## Sensor Steckverbinder Serie 713 (M12x1) Sensor connectors series 713 (M12x1) <br> Kurzinformation <br> Brief information

## Kabelsteckverbinder

- Schirmbar/nicht schirmbar
- Konfektionierbar
- Gewindeverriegelung M12x1
- Schraubanschluss/Schirm wird $360^{\circ}$ geklemmt
- Schutzart IP 67 1)
- Transparentes Gehäuse für Leiterplatte mit LED
- Kompatibel zu Steckverbindern der Serie 763
- Standardkodierung für Sensoren und Aktoren

Cable Connector
(94)

- Shieldable/not shieldable
- Assembly possible
- Thread locking MI2xI
- Screw connection/shield is clamped $360^{\circ}$
- Degree of protection IP 67"
- Transparent housing for PCB with LED
- Compatible with connectors series 763
- Standard coding for sensors and actors


Aufbau des Steckverbinders:
Construction of the connector:

Winkeldose:
Female angled connector:

## Kabelstecker mit

Käfigzugfederanschluss:
Male cable connector with


Duostecker: Duo connector


Flanschstecker: Male socket:



Flanschdose:
Female socket:

- Metal and plastic housing
- Thread locking M12x1
- Fixing thread M12; PG 9; PG II; PG 13,5; M16x1,5; M2Ox1,5
- Solder, dipsolder termination and wires
- Front fastened and fastened from back side
- Compatible with connectors series 763

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## Sensor Steckverbinder Serie 713 (M12xI) <br> Sensor connectors series 713 (M12xI)

Technische Daten ${ }^{1)}$
Specifications"

| Allgemeine Kennwerte General Characteristics |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Polzahl | Number of contacts | 3 | 4 | 5 | 8 | 12 |
| Verriegelung | Locking system | schrauben M12x1 / screw M12x] |  |  |  |  |
| Anschlussart | Termination | schrauben, İ̈ten, tauchlöten, Litzen / screw, solder, dip solder, wires |  |  |  |  |
| Anschlussquerschnitt in $\mathrm{mm}^{2}$ Kobesteckverbinder | Wire gauge in $\mathrm{mm}^{2}$ Cable connectors | max. 0,75 (schrauben/screw) |  |  | max. 0.5 (schrouben/screw) | $\begin{gathered} \operatorname{max.} 0,25 \\ \text { (loten/solder) } \end{gathered}$ |
| Flanschsteckverbinder | Socket connectors | max. 0,25 (l̈̈ten/solder) |  |  |  |  |
| Anschlussquerschnitt in AWG Kobesteckverbinder | Wire gauge in AWG Cable connectors | max. 20 (schrouben/screw) |  |  |  |  |
| Flanschsteckveribinder | Socket connectors | max. 24 (löten/solder) |  |  |  |  |
| Schutzart Gehäuse | Shell protection | IP 67 |  |  |  |  |
| Mechanische Lebensdaver | Mechanical operation | > 50 Steckzyklen / > 50 mating cycles |  |  |  |  |
| Obere Grenztemperatur | Upper temperature | $+85^{\circ} \mathrm{C}\left(+185{ }^{\circ} \mathrm{F}\right)$ |  |  |  |  |
| Untere Grenztemperatur | Lower temperature | $-40^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right)$ |  |  |  |  |
| Elektrische Kennwerte Electrical Characteristics |  |  |  |  |  |  |
| Bemessungsspannung ${ }^{27}$ | Rated voltage ${ }^{23}$ | 250 V | 250 V | 125 V | 60 V | 30 V |
| Bemessungs-Stoßspannung | Rated impulse voltage | 2500 V | 2500 V | 1500 V | 800 V | 500 V |
| Verschmutzungsgrad | Pollution degree | $3{ }^{3)}$ |  |  |  |  |
| Überspannungskategorie | Overvoltage categorie | \|| |  |  |  |  |
| Isolierstoffgruppe | Material group | III |  |  |  |  |
| Prüfstoßspannung | Test voltage | 2950 V | 2950 V | 1750 V | 910 V | 550 V |
| Bemessungsstrom ( $40{ }^{\circ} \mathrm{C}$ ) | Rated current ( $40^{\circ} \mathrm{O}$ ) | 4 A |  |  | 2 A | 1 A |
| Durchgangswiderstand 1) | Contact resistance) | $\leq 8 \mathrm{~m} \Omega$ (Optaloy), $\leq 3 \mathrm{~m} \Omega$ (Gold) $/ \leq 8 \mathrm{~m} \Omega$ (optalov), $\leq 3 \mathrm{~m} \Omega$ (gold) |  |  |  |  |
| Isolationswiderstand | Insulation resistance | $\geq 10^{10} \Omega$ |  |  |  |  |
| Werkstoffe Materials |  |  |  |  |  |  |
| Kontaktstift | Pin contact | CuIn (Messing / brass) |  |  |  |  |
| Kontaktbuchse | Socket contact | CuZn (Messing / brass) |  |  |  |  |
| Kontaktoberfläche Kabelteil | Contact plating cable part | CuSnZn (Optaloy ungeschirmt/not shielded), Au (geschirmt/shielded) |  |  |  | Au (Gold / gold) |
| Kontaktoberfläche Flanschteil | Contact plating socket part | Au (Gold / gold) |  |  |  |  |
| Steckerkörper | Male insert | PA 66 (UL 94 HB) |  |  |  |  |
| Buchsenkörper | Female insert | PA 66 (UL 94 HB) |  |  |  |  |
| Gehäuse Kabelstecker Kunstsoff | Housing cable connector plastic vess. | PBT (UL 94 V-0), gewinkelt (angled) / PA 66 (UL 94 V0), gerade (straight) |  |  |  |  |
| Gehäuse Kabelstecker Metall | Housing cable connector metal vers. | CuZn vernickelt (ger), Zink-Druckguss vernickelt (gem.) / nickel-plated (strt), zinc diecasting (ang.) |  |  |  |  |
| Flanschgehäuse | Socket | PA66 (UL94HB), CuZn (Messing) vernickelt/(brass) nickel-plated, Zink-Druckguss/zinc diecasting |  |  |  |  |
| Gewindering | Ring nut | PA66(UL94V-0), Zink-Druckguss vernickelt, VA-Stahl/nickel-plated, zinc diecasting, stainless steel |  |  |  |  |

