

EDSYPFLD  
13298960

# L-force *Drives*



Manual



EY...

System cables and system connectors

**Lenze**

## Document history

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13262247	1.0	08/2008	TD36	First edition



### Tip!

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# 1 Preface

## System cables

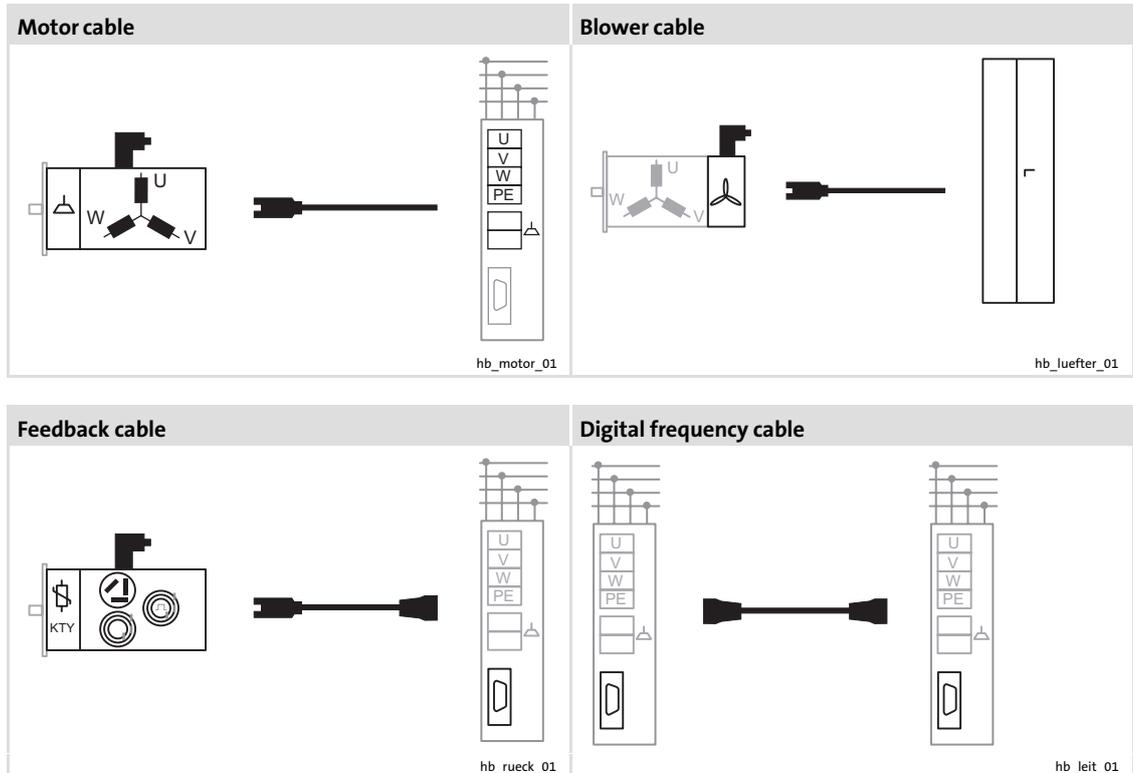
### Selection

# 1 Preface

## 1.1 System cables

### 1.1.1 Selection

A comprehensive selection of system cables is available for your Lenze motors and controllers.



### 1.1.2 Validity

This manual describes Lenze standard system cables and assignments and does not deal with customised cables.

### 1.1.3 Design

Lenze system cables are available in many different designs and provide various possible combinations.

#### Laying system

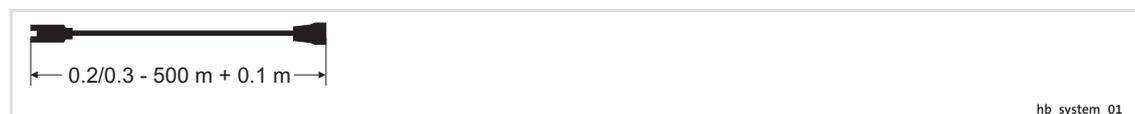
- ▶ Fixed installation
- ▶ Trailing cable installation

#### Cable ends

- ▶ Screw plug
- ▶ SpeedTec
- ▶ open

#### Cable lengths

- ▶ freely selectable within a range of 0.3 m ... 500 m at an increment of 0.1 m. For digital frequency cables, the cable lengths are freely selectable within a range of 0.2 m ... 500 m.



hb\_system\_01



#### Note!

Depending on the controller and the feedback system, certain cable lengths must not be exceeded.

#### Individual layout

- ▶ Connection on the motor side – System cable – Connection on the controller side

#### Possible combinations

- ▶ Motor – System cable – Controller
- ▶ Motor – System cable 1 – System cable 2 – ... – System cable n – Controller



#### Note!

This pattern applies to cables in both fixed installation and trailing cable installation. The two designs can be combined.

#### Unique design

- ▶ Plug-in connectors are application-specific (power, blower, feedback, digital frequency) and uniquely designed.
- ▶ Hence, faulty connections can be ruled out during the mounting and in the event of service.

Often, many system cables with different cross-sections can be used for one motor type. The assignment of motor type and system cable is only valid under certain conditions.

**Note!**

The motor powers have been assigned corresponding to the permissible current loadings according to EN 60204-1, laying system C, for continuous operation conditions with motor standstill current ( $I_0$ ) at an ambient air temperature of 45°C.

If the system cable is a trailing cable, a reference is made to the IEC 60354-2-52 standard, table A.52-5.

In case of deviant specifications and conditions

- ▶ regional standards
- ▶ regulations
- ▶ laying systems
- ▶ bundlings
- ▶ ambient conditions
- ▶ cable designs
- ▶ motor utilisations

the responsibility for installing a connection cable according to the current conditions and to all relevant standards and legislation lies with the user.

**Stop!**

If several system cables are listed, the cable with the smallest cross-section is sufficient, but all other cables can be used as well.

**Exceptions:**

Depending on the cable length, especially with dynamic applications, the voltage drop on the cable might have to be considered. If necessary, select a bigger cable cross-section.

**Trailing cable:**



**Note!**

Since trailing cables feature an increased thermal stability, higher currents are permitted in the above-listed standards. As a result, smaller cross-sections may be permissible for trailing cables than for fixedly installed cables.

The system cables for motors with terminal boxes are designed for standard cable glands.



**Note!**

Compared to motors with plug connections, motors with terminal boxes have restricted connection possibilities.

These restrictions can be compensated through

- ▶ different screwed connections
- ▶ extensions or reductions.

**1.1.5 Important notes for trailing cables****Store trailing cables in an optimal manner**

Trailing cables should be stored in closed rooms. The storage temperature should be observed.

Store cables at room temperature at least 24 hours before laying to ensure an optimum installation.

Store cables in the condition upon delivery until they are installed.

**Install trailing cables correctly**

Unwind trailing cables from the cable drum or cable ring tangentially. **Never** pull via the front of the cable drum or cable ring. It may be necessary to lay or hang cables before installation. Cables must be installed twist-free in the drag chain and bending radii must be observed.

Drag chains must be selected according to the features of the cables used. Mounting instructions of the chain manufacturer must be observed.

The cables in the drag chains must lay loosely next to each other and must move freely. A free space of min. 10% and max. 50% of the cable diameter must be allowed. If possible, use separating strips to achieve the separate laying of the cables. This applies particularly if the cables are laid on top of each other. Cables which differ greatly in diameter and material must be laid separately of each other.

A free space of 20% of the cable diameter must be allowed in vertical trailing cables to avoid that they are obstructed.

Cables must also move freely in horizontal direction. They must not be forcibly guided or fixed. In the radius, no tensile force must act on the trailing cable.

Fix the cables over a large surface at both cable ends in the drag chains. A minimum distance of  $20 \times$  cable diameter between the fixing point and last pivoting point of the drag chain must be maintained.

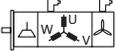
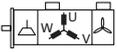
**Maintain cables in drag chains regularly**

After commissioning and several test runs, check the cables in the drag chains if they are laid correctly. Readjust and adjust lengths. It must be observed that the cables do not lay on the inner or outer radius. Further checks must be carried out every six months.

After a fracture or other damage of the drag chain, replace all cables since a permanent damage of the cable is probable.

Used cables must not be used again in other drag chains.

1.2 Symbol key

Symbol	Meaning
	Motor with plug connection
	Motor and blower with plug connection
	Feedback with plug connection
	Motor with terminal box
	Motor and blower with terminal box
	Feedback with terminal box
	Cable between motor and servo controller/frequency inverter
	Connection on the servo controller/frequency inverter
	Connection on the control cabinet (terminal strip)
	Cable for fixed installation
	Cable for trailing cable installation
	Plug-in connector with screw plug(socket)
	Plug-in connector with SpeedTec(socket)
	Plug-in connector with SpeedTec(pin)
	Sub-D plug
	Sub-D plug with locking hook
	Structure of the system cable
	Cross-section
	Diameter
	Bend radius
	Maximum acceleration
	Maximum traversing speed
	Minimum number of bending cycles
	Mass
	DC resistance at 20°C
	Temperature range for operation
	Temperature range for transport and storage
	Outer sheath: PCV (polyvinyl chloride)
	Outer sheath: PUR (polyurethane)
	Colour of sheath

Symbol	Meaning
	Flame-resistant according to UL 1581, vertical wire flame test (VW-1) Flame-resistant according to CSA C22.2 No. 3-92, vertical flame (FT-1) Flame-resistant according to EN 50265-1/IEC 60332-1
	General resistance to dilute acids, alkalis and detergents
	General resistance to dust (e.g. bauxite, magnesite)
	Silicone-free
	Halogen-free according to VDE 0472, part 815
	Free of paint-wetting impairment substances
	Oil resistance according to ISO 6722, parts 1 and 2 Oil resistance according to VDE 0282, part 10 Oil resistance according to VDE 0472, part 803, test method B
	Resistance to fuels according to ISO 6722, parts 1 and 2
	UV resistant and weatherproof according to DIN EN ISO 4892-2

## 1.3

## Code for core colour coding according to DIN IEC 757

Abbreviation	Colour	Abbreviation	Colour	Abbreviation	Colour
BK	Black	BN	Brown	RD	Red
YE	Yellow	GN	Green	BU	Blue
VT	Violet	GY	Grey	WH	White
PK	Pink	GNYE	Green/Yellow	OG	Orange

## 1.4 Type designation and technical data

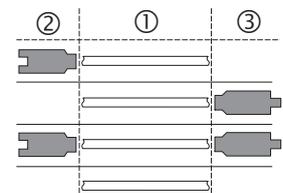
### 1.4.1 Enclosure

The prefabricated system cables with the following plug-in connectors (M01...M06, L01...L06, F01...F08, P04...P06, J03...J05, and G06...G09) comply with IP65.

### 1.4.2 Type code

The type code specifies the different system cable designs.

	EYx	xxxx	x	xxxx	xxx	xxx
		①		②	③	
<b>Product series</b>						
EYP =	Motor cable					
EYF =	Feedback cable					
EYL =	Blower cable					
EYD =	Digital frequency cable					
<b>Cable type</b>						
xxxx =	Characteristic, see description <a href="#">16</a>					
<b>Type of usage</b>						
A =	Connection cable					
V =	Extension cable					
Y =	Cable without plug-in connector					
<b>Cable length</b>						
xxxx =	Cable length in decimetres					
0003 =	Minimum length					
5000 =	Maximum length					
	Increment: 0.1 m					
	Example:					
2350 =	$2350 \times 0.1 \text{ m} = 235.0 \text{ m}$					
<b>Cable end on the motor side or on the controller side (digital frequency cable for slave)</b>						
xxx =	Characteristic, see description <a href="#">19</a> , <a href="#">21</a>					
<b>Cable end on the controller side (digital frequency cable for master)</b>						
xxx =	Characteristic, see description <a href="#">20</a>					



# 1

## Preface

Type designation and technical data  
Cable type

### 1.4.3 Cable type

The cable type characteristic describes the system cable before it is finished.

This characteristic specifies the layout, the technical data, and the system cable properties.

The parentheses stand for the shield.

#### Structure and mechanical properties

KZ										
	[mm <sup>2</sup> ]	[AWG]		[mm]	—		[Mio.]	[m/s]	[m/s <sup>2</sup> ]	[kg/km]
0001	5×1.0	5×18	–	7.8	4×d	–	–	–	–	98
0002	5×1.0	5×18	✓	9.1	5×d	5×d	7.5	3	5	106
0003	(4×1.0+(2×0.5))	(4×18+(2×20))	–	10.3	7.5×d	–	–	–	–	150
0004	(4×1.5+(2×0.5))	(4×16+(2×20))	–	11.6	7.5×d	–	–	–	–	191
0005	(4×2.5+(2×0.5))	(4×14+(2×20))	–	13.2	7.5×d	–	–	–	–	260
0006	(4×4+(2×1.0))	(4×12+(2×18))	–	14.5	7.5×d	–	–	–	–	346
0007	(4×6+(2×1.0))	(4×10+(2×18))	–	16.5	7.5×d	–	–	–	–	455
0008	(4×10+(2×1.0))	(4×8+(2×18))	–	19.6	7.5×d	–	–	–	–	670
0009	(4×16+(2×1.0))	(4×6+(2×18))	–	23.6	7.5×d	–	–	–	–	995
0010	(4×1.0+(2×0.5))	(4×18+(2×20))	✓	11.2	5×d	7.5×d	2.5	3	5	177
0011	(4×1.5+(2×0.5))	(4×16+(2×20))	✓	12.3	5×d	10×d	2.5	3	5	215
0012	(4×2.5+(2×0.5))	(4×14+(2×20))	✓	14.2	5×d	10×d	2.5	3	5	215
0013	(4×4+(2×1.0))	(4×12+(2×18))	✓	14.8	5×d	10×d	2.5	3	5	368
0014	(4×6+(2×1.0))	(4×10+(2×18))	✓	17.5	5×d	10×d	2.5	3	5	509
0015	(4×10+(2×1.0))	(4×8+(2×18))	✓	20.5	5×d	10×d	2.5	3	5	732
0016	(4×16+(2×1.0))	(4×6+(2×18))	✓	24.0	5×d	10×d	2.5	3	5	1053
0017	3(2×0.14)+(3×0.14)	3(2×26)+(3×26)	–	9.4	7.5×d	–	–	–	–	100
0018	4(2×0.14)+(2×1.0)	4(2×26)+(2×18)	–	11.1	7.5×d	–	–	–	–	150
0019	4(2×0.14)+2(1.0)	4(2×26)+2(18)	✓	11.7	5×d	10×d	2.5	3	5	165
0020	3(2×0.14)+(3×0.14)	3(2×26)+(3×26)	✓	10.3	5×d	7.5×d	2.5	3	5	115
0021	3(2×0.14)+(4×0.14) +2(2×0.5)	3(2×26)+(4×26) +2(2×20)	–	12.0	7.5×d	–	–	–	–	180
0022	3(2×0.14)+(4×0.14) +2(2×0.5)	3(2×26)+(4×26) +2(2×20)	✓	12.2	5×d	10×d	2.5	3	5	175
0023	5(2×0.14)+(4×0.14) +(2×0.5)	5(2×26)+(4×26) +(2×20)	–	12.6	7.5×d	–	–	–	–	180
0024	5(2×0.14)+(4×0.14) +(2×0.5)	5(2×26)+(4×26) +(2×20)	✓	12.6	5×d	10×d	2.5	3	5	180

### Electrical properties and temperature range

KZ	U <sub>N</sub>				U <sub>p</sub>								I
	DIN VDE 1)		UL/CSA 2)		3)	4)	5)	6)	DIN VDE	UL/CSA	DIN VDE	UL/CSA	7)
	[V]		[V]		[kV AC]	[kV AC]	[Ω/km]	[Ω/km]	[°C]				[A]
0001	–	300/500	–	600	–	–	–	19.5	–40 ... +70	–40 ... +90	–40 ... +90	–40 ... +90	–
0002	–	300/500	–	600	–	–	–	19.5	–40 ... +70	–40 ... +75	–40 ... +80	–40 ... +80	–
0003	300	600/1000	300	600	1.2	3.0	39.0	19.5	–30 ... +80	–30 ... +80	–30 ... +80	–30 ... +80	10.0
0004	300	600/1000	300	600	1.2	3.0	39.0	13.3	–30 ... +80	–30 ... +80	–30 ... +80	–30 ... +80	13.8
0005	300	600/1000	300	600	1.2	3.0	39.0	8.0	–30 ... +80	–30 ... +80	–30 ... +80	–30 ... +80	19.1
0006	300	600/1000	300	600	1.2	3.0	19.5	4.9	–30 ... +80	–30 ... +80	–30 ... +80	–30 ... +80	25.5
0007	300	600/1000	300	600	1.2	3.0	19.5	3.3	–30 ... +80	–30 ... +80	–30 ... +80	–30 ... +80	32.8
0008	300	600/1000	300	600	1.2	3.0	19.5	1.9	–30 ... +80	–30 ... +80	–30 ... +80	–30 ... +80	45.5
0009	300	600/1000	300	600	1.2	3.0	19.5	1.2	–30 ... +80	–30 ... +80	–30 ... +80	–30 ... +80	60.1
0010	300	600/1000	300	600	1.2	3.0	39.0	19.5	–30 ... +90	–30 ... +80	–30 ... +90	–40 ... +80	13.8
0011	300	600/1000	300	600	1.2	3.0	39.0	13.3	–30 ... +90	–30 ... +80	–30 ... +90	–40 ... +80	19.0
0012	300	600/1000	300	600	1.2	3.0	39.0	8.0	–30 ... +90	–30 ... +80	–30 ... +90	–40 ... +80	26.0
0013	300	600/1000	300	600	1.2	3.0	19.5	4.9	–30 ... +90	–30 ... +80	–30 ... +90	–40 ... +80	34.0
0014	300	600/1000	300	600	1.2	3.0	19.5	3.3	–30 ... +90	–30 ... +80	–30 ... +90	–40 ... +80	45.0
0015	300	600/1000	300	600	1.2	3.0	19.5	1.9	–30 ... +90	–30 ... +80	–30 ... +90	–40 ... +80	61.0
0016	300	600/1000	300	600	1.2	3.0	19.5	1.2	–30 ... +90	–30 ... +80	–30 ... +90	–40 ... +80	83.0
0017	300	–	300	–	0.8	–	130	–	–10 ... +80	–10 ... +80	–30 ... +80	–30 ... +80	–
0018	300	–	300	–	0.8	–	130/19.5	–	–10 ... +80	–10 ... +80	–30 ... +80	–30 ... +80	–
0019	300	–	300	–	0.8	–	130/19.5	–	–20 ... +90	–20 ... +80	–30 ... +90	–30 ... +80	–
0020	300	–	300	–	0.8	–	130	–	–20 ... +90	–20 ... +80	–30 ... +90	–30 ... +80	–
0021	300	–	300	–	0.8	–	130/39.0	–	–10 ... +80	–10 ... +80	–30 ... +80	–30 ... +80	–
0022	300	–	300	–	0.8	–	130/39.0	–	–20 ... +90	–20 ... +80	–30 ... +90	–30 ... +80	–
0023	300	–	300	–	0.8	–	130/39.0	–	–10 ... +80	–10 ... +80	–30 ... +80	–30 ... +80	–
0024	300	–	300	–	0.8	–	130/39.0	–	–20 ... +90	–20 ... +80	–30 ... +90	–30 ... +80	–

- 1) The rated voltage of 300 V refers to control wires, and the rated voltage of 300/500 V or 600/1000 V, respectively, refers to supply wires. The quotient specifies the U<sub>0</sub>/U ratio.
- 2) The rated voltage of 300 V refers to control wires, and the rated voltage of 600 V refers to supply wires.
- 3) The test voltage U<sub>p</sub> refers to control wires between core/shield.
- 4) The test voltage U<sub>p</sub> refers to supply wires between core/shield.
- 5) The DC resistance at 20°C refers to the control wires. If two values are specified, the greater value refers to the smaller cross-section.
- 6) The DC resistance at 20°C refers to the supply wires.
- 7) Max. current-carrying capacity of cable according to selection, see (□ 10) and (□ 38).

## Chemical properties

KZ													
									ISO	VDE 0282	VDE 0472		
0001	GYBU	PVC	✓ <sup>1)</sup>	✓	–	✓	–	✓	–	–	–	–	–
0002	BK	PUR	✓	✓	–	✓	✓	✓	–	–	–	–	–
0003	GYBU	PVC	✓	✓	–	✓	–	✓	✓	–	–	✓	✓
0004	GYBU	PVC	✓	✓	–	✓	–	✓	✓	–	–	✓	✓
0005	GYBU	PVC	✓	✓	–	✓	–	✓	✓	–	–	✓	✓
0006	GYBU	PVC	✓	✓	–	✓	–	✓	✓	–	–	✓	✓
0007	GYBU	PVC	✓	✓	–	✓	–	✓	✓	–	–	✓	✓
0008	GYBU	PVC	✓	✓	–	✓	–	✓	✓	–	–	✓	✓
0009	GYBU	PVC	✓	✓	–	✓	–	✓	✓	–	–	✓	✓
0010	OG	PUR	✓	✓	✓	✓	✓	✓	–	✓	–	✓	✓
0011	OG	PUR	✓	✓	✓	✓	✓	✓	–	✓	–	✓	✓
0012	OG	PUR	✓	✓	✓	✓	✓	✓	–	✓	–	✓	✓
0013	OG	PUR	✓	✓	✓	✓	✓	✓	–	✓	–	✓	✓
0014	OG	PUR	✓	✓	✓	✓	✓	✓	–	✓	–	✓	✓
0015	OG	PUR	✓	✓	✓	✓	✓	✓	–	✓	–	✓	✓
0016	OG	PUR	✓	✓	✓	✓	✓	✓	–	✓	–	✓	✓
0017	BK	PVC	✓	✓	–	✓	–	–	✓	–	–	✓	✓
0018	BK	PVC	✓	✓	–	✓	–	–	✓	–	–	✓	✓
0019	GN	PUR	✓	✓	✓	✓	✓	–	–	–	✓	✓	✓
0020	GN	PUR	✓	✓	✓	✓	✓	–	–	–	✓	✓	✓
0021	BK	PVC	✓	✓	–	✓	–	–	✓	–	–	✓	✓
0022	GN	PUR	✓	✓	✓	✓	✓	–	–	–	✓	✓	✓
0023	BK	PVC	✓	✓	–	✓	–	–	✓	–	–	✓	✓
0024	GN	PUR	✓	✓	✓	✓	✓	–	–	–	✓	✓	✓

1) Not flame-resistant according to UL and CSA.

### 1.4.4 Cable end on the motor side

This characteristic describes the end of the system cable on the motor side. The plug-in connectors are designed as sockets.

Characteristic	No. of poles	Maximum voltage	Core cross-section	Type
<b>Power</b>				
M01	6	AC/DC 630 V	1.0 ... 2.5 mm <sup>2</sup>	Plug-in connector with screw plug
M02	8	AC/DC 630 V	2.5 ... 4.0 mm <sup>2</sup>	Plug-in connector with screw plug
M03	8	AC/DC 630 V	6.0 ... 16.0 mm <sup>2</sup>	Plug-in connector with screw plug
M04	6	AC/DC 630 V	1.0 ... 2.5 mm <sup>2</sup>	Plug-in connector with SpeedTec
M05	8	AC/DC 630 V	2.5 ... 4.0 mm <sup>2</sup>	Plug-in connector with SpeedTec
M06	8	AC/DC 630 V	6.0 ... 16.0 mm <sup>2</sup>	Plug-in connector with SpeedTec
<b>Blower</b>				
L01	8	AC/DC 630 V	1.0 ... 2.5 mm <sup>2</sup>	Plug-in connector with screw plug
L02	7	AC/DC 630 V	1.0 ... 1.5 mm <sup>2</sup>	Plug-in connector with screw plug
L03	8	AC/DC 630 V	1.0 ... 2.5 mm <sup>2</sup>	Plug-in connector with SpeedTec
L04	7	AC/DC 630 V	1.0 ... 1.5 mm <sup>2</sup>	Plug-in connector with SpeedTec
L05	7	AC/DC 630 V	1.0 ... 1.5 mm <sup>2</sup>	Plug-in connector with screw plug
L06	7	AC/DC 630 V	1.0 ... 1.5 mm <sup>2</sup>	Plug-in connector with SpeedTec
<b>Feedback</b>				
F01	12	AC/DC 125 V	0.14 ... 1.0 mm <sup>2</sup>	Plug-in connector with screw plug
F02	12	AC/DC 125 V	0.14 ... 1.0 mm <sup>2</sup>	Plug-in connector with screw plug, coding: 20°
F03	17	AC/DC 125 V	0.14 ... 0.5 mm <sup>2</sup>	Plug-in connector with screw plug
F04	17	AC/DC 125 V	0.14 ... 0.5 mm <sup>2</sup>	Plug-in connector with screw plug, coding: 20°
F05	12	AC/DC 125 V	0.14 ... 1.0 mm <sup>2</sup>	Plug-in connector with SpeedTec
F06	12	AC/DC 125 V	0.14 ... 1.0 mm <sup>2</sup>	Plug-in connector with SpeedTec, coding: 20°
F07	17	AC/DC 125 V	0.14 ... 0.5 mm <sup>2</sup>	Plug-in connector with SpeedTec
F08	17	AC/DC 125 V	0.14 ... 0.5 mm <sup>2</sup>	Plug-in connector with SpeedTec, coding: 20°
<b>Cable end without plug-in connector</b>				
A00	–	–	–	–

## 1.4.5 Cable end on the controller side

This characteristic describes the end of the system cable on the controller side. The plug-in connectors are designed as pins.

Characteristic	No. of poles	Maximum voltage	Core cross-section	Type
<b>Power</b>				
P04	6	AC/DC 630 V	1.0 ... 2.5 mm <sup>2</sup>	Plug-in connector with SpeedTec
P05	8	AC/DC 630 V	2.5 ... 4.0 mm <sup>2</sup>	Plug-in connector with SpeedTec
P06	8	AC/DC 630 V	6.0 ... 16.0 mm <sup>2</sup>	Plug-in connector with SpeedTec
<b>Blower</b>				
J03	8	AC/DC 630 V	1.0 ... 2.5 mm <sup>2</sup>	Plug-in connector with SpeedTec
J04	7	AC/DC 630 V	1.0 ... 1.5 mm <sup>2</sup>	Plug-in connector with SpeedTec
J05	7	AC/DC 630 V	1.0 ... 1.5 mm <sup>2</sup>	Plug-in connector with SpeedTec
<b>Feedback</b>				
G06	12	AC/DC 125 V	0.14 ... 1.0 mm <sup>2</sup>	Plug-in connector with SpeedTec
G07	12	AC/DC 125 V	0.14 ... 1.0 mm <sup>2</sup>	Plug-in connector with SpeedTec, coding: 20°
G08	17	AC/DC 125 V	0.14 ... 0.5 mm <sup>2</sup>	Plug-in connector with SpeedTec
G09	17	AC/DC 125 V	0.14 ... 0.5 mm <sup>2</sup>	Plug-in connector with SpeedTec, coding: 20°
S01	9	AC/DC 50 V	0.14 mm <sup>2</sup>	Sub-D plug
S02	9	AC/DC 50 V	0.14 mm <sup>2</sup>	Sub-D plug with locking hook
S03	15	AC/DC 50 V	0.14 ... 0.5 mm <sup>2</sup>	Sub-D plug with locking hook
S04	9	AC/DC 50 V	0.14 mm <sup>2</sup>	Sub-D plug, large cable entry
S05	9	AC/DC 50 V	0.14 mm <sup>2</sup>	Sub-D plug with locking hook, large cable entry
S06	15	AC/DC 50 V	0.14 ... 0.5 mm <sup>2</sup>	Sub-D plug
W02	9	AC/DC 50 V	0.14 mm <sup>2</sup>	Sub-D plug, (socket)
W04	9	AC/DC 50 V	0.14 mm <sup>2</sup>	Sub-D plug, large cable entry(socket)
<b>Cable end without plug-in connector</b>				
A00	–	–	–	–

**Note!**

When Sub-D plug W04 is used, an additional free space of 50 mm must be considered due to the depth of the plug.

If the required free space is not available, a connection cable for fixed installation and plug W02 can be used in combination with an extension cable suitable for trailing to solve the application.

**1.4.6 Cable end of digital frequency cable**

This characteristic describes the cable ends of the digital frequency cables.

