



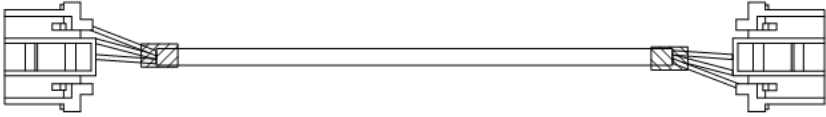
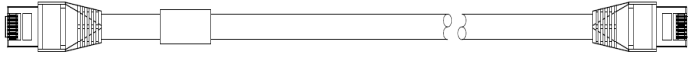
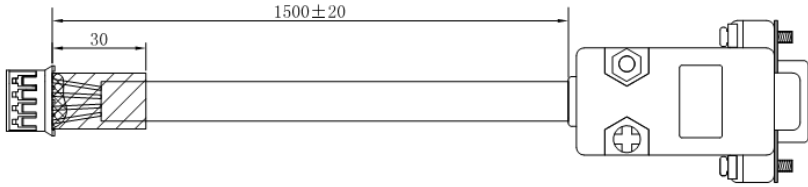
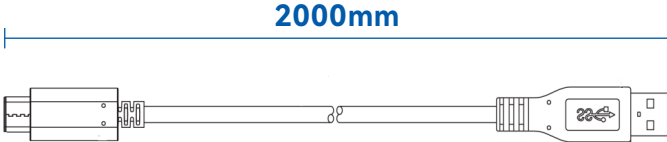
Cable Selection

The cables which are available for our 2ELD2/ELD2 series servo drives and ELVM series servo motors are listed in detail in this section including a comprehensive guide on how to match the right cables to the drives and motors.

For our 2ELD2/ELD2 series servo drives, an CABLE-PC-1 tuning cable is optionally provided to connect the drives to a PC for tuning purposes.

Motor power supply cables (including motor brake cables) and encoder cables are matched with our ELVM series servo motors. The cables are matched to the servo motors based on motor series and frame sizes.

Servo Drive Cables

Communication cable	CABLE-TX*M*-LD2	 *M*represents the length of the cables. For example, 1M5 = 1.5 meters Available length: 0.3M, 0.5M, 1.0M, 1.5M, 3M, 5M, 7M, 10M
	CABLE-TX*M*-BUS	 *M*represents the length of the cables. For example, 1M5 = 1.5 meters Available length: 0.2M, 0.5M, 1.0M, 1.5M, 3M, 5M, 7M, 10M, 13M
Tuning cable	CABLE-PC-1	
	CABLE-TYPEC2M0	

Motor cable model number

CABLE RZS H 3M0 - 1 1 3 - T - R

Sign	Meaning
CABLE	Cable identification

Sign	Cable type
RZ	Without brake motor cable
RZS	With brake motor cable

Sign	Voltage
H	AC Servo motor cable
D	DC Servo motor cable

Sign	Length	Sign	Length
1M5	1.5 meter	13M0	13 meter
3M0	3 meter	15M0	15 meter
5M0	5 meter	***	Please contact leadshine teams for other lengths
7M0	7 meter		
10M0	10 meter		

Sign	Drive side terminal type
1	Wire ferrule
2	Spade terminal

Sign	Customized models
R	Direct plug for backfacing wiring
***	Customized

Sign	Special requirements
Blank	Fixed cable
T	Flexible cable
TS	Flexible & oil proof cable
***	Reserved

Sign	Motor side terminal type
1	AMP plastic plug
2	Reserved
3	Assembly type aviation plug
4	Terminal type direct plug
***	Reserved

Sign	Cable specifications	Sign	Cable specifications
1	20AWG	5	14AWG
2	18AWG	6	12AWG
3	16AWG	7	19AWG
4	15AWG	8	Reserved

Encoder cable model number

CABLE BMA H 3M0 - 1 1 3 - T - R

Sign	Meaning
CABLE	Cable identification

Sign	Cable type
BM	Incremental encoder cable
BMA	Absolute encoder cable (Including Battery Kit)

