

CF-INI



Chainflex® sensor/actuator cables with 5xd for Energy Chains® M12 connector, single end cordset

Plug-type connector
Handle base
Union nut/screw
Contact base
Contacts
Seal

Number of poles
Ampacity
Rated voltage of a winding

Number of poles
Ampacity
Rated voltage of a winding

Insulation resistance
Contact resistance

Ambient temperature of
plug-type connector
Protection class
Mechanical service life

Coupling, M12 x 1
Plastic, PP, black
Metal, CuZn, nickel-plated
Plastic, PP, black
Metal, CuZn, gold-plated
Plastic, FPM (Viton)

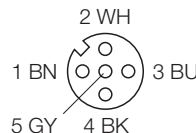
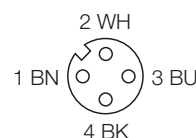
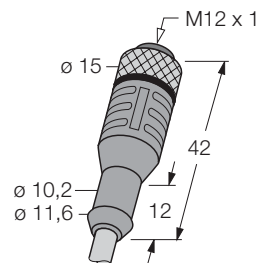
4-pole
4 A
max. 250 V

5-pole (4-pole + PE)
4 A
max. 60 V

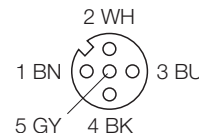
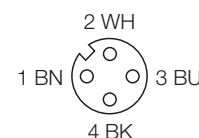
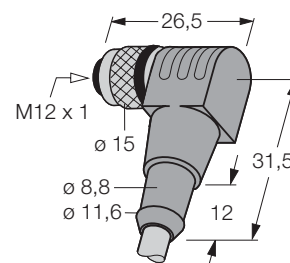
≥10⁹ Ohm
≥5 m Ohm

-40°F to +221°F
(-40 °C to +105 °C)
IP69K, in screwed state
max. 100 insertion cycles

BG



BW



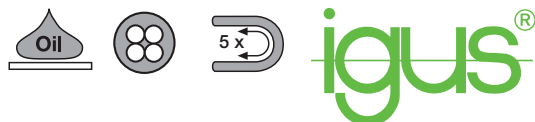
CF9-03-04-INI* (4 x 0.34) Type	Part No.	Number Poles	Cable length		Connector Type
CF-INI-P4-M12-BG-3	MAT9043700	4	9.84	(3.0)	BG
CF-INI-P4-M12-BG-5	MAT9043701	4	16.41	(5.0)	BG
CF-INI-P4-M12-BG-7	MAT9043702	4	22.97	(7.0)	BG
CF-INI-P4-M12-BG-10	MAT9043703	4	32.81	(10.0)	BG
CF-INI-P4-M12-BG-15	MAT9049426	4	49.22	(15.0)	BG
CF9-03-05-INI* (5 x 0.34)					
CF-INI-P5-M12-BG-3	MAT9043737	5	9.84	(3.0)	BG
CF-INI-P5-M12-BG-5	MAT9043738	5	16.41	(5.0)	BG
CF-INI-P5-M12-BG-7	MAT9043739	5	22.97	(7.0)	BG
CF-INI-P5-M12-BG-10	MAT9043740	5	32.81	(10.0)	BG
CF-INI-P5-M12-BG-15	MAT90410077	5	49.22	(15.0)	BG



CF9-03-04-INI* (4 x 0.34) Type	Part No.	Number Poles	Cable length		Connector Type
CF-INI-P4-M12-BW-3	MAT9043704	4	9.84	(3.0)	BW
CF-INI-P4-M12-BW-5	MAT9043705	4	16.41	(5.0)	BW
CF-INI-P4-M12-BW-7	MAT9043706	4	22.97	(7.0)	BW
CF-INI-P4-M12-BW-10	MAT9043707	4	32.81	(10.0)	BW
CF-INI-P4-M12-BW-15	MAT9049430	4	49.22	(15.0)	BW
CF9-03-05-INI* (5 x 0.34)					
CF-INI-P5-M12-BW-3	MAT9043742	5	9.84	(3.0)	BW
CF-INI-P5-M12-BW-5	MAT9043743	5	16.41	(5.0)	BW
CF-INI-P5-M12-BW-7	MAT9043744	5	22.97	(7.0)	BW
CF-INI-P5-M12-BW-10	MAT9043745	5	32.81	(10.0)	BW
CF-INI-P5-M12-BW-15	MAT90410078	5	49.22	(15.0)	BW

