

2090-CSxM1DE single motor cables also provide power, feedback, and brake conductors in a single shielded cable. However, 2090-CSxM1DE cables include the 2198-KITCON-DSL feedback connector kit that is pre-assembled with the feedback conductors. See Technical Specifications - 2090-Series Single Motor Cables on [page 10](#) for cable descriptions, weights, and standard cable lengths.

Single Motor Cable Descriptions (feedback connector kit)

Cable Cat. No.	Description	Cable Configuration		Motor Connector
		Motor End	Drive End	
2090-CSBM1DE-xxAAxx 2090-CSBM1DE-xxAFxx	- Drive-end feedback connector kit (DE) - Power/feedback/brake wires (SB) - Standard, non-flex (AA) - Continuous-flex (AF)			SpeedTec DIN
2090-CSWM1DE-xxAAxx	- Drive-end feedback connector kit (DE) - Power/feedback wires only (SW)			

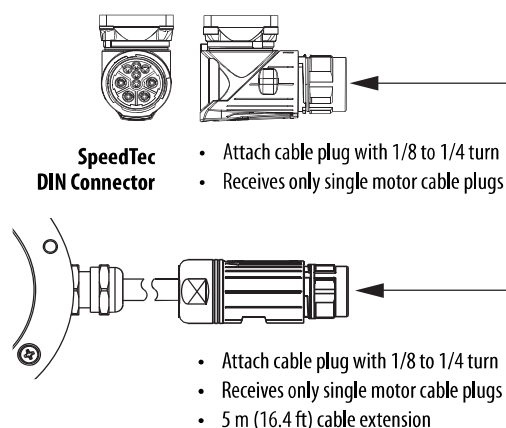
Extension cables provide continuous-flex cable technology between your standard (non-flex) cable and the continuous-flex application. The IP rating for continuous-flex extension cables is consistent with the motor/actuator and cable combination they are extending. Extension cables are available with 18, 14, 10, 8, and 6 AWG power conductors and lengths up to 30 m (98.4 ft).

Single Continuous-flex Extension Cable Description

Cable Cat. No.	Description	Cable Configuration		Motor Connector
		Motor End	Drive End	
2090-CSBM1E1-xxAFxx	- Drive-end (male) connector, extension (E1) ⁽¹⁾ - Motor-end SpeedTec DIN cable plug (M1)			SpeedTec DIN

(1) SpeedTec DIN connector (motor end) and male connector for extending SpeedTec DIN cable. Refer to Single Continuous-flex Extension Cable with Bulkhead Adapter on [page 5](#).

Typical Single Motor Cable Applications



SpeedTec DIN (M1) Single Cable Plug



- 2090-CSBM1DF-xxAAxx (standard, non-flex) power/feedback/brake cables
- 2090-CSWM1DF-xxAAxx (standard, non-flex) power/feedback cables
- 2090-CSBM1DF-xxAFxx (continuous-flex) power/feedback/brake cables
- 2090-CSBM1DE-xxAAxx (standard, non-flex) power/feedback/brake cables
- 2090-CSWM1DE-xxAAxx (standard, non-flex) power/feedback cables
- 2090-CSBM1DE-xxAFxx (continuous-flex) power/feedback/brake cables
- 2090-CSBM1DG-xxAAxx (standard, non-flex) power/feedback/brake cables
- 2090-CSWM1DG-xxAAxx (standard, non-flex) power/feedback cables
- 2090-CSBM1DG-xxAFxx (continuous-flex) power/feedback/brake cables

Technical Specifications - 2090-Series Single Motor Cables

IMPORTANT Maximum motor cable length depends on the feedback type and overall system design. The drive-system power supply, AC input-power type, and AC input voltage are among the configuration variables. For more information on maximum cable lengths see your servo drive user manual or the Kinetix Servo Drives Technical Data, publication [KNX-TD003](#).

2090-CSBM1DE Cable Specifications

Cable Cat. No.	Cable Type/ Jacket Color	Description	Wire Size AWG	Weight, approx kg/m (lb/ft)	Standard Cable Lengths m (ft)
2090-CSBM1DE-18AAxx	Standard (non-flex) cable, Industrial TPE, Orange (DESINA, RAL 2003)	1000V hybrid cable with four power, two feedback (digital communication), and two brake conductors.	18	0.212 (0.143)	01 (3.3) ... 90 (295) in 1.0 m (3.3 ft) increments
2090-CSBM1DE-14AAxx			14	0.261 (0.175)	
2090-CSWM1DE-18AAxx		1000V hybrid cable with four power and two feedback (digital communication) conductors.	18	0.136 (0.091)	
2090-CSWM1DE-14AAxx			14	0.185 (0.124)	
2090-CSBM1DE-18AFxx	Continuous-flex cable, Industrial TPE, Orange (DESINA, RAL 2003)	1000V hybrid cable with four power, two feedback (digital communication), and two brake conductors.	18	0.228 (0.153)	
2090-CSBM1DE-14AFxx			14	0.289 (0.194)	
2090-CSBM1DE-10AFxx			10	0.551 (0.370)	
2090-CSBM1DE-08AFxx			8	1.0 (0.67)	
2090-CSBM1DE-06AFxx			6	1.2 (0.80)	

