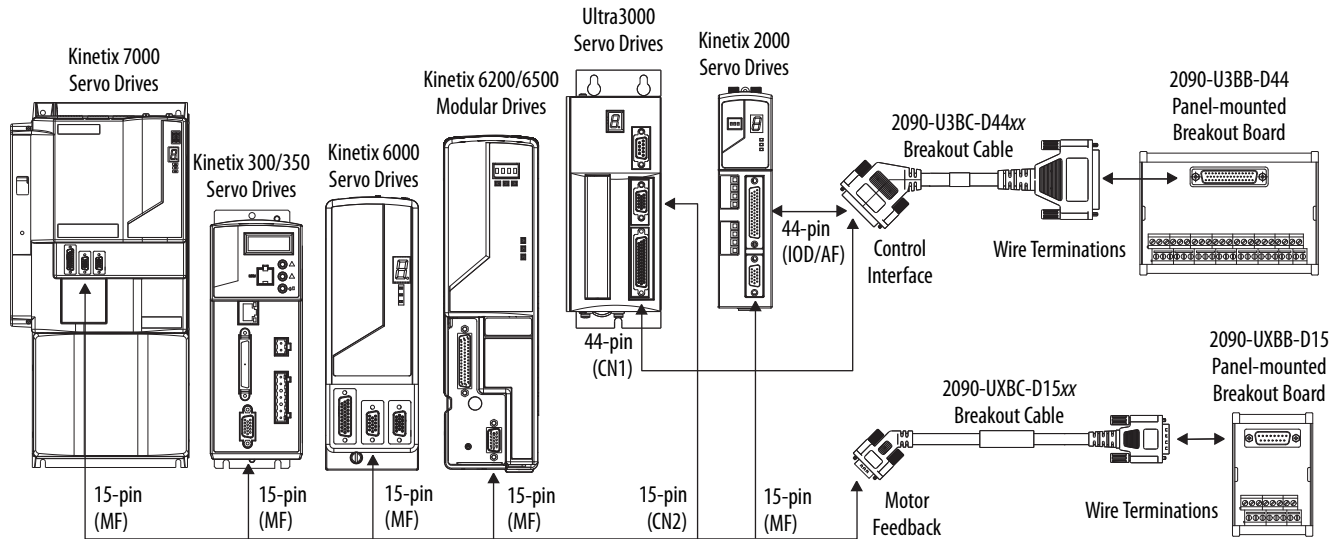


## Panel-mounted Breakout Board Kits

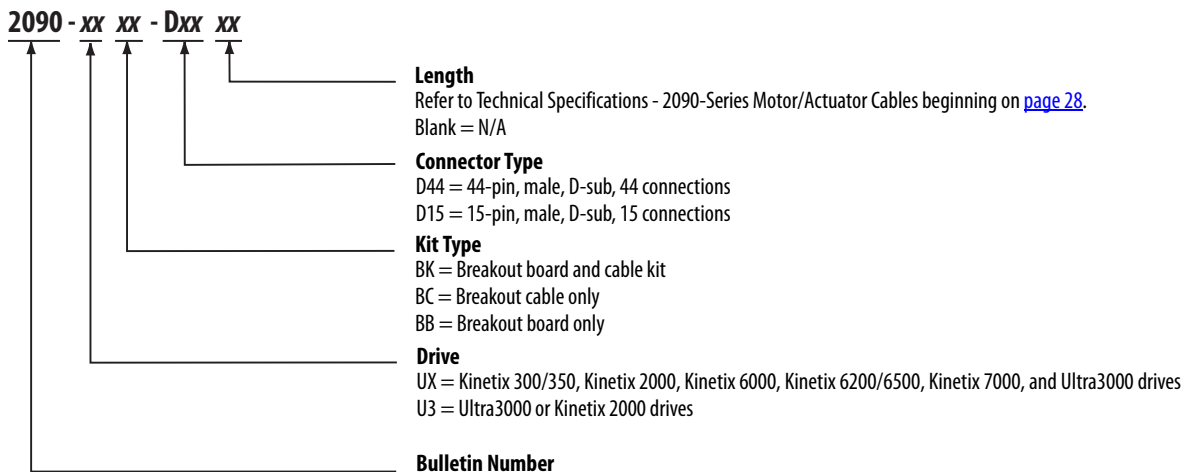
Panel-mounted breakout board kits for motor feedback (catalog number 2090-UXBK-D15xx) and control interface (catalog number 2090-U3BK-D44xx) are designed for use with these servo drives. Refer to Panel-mounted Breakout Board Components on [page 74](#) for more information.