*Refer to the CF9 page in the Control Cable section for more cable information

CF-INI



CF-INI
CF9



M12 Socket

M12 connector, single end cordset, LED

Plug-type connector
Handle base
Union nut/screw
Contact base
Contacts
Seal

Coupling, M12 x 1
Plastic, TPU, transparent
Metal, CuZn, nickel-plated
Plastic, PA6GF, transparent
Metal, CuZn, gold-plated
Plastic, FPM (Viton)

Number of poles
Ampacity
Rated voltage of a winding

4-pole
4 A
10...30 V

Insulation resistance
Contact resistance

$\geq 10^9$ Ohm
 ≥ 5 m Ohm

Operating voltage display
Switching state display
Switching function

LED green
LED yellow/yellow
pnp

Ambient temperature of
plug-type connector

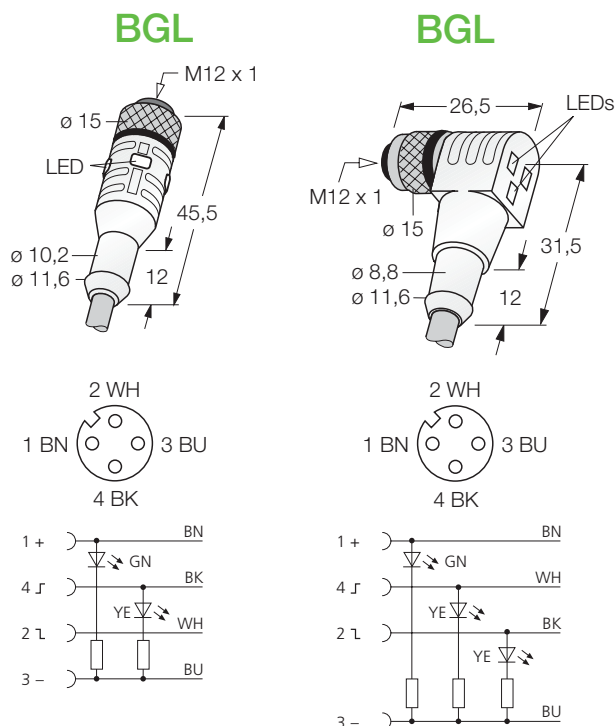
-40°F to +221°F
(-40°C to +105 °C)

Protection class

IP66, in screwed state

Mechanical service life

max. 100 Steckzyklen



CF9-03-04-INI* (4 x 0.34) Type	Part No.	Number Poles	Cable length		Connector Type
			ft.	(m)	
CF-INI-P4-M12-BGL2-3	MAT9043708	4	9.84	(3.0)	BGL
CF-INI-P4-M12-BGL2-5	MAT9043709	4	16.41	(5.0)	BGL
CF-INI-P4-M12-BGL2-7	MAT9043710	4	22.97	(7.0)	BGL
CF-INI-P4-M12-BGL2-10	MAT9043711	4	32.81	(10.0)	BGL
CF-INI-P4-M12-BGL2-15	MAT90410087	4	49.22	(15.0)	BGL



CF9-03-04-INI* (4 x 0.34) Type	Part No.	Number Poles	Cable length		Connector Type
			ft.	(m)	
CF-INI-P4-M12-BWL3-3	MAT9043712	4	9.84	(3.0)	BWL
CF-INI-P4-M12-BWL3-5	MAT9043713	4	16.41	(5.0)	BWL
CF-INI-P4-M12-BWL3-7	MAT9043714	4	22.97	(7.0)	BWL
CF-INI-P4-M12-BWL3-10	MAT9043715	4	32.81	(10.0)	BWL
CF-INI-P4-M12-BWL3-15	MAT90410088	4	49.22	(15.0)	BWL