Sign	Voltage
H	AC Servo motor cable
D	DC Servo motor cable

Sign	Length	Sign	Length
1M5	1.5 meter	13M0	13 meter
3M0	3 meter	15M0	15 meter
5M0	5 meter	***	Please contact leadshine teams for other lengths
7M0	7 meter		
10M0	10 meter		

Sign	Drive side terminal type
1	1394-6P Connector
2	MOLEX Connector

Sign	Customized models
R	Direct plug for back-facing wiring
***	Customized

Sign	Special requirements
Blank	Fixed cable
T	Flexible cable
TS	Flexible & oil proof cable
***	Reserved

Sign	Motor side terminal type
1	AMP plastic plug
2	Reserved
3	Assembly type aviation plug
4	Terminal type direct plug
***	Reserved

Sign	Cable specifications
1	2PX24AWG
2	3PX24AWG
3	2PX26AWG
4	3PX26AWG
5	Reserved

Motor cable model number

CABLE - SC H 3M0 - 1 1 3 - T

Sign	Meaning
CABLE	Cable identification

Sign	Cable type
SC	Brake cable
***	Reserved

Sign	Voltage
H	AC Servo motor cable
D	DC Servo motor cable

Sign	Length	Sign	Length
1M5	1.5 meter	13M0	13 meter
3M0	3 meter	15M0	15 meter
5M0	5 meter	***	Please contact leadshine teams for other lengths
7M0	7 meter		
10M0	10 meter		

Sign	Drive side terminal type
1	Wire ferrule
***	Reserved

Sign	Special requirements
Blank	Fixed cable
T	Flexible cable
TS	Flexible & oil proof cable
***	Reserved

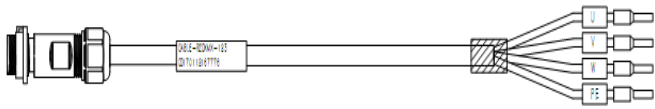
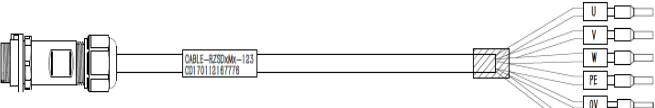
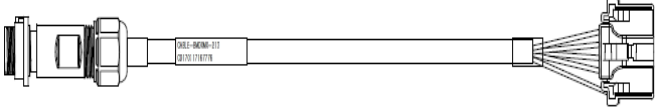
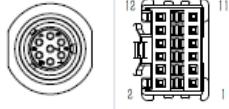
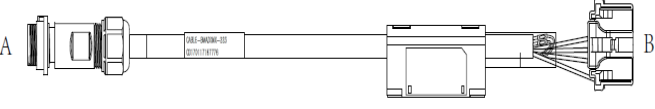
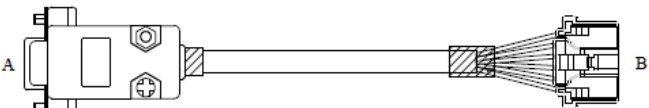
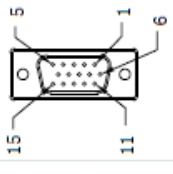
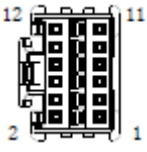
Sign	Motor side terminal type
1	AMP plastic plug
2	Reserved
3	Assembly type aviation plug
4	Terminal type direct plug
***	Reserved