Characteristic	Number of poles	Maximum voltage	Core cross-section	Type
<b>Digital frequency</b>				
W01	9	AC/DC 50 V	0.14 mm <sup>2</sup>	Sub-D plug (socket)
W03	9	AC/DC 50 V	0.14 mm <sup>2</sup>	Sub-D plug with locking hook (socket)
S01	9	AC/DC 50 V	0.14 mm <sup>2</sup>	Sub-D plug (pin)
S02	9	AC/DC 50 V	0.14 mm <sup>2</sup>	Sub-D plug with locking hook (pin)

# 1

## Preface

Overview of possible configurations  
Motor cables

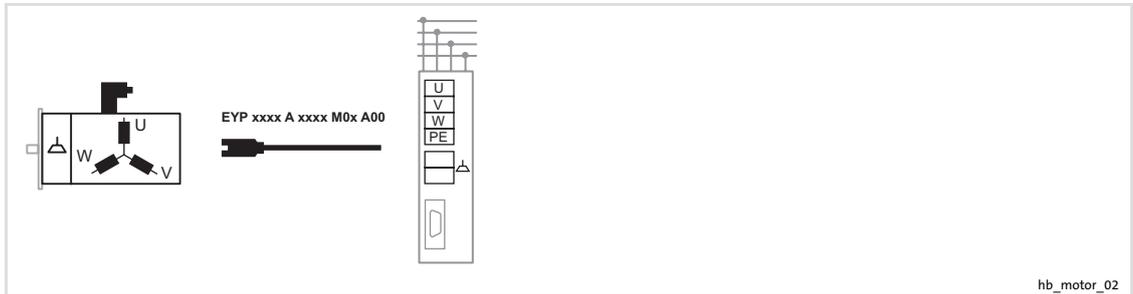
### 1.5

#### Overview of possible configurations

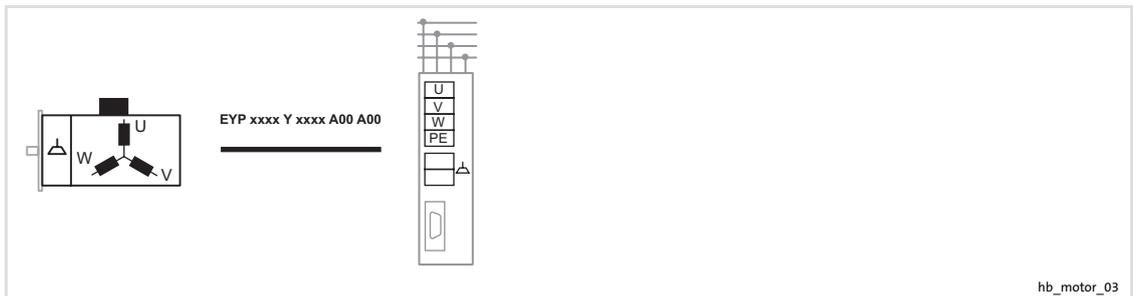
##### 1.5.1

#### Motor cables

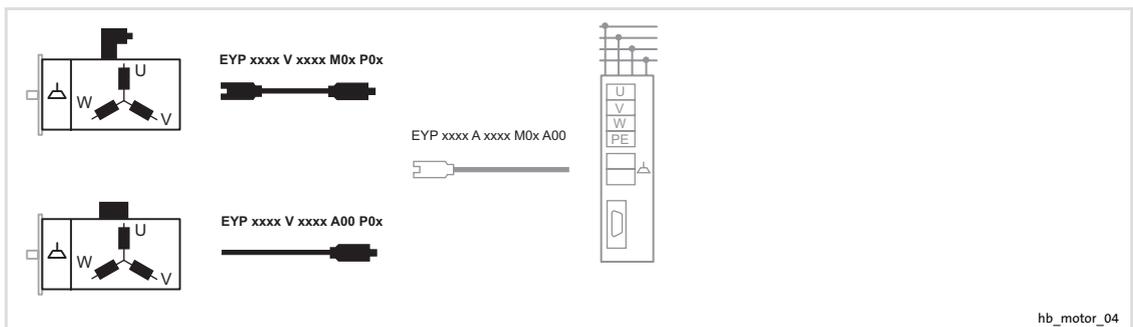
Connection cable, see (📖 23)



Cable without plug-in connector, see (📖 24)



Extension cable, see (📖 25)



Connection cable

Product series	Cable type	Connection cable	Cable length in decimetres	Cable end on the motor side (socket)	Cable end on the controller side
<b>E Y</b> P Motor		<b>A</b>	<b>0 0 0 3</b> Minimum length <b>5 0 0 0</b> Maximum length		
Fixed installation	<b>0 0 0 3</b>	1.0 mm <sup>2</sup>		<b>M 0 1</b> Screw plug	<b>A 0 0</b> Without plug-in connector
	<b>0 0 0 4</b>	1.5 mm <sup>2</sup>		<b>M 0 4</b> SpeedTec	
	<b>0 0 0 5</b>	2.5 mm <sup>2</sup>			
	<b>0 0 0 5</b>	2.5 mm <sup>2</sup>		<b>M 0 2</b> Screw plug	<b>A 0 0</b> Without plug-in connector
	<b>0 0 0 6</b>	4.0 mm <sup>2</sup>		<b>M 0 5</b> SpeedTec	
	<b>0 0 0 7</b>	6.0 mm <sup>2</sup>		<b>M 0 3</b> Screw plug	<b>A 0 0</b> Without plug-in connector
	<b>0 0 0 8</b>	10.0 mm <sup>2</sup>		<b>M 0 6</b> SpeedTec	
	<b>0 0 0 9</b>	16.0 mm <sup>2</sup>			
Trailing cable	<b>0 0 1 0</b>	1.0 mm <sup>2</sup>		<b>M 0 1</b> Screw plug	<b>A 0 0</b> Without plug-in connector
	<b>0 0 1 1</b>	1.5 mm <sup>2</sup>		<b>M 0 4</b> SpeedTec	
	<b>0 0 1 2</b>	2.5 mm <sup>2</sup>			
	<b>0 0 1 2</b>	2.5 mm <sup>2</sup>		<b>M 0 2</b> Screw plug	<b>A 0 0</b> Without plug-in connector
	<b>0 0 1 3</b>	4.0 mm <sup>2</sup>		<b>M 0 5</b> SpeedTec	
	<b>0 0 1 4</b>	6.0 mm <sup>2</sup>		<b>M 0 3</b> Screw plug	<b>A 0 0</b> Without plug-in connector
	<b>0 0 1 5</b>	10.0 mm <sup>2</sup>		<b>M 0 6</b> SpeedTec	
	<b>0 0 1 6</b>	16.0 mm <sup>2</sup>			

hb\_typ\_01

Fig. 1 Overview of motor connection cable

Cable without plug-in connector

Product series	Cable type	Cable without plug-in connector	Cable length in decimetres	Cable end on the motor side	Cable end on the controller side
E Y P Motor		Y	0 0 0 3 5 0 0 0 Minimum length Maximum length		
Fixed installation	0 0 0 3 0 0 0 4 0 0 0 5 0 0 0 6 0 0 0 7 0 0 0 8 0 0 0 9	1.0 mm <sup>2</sup> 1.5 mm <sup>2</sup> 2.5 mm <sup>2</sup> 4.0 mm <sup>2</sup> 6.0 mm <sup>2</sup> 10.0 mm <sup>2</sup> 16.0 mm <sup>2</sup>		A 0 0 Without plug-in connector	A 0 0 Without plug-in connector
Trailing cable	0 0 1 0 0 0 1 1 0 0 1 2 0 0 1 3 0 0 1 4 0 0 1 5 0 0 1 6	1.0 mm <sup>2</sup> 1.5 mm <sup>2</sup> 2.5 mm <sup>2</sup> 4.0 mm <sup>2</sup> 6.0 mm <sup>2</sup> 10.0 mm <sup>2</sup> 16.0 mm <sup>2</sup>		A 0 0 Without plug-in connector	A 0 0 Without plug-in connector

Fig. 2 Overview of motor cable without plug-in connector

hb\_typ\_03

Extension cable

Product series	Cable type	Extension cable	Cable length in decimetres	Cable end on the motor side (socket)	Cable end on the controller side (pin)
<b>E Y</b> P Motor		<b>V</b>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 0 0 0 3 Minimum length 5 0 0 0 Maximum length	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>
Fixed installation	<b>0 0 0 3</b>	1.0 mm <sup>2</sup>		<b>M 0 1</b> Screw plug	<b>P 0 4</b> SpeedTec
	<b>0 0 0 4</b>	1.5 mm <sup>2</sup>		<b>M 0 4</b> SpeedTec	
	<b>0 0 0 5</b>	2.5 mm <sup>2</sup>		<b>A 0 0</b> Without plug-in connector	
	<b>0 0 0 5</b>	2.5 mm <sup>2</sup>		<b>M 0 2</b> Screw plug	<b>P 0 5</b> SpeedTec
	<b>0 0 0 6</b>	4.0 mm <sup>2</sup>		<b>M 0 5</b> SpeedTec	
				<b>A 0 0</b> Without plug-in connector	
	<b>0 0 0 7</b>	6.0 mm <sup>2</sup>		<b>M 0 3</b> Screw plug	<b>P 0 6</b> SpeedTec
	<b>0 0 0 8</b>	10.0 mm <sup>2</sup>		<b>M 0 6</b> SpeedTec	
	<b>0 0 0 9</b>	16.0 mm <sup>2</sup>		<b>A 0 0</b> Without plug-in connector	
Trailing cable	<b>0 0 1 0</b>	1.0 mm <sup>2</sup>		<b>M 0 1</b> Screw plug	<b>P 0 4</b> SpeedTec
	<b>0 0 1 1</b>	1.5 mm <sup>2</sup>		<b>M 0 4</b> SpeedTec	
	<b>0 0 1 2</b>	2.5 mm <sup>2</sup>		<b>A 0 0</b> Without plug-in connector	
	<b>0 0 1 2</b>	2.5 mm <sup>2</sup>		<b>M 0 2</b> Screw plug	<b>P 0 5</b> SpeedTec
	<b>0 0 1 3</b>	4.0 mm <sup>2</sup>		<b>M 0 5</b> SpeedTec	
				<b>A 0 0</b> Without plug-in connector	
	<b>0 0 1 4</b>	6.0 mm <sup>2</sup>		<b>M 0 3</b> Screw plug	<b>P 0 6</b> SpeedTec
	<b>0 0 1 5</b>	10.0 mm <sup>2</sup>		<b>M 0 6</b> SpeedTec	
	<b>0 0 1 6</b>	16.0 mm <sup>2</sup>		<b>A 0 0</b> Without plug-in connector	

Fig. 3 Overview of motor extension cable

hb\_typ\_02

# 1

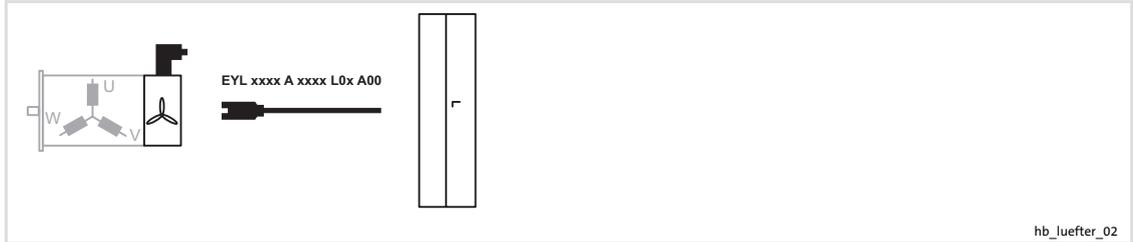
## Preface

Overview of possible configurations  
Blower cables

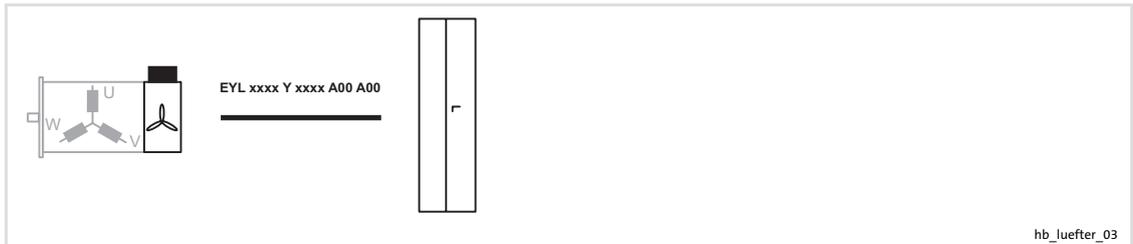
### 1.5.2

#### Blower cables

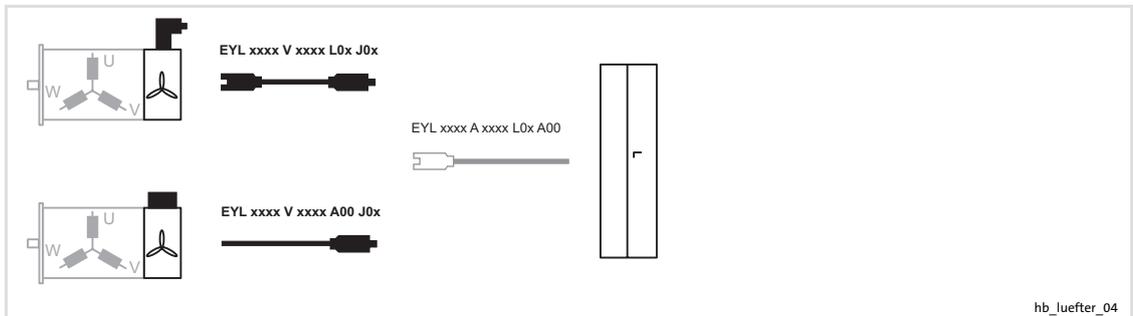
Connection cable, see (📖 27)



Cable without plug-in connector, see (📖 28)



Extension cable, see (📖 29)



Connection cable

Product series	Cable type	Connection cable	Cable length in decimetres	Cable end on the motor side (socket)	Cable end (control cabinet)	For use with
E Y L Blower		A	0 0 0 3 5 0 0 0 Minimum length Maximum length			
Fixed installation	0 0 0 1			L 0 1 Screw plug L 0 3 SpeedTec	A 0 0 Without plug-in connector	MDFKS
				L 0 2 Screw plug L 0 4 SpeedTec	A 0 0 Without plug-in connector	MCA, MCS, MDFMA
				L 0 5 Screw plug L 0 6 SpeedTec	A 0 0 Without plug-in connector	MDFMA
Trailing cable	0 0 0 2			L 0 1 Screw plug L 0 3 SpeedTec	A 0 0 Without plug-in connector	MDFKS
				L 0 2 Screw plug L 0 4 SpeedTec	A 0 0 Without plug-in connector	MCA, MCS, MDFMA
				L 0 5 Screw plug L 0 6 SpeedTec	A 0 0 Without plug-in connector	MDFMA

Fig. 4 Overview of blower connection cable

hb\_typ\_09

**Cable without plug-in connector**

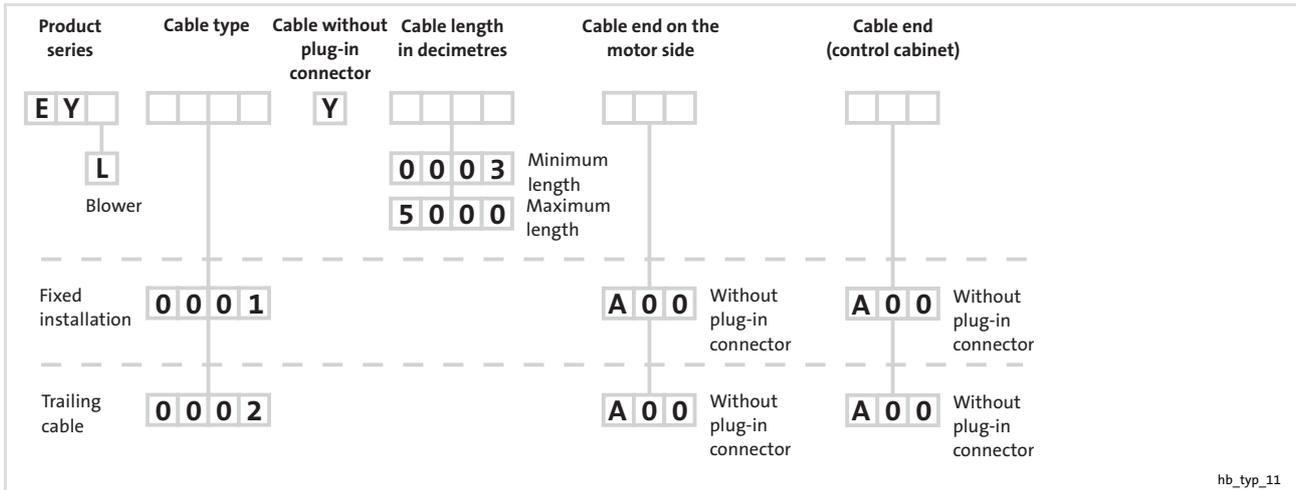


Fig. 5 Overview of blower cable without plug-in connector

Extension cable

Product series	Cable type	Extension cable	Cable length in decimetres	Cable end on the motor side (socket)	Cable end (pin)	For use with
E Y L Blower		V	0 0 0 3 5 0 0 0 Minimum length Maximum length			
Fixed installation	0 0 0 1			L 0 1 Screw plug L 0 3 SpeedTec A 0 0 Without plug-in connector	J 0 3 SpeedTec	MDFKS
				L 0 2 Screw plug L 0 4 SpeedTec A 0 0 Without plug-in connector	J 0 4 SpeedTec	MCA, MCS, MDFMA
				L 0 5 Screw plug L 0 6 SpeedTec A 0 0 Without plug-in connector	J 0 5 SpeedTec	MDFMA
Trailing cable	0 0 0 2			L 0 1 Screw plug L 0 3 SpeedTec A 0 0 Without plug-in connector	J 0 3 SpeedTec	MDFKS
				L 0 2 Screw plug L 0 4 SpeedTec A 0 0 Without plug-in connector	J 0 4 SpeedTec	MCA, MCS, MDFMA
				L 0 5 Screw plug L 0 6 SpeedTec A 0 0 Without plug-in connector	J 0 5 SpeedTec	MDFMA

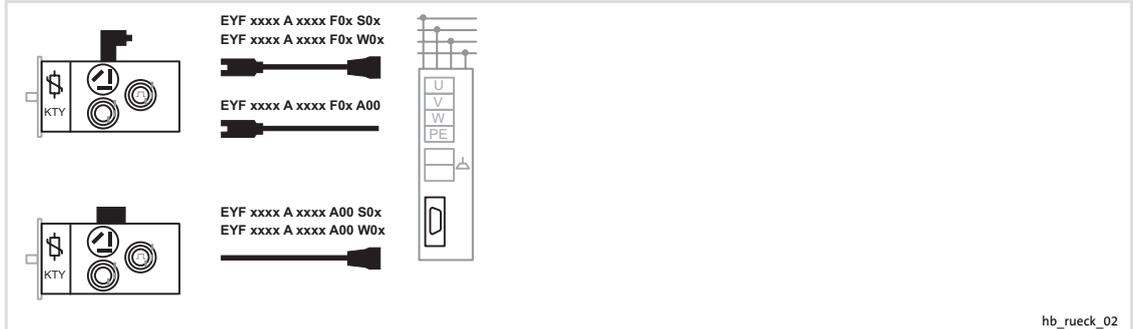
Fig. 6 Overview of blower extension cable

hb\_typ\_10

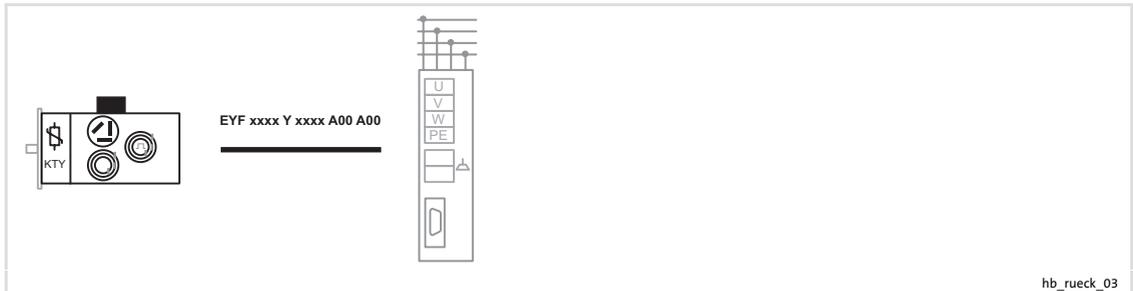
1.5.3

Feedback cables

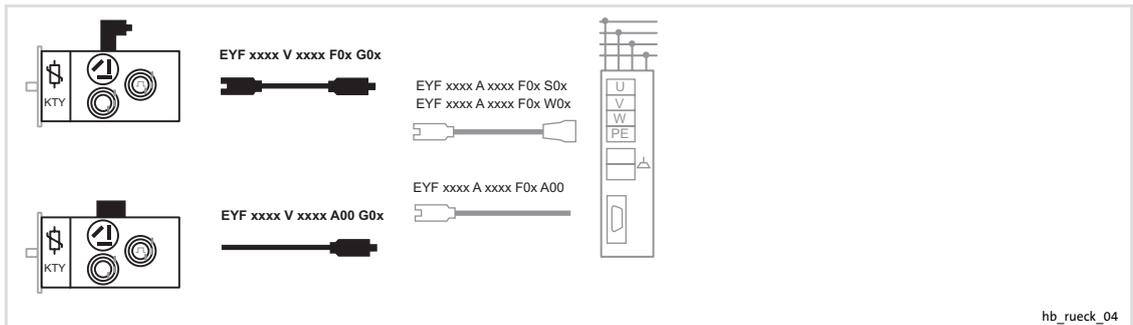
Connection cable, see (📖 31) and (📖 32)



Cable without plug-in connector, see (📖 33)



Extension cable, see (📖 34) and (📖 35)



**Connection cable**

Product series	Cable type	Connection cable	Cable length in decimetres	Cable end on the motor side (socket)	Cable end on the controller side	For use with
<b>E Y</b> Feedback		<b>A</b>	<b>0 0 0 3</b> Minimum length <b>5 0 0 0</b> Maximum length			
<hr style="border-top: 1px dashed #ccc;"/>						
Fixed installation	<b>0 0 1 7</b>	Resolver		<b>F 0 1</b> Screw plug	<b>S 0 1</b> Sub-D plug	EVS93..., ECS...
				<b>F 0 5</b> SpeedTec	<b>S 0 2</b> Sub-D plug	E94xx...
					<b>A 0 0</b> Without plug-in connector	
				<b>A 0 0</b> Without plug-in connector	<b>S 0 1</b> Sub-D plug	EVS93..., ECS...
<hr style="border-top: 1px dashed #ccc;"/>						
	<b>0 0 2 1</b>	Sin/cos encoder (EnDat)		<b>F 0 3</b> Screw plug	<b>S 0 3</b> Sub-D plug	E94xx...
				<b>F 0 7</b> SpeedTec	<b>A 0 0</b> Without plug-in connector	
				<b>A 0 0</b> Without plug-in connector	<b>S 0 3</b> Sub-D plug	E94xx...
<hr style="border-top: 1px dashed #ccc;"/>						
Trailing cable	<b>0 0 2 0</b>	Resolver		<b>F 0 1</b> Screw plug	<b>S 0 4</b> Sub-D plug	EVS93..., ECS...
				<b>F 0 5</b> SpeedTec	<b>S 0 5</b> Sub-D plug	E94xx...
				<b>A 0 0</b> Without plug-in connector	<b>A 0 0</b> Without plug-in connector	
				<b>A 0 0</b> Without plug-in connector	<b>S 0 4</b> Sub-D plug	EVS93..., ECS...
<hr style="border-top: 1px dashed #ccc;"/>						
	<b>0 0 2 2</b>	Sin/cos encoder (EnDat)		<b>F 0 3</b> Screw plug	<b>A 0 0</b> Without plug-in connector	
				<b>F 0 7</b> SpeedTec		

hb\_typ\_04

Fig. 7 Overview of resolver and sin/cos encoder (EnDat) connection cable feedback

Connection cable

Product series	Cable type	Connection cable	Cable length in decimetres	Cable end on the motor side (socket)	Cable end on the controller side	For use with
E Y F Feedback		A	0 0 0 3 5 0 0 0 Minimum length Maximum length			
Fixed installation	0 0 1 8	Sin/cos encoder (Hiperface) and incremental encoder		F 0 2 Screw plug F 0 6 SpeedTec	W 0 2 Sub-D plug S 0 3 Sub-D plug A 0 0 Without plug-in connector	EVS93..., ECS... EVF93... E94xx... E82xV..., E84xV...
				A 0 0 Without plug-in connector	W 0 2 Sub-D plug S 0 3 Sub-D plug	EVS93..., ECS... EVF93... E94xx...
	0 0 2 3	Renco R35i incremental encoder		F 0 4 Screw plug F 0 8 SpeedTec	S 0 6 Sub-D plug A 0 0 Without plug-in connector	E94P...
				A 0 0 Without plug-in connector	S 0 6 Sub-D plug	E94P...
Trailing cable	0 0 1 9	Sin/cos encoder (Hiperface) and incremental encoder		F 0 2 Screw plug F 0 6 SpeedTec	W 0 4 Sub-D plug S 0 3 Sub-D plug A 0 0 Without plug-in connector	EVS93..., ECS... EVF93... E94xx... E82xV..., E84xV...
				A 0 0 Without plug-in connector	W 0 4 Sub-D plug S 0 3 Sub-D plug	EVS93..., ECS... EVF93... E94xx...
	0 0 2 4	Renco R35i incremental encoder		F 0 4 Screw plug F 0 8 SpeedTec	A 0 0 Without plug-in connector	

Fig. 8 Overview of sin/cos encoder (Hiperface) and Renco R35i connection cable feedback

hb\_typ\_05

**Cable without plug-in connector**

Product series	Cable type	Cable without plug-in connector	Cable length in decimetres	Cable end on the motor side	Cable end on the controller side
<b>E Y</b> F Feedback		<b>Y</b>	<b>0 0 0 3</b> Minimum length <b>5 0 0 0</b> Maximum length		
Fixed installation	<b>0 0 1 7</b>	Resolver		<b>A 0 0</b> Without plug-in connector	<b>A 0 0</b> Without plug-in connector
	<b>0 0 1 8</b>	Sin/cos encoder (Hiperface) and incremental encoder			
	<b>0 0 2 1</b>	Sin/cos encoder (EnDat)			
	<b>0 0 2 3</b>	Renco R35i incremental encoder			
Trailing cable	<b>0 0 2 0</b>	Resolver		<b>A 0 0</b> Without plug-in connector	<b>A 0 0</b> Without plug-in connector
	<b>0 0 1 9</b>	Sin/cos encoder (Hiperface) and incremental encoder			
	<b>0 0 2 2</b>	Sin/cos encoder (EnDat)			
	<b>0 0 2 4</b>	Renco R35i incremental encoder			

hb\_typ\_08

Fig. 9 Overview of cable without plug-in connector feedback

Extension cable

Product series	Cable type	Extension cable	Cable length in decimetres	Cable end on the motor side (socket)	Cable end on the controller side (pin)
<b>E Y</b> F Feedback		<b>V</b>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 0 0 0 3 5 0 0 0 Minimum length Maximum length	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>
Fixed installation	<b>0 0 1 7</b>	Resolver		<b>F 0 1</b> Screw plug <b>F 0 5</b> SpeedTec <b>A 0 0</b> Without plug-in connector	<b>G 0 6</b> SpeedTec
	<b>0 0 2 1</b>	Sin/cos encoder (EnDat)		<b>F 0 3</b> Screw plug <b>F 0 7</b> SpeedTec <b>A 0 0</b> Without plug-in connector	<b>G 0 8</b> SpeedTec
Trailing cable	<b>0 0 2 0</b>	Resolver		<b>F 0 1</b> Screw plug <b>F 0 5</b> SpeedTec <b>A 0 0</b> Without plug-in connector	<b>G 0 6</b> SpeedTec
	<b>0 0 2 2</b>	Sin/cos encoder (EnDat)		<b>F 0 3</b> Screw plug <b>F 0 7</b> SpeedTec <b>A 0 0</b> Without plug-in connector	<b>G 0 8</b> SpeedTec

Fig. 10 Overview of resolver and sin/cos encoder (EnDat) extension cable feedback

hb\_typ\_06

Extension cable

Product series	Cable type	Extension cable	Cable length in decimetres	Cable end on the motor side (socket)	Cable end on the controller side (pin)
<b>E Y</b> F Feedback		<b>V</b>	 0 0 0 3 5 0 0 0 Minimum length Maximum length		
Fixed installation	<b>0 0 1 8</b>	Sin/cos encoder (Hiperface) and incremental encoder		<b>F 0 2</b> Screw plug <b>F 0 6</b> SpeedTec <b>A 0 0</b> Without plug-in connector	<b>G 0 7</b> SpeedTec
	<b>0 0 2 3</b>	Renco R35i incremental encoder		<b>F 0 4</b> Screw plug <b>F 0 8</b> SpeedTec <b>A 0 0</b> Without plug-in connector	<b>G 0 9</b> SpeedTec
Trailing cable	<b>0 0 1 9</b>	Sin/cos encoder (Hiperface) and incremental encoder		<b>F 0 2</b> Screw plug <b>F 0 6</b> SpeedTec <b>A 0 0</b> Without plug-in connector	<b>G 0 7</b> SpeedTec
	<b>0 0 2 4</b>	Renco R35i incremental encoder		<b>F 0 4</b> Screw plug <b>F 0 8</b> SpeedTec <b>A 0 0</b> Without plug-in connector	<b>G 0 9</b> SpeedTec

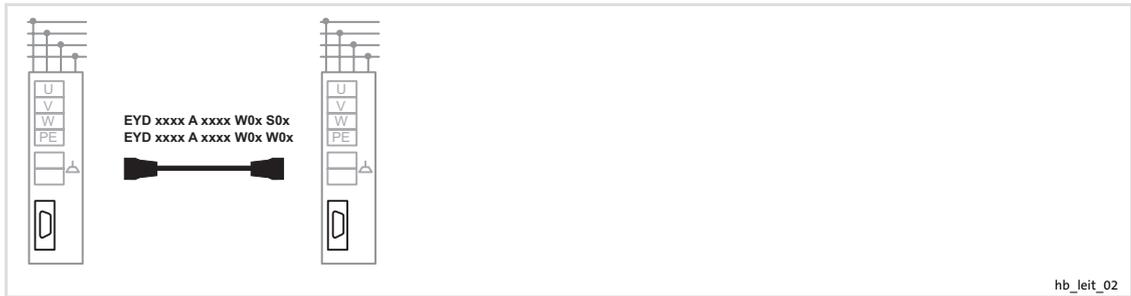
Fig. 11 Overview of sin/cos encoder (Hiperface) and Renco R35i extension cable feedback

hb\_typ\_07

1.5.4

Digital frequency cables

Connection cable



Product series	Cable type	Connection cable	Cable length in decimetres	Cable end (Slave)	Cable end (Master)	For use with Slave	Master
E Y		A	0 0 0 2 5 0 0 0 Minimum length Maximum length				
D Digital frequency							
Fixed installation	0 0 1 7			W 0 1 Sub-D plug	S 0 1 Sub-D plug	EVS93..., EVF93..., ECS..., EMF2132IB	EVS93..., EVF93..., EMF2132IB
				W 0 3 Sub-D plug		E94AYFLF	
				W 0 1 Sub-D plug	S 0 2 Sub-D plug	EVS93..., EVF93..., ECS..., EMF2132IB	E94AYFLF
				W 0 3 Sub-D plug		E94AYFLF	
				W 0 1 Sub-D plug	W 0 1 Sub-D plug	EVS93..., EVF93..., ECS..., EMF2132IB	ECS...
				W 0 3 Sub-D plug		E94AYFLF	

Fig. 12 Overview of digital frequency connection cable

## 2 How to select your system cable

### 2.1 Motor cables

For your convenience, choose your customised motor cable using a maximum of three tables. The structure of the tables always provides for the same order in which the components appear ('motor - motor cable - controller').



#### Note!

For controllers, only the device series are listed and not the single device types. The connectable cable cross-sections can be obtained from the documentation of the controllers.

#### 2.1.1 How to find your motor cable

1. Search for the motor type in the table of contents of the "Selection tables for motor cables" chapter and switch to the respective chapter.
2. Select the "Motor with plug connection" section or the "Motor with terminal box" section, according to the connection type.
  - Structure of the "Motor type" selection table: (📖 38)
3. Select a connection cable or a combination of connection cable and extension cable.
  - Structure of the "Connection cable" selection table: (📖 39)
  - Structure of the "Extension cable" selection table: (📖 40)
4. Determine the product key of the connection cable or the extension cable, respectively.
  - The product key gives information about the cross-section, the laying system, and the design of the cable ends.
  - The product key also is the order designation.

## 2 How to select your system cable

Motor cables  
Motor type

### 2.1.2 Motor type

The table gives more detailed information about the motor, the structure and cross-section of the motor cable, and the connection on the controller.