*Refer to the CF9 page in the Control Cable section for more cable information

PDF: www.igus.com/pdf/chainflex.asp
Specs/CAD/RfQ: www.igus.com/chainflex.asp
RoHS info: www.igus.com/RoHS.asp

CF-INI

Connection cable M12 x 1, connector on each end

Plug-type connector
 Handle base
 Union nut/screw
 Contact base
 Contacts
 Seal

Coupling, M12 x 1
 Plastic, PP, black
 Metal, CuZn, nickel-plated
 Plastic, PP, black
 Metal, CuZn, gold-plated
 Plastic, FPM (Viton)

Plug-type connector
 Handle base
 Union nut/screw
 Contact base
 Contacts

Connector, M12 x 1
 Plastic, PP, black
 Metal, CuZn, nickel-plated
 Plastic, TPU, black
 Metal, CuZn, gold-plated

Rated voltage of a winding
 4-pole: max. 250 V
 5-pole (4-pole+PE): max. 60 V

Ampacity
 Insulation resistance
 Contact resistance

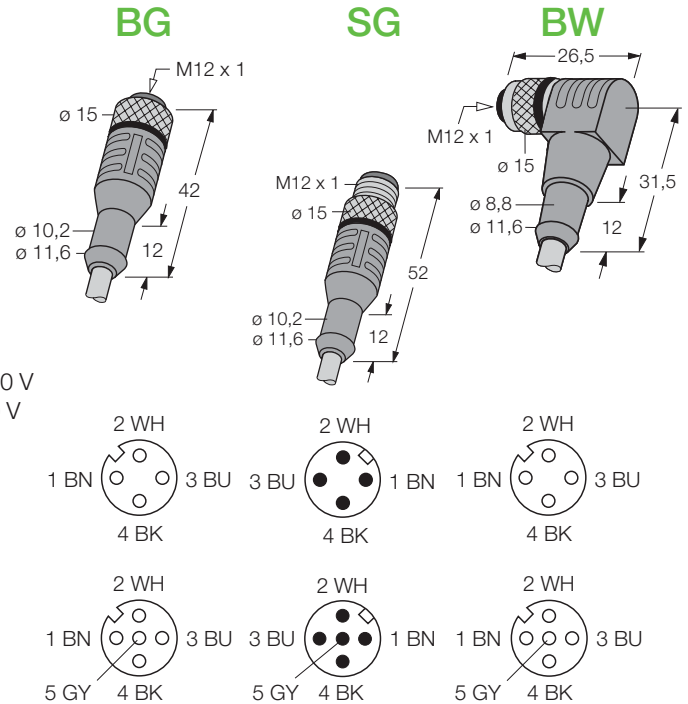
4 A
 $\geq 10^9$ Ohm
 ≥ 5 m Ohm

Ambient temperature of
 plug-type connector

-40°F to +221°F
 (-40°C to +105 °C)

Protection class
 Mechanical service life

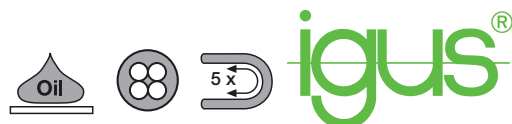
IP69K, in screwed state
 max. 100 insertion cycles



