36

igus 36-month chainflex cable guarantee and service life calculator based on 2 billion test cycles per year

#

New

Data elements | chainflex® CFCLEAN3







- For heaviest duty applications in e-skin® flat
- PTFE foil wrap
- Shielded
- Highly abrasion-resistant
- PVC-free

Now with **UL** approval in combination with e-skin® flat

Dynamic information

Bend radius

Temperature

e-skin® flat linear minimum 70mm

(further radii in preparation, please see data sheet)

fixed

minimum 3 x d

e-skin® linear

-10°C up to +80°C

fixed

-25°C up to +90°C (following DIN EN 50305)

v max.

unsupported

a max.

40m/s²

Travel distance

Short, very fast applications with small radii and restricted installation space in

an e-skin® flat

Cable structure



Conductor

Very finely stranded special conductors with especially soft and bending resistant design, made of bare copper wires.



Core insulation

Mechanically high-quality FEP mixture.



Core structure

Cores twisted in pairs with a short pitch length, core pairs then wound with short pitch lengths.



Core identification

► Product range table



Overall shield



Extremely bending-resistant braiding made of tinned copper wires. Coverage linear approx. 70%, optical approx. 90%

Low-adhesion, extremely abrasion-resistant and highly flexible PTFE wrap,

adapted to suit the requirements in e-skin® flat. Colour: White

Electrical information



300/300V Nominal voltage

300V (following UL)

36-month guarantee ... more than 1,350 cable types from stock ... no cutting charges

Testing voltage

2,000V

Properties and approvals

UL verified

Silicone-free

Free from silicone which can affect paint adhesion (following PV 3.10.7 – status

Certificate No. B129699: "igus 36-month chainflex cable guarantee and service

life calculator based on 2 billion test cycles per year" See data sheet for details ▶ www.igus.eu/CFCLEAN3

FLI UL AWM REACH REACH In accordance with regulation (EC) No. 1907/2006 (REACH)

RoHS Lead-free Following 2011/65/EC (RoHS-II/RoHS-III)

Cleanroom Air Purity Class 1, material/stranded structure tested by IPA according to

ISO 14644-14, test report IG 2107-1242

CE_{CE} Following 2014/35/EU

UK UKCA In accordance with the valid regulations of the United Kingdom (as at 08/2021)

Typical application areas

- For heaviest duty applications and especially small radii in cleanroom with e-skin[®] flat
- Especially for short, very fast applications with small radii and restricted installation space
- Indoor applications with e-skin® flat
- Semi-conductor/OLED manufacturing, medical cleanroom



chainflex® CFCLEAN are not cables in the sense of the normal standards for cables. Due to the absence of the outer jacket in CFCLEAN, which provides mechanical protection for cables, the use of chainflex® CFCLEAN is only permitted inside e-skin® flat.

Part No.	Number of cores and conductor nominal cross section [mm²]	Outer diameter (d) max. [mm]	Copper index [kg/km]	Weight [kg/km]
CFCLEAN3.01.05.02	(5x(2x0.14))C	5.0	33	43
CFCLEAN3.01.06.02	(6x(2x0.14))C	5.5	36	50
CFCLEAN3.01.08.02	(8x(2x0.14))C	6.0	47	61
CFCLEAN3.02.03.02	(3x(2x0.25))C	5.0	34	44
CFCLEAN3.02.04.02	(4x(2x0.25))C	5.5	42	58
CFCLEAN3.02.05.02	(5x(2x0.25))C	5.5	50	63
CFCLEAN3.02.06.02	(6x(2x0.25))C	6.0	52	70

Note: The given outer diameters are maximum values and may tend toward lower tolerance limits. G = with green-yellow earth core x = without earth core

Part No.	Core identification	
CFCLEAN3.01.05.02	brown/white, green/white, yellow/white, grey/white, pink/white	
CFCLEAN3.01.06.02	brown/white, green/white, yellow/white, grey/white, pink/white, blue/white	
CFCLEAN3.01.08.02	brown/white, green/white, yellow/white, grey/white, pink/white, blue/white, red/white black/white	
CFCLEAN3.02.03.02	brown/white, green/white, yellow/white	
CFCLEAN3.02.04.02	brown/white, green/white, yellow/white, grey/white	
CFCLEAN3.02.05.02	brown/white, green/white, yellow/white, grey/white, pink/white	
CFCLEAN3.02.06.02	brown/white, green/white, yellow/white, grey/white, pink/white, blue/white	
•		



