

Continuously Flexing Cables

Simplify your machine design and minimize downtime

Your motion control applications require cables that can endure continuous flexing and bending. Using standard cables in these types of applications can result in excessive strain and internal frictional heating that leads to damage and potential axis failure. With continuously flexing cables and extension cables from Allen-Bradley you now have a cable designed for these challenging applications, and you can purchase them all from Rockwell Automation, simplifying your machine design and helping you minimize maintenance time and costs.

Advantages

- Designed specifically for continuous bending applications, which is essential for many applications, such as C-Tracks where bending flex is needed
- Cables meet the requirements of your machine, codes and standards
 - UL-Listed bulk cable
 - NFPA 79 compliant
 - Suitable for tray applications
 - DESINA cable jacket coloring
 - RoHS
 - 600V insulation rating allows for use in cable trays
- Confidence that your flex cables have been designed, tested and approved as part of a system with a declaration of conformity that your complete system will work together
- Functional lifecycle testing helps you avoid costly downtime, because you can estimate cable lifecycle and include cable replacement in your preventative maintenance program
 - Rated for up to 20 million flexing cycles
 - Durable jacket material is resistant to most common compounds
- With integrated power and brake cables, the number of cables is minimized, reducing total system costs
- Complete family of standard and continuous flexing cables from Rockwell Automation all your motors and actuators needs



This innovative cable offering comes complete with SpeedTEC® connectors for quick, secure connections and features an innovative tamper-resistant backshell and strain relief to maximize cable life. Continuously flexing cables are rated for 20 million flexing cycles and are UL-listed, meet NFPA 79 and DESINA (DistributEd and Standardized INstAllation) color code standards.

Extension Cables

Continuously flexing extension cables make it easier to replace your motor cables that are already in place. With the extension cables, you don't need to re-route an entire motor cable, only the part where flexing capabilities are needed, saving time and minimizing downtime.

Bulkhead Adapters

Bulkhead connectors allow you to customize your cables to meet your needs:

- Easily lets cables pass thru enclosures and cabinet walls minimizing the risk of damage
- Provides a secure interface when connecting an extension cable to a standard cable, helping ensure the connection
- Simplify cable management in your large, modular machines where you need to disconnect cables between machine sections for shipping or maintenance

Rockwell Automation provides a comprehensive connectivity solution that includes standard and continuous flexing servo motor cables, fiber optic cables, interface cables and bulkhead adapters and connector kits.

LISTEN.
THINK.
SOLVE.®

Catalog Numbers

Catalog Number	Description	Motor Compatibility
2090-CPWM7DF-16AFxx	Continuous Flex Cable, Power, 16 AWG	MP-Series Low Inertia and MP-Series Food Grade Servo Motors with "7" Connector Designation <i>Continuous Flex cables are also available for Bayonet and DIN threaded connectors</i>
2090-CPWM7DF-14AFxx	Continuous Flex Cable, Power, 14 AWG	
2090-CPWM7DF-10AFxx	Continuous Flex Cable, Power, 10 AWG	
2090-CPBM7DF-16AFxx	Continuous Flex Cable, Power with Brake, 16 AWG	
2090-CPBM7DF-14AFxx	Continuous Flex Cable, Power with Brake, 14 AWG	
2090-CPBM7DF-10AFxx	Continuous Flex Cable, Power with Brake, 10 AWG	
2090-CFBM7DF-CDAFxx	Continuous Flex Cable, Feedback, Flying Lead	
2090-CPBM7E7-16AFxx	Extension Cable, Power with Brake, 16 AWG	
2090-CPBM7E7-14AFxx	Extension Cable, Power with Brake, 14 AWG	
2090-CPBM7E7-10AFxx	Extension Cable, Power with Brake, 10 AWG	
2090-CFBM7E7-CDAFxx	Extension Cable, Feedback	

xx in catalog number, above, is the cable length in meters

xx = 01, 02, 03, 04, 05, 07, 09, 12, 15, 20, 25, 30, 40, 50, 60, 75, 90 for cables

xx = 01, 02, 03, 04, 05, 07, 09, 12, 15, 20, 25, 30 for extension cables

Specifications	Type of Cable / Catalog Number		
	Power 2090-CPWM7DF-xxAFxx	Power with Brake 2090-CPBM7DF-xxAFxx	Feedback 2090-CFBM7DF-CDAFxx
Wire Size (AWG)	16, 14, 10	16, 14, 10	
Cable Overall Diameter [OD] (mm)	9.7, 10.4, 15.7	12.5, 13.7, 17.8	9.6
Installation Bend Radius	10x OD	10x OD	10x OD
Flex Bend Radius	12x OD	12x OD	12x OD
Cycle Rating at 12x OD	20 Million Cycles	20 Million Cycles	20 Million Cycles
UL Listing	TC-ER	TC-ER	CM
NFPA 79	Compliant	Compliant	Compliant
DESINA	RAL 2003 (Orange)	RAL 2003 (Orange)	RAL 6018 (Green)
RoHS	Compliant	Compliant	Compliant
Cable Jacket Material	Industrial Grade TPE	Industrial Grade TPE	Industrial Grade TPE
Operating Ambient Temperature	0° C to 50° C (32° F to 122° F)		
Storage Ambient Temperature	-40° C to 70° C (-40° F to 158° F)		

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