### Panel-mounted Breakout Board Examples



### Catalog Numbers - Panel-mounted Breakout Boards

Catalog numbers consist of various characters, each of which identifies a specific option for that component. Use the catalog numbering chart below to understand the configuration of your component. For questions regarding product availability, contact your Allen-Bradley distributor.



## Panel-mounted Breakout Board Components

Breakout boards, cables, and kits (designed for DIN rail mounting on the panel) and for use with Kinetix drives as specified in the description are shown below. These breakout board components can be ordered separately, or as a kit containing both terminal block and cable.

### Panel-mounted Breakout Board Kits

Cat. No.	Description	Cable Compatibility
2090-UXBK-D15xx	DIN rail terminal block (catalog number 2090-UxBB-Dxx) and cable (catalog number 2090-UxBC-Dxxxx) for motor feedback connector (15-pin, male, D-sub). Use with any Kinetix 300/350, Kinetix 2000, Kinetix 6000, Kinetix 6200/6500, or Kinetix 7000 drives (MF connector) or Ultra3000 drives (CN2 connector) for motor feedback connections.	2090-XXNFMF-Sxx 2090-CFBM4DF-CDAFxx 2090-CFBM7DF-CEAAxx 2090-CFBM7DF-CEAFxx 2090-CFBM6DF-CBAAXx
	Terminal block and cable for motor feedback connector (15-pin, male, D-sub). Use with Kinetix 6000 drives, MPL-BxxxxR, and MPM-A/Bxxxx-2 (resolver feedback) motors.	2090-CFBM7DF-CEAAxx
2090-U3BK-D44xx	Terminal block and cable for control interface connector (44-pin, male, D-sub). Use with Ultra3000 drives (CN1 connector) or Kinetix 2000 drives (IOD/AF connector).	Customer Supplied