①		②		③			
A	B	C					
							
	⊗ [mm <sup>2</sup> ]	9300	9400	ECS			
MCS06C41-...S00 MCS06C60-...S00 MCS06F41-...S00 MCS06F60-...S00	(4 x 1.0 + (2 x 0.5))						
MCS06I41-...S00 MCS06I60-...S00	(4 x 1.5 + (2 x 0.5))	U, V, W, PE	X105, X107	X24, X25			
	(4 x 2.5 + (2 x 0.5))						
D	E	F					

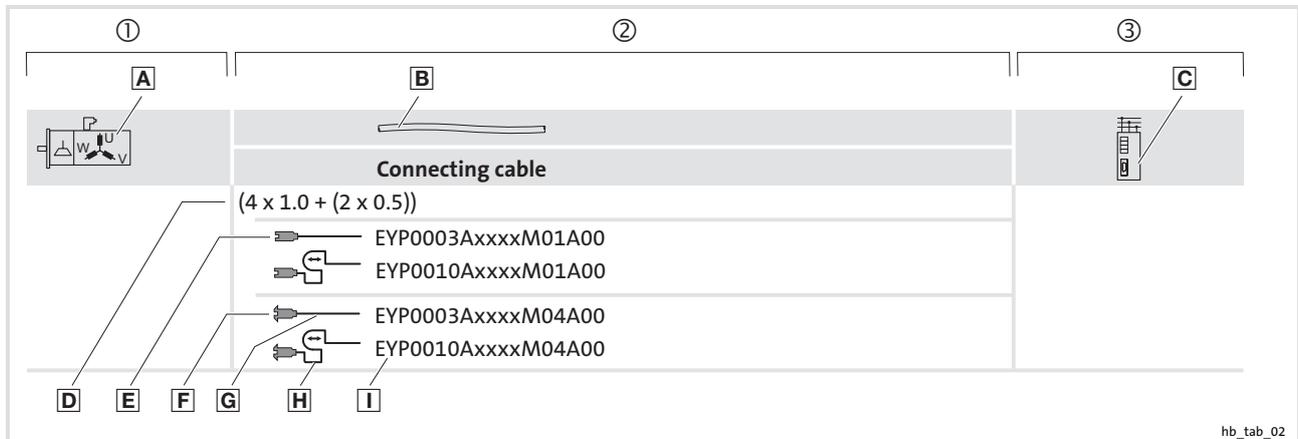
hb\_tab\_01

- A Self-ventilated motor with plug
- B Motor cable
- C Controller
- D Motor types
- E Structure and cross-section of the motor cable
- F Controller terminals

- ▶ Column ① describes which motor type is to be connected to the controller.
  - The symbol may represent a motor with a plug or a terminal box.
- ▶ Column ② gives more detailed information about the motor cable:
  - Here, the symbol stands for the extension/connection cables. The exact product key of these motor cables can be seen from the following two tables.
  - The motor cables are shielded four-core cables with the parentheses representing the shield. Within this shield, another two-core cable is laid.
  - Alternatively, all of the three motor cables can be connected to all of the synchronous servo motors specified.
  - The assignment of the cable cross-section to the motor type is valid for the conditions of the permissible current loading according to EN 60204-1, IEC 60354-2-52 for trailing cables, table A.52-5, laying system C, continuous operation with motor standstill current  $I_0$ , and an air temperature of 45°C.
  - If the conditions vary (regional standards, regulations, laying systems, bundling, ambient conditions, cable types, motor utilisation), the responsibility for installing a corresponding motor cable lies with the user.
- ▶ Column ③ contains the controller types.
  - The motor cable is applied to the specified terminals of the different controllers.

## 2.1.3 Connection cable

The table describes how to directly connect the motor to a controller.



- A** Self-ventilated motor with plug
- B** Connection cable
- C** Controller
- D** Structure and cross-section of the connection cable
- E** Connection cable with screw plug
- F** Connection cable with SpeedTec
- G** Connection cable for fixed installation
- H** Connection cable as trailing cable
- I** Product key of the connection cable

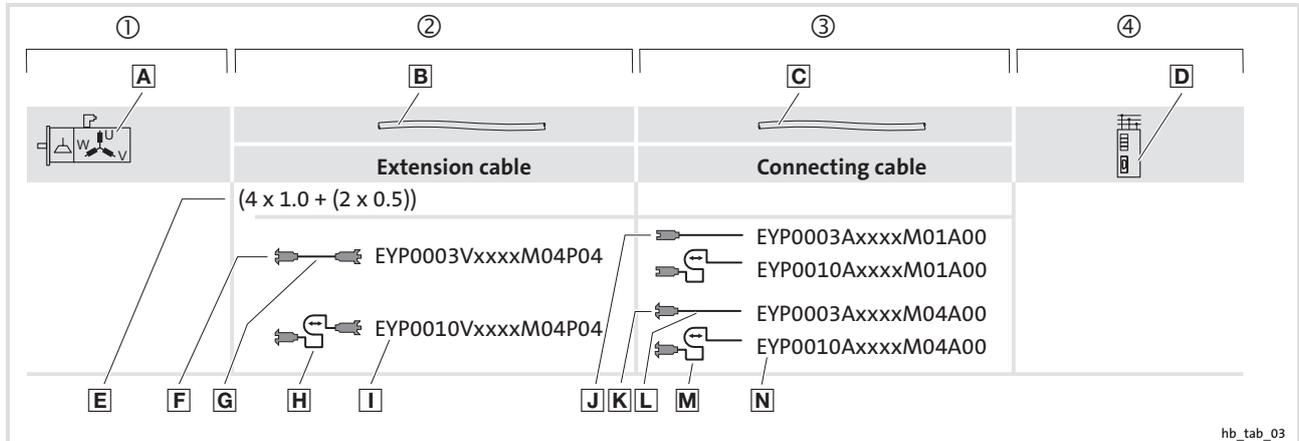
- ▶ The ① column contains the motor symbol which represents the consistent 'motor - motor cable - controller' system.
  - The symbol may represent a motor with a plug or a terminal box.
- ▶ The ② column gives more detailed information about the connection cable:
  - Structure and cross-section
  - Trailing cable design or for fixed installation
  - Plug on the motor side or open cable end
  - The cable end on the motor side is always open
  - The product key must be specified when you make your order.
- ▶ The ③ column contains the controller symbol which represents the consistent 'motor - motor cable - controller' system.

## 2 How to select your system cable

Motor cables  
Extension cable

### 2.1.4 Extension cable

The table describes how to connect the motor to the controller using a combination of extension/connection cables.



- Ⓐ Self-ventilated motor with plug
- Ⓑ Extension cable
- Ⓒ Connection cable
- Ⓓ Controller
- Ⓔ Structure and cross-section of the extension/connection cable
- Ⓕ Extension cable with SpeedTec
- Ⓖ Extension cable for fixed installation
- Ⓗ Extension cable as a trailing cable
- Ⓘ Product key of the extension cable
- Ⓝ Connection cable with screw plug
- Ⓚ Connection cable with SpeedTec
- Ⓛ Connection cable for fixed installation
- Ⓜ Connection cable as trailing cable
- Ⓝ Product key of the connection cable

- ▶ The ① column contains the motor symbol which represents the consistent 'motor - motor cables - controller' system.
  - The symbol may represent a motor with a plug or a terminal box.
- ▶ The ② column gives more detailed information about the extension cable:
  - Structure and cross-section; this also holds for the connection cable
  - Trailing cable design or for fixed installation
  - Plug on the motor side or open cable end
  - Always a plug on the controller side
  - The product key must be specified when you make your order.
- ▶ The ③ column gives more detailed information about the connection cable:
  - Trailing cable design or for fixed installation
  - Always a plug on the motor side
  - The cable end on the motor side is always open
  - The product key must be specified when you make your order.



### Note!

#### Possible combinations of the different cable types:

Extension cables with SpeedTec can be combined with

- Connection cables with screw plugs
- Connection cables with SpeedTec
- Extension cables with SpeedTec

- ▶ The ④ column contains the controller symbol which represents the consistent 'motor - motor cables - controller' system.

## 2 How to select your system cable

Blower cables

How to find your blower cable

### 2.2 Blower cables

For your convenience, choose your customised blower cable using a maximum of three tables. The structure of the tables always provides for the same order in which the components appear ('motor with blower - blower cable - control cabinet').

#### 2.2.1 How to find your blower cable

1. Search for the motor type in the table of contents of the "Selection tables for blower cables" chapter and switch to the respective chapter.
2. Select the "Blowers with plug connection" section or the "Blowers with terminal box" section, according to the connection type.
  - Structure of the "Blower type" selection table: (📖 43)
3. Select a connection cable or a combination of connection cable and extension cable.
  - Structure of the "Connection cable" selection table: (📖 44)
  - Structure of the "Extension cable" selection table: (📖 45)
4. Determine the product key of the connection cable or the extension cable, respectively.
  - The product key gives information about the cross-section, the laying system, and the design of the cable ends.
  - The product key also is the order designation.

## 2.2.2 Blower type

The table gives more detailed information about the blower, the structure and cross-section of the blower cable, and the connection to the control cabinet.



- A Forced-ventilated motor with plug
- B Blower cable
- C Control cabinet
- D Forced-ventilated motor type
- E Structure and cross-section of the blower cable

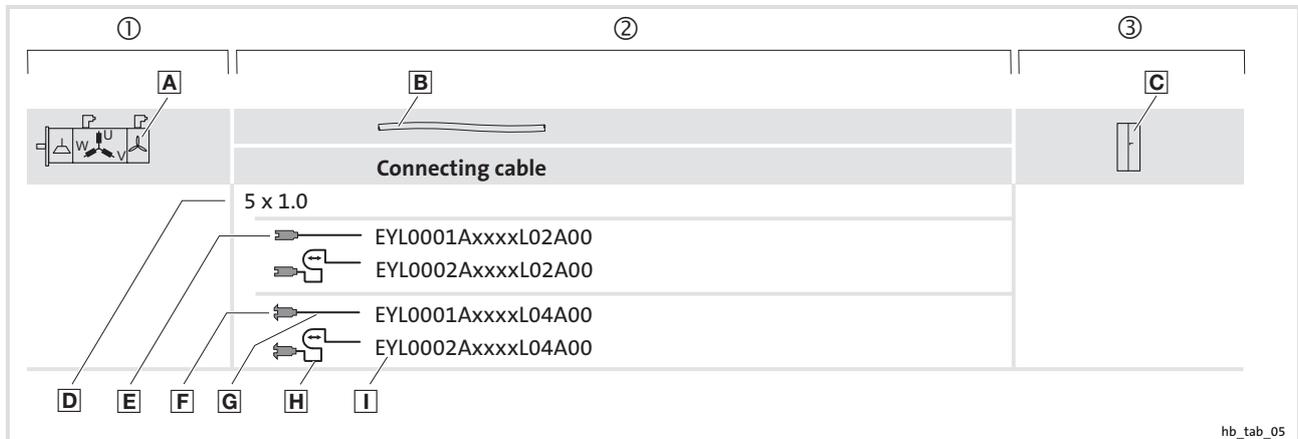
- ▶ The ① column describes the 'motor with blower' type.
  - The symbol may represent a blower with a plug or a terminal box.
- ▶ The ② column gives more detailed information about the blower cable:
  - Here, the symbol stands for the extension/connection cables. The exact product key of these blower cables can be seen from the following two tables.
  - The blower cables are five-core cables with a cross-section of 1 mm<sup>2</sup>.
- ▶ The ③ column specifies that the blower is applied in the control cabinet.

## 2 How to select your system cable

Blower cables  
Connection cable

### 2.2.3 Connection cable

The table describes how to directly connect the blower to the control cabinet.

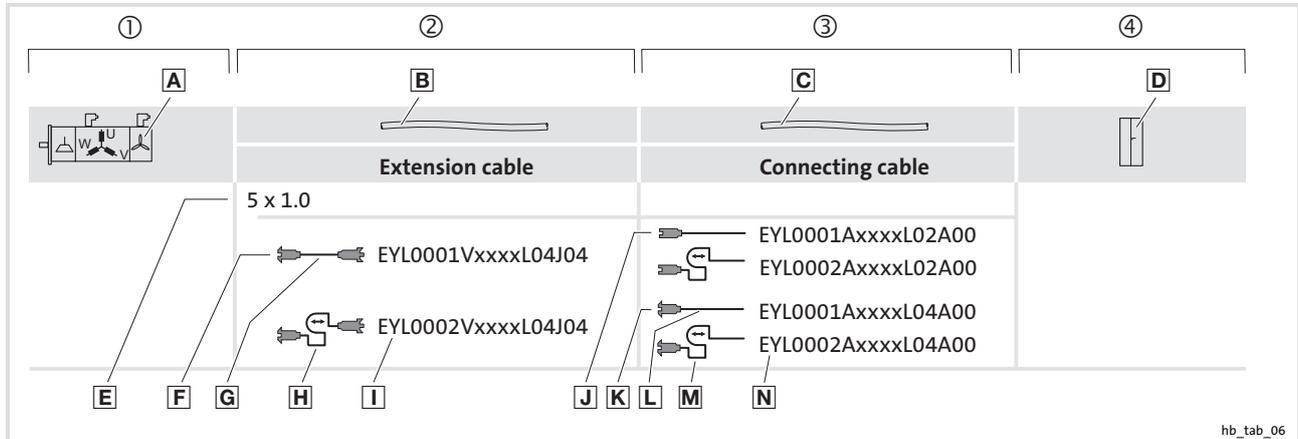


- A** Forced-ventilated motor with plug
- B** Connection cable
- C** Control cabinet
- D** Structure and cross-section of the connection cable
- E** Connection cable with screw plug
- F** Connection cable with SpeedTec
- G** Connection cable for fixed installation
- H** Connection cable as trailing cable
- I** Product key of the connection cable

- ▶ The ① column contains the 'motor with blower' symbol which represents the consistent 'motor with blower - blower cable - control cabinet' system.
  - The symbol may represent a blower with a plug or a terminal box.
- ▶ The ② column gives more detailed information about the connection cable:
  - Structure and cross-section
  - Trailing cable design or for fixed installation
  - Plug on the blower side or open cable end
  - The cable end on the control cabinet side is always open
  - The product key must be specified when you make your order.
- ▶ The ③ column contains the control cabinet symbol which represents the consistent 'motor with blower - blower cable - control cabinet' system.

## 2.2.4 Extension cable

The table describes how to connect the blower to the control cabinet using a combination of extension/connection cables.



- A** Forced-ventilated motor with plug
- B** Extension cable
- C** Connection cable
- D** Control cabinet
- E** Structure and cross-section of the extension/connection cable
- F** Extension cable with SpeedTec
- G** Extension cable for fixed installation
- H** Extension cable as a trailing cable
- I** Product key of the extension cable
- J** Connection cable with screw plug
- K** Connection cable with SpeedTec
- L** Connection cable for fixed installation
- M** Connection cable as trailing cable
- N** Product key of the connection cable

- ▶ The ① column contains the 'motor with blower' symbol which represents the consistent 'motor with blower - blower cables - control cabinet' system.
  - The symbol may represent a blower with a plug or a terminal box.
- ▶ The ② column gives more detailed information about the extension cable:
  - Structure and cross-section; this also holds for the connection cable
  - Trailing cable design or for fixed installation
  - Plug on the blower side or open cable end
  - Always a plug on the control cabinet side
  - The product key must be specified when you make your order.
- ▶ The ③ column gives more detailed information about the connection cable:
  - Trailing cable design or for fixed installation
  - Always a plug on the blower side
  - The cable end on the control cabinet side is always open
  - The product key must be specified when you make your order.

**Note!****Possible combinations of the different cable types:**

Extension cables with SpeedTec can be combined with

- Connection cables with screw plugs
- Connection cables with SpeedTec
- Extension cables with SpeedTec

- ▶ The ④ column contains the control cabinet symbol which represents the consistent 'motor with blower - blower cables - control cabinet' system.

## 2.3 Feedback cables

For your convenience, choose your customised feedback cable using a maximum of three tables. The structure of the tables always provides for the same order in which the components appear ('feedback - feedback cable - controller').

### 2.3.1 How to find your feedback cable

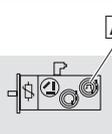
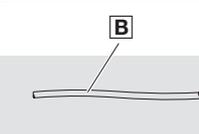
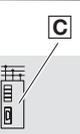
1. Search for the feedback type in the table of contents of the "Selection tables for feedback cables" chapter and switch to the respective chapter.
2. Select the "Feedbacks with plug connection" section or the "Feedbacks with terminal box" section, according to the connection type.
  - Structure of the "Feedback type" selection table: (📖 48)
3. Select a connection cable or a combination of connection cable and extension cable.
  - Structure of the "Connection cable" selection table: (📖 49)
  - Structure of the "Extension cable" selection table: (📖 50)
4. Determine the product key of the connection cable or the extension cable, respectively.
  - The product key gives information about the cross-section, the laying system, and the design of the cable ends.
  - The product key also is the order designation.

## 2 How to select your system cable

Feedback cables  
Feedback type

### 2.3.2 Feedback type

The table gives more detailed information about the feedback, the structure and cross-section of the feedback cable, and the connection on the controller.

①	②	③					
							
RSx	 [mm <sup>2</sup> ] 3 (2 x 0.14 + (3 x 0.14))	9300	9400	ECS	9300vector	8200vector	8400
		X7	X7	X7			

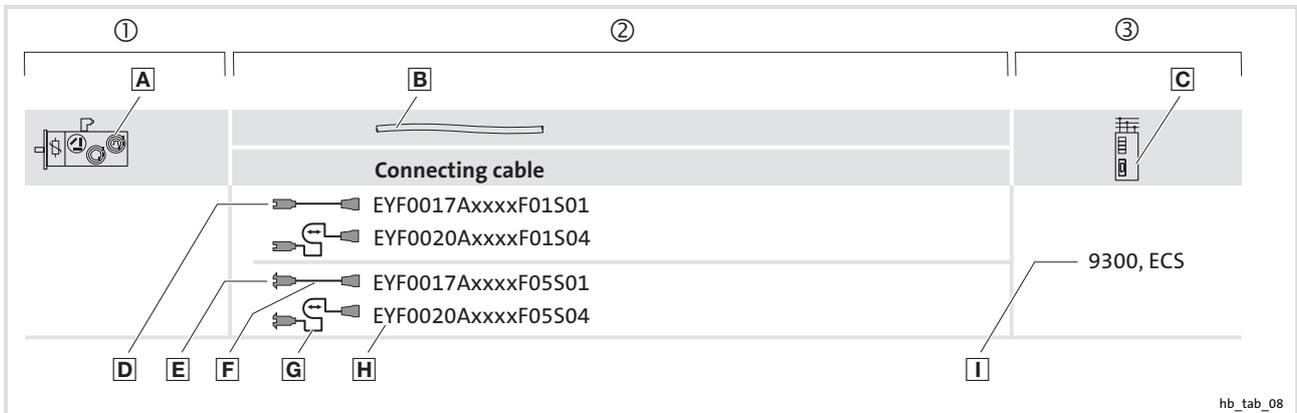
hb\_tab\_07

- A** Feedback with plug
- B** Feedback cable
- C** Controller
- D** Feedback types
- E** Structure and cross-section of the feedback cable
- F** Interface on the controller

- ▶ The ① column describes which feedback type is to be connected to the controller.
  - The symbol may represent a feedback with a plug or a terminal box.
- ▶ The ② column gives more detailed information about the feedback cable:
  - Here, the symbol stands for the extension/connection cables. The exact product key of these feedback cables can be seen from the following two tables.
  - The feedback cables are shielded multi-core cables with the parentheses representing the shield.
- ▶ The ③ column contains the controller types.
  - The feedback cable is plugged on the specified interfaces of the different controllers.

## 2.3.3 Connection cable

The table describes how to directly connect the feedback to a controller.



- A** Feedback with plug
- B** Connection cable
- C** Controller
- D** Connection cable with screw plug
- E** Connection cable with SpeedTec
- F** Connection cable for fixed installation
- G** Connection cable as trailing cable
- H** Product key of the connection cable
- I** Controller types

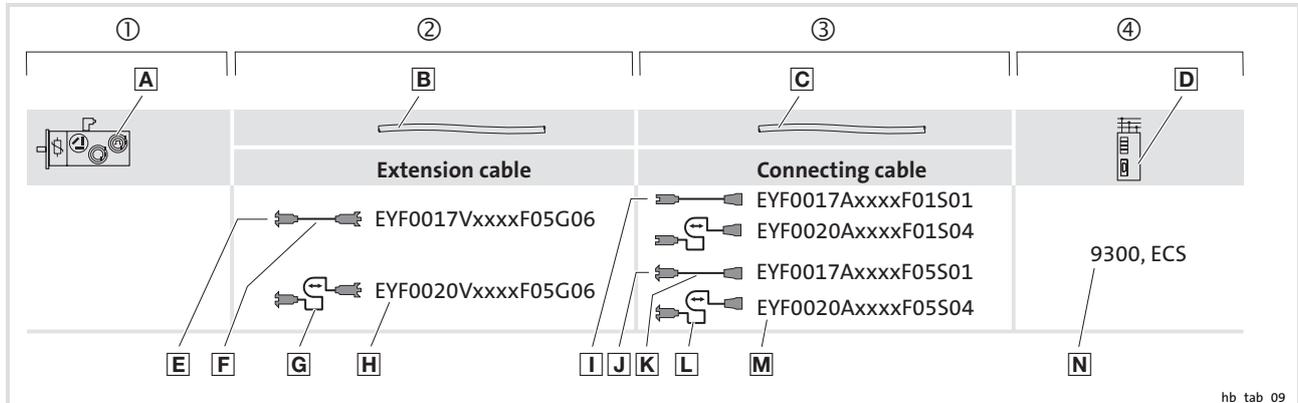
- ▶ The ① column contains the feedback symbol which represents the consistent 'feedback - feedback cable - controller' system.
  - The symbol may represent a feedback with a plug or a terminal box.
- ▶ The ② column gives more detailed information about the connection cable:
  - Trailing cable design or for fixed installation
  - Plug on the feedback side or open cable end
  - Plug on the controller side or open cable end
  - The product key must be specified when you make your order.
- ▶ The ③ column contains the controller symbol which represents the consistent 'feedback - feedback cable - controller' system.
  - The feedback cable can be connected to the controller types specified.

## 2 How to select your system cable

Feedback cables  
Extension cable

### 2.3.4 Extension cable

The table describes how to connect the feedback to the controller using a combination of extension/connection cables.



- A** Feedback with plug
- B** Extension cable
- C** Connection cable
- D** Controller
- E** Extension cable with SpeedTec
- F** Extension cable for fixed installation
- G** Extension cable as a trailing cable
- H** Product key of the extension cable
- I** Connection cable with screw plug
- J** Connection cable with SpeedTec
- K** Connection cable for fixed installation
- L** Connection cable as trailing cable
- M** Product key of the connection cable
- N** Controller types

- ▶ The ① column contains the feedback symbol which represents the consistent 'feedback - feedback cables - controller' system.
  - The symbol may represent a feedback with a plug or a terminal box.
- ▶ The ② column gives more detailed information about the extension cable:
  - Trailing cable design or for fixed installation
  - Plug on the feedback side or open cable end
  - Always a plug on the controller side
  - The product key must be specified when you make your order.
- ▶ The ③ column gives more detailed information about the connection cable:
  - Trailing cable design or for fixed installation
  - Always a plug on the feedback side
  - Plug on the controller side or open cable end
  - The product key must be specified when you make your order.



### Note!

#### Possible combinations of the different cable types:

- ▶ Extension cables with SpeedTec can be combined with
  - Connection cables with screw plugs
  - Connection cables with SpeedTec
  - Extension cables with SpeedTec
  
- ▶ The ⓘ column contains the controller symbol which represents the consistent 'feedback - feedback cables - controller' system.
  - The feedback cable can be connected to the controller types specified.

## 2 How to select your system cable

Digital frequency cables

How to find your digital frequency cable

### 2.4 Digital frequency cables

For your convenience, choose your customised digital frequency cable using a maximum of two tables. The structure of the tables always provides for the same order in which the components appear ('controller (master) - digital frequency cable - controller (slave)').

#### 2.4.1 How to find your digital frequency cable

1. Search for the controller (master) type in the table of contents of the "Selection tables for digital frequency cables" chapter and switch to the respective chapter.
2. Switch to "Controller type" in the table.
  - Structure of the "Controller type" selection table: (📖 53)
3. Select a connection cable.
  - Structure of the "Connection cable" selection table: (📖 54)
4. Determine the product key of the connection cable.
  - The product key gives information about the cross-section, the laying system, and the design of the cable ends.
  - The product key also is the order designation.

## 2.4.2 Controller type

The table shows the controller interfaces and the structure and cross-section of the digital frequency cable.

①		②		③					
A		B		C					
Master		[mm <sup>2</sup> ]		9300	9400	ECS	9300vector	8200vector	EMF2132IB
9300 vector, X10		3 (2 x 0.14 + (3 x 0.14))		X9	X9	X8	X9		
D		E		F					

hb\_tab\_10

- A Controller (master)
- B Digital frequency cable
- C Controller (slave)
- D Interface on the controller (master)
- E Structure and cross-section of the digital frequency cable
- F Interfaces on the controllers (slave)

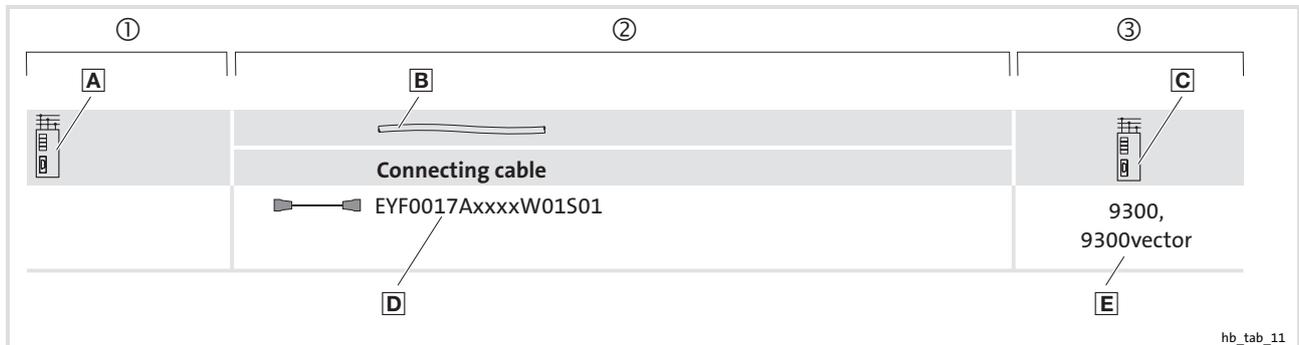
- ▶ The ① column describes which interface of the controller (master) is to be connected to the controllers (slave).
- ▶ The ② column gives more detailed information about the digital frequency cable:
  - Here, the symbol stands for the connection cable. The digital frequency cables do not have any extension cables. The exact product key of this digital frequency cable can be seen from the following table.
  - The digital frequency cables are shielded multi-core cables with the parentheses representing the shield.
- ▶ The ③ column contains the interfaces of the controllers (slave).
  - The digital frequency cable is applied to the specified interfaces of the different controllers.

## 2 How to select your system cable

Digital frequency cables  
Connection cable

### 2.4.3 Connection cable

The table describes how to connect two controllers to a connection cable.



- A** Controller (master)
- B** Connection cable
- C** Controller (slave)
- D** Product key of connection cable
- E** Controller types (slave)

- ▶ The ① column contains the controller symbol which represents the consistent 'controller (master) - digital frequency cable - controller (slave)' system.
- ▶ The ② column gives more detailed information about the connection cable:
  - Both cable ends are provided with Sub-D plugs
  - The product key must be specified when you make your order
- ▶ The ③ column contains the controller symbol which represents the consistent 'controller (master) - digital frequency cable - controller (slave)' system.
  - The digital frequency cable can be connected to the controller types specified.

