

Han 24B connector housing (pin) on Han 24B  
connector housing (socket), single locking lever,  
angled at both ends, PUR 10xd

**MAT90489455**



**Han 24B connector housing (pin) on Han 24B  
connector housing (socket), single locking  
lever, angled at both ends, PUR 10xd**

- For torsion applications
- PUR outer jacket
- Coolant-resistant
- Notch-resistant
- Hydrolysis and microbe-resistant
- Flame retardant
- Halogen-free
- Silicone-free
- UV-resistant
- PVC-free
- Oil-resistant (according to DIN EN 50363-10-2)
- Guarantee up to 4 years

**Product description**

Introducing the Han 24B connector housing, designed for demanding applications with torsion movements. This robust housing features a single locking lever and is angled at both ends for versatile installation. Made from PUR, it offers exceptional resistance to oil, UV rays, and various environmental factors, making it perfect for both indoor and outdoor use. Ideal for robotics, 3D movements, and handling systems, this connector is your reliable choice for heavy-duty performance.

**Connectors**

|             |                                                |
|-------------|------------------------------------------------|
| Connector A | Socket M32 insert 24+PE lateral Cable entry    |
| Connector B | Connector M32 insert 24+PE lateral Cable entry |

**General properties**

|                                                     |                 |
|-----------------------------------------------------|-----------------|
| Number of cores and conductor nominal cross-section | 23G1.0+(2x1.0)C |
| Outer diameter (d) max. mm                          | 19.5 mm         |
| Weight per km                                       | 444 kg/km       |
| Copper index kg/km                                  | 268 kg/km       |

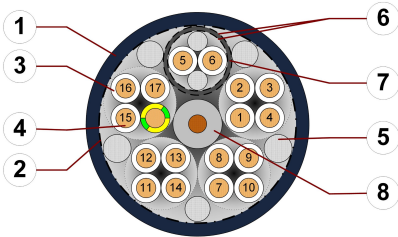


Electricity attributes

|                                                                                  |                   |                                        |
|----------------------------------------------------------------------------------|-------------------|----------------------------------------|
|  | Nominal voltage   | 300/500V (according to DIN VDE 0298-3) |
|                                                                                  | UL Voltage Rating | 300 V                                  |
|  | Test voltage      | 2000V (according to DIN EN 50395)      |

Cable structure

|                                                                                    |                             |                                                                                                                                                    |
|------------------------------------------------------------------------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
|    | Conductor                   | Stranded conductor in an especially bend-resistant version consisting of bare copper wires (according to DIN EN 60228).                            |
|    | Core insulation             | Mechanically high-quality TPE mixture.                                                                                                             |
|    | Conductor colours           | white with black numbers 1-4, 7-24, one wire green-yellow white with black numbers 5-6                                                             |
|                                                                                    | Core group 1 core structure | 23G1.0                                                                                                                                             |
|                                                                                    | Core group 1 colour code    | white with black numerals 1-4, 7-24, one green-yellow core                                                                                         |
|                                                                                    | Core group 2 core structure | (2x1.0)C                                                                                                                                           |
|  | Element shield              | Extremely torsion-resistant, tinned copper shield. Cover approx. 85% optical                                                                       |
|  | Outer jacket                | Low-adhesion, halogen-free, highly abrasion-resistant PUR mixture, adapted to suit the requirements in e-chains® (according to DIN EN 50363-10-2). |
|  | Outer jacket colour         | Steel blue (comparable to RAL 5011)                                                                                                                |



- 1. Outer jacket: pressure extruded PUR mixture
- 2. Overall banding: plastic fleece over plastic band
- 3. Core insulation: mechanically high-quality TPE mixture
- 4. Conductor: fine-wire strand in especially bending-stable version consisting of bare copper wires
- 5. Filler: plastic yarns
- 6. Element banding: plastic fleece
- 7. Element shield: extremely flexible tinned copper wire
- 8. Strain relief: high tensile strength and torsion-resistant core element



## Properties and approvals

|                                                                                   |                        |                                                                                                                                                           |
|-----------------------------------------------------------------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | <b>UV resistance</b>   | High                                                                                                                                                      |
|   | <b>Oil resistance</b>  | Oil-resistant (according to DIN EN 50363-10-2), Class 3                                                                                                   |
|   | <b>Flame-retardant</b> | According to IEC 60332-1-2, Cable Flame, VW-1, FT1, FT2/Horizontal Flame                                                                                  |
|   | <b>Silicone-free</b>   | Free from silicone which can affect paint adhesion (according to PV 3.10.7 – status 1992)                                                                 |
|   | <b>Halogen-free</b>    | According to DIN EN 60754                                                                                                                                 |
|   | <b>UL verified</b>     | Certificate no. V293650: "The igus 4-year chainflex cable guarantee and service life calculator based on 2 billion test cycles per year"                  |
|   | <b>NFPA</b>            | According to NFPA 79-2018, chapter 12.9                                                                                                                   |
|   | <b>Lead-free</b>       | According to 2011/65/EU (RoHS-II/RoHS-III)                                                                                                                |
|   | <b>Cleanroom</b>       | According to ISO Class 1. The outer jacket material of this series complies with CF77.UL.05.12.D - tested by IPA according to standard DIN EN ISO 14644-1 |
|  | <b>CE</b>              | According to 2014/35/EU                                                                                                                                   |



## Dynamic properties

|                                                                                    |                                     |                                                |
|------------------------------------------------------------------------------------|-------------------------------------|------------------------------------------------|
|    | Min. bend radius, e-chain (factor)  | 10 x d                                         |
|    | Min. bend radius, e-chain           | 195 mm                                         |
|    | Min. bend radius, flexible (factor) | 8 x d                                          |
|    | Min. bend radius, fixed (factor)    | 5 x d                                          |
|    | Temperature e-chain®                | -25°C up to +80°C                              |
|    | Temperature, flexible               | -40°C to +80°C (according to DIN EN 60811-504) |
|    | Temperature, fixed                  | -50°C to +80°C (according to DIN EN 50305)     |
|    | v max. unsupported (speed)          | 10 m/s                                         |
|   | v max. gliding (speed)              | 5 m/s                                          |
|  | travel length                       | Class 8                                        |
|  | torsion                             | Torsion ±180°, with 1 m cable length, Class 3  |



chainflex®Lifetime

Guaranteed service life for this series according to guarantee conditions

Further information: [chainflex® guarantee](#)

| Cycles*      |              |               | 5 million    | 7.5 million         | 10 million          |
|--------------|--------------|---------------|--------------|---------------------|---------------------|
| Temperature, | v max. [°/s] | a max. [°/s²] | Torsion max. | R min. [Factor x d] | R min. [Factor x d] |
| from/to [°C] | twisted      | twisted       | [°/m]        | [°/m]               | [°/m]               |
| -25 / -15    |              |               | ±150         | ±90                 | ±30                 |
| -15 / +70    | 180          | 60            | ±180         | ±120                | ±60                 |
| +70 / +80    |              |               | ±150         | ±90                 | ±30                 |

\* Higher number of cycles possible - please ask for your individual calculation.

Certificates and standards

