

Cable Adapter. EC-PA-DQ1-M



- The EC-PA-DQ1-M Adapter connects Fagor linear and angular absolute encoders with FeeDat Fast protocol to Siemens systems through DRIVE-CLiQ digital INTERFACE.
- DRIVE-CLiQ digital protocol for Siemens Solution Line and SINUMERIK ONE.
- The encoder can be operated in two encoder safety systems in conjunction Siemens SINUMERIK 840D sl or SINUMERIK one.
- Applications up to **SIL 2** (acc. to EN 61508) or **Category 3, Performance Level d** (acc.to ISO 13849) when used with another safety encoder in the same axis.

Specifications DRIVE-CLiQ Adapter Cable

Maximum vibration (55 Hz – 2 000 Hz)	100 m/s ²	Maximum shock (11 ms)	1000 m/s ²
Cable Adapter lengths	1, 3, 6 or 9 meters	Maximum cable length	Up to 100 m *
IP rating	67	Terminating connector	M12 8 pin male
Cable protection	With or without armour	Cable bending radius	With armour: ≥ 75 mm Without armour: ≥ 40 mm

* Depending on CNC model. Consult Siemens documentation.

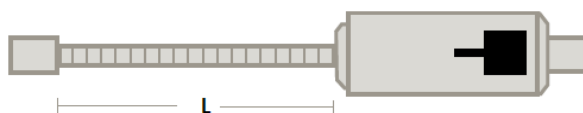
General Specification

Input		Output	
Interface	FeeDat Fast	Interface	DRIVE-CLiQ
Communication Speed	10 MHz	Communication Speed	100 MHz
Power Supply	(5 ± 0.5) Vdc	Power Supply	24 V < 150 mA, < 3.6 W; (14 V ... 36 V) (with encoder load 250 mA)

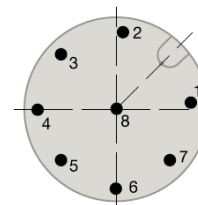
Pin Layout

Cable Diagram

Pin Layout



L = 1, 3, 6, 9 meters



Front view

Pin Out

1	VCC (24 Vdc)	3	RXP	4	RXN	5	GND (0 V)	6	TXN	7	TXP
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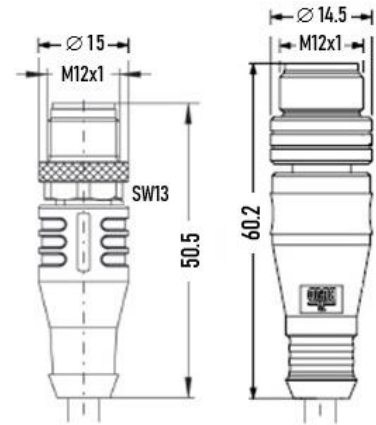
Lead-in Connector

Cable Specification

Construction	4 x 2 x 0.14 mm ²
Material	Polyurethane
Ø without armour	6 mm
Bend radius dynamic	≥ 60 mm
Bend radius static	≥ 24 mm
Shield	Single
Lead-in connector (encoder side)	M23 17-pin female, external female, contact arrangement direction P
Terminating connector	M12 8-pin male

Terminating Connector

Housing dimensions slightly differ for manufacturers



Related Products

Product	Description
XC-M2-...S-M1	Intermediate extension cable M12 8-pin connectors for DRIVE-CLiQ applications.
XC-M2-...S-RJ2	Extension Cable for DRIVE-CLiQ Cable Adapter (EC-...PA-DQ..-M) or Extension Adapter (XC-C8-...PA-DQ-M-N). With M12 8-pin female input connector and RJ-45 IP 20 terminating connector for DRIVE-CLiQ applications.
XC-M2-...S-RJ6	Extension Cable for DRIVE-CLiQ Cable Adapter (EC-...PA-DQ..-M) or Extension Adapter (XC-C8-...PA-DQ-M-N). With M12 8-pin female input connector and RJ-45 IP 67 terminating connector for DRIVE-CLiQ applications.

Order Information

DRIVE-CLiQ Adapter	Cable Length	Protection
EC-...PA-DQ1-M	1, 3, 6 or 9 meters	Blank with armour N without armour

Example

Order Code	Description
G2AD10-740-3-T	The system comprises one linear or angular encoder and one DRIVE-CLiQ Adapter:
EC-3PA-DQ1-M-N	<ul style="list-style-type: none"> Absolute G2 linear encoder, FeedDat protocol, 0.01 µm resolution, 740 mm measuring length, ± 3 µm/m accuracy, M6 thread (tapped) reader head. DRIVE-CLiQ Adapter, cable length 3 meters without armour connecting to Fagor encoder and terminating connector M12 8-pin male.