2090-CSBM1DF/DG Cable Specifications

Cable Cat. No.	Cable Type/ Jacket Color	Description	Wire Size AWG	Weight, approx kg/m (lb/ft)	Standard Cable Lengths m (ft)
2090-CSBM1DF-18AAxx 2090-CSBM1DG-18AAxx	Standard (non-flex) cable, Industrial TPE, Orange (DESINA, RAL 2003)	1000V hybrid cable with four power, two feedback (digital communication), and two brake conductors.	18	0.212 (0.143)	01 (3.3) ... 50 (164) in 1.0 m (3.3 ft) increments
2090-CSBM1DF-14AAxx 2090-CSBM1DG-14AAxx			14	0.261 (0.175)	
2090-CSWM1DF-18AAxx 2090-CSWM1DG-18AAxx		1000V hybrid cable with four power and two feedback (digital communication) conductors.	18	0.136 (0.091)	
2090-CSWM1DF-14AAxx 2090-CSWM1DG-14AAxx			14	0.185 (0.124)	
2090-CSBM1DF-18AFxx 2090-CSBM1DG-18AFxx	Continuous-flex cable, Industrial TPE, Orange (DESINA, RAL 2003)	1000V hybrid cable with four power, two feedback (digital communication), and two brake conductors.	18	0.228 (0.153)	01 (3.3) ... 50 (164) ⁽¹⁾ in 1.0 m (3.3 ft) increments
2090-CSBM1DF-14AFxx 2090-CSBM1DG-14AFxx			14	0.289 (0.194)	
2090-CSBM1DF-10AFxx 2090-CSBM1DG-10AFxx			10	0.551 (0.370)	

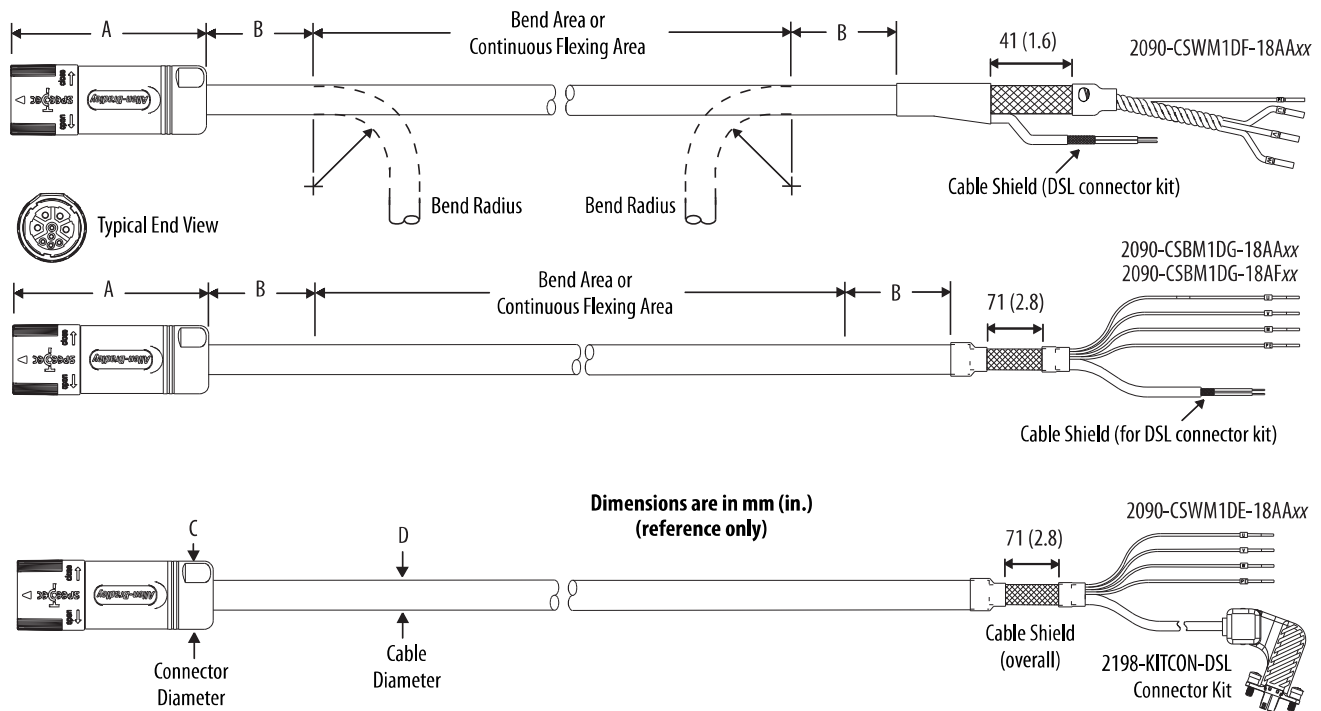
(1) Applies to all Kinetix 5500 (frame 2 and 3) drives. For Kinetix 5500 (frame 1) drives in continuous-flex applications, 30 m (98 ft) is maximum cable length.