### Panel-mounted Breakout Boards

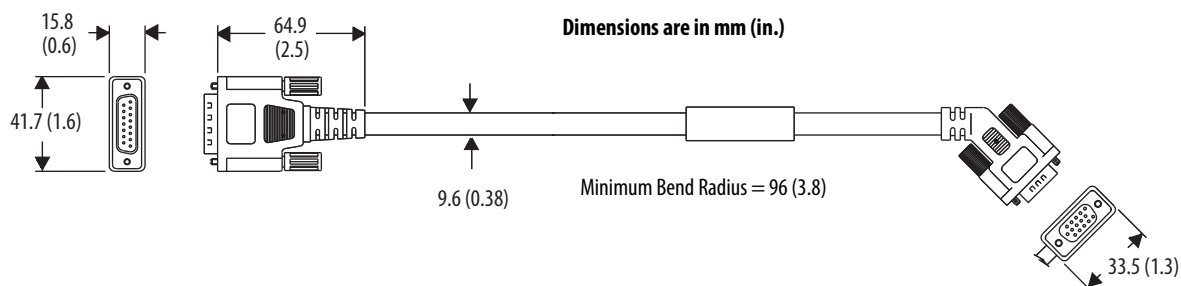
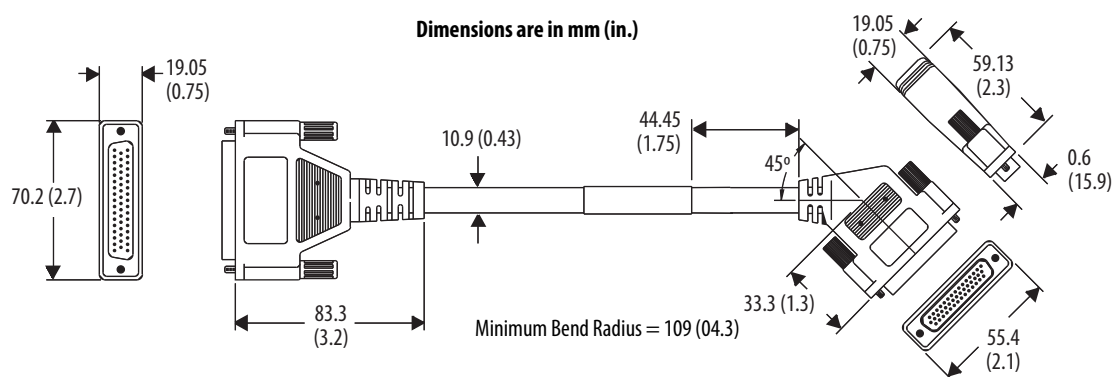
Cat. No.	Description
2090-UxBB-D15	15-pin terminal block with D-sub connector. Use with any Kinetix 300/350, Kinetix 2000, Kinetix 6000, Kinetix 6200/6500, or Kinetix 7000 drives (MF connector) or Ultra3000 drives (CN2 connector) for motor feedback connections.
2090-U3BB-D44	44-pin terminal block with D-sub connector. Use with Ultra3000 drives (CN1 connector) or Kinetix 2000 drives (IOD/AF connector) for control interface connections.

**IMPORTANT** The flying-lead compatible cables listed above require either 2090-UxBB-DM15 (drive-mounted) or 2090-UxBB-D15 (panel-mounted) breakout board connector kits to complete feedback and I/O connections to the drive.

### Panel-mounted Breakout Cables

Cat. No.	Description
2090-UxBC-D15xx	15-pin cable with D-sub connector. Use with any Kinetix 300/350, Kinetix 2000, Kinetix 6000, Kinetix 6200/6500, or Kinetix 7000 drives (MF connector) or Ultra3000 drives (CN2 connector) for motor feedback connections.
2090-U3BC-D44xx <sup>(1)</sup>	44-pin cable with D-sub connector. Use with Ultra3000 drives (CN1 connector) or Kinetix 2000 drives (IOD/AF connector) for control interface connections.

(1) This cable does not carry the unbuffered motor encoder signals (CN1 pins 10 . . . 15). Contact your Rockwell Automation sales representative if these signals are required for your application.

**Panel-mounted Breakout Cable Dimensions (catalog number 2090-UXBC-D15xx)****Panel-mounted Breakout Cable Dimensions (catalog number 2090-U3BC-D44xx)****Panel-mounted Breakout Cable Specifications**

Breakout Cable	Description	Specifications			Standard Cable Lengths m (ft)
		Temperature Rating	Shield Coverage	Jacket Material	
2090-UXBC-D15xx	15-pin, high density D-shell for Kinetix 6000 motor/auxiliary feedback and Ultra3000 CN2 feedback connector	90 °C (194 °F)	100% Aluminum Foil (with 85% braid overshield)	TPE	1 (3.2) 3 (9.8) 9 (29.5) 15 (49.2)
2090-U3BC-D44xx	44-pin, high density D-shell for Ultra3000 CN1 control interface connector				

**Drive-end Connector Kits**

Drive Family	Kit Cat. No.	Description
Ultra3000	2090-UXCK-D09	Mating Connector Kit (9-pin standard density D-shell) CN3
Ultra3000	2090-UXCK-D15	Mating Connector Kit (15-pin high density D-shell) CN2
Ultra3000	2090-U3CK-D44	Mating Connector Kit (44-pin high density D-shell) CN1
Kinetix 3	9101-1476	Mating Connector Kit (50-pin mini-D solder cup) IOD
	9101-1477	Mating Connector Kit (20-pin mini-D solder cup) MF