Sign	Cable specifications
1	2X0.3mm ²
***	Reserved

ELVM Series – 40mm

- Frame size: 40mm
- Power rating: 50W-100W
- Motor model: ELVM40**V48*H-***-HD

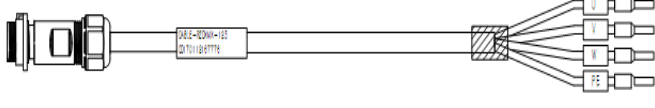
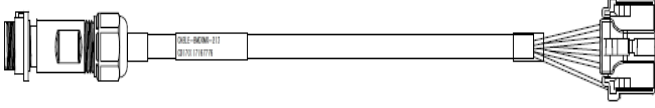
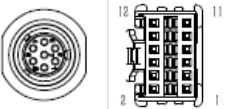
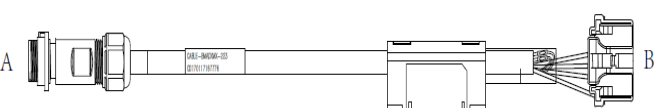
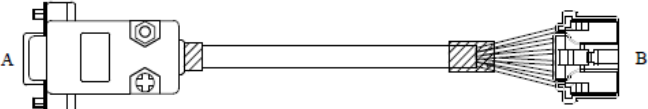
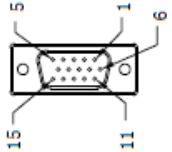
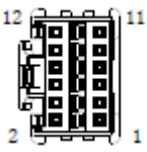


Cable Type		Diagram	Pin		
Motor power	Without brake	 CABLE-RZD*M*-123			
	With brake	 CABLE-RZSD*M*-123	1	Red	U
			2	Blue	V
			3	Brown	W
			4	Yellow Green	PE
			5*	Black	0V
			6*	White	24V
			*5&6 terminal for motor with brake		
Motor encoder	Incremental	 CABLE-BMD*M*-213 (17Bit magnetic encoder)			
	Absolute	 CABLE-BMAD*M*-223 (17Bit magnetic encoder)	A	Terminal	B
			1	PE	1
			2	5V	5
			3	0V	6
			4	SD+	7
			5	SD-	8
			6*	BAT+	-
			7*	BAT-	-
			*Terminal 6 & 7 is to be connected to battery kit for absolute encoder		
		 CABLE-LD2-BM*M* (2500 ppr encoder)			
	PIN-A	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15			
	PIN-B	11 9 6 3 2 1 7 8 4 - 12 10 5 - -			
	Signal	A+ B+ 0V W+ U+ PE Z+ Z- V+ V- A- B- +5V W- U-			

ELVM Series – 60mm

- Frame size: 60mm
- Power rating: 200W (48V)
- Motor model: ELVM6020V48*H-***-HD

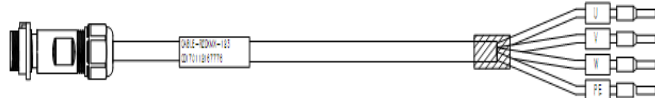
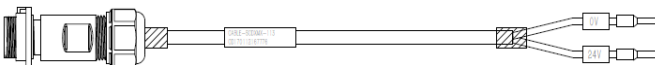
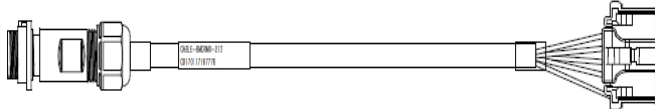
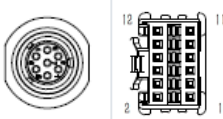
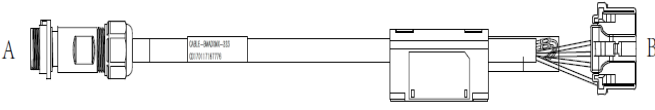
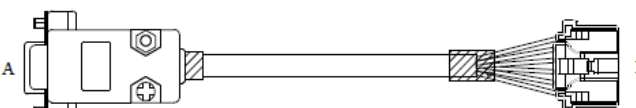
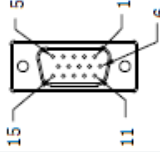
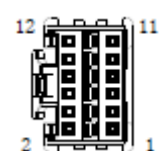