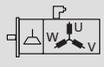
### 3 Selection tables for motor cables

#### 3.1 MCA motor

##### 3.1.1 MCA10I40 ... MCA14L20

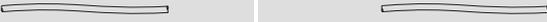
##### Motors with plug connections

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCA10I40-...S00	(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
MCA13I34-...Fxx	(4 × 1.5 + (2 × 0.5))					
MCA13I41-...S00	(4 × 2.5 + (2 × 0.5))					
MCA14L16-...Fxx						
MCA14L20-...S00						

						
		Connection cable				
(4 × 1.0 + (2 × 0.5))						
 EYP0003AxxxxM01A00						
 EYP0010AxxxxM01A00						
 EYP0003AxxxxM04A00						
 EYP0010AxxxxM04A00						
(4 × 1.5 + (2 × 0.5))						
 EYP0004AxxxxM01A00						
 EYP0011AxxxxM01A00						
 EYP0004AxxxxM04A00						
 EYP0011AxxxxM04A00						
(4 × 2.5 + (2 × 0.5))						
 EYP0005AxxxxM01A00						
 EYP0012AxxxxM01A00						
 EYP0005AxxxxM04A00						
 EYP0012AxxxxM04A00						

### Selection tables for motor cables

MCA motor  
MCA10I40 ... MCA14L20

			
	Extension cable	Connection cable	
<b>(4 × 1.0 + (2 × 0.5))</b>			
 EYP0003VxxxxM01P04	 EYP0003AxxxxM01A00		
 EYP0003VxxxxM04P04	 EYP0010AxxxxM01A00		
 EYP0010VxxxxM01P04	 EYP0003AxxxxM04A00		
 EYP0010VxxxxM04P04	 EYP0010AxxxxM04A00		
<b>(4 × 1.5 + (2 × 0.5))</b>			
 EYP0004VxxxxM01P04	 EYP0004AxxxxM01A00		
 EYP0004VxxxxM04P04	 EYP0011AxxxxM01A00		
 EYP0011VxxxxM01P04	 EYP0004AxxxxM04A00		
 EYP0011VxxxxM04P04	 EYP0011AxxxxM04A00		
<b>(4 × 2.5 + (2 × 0.5))</b>			
 EYP0005VxxxxM01P04	 EYP0005AxxxxM01A00		
 EYP0005VxxxxM04P04	 EYP0012AxxxxM01A00		
 EYP0012VxxxxM01P04	 EYP0005AxxxxM04A00		
 EYP0012VxxxxM04P04	 EYP0012AxxxxM04A00		

## Motors with terminal boxes

						
	 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>		
MCA10140-...S00 MCA13134-...Fxx MCA13141-...S00 MCA14L16-...Fxx MCA14L20-...S00	$(4 \times 1.0 + (2 \times 0.5))$	U, V, W, PE	X105, X107	X24, X25		
	$(4 \times 1.5 + (2 \times 0.5))$					

			
	<b>Connection cable</b>		
	$(4 \times 1.0 + (2 \times 0.5))$		
	 EYP0003YxxxxA00A00		
	 EYP0010YxxxxA00A00		
	$(4 \times 1.5 + (2 \times 0.5))$		
	 EYP0004YxxxxA00A00		
	 EYP0011YxxxxA00A00		

			
	<b>Extension cable</b>	<b>Connection cable</b>	
	$(4 \times 1.0 + (2 \times 0.5))$		
	 EYP0003VxxxxA00P04	 EYP0003AxxxxM01A00	
		 EYP0010AxxxxM01A00	
	 EYP0010VxxxxA00P04	 EYP0003AxxxxM04A00	
		 EYP0010AxxxxM04A00	
	$(4 \times 1.5 + (2 \times 0.5))$		
	 EYP0004VxxxxA00P04	 EYP0004AxxxxM01A00	
		 EYP0011AxxxxM01A00	
	 EYP0011VxxxxA00P04	 EYP0004AxxxxM04A00	
		 EYP0011AxxxxM04A00	

### 3 Selection tables for motor cables

MCA motor  
MCA14L35

#### 3.1.2 MCA14L35

##### Motors with plug connections

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCA14L35-...Fxx	(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 1.5 + (2 × 0.5))					
	(4 × 2.5 + (2 × 0.5))					

			
			Connection cable
			
			(4 × 1.0 + (2 × 0.5))
			 -
			 EYP0010AxxxxM01A00
			 -
			 EYP0010AxxxxM04A00
			(4 × 1.5 + (2 × 0.5))
			 EYP0004AxxxxM01A00
			 EYP0011AxxxxM01A00
			 EYP0004AxxxxM04A00
			 EYP0011AxxxxM04A00
			(4 × 2.5 + (2 × 0.5))
 EYP0005AxxxxM01A00			
 EYP0012AxxxxM01A00			
 EYP0005AxxxxM04A00			
 EYP0012AxxxxM04A00			

			
	Extension cable	Connection cable	
<b>(4 × 1.0 + (2 × 0.5))</b>			
	-		-
	-		EYP0010AxxxxM01A00
	EYP0010VxxxxM01P04		-
	EYP0010VxxxxM04P04		EYP0010AxxxxM04A00
<b>(4 × 1.5 + (2 × 0.5))</b>			
	EYP0004VxxxxM01P04		EYP0004AxxxxM01A00
	EYP0004VxxxxM04P04		EYP0011AxxxxM01A00
	EYP0011VxxxxM01P04		EYP0004AxxxxM04A00
	EYP0011VxxxxM04P04		EYP0011AxxxxM04A00
<b>(4 × 2.5 + (2 × 0.5))</b>			
	EYP0005VxxxxM01P04		EYP0005AxxxxM01A00
	EYP0005VxxxxM04P04		EYP0012AxxxxM01A00
	EYP0012VxxxxM01P04		EYP0005AxxxxM04A00
	EYP0012VxxxxM04P04		EYP0012AxxxxM04A00

Motors with terminal boxes

						
		 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>	
MCA14L35-...Fxx	$(4 \times 1.0 + (2 \times 0.5))$ $(4 \times 1.5 + (2 \times 0.5))$	U, V, W, PE	X105, X107	X24, X25		

			
	<b>Connection cable</b>		
$(4 \times 1.0 + (2 \times 0.5))$			
 -			
 EYP0010YxxxxA00A00			
$(4 \times 1.5 + (2 \times 0.5))$			
 EYP0004YxxxxA00A00			
 EYP0011YxxxxA00A00			

			
	<b>Extension cable</b>	<b>Connection cable</b>	
$(4 \times 1.0 + (2 \times 0.5))$			
 -		 -	
 EYP0010VxxxxA00P04		 EYP0010AxxxxM01A00	
		 -	
		 EYP0010AxxxxM04A00	
$(4 \times 1.5 + (2 \times 0.5))$			
 EYP0004VxxxxA00P04		 EYP0004AxxxxM01A00	
		 EYP0011AxxxxM01A00	
 EYP0011VxxxxA00P04		 EYP0004AxxxxM04A00	
		 EYP0011AxxxxM04A00	

3.1.3 MCA14L41 ... MCA17N23

Motors with plug connections

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCA14L41-...S00	(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
MCA17N17-...Fxx	(4 × 1.5 + (2 × 0.5))					
MCA17N23-...S00	(4 × 2.5 + (2 × 0.5))					

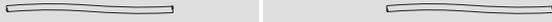
			
		Connection cable	
<b>(4 × 1.0 + (2 × 0.5))</b>			
	 EYP0003AxxxxM01A00		
	 EYP0010AxxxxM01A00		
	 EYP0003AxxxxM04A00		
	 EYP0010AxxxxM04A00		
<b>(4 × 1.5 + (2 × 0.5))</b>			
	 EYP0004AxxxxM01A00		
	 EYP0011AxxxxM01A00		
	 EYP0004AxxxxM04A00		
	 EYP0011AxxxxM04A00		
<b>(4 × 2.5 + (2 × 0.5))</b>			
	 EYP0005AxxxxM01A00		
	 EYP0012AxxxxM01A00		
	 EYP0005AxxxxM04A00		
	 EYP0012AxxxxM04A00		

### 3

## Selection tables for motor cables

MCA motor

MCA14L41 ... MCA17N23

			
	Extension cable	Connection cable	
<b>(4 × 1.0 + (2 × 0.5))</b>			
 EYP0003VxxxxM01P04	 EYP0003AxxxxM01A00		
 EYP0003VxxxxM04P04	 EYP0010AxxxxM01A00		
 EYP0010VxxxxM01P04	 EYP0003AxxxxM04A00		
 EYP0010VxxxxM04P04	 EYP0010AxxxxM04A00		
<b>(4 × 1.5 + (2 × 0.5))</b>			
 EYP0004VxxxxM01P04	 EYP0004AxxxxM01A00		
 EYP0004VxxxxM04P04	 EYP0011AxxxxM01A00		
 EYP0011VxxxxM01P04	 EYP0004AxxxxM04A00		
 EYP0011VxxxxM04P04	 EYP0011AxxxxM04A00		
<b>(4 × 2.5 + (2 × 0.5))</b>			
 EYP0005VxxxxM01P04	 EYP0005AxxxxM01A00		
 EYP0005VxxxxM04P04	 EYP0012AxxxxM01A00		
 EYP0012VxxxxM01P04	 EYP0005AxxxxM04A00		
 EYP0012VxxxxM04P04	 EYP0012AxxxxM04A00		

## Motors with terminal boxes

						
	 [mm <sup>2</sup> ]	9300 servo	9400	ECS		
MCA14L41-...S00	(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
MCA17N17-...Fxx MCA17N23-...S00	(4 × 1.5 + (2 × 0.5))					
						
	<b>Connection cable</b>					
	(4 × 1.0 + (2 × 0.5))					
	 EYP0003YxxxxA00A00					
	 EYP0010YxxxxA00A00					
	(4 × 1.5 + (2 × 0.5))					
	 EYP0004YxxxxA00A00					
	 EYP0011YxxxxA00A00					
						
	<b>Extension cable</b>		<b>Connection cable</b>			
	(4 × 1.0 + (2 × 0.5))					
	 EYP0003VxxxxA00P04	 EYP0003AxxxxM01A00				
	 EYP0010VxxxxA00P04	 EYP0010AxxxxM01A00				
	 EYP0010VxxxxA00P04	 EYP0003AxxxxM04A00				
	 EYP0011VxxxxA00P04	 EYP0010AxxxxM04A00				
	(4 × 1.5 + (2 × 0.5))					
	 EYP0004VxxxxA00P04	 EYP0004AxxxxM01A00				
	 EYP0011VxxxxA00P04	 EYP0011AxxxxM01A00				
	 EYP0011VxxxxA00P04	 EYP0004AxxxxM04A00				
	 EYP0011VxxxxA00P04	 EYP0011AxxxxM04A00				

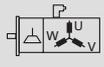
### 3 Selection tables for motor cables

MCA motor  
MCA17N35

#### 3.1.4 MCA17N35

##### Motors with plug connections

						
		 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>	
MCA17N35-...Fxx	$(4 \times 1.5 + (2 \times 0.5))$ $(4 \times 2.5 + (2 \times 0.5))$	U, V, W, PE	X105, X107	X24, X25		

			
	<b>Connection cable</b>		
	$(4 \times 1.5 + (2 \times 0.5))$		
	 -		
	 EYP0011AxxxxM01A00		
	 -		
	 EYP0011AxxxxM04A00		
	$(4 \times 2.5 + (2 \times 0.5))$		
	 EYP0005AxxxxM01A00		
	 EYP0012AxxxxM01A00		
	 EYP0005AxxxxM04A00		
	 EYP0012AxxxxM04A00		

			
	<b>Extension cable</b>		
	$(4 \times 1.5 + (2 \times 0.5))$		
	 -		 -
	 -		 EYP0011AxxxxM01A00
	 EYP0011VxxxxM01P04		 -
	 EYP0011VxxxxM04P04		 EYP0011AxxxxM04A00
	$(4 \times 2.5 + (2 \times 0.5))$		
	 EYP0005VxxxxM01P04		 EYP0005AxxxxM01A00
	 EYP0005VxxxxM04P04		 EYP0012AxxxxM01A00
	 EYP0012VxxxxM01P04		 EYP0005AxxxxM04A00
	 EYP0012VxxxxM04P04		 EYP0012AxxxxM04A00

## Motors with terminal boxes

							
		 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>		
		$(4 \times 1.5 + (2 \times 0.5))$ $(4 \times 2.5 + (2 \times 0.5))$	U, V, W, PE	X105, X107	X24, X25		

				
			<b>Connection cable</b>	
			$(4 \times 1.5 + (2 \times 0.5))$  -  EYP0011YxxxxA00A00	
$(4 \times 2.5 + (2 \times 0.5))$  EYP0005YxxxxA00A00  EYP0012YxxxxA00A00				

The EYP0012... system cable can only be connected to the motor using an enlarger.

					
				<b>Extension cable</b>	<b>Connection cable</b>
				$(4 \times 1.5 + (2 \times 0.5))$  -  EYP0011VxxxxA00P04	 -  EYP0011AxxxxM01A00  -  EYP0011AxxxxM04A00
$(4 \times 2.5 + (2 \times 0.5))$  EYP0005VxxxxA00P04  EYP0012VxxxxA00P04	 EYP0005AxxxxM01A00  EYP0012AxxxxM01A00  EYP0005AxxxxM04A00  EYP0012AxxxxM04A00				

The EYP0012... system cable can only be connected to the motor using an enlarger.

### 3 Selection tables for motor cables

MCA motor  
MCA17N41

#### 3.1.5 MCA17N41

##### Motors with plug connections

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCA17N41-...S00	(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 1.5 + (2 × 0.5))					
	(4 × 2.5 + (2 × 0.5))					

		
	(4 × 1.0 + (2 × 0.5))	 -
		 EYP0010AxxxxM01A00
	(4 × 1.5 + (2 × 0.5))	 -
		 EYP0010AxxxxM04A00
	(4 × 2.5 + (2 × 0.5))	 EYP0004AxxxxM01A00
		 EYP0011AxxxxM01A00
		 EYP0004AxxxxM04A00
		 EYP0011AxxxxM04A00
		 EYP0005AxxxxM01A00
		 EYP0012AxxxxM01A00
		 EYP0005AxxxxM04A00
		 EYP0012AxxxxM04A00

			
	Extension cable	Connection cable	
<b>(4 × 1.0 + (2 × 0.5))</b>			
	 -	 -	
	 -	 EYP0010AxxxxM01A00	
	 EYP0010VxxxxM01P04	 -	
	 EYP0010VxxxxM04P04	 EYP0010AxxxxM04A00	
<b>(4 × 1.5 + (2 × 0.5))</b>			
	 EYP0004VxxxxM01P04	 EYP0004AxxxxM01A00	
	 EYP0004VxxxxM04P04	 EYP0011AxxxxM01A00	
	 EYP0011VxxxxM01P04	 EYP0004AxxxxM04A00	
	 EYP0011VxxxxM04P04	 EYP0011AxxxxM04A00	
<b>(4 × 2.5 + (2 × 0.5))</b>			
	 EYP0005VxxxxM01P04	 EYP0005AxxxxM01A00	
	 EYP0005VxxxxM04P04	 EYP0012AxxxxM01A00	
	 EYP0012VxxxxM01P04	 EYP0005AxxxxM04A00	
	 EYP0012VxxxxM04P04	 EYP0012AxxxxM04A00	

## Motors with terminal boxes

						
		9300 servo	9400	ECS		
MCA17N41-...S00	$(4 \times 1.0 + (2 \times 0.5))$	U, V, W, PE	X105, X107	X24, X25		
	$(4 \times 1.5 + (2 \times 0.5))$					
	$(4 \times 2.5 + (2 \times 0.5))$					

			
		Connection cable	
	$(4 \times 1.0 + (2 \times 0.5))$	-	
		EYP0010YxxxxA00A00	
	$(4 \times 1.5 + (2 \times 0.5))$	EYP0004YxxxxA00A00	
		EYP0011YxxxxA00A00	
	$(4 \times 2.5 + (2 \times 0.5))$	EYP0005YxxxxA00A00	
		EYP0012YxxxxA00A00	

The EYP0012... system cable can only be connected to the motor using an enlarger.

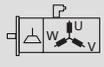
					
			Extension cable	Connection cable	
	$(4 \times 1.0 + (2 \times 0.5))$		-	-	
				EYP0010AxxxxM01A00	
				EYP0010VxxxxA00P04	-
				EYP0010AxxxxM04A00	
	$(4 \times 1.5 + (2 \times 0.5))$		EYP0004VxxxxA00P04	EYP0004AxxxxM01A00	
				EYP0011VxxxxA00P04	EYP0011AxxxxM01A00
				EYP0011VxxxxA00P04	EYP0004AxxxxM04A00
				EYP0011AxxxxM04A00	
	$(4 \times 2.5 + (2 \times 0.5))$		EYP0005VxxxxA00P04	EYP0005AxxxxM01A00	
				EYP0012VxxxxA00P04	EYP0012AxxxxM01A00
				EYP0012VxxxxA00P04	EYP0005AxxxxM04A00
				EYP0012AxxxxM04A00	

The EYP0012... system cable can only be connected to the motor using an enlarger.

3.1.6 MCA19S17

Motors with plug connections

						
		 [mm²]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>	
MCA19S17-...Fxx	(4 × 2.5 + (2 × 0.5)) (4 × 4.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		

			
	<b>Connection cable</b>		
	(4 × 2.5 + (2 × 0.5))		
	 EYP0005AxxxxM02A00		
	 EYP0012AxxxxM02A00		
	 EYP0005AxxxxM05A00		
	 EYP0012AxxxxM05A00		
	(4 × 4.0 + (2 × 1.0))		
	 EYP0006AxxxxM02A00		
	 EYP0013AxxxxM02A00		
	 EYP0006AxxxxM05A00		
	 EYP0013AxxxxM05A00		

			
	<b>Extension cable</b>		
	(4 × 2.5 + (2 × 0.5))		
	 EYP0005VxxxxM02P05	 EYP0005AxxxxM02A00	
	 EYP0005VxxxxM05P05	 EYP0012AxxxxM02A00	
	 EYP0012VxxxxM02P05	 EYP0005AxxxxM05A00	
	 EYP0012VxxxxM05P05	 EYP0012AxxxxM05A00	
	(4 × 4.0 + (2 × 1.0))		
	 EYP0006VxxxxM02P05	 EYP0006AxxxxM02A00	
	 EYP0006VxxxxM05P05	 EYP0013AxxxxM02A00	
	 EYP0013VxxxxM02P05	 EYP0006AxxxxM05A00	
	 EYP0013VxxxxM05P05	 EYP0013AxxxxM05A00	

Motors with terminal boxes

							
		 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>		
		(4 × 1.5 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
		(4 × 2.5 + (2 × 0.5))					
(4 × 4.0 + (2 × 1.0))							

			
		<b>Connection cable</b>	
		(4 × 1.5 + (2 × 0.5))	
		— —	
		 EYP0011YxxxxA00A00	
		(4 × 2.5 + (2 × 0.5))	
		— —	
		 EYP0005YxxxxA00A00  EYP0012YxxxxA00A00	
		(4 × 4.0 + (2 × 1.0))	
		— —	
 EYP0006YxxxxA00A00  EYP0013YxxxxA00A00			

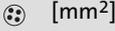
Die EYP0011... system cable can only be connected to the motor using a reducer.

			
		<b>Extension cable</b>	<b>Connection cable</b>
		(4 × 1.5 + (2 × 0.5))	
		— —	
		 EYP0011VxxxxA00P04	
		 —  EYP0011AxxxxM01A00  —  EYP0011AxxxxM04A00	
		(4 × 2.5 + (2 × 0.5))	
		 EYP0005VxxxxA00P04  EYP0012VxxxxA00P04	
		 EYP0005AxxxxM01A00  EYP0012AxxxxM01A00  EYP0005AxxxxM04A00  EYP0012AxxxxM04A00	
		(4 × 4.0 + (2 × 1.0))	
		 EYP0006VxxxxA00P05  EYP0013VxxxxA00P05	
		 EYP0006AxxxxM02A00  EYP0013AxxxxM02A00  EYP0006AxxxxM05A00  EYP0013AxxxxM05A00	

Die EYP0011... system cable can only be connected to the motor using a reducer.

3.1.7 MCA19S23

Motors with plug connections

						
		 [mm²]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>	
MCA19S23-...S00	$(4 \times 2.5 + (2 \times 0.5))$ $(4 \times 4.0 + (2 \times 1.0))$	U, V, W, PE	X105, X107	X24, X25		

			
	<b>Connection cable</b>		
	$(4 \times 2.5 + (2 \times 0.5))$		
	 EYP0005AxxxxM02A00		
	 EYP0012AxxxxM02A00		
	 EYP0005AxxxxM05A00		
	 EYP0012AxxxxM05A00		
	$(4 \times 4.0 + (2 \times 1.0))$		
	 EYP0006AxxxxM02A00		
	 EYP0013AxxxxM02A00		
	 EYP0006AxxxxM05A00		
	 EYP0013AxxxxM05A00		

			
	<b>Extension cable</b>		
	$(4 \times 2.5 + (2 \times 0.5))$		
	 EYP0005VxxxxM02P05	 EYP0005AxxxxM02A00	
	 EYP0005VxxxxM05P05	 EYP0012AxxxxM02A00	
	 EYP0012VxxxxM02P05	 EYP0005AxxxxM05A00	
	 EYP0012VxxxxM05P05	 EYP0012AxxxxM05A00	
	$(4 \times 4.0 + (2 \times 1.0))$		
	 EYP0006VxxxxM02P05	 EYP0006AxxxxM02A00	
	 EYP0006VxxxxM05P05	 EYP0013AxxxxM02A00	
	 EYP0013VxxxxM02P05	 EYP0006AxxxxM05A00	
	 EYP0013VxxxxM05P05	 EYP0013AxxxxM05A00	

## Motors with terminal boxes

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCA19S23-...S00	(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 1.5 + (2 × 0.5))					
	(4 × 2.5 + (2 × 0.5))					
	(4 × 4.0 + (2 × 1.0))					

			
		Connection cable	
	(4 × 1.0 + (2 × 0.5))	 EYP0003YxxxxA00A00	
		 EYP0010YxxxxA00A00	
	(4 × 1.5 + (2 × 0.5))	 EYP0004YxxxxA00A00	
		 EYP0011YxxxxA00A00	
	(4 × 2.5 + (2 × 0.5))	 EYP0005YxxxxA00A00	
		 EYP0012YxxxxA00A00	
	(4 × 4.0 + (2 × 1.0))	 EYP0006YxxxxA00A00	
		 EYP0013YxxxxA00A00	

Die EYP0003... system cable can only be connected to the motor using a reducer.  
 Die EYP0004... system cable can only be connected to the motor using a reducer.  
 Die EYP0010... system cable can only be connected to the motor using a reducer.  
 Die EYP0011... system cable can only be connected to the motor using a reducer.

			
	Extension cable	Connection cable	
<b>(4 × 1.0 + (2 × 0.5))</b>			
 EYP0003VxxxxA00P04	 EYP0003AxxxxM01A00	 EYP0010AxxxxM01A00	
 EYP0010VxxxxA00P04	 EYP0003AxxxxM04A00	 EYP0010AxxxxM04A00	
<b>(4 × 1.5 + (2 × 0.5))</b>			
 EYP0004VxxxxA00P04	 EYP0004AxxxxM01A00	 EYP0011AxxxxM01A00	
 EYP0011VxxxxA00P04	 EYP0004AxxxxM04A00	 EYP0011AxxxxM04A00	
<b>(4 × 2.5 + (2 × 0.5))</b>			
 EYP0005VxxxxA00P04	 EYP0005AxxxxM01A00	 EYP0012AxxxxM01A00	
 EYP0012VxxxxA00P04	 EYP0005AxxxxM04A00	 EYP0012AxxxxM04A00	
<b>(4 × 4.0 + (2 × 1.0))</b>			
 EYP0006VxxxxA00P05	 EYP0006AxxxxM02A00	 EYP0013AxxxxM02A00	
 EYP0013VxxxxA00P05	 EYP0006AxxxxM05A00	 EYP0013AxxxxM05A00	

Die EYP0003... system cable can only be connected to the motor using a reducer.  
 Die EYP0004... system cable can only be connected to the motor using a reducer.  
 Die EYP0010... system cable can only be connected to the motor using a reducer.  
 Die EYP0011... system cable can only be connected to the motor using a reducer.

### 3 Selection tables for motor cables

MCA motor  
MCA19S35

#### 3.1.8 MCA19S35

##### Motors with plug connections

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCA19S35-...Fxx	(4 × 4.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 6.0 + (2 × 1.0))					
	(4 × 10.0 + (2 × 1.0))					
	(4 × 16.0 + (2 × 1.0))					

			
		Connection cable	
	(4 × 4.0 + (2 × 1.0))	 -	
		 EYP0013AxxxxM02A00	
	(4 × 6.0 + (2 × 1.0))	 -	
		 EYP0013AxxxxM05A00	
	(4 × 6.0 + (2 × 1.0))	 EYP0007AxxxxM03A00	
		 EYP0014AxxxxM03A00	
		 EYP0007AxxxxM06A00	
		 EYP0014AxxxxM06A00	
	(4 × 10.0 + (2 × 1.0))	 EYP0008AxxxxM03A00	
		 EYP0015AxxxxM03A00	
		 EYP0008AxxxxM06A00	
		 EYP0015AxxxxM06A00	
	(4 × 16.0 + (2 × 1.0))	 EYP0009AxxxxM03A00	
		 EYP0016AxxxxM03A00	
		 EYP0009AxxxxM06A00	
		 EYP0016AxxxxM06A00	

			
	Extension cable	Connection cable	
	(4 × 4.0 + (2 × 1.0))		
	 -   EYP0013VxxxxM05P05	 -  EYP0013AxxxxM02A00  -  EYP0013AxxxxM05A00	
	(4 × 6.0 + (2 × 1.0))		
	 EYP0007VxxxxM06P06   EYP0014VxxxxM06P06	 EYP0007AxxxxM03A00  EYP0014AxxxxM03A00  EYP0007AxxxxM06A00  EYP0014AxxxxM06A00	
	(4 × 10.0 + (2 × 1.0))		
	 EYP0008VxxxxM06P06   EYP0015VxxxxM06P06	 EYP0008AxxxxM03A00  EYP0015AxxxxM03A00  EYP0008AxxxxM06A00  EYP0015AxxxxM06A00	
	(4 × 16.0 + (2 × 1.0))		
	 EYP0009VxxxxM06P06   EYP0016VxxxxM06P06	 EYP0009AxxxxM03A00  EYP0016AxxxxM03A00  EYP0009AxxxxM06A00  EYP0016AxxxxM06A00	

## Motors with terminal boxes

						
		9300 servo	9400	ECS		
MCA19S35-...Fxx	☉ [mm <sup>2</sup> ]					
	(4 × 4.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 6.0 + (2 × 1.0))					
(4 × 10.0 + (2 × 1.0))						

			
	Connection cable		
	(4 × 4.0 + (2 × 1.0))		
	—		
		EYP0013YxxxxA00A00	
	(4 × 6.0 + (2 × 1.0))		
	—		
		EYP0014YxxxxA00A00	
	(4 × 10.0 + (2 × 1.0))		
	—		
		EYP0015YxxxxA00A00	

			
	Extension cable	Connection cable	
	(4 × 4.0 + (2 × 1.0))		
	—		
		EYP0013VxxxxA00P05	
	(4 × 6.0 + (2 × 1.0))		
		EYP0007VxxxxA00P06	
		EYP0014VxxxxA00P06	
	(4 × 10.0 + (2 × 1.0))		
		EYP0008VxxxxA00P06	
		EYP0015VxxxxA00P06	

3.1.9 MCA19S42

Motors with plug connections

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCA19S42-...S00	(4 × 2.5 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 4.0 + (2 × 1.0))					
	(4 × 6.0 + (2 × 1.0))					
	(4 × 10.0 + (2 × 1.0))					
	(4 × 16.0 + (2 × 1.0))					

		
	(4 × 2.5 + (2 × 0.5))	
	 -	
	 EYP0012AxxxxM02A00	
	 -	
	 EYP0012AxxxxM05A00	
	(4 × 4.0 + (2 × 1.0))	
	 EYP0006AxxxxM02A00	
	 EYP0013AxxxxM02A00	
 EYP0006AxxxxM05A00		
 EYP0013AxxxxM05A00		
(4 × 6.0 + (2 × 1.0))		
 EYP0007AxxxxM03A00		
 EYP0014AxxxxM03A00		
 EYP0007AxxxxM06A00		
 EYP0014AxxxxM06A00		
(4 × 10.0 + (2 × 1.0))		
 EYP0008AxxxxM03A00		
 EYP0015AxxxxM03A00		
 EYP0008AxxxxM06A00		
 EYP0015AxxxxM06A00		
(4 × 16.0 + (2 × 1.0))		
 EYP0009AxxxxM03A00		
 EYP0016AxxxxM03A00		
 EYP0009AxxxxM06A00		
 EYP0016AxxxxM06A00		

			
	Extension cable	Connection cable	
	<b>(4 × 2.5 + (2 × 0.5))</b>		
	 -	 -	
	 -	 EYP0012AxxxxM02A00	
	 EYP0012VxxxxM02P05	 -	
	 EYP0012VxxxxM05P05	 EYP0012AxxxxM05A00	
	<b>(4 × 4.0 + (2 × 1.0))</b>		
	 EYP0006VxxxxM02P05	 EYP0006AxxxxM02A00	
	 EYP0006VxxxxM05P05	 EYP0013AxxxxM02A00	
	 EYP0013VxxxxM02P05	 EYP0006AxxxxM05A00	
	 EYP0013VxxxxM05P05	 EYP0013AxxxxM05A00	
	<b>(4 × 6.0 + (2 × 1.0))</b>		
	 EYP0007VxxxxM03P06	 EYP0007AxxxxM03A00	
	 EYP0007VxxxxM06P06	 EYP0014AxxxxM03A00	
	 EYP0014VxxxxM03P06	 EYP0007AxxxxM06A00	
	 EYP0014VxxxxM06P06	 EYP0014AxxxxM06A00	
	<b>(4 × 10.0 + (2 × 1.0))</b>		
	 EYP0008VxxxxM03P06	 EYP0008AxxxxM03A00	
	 EYP0008VxxxxM06P06	 EYP0015AxxxxM03A00	
	 EYP0015VxxxxM03P06	 EYP0008AxxxxM06A00	
	 EYP0015VxxxxM06P06	 EYP0015AxxxxM06A00	
	<b>(4 × 16.0 + (2 × 1.0))</b>		
	 EYP0009VxxxxM03P06	 EYP0009AxxxxM03A00	
	 EYP0009VxxxxM06P06	 EYP0016AxxxxM03A00	
	 EYP0016VxxxxM03P06	 EYP0009AxxxxM06A00	
	 EYP0016VxxxxM06P06	 EYP0016AxxxxM06A00	

**Motors with terminal boxes**

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCA19S42-...S00	(4 × 2.5 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 4.0 + (2 × 1.0))					
	(4 × 6.0 + (2 × 1.0))					
	(4 × 10.0 + (2 × 1.0))					

						
	Connection cable					
	(4 × 2.5 + (2 × 0.5))	— — — — —				
		 EYP0012YxxxxA00A00				
	(4 × 4.0 + (2 × 1.0))	— — — — —				
		 EYP0013YxxxxA00A00				
	(4 × 6.0 + (2 × 1.0))	— — — — —				
		 EYP0014YxxxxA00A00				
	(4 × 10.0 + (2 × 1.0))	— — — — —				
		 EYP0015YxxxxA00A00				

## Selection tables for motor cables

MCA motor  
MCA19S42

			
	Extension cable	Connection cable	
	$(4 \times 2.5 + (2 \times 0.5))$		
	 -	 -	
	 EYP0012VxxxxA00P05	 EYP0012AxxxxM02A00	
		 -	
		 EYP0012AxxxxM05A00	
	$(4 \times 4.0 + (2 \times 1.0))$		
	 EYP0006VxxxxA00P05	 EYP0006AxxxxM02A00	
		 EYP0013AxxxxM02A00	
	 EYP0013VxxxxA00P05	 EYP0006AxxxxM05A00	
		 EYP0013AxxxxM05A00	
	$(4 \times 6.0 + (2 \times 1.0))$		
	 EYP0007VxxxxA00P06	 EYP0007AxxxxM03A00	
		 EYP0014AxxxxM03A00	
	 EYP0014VxxxxA00P06	 EYP0007AxxxxM06A00	
		 EYP0014AxxxxM06A00	
	$(4 \times 10.0 + (2 \times 1.0))$		
	 EYP0008VxxxxA00P06	 EYP0008AxxxxM03A00	
		 EYP0015AxxxxM03A00	
	 EYP0015VxxxxA00P06	 EYP0008AxxxxM06A00	
		 EYP0015AxxxxM06A00	

3.1.10 MCA20X14

Motors with plug connections

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCA20X14-...2Fxx	(4 × 4.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 6.0 + (2 × 1.0))					
	(4 × 10.0 + (2 × 1.0))					
	(4 × 16.0 + (2 × 1.0))					

			
		Connection cable	
	(4 × 4.0 + (2 × 1.0))	 -  EYP0013AxxxxM02A00	
		 -  EYP0013AxxxxM05A00	
	(4 × 6.0 + (2 × 1.0))	 EYP0007AxxxxM03A00  EYP0014AxxxxM03A00	
		 EYP0007AxxxxM06A00  EYP0014AxxxxM06A00	
	(4 × 10.0 + (2 × 1.0))	 EYP0008AxxxxM03A00  EYP0015AxxxxM03A00	
		 EYP0008AxxxxM06A00  EYP0015AxxxxM06A00	
	(4 × 16.0 + (2 × 1.0))	 EYP0009AxxxxM03A00  EYP0016AxxxxM03A00	
		 EYP0009AxxxxM06A00  EYP0016AxxxxM06A00	

