



Specifications

Cable	CL1	CL2	Power
Operating Temperature	-25°C to +75°C (-13°F to +167°F)		
Agency Approvals	UL listed, CSA certified		
Housing Material	TPE	PVC	Black PVC
Maximum Current	8A	4A	8A
Connector			
Storage Temperature	-40°C to +85°C (-40°F to +185°F)		
Operating Temperature	-25°C to +75°C (-13°F to +167°F)		
Enclosure Rating (washdown)	Unsealed: NEMA 1; IP60 Sealed: NEMA 6P, 13; IP67 and 1200psi washdown		
Vibration	1.5mm displacement @ 10 to 500Hz, 10G peak, 3 planes		
Housing Material	Valox®		
Dimensions	45mm x 49mm x 50mm (1.8in x 1.8in x 2in)		

Description

The KwikLink™ flat media system provides a simple, modular cabling method with its flat 4-wire cable and Insulation Displacement Connectors (IDCs). Designed to promote up to a possible 50% savings in installation costs by offering a drastic reduction in labor and materials, the KwikLink system allows nodes to be added to the network quickly and easily—without severing the trunkline. Cutting or stripping of the trunkline is eliminated, as is the need for predetermined cable lengths. KwikLink offers maximum simplicity while still supporting 64 nodes.

Thick vs. Thin vs. Flat

Data Rates	125 Kbaud	250 Kbaud	500 Kbaud
Thick Trunk Dist.	500m (1640ft)	250m (820ft)	100m (328ft)
Thin Trunk Dist.	100m (328ft)	100m (328ft)	100m (328ft)
Flat Trunk Dist.	420m (1378ft)	200m (656ft)	75m (246ft)
Max. Drop Length	6.1m (20ft)	6.1m (20ft)	6.1m (20ft)
Cumulative Drop	156m (512ft)	78m (256ft)	39m (128ft)
Number of Nodes	64	64	64

Allen-Bradley Parts

Flat Cable

KwikLink flat cable is easy to mount and physically keyed to prevent wiring mishaps. All three variations of KwikLink cable are unshielded and contain four conductors. Sharing a common profile, all three cables are also conveniently sized for placement in 1" conduit. With a wide operating temperature range and rugged jacket materials, KwikLink flat cable was designed with rough industrial conditions and outdoor use in mind.

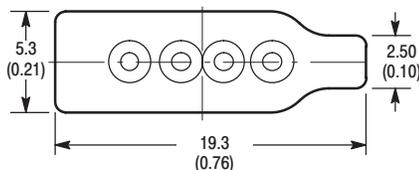
Class 1 (CL1) Cable: Per NEC specifications for a Class 1 circuit (see NEC Article 725), the power source must have a rated output of less than 30V and 1000VA. So, based on the size of the flat cable conductors, the maximum current through the network must be no more than 8A. For applications requiring 8A in the field, a Class 1 rated flat cable is available.

Allen-Bradley Class 1 KwikLink cable is UL listed for 600V and 8A at 24V DC. For optimal chemical resilience and superior protection in harsh environments, KwikLink Class 1 cable also features a TPE jacket. Maximum toughness with excellent flexibility.

Class 2 (CL2) Cable: For less demanding applications at lower currents, Allen-Bradley offers a PVC-jacketed Class 2 cable. More flexible than the CL 1 cable, this design adheres to NEC Article 725, which states that for a Class 2 circuit, the power source must have a rated output of less than 30V and 100VA. In the case of DeviceNet, running at 24V, the maximum allowable current is then 100VA/24V or 4A. Therefore, KwikLink CL 2 cable is rated to 4A at 24V DC.

Auxiliary Power Cable (CL1): In some cases, it may be desirable to run an auxiliary bus to power outputs, i.e. valves, actuators, indicators. To support such an application, Allen-Bradley provides a black PVC power cable for use with KwikLink connectors. KwikLink power cable is a Class 1 cable capable of supplying 24V of output power with currents up to 8A.

