

Han 16B connector housing (pin) on Han 16B
connector housing (socket), double locking lever,
straight at both ends, TPE, flame-retardant

MAT90489430



**Han 16B connector housing (pin) on Han 16B
connector housing (socket), double locking
lever, straight at both ends, TPE, flame-
retardant**

- For extremely heavy duty applications
- TPE outer jacket
- Coolant-resistant
- Low-temperature-flexible
- Hydrolysis and microbe-resistant
- Flame retardant
- Silicone-free
- UV-resistant
- PVC-free
- Oil-resistant (following DIN EN 60811-404), resistant to bio oils (following VDMA 24568 with Plantocut 8 S-MB tested by DEA)
- CFRIP®
- Guarantee up to 4 years

Product description

Introducing the Han 16B connector housing, designed for the toughest jobs. This robust connector features a TPE outer jacket that is flame-retardant, oil-resistant, and UV-resistant, making it ideal for both indoor and outdoor applications. With double locking levers and straight ends, it ensures a secure connection even in demanding environments. Perfect for high-bay warehouses, machining units, and outdoor cranes, this connector is built to withstand extreme conditions while providing reliable performance.

Connectors

Connector A

Socket M32 insert 16+PE straight Cable entry

Connector B

Connector M32 insert 16+PE straight Cable entry



General properties

Number of cores and conductor nominal cross-section	18G1.5
Outer diameter (d) max. mm	16 mm
Weight per km	449 kg/km
Copper index kg/km	267 kg/km

Electricity attributes

 Nominal voltage	300/500V (according to DIN VDE 0298-3)
UL Voltage Rating	1000 V
 Test voltage	2000V (according to DIN EN 50395)
Maximum conductor resistance at 20°C [μm]	13.3000



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.



Core stranding

Cores wound in bundles are then wound around a high tensile strength centre element, all with optimised short pitch lengths and directions. Especially low-torsion structure.



Conductor colours

cores black with white numbers, one core green-yellow.

Core group 1 core structure

18G1.5



Outer jacket

Low-adhesion, extremely abrasion-resistant and highly flexible TPE mixture, adapted to suit the requirements in e-chains®.



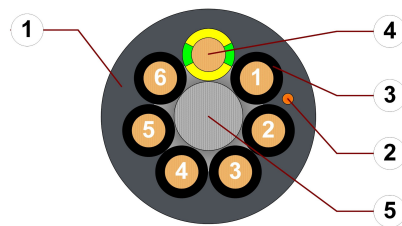
Outer jacket colour

Slate grey (comparable to RAL 7015)



CFRIP®

Strip cables faster: a tear strip is moulded into the outer jacket



1. Outer jacket: pressure extruded, gusset-filling, flame-retardant TPE mixture
2. CFRIP: tear strip for faster stripping
3. Core insulation: mechanically high-quality TPE mixture
4. Conductor: stranded wire in especially flexible version consisting of bare copper wires
5. Strain relief: high tensile strength centre element
6. 12 cores or more: bundles with optimised pitch length and direction



Properties and approvals

	UV resistance	High
	Oil resistance	Oil-resistant (according to DIN EN 60811-404), bio-oil-resistant (according to VDMA 24568 with Plantocut 8 S-MB tested by DEA), Class 4
	Flame-retardant	According to IEC 60332-1-2, Cable Flame, VW-1, FT1, FT2/Horizontal Flame
	Silicone-free	Free from silicone which can affect paint adhesion (according to PV 3.10.7 – status 1992)
	UL verified	Certificate no. V293650: "The igus 4-year chainflex cable guarantee and service life calculator based on 2 billion test cycles per year"
	UL/CSA AWM	Style 11886 and 22021, 1000 V, 90 °C
	NFPA	According to NFPA 79-2018, chapter 12.9
	DNV	Type approval certificate TAE00003X2
	Lead-free	According to 2011/65/EU (RoHS-II/RoHS-III)
	Cleanroom	According to ISO Class 1. The outer jacket material of this series complies with CF34.UL.25.04.D - tested by IPA according to standard DIN EN ISO 14644-1
	CE	According to 2014/35/EU



Dynamic properties

	Min. bend radius, e-chain (factor)	5 x d
	Min. bend radius, e-chain	80 mm
	Min. bend radius, flexible (factor)	4 x d
	Min. bend radius, fixed (factor)	3 x d
	Temperature e-chain®	-35°C up to +100°C
	Temperature, flexible	-45°C to +100°C (according to DIN EN 60811-504)
	Temperature, fixed	-55°C to +100°C (according to DIN EN 50305)
	v max. unsupported (speed)	10 m/s
	v max. gliding (speed)	6 m/s
	a max. (acceleration)	100 m/s ²
	travel length	Class 6
	torsion	Torsion ±90°, with 1m cable length, Class 2



chainflex®Lifetime

Guaranteed service life for this series according to guarantee conditions

Further information: [chainflex® guarantee](#)

Double strokes*	5 million	7.5 million	10 million
Temperature,	R min.	R min.	R min.
from/to [°C]	[Factor x d]	[Factor x d]	[Factor x d]
-35 / -25	6.8	7.5	8.5
-25 / +90	5	6	7
+90 / +100	6.8	7.5	8.5

* Higher number of double strokes possible - use the service life calculation function on this page.

Certificates and standards

