

Ethernet Bus cable | PUR | chainflex® CF14US

36

10,000,000

Cycles guaranteed

12.5 x d

Bend radius E-Chain®

164 ft

Travel distance E-Chain®

- For high mechanical load applications
 - PUR outer jacket
 - Shielded
 - Oil-resistant
 - UV-resistant
- Flame-retardant
 - Abrasion and tear resistant
 - Hydrolosis/microbe-resistant

Dynamic Information

	Bend radius	E-Chain® linear	min. 12.5 x d
		flexible	min. 10 x d
		fixed	min. 7.5 x d
	Temperature	E-Chain® linear	-4 °F to +158 °F (-20 °C to +70 °C)
		flexible	-40 °F to +158 °F (-40 °C to +70 °C)
		fixed	-50 °F to +158 °F (-45 °C to +70 °C)
	a max.		328.1 ft/s² (100 m/s²)
	Travel distance		Especially for unsupported and gliding travel up to 164 ft (50m)

Cable structure

	Conductors	Conductor consisting of bare copper wires (according to EN 60228).
	Conductor insulation	Foam polyethylene
	Conductor construction	4 pairs twisted together
	Color code	See Table
	Inner jacket	TPE
	Overall shield	Tinned copper braid 90 % optical coverage
	Outer jacket	Low adhesion PUR blend adapted to the requirements of the Energy Chain® Color: See P/N Tables

Electrical Information

	Nominal voltage	300 V
	Test voltage	2500 V

Properties and approvals

	UV resistance	CF14US-02-04-02: Medium CF14US-02-04-02-UV: High
	Oil resistance	High
	Flame resistance	According to IEC 60332-1-2, CEI 20-35, FT1
	UL/CSA	UL AWM: Style 20233, 80 °C, 300V CSA AWM: I/II A/B 80 °C, 300V, FT1

Basic requirements	low	1	2	3	4	5	6	7	highest
Travel distance	unsupported	1	2	3	4	5	6	1,312 ft +	
Oil resistance	none	1	2	3	4	highest			
Torsion	none	1	2	3	4	±360°			

Class 6.3.4.1

NFPA 79

Complies to NFPA 79 2018 chapter 12.9

Lead-free

Complies to 2011/65/EU (RoHS-II)

CE

2006/95/EG

Guaranteed lifetime according to guarantee conditions (Page 22-23)

Cycles*	5 million	7.5 million	10 million
Temperature, from/to [°F]	R min. [factor x d]	R min. [factor x d]	R min. [factor x d]
-4/-13	12.5	13.5	14.5
-14/+140	10	11	12
+140/+158	12.5	13.5	14.5

* Higher number of cycles? Online lifetime calculation ► www.chainflex.com/chainflexlife

Typical application areas

- CF14US-02-04-02-UV is good for direct sunlight
- For extremely heavy duty applications
- Suitable for indoor/outdoor applications without direct sunlight
- Especially for unsupported and gliding travel up to 164 ft (50m)
- For application lengths > 164 ft (50m) use igus® P/N CFBUS-045
- Storage and retrieval units for high-bay warehouses, machine tools, quick handling, cleanroom, semiconductor insertion, indoor cranes, low temperature applications

Part No.	AWG	Number of Conductors and rated cross section	Outer diameter max.	Copper index	Weight	Jacket color
		[mm²]	[in.] [mm]	[lbs/mft] [kg/km]	[lbs/mft] [kg/km]	
CF14US-02-04-02	26	4 PR x 0.14	0.30 7.6	7.4 11	59.8 89	Violet
CF14US-02-04-02-UV	26	4 PR x 0.14	0.30 7.6	7.4 11	59.8 89	Black

Note: The given outer diameters are maximum values.
PR = Twisted Pair

Part No.	Characteristic Impedance [Ω]	Core group	Color code
CF14US-02-04-02	100	4 PR x 0.14	Blue & White/Blue, Orange & White/Orange,
CF14US-02-04-02-UV	100	4 PR x 0.14	Green & White/Green, Brown & White/Brown

Order example: **CF14US-02-04-02** – To your desired length
CF14US chainflex® series **-02** Code nominal cross section **-04** Number of pairs
-02 Identification pairs

Online order ► www.chainflex.com/CF14US

Delivery time 24hr or today.
Delivery time means time until shipping of goods.

Guarantee

igus chainflex

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up to 36 months guarantee

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