### 3

## Selection tables for motor cables

MCA motor  
MCA20X14

			
	Extension cable	Connection cable	
	(4 × 4.0 + (2 × 1.0))		
	 -  EYP0013VxxxxM05P05	 -  EYP0013AxxxxM02A00  -  EYP0013AxxxxM05A00	
	(4 × 6.0 + (2 × 1.0))		
	 EYP0007VxxxxM06P06  EYP0014VxxxxM06P06	 EYP0007AxxxxM03A00  EYP0014AxxxxM03A00  EYP0007AxxxxM06A00  EYP0014AxxxxM06A00	
	(4 × 10.0 + (2 × 1.0))		
	 EYP0008VxxxxM06P06  EYP0015VxxxxM06P06	 EYP0008AxxxxM03A00  EYP0015AxxxxM03A00  EYP0008AxxxxM06A00  EYP0015AxxxxM06A00	
	(4 × 16.0 + (2 × 1.0))		
	 EYP0009VxxxxM06P06  EYP0016VxxxxM06P06	 EYP0009AxxxxM03A00  EYP0016AxxxxM03A00  EYP0009AxxxxM06A00  EYP0016AxxxxM06A00	

## Motors with terminal boxes

							
		 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>		
		$(4 \times 4.0 + (2 \times 1.0))$	U, V, W, PE	X105, X107	X24, X25		
		$(4 \times 6.0 + (2 \times 1.0))$					
$(4 \times 10.0 + (2 \times 1.0))$							

			
	<b>Connection cable</b>		
	$(4 \times 4.0 + (2 \times 1.0))$		
		EYP0013YxxxxA00A00	
$(4 \times 6.0 + (2 \times 1.0))$			
		EYP0007YxxxxA00A00	
		EYP0014YxxxxA00A00	
$(4 \times 10.0 + (2 \times 1.0))$			
		EYP0008YxxxxA00A00	
		EYP0015YxxxxA00A00	

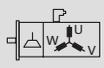
					
	<b>Extension cable</b>			<b>Connection cable</b>	
	$(4 \times 4.0 + (2 \times 1.0))$				
		-			-
		EYP0013VxxxxA00P05		EYP0013AxxxxM02A00	
				-	
				EYP0013AxxxxM05A00	
$(4 \times 6.0 + (2 \times 1.0))$					
		EYP0007VxxxxA00P06		EYP0007AxxxxM03A00	
		EYP0014VxxxxA00P06		EYP0014AxxxxM03A00	
				EYP0007AxxxxM06A00	
				EYP0014AxxxxM06A00	
$(4 \times 10.0 + (2 \times 1.0))$					
		EYP0008VxxxxA00P06		EYP0008AxxxxM03A00	
				EYP0015AxxxxM03A00	
				EYP0008AxxxxM06A00	
		EYP0015VxxxxA00P06		EYP0015AxxxxM06A00	

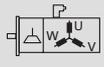
### 3 Selection tables for motor cables

MCA motor  
MCA20X29

#### 3.1.11 MCA20X29

##### Motors with plug connections

						
		 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>	
MCA20X29-...2Fxx	$(4 \times 10.0 + (2 \times 1.0))$ $(4 \times 16.0 + (2 \times 1.0))$	U, V, W, PE	X105, X107	X24, X25		

			
	<b>Connection cable</b>		
$(4 \times 10.0 + (2 \times 1.0))$			
 -			
 EYP0015AxxxxM03A00			
 -			
 EYP0015AxxxxM06A00			
<hr/>			
$(4 \times 16.0 + (2 \times 1.0))$			
 EYP0009AxxxxM03A00			
 EYP0016AxxxxM03A00			
 EYP0009AxxxxM06A00			
 EYP0016AxxxxM06A00			

			
	<b>Extension cable</b>	<b>Connection cable</b>	
$(4 \times 10.0 + (2 \times 1.0))$			
 -		 -	
 EYP0015VxxxxM06P06		 EYP0015AxxxxM03A00	
		 -	
		 EYP0015AxxxxM06A00	
<hr/>			
$(4 \times 16.0 + (2 \times 1.0))$			
 EYP0009VxxxxM06P06		 EYP0009AxxxxM03A00	
 EYP0016VxxxxM06P06		 EYP0016AxxxxM03A00	
		 EYP0009AxxxxM06A00	
		 EYP0016AxxxxM06A00	

## Motors with terminal boxes

						
		 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>	
MCA20X29-...2Fxx	(4 × 10.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 16.0 + (2 × 1.0))					

		
(4 × 10.0 + (2 × 1.0))		
 -		
 EYP0015YxxxxA00A00		
(4 × 16.0 + (2 × 1.0))		
 EYP0009YxxxxA00A00		
 EYP0016YxxxxA00A00		

The EYP0009... system cable can only be connected to the motor using an enlarger.  
The EYP0016... system cable can only be connected to the motor using an enlarger.

			
(4 × 10.0 + (2 × 1.0))			
 -		 -	
 EYP0015VxxxxA00P06		 EYP0015AxxxxM03A00	
		 -	
		 EYP0015AxxxxM06A00	
(4 × 16.0 + (2 × 1.0))			
 EYP0009VxxxxA00P06		 EYP0009AxxxxM03A00	
		 EYP0016AxxxxM03A00	
		 EYP0009AxxxxM06A00	
 EYP0016VxxxxA00P06		 EYP0016AxxxxM06A00	

The EYP0009... system cable can only be connected to the motor using an enlarger.  
The EYP0016... system cable can only be connected to the motor using an enlarger.

### 3 Selection tables for motor cables

MCA motor  
MCA21X17

#### 3.1.12 MCA21X17

##### Motors with plug connections

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCA21X17-...Fxx	(4 × 4.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 6.0 + (2 × 1.0))					
	(4 × 10.0 + (2 × 1.0))					

			
			Connection cable
			
			(4 × 4.0 + (2 × 1.0))
			 -
			 EYP0013AxxxxM02A00
			 -
			 EYP0013AxxxxM05A00
			(4 × 6.0 + (2 × 1.0))
			 EYP0007AxxxxM03A00
			 EYP0014AxxxxM03A00
			 EYP0007AxxxxM06A00
			 EYP0014AxxxxM06A00
			(4 × 10.0 + (2 × 1.0))
 EYP0008AxxxxM03A00			
 EYP0015AxxxxM03A00			
 EYP0008AxxxxM06A00			
 EYP0015AxxxxM06A00			

			
	Extension cable	Connection cable	
	<b>(4 × 4.0 + (2 × 1.0))</b>		
	 -  EYP0013VxxxxM05P05	 -  EYP0013AxxxxM02A00  -  EYP0013AxxxxM05A00	
	<b>(4 × 6.0 + (2 × 1.0))</b>		
	 EYP0007VxxxxM06P06  EYP0014VxxxxM06P06	 EYP0007AxxxxM03A00  EYP0014AxxxxM03A00  EYP0007AxxxxM06A00  EYP0014AxxxxM06A00	
	<b>(4 × 10.0 + (2 × 1.0))</b>		
	 EYP0008VxxxxM06P06  EYP0015VxxxxM06P06	 EYP0008AxxxxM03A00  EYP0015AxxxxM03A00  EYP0008AxxxxM06A00  EYP0015AxxxxM06A00	

## Motors with terminal boxes

						
		9300 servo	9400	ECS		
MCA21X17-...Fxx	⊕ [mm <sup>2</sup> ]					
	(4 × 4.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 6.0 + (2 × 1.0))					
(4 × 10.0 + (2 × 1.0))						

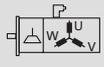
			
	Connection cable		
	(4 × 4.0 + (2 × 1.0))		
	—		
		EYP0013YxxxxA00A00	
	(4 × 6.0 + (2 × 1.0))		
	—		
		EYP0014YxxxxA00A00	
	(4 × 10.0 + (2 × 1.0))		
	—		
		EYP0015YxxxxA00A00	

			
	Extension cable	Connection cable	
	(4 × 4.0 + (2 × 1.0))		
	—		
		EYP0013VxxxxA00P05	
	(4 × 6.0 + (2 × 1.0))		
		EYP0007VxxxxA00P06	
		EYP0014VxxxxA00P06	
	(4 × 10.0 + (2 × 1.0))		
		EYP0008VxxxxA00P06	
		EYP0015VxxxxA00P06	

3.1.13 MCA21X25

Motors with plug connections

						
		 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>	
MCA21X25-...S00	$(4 \times 2.5 + (2 \times 0.5))$ $(4 \times 4.0 + (2 \times 1.0))$	U, V, W, PE	X105, X107	X24, X25		

			
		<b>Connection cable</b>	
$(4 \times 2.5 + (2 \times 0.5))$			
 EYP0005AxxxxM02A00			
 EYP0012AxxxxM02A00			
 EYP0005AxxxxM05A00			
 EYP0012AxxxxM05A00			
$(4 \times 4.0 + (2 \times 1.0))$			
 EYP0006AxxxxM02A00			
 EYP0013AxxxxM02A00			
 EYP0006AxxxxM05A00			
 EYP0013AxxxxM05A00			

			
		<b>Extension cable</b>	
$(4 \times 2.5 + (2 \times 0.5))$			
 EYP0005VxxxxM02P05		 EYP0005AxxxxM02A00	
 EYP0005VxxxxM05P05		 EYP0012AxxxxM02A00	
 EYP0012VxxxxM02P05		 EYP0005AxxxxM05A00	
 EYP0012VxxxxM05P05		 EYP0012AxxxxM05A00	
$(4 \times 4.0 + (2 \times 1.0))$			
 EYP0006VxxxxM02P05		 EYP0006AxxxxM02A00	
 EYP0006VxxxxM05P05		 EYP0013AxxxxM02A00	
 EYP0013VxxxxM02P05		 EYP0006AxxxxM05A00	
 EYP0013VxxxxM05P05		 EYP0013AxxxxM05A00	

## Motors with terminal boxes

						
		9300 servo	9400	ECS		
MCA21X25-...S00	$(4 \times 1.5 + (2 \times 0.5))$	U, V, W, PE	X105, X107	X24, X25		
	$(4 \times 2.5 + (2 \times 0.5))$					
	$(4 \times 4.0 + (2 \times 1.0))$					

			
		Connection cable	
	$(4 \times 1.5 + (2 \times 0.5))$		
	 -		
	 EYP0011YxxxxA00A00		
	$(4 \times 2.5 + (2 \times 0.5))$		
	 EYP0005YxxxxA00A00		
	 EYP0012YxxxxA00A00		
	$(4 \times 4.0 + (2 \times 1.0))$		
	 EYP0006YxxxxA00A00		
	 EYP0013YxxxxA00A00		

Die EYP0011... system cable can only be connected to the motor using a reducer.

							
			Extension cable	Connection cable			
	$(4 \times 1.5 + (2 \times 0.5))$	 -	 -	 EYP0011AxxxxM01A00			
					 EYP0011VxxxxA00P04	 -	 EYP0011AxxxxM04A00
	$(4 \times 2.5 + (2 \times 0.5))$	 EYP0005VxxxxA00P04	 EYP0005AxxxxM01A00	 EYP0012AxxxxM01A00			
					 EYP0012VxxxxA00P04	 EYP0005AxxxxM04A00	 EYP0012AxxxxM04A00
	$(4 \times 4.0 + (2 \times 1.0))$	 EYP0006VxxxxA00P05	 EYP0006AxxxxM02A00	 EYP0013AxxxxM02A00			
					 EYP0013VxxxxA00P05	 EYP0006AxxxxM05A00	 EYP0013AxxxxM05A00

Die EYP0011... system cable can only be connected to the motor using a reducer.

3.1.14 MCA21X35

Motors with plug connections

			<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>	
MCA21X35-...Fxx	$(4 \times 10.0 + (2 \times 1.0))$ $(4 \times 16.0 + (2 \times 1.0))$	U, V, W, PE	X105, X107	X24, X25		

		<b>Connection cable</b>				
	$(4 \times 10.0 + (2 \times 1.0))$					
	- EYP0015AxxxxM03A00					
	- EYP0015AxxxxM06A00					
	$(4 \times 16.0 + (2 \times 1.0))$					
	EYP0009AxxxxM03A00 EYP0016AxxxxM03A00 EYP0009AxxxxM06A00 EYP0016AxxxxM06A00					

			<b>Extension cable</b>		<b>Connection cable</b>	
	$(4 \times 10.0 + (2 \times 1.0))$					
	- EYP0015VxxxxM06P06		- EYP0015AxxxxM03A00 - EYP0015AxxxxM06A00			
	$(4 \times 16.0 + (2 \times 1.0))$					
	EYP0009VxxxxM06P06 EYP0016VxxxxM06P06		EYP0009AxxxxM03A00 EYP0016AxxxxM03A00 EYP0009AxxxxM06A00 EYP0016AxxxxM06A00			

Motors with terminal boxes

						
	 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>		
MCA21X35-...Fxx	(4 × 10.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		

			
	<b>Connection cable</b> (4 × 10.0 + (2 × 1.0))		
 -			
 EYP0015YxxxxA00A00			

					
	<b>Extension cable</b> (4 × 10.0 + (2 × 1.0))		<b>Connection cable</b>		
 -		 -			
 EYP0015VxxxxA00P06		 EYP0015AxxxxM03A00			
		 -			
		 EYP0015AxxxxM06A00			

3.1.15 MCA21X42

Motors with plug connections

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCA21X42-...S00	(4 × 4.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 6.0 + (2 × 1.0))					
	(4 × 10.0 + (2 × 1.0))					
	(4 × 16.0 + (2 × 1.0))					

		
<b>(4 × 4.0 + (2 × 1.0))</b>		
	-	
	EYP0013AxxxxM02A00	
	-	
	EYP0013AxxxxM05A00	
<b>(4 × 6.0 + (2 × 1.0))</b>		
	EYP0007AxxxxM03A00	
	EYP0014AxxxxM03A00	
	EYP0007AxxxxM06A00	
	EYP0014AxxxxM06A00	
<b>(4 × 10.0 + (2 × 1.0))</b>		
	EYP0008AxxxxM03A00	
	EYP0015AxxxxM03A00	
	EYP0008AxxxxM06A00	
	EYP0015AxxxxM06A00	
<b>(4 × 16.0 + (2 × 1.0))</b>		
	EYP0009AxxxxM03A00	
	EYP0016AxxxxM03A00	
	EYP0009AxxxxM06A00	
	EYP0016AxxxxM06A00	

## Selection tables for motor cables

MCA motor  
MCA21X42

			
	Extension cable	Connection cable	
	<b>(4 × 4.0 + (2 × 1.0))</b>		
	 -	 -	
	 EYP0013VxxxxM05P05	 EYP0013AxxxxM02A00	
		 -	
		 EYP0013AxxxxM05A00	
	<b>(4 × 6.0 + (2 × 1.0))</b>		
	 EYP0007VxxxxM06P06	 EYP0007AxxxxM03A00	
		 EYP0014AxxxxM03A00	
	 EYP0014VxxxxM06P06	 EYP0007AxxxxM06A00	
		 EYP0014AxxxxM06A00	
	<b>(4 × 10.0 + (2 × 1.0))</b>		
	 EYP0008VxxxxM06P06	 EYP0008AxxxxM03A00	
		 EYP0015AxxxxM03A00	
	 EYP0015VxxxxM06P06	 EYP0008AxxxxM06A00	
		 EYP0015AxxxxM06A00	
	<b>(4 × 16.0 + (2 × 1.0))</b>		
	 EYP0009VxxxxM06P06	 EYP0009AxxxxM03A00	
		 EYP0016AxxxxM03A00	
	 EYP0016VxxxxM06P06	 EYP0009AxxxxM06A00	
		 EYP0016AxxxxM06A00	

## Motors with terminal boxes

							
		 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>		
		$(4 \times 4.0 + (2 \times 1.0))$	U, V, W, PE	X105, X107	X24, X25		
		$(4 \times 6.0 + (2 \times 1.0))$					
$(4 \times 10.0 + (2 \times 1.0))$							

			
	<b>Connection cable</b>		
	$(4 \times 4.0 + (2 \times 1.0))$		
	 -		
	 EYP0013YxxxxA00A00		
	$(4 \times 6.0 + (2 \times 1.0))$		
	 EYP0007YxxxxA00A00		
	 EYP0014YxxxxA00A00		
	$(4 \times 10.0 + (2 \times 1.0))$		
	 EYP0008YxxxxA00A00		
 EYP0015YxxxxA00A00			

					
	<b>Extension cable</b>			<b>Connection cable</b>	
	$(4 \times 4.0 + (2 \times 1.0))$			 -	
	 -			 EYP0013AxxxxM02A00	
	 EYP0013VxxxxA00P05			 -	
	 EYP0013VxxxxA00P05			 EYP0013AxxxxM05A00	
	$(4 \times 6.0 + (2 \times 1.0))$			 EYP0007AxxxxM03A00	
	 EYP0007VxxxxA00P06			 EYP0014AxxxxM03A00	
	 EYP0014VxxxxA00P06			 EYP0007AxxxxM06A00	
	 EYP0014VxxxxA00P06			 EYP0014AxxxxM06A00	
	$(4 \times 10.0 + (2 \times 1.0))$			 EYP0008AxxxxM03A00	
	 EYP0008VxxxxA00P06			 EYP0015AxxxxM03A00	
	 EYP0015VxxxxA00P06			 EYP0008AxxxxM06A00	
	 EYP0015VxxxxA00P06			 EYP0015AxxxxM06A00	

### 3 Selection tables for motor cables

MCA motor  
MCA22P08-...2Fxx

#### 3.1.16 MCA22P08-...2Fxx

##### Motors with terminal boxes

						
		9300 servo	9400	ECS		
MCA22P08-...2Fxx	⊕ [mm <sup>2</sup> ]					
	(4 × 4.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 6.0 + (2 × 1.0))					
	(4 × 10.0 + (2 × 1.0))					
(4 × 16.0 + (2 × 1.0))						

		
	(4 × 4.0 + (2 × 1.0))	
	 -  EYP0013YxxxxA00A00	
	(4 × 6.0 + (2 × 1.0))	
	 EYP0007YxxxxA00A00  EYP0014YxxxxA00A00	
	(4 × 10.0 + (2 × 1.0))	
	 EYP0008YxxxxA00A00  EYP0015YxxxxA00A00	
	(4 × 16.0 + (2 × 1.0))	
	 EYP0009YxxxxA00A00  EYP0016YxxxxA00A00	

Die EYP0007... system cable can only be connected to the motor using a reducer.  
 Die EYP0013... system cable can only be connected to the motor using a reducer.  
 Die EYP0014... system cable can only be connected to the motor using a reducer.

			
	Extension cable	Connection cable	
	<b>(4 × 4.0 + (2 × 1.0))</b>		
	 -	 -	
	 EYP0013VxxxxA00P05	 EYP0013AxxxxM02A00	
		 -	
		 EYP0013AxxxxM05A00	
	<b>(4 × 6.0 + (2 × 1.0))</b>		
	 EYP0007VxxxxA00P06	 EYP0007AxxxxM03A00	
		 EYP0014AxxxxM03A00	
	 EYP0014VxxxxA00P06	 EYP0007AxxxxM06A00	
		 EYP0014AxxxxM06A00	
	<b>(4 × 10.0 + (2 × 1.0))</b>		
	 EYP0008VxxxxA00P06	 EYP0008AxxxxM03A00	
		 EYP0015AxxxxM03A00	
	 EYP0015VxxxxA00P06	 EYP0008AxxxxM06A00	
		 EYP0015AxxxxM06A00	
	<b>(4 × 16.0 + (2 × 1.0))</b>		
	 EYP0009VxxxxA00P06	 EYP0009AxxxxM03A00	
		 EYP0016AxxxxM03A00	
	 EYP0016VxxxxA00P06	 EYP0009AxxxxM06A00	
		 EYP0016AxxxxM06A00	

Die EYP0007... system cable can only be connected to the motor using a reducer.  
 Die EYP0013... system cable can only be connected to the motor using a reducer.  
 Die EYP0014... system cable can only be connected to the motor using a reducer.

### 3 Selection tables for motor cables

MCA motor  
MCA22P08-...5Fxx

#### 3.1.17 MCA22P08-...5Fxx

##### Motors with terminal boxes

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCA22P08-...5Fxx	(4 × 2.5 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 4.0 + (2 × 1.0))					
	(4 × 6.0 + (2 × 1.0))					
	(4 × 10.0 + (2 × 1.0))					
	(4 × 16.0 + (2 × 1.0))					

		
(4 × 2.5 + (2 × 0.5))	 -	
	 EYP0012YxxxxA00A00	
(4 × 4.0 + (2 × 1.0))	 EYP0006YxxxxA00A00	
	 EYP0013YxxxxA00A00	
(4 × 6.0 + (2 × 1.0))	 EYP0007YxxxxA00A00	
	 EYP0014YxxxxA00A00	
(4 × 10.0 + (2 × 1.0))	 EYP0008YxxxxA00A00	
	 EYP0015YxxxxA00A00	
(4 × 16.0 + (2 × 1.0))	 EYP0009YxxxxA00A00	
	 EYP0016YxxxxA00A00	

Die EYP0006... system cable can only be connected to the motor using a reducer.  
 Die EYP0007... system cable can only be connected to the motor using a reducer.  
 The EYP0012... system cable can only be connected to the motor using a reducer.  
 Die EYP0013... system cable can only be connected to the motor using a reducer.  
 Die EYP0014... system cable can only be connected to the motor using a reducer.

			
	Extension cable	Connection cable	
	$(4 \times 2.5 + (2 \times 0.5))$		
	 -	 -	
	 EYP0012VxxxxA00P05	 EYP0012AxxxxM02A00	
		 -	
		 EYP0012AxxxxM05A00	
	$(4 \times 4.0 + (2 \times 1.0))$		
	 EYP0006VxxxxA00P05	 EYP0006AxxxxM02A00	
		 EYP0013AxxxxM02A00	
	 EYP0013VxxxxA00P05	 EYP0006AxxxxM05A00	
		 EYP0013AxxxxM05A00	
	$(4 \times 6.0 + (2 \times 1.0))$		
	 EYP0007VxxxxA00P06	 EYP0007AxxxxM03A00	
		 EYP0014AxxxxM03A00	
	 EYP0014VxxxxA00P06	 EYP0007AxxxxM06A00	
		 EYP0014AxxxxM06A00	
	$(4 \times 10.0 + (2 \times 1.0))$		
	 EYP0008VxxxxA00P06	 EYP0008AxxxxM03A00	
		 EYP0015AxxxxM03A00	
	 EYP0015VxxxxA00P06	 EYP0008AxxxxM06A00	
		 EYP0015AxxxxM06A00	
	$(4 \times 16.0 + (2 \times 1.0))$		
	 EYP0009VxxxxA00P06	 EYP0009AxxxxM03A00	
		 EYP0016AxxxxM03A00	
	 EYP0016VxxxxA00P06	 EYP0009AxxxxM06A00	
		 EYP0016AxxxxM06A00	

Die EYP0006... system cable can only be connected to the motor using a reducer.  
 Die EYP0007... system cable can only be connected to the motor using a reducer.  
 The EYP0012... system cable can only be connected to the motor using a reducer.  
 Die EYP0013... system cable can only be connected to the motor using a reducer.  
 Die EYP0014... system cable can only be connected to the motor using a reducer.

### 3 Selection tables for motor cables

MCA motor  
MCA22P14-...2Fxx

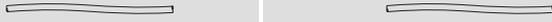
#### 3.1.18 MCA22P14-...2Fxx

##### Motors with terminal boxes

						
		[mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCA22P14-...2Fxx	(4 × 6.0 + (2 × 1.0))					
	(4 × 10.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 16.0 + (2 × 1.0))					

			
		Connection cable	
	(4 × 6.0 + (2 × 1.0))		
	 -		
	 EYP0014YxxxxA00A00		
	(4 × 10.0 + (2 × 1.0))		
	 EYP0008YxxxxA00A00		
	 EYP0015YxxxxA00A00		
	(4 × 16.0 + (2 × 1.0))		
	 EYP0009YxxxxA00A00		
	 EYP0016YxxxxA00A00		

Die EYP0014... system cable can only be connected to the motor using a reducer.

			
	Extension cable	Connection cable	
<b>(4 × 6.0 + (2 × 1.0))</b>			
 -	 -	 EYP0014AxxxxM03A00	
 EYP0014VxxxxA00P06	 -	 EYP0014AxxxxM06A00	
<b>(4 × 10.0 + (2 × 1.0))</b>			
 EYP0008VxxxxA00P06	 EYP0008AxxxxM03A00	 EYP0015AxxxxM03A00	
 EYP0015VxxxxA00P06	 EYP0008AxxxxM06A00	 EYP0015AxxxxM06A00	
<b>(4 × 16.0 + (2 × 1.0))</b>			
 EYP0009VxxxxA00P06	 EYP0009AxxxxM03A00	 EYP0016AxxxxM03A00	
 EYP0016VxxxxA00P06	 EYP0009AxxxxM06A00	 EYP0016AxxxxM06A00	

Die EYP0014... system cable can only be connected to the motor using a reducer.

### 3 Selection tables for motor cables

MCA motor  
MCA22P14-...5Fxx

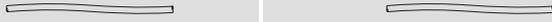
#### 3.1.19 MCA22P14-...5Fxx

##### Motors with terminal boxes

						
		[mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCA22P14-...5Fxx	(4 × 6.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 10.0 + (2 × 1.0))					
	(4 × 16.0 + (2 × 1.0))					

				
		Connection cable		
	(4 × 6.0 + (2 × 1.0))		EYP0014YxxxxA00A00	
	(4 × 10.0 + (2 × 1.0))			EYP0008YxxxxA00A00
				EYP0015YxxxxA00A00
	(4 × 16.0 + (2 × 1.0))		EYP0009YxxxxA00A00	
			EYP0016YxxxxA00A00	

Die EYP0014... system cable can only be connected to the motor using a reducer.

			
	Extension cable	Connection cable	
<b>(4 × 6.0 + (2 × 1.0))</b>			
 -	 -	 EYP0014AxxxxM03A00	
 EYP0014VxxxxA00P06	 -	 EYP0014AxxxxM06A00	
<b>(4 × 10.0 + (2 × 1.0))</b>			
 EYP0008VxxxxA00P06	 EYP0008AxxxxM03A00	 EYP0015AxxxxM03A00	
 EYP0015VxxxxA00P06	 EYP0008AxxxxM06A00	 EYP0015AxxxxM06A00	
<b>(4 × 16.0 + (2 × 1.0))</b>			
 EYP0009VxxxxA00P06	 EYP0009AxxxxM03A00	 EYP0016AxxxxM03A00	
 EYP0016VxxxxA00P06	 EYP0009AxxxxM06A00	 EYP0016AxxxxM06A00	

Die EYP0014... system cable can only be connected to the motor using a reducer.

### 3 Selection tables for motor cables

MCA motor  
MCA22P17-...2Fxx

#### 3.1.20 MCA22P17-...2Fxx

##### Motors with terminal boxes

							
		 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>		
		(4 × 10.0 + (2 × 1.0)) (4 × 16.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		

			
		<b>Connection cable</b>	
		(4 × 10.0 + (2 × 1.0))	
		 EYP0015YxxxxA00A00	
			
		<b>Connection cable</b>	
		(4 × 16.0 + (2 × 1.0))	
		 EYP0016YxxxxA00A00	

Die EYP0009... system cable can only be connected to the motor using a reducer.  
 Die EYP0015... system cable can only be connected to the motor using a reducer.  
 Die EYP0016... system cable can only be connected to the motor using a reducer.

			
		<b>Extension cable</b>	<b>Connection cable</b>
		(4 × 10.0 + (2 × 1.0))	
		 -  EYP0015VxxxxA00P06	 -  EYP0015AxxxxM03A00  -  EYP0015AxxxxM06A00
		(4 × 16.0 + (2 × 1.0))	
		 EYP0009VxxxxA00P06  EYP0016VxxxxA00P06	 EYP0009AxxxxM03A00  EYP0016AxxxxM03A00  EYP0009AxxxxM06A00  EYP0016AxxxxM06A00

Die EYP0009... system cable can only be connected to the motor using a reducer.  
 Die EYP0015... system cable can only be connected to the motor using a reducer.  
 Die EYP0016... system cable can only be connected to the motor using a reducer.

3.1.21 MCA22P17-...5Fxx

Motors with terminal boxes

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCA22P17-...5Fxx	(4 × 10.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 16.0 + (2 × 1.0))					

			
	<b>Connection cable</b>		
	(4 × 10.0 + (2 × 1.0))	-	
	 EYP0015YxxxxA00A00		
	(4 × 16.0 + (2 × 1.0))	EYP0009YxxxxA00A00	
	 EYP0016YxxxxA00A00		

			
	<b>Extension cable</b>	<b>Connection cable</b>	
	(4 × 10.0 + (2 × 1.0))	-	
	 -	 -	
	 EYP0015VxxxxA00P06	 EYP0015AxxxxM03A00	
		 -	
		 EYP0015AxxxxM06A00	
	(4 × 16.0 + (2 × 1.0))	EYP0009VxxxxA00P06	 EYP0009AxxxxM03A00
	 EYP0009VxxxxA00P06	 EYP0016AxxxxM03A00	
	 EYP0016VxxxxA00P06	 EYP0009AxxxxM06A00	
		 EYP0016AxxxxM06A00	

### 3 Selection tables for motor cables

MCA motor  
MCA22P29-...5Fxx

#### 3.1.22 MCA22P29-...5Fxx

##### Motors with terminal boxes

						
		 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>	
MCA22P29-...5Fxx	(4 × 16.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		

			
	<b>Connection cable</b>		
	(4 × 16.0 + (2 × 1.0))		
	 -		
	 EYP0016YxxxxA00A00		

					
	<b>Extension cable</b>		<b>Connection cable</b>		
	(4 × 16.0 + (2 × 1.0))				
	 -		 -		
	 EYP0016VxxxxA00P06		 EYP0016AxxxxM03A00		
			 -		
			 EYP0016AxxxxM06A00		

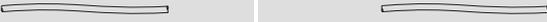
3.1.23 MCA26T05

Motors with terminal boxes

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCA26T05-...2Fxx MCA26T05-...5Fxx	(4 × 6.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 10.0 + (2 × 1.0))					
	(4 × 16.0 + (2 × 1.0))					

		
	(4 × 6.0 + (2 × 1.0))	
	 EYP0014YxxxxA00A00	
	(4 × 10.0 + (2 × 1.0))	
	 EYP0008YxxxxA00A00	
	 EYP0015YxxxxA00A00	
	(4 × 16.0 + (2 × 1.0))	
	 EYP0009YxxxxA00A00	
	 EYP0016YxxxxA00A00	

Die EYP0008... system cable can only be connected to the motor using a reducer.  
 Die EYP0009... system cable can only be connected to the motor using a reducer.  
 Die EYP0014... system cable can only be connected to the motor using a reducer.  
 Die EYP0015... system cable can only be connected to the motor using a reducer.  
 Die EYP0016... system cable can only be connected to the motor using a reducer.

