CF820.UL.H

CHAINFLEX

PVC Hybrid Servo cable | CF220-UL-H

- For medium mechanical load requirements
- PVC outer jacket
- Shielded
- Oil-resistant
- Flame-retardant

Temperature

Dynamic Information

Bend radius	E-Chain®	min. 10 x c
	flexible	min. 8 x d
_	fixed	min. 5 x d

E-Chain®	+41 °F to +158 °F (+5 °C to +70 °C)
flexible	+23 °F to +158 °F (-5 °C to +70 °C)
fixed	+5 °F to +158 °F (-15 °C to +70 °C)

v max.	unsupported	32.81 ft/s (10 m/s
v max.	gliding	6.56 ft/s (2 m/s)

a IIIax.	104.1 105	(30 11/5)

_						
Travel distance	Unsupported	travel distance	es and for	gliding	applications u	up to

32.81 ft (10 m), Class 2

Cable structure

Signal Pair shield

Overall cable

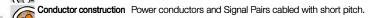
Overall shield

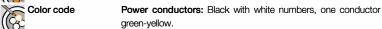
Outer jacket

onductors	Conductor	consisting	of	bare	copper	wires	(according	to	ΕN



Conductor insulation Mechanically high-quality, especially low-capacitance TPE mixture.





green-yellow. 1. U/L1/C/L+ 2. V/L2

3. W/L3/D/L-

Control pair: Black with white numbers.

1. Control Pair Printed 5 and 6

Bus element: white, blue

Aluminium/Polyester tape & Tinned Copper Braided shield.

80% optical coverage Aluminium/Polyester tape

Bending-resistant tinned copper braid.

80 % optical coverage

Low-adhesion, oil-resistant mixture on the basis of PVC, adapted to suit the requirements in E-Chains® (following DIN VDE 0281 Part

13). Color: Orange (similar to RAL 2003) Color: Orange (similar to RAL 2003)

Electrical Information

Class 4.2.2.1

★uv UV resistance

Nominal voltage 1000 V



Test voltage 4000 V (following DIN EN 50396)

Medium

Properties and approvals

777	
Oil resistance	Oil-resistant (following DIN EN 50363-4-1), Class 2
oil 6	
Flame resistance	According to IEC 60332-1-2, CEI 20-35, FT1

Silicone-free	Free from silicone which can affect paint adhesion (following PV
	3.10.7 – status 1992)

Complies to NFPA 79-2015 chapter 12.9

UL/CSA	
Rus ODCSA	

FILE FAC	Certified according to no. TC BUIC-DE ME77 B 01255

GP	CTP	Certified according to no. C-DE.PB49.B.00420	0

Following CEI 20-35

RoHS-4	Lead-free	Following 2011/65/EC (RoHS-II)

Clean Cleanroom	According to ISO Class 2. Outer jacket material complies with								
Room	CE5-10-07 tested by IPA according to standard 1/6/1/-1								

Following 2014/35/EC

Guaranteed lifetime according to guarantee conditions (Page 22-25)

Cycles					5 million	7.5 million	10 million
Temperature,	v max.	[ft/s]	a max.	Travel distance	R min.	R min.	R min.
from/to [°F]	unsupported	gliding	[ft/s ²]	[ft]	[factor x d]	[factor x d]	[factor x d]
+41 / +59					12.5	13.5	14.5
+59 / +140	32.81	6.56	164.05	≤ 32.81	10	11	12
+140/+158					12.5	13.5	14.5

^{*} Higher number of cycles possible - please ask for your individual calculation.

Typical application areas

- For medium mechanical load requirements
- Light oil influence
- Preferably indoor applications, can be used in outdoor applications with temperatures > 23 °F
- Unsupported travel distances and for gliding applications up to 32.81 ft (10 m)
- Wood/stone processing, Packaging industry, supply systems, Handling, adjusting equipment

















PVC Hybrid Servo cable | CF220-UL-H

IGUS" CHAINFLEX® CF220.UL.H

Image exemplary.

	image exemplary.											
	Part No.	AWG	Number of Conductors and rated cross section [mm²]	dian	uter neter ax.	Copper	rindex	Weight	Part No.		Hybrid technology	Manufacturer
				in.	mm	lbs/mft	kg/km l	bs/mft kg/kn				
	CF220-UL-H100-07-04	18	4 G 0.75						CF220-UI	L-H100-07-04	Sick "Hiperface DSL."	see selection table on page 279
		22	1 STP x 0.34	0.47	12.0	78.6	117	148.5 221				, 3
		22	1 STP x 22AWG									
	CF220-UL-H101-10-04	17	4 G 1.0						CF220-UI	L-H101-10-04	Sick "Hiperface DSL"	see selection table on page 279
		18	1 STP x 0.75	0.49	12.5	93.4	139	172.7 257				1.3
		22	1 STP x 22AWG									
	CF220-UL-H101-15-04	16	4 G 1.5						CF220-UI	L-H101-15-04	Sick "Hiperface DSL"	see selection table on page 279
		18	1 STP x 0.75	0.53	13.5	106.8	159	197.6 294	0. 220 0.		Siert Imperiade Bez	see seiseiten table en page 27 e
		22	1 STP x 22AWG									
	CF220-UL-H102-25-04	14	4 G 2.5						CF220-LII	L-H102-25-04	Sick "Hiperface DSL"	see selection table on page 279
		17	1 STP x 1.0	0.59	15.0	145.8	217	243.3 362	0. 220 0.		Sick Taponado Boz	see seiseiten table en page 27 e
		22	1 STP x 22AWG									
New	CF220-UL-H200-25-07 1)	14	7 G 2.5						CF220-LII	L-H200-25-07	SEW Cable type A/2.5	SEW
		18	1 STP x 0.75	0.79	20.0	207.0	308	360.8 537	0. 220 0.		SEW Subistiffer (E.S.	52
New	CF220-UL-H501-15-04 1)	16	4 G 1.5						CF220-UI	L-H501-15-04	Heidenhain	B&R
		18	1 STP x 0.75						0. 220 0.		1.5145.11.1411.1	26.1
		26	(2 PR x 0.14 +	0.59	15.0	129.7	193	195.5 291				
		24	1 PR x 0.25) SHLD									
New	CF220-UL-H502-40-04 1)	12	4 G 4.0						CF220-UI	L-H502-40-04	Heidenhain	B&R
		17	1 STP x 1.0						0. 220 0.		1.5145.11.1411.1	26.1
		26	(2 PR x 0.14 +	0.67	17.0	211./	315	285.6 425				
		24	1 PR x 0.25) SHLD									
New	CF220-UL-H601-25-05 1) 16)	14	5 G 2.5						CF220-III	L-H601-25-05	isH Servo	ELAU/Schneider Electric
		24	24 AWG QUAD SHLD	0.57	14.5	113.6	169	205.6 306	31 ZZ0-01	<u></u>	13.1.33.13	LE 10, Solitional Libertio
		24	1 STP x 0,25 SHLD									



¹⁾ Delivery time upon request ¹⁶⁾ Colour outer jacket: Yellow-green (RAL 6018)

Note: The mentioned outer diameters are maximum values.

G = with green-yellow earth conductor **x** = without earth conductor

STP = Individually shielded Twisted Pair SC = Individually shielded Conductor

PR = Twisted Pair SHLD = Shielded Precable