Dimensions—mm (in)



Class 1 (CL1) KwikLink Cable

Spool Size	Catalog Number
75m	1485C-P1E75
200m	1485C-P1E200
420m	1485C-P1E420

Class 2 (CL2) KwikLink Cable

Spool Size	Catalog Number
75m	1485C-P1G75
200m	1485C-P1G200
420m	1485C-P1G420

KwikLink Power Cable

Spool Size	Catalog Number
75m	1485C-P1L75
200m	1485C-P1L200
420m	1485C-P1L420

Insulation Displacement Connectors (IDCs)

Allen-Bradley KwikLink Insulation Displacement Connectors (IDCs) interface drop cables to the flat cable trunkline with optimal plug-and-play capability at minimal cost. The hinged, two-piece base snaps snugly around the flat cable at any point along the trunk. Contact is made with the cable's four conductors by tightening two screws that drive the contacts through the cable jacket and into the conductors. The upper portion of the IDC provides the connection to the drop cable and is available in several versions including micro- and open-style connectors. Sealed versions offer NEMA 6P and 13, IP67 and 1200psi washdown protection and feature a wide working temperature range (-25°C to 75°C) for outdoor use. The compact Valox® construction (roughly 2" square) makes KwikLink IDCs chemically resistant for use in harsh industrial environments.



Micro



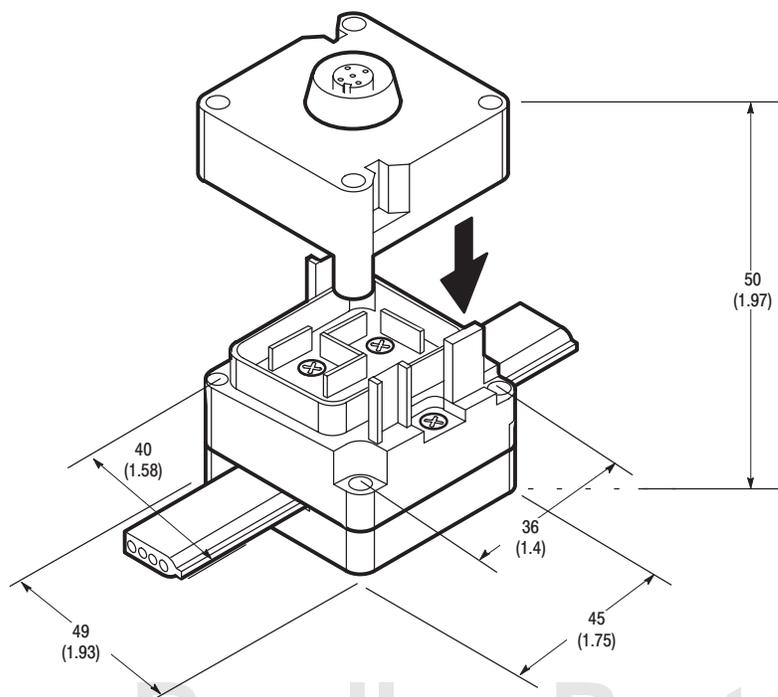
Open Style



Terminator

Catalog Number	Description
1485P-P1E4-R5	NEMA 6P, 13; IP67 Micro module w/base
1485P-P1H4-R5	NEMA 1; IP60 Micro module w/base (no gaskets)
1485P-P1H4-T4	Open style module w/base (no gaskets)
1485A-T1E4	NEMA 6P, 13; IP67 Terminator w/base
1485A-T1H4	NEMA 1; IP60 Terminator w/base (no gaskets)

Dimensions—mm (in)



Allen-Bradley Parts

Drop Cables

Designed specifically for use with KwikLink, these drop cables come in the most common connection configurations. All trunkline connections are 90° micro male with 4-wire unshielded cable. Device connection options include 5-pin straight mini and micro as well as flying leads.

Note: These drop cables are only for use with the KwikLink flat cable system. They are not suitable for use with standard DeviceNet round cable systems.



Catalog Number	Description
1485K-P1F5-N5	Micro 90° male 1m to mini female
1485K-P2F5-N5	Micro 90° male 2m to mini female
1485K-P3F5-N5	Micro 90° male 3m to mini female
1485K-P1F5-R5	Micro 90° male 1m to micro female
1485K-P2F5-R5	Micro 90° male 2m to micro female
1485K-P3F5-R5	Micro 90° male 3m to micro female
1485K-P1F5-C	Micro 90° male 1m to conductor
1485K-P6F5-C	Micro 90° male 6m to conductor

Accessories

In order to support all of the options associated with the flexibility of KwikLink, Allen-Bradley offers an array of accessories including cable mounts, conduit adaptors, covers for unused nodes, and threaded plugs for sealing unused micro connectors.

Catalog Number	Description
1485A-C5E4	KwikLink module dust cap
1485A-CAD	Conduit adaptor (Pg21)
1485A-FCM	Flat cable mounting clamp
1485A-M12	Threaded plug (M12)



Dust Cap



Conduit Adaptor



Mounting Clamp



M12 Threaded Plug