CF9-03-04-INI* (4 x 0.34) Type	Part No.	Number Poles	Cable length ft. (m)	Connector Type	
CF-INI-P4-M12-BG / M12-SG-2	MAT90410312	4	6.56 (2.0)	BG	SG
CF-INI-P4-M12-BG / M12-SG-5	MAT90410313	4	16.41 (5.0)	BG	SG
CF-INI-P4-M12-BG / M12-SG-10	MAT90410314	4	32.81 (10.0)	BG	SG
CF9-03-05-INI* (5 x 0.34)					
CF-INI-P5-M12-BG / M12-SG-2	MAT90410339	5	6.56 (2.0)	BG	SG
CF-INI-P5-M12-BG / M12-SG-5	MAT90410340	5	16.41 (5.0)	BG	SG
CF-INI-P5-M12-BG / M12-SG-10	MAT90410341	5	32.81 (10.0)	BG	SG
CF9-03-04-INI* (4 x 0.34)					
CF-INI-P4-M12-BW / M12-SG-2	MAT90410315	4	6.56 (2.0)	BW	SG
CF-INI-P4-M12-BW / M12-SG-5	MAT90410316	4	16.41 (5.0)	BW	SG
CF-INI-P4-M12-BW / M12-SG-10	MAT90410317	4	32.81 (10.0)	BW	SG
CF9-03-05-INI* (5 x 0.34)					
CF-INI-P5-M12-BW / M12-SG-2	MAT90410342	5	6.56 (2.0)	BW	SG
CF-INI-P5-M12-BW / M12-SG-5	MAT90410343	5	16.41 (5.0)	BW	SG
CF-INI-P5-M12-BW / M12-SG-10	MAT90410344	5	32.81 (10.0)	BW	SG

*Refer to the CF9 page in the Control Cable section for more cable information

CF-INI



Direct line M8 x 1, connector , single end cordset

Plug-type connector	Coupling, M8 x 1
Handle base	Plastic, PP, black
Union nut/screw	Metal, CuZn, nickel-plated
Contact base	Plastic, PP, black
Contacts	Metal, CuZn, gold-plated
Seal	Plastic, FPM (Viton)

Number of poles	3-pole
Ampacity	4 A
Rated voltage of a winding	max. 60 V

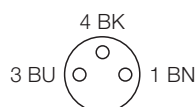
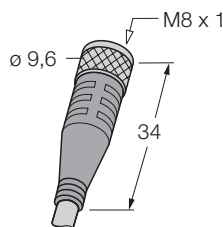
Number of poles	4-pole
Ampacity	4 A
Rated voltage of a winding	max. 30 V

Insulation resistance	$\geq 10^9$ Ohm
Contact resistance	≥ 5 m Ohm

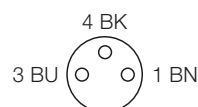
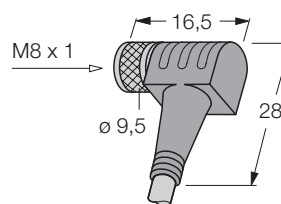
Ambient temperature of plug-type connector	-40°F to +221°F (-40 °C to +105 °C)
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Protection class	IP69K, in screwed state
Mechanical service life	max. 100 insertion cycles

BG



BW



CF-INI
CF9



M8 Socket

Chainflex®
Sensor Cables

Telephone 1-800-521-2747
Fax 1-401-438-7270

PDF: www.igus.com/pdf/chainflex.asp
Specs/CAD/Samples/Size Selector/RFQ:
www.igus.com/chainflex.asp

