

In the chainflex® series **CF220.UL.H** and **CF280.UL.H**, you will see system cables for intelligent drive concepts of renowned system manufacturers.

To save installation space in the e-chainsystem® some manufacturers combine the servo cable for power transmission with the measuring system cable for position data transmission to make a so-called hybrid cable. The feedback of the position data to the servo controller is done frequently by various digital bus technologies.

When connecting these two cables into a hybrid cable, it is necessary to guarantee the necessary data transmission properties and the EMC behavior of the cable for many million cycles.

Due to the proximity to the power cores often operated with interference-intensive square-wave signals, in the igus® chainflex® servo hybrid cables, mechanically optimised shield concepts with a very high optical cover are used.

A secure transmission of bus signals at maximum cable length at maximum speed makes special demands on the used insulating materials of the bus or data cores. In the 2,750m² large igus® laboratory, the electrical parameters such as capacitance, impedance, attenuation and crosstalk are measured over the entire test period of several million double strokes and monitored for compliance with specifications.

igus® chainflex® servo hybrid cables are available in cost-effective PVC and oil-resistant, halogen-free PUR. As with all chainflex® cables, igus® also offers a guarantee of 36 months or 10 million double strokes for the servo hybrid cables and 5 million for chainflex® M.

In the table below you will find an overview of all currently available hybrid cables grouped by manufacturers. The listed companies are drive systems manufacturers or technology providers whose rotation sensors are used in the most varied systems.



Two become one: Hybrid Servo cables combine Servo and Measuring system cables.

Selection table Hybrid Servo cables

Manufacturer	Hybrid technology	CF220.UL.H	CF280.UL.H
		PVC 10 x d UL page 256	PUR 10 x d oil-resistant page 270
ABB	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
AMK	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
B&R	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
B&R	Heidenhain	CF220.UL.H50x	CF280.UL.H50x
Baumüller	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
BCB	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
Beckhoff	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
BMP	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
Bosch-Rexroth	IndraDrive	-	CF280.UL.H40x
CEDS	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
ELAU/Schneider Electric	isH Servo	CF220.UL.H60x	CF280.UL.H60x
Fertig	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
Fine	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
Han's	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
Harmonic Drive AG	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
Heidrive	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
Infranor	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
IRT	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
Jetter	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
KEBA	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
Kinavo	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
Kollmorgen	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
Lafert	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
LTi DRIVES	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
Mavilor	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
Maxsine	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
metronix	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
PowerMotor	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
NUM	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
Parker	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
ROBOX	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
Selema	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
SEW	SEW Cable type A, B, C, D, E	CF220.UL.H20x	CF280.UL.H20x
Siboni	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
Sigmatek	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
STEP	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
TG-Drives	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
WEG	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x
Witthur Drive	Sick „Hiperface DSL“	CF220.UL.H10x	CF280.UL.H10x