Cable Type		Diagram	Pin		
Motor power		 CABLE-RZD*M*-123			
			1	Red	U
			2	Blue	V
			3	Brown	W
			4	Yellow Green	PE
Motor brake		 CABLE-SCD*M*-113			
			1	Red	24V
			2	Black	0V
Motor encoder	Incremental	 CABLE-BMD*M*-213 (17Bit magnetic encoder)			
	Absolute	 CABLE-BMAD*M*-223 (17Bit magnetic encoder)	A	Terminal	B
			1	PE	1
			2	5V	5
			3	0V	6
			4	SD+	7
			5	SD-	8
			6*	BAT+	-
			7*	BAT-	-
			*Terminal 6 & 7 is to be connected to battery kit for absolute encoder		
		 CABLE-LD2-BM*M* (2500 ppr encoder)			
	PIN-A	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15			
	PIN-B	11 9 6 3 2 1 7 8 4 - 12 10 5 - -			
	Signal	A+ B+ 0V W+ U+ PE Z+ Z- V+ V- A- B- +5V W- U-			

ELVM Series – 60mm

- Frame size: 60mm
- Power rating: 200W(24V)&400W(48V)
- Motor model: ELVM6020V24*H-***-HD/ELVM6040V48*H-***-HD

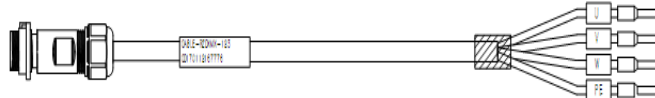
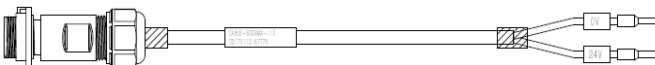
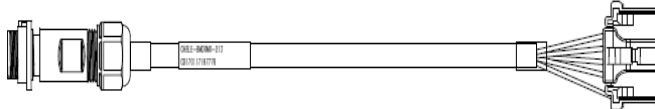
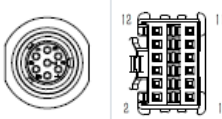
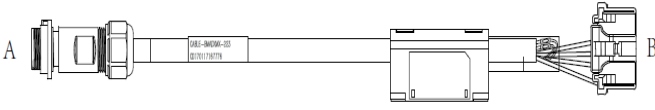
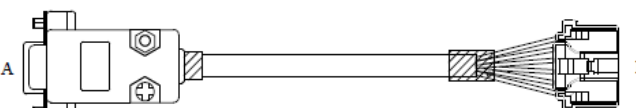
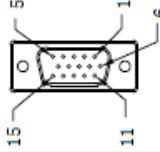


Cable Type		Diagram														Pin															
Motor power		 CABLE-RZD*M*-143																													
																1	Red	U													
																2	Blue	V													
																3	Brown	W													
																4	Yellow Green	PE													
Motor brake		 CABLE-SCD*M*-113																													
																1	Red	24V													
																2	Black	0V													
Motor encoder	Incremental	 CABLE-BMD*M*-213 (17Bit magnetic encoder)																													
																A	Terminal	B													
	Absolute	 CABLE-BMAD*M*-223 (17Bit magnetic encoder)														1	PE	1													
																2	5V	5													
																3	0V	6													
																4	SD+	7													
																5	SD-	8													
																6*	BAT+	-													
																7*	BAT-	-													
																*Terminal 6 & 7 is to be connected to battery kit for absolute encoder															
		 CABLE-LD2-BM*M* (2500 ppr encoder)																													
																															
																PIN-A	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
																PIN-B	11	9	6	3	2	1	7	8	4	-	12	10	5	-	-
																Signal	A+	B+	0V	W+	U+	PE	Z+	Z-	V+	V-	A-	B-	+5V	W-	U-

ELVM Series – 60mm&80mm

- Frame size: 60mm&80mm
- Power rating: 400W(24V)&600W&750W
- Motor model: ELVM6040V24*H-***-HD/ELVM6060V48*H-***-HD/ELVM8075V48*H-***-HD