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CF9-02-03-INI* (3 x 0.25) Type	Part No.	Number Poles	Cable length		Connector Type
CF-INI-P3-M8-BG-3	MAT9043716	3	9.84	(3.0)	BG
CF-INI-P3-M8-BG-5	MAT9043717	3	16.41	(5.0)	BG
CF-INI-P3-M8-BG-7	MAT9043718	3	22.97	(7.0)	BG
CF-INI-P3-M8-BG-10	MAT9043719	3	32.81	(10.0)	BG
CF-INI-P3-M8-BG-15	MAT9049416	3	49.22	(15.0)	BG
CF9-03-04-INI* (4 x 0.34)					
CF-INI-P4-M8-BG-3	MAT9043728	4	9.84	(3.0)	BG
CF-INI-P4-M8-BG-5	MAT9043729	4	16.41	(5.0)	BG
CF-INI-P4-M8-BG-7	MAT9043730	4	22.97	(7.0)	BG
CF-INI-P4-M8-BG-10	MAT9043731	4	32.81	(10.0)	BG
CF-INI-P4-M8-BG-15	MAT9049466	4	49.22	(15.0)	BG
CF9-02-03-INI* (3 x 0.25)					
CF-INI-P3-M8-BW-3	MAT9043724	3	9.84	(3.0)	BW
CF-INI-P3-M8-BW-5	MAT9043725	3	16.41	(5.0)	BW
CF-INI-P3-M8-BW-7	MAT9043726	3	22.97	(7.0)	BW
CF-INI-P3-M8-BW-10	MAT9043727	3	32.81	(10.0)	BW
CF-INI-P3-M8-BW-15	MAT9049419	3	49.22	(15.0)	BW
CF9-03-04-INI* (4 x 0.34)					
CF-INI-P4-M8-BW-3	MAT9043732	4	9.84	(3.0)	BW
CF-INI-P4-M8-BW-5	MAT9043733	4	16.41	(5.0)	BW
CF-INI-P4-M8-BW-7	MAT9043734	4	22.97	(7.0)	BW
CF-INI-P4-M8-BW-10	MAT9043735	4	32.81	(10.0)	BW
CF-INI-P4-M8-BW-15	MAT9049467	4	49.22	(15.0)	BW

*Refer to the CF9 page in the Control Cable section for more cable information



CF-INI

Direct line M8 x 1 connector, single end cordset, LED

Plug-type connector	Coupling, M8 x 1
Handle base	Plastic, TPU, transparent
Union nut/screw	Metal, CuZn, nickel-plated
Contact base	Plastic, PA6GF, black
Contacts	Metal, CuZn, gold-plated
Seal	Plastic, FPM (Viton)

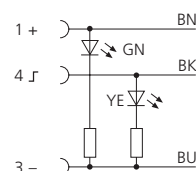
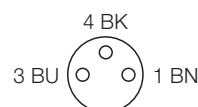
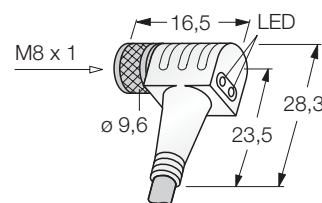
Number of poles	3-pole
Ampacity	4 A
Rated voltage of a winding	10...30 V

Insulation resistance	$\geq 10^9$ Ohm
Contact resistance	≥ 5 m Ohm

Operating voltage display	LED green
Switching state display	LED yellow
Switching function	pnp

Ambient temperature of plug-type connector	-40°F to +221°F (-40 °C to +105 °C)
Protection class	IP66K, in screwed state
Mechanical service life	max. 100 insertion cycles

BWL



CF9-02-03-INI* (3 x 0.25) Type	Part No.	Number Poles	Cable length		Connector Type
			ft.	(m)	
CF-INI-P3-M8-BWL2-3	MAT9043720	3	9.84	(3.0)	BWL
CF-INI-P3-M8-BWL2-5	MAT9043721	3	16.41	(5.0)	BWL
CF-INI-P3-M8-BWL2-7	MAT9043722	3	22.97	(7.0)	BWL
CF-INI-P3-M8-BWL2-10	MAT9043723	3	32.81	(10.0)	BWL
CF-INI-P3-M8-BWL2-15	MAT90410196	3	49.22	(15.0)	BWL

*Refer to the CF9 page in the Control Cable section for more cable information

CF-INI



CF-INI
CF9



M8 Socket

Connection cable M8 x 1, connector on each end

Plug-type connector
Handle base
Union nut/screw
Contact base
Contacts
Seal

Coupling, M8 x 1
Plastic, PP, black
Metal, CuZn, nickel-plated
Plastic, PP, black
Metal, CuZn, gold-plated
Plastic, FPM (Viton)

Plug-type connector
Handle base
Union nut/screw
Contact base
Contacts

Connector, M8 x 1
Plastic, PP, black
Metal, CuZn, nickel-plated
Plastic, PP, black
Metal, CuZn, gold-plated