Single Continuous-flex Extension Cable Specifications

Extension Cable ⁽¹⁾ Cat. No.	Cable Type/ Jacket Color	Description	Weight, approx kg/m (lb/ft)	Standard Cable Lengths m (ft)
2090-CSBM1E1-18AFxx	Continuous-flex cable, Industrial TPE, Orange (DESINA, RAL 2003)	SpeedTec DIN connector plug on motor end to SpeedTec DIN receptacle for mating with 2090-Series standard, non-flex power/brake/feedback cable, 600V.	0.228 (0.153)	01 (3.3) ... 30 (98.4) in 1.0 m (3.3 ft) increments
2090-CSBM1E1-14AFxx			0.289 (0.194)	
2090-CSBM1E1-10AFxx			0.551 (0.370)	
2090-CSBM1E1-08AFxx			1.0 (0.67)	
2090-CSBM1E1-06AFxx			1.2 (0.80)	

(1) 2090-CSBM1E1-xxAFxx extension cables are UL Listed, bulk cable, type PLTC-ER.

Single Motor Cable Dimensions (18 AWG) Without Brake

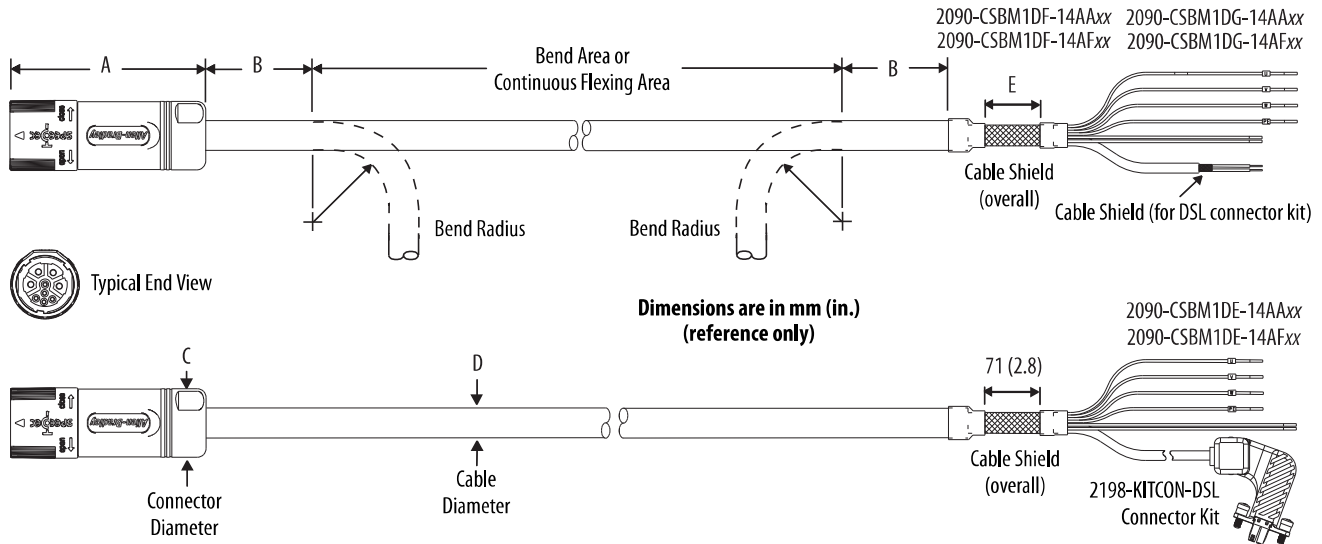


Single Motor Cable Dimensions (18 AWG)