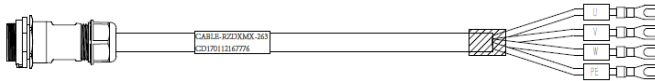
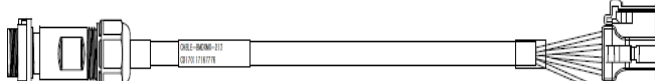
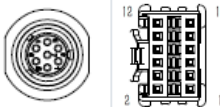
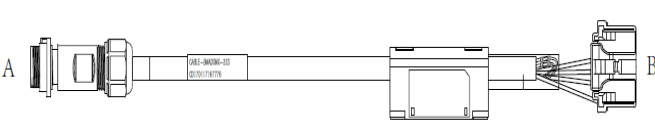
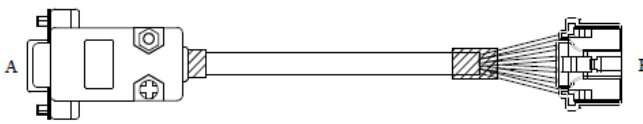
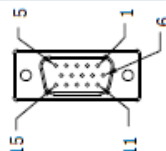
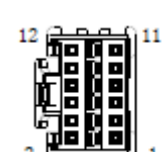


Cable Type		Diagram														Pin			
Motor power		 CABLE-RZD*M*-253																	
																1	Red	U	
																2	Blue	V	
																3	Brown	W	
																4	Yellow Green	PE	
Motor brake		 CABLE-SCD*M*-113																	
																1	Red	24V	
																2	Black	0V	
Motor encoder	Incremental	 CABLE-BMD*M*-213 (17Bit magnetic encoder)																	
	Absolute															 CABLE-BMAD*M*-223 (17Bit magnetic encoder)			A
																	1	PE	1
																	2	5V	5
																	3	0V	6
																	4	SD+	7
																	5	SD-	8
																	6*	BAT+	-
																	7*	BAT-	-
																	*Terminal 6 & 7 is to be connected to battery kit for absolute encoder		
		 CABLE-LD2-BM*M* (2500 ppr encoder)																	

ELVM Series - 80mm

- Frame size: 80mm
- Power rating: 1000W
- Motor model: ELVM80100V48*H-***-HD

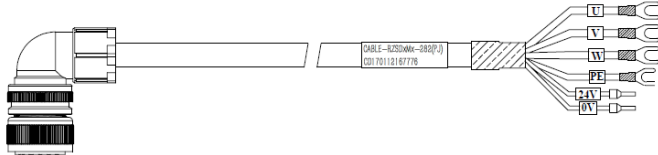
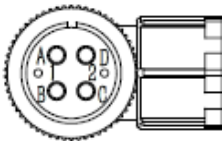
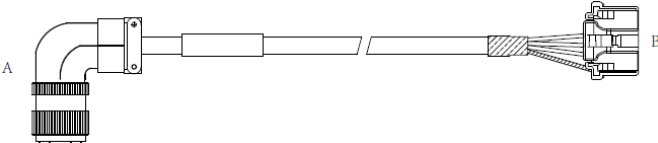
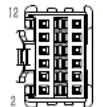
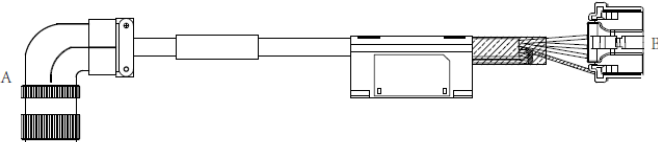
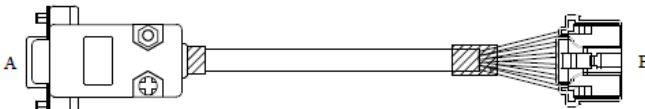
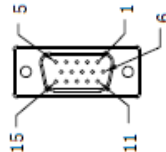
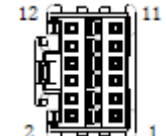


Cable Type		Diagram															Pin		
Motor power																			
		CABLE-RZD*M*-263															1	Red	U
																	2	Blue	V
																	3	Brown	W
																	4	Yellow Green	PE
Motor brake																			
		CABLE-SCD*M*-113															1	Red	24V
																	2	Black	0V
Motor encoder	Incremental																		
	CABLE-BMD*M*-213 (17Bit magnetic encoder)															A	Terminal	B	
	Absolute																1	PE	1
		CABLE-BMAD*M*-223 (17Bit magnetic encoder)															2	5V	5
																	3	0V	6
															4	SD+	7		
															5	SD-	8		
																	6*	BAT+	-
																	7*	BAT-	-
																			