${ }^{11}$ Normen und Prüfbedingungen für diese Angaben siehe Seite TI-16. / " Standards and test parameters for this data see page TI-16.
${ }^{2)}$ Bei Verwendung von LED-Einsätzen $10-30 \mathrm{~V} . /{ }^{2)} 10-30 \mathrm{~V}$ when used LED-inserts.
${ }^{3)}$ Flanschsteckverbinder im Anschlussbereich Verschmutzungsgrad 2. / ${ }^{31}$ Sockets in service area pollution degree 2.

## Sensor Steckverbinder Serie 713 (M12x1) <br> Sensor connectors series 713 (M12xI) <br> Kabelstecker <br> Male cable connectors

| Bezeichnung - Abbildung Description - Figure | Maßzeichnung Drawing | Polzahl Contacts | Kabeldurchlass Cable outlet (mm/inch) | Bestell-Nr. Ordering-No. |
| :---: | :---: | :---: | :---: | :---: |
| Kabelstecker, Kunststoffverriegelung Male cable connector, plastic locking system |  | 4 | $\begin{aligned} & 4-6 \\ & .16 \cdot .24 \end{aligned}$ | 99-0429-43-04 |
|  |  |  | $\begin{aligned} & 6 \cdot 8 \\ & .24-.31 \end{aligned}$ | 99-0429-57-04 |
|  |  | 5 | $\begin{aligned} & 4-6 \\ & .16 \cdot .24 \end{aligned}$ | 99-0437-43-05 |
|  |  |  | $\begin{aligned} & 6 \cdot 8 \\ & .24-.31 \end{aligned}$ | 99-0437-57-05 |
| Kabelstecker, Metallverriegelung Male cable connector, metal locking system |  | 3 | $\begin{aligned} & 4-6 \\ & .16 \cdot .24 \end{aligned}$ | 99-0429-07-04 |
|  |  |  | $\begin{aligned} & 6-8 \\ & .24-.31 \end{aligned}$ | 99-0429-158-04 |
|  |  | 4 | $\begin{aligned} & 4-6 \\ & .16 \cdot .24 \end{aligned}$ | 99-0429-14-04 군 |
|  |  |  | $\begin{aligned} & 6 \cdot 8 \\ & .24-.31 \end{aligned}$ | 99-0429-12-04 군 |
|  |  | 5 | $\begin{aligned} & 4-6 \\ & .16 \cdot .24 \end{aligned}$ | 99-0437-14-05 둔 |
|  |  |  | $\begin{aligned} & 6-8 \\ & .24-.31 \end{aligned}$ | 99-0437-12-05 군 |
|  |  | 8 | $\begin{aligned} & 6-8 \\ & .24-.31 \end{aligned}$ | 99-0487-12-08 |
|  |  | 12 | $\begin{aligned} & 6 \cdot 8 \\ & .24-.31 \\ & \hline \end{aligned}$ | 99-0491-12-12 |
| Kabelstecker, VA-Gewindeverriegelung, Kontaktoberfläche Gold Male cable connector, VA locking system, Contact surface gold |  | 4 | $\begin{aligned} & 4-6 \\ & .16 \cdot .24 \end{aligned}$ | 99-0429-82-04 |
|  |  |  | $\begin{aligned} & 6 \cdot 8 \\ & .24 \cdot .31 \end{aligned}$ | 99-0429-282-04 |
|  |  | 5 | $\begin{aligned} & 4-6 \\ & .16 \cdot .24 \end{aligned}$ | 99-0437-82-05 |
|  |  |  | $\begin{aligned} & 6-8 \\ & .24 \cdot .31 \end{aligned}$ | 99-0437-282-05 |
|  |  | 8 | $\begin{aligned} & 6-8 \\ & .24 \cdot .31 \end{aligned}$ | 99-0487-282-08 |
| Kabelstecker mit Käfigzugfederanschluss Male cable connector with cage clamp connection |  | 5 | $\begin{aligned} & 4-6 \\ & .16 \cdot .24 \end{aligned}$ | 99-0537-14-05 |
|  |  |  | $\begin{aligned} & 6-8 \\ & .24-.31 \end{aligned}$ | 99-0537-12-05 |


[^0]:    ${ }^{1)}$ Erläuterung der Schutzarten siehe Seite $\mathrm{TI}-3-\mathrm{TI}-4 . /{ }^{1)}$ Explanation of protection standards see page Tl-3 - Tl-4.