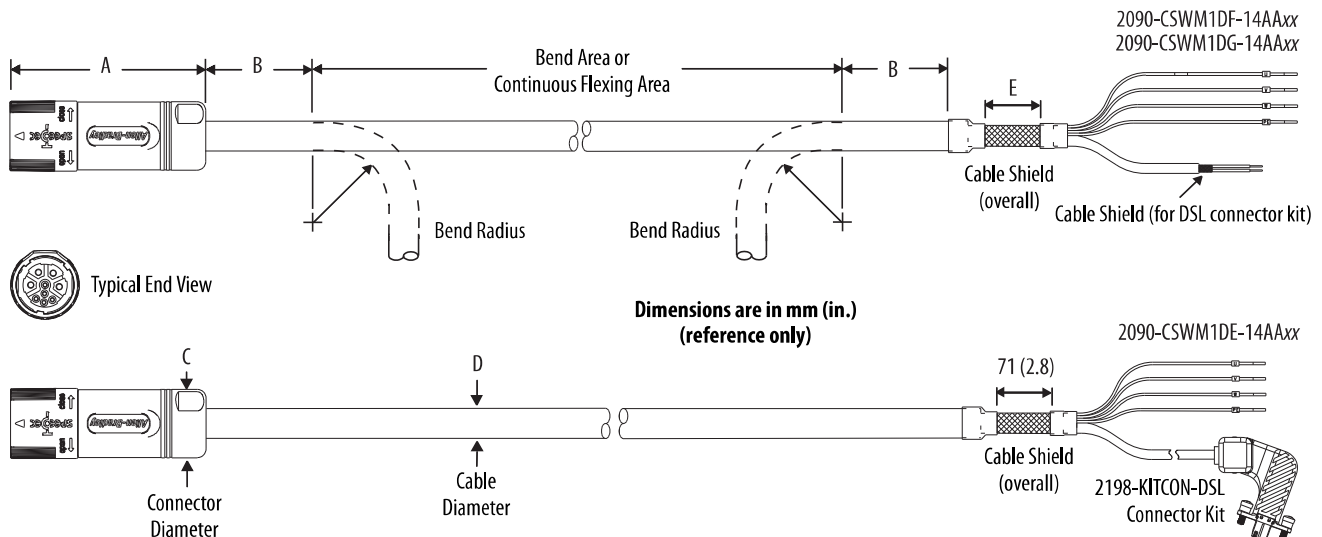
Cable Cat. No.	A mm (in.)	B ⁽¹⁾ mm (in.)	Continuous Bend Radius ⁽¹⁾ mm (in.)	C mm (in.)	D mm (in.)
2090-CSBM1DF-18AAxx 2090-CSBM1DE-18AAxx 2090-CSBM1DG-18AAxx	81 (3.2)	105 (4.1)	N/A	28 (1.1)	15 (0.59)
2090-CSWM1DF-18AAxx 2090-CSWM1DE-18AAxx 2090-CSWM1DG-18AAxx					
2090-CSBM1DF-18AFxx 2090-CSBM1DE-18AFxx 2090-CSBM1DG-18AFxx			150 (5.9)		

(1) Dimension B and Continuous Bend Radius are based on the cable diameter. Refer to Single Cable Bend Radius Definitions on [page 11](#) for more information.

Single Motor Cable Dimensions (14 AWG) Brake



Single Motor Cable Dimensions (14 AWG) Without Brake



Single Motor Cable Dimensions (14 AWG)

Cable Cat. No.	A mm (in.)	B ⁽¹⁾ mm (in.)	Continuous Bend Radius ⁽¹⁾ mm (in.)	C mm (in.)	D mm (in.)	E mm (in.)	
2090-CSBM1DF-14AAxx	81 (3.2)	105 (4.1)	N/A	28 (1.1)	15.0 (0.59)	41 (1.6)	
2090-CSBM1DE-14AAxx (series A)		105 (4.1)			15.0 (0.59)	71 (2.8)	
2090-CSBM1DE-14AAxx (series B)		113 (4.4)			16.1 (0.64)		
2090-CSBM1DG-14AAxx		105 (4.1)			15.0 (0.59)	41 (1.6)	
2090-CSWM1DF-14AAxx							71 (2.8)
2090-CSWM1DE-14AAxx							
2090-CSWM1DG-14AAxx							
2090-CSBM1DF-14AFxx		119 (4.7)	170 (6.7)	17.0 (0.67)	41 (1.6)		
2090-CSBM1DE-14AFxx (series A and B)	71 (2.8)						
2090-CSBM1DG-14AFxx							

(1) Dimension B and Continuous Bend Radius are based on the cable diameter. Refer to Single Cable Bend Radius Definitions on [page 11](#) for more information.