			
	Extension cable	Connection cable	
<b>(4 × 6.0 + (2 × 1.0))</b>			
 -	 -	 EYP0014AxxxxM03A00	
 EYP0014VxxxxA00P06	 -	 EYP0014AxxxxM06A00	
<b>(4 × 10.0 + (2 × 1.0))</b>			
 EYP0008VxxxxA00P06	 EYP0008AxxxxM03A00	 EYP0015AxxxxM03A00	
 EYP0015VxxxxA00P06	 EYP0008AxxxxM06A00	 EYP0015AxxxxM06A00	
<b>(4 × 16.0 + (2 × 1.0))</b>			
 EYP0009VxxxxA00P06	 EYP0009AxxxxM03A00	 EYP0016AxxxxM03A00	
 EYP0016VxxxxA00P06	 EYP0009AxxxxM06A00	 EYP0016AxxxxM06A00	

Die EYP0008... system cable can only be connected to the motor using a reducer.  
 Die EYP0009... system cable can only be connected to the motor using a reducer.  
 Die EYP0014... system cable can only be connected to the motor using a reducer.  
 Die EYP0015... system cable can only be connected to the motor using a reducer.  
 Die EYP0016... system cable can only be connected to the motor using a reducer.

3.1.24 MCA26T10

Motors with terminal boxes

						
	 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>		
MCA26T10-...2Fxx MCA26T10-...5Fxx	$(4 \times 16.0 + (2 \times 1.0))$	U, V, W, PE	X105, X107	X24, X25		

		
	<b>Connection cable</b>	
	$(4 \times 16.0 + (2 \times 1.0))$	
	 -	
	 EYP0016YxxxxA00A00	

Die EYP0016... system cable can only be connected to the motor using a reducer.

			
	<b>Extension cable</b>	<b>Connection cable</b>	
	$(4 \times 16.0 + (2 \times 1.0))$		
	 -	 -	
	 EYP0016VxxxxA00P06	 EYP0016AxxxxM03A00	
		 -	
		 EYP0016AxxxxM06A00	

Die EYP0016... system cable can only be connected to the motor using a reducer.

### 3 Selection tables for motor cables

MCS motor  
MCS06

#### 3.2 MCS motor

##### 3.2.1 MCS06

###### Motors with plug connections

							
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS		
MCS06C41-...S00	(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25			
MCS06C41L...S00							
MCS06C60-...S00							
MCS06C60L...S00	(4 × 1.5 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25			
MCS06F41-...S00							
MCS06F41L...S00							
MCS06F60-...S00	(4 × 2.5 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25			
MCS06F60L...S00							
MCS06I41-...S00							
MCS06I41L...S00							
MCS06I60-...S00	(4 × 2.5 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25			
MCS06I60L...S00							

							
		Connection cable					
(4 × 1.0 + (2 × 0.5))							
 EYP0003AxxxxM01A00							
 EYP0010AxxxxM01A00							
 EYP0003AxxxxM04A00							
 EYP0010AxxxxM04A00							
(4 × 1.5 + (2 × 0.5))							
 EYP0004AxxxxM01A00							
 EYP0011AxxxxM01A00							
 EYP0004AxxxxM04A00							
 EYP0011AxxxxM04A00							
(4 × 2.5 + (2 × 0.5))							
 EYP0005AxxxxM01A00							
 EYP0012AxxxxM01A00							
 EYP0005AxxxxM04A00							
 EYP0012AxxxxM04A00							

			
	Extension cable	Connection cable	
<b>(4 × 1.0 + (2 × 0.5))</b>			
	EYP0003VxxxxM01P04		EYP0003AxxxxM01A00
	EYP0003VxxxxM04P04		EYP0010AxxxxM01A00
	EYP0010VxxxxM01P04		EYP0003AxxxxM04A00
	EYP0010VxxxxM04P04		EYP0010AxxxxM04A00
<b>(4 × 1.5 + (2 × 0.5))</b>			
	EYP0004VxxxxM01P04		EYP0004AxxxxM01A00
	EYP0004VxxxxM04P04		EYP0011AxxxxM01A00
	EYP0011VxxxxM01P04		EYP0004AxxxxM04A00
	EYP0011VxxxxM04P04		EYP0011AxxxxM04A00
<b>(4 × 2.5 + (2 × 0.5))</b>			
	EYP0005VxxxxM01P04		EYP0005AxxxxM01A00
	EYP0005VxxxxM04P04		EYP0012AxxxxM01A00
	EYP0012VxxxxM01P04		EYP0005AxxxxM04A00
	EYP0012VxxxxM04P04		EYP0012AxxxxM04A00

### 3 Selection tables for motor cables

MCS motor  
MCS09D41 ... MCS09L41

#### 3.2.2 MCS09D41 ... MCS09L41

##### Motors with plug connections

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCS09D41-...S00 MCS09D41L...S00 MCS09D60-...S00 MCS09F38-...S00 MCS09F38L...S00 MCS09F60-...S00 MCS09H41-...S00 MCS09H41L...S00 MCS09H60-...S00 MCS09L41-...S00	(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 1.5 + (2 × 0.5))					
	(4 × 2.5 + (2 × 0.5))					

		
	(4 × 1.0 + (2 × 0.5))	 EYP0003AxxxxM01A00
		 EYP0010AxxxxM01A00
		 EYP0003AxxxxM04A00
		 EYP0010AxxxxM04A00
	(4 × 1.5 + (2 × 0.5))	 EYP0004AxxxxM01A00
		 EYP0011AxxxxM01A00
		 EYP0004AxxxxM04A00
		 EYP0011AxxxxM04A00
(4 × 2.5 + (2 × 0.5))	 EYP0005AxxxxM01A00	
	 EYP0012AxxxxM01A00	
	 EYP0005AxxxxM04A00	
	 EYP0012AxxxxM04A00	

			
	Extension cable	Connection cable	
<b>(4 × 1.0 + (2 × 0.5))</b>			
	EYP0003VxxxxM01P04		EYP0003AxxxxM01A00
	EYP0003VxxxxM04P04		EYP0010AxxxxM01A00
	EYP0010VxxxxM01P04		EYP0003AxxxxM04A00
	EYP0010VxxxxM04P04		EYP0010AxxxxM04A00
<b>(4 × 1.5 + (2 × 0.5))</b>			
	EYP0004VxxxxM01P04		EYP0004AxxxxM01A00
	EYP0004VxxxxM04P04		EYP0011AxxxxM01A00
	EYP0011VxxxxM01P04		EYP0004AxxxxM04A00
	EYP0011VxxxxM04P04		EYP0011AxxxxM04A00
<b>(4 × 2.5 + (2 × 0.5))</b>			
	EYP0005VxxxxM01P04		EYP0005AxxxxM01A00
	EYP0005VxxxxM04P04		EYP0012AxxxxM01A00
	EYP0012VxxxxM01P04		EYP0005AxxxxM04A00
	EYP0012VxxxxM04P04		EYP0012AxxxxM04A00

Motors with terminal boxes

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCS09D41-...S00 MCS09D41L...S00 MCS09D60-...S00	(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
MCS09F38-...S00 MCS09F38L...S00 MCS09F60-...S00	(4 × 1.5 + (2 × 0.5))					
MCS09H41-...S00 MCS09H41L...S00 MCS09H60-...S00 MCS09L41-...S00	(4 × 2.5 + (2 × 0.5))					

		
(4 × 1.0 + (2 × 0.5))		
 EYP0003YxxxxA00A00		
 EYP0010YxxxxA00A00		
(4 × 1.5 + (2 × 0.5))		
 EYP0004YxxxxA00A00		
 EYP0011YxxxxA00A00		
(4 × 2.5 + (2 × 0.5))		
 EYP0005YxxxxA00A00		
 EYP0012YxxxxA00A00		

	 <b>Extension cable</b>	 <b>Connection cable</b>	
	<b>(4 × 1.0 + (2 × 0.5))</b>		
	 EYP0003VxxxxA00P04   EYP0010VxxxxA00P04	 EYP0003AxxxxM01A00  EYP0010AxxxxM01A00  EYP0003AxxxxM04A00  EYP0010AxxxxM04A00	
	<b>(4 × 1.5 + (2 × 0.5))</b>		
	 EYP0004VxxxxA00P04   EYP0011VxxxxA00P04	 EYP0004AxxxxM01A00  EYP0011AxxxxM01A00  EYP0004AxxxxM04A00  EYP0011AxxxxM04A00	
	<b>(4 × 2.5 + (2 × 0.5))</b>		
	 EYP0005VxxxxA00P04   EYP0012VxxxxA00P04	 EYP0005AxxxxM01A00  EYP0012AxxxxM01A00  EYP0005AxxxxM04A00  EYP0012AxxxxM04A00	

### 3 Selection tables for motor cables

MCS motor  
MCS09D60 ... MCS09L51

#### 3.2.3 MCS09D60 ... MCS09L51

##### Motors with plug connections

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCS09D60L...S00	(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
MCS09F60L...S00	(4 × 1.5 + (2 × 0.5))					
MCS09H60L...S00	(4 × 1.5 + (2 × 0.5))					
MCS09L41L...S00	(4 × 2.5 + (2 × 0.5))					
MCS09L51-...S00	(4 × 2.5 + (2 × 0.5))					

			
		Connection cable	
(4 × 1.0 + (2 × 0.5))			
 -			
 EYP0010AxxxxM01A00			
 -			
 EYP0010AxxxxM04A00			
(4 × 1.5 + (2 × 0.5))			
 EYP0004AxxxxM01A00			
 EYP0011AxxxxM01A00			
 EYP0004AxxxxM04A00			
 EYP0011AxxxxM04A00			
(4 × 2.5 + (2 × 0.5))			
 EYP0005AxxxxM01A00			
 EYP0012AxxxxM01A00			
 EYP0005AxxxxM04A00			
 EYP0012AxxxxM04A00			

			
	Extension cable	Connection cable	
<b>(4 × 1.0 + (2 × 0.5))</b>			
	-		-
	-		EYP0010AxxxxM01A00
	EYP0010VxxxxM01P04		-
	EYP0010VxxxxM04P04		EYP0010AxxxxM04A00
<b>(4 × 1.5 + (2 × 0.5))</b>			
	EYP0004VxxxxM01P04		EYP0004AxxxxM01A00
	EYP0004VxxxxM04P04		EYP0011AxxxxM01A00
	EYP0011VxxxxM01P04		EYP0004AxxxxM04A00
	EYP0011VxxxxM04P04		EYP0011AxxxxM04A00
<b>(4 × 2.5 + (2 × 0.5))</b>			
	EYP0005VxxxxM01P04		EYP0005AxxxxM01A00
	EYP0005VxxxxM04P04		EYP0012AxxxxM01A00
	EYP0012VxxxxM01P04		EYP0005AxxxxM04A00
	EYP0012VxxxxM04P04		EYP0012AxxxxM04A00

Motors with terminal boxes

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCS09D60L...S00	(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
MCS09F60L...S00	(4 × 1.5 + (2 × 0.5))					
MCS09H60L...S00	(4 × 1.5 + (2 × 0.5))					
MCS09L41L...S00	(4 × 2.5 + (2 × 0.5))					
MCS09L51-...S00	(4 × 2.5 + (2 × 0.5))					

			
	Connection cable		
	(4 × 1.0 + (2 × 0.5))	-	
	 EYP0010YxxxxA00A00		
	(4 × 1.5 + (2 × 0.5))		
	 EYP0004YxxxxA00A00		
	 EYP0011YxxxxA00A00		
	(4 × 2.5 + (2 × 0.5))		
	 EYP0005YxxxxA00A00		
	 EYP0012YxxxxA00A00		

			
	Extension cable	Connection cable	
	<b>(4 × 1.0 + (2 × 0.5))</b>		
	 -	 -	
	 EYP0010VxxxxA00P04	 EYP0010AxxxxM01A00	
		 -	
		 EYP0010AxxxxM04A00	
	<b>(4 × 1.5 + (2 × 0.5))</b>		
	 EYP0004VxxxxA00P04	 EYP0004AxxxxM01A00	
	 EYP0011VxxxxA00P04	 EYP0011AxxxxM01A00	
		 EYP0004AxxxxM04A00	
		 EYP0011AxxxxM04A00	
	<b>(4 × 2.5 + (2 × 0.5))</b>		
	 EYP0005VxxxxA00P04	 EYP0005AxxxxM01A00	
	 EYP0012VxxxxA00P04	 EYP0012AxxxxM01A00	
		 EYP0005AxxxxM04A00	
		 EYP0012AxxxxM04A00	

### 3 Selection tables for motor cables

MCS motor  
MCS12D17 ... MCS12L20

#### 3.2.4 MCS12D17 ... MCS12L20

##### Motors with plug connections

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCS12D17-...Fxx MCS12D20-...S00 MCS12D20L...S00 MCS12D35-...Fxx MCS12D41-...S00 MCS12H14-...Fxx MCS12H15-...S00 MCS12H15L...S00 MCS12H34-...Fxx MCS12H35-...S00 MCS12L17-...Fxx MCS12L20-...S00	(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 1.5 + (2 × 0.5))					
	(4 × 2.5 + (2 × 0.5))					

		
	(4 × 1.0 + (2 × 0.5))	 EYP0003AxxxxM01A00
		 EYP0010AxxxxM01A00
		 EYP0003AxxxxM04A00
		 EYP0010AxxxxM04A00
	(4 × 1.5 + (2 × 0.5))	 EYP0004AxxxxM01A00
		 EYP0011AxxxxM01A00
		 EYP0004AxxxxM04A00
		 EYP0011AxxxxM04A00
	(4 × 2.5 + (2 × 0.5))	 EYP0005AxxxxM01A00
		 EYP0012AxxxxM01A00
		 EYP0005AxxxxM04A00
		 EYP0012AxxxxM04A00

			
	Extension cable	Connection cable	
<b>(4 × 1.0 + (2 × 0.5))</b>			
	EYP0003VxxxxM01P04	 EYP0003AxxxxM01A00	
	EYP0003VxxxxM04P04	 EYP0010AxxxxM01A00	
	EYP0010VxxxxM01P04	 EYP0003AxxxxM04A00	
	EYP0010VxxxxM04P04	 EYP0010AxxxxM04A00	
<b>(4 × 1.5 + (2 × 0.5))</b>			
	EYP0004VxxxxM01P04	 EYP0004AxxxxM01A00	
	EYP0004VxxxxM04P04	 EYP0011AxxxxM01A00	
	EYP0011VxxxxM01P04	 EYP0004AxxxxM04A00	
	EYP0011VxxxxM04P04	 EYP0011AxxxxM04A00	
<b>(4 × 2.5 + (2 × 0.5))</b>			
	EYP0005VxxxxM01P04	 EYP0005AxxxxM01A00	
	EYP0005VxxxxM04P04	 EYP0012AxxxxM01A00	
	EYP0012VxxxxM01P04	 EYP0005AxxxxM04A00	
	EYP0012VxxxxM04P04	 EYP0012AxxxxM04A00	

Motors with terminal boxes

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCS12D17-...Fxx MCS12D20-...S00 MCS12D20L...S00 MCS12D35-...Fxx MCS12D41-...S00 MCS12H14-...Fxx MCS12H15-...S00 MCS12H15L...S00 MCS12H34-...Fxx MCS12H35-...S00 MCS12L17-...Fxx MCS12L20-...S00	(4 × 1.0 + (2 × 0.5))					
	(4 × 1.5 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 2.5 + (2 × 0.5))					

		
	(4 × 1.0 + (2 × 0.5))	
	 EYP0003YxxxxA00A00	
	 EYP0010YxxxxA00A00	
	(4 × 1.5 + (2 × 0.5))	
	 EYP0004YxxxxA00A00	
	 EYP0011YxxxxA00A00	
	(4 × 2.5 + (2 × 0.5))	
	 EYP0005YxxxxA00A00	
	 EYP0012YxxxxA00A00	

			
	Extension cable	Connection cable	
	<b>(4 × 1.0 + (2 × 0.5))</b>		
	 EYP0003VxxxxA00P04	 EYP0003AxxxxM01A00  EYP0010AxxxxM01A00	
	 EYP0010VxxxxA00P04	 EYP0003AxxxxM04A00  EYP0010AxxxxM04A00	
	<b>(4 × 1.5 + (2 × 0.5))</b>		
	 EYP0004VxxxxA00P04	 EYP0004AxxxxM01A00  EYP0011AxxxxM01A00	
	 EYP0011VxxxxA00P04	 EYP0004AxxxxM04A00  EYP0011AxxxxM04A00	
	<b>(4 × 2.5 + (2 × 0.5))</b>		
	 EYP0005VxxxxA00P04	 EYP0005AxxxxM01A00  EYP0012AxxxxM01A00	
	 EYP0012VxxxxA00P04	 EYP0005AxxxxM04A00  EYP0012AxxxxM04A00	

### 3 Selection tables for motor cables

MCS motor  
MCS12D41L ... MCS12L41

#### 3.2.5 MCS12D41L ... MCS12L41

##### Motors with plug connections

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCS12D41L...S00	(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
MCS12H30L...S00	(4 × 1.5 + (2 × 0.5))					
MCS12L20L...S00 MCS12L41-...S00	(4 × 2.5 + (2 × 0.5))					

		
<b>(4 × 1.0 + (2 × 0.5))</b>		
	-	
 	EYP0010AxxxxM01A00	
	-	
 	EYP0010AxxxxM04A00	
<b>(4 × 1.5 + (2 × 0.5))</b>		
	EYP0004AxxxxM01A00	
 	EYP0011AxxxxM01A00	
	EYP0004AxxxxM04A00	
 	EYP0011AxxxxM04A00	
<b>(4 × 2.5 + (2 × 0.5))</b>		
	EYP0005AxxxxM01A00	
 	EYP0012AxxxxM01A00	
	EYP0005AxxxxM04A00	
 	EYP0012AxxxxM04A00	

			
	Extension cable	Connection cable	
<b>(4 × 1.0 + (2 × 0.5))</b>			
	-		-
	-		EYP0010AxxxxM01A00
	EYP0010VxxxxM01P04		-
	EYP0010VxxxxM04P04		EYP0010AxxxxM04A00
<b>(4 × 1.5 + (2 × 0.5))</b>			
	EYP0004VxxxxM01P04		EYP0004AxxxxM01A00
	EYP0004VxxxxM04P04		EYP0011AxxxxM01A00
	EYP0011VxxxxM01P04		EYP0004AxxxxM04A00
	EYP0011VxxxxM04P04		EYP0011AxxxxM04A00
<b>(4 × 2.5 + (2 × 0.5))</b>			
	EYP0005VxxxxM01P04		EYP0005AxxxxM01A00
	EYP0005VxxxxM04P04		EYP0012AxxxxM01A00
	EYP0012VxxxxM01P04		EYP0005AxxxxM04A00
	EYP0012VxxxxM04P04		EYP0012AxxxxM04A00

Motors with terminal boxes

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCS12D41L...S00	(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
MCS12H30L...S00	(4 × 1.5 + (2 × 0.5))					
MCS12L20L...S00						
MCS12L41-...S00	(4 × 2.5 + (2 × 0.5))					

			
	Connection cable		
	(4 × 1.0 + (2 × 0.5))	 -  EYP0010YxxxxA00A00	
	(4 × 1.5 + (2 × 0.5))	 EYP0004YxxxxA00A00  EYP0011YxxxxA00A00	
	(4 × 2.5 + (2 × 0.5))	 EYP0005YxxxxA00A00  EYP0012YxxxxA00A00	

			
	Extension cable	Connection cable	
	<b>(4 × 1.0 + (2 × 0.5))</b>		
	 -	 -	
	 EYP0010VxxxxA00P04	 EYP0010AxxxxM01A00	
		 -	
		 EYP0010AxxxxM04A00	
	<b>(4 × 1.5 + (2 × 0.5))</b>		
	 EYP0004VxxxxA00P04	 EYP0004AxxxxM01A00	
	 EYP0011VxxxxA00P04	 EYP0011AxxxxM01A00	
		 EYP0004AxxxxM04A00	
		 EYP0011AxxxxM04A00	
	<b>(4 × 2.5 + (2 × 0.5))</b>		
	 EYP0005VxxxxA00P04	 EYP0005AxxxxM01A00	
	 EYP0012VxxxxA00P04	 EYP0012AxxxxM01A00	
		 EYP0005AxxxxM04A00	
		 EYP0012AxxxxM04A00	

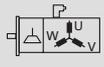
### 3 Selection tables for motor cables

MCS motor  
MCS12L39

#### 3.2.6 MCS12L39

##### Motors with plug connections

					
		 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>
MCS12L39-...Fxx	$(4 \times 1.5 + (2 \times 0.5))$ $(4 \times 2.5 + (2 \times 0.5))$	U, V, W, PE	X105, X107	X24, X25	

			
	<b>Connection cable</b>		
	$(4 \times 1.5 + (2 \times 0.5))$		
	 -		
	 EYP0011AxxxxM01A00		
	 -		
	 EYP0011AxxxxM04A00		
	$(4 \times 2.5 + (2 \times 0.5))$		
	 EYP0005AxxxxM01A00		
	 EYP0012AxxxxM01A00		
	 EYP0005AxxxxM04A00		
	 EYP0012AxxxxM04A00		

			
	<b>Extension cable</b>		
	$(4 \times 1.5 + (2 \times 0.5))$		
	 -		 -
	 -		 EYP0011AxxxxM01A00
	 EYP0011VxxxxM01P04		 -
	 EYP0011VxxxxM04P04		 EYP0011AxxxxM04A00
	$(4 \times 2.5 + (2 \times 0.5))$		
	 EYP0005VxxxxM01P04		 EYP0005AxxxxM01A00
	 EYP0005VxxxxM04P04		 EYP0012AxxxxM01A00
	 EYP0012VxxxxM01P04		 EYP0005AxxxxM04A00
	 EYP0012VxxxxM04P04		 EYP0012AxxxxM04A00

## Motors with terminal boxes

						
		 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>	
MCS12L39-...Fxx	(4 × 1.5 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 2.5 + (2 × 0.5))					

		
(4 × 1.5 + (2 × 0.5))		
 -		
 EYP0011YxxxxA00A00		
(4 × 2.5 + (2 × 0.5))		
 EYP0005YxxxxA00A00		
 EYP0012YxxxxA00A00		

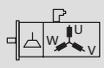
			
(4 × 1.5 + (2 × 0.5))			
 -		 -	
 EYP0011VxxxxA00P04		 EYP0011AxxxxM01A00	
		 -	
		 EYP0011AxxxxM04A00	
(4 × 2.5 + (2 × 0.5))			
 EYP0005VxxxxA00P04		 EYP0005AxxxxM01A00	
 EYP0012VxxxxA00P04		 EYP0012AxxxxM01A00	
		 EYP0005AxxxxM04A00	
		 EYP0012AxxxxM04A00	

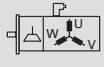
### 3 Selection tables for motor cables

MCS motor  
MCS14D14 ... MSC14H15

#### 3.2.7 MCS14D14 ... MSC14H15

##### Motors with plug connections

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCS14D14-...Fxx	(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
MCS14D15-...S00	(4 × 1.5 + (2 × 0.5))					
MCS14H12-...Fxx	(4 × 2.5 + (2 × 0.5))					
MCS14H15-...S00	(4 × 2.5 + (2 × 0.5))					

			
		Connection cable	
<b>(4 × 1.0 + (2 × 0.5))</b>			
	EYP0003AxxxxM01A00		
	EYP0010AxxxxM01A00		
	EYP0003AxxxxM04A00		
	EYP0010AxxxxM04A00		
<b>(4 × 1.5 + (2 × 0.5))</b>			
	EYP0004AxxxxM01A00		
	EYP0011AxxxxM01A00		
	EYP0004AxxxxM04A00		
	EYP0011AxxxxM04A00		
<b>(4 × 2.5 + (2 × 0.5))</b>			
	EYP0005AxxxxM01A00		
	EYP0012AxxxxM01A00		
	EYP0005AxxxxM04A00		
	EYP0012AxxxxM04A00		

			
	Extension cable	Connection cable	
<b>(4 × 1.0 + (2 × 0.5))</b>			
	EYP0003VxxxxM01P04	 EYP0003AxxxxM01A00	
	EYP0003VxxxxM04P04	 EYP0010AxxxxM01A00	
	EYP0010VxxxxM01P04	 EYP0003AxxxxM04A00	
	EYP0010VxxxxM04P04	 EYP0010AxxxxM04A00	
<b>(4 × 1.5 + (2 × 0.5))</b>			
	EYP0004VxxxxM01P04	 EYP0004AxxxxM01A00	
	EYP0004VxxxxM04P04	 EYP0011AxxxxM01A00	
	EYP0011VxxxxM01P04	 EYP0004AxxxxM04A00	
	EYP0011VxxxxM04P04	 EYP0011AxxxxM04A00	
<b>(4 × 2.5 + (2 × 0.5))</b>			
	EYP0005VxxxxM01P04	 EYP0005AxxxxM01A00	
	EYP0005VxxxxM04P04	 EYP0012AxxxxM01A00	
	EYP0012VxxxxM01P04	 EYP0005AxxxxM04A00	
	EYP0012VxxxxM04P04	 EYP0012AxxxxM04A00	

## Motors with terminal boxes

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCS14D14-...Fxx	(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
MCS14D15-...S00	(4 × 1.5 + (2 × 0.5))					
MCS14H12-...Fxx	(4 × 2.5 + (2 × 0.5))					
MCS14H15-...S00	(4 × 2.5 + (2 × 0.5))					

			
		Connection cable	
	(4 × 1.0 + (2 × 0.5))	 EYP0003YxxxxA00A00	
		 EYP0010YxxxxA00A00	
	(4 × 1.5 + (2 × 0.5))	 EYP0004YxxxxA00A00	
		 EYP0011YxxxxA00A00	
	(4 × 2.5 + (2 × 0.5))	 EYP0005YxxxxA00A00	
		 EYP0012YxxxxA00A00	

	 Extension cable	 Connection cable	
	(4 × 1.0 + (2 × 0.5))		
	 EYP0003VxxxxA00P04   EYP0010VxxxxA00P04	 EYP0003AxxxxM01A00  EYP0010AxxxxM01A00  EYP0003AxxxxM04A00  EYP0010AxxxxM04A00	
	(4 × 1.5 + (2 × 0.5))		
	 EYP0004VxxxxA00P04   EYP0011VxxxxA00P04	 EYP0004AxxxxM01A00  EYP0011AxxxxM01A00  EYP0004AxxxxM04A00  EYP0011AxxxxM04A00	
	(4 × 2.5 + (2 × 0.5))		
	 EYP0005VxxxxA00P04   EYP0012VxxxxA00P04	 EYP0005AxxxxM01A00  EYP0012AxxxxM01A00  EYP0005AxxxxM04A00  EYP0012AxxxxM04A00	

### 3 Selection tables for motor cables

MCS motor  
MCS14D30 ... MSC14P14

#### 3.2.8 MCS14D30 ... MSC14P14

##### Motors with plug connections

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCS14D30-...Fxx MCS14D36-...S00	(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
MCS14L14-...Fxx MCS14L15-...S00	(4 × 1.5 + (2 × 0.5))					
MCS14P14-...S00	(4 × 2.5 + (2 × 0.5))					

		
<b>(4 × 1.0 + (2 × 0.5))</b>		
	 -	
	 EYP0010AxxxxM01A00	
	 -	
	 EYP0010AxxxxM04A00	
<b>(4 × 1.5 + (2 × 0.5))</b>		
	 EYP0004AxxxxM01A00	
	 EYP0011AxxxxM01A00	
	 EYP0004AxxxxM04A00	
	 EYP0011AxxxxM04A00	
<b>(4 × 2.5 + (2 × 0.5))</b>		
	 EYP0005AxxxxM01A00	
	 EYP0012AxxxxM01A00	
	 EYP0005AxxxxM04A00	
	 EYP0012AxxxxM04A00	

			
	Extension cable	Connection cable	
<b>(4 × 1.0 + (2 × 0.5))</b>			
	-		-
	-		EYP0010AxxxxM01A00
	EYP0010VxxxxM01P04		-
	EYP0010VxxxxM04P04		EYP0010AxxxxM04A00
<b>(4 × 1.5 + (2 × 0.5))</b>			
	EYP0004VxxxxM01P04		EYP0004AxxxxM01A00
	EYP0004VxxxxM04P04		EYP0011AxxxxM01A00
	EYP0011VxxxxM01P04		EYP0004AxxxxM04A00
	EYP0011VxxxxM04P04		EYP0011AxxxxM04A00
<b>(4 × 2.5 + (2 × 0.5))</b>			
	EYP0005VxxxxM01P04		EYP0005AxxxxM01A00
	EYP0005VxxxxM04P04		EYP0012AxxxxM01A00
	EYP0012VxxxxM01P04		EYP0005AxxxxM04A00
	EYP0012VxxxxM04P04		EYP0012AxxxxM04A00

## Motors with terminal boxes

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCS14D30-...Fxx	(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
MCS14D36-...S00	(4 × 1.5 + (2 × 0.5))					
MCS14L14-...Fxx	(4 × 1.5 + (2 × 0.5))					
MCS14L15-...S00	(4 × 2.5 + (2 × 0.5))					
MCS14P14-...S00	(4 × 2.5 + (2 × 0.5))					

			
	Connection cable		
	(4 × 1.0 + (2 × 0.5))		
	 -  EYP0010YxxxxA00A00		
	(4 × 1.5 + (2 × 0.5))		
	 EYP0004YxxxxA00A00  EYP0011YxxxxA00A00		
	(4 × 2.5 + (2 × 0.5))		
	 EYP0005YxxxxA00A00  EYP0012YxxxxA00A00		

			
	Extension cable	Connection cable	
	<b>(4 × 1.0 + (2 × 0.5))</b>		
	 -	 -	
	 EYP0010VxxxxA00P04	 EYP0010AxxxxM01A00	
		 -	
		 EYP0010AxxxxM04A00	
	<b>(4 × 1.5 + (2 × 0.5))</b>		
	 EYP0004VxxxxA00P04	 EYP0004AxxxxM01A00	
	 EYP0011VxxxxA00P04	 EYP0011AxxxxM01A00	
		 EYP0004AxxxxM04A00	
		 EYP0011AxxxxM04A00	
	<b>(4 × 2.5 + (2 × 0.5))</b>		
	 EYP0005VxxxxA00P04	 EYP0005AxxxxM01A00	
	 EYP0012VxxxxA00P04	 EYP0012AxxxxM01A00	
		 EYP0005AxxxxM04A00	
		 EYP0012AxxxxM04A00	

