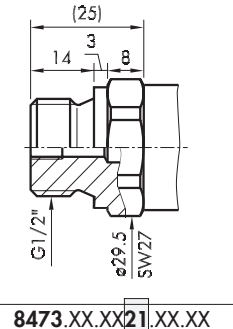
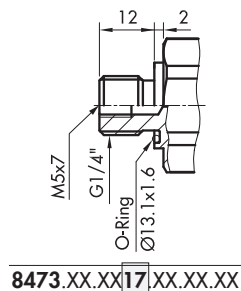
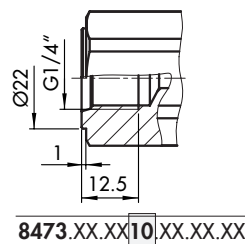
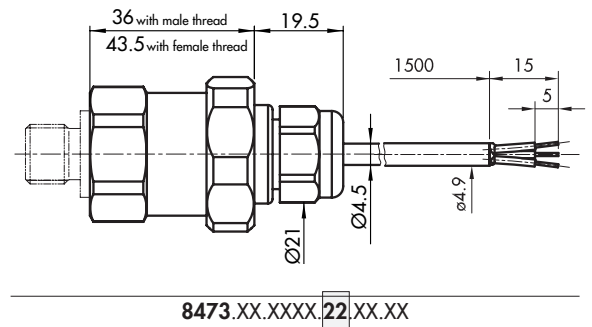
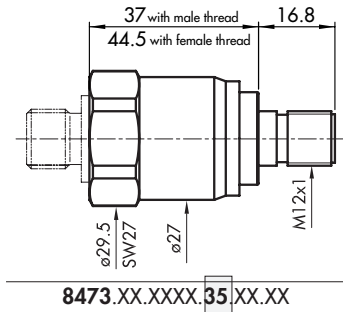
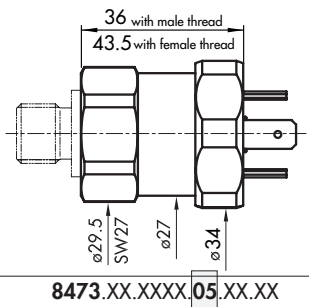


Measuring accuracy 0.3% (≥ 400 mbar)

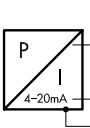


<sup>2)</sup> nur mit vorschriftsmässig montierter Kabeldose gültig/ valable seulement avec fiche femelle montée selon instructions/ provided female connector is mounted according to instructions

### MASSBILDER / COTES D'ENCOMBREMENT / DIMENSIONS



## ELEKTRISCHER ANSCHLUSS / RACCORDEMENT ÉLECTRIQUE / ELECTRICAL CONNECTION

| Schutzart / protection <sup>2)</sup><br><br>Ausführung<br>Exécution<br>Execution                                   | IP65 <sup>2)</sup><br>EN175301-803A<br>(DIN43650-A)<br>05                                                        | IP65<br>Cable<br>22                                                                                      | IP67 <sup>2)</sup><br>M12x1<br>5-pol.<br>35                                                             |
|--------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Ausgangssignal<br>Signal de sortie<br>Output                                                                       |                               |                      |                    |
| <br>8473.XX.XXXX.XX.19          | (Standard)<br>2<br>1<br>      | 92<br>1<br>2<br>      | 4<br>1<br>5<br>      |
| <br>8473.XX.XXXX.XX.14/16/17/23 | (Standard)<br>2<br>3<br>1<br> | 98<br>3<br>1<br>2<br> | 2<br>4<br>3<br>5<br> |

<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