Rated voltage of a winding 3-pole: max. 60 V
4-pole: max. 30 V

Ampacity 4 A

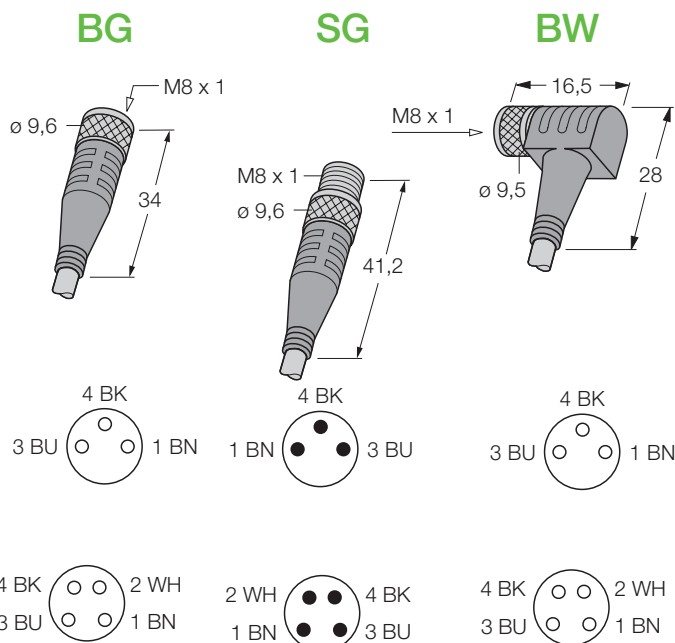
Insulation resistance $\geq 10^9$ Ohm

Contact resistance ≥ 5 m Ohm

Ambient temperature of plug-type connector -40°F to +221°F
(-40°C to +105 °C)

Protection class IP69K, in screwed state

Mechanical service life max. 100 insertion cycles



Chainflex®
Sensor Cables

Telephone 1-800-521-2747
Fax 1-401-438-7270



CF9-02-03-INI* (3 x 0.25)	Part No.	Number Poles	Cable length ft.	Cable length (m)	Connector Type	
CF-INI-P3-M8-BG / M8-SG-2	MAT90410324	3	6.56	(2.0)	BG	SG
CF-INI-P3-M8-BG / M8-SG-5	MAT90410325	3	49.22	(15.0)	BG	SG
CF-INI-P3-M8-BG / M8-SG-10	MAT90410326	3	32.81	(10.0)	BG	SG
CF9-03-04-INI* (4 x 0.34)						
CF-INI-P4-M8-BG / M8-SG-2	MAT90410333	4	6.56	(2.0)	BG	SG
CF-INI-P4-M8-BG / M8-SG-5	MAT90410334	4	49.22	(15.0)	BG	SG
CF-INI-P4-M8-BG / M8-SG-10	MAT90410335	4	32.81	(10.0)	BG	SG
CF9-02-03-INI* (3 x 0.25)						
CF-INI-P3-M8-BW / M8-SG-2	MAT90410330	3	6.56	(2.0)	BW	SG
CF-INI-P3-M8-BW / M8-SG-5	MAT90410331	3	49.22	(15.0)	BW	SG
CF-INI-P3-M8-BW / M8-SG-10	MAT90410332	3	32.81	(10.0)	BW	SG
CF9-03-04-INI* (4 x 0.34)						
CF-INI-P4-M8-BW / M8-SG-2	MAT90410336	4	6.56	(2.0)	BW	SG
CF-INI-P4-M8-BW / M8-SG-5	MAT90410337	4	49.22	(15.0)	BW	SG
CF-INI-P4-M8-BW / M8-SG-10	MAT90410338	4	32.81	(10.0)	BW	SG

*Refer to the CF9 page in the Control Cable section for more cable information

PDF: www.igus.com/pdf/chainflex.asp
Specs/CAD/Samples/Size Selector/RFQ:
www.igus.com/chainflex.asp

No Minimum Order • No Cut Charges on up to 10 cuts of the same part number

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