		CABLE-LD2-BM*M* (2500 ppr encoder)																	
PIN-A	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
PIN-B	11	9	6	3	2	1	7	8	4	-	12	10	5	-	-				
Signal	A+	B+	0V	W+	U+	PE	Z+	Z-	V+	V-	A-	B-	+5V	W-	U-				

ELVM Series - 130mm

- Frame size: 130mm
- Power rating: 1200W-2000W
- Motor model: ELVM130**0V48*-*-*-*HD



Cable Type		Diagram															Pin																																																		
Motor power																																																																			
		CABLE-RZSD*M*-282															1	Red	U																																																
																	2	Blue	V																																																
																	3	Brown	W																																																
																	4	Yellow Green	PE																																																
															5*	Black	0V																																																		
															6*	White	24V																																																		
															*5&6 terminal for motor with brake																																																				
Incremental																																																																			
		CABLE-BMD*M*-212 (17Bit magnetic encoder)																																																																	
Absolute																	<table><tr><td>A</td><td>Terminal</td><td>B</td></tr><tr><td>1</td><td>PE</td><td>1</td></tr><tr><td>2</td><td>5V</td><td>5</td></tr><tr><td>3</td><td>0V</td><td>6</td></tr><tr><td>4</td><td>SD+</td><td>7</td></tr><tr><td>5</td><td>SD-</td><td>8</td></tr><tr><td>6*</td><td>BAT+</td><td>-</td></tr><tr><td>7*</td><td>BAT-</td><td>-</td></tr></table>			A	Terminal	B	1	PE	1	2	5V	5	3	0V	6	4	SD+	7	5	SD-	8	6*	BAT+	-	7*	BAT-	-																								
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Motor encoder																																																																			
		CABLE-LD2-BM*M* (2500 ppr encoder)																																																																	
		<table><tr><td>PIN-A</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td></tr><tr><td>PIN-B</td><td>11</td><td>9</td><td>6</td><td>3</td><td>2</td><td>1</td><td>7</td><td>8</td><td>4</td><td>-</td><td>12</td><td>10</td><td>5</td><td>-</td><td>-</td></tr><tr><td>Signal</td><td>A+</td><td>B+</td><td>0V</td><td>W+</td><td>U+</td><td>PE</td><td>Z+</td><td>Z-</td><td>V+</td><td>V-</td><td>A-</td><td>B-</td><td>+5V</td><td>W-</td><td>U-</td></tr></table>															PIN-A	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	PIN-B	11	9	6	3	2	1	7	8	4	-	12	10	5	-	-	Signal	A+	B+	0V	W+	U+	PE	Z+	Z-	V+	V-	A-	B-	+5V	W-	U-			
		PIN-A	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15																																																		
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Signal	A+	B+	0V	W+	U+	PE	Z+	Z-	V+	V-	A-	B-	+5V	W-	U-																																																				