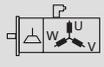
### 3 Selection tables for motor cables

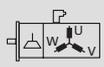
MCS motor  
MCS14H32 ... MSC14P11

#### 3.2.9 MCS14H32 ... MSC14P11

##### Motors with plug connections

					
		9300 servo	9400	ECS	
MCS14H32-...S00	(4 × 1.5 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25	
MCS14P11-...Fxx	(4 × 2.5 + (2 × 0.5))				

			
	Connection cable		
	(4 × 1.5 + (2 × 0.5))		
		-	
		EYP0011AxxxxM01A00	
		-	
		EYP0011AxxxxM04A00	
	(4 × 2.5 + (2 × 0.5))		
		EYP0005AxxxxM01A00	
		EYP0012AxxxxM01A00	
		EYP0005AxxxxM04A00	
		EYP0012AxxxxM04A00	

			
	Extension cable	Connection cable	
	(4 × 1.5 + (2 × 0.5))		
		-	
		-	
		EYP0011VxxxxM01P04	
		EYP0011VxxxxM04P04	
	(4 × 2.5 + (2 × 0.5))		
		EYP0005VxxxxM01P04	
		EYP0005VxxxxM04P04	
		EYP0012VxxxxM01P04	
		EYP0012VxxxxM04P04	

## Motors with terminal boxes

						
		 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>	
MCS14H32-...S00	(4 × 1.5 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
MCS14P11-...Fxx	(4 × 2.5 + (2 × 0.5))					

			
		<b>Connection cable</b>	
	(4 × 1.5 + (2 × 0.5))		
	 -  EYP0011YxxxxA00A00		
	(4 × 2.5 + (2 × 0.5))		
	 EYP0005YxxxxA00A00  EYP0012YxxxxA00A00		

				
			<b>Extension cable</b>	<b>Connection cable</b>
	(4 × 1.5 + (2 × 0.5))			
	 -  EYP0011VxxxxA00P04	 -  EYP0011AxxxxM01A00  -  EYP0011AxxxxM04A00		
	(4 × 2.5 + (2 × 0.5))			
	 EYP0005VxxxxA00P04  EYP0012VxxxxA00P04	 EYP0005AxxxxM01A00  EYP0012AxxxxM01A00  EYP0005AxxxxM04A00  EYP0012AxxxxM04A00		

### 3 Selection tables for motor cables

MCS motor  
MCS14H28

#### 3.2.10 MCS14H28

##### Motors with plug connections

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCS14H28-...Fxx	(4 × 2.5 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 4.0 + (2 × 1.0))					
	(4 × 6.0 + (2 × 1.0))					
	(4 × 10.0 + (2 × 1.0))					
	(4 × 16.0 + (2 × 1.0))					

			
			Connection cable
			
			(4 × 2.5 + (2 × 0.5))
			 EYP0005AxxxxM02A00
			 EYP0012AxxxxM02A00
			 EYP0005AxxxxM05A00
			 EYP0012AxxxxM05A00
			(4 × 4.0 + (2 × 1.0))
			 EYP0006AxxxxM02A00
 EYP0013AxxxxM02A00			
 EYP0006AxxxxM05A00			
 EYP0013AxxxxM05A00			
(4 × 6.0 + (2 × 1.0))			
 EYP0007AxxxxM03A00			
 EYP0014AxxxxM03A00			
 EYP0007AxxxxM06A00			
 EYP0014AxxxxM06A00			
(4 × 10.0 + (2 × 1.0))			
 EYP0008AxxxxM03A00			
 EYP0015AxxxxM03A00			
 EYP0008AxxxxM06A00			
 EYP0015AxxxxM06A00			
(4 × 16.0 + (2 × 1.0))			
 EYP0009AxxxxM03A00			
 EYP0016AxxxxM03A00			
 EYP0009AxxxxM06A00			
 EYP0016AxxxxM06A00			

					
	Extension cable		Connection cable		
<b>(4 × 2.5 + (2 × 0.5))</b>					
	EYP0005VxxxxM02P05		EYP0005AxxxxM02A00		
	EYP0005VxxxxM05P05		EYP0012AxxxxM02A00		
	EYP0012VxxxxM02P05		EYP0005AxxxxM05A00		
	EYP0012VxxxxM05P05		EYP0012AxxxxM05A00		
<b>(4 × 4.0 + (2 × 1.0))</b>					
	EYP0006VxxxxM02P05		EYP0006AxxxxM02A00		
	EYP0006VxxxxM05P05		EYP0013AxxxxM02A00		
	EYP0013VxxxxM02P05		EYP0006AxxxxM05A00		
	EYP0013VxxxxM05P05		EYP0013AxxxxM05A00		
<b>(4 × 6.0 + (2 × 1.0))</b>					
	EYP0007VxxxxM03P06		EYP0007AxxxxM03A00		
	EYP0007VxxxxM06P06		EYP0014AxxxxM03A00		
	EYP0014VxxxxM03P06		EYP0007AxxxxM06A00		
	EYP0014VxxxxM06P06		EYP0014AxxxxM06A00		
<b>(4 × 10.0 + (2 × 1.0))</b>					
	EYP0008VxxxxM03P06		EYP0008AxxxxM03A00		
	EYP0008VxxxxM06P06		EYP0015AxxxxM03A00		
	EYP0015VxxxxM03P06		EYP0008AxxxxM06A00		
	EYP0015VxxxxM06P06		EYP0015AxxxxM06A00		
<b>(4 × 16.0 + (2 × 1.0))</b>					
	EYP0009VxxxxM03P06		EYP0009AxxxxM03A00		
	EYP0009VxxxxM06P06		EYP0016AxxxxM03A00		
	EYP0016VxxxxM03P06		EYP0009AxxxxM06A00		
	EYP0016VxxxxM06P06		EYP0016AxxxxM06A00		

## Motors with terminal boxes

						
		9300 servo	9400	ECS		
MCS14H28-...Fxx	☉ [mm <sup>2</sup> ]					
	(4 × 2.5 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 4.0 + (2 × 1.0))					
	(4 × 6.0 + (2 × 1.0))					
(4 × 10.0 + (2 × 1.0))						

			
		Connection cable	
	(4 × 2.5 + (2 × 0.5))		
	 EYP0005YxxxxA00A00		
	 EYP0012YxxxxA00A00		
	(4 × 4.0 + (2 × 1.0))		
	 EYP0006YxxxxA00A00		
	 EYP0013YxxxxA00A00		
	(4 × 6.0 + (2 × 1.0))		
	 EYP0007YxxxxA00A00		
	 EYP0014YxxxxA00A00		
	(4 × 10.0 + (2 × 1.0))		
	 EYP0008YxxxxA00A00		
	 EYP0015YxxxxA00A00		

			
	<b>Extension cable</b>	<b>Connection cable</b>	
	<b>(4 × 2.5 + (2 × 0.5))</b>		
	 EYP0005VxxxxA00P05	 EYP0005AxxxxM02A00  EYP0012AxxxxM02A00	
	 EYP0012VxxxxA00P05	 EYP0005AxxxxM05A00  EYP0012AxxxxM05A00	
	<b>(4 × 4.0 + (2 × 1.0))</b>		
	 EYP0006VxxxxA00P05	 EYP0006AxxxxM02A00  EYP0013AxxxxM02A00	
	 EYP0013VxxxxA00P05	 EYP0006AxxxxM05A00  EYP0013AxxxxM05A00	
	<b>(4 × 6.0 + (2 × 1.0))</b>		
	 EYP0007VxxxxA00P06	 EYP0007AxxxxM03A00  EYP0014AxxxxM03A00	
	 EYP0014VxxxxA00P06	 EYP0007AxxxxM06A00  EYP0014AxxxxM06A00	
	<b>(4 × 10.0 + (2 × 1.0))</b>		
	 EYP0008VxxxxA00P06	 EYP0008AxxxxM03A00  EYP0015AxxxxM03A00	
	 EYP0015VxxxxA00P06	 EYP0008AxxxxM06A00  EYP0015AxxxxM06A00	

### 3 Selection tables for motor cables

MCS motor  
MCS14L30 ... MCS14P26

#### 3.2.11 MCS14L30 ... MCS14P26

##### Motors with plug connections

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCS14L30-...Fxx MCS14P26-...Fxx	(4 × 4.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 6.0 + (2 × 1.0))					
	(4 × 10.0 + (2 × 1.0))					
	(4 × 16.0 + (2 × 1.0))					

			
		Connection cable	
MCS14L30-...Fxx MCS14P26-...Fxx	(4 × 4.0 + (2 × 1.0))	 -  EYP0013AxxxxM02A00  -  EYP0013AxxxxM05A00	
	(4 × 6.0 + (2 × 1.0))	 EYP0007AxxxxM03A00  EYP0014AxxxxM03A00  EYP0007AxxxxM06A00  EYP0014AxxxxM06A00	
	(4 × 10.0 + (2 × 1.0))	 EYP0008AxxxxM03A00  EYP0015AxxxxM03A00  EYP0008AxxxxM06A00  EYP0015AxxxxM06A00	
	(4 × 16.0 + (2 × 1.0))	 EYP0009AxxxxM03A00  EYP0016AxxxxM03A00  EYP0009AxxxxM06A00  EYP0016AxxxxM06A00	

			
	Extension cable	Connection cable	
	(4 × 4.0 + (2 × 1.0))		
	 -  EYP0013VxxxxM05P05	 -  EYP0013AxxxxM02A00  -  EYP0013AxxxxM05A00	
	(4 × 6.0 + (2 × 1.0))		
	 EYP0007VxxxxM06P06  EYP0014VxxxxM06P06	 EYP0007AxxxxM03A00  EYP0014AxxxxM03A00  EYP0007AxxxxM06A00  EYP0014AxxxxM06A00	
	(4 × 10.0 + (2 × 1.0))		
	 EYP0008VxxxxM06P06  EYP0015VxxxxM06P06	 EYP0008AxxxxM03A00  EYP0015AxxxxM03A00  EYP0008AxxxxM06A00  EYP0015AxxxxM06A00	
	(4 × 16.0 + (2 × 1.0))		
	 EYP0009VxxxxM06P06  EYP0016VxxxxM06P06	 EYP0009AxxxxM03A00  EYP0016AxxxxM03A00  EYP0009AxxxxM06A00  EYP0016AxxxxM06A00	

Motors with terminal boxes

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCS14L30-...Fxx MCS14P26-...Fxx	(4 × 4.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 6.0 + (2 × 1.0))					
	(4 × 10.0 + (2 × 1.0))					

		
	(4 × 4.0 + (2 × 1.0))	
	— —	
	 EYP0013YxxxxA00A00	
	(4 × 6.0 + (2 × 1.0))	
	— —	
	 EYP0014YxxxxA00A00	
	(4 × 10.0 + (2 × 1.0))	
	— —	
	— —	
	 EYP0015YxxxxA00A00	

			
	Extension cable	Connection cable	
	<b>(4 × 4.0 + (2 × 1.0))</b>		
	 -  EYP0013VxxxxA00P05	 -  EYP0013AxxxxM02A00  -  EYP0013AxxxxM05A00	
	<b>(4 × 6.0 + (2 × 1.0))</b>		
	 EYP0007VxxxxA00P06  EYP0014VxxxxA00P06	 EYP0007AxxxxM03A00  EYP0014AxxxxM03A00  EYP0007AxxxxM06A00  EYP0014AxxxxM06A00	
	<b>(4 × 10.0 + (2 × 1.0))</b>		
	 EYP0008VxxxxA00P06  EYP0015VxxxxA00P06	 EYP0008AxxxxM03A00  EYP0015AxxxxM03A00  EYP0008AxxxxM06A00  EYP0015AxxxxM06A00	

### 3 Selection tables for motor cables

MCS motor  
MCS14L32 ... MCS14P32

#### 3.2.12 MCS14L32 ... MCS14P32

##### Motors with plug connections

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCS14L32-...S00 MCS14P32-...S00	(4 × 2.5 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 4.0 + (2 × 1.0))					
	(4 × 6.0 + (2 × 1.0))					
	(4 × 10.0 + (2 × 1.0))					
	(4 × 16.0 + (2 × 1.0))					

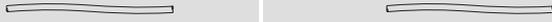
		
MCS14L32-...S00 MCS14P32-...S00	(4 × 2.5 + (2 × 0.5))	
	 -  EYP0012AxxxxM02A00  -  EYP0012AxxxxM05A00	
	(4 × 4.0 + (2 × 1.0))	
	 EYP0006AxxxxM02A00  EYP0013AxxxxM02A00  EYP0006AxxxxM05A00  EYP0013AxxxxM05A00	
	(4 × 6.0 + (2 × 1.0))	
	 EYP0007AxxxxM03A00  EYP0014AxxxxM03A00  EYP0007AxxxxM06A00  EYP0014AxxxxM06A00	
	(4 × 10.0 + (2 × 1.0))	
	 EYP0008AxxxxM03A00  EYP0015AxxxxM03A00  EYP0008AxxxxM06A00  EYP0015AxxxxM06A00	
	(4 × 16.0 + (2 × 1.0))	
	 EYP0009AxxxxM03A00  EYP0016AxxxxM03A00  EYP0009AxxxxM06A00  EYP0016AxxxxM06A00	

			
	Extension cable	Connection cable	
	<b>(4 × 2.5 + (2 × 0.5))</b>		
	 -	 -	
	 -	 EYP0012AxxxxM02A00	
	 EYP0012VxxxxM02P05	 -	
	 EYP0012VxxxxM05P05	 EYP0012AxxxxM05A00	
	<b>(4 × 4.0 + (2 × 1.0))</b>		
	 EYP0006VxxxxM02P05	 EYP0006AxxxxM02A00	
	 EYP0006VxxxxM05P05	 EYP0013AxxxxM02A00	
	 EYP0013VxxxxM02P05	 EYP0006AxxxxM05A00	
	 EYP0013VxxxxM05P05	 EYP0013AxxxxM05A00	
	<b>(4 × 6.0 + (2 × 1.0))</b>		
	 EYP0007VxxxxM03P06	 EYP0007AxxxxM03A00	
	 EYP0007VxxxxM06P06	 EYP0014AxxxxM03A00	
	 EYP0014VxxxxM03P06	 EYP0007AxxxxM06A00	
	 EYP0014VxxxxM06P06	 EYP0014AxxxxM06A00	
	<b>(4 × 10.0 + (2 × 1.0))</b>		
	 EYP0008VxxxxM03P06	 EYP0008AxxxxM03A00	
	 EYP0008VxxxxM06P06	 EYP0015AxxxxM03A00	
	 EYP0015VxxxxM03P06	 EYP0008AxxxxM06A00	
	 EYP0015VxxxxM06P06	 EYP0015AxxxxM06A00	
	<b>(4 × 16.0 + (2 × 1.0))</b>		
	 EYP0009VxxxxM03P06	 EYP0009AxxxxM03A00	
	 EYP0009VxxxxM06P06	 EYP0016AxxxxM03A00	
	 EYP0016VxxxxM03P06	 EYP0009AxxxxM06A00	
	 EYP0016VxxxxM06P06	 EYP0016AxxxxM06A00	

## Motors with terminal boxes

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCS14L32-...S00 MCS14P32-...S00	(4 × 2.5 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 4.0 + (2 × 1.0))					
	(4 × 6.0 + (2 × 1.0))					
	(4 × 10.0 + (2 × 1.0))					

		
	(4 × 2.5 + (2 × 0.5))	
	 —  EYP0012YxxxxA00A00	
	(4 × 4.0 + (2 × 1.0))	
	 — EYP0006YxxxxA00A00  EYP0013YxxxxA00A00	
	(4 × 6.0 + (2 × 1.0))	
	 — EYP0007YxxxxA00A00  EYP0014YxxxxA00A00	
	(4 × 10.0 + (2 × 1.0))	
	 — EYP0008YxxxxA00A00  EYP0015YxxxxA00A00	

			
	Extension cable	Connection cable	
	<b>(4 × 2.5 + (2 × 0.5))</b>		
	 -   EYP0012VxxxxA00P05	 -  EYP0012AxxxxM02A00  -  EYP0012AxxxxM05A00	
	<b>(4 × 4.0 + (2 × 1.0))</b>		
	 EYP0006VxxxxA00P05   EYP0013VxxxxA00P05	 EYP0006AxxxxM02A00  EYP0013AxxxxM02A00  EYP0006AxxxxM05A00  EYP0013AxxxxM05A00	
	<b>(4 × 6.0 + (2 × 1.0))</b>		
	 EYP0007VxxxxA00P06   EYP0014VxxxxA00P06	 EYP0007AxxxxM03A00  EYP0014AxxxxM03A00  EYP0007AxxxxM06A00  EYP0014AxxxxM06A00	
	<b>(4 × 10.0 + (2 × 1.0))</b>		
	 EYP0008VxxxxA00P06   EYP0015VxxxxA00P06	 EYP0008AxxxxM03A00  EYP0015AxxxxM03A00  EYP0008AxxxxM06A00  EYP0015AxxxxM06A00	

### 3 Selection tables for motor cables

MCS motor  
MCS19F12

#### 3.2.13 MCS19F12

##### Motors with plug connections

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCS19F12-...Fxx	(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 1.5 + (2 × 0.5))					
	(4 × 2.5 + (2 × 0.5))					

			
			Connection cable
			
			(4 × 1.0 + (2 × 0.5))
			 -
			 EYP0010AxxxxM01A00
			 -
			 EYP0010AxxxxM04A00
			(4 × 1.5 + (2 × 0.5))
			 EYP0004AxxxxM01A00
			 EYP0011AxxxxM01A00
			 EYP0004AxxxxM04A00
			 EYP0011AxxxxM04A00
			(4 × 2.5 + (2 × 0.5))
 EYP0005AxxxxM01A00			
 EYP0012AxxxxM01A00			
 EYP0005AxxxxM04A00			
 EYP0012AxxxxM04A00			

			
	Extension cable	Connection cable	
<b>(4 × 1.0 + (2 × 0.5))</b>			
	 -	 -	
	 -	 EYP0010AxxxxM01A00	
	 EYP0010VxxxxM01P04	 -	
	 EYP0010VxxxxM04P04	 EYP0010AxxxxM04A00	
<b>(4 × 1.5 + (2 × 0.5))</b>			
	 EYP0004VxxxxM01P04	 EYP0004AxxxxM01A00	
	 EYP0004VxxxxM04P04	 EYP0011AxxxxM01A00	
	 EYP0011VxxxxM01P04	 EYP0004AxxxxM04A00	
	 EYP0011VxxxxM04P04	 EYP0011AxxxxM04A00	
<b>(4 × 2.5 + (2 × 0.5))</b>			
	 EYP0005VxxxxM01P04	 EYP0005AxxxxM01A00	
	 EYP0005VxxxxM04P04	 EYP0012AxxxxM01A00	
	 EYP0012VxxxxM01P04	 EYP0005AxxxxM04A00	
	 EYP0012VxxxxM04P04	 EYP0012AxxxxM04A00	

## Motors with terminal boxes

						
		9300 servo	9400	ECS		
MCS19F12-...Fxx	(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 1.5 + (2 × 0.5))					
	(4 × 2.5 + (2 × 0.5))					

			
	Connection cable		
	(4 × 1.0 + (2 × 0.5))		
	— —		
		EYP0010YxxxxA00A00	
	(4 × 1.5 + (2 × 0.5))		
	— —		
		EYP0011YxxxxA00A00	
	(4 × 2.5 + (2 × 0.5))		
	— —		
		EYP0012YxxxxA00A00	

			
	Extension cable	Connection cable	
	(4 × 1.0 + (2 × 0.5))		
	— —		
		EYP0010VxxxxA00P04	
	(4 × 1.5 + (2 × 0.5))		
	— —		
		EYP0011VxxxxA00P04	
	(4 × 2.5 + (2 × 0.5))		
	— —		
		EYP0012VxxxxA00P04	

3.2.14 MCS19F14

Motors with plug connections

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCS19F14-...S00	(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 1.5 + (2 × 0.5))					
	(4 × 2.5 + (2 × 0.5))					

			
		Connection cable	
	(4 × 1.0 + (2 × 0.5))	 EYP0003AxxxxM01A00	
		 EYP0010AxxxxM01A00	
		 EYP0003AxxxxM04A00	
		 EYP0010AxxxxM04A00	
	(4 × 1.5 + (2 × 0.5))	 EYP0004AxxxxM01A00	
		 EYP0011AxxxxM01A00	
		 EYP0004AxxxxM04A00	
		 EYP0011AxxxxM04A00	
	(4 × 2.5 + (2 × 0.5))	 EYP0005AxxxxM01A00	
		 EYP0012AxxxxM01A00	
		 EYP0005AxxxxM04A00	
		 EYP0012AxxxxM04A00	

### Selection tables for motor cables

MCS motor  
MCS19F14

			
	Extension cable	Connection cable	
<b>(4 × 1.0 + (2 × 0.5))</b>			
	EYP0003VxxxxM01P04		EYP0003AxxxxM01A00
	EYP0003VxxxxM04P04		EYP0010AxxxxM01A00
	EYP0010VxxxxM01P04		EYP0003AxxxxM04A00
	EYP0010VxxxxM04P04		EYP0010AxxxxM04A00
<b>(4 × 1.5 + (2 × 0.5))</b>			
	EYP0004VxxxxM01P04		EYP0004AxxxxM01A00
	EYP0004VxxxxM04P04		EYP0011AxxxxM01A00
	EYP0011VxxxxM01P04		EYP0004AxxxxM04A00
	EYP0011VxxxxM04P04		EYP0011AxxxxM04A00
<b>(4 × 2.5 + (2 × 0.5))</b>			
	EYP0005VxxxxM01P04		EYP0005AxxxxM01A00
	EYP0005VxxxxM04P04		EYP0012AxxxxM01A00
	EYP0012VxxxxM01P04		EYP0005AxxxxM04A00
	EYP0012VxxxxM04P04		EYP0012AxxxxM04A00

Motors with terminal boxes

							
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS		
		(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
		(4 × 1.5 + (2 × 0.5))					
(4 × 2.5 + (2 × 0.5))							

						
		<b>Connection cable</b>				
		(4 × 1.0 + (2 × 0.5))				
		 EYP0003YxxxxA00A00				
		 EYP0010YxxxxA00A00				
		(4 × 1.5 + (2 × 0.5))				
		 EYP0004YxxxxA00A00				
		 EYP0011YxxxxA00A00				
		(4 × 2.5 + (2 × 0.5))				
		 EYP0005YxxxxA00A00				
		 EYP0012YxxxxA00A00				

							
		<b>Extension cable</b>		<b>Connection cable</b>			
		(4 × 1.0 + (2 × 0.5))					
		 EYP0003VxxxxA00P04		 EYP0003AxxxxM01A00			 EYP0010AxxxxM01A00
		 EYP0010VxxxxA00P04		 EYP0003AxxxxM04A00			 EYP0010AxxxxM04A00
		(4 × 1.5 + (2 × 0.5))					
		 EYP0004VxxxxA00P04		 EYP0004AxxxxM01A00			 EYP0011AxxxxM01A00
		 EYP0011VxxxxA00P04		 EYP0004AxxxxM04A00			 EYP0011AxxxxM04A00
		(4 × 2.5 + (2 × 0.5))					
		 EYP0005VxxxxA00P04		 EYP0005AxxxxM01A00			 EYP0012AxxxxM01A00
		 EYP0012VxxxxA00P04		 EYP0005AxxxxM04A00			 EYP0012AxxxxM04A00

### 3 Selection tables for motor cables

MCS motor  
MCS19F29 ... MSC19P12

#### 3.2.15 MCS19F29 ... MSC19P12

##### Motors with plug connections

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCS19F29-...Fxx MCS19F30-...S00 MCS19J12-...Fxx MCS19P12-...Fxx	(4 × 2.5 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 4.0 + (2 × 1.0))					
	(4 × 6.0 + (2 × 1.0))					
	(4 × 10.0 + (2 × 1.0))					
	(4 × 16.0 + (2 × 1.0))					

		
<b>(4 × 2.5 + (2 × 0.5))</b>		
	-	
	EYP0012AxxxxM02A00	
	-	
	EYP0012AxxxxM05A00	
<b>(4 × 4.0 + (2 × 1.0))</b>		
	EYP0006AxxxxM02A00	
	EYP0013AxxxxM02A00	
	EYP0006AxxxxM05A00	
	EYP0013AxxxxM05A00	
<b>(4 × 6.0 + (2 × 1.0))</b>		
	EYP0007AxxxxM03A00	
	EYP0014AxxxxM03A00	
	EYP0007AxxxxM06A00	
	EYP0014AxxxxM06A00	
<b>(4 × 10.0 + (2 × 1.0))</b>		
	EYP0008AxxxxM03A00	
	EYP0015AxxxxM03A00	
	EYP0008AxxxxM06A00	
	EYP0015AxxxxM06A00	
<b>(4 × 16.0 + (2 × 1.0))</b>		
	EYP0009AxxxxM03A00	
	EYP0016AxxxxM03A00	
	EYP0009AxxxxM06A00	
	EYP0016AxxxxM06A00	

			
	Extension cable	Connection cable	
	<b>(4 × 2.5 + (2 × 0.5))</b>		
	 -	 -	
	 -	 EYP0012AxxxxM02A00	
	 EYP0012VxxxxM02P05	 -	
	 EYP0012VxxxxM05P05	 EYP0012AxxxxM05A00	
	<b>(4 × 4.0 + (2 × 1.0))</b>		
	 EYP0006VxxxxM02P05	 EYP0006AxxxxM02A00	
	 EYP0006VxxxxM05P05	 EYP0013AxxxxM02A00	
	 EYP0013VxxxxM02P05	 EYP0006AxxxxM05A00	
	 EYP0013VxxxxM05P05	 EYP0013AxxxxM05A00	
	<b>(4 × 6.0 + (2 × 1.0))</b>		
	 EYP0007VxxxxM03P06	 EYP0007AxxxxM03A00	
	 EYP0007VxxxxM06P06	 EYP0014AxxxxM03A00	
	 EYP0014VxxxxM03P06	 EYP0007AxxxxM06A00	
	 EYP0014VxxxxM06P06	 EYP0014AxxxxM06A00	
	<b>(4 × 10.0 + (2 × 1.0))</b>		
	 EYP0008VxxxxM03P06	 EYP0008AxxxxM03A00	
	 EYP0008VxxxxM06P06	 EYP0015AxxxxM03A00	
	 EYP0015VxxxxM03P06	 EYP0008AxxxxM06A00	
	 EYP0015VxxxxM06P06	 EYP0015AxxxxM06A00	
	<b>(4 × 16.0 + (2 × 1.0))</b>		
	 EYP0009VxxxxM03P06	 EYP0009AxxxxM03A00	
	 EYP0009VxxxxM06P06	 EYP0016AxxxxM03A00	
	 EYP0016VxxxxM03P06	 EYP0009AxxxxM06A00	
	 EYP0016VxxxxM06P06	 EYP0016AxxxxM06A00	

## Motors with terminal boxes

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCS19F29-...Fxx MCS19F30-...S00 MCS19J12-...Fxx MCS19P12-...Fxx	(4 × 2.5 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 4.0 + (2 × 1.0))					
	(4 × 6.0 + (2 × 1.0))					
	(4 × 10.0 + (2 × 1.0))					

		
	(4 × 2.5 + (2 × 0.5))	
	 EYP0012YxxxxA00A00	
	(4 × 4.0 + (2 × 1.0))	
	 EYP0013YxxxxA00A00	
	(4 × 6.0 + (2 × 1.0))	
	 EYP0014YxxxxA00A00	
	(4 × 10.0 + (2 × 1.0))	
	 EYP0015YxxxxA00A00	

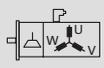
			
	Extension cable	Connection cable	
	<b>(4 × 2.5 + (2 × 0.5))</b>		
	 -   EYP0012VxxxxA00P05	 -  EYP0012AxxxxM02A00  -  EYP0012AxxxxM05A00	
	<b>(4 × 4.0 + (2 × 1.0))</b>		
	 EYP0006VxxxxA00P05   EYP0013VxxxxA00P05	 EYP0006AxxxxM02A00  EYP0013AxxxxM02A00  EYP0006AxxxxM05A00  EYP0013AxxxxM05A00	
	<b>(4 × 6.0 + (2 × 1.0))</b>		
	 EYP0007VxxxxA00P06   EYP0014VxxxxA00P06	 EYP0007AxxxxM03A00  EYP0014AxxxxM03A00  EYP0007AxxxxM06A00  EYP0014AxxxxM06A00	
	<b>(4 × 10.0 + (2 × 1.0))</b>		
	 EYP0008VxxxxA00P06   EYP0015VxxxxA00P06	 EYP0008AxxxxM03A00  EYP0015AxxxxM03A00  EYP0008AxxxxM06A00  EYP0015AxxxxM06A00	

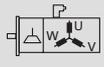
### 3 Selection tables for motor cables

MCS motor  
MCS19J14

#### 3.2.16 MCS19J14

##### Motors with plug connections

						
		 [mm²]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>	
MCS19J14-...S00	$(4 \times 1.5 + (2 \times 0.5))$ $(4 \times 2.5 + (2 \times 0.5))$	U, V, W, PE	X105, X107	X24, X25		

			
	<b>Connection cable</b>		
$(4 \times 1.5 + (2 \times 0.5))$			
 -			
 EYP0011AxxxxM01A00			
 -			
 EYP0011AxxxxM04A00			
<hr/>			
$(4 \times 2.5 + (2 \times 0.5))$			
 EYP0005AxxxxM01A00			
 EYP0012AxxxxM01A00			
 EYP0005AxxxxM04A00			
 EYP0012AxxxxM04A00			

			
	<b>Extension cable</b>		
$(4 \times 1.5 + (2 \times 0.5))$			
 -		 -	
 -		 EYP0011AxxxxM01A00	
 EYP0011VxxxxM01P04		 -	
 EYP0011VxxxxM04P04		 EYP0011AxxxxM04A00	
<hr/>			
$(4 \times 2.5 + (2 \times 0.5))$			
 EYP0005VxxxxM01P04		 EYP0005AxxxxM01A00	
 EYP0005VxxxxM04P04		 EYP0012AxxxxM01A00	
 EYP0012VxxxxM01P04		 EYP0005AxxxxM04A00	
 EYP0012VxxxxM04P04		 EYP0012AxxxxM04A00	

## Motors with terminal boxes

						
		 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>	
MCS19J14-...S00	(4 × 1.5 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 2.5 + (2 × 0.5))					

		
(4 × 1.5 + (2 × 0.5))		
 -		
 EYP0011YxxxxA00A00		
(4 × 2.5 + (2 × 0.5))		
 EYP0005YxxxxA00A00		
 EYP0012YxxxxA00A00		

