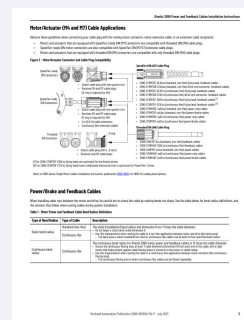


FIELD INSTALLATION QUICK GUIDE

Installation Instructions

2090-XXNPMF-14S20

20 M Servo Motor Power Cable



PRODUCT	2090-XXNPMF-14S20
DOCUMENT TYPE	Installation Instructions
PRODUCT FUNCTION	20 M Servo Motor Power Cable
OFFICIAL SOURCE	Rockwell Automation Kinetix 2090 installation instructions

Use this guide with the complete manufacturer documentation and the controlled site procedure. Isolate all energy sources, preserve the exact model identity and verify every connection before energising.

01

PRE-INSTALLATION VERIFICATION

- Confirm the complete 2090-XXNPMF-14S20 identification and the documented 20 m servo motor power cable configuration.
- Record the installed position, connector orientation, cable routing, grounding and adjacent equipment before removal.
- Isolate electrical, pneumatic and stored energy sources using the approved site procedure.
- Use the official drawing and terminal information shown on the following page; do not infer connections from appearance.
- Inspect the replacement unit, mating hardware and environmental conditions before installation.

MOTOR CABLE ROUTING AND CONNECTOR DETAILS

Official manufacturer installation material reproduced from Rockwell Automation Kinetix 2090 installation instructions. The drawings retain their original aspect ratio and technical meaning.

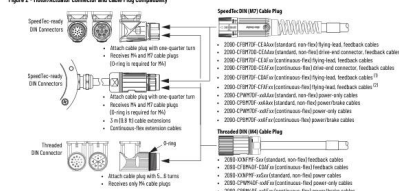
Kinetic 3000 Power and Feedback Cables Installation Instructions

Motor/Actuator (M4 and M7) Cable Applications

Always disconnect your cable plug with the mating meter connector, meter extension cable, or an extension cable receptacle.

- Motors and actuators that are equipped with SpeedTec-ready DIN (M7) connectors are compatible with threaded DIN (M9) cable plugs.
- SpeedTec-ready DIN motor connectors are also compatible with SpeedTec (M7/M7E) extension cable plugs.
- Motors and actuators that are equipped with threaded DIN (M4) connectors are compatible with only threaded DIN (M4) cable plugs.

Figure 2 - Motor/Actuator Connector and Cable Plug Compatibility



(1) For 2000 CF8MTDF-CEAF air flying-leads are optimized for the Kinetix drives.

Refer to 2008-Series Single Motor Cables Installation Instruction, publication [70001V03](#) for 2000-C3 catalog descriptions.

Power/Brake and Feedback Cables

When installing cable runs between the motor and drive, be careful not to stress the cable by making bends too sharp. See the table below for bend radius definitions, and the sections that follow, when routing cables during system installation.

Table 1 - Motor Power and Feedback Cable Bend Radius Definitions

Type of Bend Radius	Type of Cable	Description
Static bend radius	Standard (non-flex)	The typical installation bend radius dimension B is 7 times the cable diameter: • To be aware a static bend would increase it.
	Continuous flex	• Use this measurement when routing the cable as a non-flex application between motor and drive (see bend area). • The bend area is where standard (non-flex) or continuous flex cables can be bent to their specified bend radius.
Continuous bend radius	Standard (non-flex)	This continuous bend radius for Kewits 2000 motor power and feedback cables is 5 times the cable diameter. • Secure the continuous flex cable at both ends so the cable diameters (inner and outer) are equal and do not move while they protect against abrasion from cables where it connects to the motor or shield clamp.
	Continuous flex	• Use this measurement when routing the cable as a continuous application between motor and drive (the continuous flexing area). • The continuous flex area is where continuous flex cables can be flexed repeatedly.

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Kinetix 2050 Power and Feedback Cables Installation Instructions

Install Motor Feedback Cables

This figure illustrates how to measure the bend radius and where cable bends can be made on motor feedback cables.

Figure 4 - Motor Feedback Bend Radius Examples

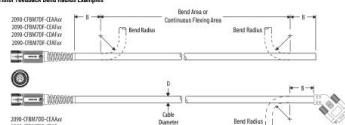


Table 5 - Feedback Cable Specifications

Cable Type	Cable Cat. No.	D mm [in.]	g [lb mm [in.]	Continuous Bend Radius D mm [in.]
Feedback cables (stand-off, non-flex)	2080-07-01P10D-CEAbox	9.8 (0.39)	88.6 (2.7)	N/A
	2080-07-01P10D-CEAbox			
	2080-07-01P10D-CEAflex	10.1 (0.40)	72.1 (2.0)	124 (4.8)
Feedback cables (continuous-flex)	2080-07-01P10D-CEAflex	11.7 (0.46)	81.8 (5.2)	140 (5.5)
	2080-07-01P10D-CEAflex	11.7 (0.46)	81.8 (5.2)	140 (5.5)

(1) Dimension B and continuous bend radius are based on the cable diameter. See Motor Power and Feedback Cable Bend Radius Definitions on [page 3](#) for more information.

Table 6 - Feedback Cable Pinouts (premolded cable connectors)

[illegible]

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03

INSTALLATION AND CONNECTION CHECKS

- Install the unit only in the documented mounting position with the specified companion hardware.
- Match every keyed connector, terminal, conductor, shield and protective-earth point to the official drawing.
- Maintain the documented separation, bend radius, torque, cooling clearance and environmental limits that apply to the product.
- Before energising, perform continuity, polarity, insulation and mechanical-retention checks appropriate to the circuit.
- Do not bypass interlocks, diagnostics, protective devices or approved safety functions during commissioning.

04

INITIAL COMMISSIONING CHECKS

- Restore power or process connections in the approved sequence and observe startup diagnostics.
- Verify communications, channel status, sensor response, drive state or controller operation as applicable.
- Test the affected function at a safe operating point and confirm alarms, trips and feedback paths.
- Record the exact model, configuration, test results and final drawing references in the maintenance record.

05

CONTROLLED DOCUMENTS

Official source	Rockwell Automation Kinetix 2090 installation instructions
Product record	2090-XXNPMF-14S20
Document	Amikon Installation Instructions
Support	INFO@AMIKON.CN