Typical configuration examples

ELVM-M17 Series

Type Name ELVM Series	Matched Drive		Matched Cable				
	CANopen	RS485	Motor Cable	Motor +Brake Cable	Encoder Cable	Brake Cable	
4005V48EH-M17-HD	ELD2-CAN7005B	ELD2-RS7005	/	CABLE-RZSD*M*-123		/	
4005V48FH-M17-HD			CABLE-RZD*M*-123	/			
4010V48EH-M17-HD			/	CABLE-RZSD*M*-123			
4010V48FH-M17-HD			CABLE-RZD*M*-123	/			
6020V24EH-M17-HD	ELD2-CAN7010B	ELD2-RS7010	CABLE-RZD*M*-143	/	CABLE-BMAD*M*-223 (Multi-turn)	CABLE-SCD*M*-113	
6020V24FH-M17-HD				/		/	
6020V48EH-M17-HD			CABLE-RZD*M*-123	/		CABLE-SCD*M*-113	
6020V48FH-M17-HD				/		/	
6040V24EH-M17-HD	ELD2-CAN7020B	ELD2-RS7020B	CABLE-RZD*M*-253	/	— — — —	CABLE-SCD*M*-113	
6040V24FH-M17-HD	2ELD2-CAN7020B	2ELD2-RS7020B		/		/	
6040V48EH-M17-HD	ELD2-CAN7010B	ELD2-RS7010	CABLE-RZD*M*-143	/	CABLE-BMD*M*-213 (Single-turn)	CABLE-SCD*M*-113	
6040V48FH-M17-HD				/		/	
6060V48EH-M17-HD	ELD2-CAN7015B	ELD2-RS7015B	CABLE-RZD*M*-253	/		CABLE-SCD*M*-113	
6060V48FH-M17-HD				/		/	
8075V48EH-M17-HD	ELD2-CAN7020B	ELD2-RS7020B		/		CABLE-SCD*M*-113	
8075V48FH-M17-HD	2ELD2-CAN7020B	2ELD2-RS7020B		/		/	
80100V48EH-M17-HD	ELD2-CAN7030B	ELD2-RS7030B	CABLE-RZD*M*-263	/		CABLE-SCD*M*-113	
80100V48FH-M17-HD	2ELD2-CAN7030B	2ELD2-RS7030B		/		/	
130120V48EM-M17-HD	ELD2-CAN7040B	ELD2-RS7040B	CABLE-RZSD*M*-282		CABLE-BMAD*M*-222 (Multi-turn)	/	
130120V48FM-M17-HD					— — — —		
130150V48EM-M17-HD							
130150V48FM-M17-HD							
130200V48EM-M17-HD	ELD2-CAN7060B	ELD2-RS7060B			CABLE-BMD*M*-212 (Single-turn)		
130200V48FM-M17-HD							

ELVM-B25 Series

Type Name ELVM Series	Matched Drive		Matched Cable			
	CANopen	RS485	Motor Cable	Motor +Brake Cable	Encoder Cable	Brake Cable
4005V48EH-B25-HD	ELD2-CAN7005B	ELD2-RS7005	/	CABLE-RZSD*M*-123		/
4005V48FH-B25-HD			CABLE-RZD*M*-123	/		
4010V48EH-B25-HD			/	CABLE-RZSD*M*-123		
4010V48FH-B25-HD			CABLE-RZD*M*-123	/		
6020V24EH-B25-HD	ELD2-CAN7010B	ELD2-RS7010	CABLE-RZD*M*-143	/		CABLE-SCD*M*-113
6020V24FH-B25-HD				/		/
6020V48EH-B25-HD			CABLE-RZD*M*-123	/		CABLE-SCD*M*-113
6020V48FH-B25-HD				/		/
6040V24EH-B25-HD	ELD2-CAN7020B	ELD2-RS7020B	CABLE-RZD*M*-253	/	CABLE-LD2-BM*M* (Single-turn)	CABLE-SCD*M*-113
6040V24FH-B25-HD	2ELD2-CAN7020B	2ELD2-RS7020B		/		/
6040V48EH-B25-HD	ELD2-CAN7010B	ELD2-RS7010	CABLE-RZD*M*-143	/		CABLE-SCD*M*-113
6040V48FH-B25-HD				/		/
6060V48EH-B25-HD	ELD2-CAN7015B	ELD2-RS7015B	CABLE-RZD*M*-253	/		CABLE-SCD*M*-113
6060V48FH-B25-HD				/		/
8075V48EH-B25-HD	ELD2-CAN7020B	ELD2-RS7020B		/		CABLE-SCD*M*-113
8075V48FH-B25-HD	2ELD2-CAN7020B	2ELD2-RS7020B		/		/
80100V48EH-B25-HD	ELD2-CAN7030B	ELD2-RS7030B	CABLE-RZD*M*-263	/		CABLE-SCD*M*-113
80100V48FH-B25-HD	2ELD2-CAN7030B	2ELD2-RS7030B		/		/