			
(4 × 1.5 + (2 × 0.5))			
 -			
 EYP0011VxxxxA00P04			
 -		 EYP0011AxxxxM01A00	
 -		 EYP0011AxxxxM04A00	
(4 × 2.5 + (2 × 0.5))			
 EYP0005VxxxxA00P04		 EYP0005AxxxxM01A00	
 EYP0012VxxxxA00P04		 EYP0012AxxxxM01A00	
		 EYP0005AxxxxM04A00	
		 EYP0012AxxxxM04A00	

### 3 Selection tables for motor cables

MCS motor  
MCS19J29 ... MSC19P30

#### 3.2.17 MCS19J29 ... MSC19P30

##### Motors with plug connections

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCS19J29-...Fxx	(4 × 6.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		
MCS19P29-...Fxx	(4 × 10.0 + (2 × 1.0))					
MCS19P30-...S00	(4 × 16.0 + (2 × 1.0))					

			
		Connection cable	
(4 × 6.0 + (2 × 1.0))			
 -			
 EYP0014AxxxxM03A00			
 -			
 EYP0014AxxxxM06A00			
(4 × 10.0 + (2 × 1.0))			
 EYP0008AxxxxM03A00			
 EYP0015AxxxxM03A00			
 EYP0008AxxxxM06A00			
 EYP0015AxxxxM06A00			
(4 × 16.0 + (2 × 1.0))			
 EYP0009AxxxxM03A00			
 EYP0016AxxxxM03A00			
 EYP0009AxxxxM06A00			
 EYP0016AxxxxM06A00			

			
	Extension cable	Connection cable	
<b>(4 × 6.0 + (2 × 1.0))</b>			
	 -	 -	
	 -	 EYP0014AxxxxM03A00	
	 EYP0014VxxxxM03P06	 -	
	 EYP0014VxxxxM06P06	 EYP0014AxxxxM06A00	
<b>(4 × 10.0 + (2 × 1.0))</b>			
	 EYP0008VxxxxM03P06	 EYP0008AxxxxM03A00	
	 EYP0008VxxxxM06P06	 EYP0015AxxxxM03A00	
	 EYP0015VxxxxM03P06	 EYP0008AxxxxM06A00	
	 EYP0015VxxxxM06P06	 EYP0015AxxxxM06A00	
<b>(4 × 16.0 + (2 × 1.0))</b>			
	 EYP0009VxxxxM03P06	 EYP0009AxxxxM03A00	
	 EYP0009VxxxxM06P06	 EYP0016AxxxxM03A00	
	 EYP0016VxxxxM03P06	 EYP0009AxxxxM06A00	
	 EYP0016VxxxxM06P06	 EYP0016AxxxxM06A00	

### Selection tables for motor cables

MCS motor  
MCS19J29 ... MSC19P30

#### Motors with terminal boxes

						
	 [mm <sup>2</sup> ]	9300 servo	9400	ECS		
MCS19J29-...Fxx MCS19P29-...Fxx MCS19P30-...S00	(4 × 6.0 + (2 × 1.0)) (4 × 10.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		

			
	Connection cable		
	(4 × 6.0 + (2 × 1.0))		
	 -  EYP0014YxxxxA00A00		
	(4 × 10.0 + (2 × 1.0))		
	 EYP0008YxxxxA00A00  EYP0015YxxxxA00A00		

					
	Extension cable		Connection cable		
	(4 × 6.0 + (2 × 1.0))				
	 -  EYP0014VxxxxA00P06		 -  EYP0014AxxxxM03A00  -  EYP0014AxxxxM06A00		
	(4 × 10.0 + (2 × 1.0))				
	 EYP0008VxxxxA00P06  EYP0015VxxxxA00P06		 EYP0008AxxxxM03A00  EYP0015AxxxxM03A00  EYP0008AxxxxM06A00  EYP0015AxxxxM06A00		

3.2.18 MCS19J30

Motors with plug connections

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCS19J30-...S00	(4 × 4.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 6.0 + (2 × 1.0))					
	(4 × 10.0 + (2 × 1.0))					
	(4 × 16.0 + (2 × 1.0))					

		
<b>(4 × 4.0 + (2 × 1.0))</b>		
	-	
	EYP0013AxxxxM02A00	
	-	
	EYP0013AxxxxM05A00	
<b>(4 × 6.0 + (2 × 1.0))</b>		
	EYP0007AxxxxM03A00	
	EYP0014AxxxxM03A00	
	EYP0007AxxxxM06A00	
	EYP0014AxxxxM06A00	
<b>(4 × 10.0 + (2 × 1.0))</b>		
	EYP0008AxxxxM03A00	
	EYP0015AxxxxM03A00	
	EYP0008AxxxxM06A00	
	EYP0015AxxxxM06A00	
<b>(4 × 16.0 + (2 × 1.0))</b>		
	EYP0009AxxxxM03A00	
	EYP0016AxxxxM03A00	
	EYP0009AxxxxM06A00	
	EYP0016AxxxxM06A00	

			
	Extension cable	Connection cable	
	<b>(4 × 4.0 + (2 × 1.0))</b>		
	 -	 -	
	 EYP0013VxxxxM05P05	 EYP0013AxxxxM02A00	
		 -	
		 EYP0013AxxxxM05A00	
	<b>(4 × 6.0 + (2 × 1.0))</b>		
	 EYP0007VxxxxM06P06	 EYP0007AxxxxM03A00	
		 EYP0014AxxxxM03A00	
	 EYP0014VxxxxM06P06	 EYP0007AxxxxM06A00	
		 EYP0014AxxxxM06A00	
	<b>(4 × 10.0 + (2 × 1.0))</b>		
	 EYP0008VxxxxM06P06	 EYP0008AxxxxM03A00	
		 EYP0015AxxxxM03A00	
	 EYP0015VxxxxM06P06	 EYP0008AxxxxM06A00	
		 EYP0015AxxxxM06A00	
	<b>(4 × 16.0 + (2 × 1.0))</b>		
	 EYP0009VxxxxM06P06	 EYP0009AxxxxM03A00	
		 EYP0016AxxxxM03A00	
	 EYP0016VxxxxM06P06	 EYP0009AxxxxM06A00	
		 EYP0016AxxxxM06A00	

Motors with terminal boxes

							
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS		
		(4 × 4.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		
		(4 × 6.0 + (2 × 1.0))					
(4 × 10.0 + (2 × 1.0))							

			
		<b>Connection cable</b>	
		(4 × 4.0 + (2 × 1.0))	
		—	
		 EYP0013YxxxxA00A00	
		(4 × 6.0 + (2 × 1.0))	
		— EYP0007YxxxxA00A00	
		 EYP0014YxxxxA00A00	
		(4 × 10.0 + (2 × 1.0))	
		— EYP0008YxxxxA00A00	
 EYP0015YxxxxA00A00			

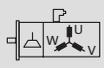
			
		<b>Extension cable</b>	<b>Connection cable</b>
		(4 × 4.0 + (2 × 1.0))	
		—	—
		 EYP0013VxxxxA00P05	 EYP0013AxxxxM02A00
			—
			 EYP0013AxxxxM05A00
		(4 × 6.0 + (2 × 1.0))	
		 EYP0007VxxxxA00P06	 EYP0007AxxxxM03A00
		 EYP0014VxxxxA00P06	 EYP0014AxxxxM03A00
			 EYP0007AxxxxM06A00
			 EYP0014AxxxxM06A00
		(4 × 10.0 + (2 × 1.0))	
		 EYP0008VxxxxA00P06	 EYP0008AxxxxM03A00
		 EYP0015VxxxxA00P06	 EYP0015AxxxxM03A00
			 EYP0008AxxxxM06A00
			 EYP0015AxxxxM06A00

### 3 Selection tables for motor cables

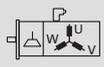
MCS motor  
MCS19P14

#### 3.2.19 MCS19P14

##### Motors with plug connections

						
		 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>	
MCS19P14-...S00	(4 × 2.5 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		

			
		<b>Connection cable</b>	
(4 × 2.5 + (2 × 0.5))			
 EYP0005AxxxxM01A00			
 EYP0012AxxxxM01A00			
 EYP0005AxxxxM04A00			
 EYP0012AxxxxM04A00			

				
			<b>Extension cable</b>	<b>Connection cable</b>
(4 × 2.5 + (2 × 0.5))				
 EYP0005VxxxxM01P04	 EYP0005AxxxxM01A00			
 EYP0005VxxxxM04P04	 EYP0012AxxxxM01A00			
 EYP0012VxxxxM01P04	 EYP0005AxxxxM04A00			
 EYP0012VxxxxM04P04	 EYP0012AxxxxM04A00			

**Motors with terminal boxes**

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MCS19P14-...S00	(4 × 2.5 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 4.0 + (2 × 1.0))					
	(4 × 6.0 + (2 × 1.0))					
	(4 × 10.0 + (2 × 1.0))					

		
	(4 × 2.5 + (2 × 0.5))	
	 EYP0005YxxxxA00A00  EYP0012YxxxxA00A00	
	(4 × 4.0 + (2 × 1.0))	
	 EYP0006YxxxxA00A00  EYP0013YxxxxA00A00	
	(4 × 6.0 + (2 × 1.0))	
	 EYP0007YxxxxA00A00  EYP0014YxxxxA00A00	
	(4 × 10.0 + (2 × 1.0))	
	 EYP0008YxxxxA00A00  EYP0015YxxxxA00A00	

			
	Extension cable	Connection cable	
	<b>(4 × 2.5 + (2 × 0.5))</b>		
	EYP0005VxxxxA00P05	 EYP0005AxxxxM02A00	
	EYP0012VxxxxA00P05	 EYP0012AxxxxM02A00	
		 EYP0005AxxxxM05A00	
		 EYP0012AxxxxM05A00	
	<b>(4 × 4.0 + (2 × 1.0))</b>		
	EYP0006VxxxxA00P05	 EYP0006AxxxxM02A00	
	EYP0013VxxxxA00P05	 EYP0013AxxxxM02A00	
		 EYP0006AxxxxM05A00	
		 EYP0013AxxxxM05A00	
	<b>(4 × 6.0 + (2 × 1.0))</b>		
	EYP0007VxxxxA00P06	 EYP0007AxxxxM03A00	
	EYP0014VxxxxA00P06	 EYP0014AxxxxM03A00	
		 EYP0007AxxxxM06A00	
		 EYP0014AxxxxM06A00	
	<b>(4 × 10.0 + (2 × 1.0))</b>		
	EYP0008VxxxxA00P06	 EYP0008AxxxxM03A00	
	EYP0015VxxxxA00P06	 EYP0015AxxxxM03A00	
		 EYP0008AxxxxM06A00	
		 EYP0015AxxxxM06A00	

3.3 MDFKS motor

3.3.1 MDFKS071-03

Motors with plug connections

								
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS			
		(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25			
		(4 × 1.5 + (2 × 0.5))						
(4 × 2.5 + (2 × 0.5))								

			
	<b>Connection cable</b>		
	(4 × 1.0 + (2 × 0.5))		
		EYP0003AxxxxM01A00	
		EYP0010AxxxxM01A00	
		EYP0003AxxxxM04A00	
		EYP0010AxxxxM04A00	
	(4 × 1.5 + (2 × 0.5))		
		EYP0004AxxxxM01A00	
		EYP0011AxxxxM01A00	
		EYP0004AxxxxM04A00	
		EYP0011AxxxxM04A00	
	(4 × 2.5 + (2 × 0.5))		
		EYP0005AxxxxM01A00	
		EYP0012AxxxxM01A00	
		EYP0005AxxxxM04A00	
		EYP0012AxxxxM04A00	

			
	Extension cable	Connection cable	
	<b>(4 × 1.0 + (2 × 0.5))</b>		
	 EYP0003VxxxxM01P04	 EYP0003AxxxxM01A00	
	 EYP0003VxxxxM04P04	 EYP0010AxxxxM01A00	
	 EYP0010VxxxxM01P04	 EYP0003AxxxxM04A00	
	 EYP0010VxxxxM04P04	 EYP0010AxxxxM04A00	
	<b>(4 × 1.5 + (2 × 0.5))</b>		
	 EYP0004VxxxxM01P04	 EYP0004AxxxxM01A00	
	 EYP0004VxxxxM04P04	 EYP0011AxxxxM01A00	
	 EYP0011VxxxxM01P04	 EYP0004AxxxxM04A00	
	 EYP0011VxxxxM04P04	 EYP0011AxxxxM04A00	
	<b>(4 × 2.5 + (2 × 0.5))</b>		
	 EYP0005VxxxxM01P04	 EYP0005AxxxxM01A00	
	 EYP0005VxxxxM04P04	 EYP0012AxxxxM01A00	
	 EYP0012VxxxxM01P04	 EYP0005AxxxxM04A00	
	 EYP0012VxxxxM04P04	 EYP0012AxxxxM04A00	

## Motors with terminal boxes

							
		 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>		
		(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
		(4 × 1.5 + (2 × 0.5))					
(4 × 2.5 + (2 × 0.5))							

			
		<b>Connection cable</b>	
		(4 × 1.0 + (2 × 0.5))	
		 EYP0003YxxxxA00A00	
		 EYP0010YxxxxA00A00	
		(4 × 1.5 + (2 × 0.5))	
		 EYP0004YxxxxA00A00	
		 EYP0011YxxxxA00A00	
		(4 × 2.5 + (2 × 0.5))	
		 EYP0005YxxxxA00A00	
 -			

			
		<b>Extension cable</b>	<b>Connection cable</b>
		(4 × 1.0 + (2 × 0.5))	
		 EYP0003VxxxxA00P04	 EYP0003AxxxxM01A00
		 EYP0010VxxxxA00P04	 EYP0010AxxxxM01A00
		 EYP0010VxxxxA00P04	 EYP0003AxxxxM04A00
		 -	 EYP0010AxxxxM04A00
		(4 × 1.5 + (2 × 0.5))	
		 EYP0004VxxxxA00P04	 EYP0004AxxxxM01A00
		 EYP0011VxxxxA00P04	 EYP0011AxxxxM01A00
		 EYP0011VxxxxA00P04	 EYP0004AxxxxM04A00
		 -	 EYP0011AxxxxM04A00
		(4 × 2.5 + (2 × 0.5))	
		 EYP0005VxxxxA00P04	 EYP0005AxxxxM01A00
		 -	 -
		 -	 EYP0005AxxxxM04A00
		 -	 -

### 3 Selection tables for motor cables

MDFKS motor  
MDFKS071-13

#### 3.3.2 MDFKS071-13

##### Motors with plug connections

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MDFKS071-13	(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 1.5 + (2 × 0.5))					
	(4 × 2.5 + (2 × 0.5))					

			
			Connection cable
			
			(4 × 1.0 + (2 × 0.5))
			 -
			 EYP0010AxxxxM01A00
			 -
			 EYP0010AxxxxM04A00
			(4 × 1.5 + (2 × 0.5))
			 EYP0004AxxxxM01A00
			 EYP0011AxxxxM01A00
			 EYP0004AxxxxM04A00
			 EYP0011AxxxxM04A00
			(4 × 2.5 + (2 × 0.5))
 EYP0005AxxxxM01A00			
 EYP0012AxxxxM01A00			
 EYP0005AxxxxM04A00			
 EYP0012AxxxxM04A00			

			
	Extension cable	Connection cable	
<b>(4 × 1.0 + (2 × 0.5))</b>			
	-		-
	-		EYP0010AxxxxM01A00
	EYP0010VxxxxM01P04		-
	EYP0010VxxxxM04P04		EYP0010AxxxxM04A00
<b>(4 × 1.5 + (2 × 0.5))</b>			
	EYP0004VxxxxM01P04		EYP0004AxxxxM01A00
	EYP0004VxxxxM04P04		EYP0011AxxxxM01A00
	EYP0011VxxxxM01P04		EYP0004AxxxxM04A00
	EYP0011VxxxxM04P04		EYP0011AxxxxM04A00
<b>(4 × 2.5 + (2 × 0.5))</b>			
	EYP0005VxxxxM01P04		EYP0005AxxxxM01A00
	EYP0005VxxxxM04P04		EYP0012AxxxxM01A00
	EYP0012VxxxxM01P04		EYP0005AxxxxM04A00
	EYP0012VxxxxM04P04		EYP0012AxxxxM04A00

### Selection tables for motor cables

MDFKS motor  
MDFKS071-13

#### Motors with terminal boxes

							
		 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>		
		$(4 \times 1.0 + (2 \times 0.5))$	U, V, W, PE	X105, X107	X24, X25		
		$(4 \times 1.5 + (2 \times 0.5))$					
$(4 \times 2.5 + (2 \times 0.5))$							

			
	<b>Connection cable</b>		
	$(4 \times 1.0 + (2 \times 0.5))$		
	 EYP0010YxxxxA00A00		
$(4 \times 1.5 + (2 \times 0.5))$			
 EYP0004YxxxxA00A00			
 EYP0011YxxxxA00A00			
$(4 \times 2.5 + (2 \times 0.5))$			
 EYP0005YxxxxA00A00			
 -			

				
	<b>Extension cable</b>			<b>Connection cable</b>
	$(4 \times 1.0 + (2 \times 0.5))$			
	 -	 -		
 EYP0010VxxxxA00P04	 EYP0010AxxxxM01A00			
 -	 -			
 EYP0010VxxxxA00P04	 EYP0010AxxxxM04A00			
$(4 \times 1.5 + (2 \times 0.5))$				
 EYP0004VxxxxA00P04	 EYP0004AxxxxM01A00			
 EYP0011VxxxxA00P04	 EYP0011AxxxxM01A00			
 -	 EYP0004AxxxxM04A00			
 EYP0011VxxxxA00P04	 EYP0011AxxxxM04A00			
$(4 \times 2.5 + (2 \times 0.5))$				
 EYP0005VxxxxA00P04	 EYP0005AxxxxM01A00			
 -	 -			
 -	 EYP0005AxxxxM04A00			
 -	 -			

3.3.3 MDFKS071-33

Motors with plug connections

		[mm <sup>2</sup> ]	9300 servo	9400	ECS	
MDFKS071-33	(4 × 1.5 + (2 × 0.5)) (4 × 2.5 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		

		Connection cable				
	(4 × 1.5 + (2 × 0.5))					
	- EYP0011AxxxxM01A00 - EYP0011AxxxxM04A00					
	(4 × 2.5 + (2 × 0.5))					
	EYP0005AxxxxM01A00 EYP0012AxxxxM01A00 EYP0005AxxxxM04A00 EYP0012AxxxxM04A00					

			Extension cable	Connection cable			
	(4 × 1.5 + (2 × 0.5))						
	- - EYP0011VxxxxM01P04 EYP0011VxxxxM04P04	- EYP0011AxxxxM01A00 - EYP0011AxxxxM04A00					
	(4 × 2.5 + (2 × 0.5))						
	EYP0005VxxxxM01P04 EYP0005VxxxxM04P04 EYP0012VxxxxM01P04 EYP0012VxxxxM04P04	EYP0005AxxxxM01A00 EYP0012AxxxxM01A00 EYP0005AxxxxM04A00 EYP0012AxxxxM04A00					

### Selection tables for motor cables

MDFKS motor  
MDFKS071-33

#### Motors with terminal boxes

							
		 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>		
		(4 × 1.5 + (2 × 0.5)) (4 × 2.5 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
MDFKS071-33							

				
			<b>Connection cable</b>	
			(4 × 1.5 + (2 × 0.5))	 -  EYP0011YxxxxA00A00
(4 × 2.5 + (2 × 0.5))	 EYP0005YxxxxA00A00  EYP0012YxxxxA00A00			

The EYP0012... system cable can only be connected to the motor using an enlarger.

					
				<b>Extension cable</b>	<b>Connection cable</b>
				(4 × 1.5 + (2 × 0.5))	 -  EYP0011VxxxxA00P04
(4 × 2.5 + (2 × 0.5))	 EYP0005VxxxxA00P04  EYP0012VxxxxA00P04	 EYP0005AxxxxM01A00  EYP0012AxxxxM01A00  EYP0005AxxxxM04A00  EYP0012AxxxxM04A00			

The EYP0012... system cable can only be connected to the motor using an enlarger.

3.4 MDFQA motor

3.4.1 MDFQA100-22, 100, Y

Motors with terminal boxes

						
	 [mm <sup>2</sup> ]	9300 servo	9400	ECS		
MDFQA100-22, 100	(4 × 10.0 + (2 × 1.0)) (4 × 16.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		

			
	Connection cable		
	(4 × 10.0 + (2 × 1.0))		
	 -  EYP0015YxxxxA00A00		
	(4 × 16.0 + (2 × 1.0))		
	 EYP0009YxxxxA00A00  EYP0016YxxxxA00A00		

			
	Extension cable	Connection cable	
	(4 × 10.0 + (2 × 1.0))		
	 -  EYP0015VxxxxA00P06	 -  EYP0015AxxxxM03A00  -  EYP0015AxxxxM06A00	
	(4 × 16.0 + (2 × 1.0))		
	 EYP0009VxxxxA00P06  EYP0016VxxxxA00P06	 EYP0009AxxxxM03A00  EYP0016AxxxxM03A00  EYP0009AxxxxM06A00  EYP0016AxxxxM06A00	

### 3 Selection tables for motor cables

MDFQA motor  
MDFQA100-22, 50, Y

#### 3.4.2 MDFQA100-22, 50, Y

##### Motors with terminal boxes

						
		9300 servo	9400	ECS		
MDFQA100-22, 50	(4 × 4.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 6.0 + (2 × 1.0))					
	(4 × 10.0 + (2 × 1.0))					
	(4 × 16.0 + (2 × 1.0))					

			
	Connection cable		
	(4 × 4.0 + (2 × 1.0))	— —	
		EYP0013YxxxxA00A00	
	(4 × 6.0 + (2 × 1.0))	— —	
		EYP0014YxxxxA00A00	
	(4 × 10.0 + (2 × 1.0))	— —	
		EYP0015YxxxxA00A00	
	(4 × 16.0 + (2 × 1.0))	— —	
		EYP0016YxxxxA00A00	

Die EYP0007... system cable can only be connected to the motor using a reducer.  
 Die EYP0013... system cable can only be connected to the motor using a reducer.  
 Die EYP0014... system cable can only be connected to the motor using a reducer.

			
	Extension cable	Connection cable	
	<b>(4 × 4.0 + (2 × 1.0))</b>		
	 -	 -	
	 EYP0013VxxxxA00P05	 EYP0013AxxxxM02A00	
		 -	
		 EYP0013AxxxxM05A00	
	<b>(4 × 6.0 + (2 × 1.0))</b>		
	 EYP0007VxxxxA00P06	 EYP0007AxxxxM03A00	
		 EYP0014AxxxxM03A00	
	 EYP0014VxxxxA00P06	 EYP0007AxxxxM06A00	
		 EYP0014AxxxxM06A00	
	<b>(4 × 10.0 + (2 × 1.0))</b>		
	 EYP0008VxxxxA00P06	 EYP0008AxxxxM03A00	
		 EYP0015AxxxxM03A00	
	 EYP0015VxxxxA00P06	 EYP0008AxxxxM06A00	
		 EYP0015AxxxxM06A00	
	<b>(4 × 16.0 + (2 × 1.0))</b>		
	 EYP0009VxxxxA00P06	 EYP0009AxxxxM03A00	
		 EYP0016AxxxxM03A00	
	 EYP0016VxxxxA00P06	 EYP0009AxxxxM06A00	
		 EYP0016AxxxxM06A00	

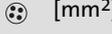
Die EYP0007... system cable can only be connected to the motor using a reducer.  
 Die EYP0013... system cable can only be connected to the motor using a reducer.  
 Die EYP0014... system cable can only be connected to the motor using a reducer.

### 3 Selection tables for motor cables

MDFQA motor  
MDFQA112-22, 100, Y

#### 3.4.3 MDFQA112-22, 100, Y

##### Motors with terminal boxes

						
	 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>		
MDFQA112-22, 100	$(4 \times 10.0 + (2 \times 1.0))$ $(4 \times 16.0 + (2 \times 1.0))$	U, V, W, PE	X105, X107	X24, X25		

		
	<b>Connection cable</b>	
	$(4 \times 10.0 + (2 \times 1.0))$  -  EYP0015YxxxxA00A00	
	$(4 \times 16.0 + (2 \times 1.0))$  EYP0009YxxxxA00A00  EYP0016YxxxxA00A00	

All system cables listed can only be connected using a reducer.

			
	<b>Extension cable</b>	<b>Connection cable</b>	
	$(4 \times 10.0 + (2 \times 1.0))$  -  EYP0015VxxxxA00P06	 -  EYP0015AxxxxM03A00  -  EYP0015AxxxxM06A00	
	$(4 \times 16.0 + (2 \times 1.0))$  EYP0009VxxxxA00P06  EYP0016VxxxxA00P06	 EYP0009AxxxxM03A00  EYP0016AxxxxM03A00  EYP0009AxxxxM06A00  EYP0016AxxxxM06A00	

All system cables listed can only be connected using a reducer.

3.4.4 MDFQA112-22, 50, Y

Motors with terminal boxes

						
		9300 servo	9400	ECS		
MDFQA112-22, 50	(4 × 4.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 6.0 + (2 × 1.0))					
	(4 × 10.0 + (2 × 1.0))					
	(4 × 16.0 + (2 × 1.0))					

			
	Connection cable		
	(4 × 4.0 + (2 × 1.0))	— —	
		 EYP0013YxxxxA00A00	
	(4 × 6.0 + (2 × 1.0))	— —	
		 EYP0014YxxxxA00A00	
	(4 × 10.0 + (2 × 1.0))	— —	
		 EYP0015YxxxxA00A00	
	(4 × 16.0 + (2 × 1.0))	— —	
		 EYP0016YxxxxA00A00	

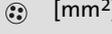
All system cables listed can only be connected using a reducer.

			
	Extension cable	Connection cable	
	(4 × 4.0 + (2 × 1.0))		
	 -	 -	
	 EYP0013VxxxxA00P05	 EYP0013AxxxxM02A00	
		 -	
		 EYP0013AxxxxM05A00	
	(4 × 6.0 + (2 × 1.0))		
	 EYP0007VxxxxA00P06	 EYP0007AxxxxM03A00	
	 EYP0014VxxxxA00P06	 EYP0014AxxxxM03A00	
		 EYP0007AxxxxM06A00	
		 EYP0014AxxxxM06A00	
	(4 × 10.0 + (2 × 1.0))		
	 EYP0008VxxxxA00P06	 EYP0008AxxxxM03A00	
	 EYP0015VxxxxA00P06	 EYP0015AxxxxM03A00	
		 EYP0008AxxxxM06A00	
		 EYP0015AxxxxM06A00	
	(4 × 16.0 + (2 × 1.0))		
	 EYP0009VxxxxA00P06	 EYP0009AxxxxM03A00	
	 EYP0016VxxxxA00P06	 EYP0016AxxxxM03A00	
		 EYP0009AxxxxM06A00	
		 EYP0016AxxxxM06A00	

All system cables listed can only be connected using a reducer.

3.4.5 MDFQA112-22, 50, Δ

Motors with terminal boxes

						
	 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>		
MDFQA112-22, 50	$(4 \times 10.0 + (2 \times 1.0))$ $(4 \times 16.0 + (2 \times 1.0))$	U, V, W, PE	X105, X107	X24, X25		

		
	<b>Connection cable</b>	
	$(4 \times 10.0 + (2 \times 1.0))$  -  EYP0015YxxxxA00A00	
	$(4 \times 16.0 + (2 \times 1.0))$  EYP0009YxxxxA00A00  EYP0016YxxxxA00A00	

All system cables listed can only be connected using a reducer.

			
	<b>Extension cable</b>	<b>Connection cable</b>	
	$(4 \times 10.0 + (2 \times 1.0))$  -  EYP0015VxxxxA00P06	 -  EYP0015AxxxxM03A00  -  EYP0015AxxxxM06A00	
	$(4 \times 16.0 + (2 \times 1.0))$  EYP0009VxxxxA00P06  EYP0016VxxxxA00P06	 EYP0009AxxxxM03A00  EYP0016AxxxxM03A00  EYP0009AxxxxM06A00  EYP0016AxxxxM06A00	

All system cables listed can only be connected using a reducer.

### 3 Selection tables for motor cables

MDFQA motor  
MDFQA132-32, 36, Y

#### 3.4.6 MDFQA132-32, 36, Y

##### Motors with terminal boxes

						
		 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>	
MDFQA132-32, 36	(4 × 10.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 16.0 + (2 × 1.0))					

		
(4 × 10.0 + (2 × 1.0))		
 -		
 EYP0015YxxxxA00A00		
(4 × 16.0 + (2 × 1.0))		
 EYP0009YxxxxA00A00		
 EYP0016YxxxxA00A00		

All system cables listed can only be connected using a reducer.

			
(4 × 10.0 + (2 × 1.0))			
 -			
 EYP0015VxxxxA00P06			
 -		 -	
 EYP0015VxxxxA00P06		 EYP0015AxxxxM03A00	
 EYP0015VxxxxA00P06		 -	
 EYP0015VxxxxA00P06		 EYP0015AxxxxM06A00	
(4 × 16.0 + (2 × 1.0))			
 EYP0009VxxxxA00P06		 EYP0009AxxxxM03A00	
 EYP0009VxxxxA00P06		 EYP0016AxxxxM03A00	
 EYP0016VxxxxA00P06		 EYP0009AxxxxM06A00	
 EYP0016VxxxxA00P06		 EYP0016AxxxxM06A00	

All system cables listed can only be connected using a reducer.

3.4.7 MDFQA160-32, 31, Y

Motors with terminal boxes

						
	 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>		
MDFQA160-32, 31	$(4 \times 10.0 + (2 \times 1.0))$ $(4 \times 16.0 + (2 \times 1.0))$	U, V, W, PE	X105, X107	X24, X25		

		
	<b>Connection cable</b>	
	$(4 \times 10.0 + (2 \times 1.0))$  -  EYP0015YxxxxA00A00	
	$(4 \times 16.0 + (2 \times 1.0))$  EYP0009YxxxxA00A00  EYP0016YxxxxA00A00	

All system cables listed can only be connected using a reducer.

			
	<b>Extension cable</b>	<b>Connection cable</b>	
	$(4 \times 10.0 + (2 \times 1.0))$  -  EYP0015VxxxxA00P06	 -  EYP0015AxxxxM03A00  -  EYP0015AxxxxM06A00	
	$(4 \times 16.0 + (2 \times 1.0))$  EYP0009VxxxxA00P06  EYP0016VxxxxA00P06	 EYP0009AxxxxM03A00  EYP0016AxxxxM03A00  EYP0009AxxxxM06A00  EYP0016AxxxxM06A00	

All system cables listed can only be connected using a reducer.

### 3 Selection tables for motor cables

MDSKS motor  
MDSKS036-13 ... MDSKS071-13

#### 3.5 MDSKS motor

##### 3.5.1 MDSKS036-13 ... MDSKS071-13

##### Motors with plug connections

							
		9300 servo	9400	ECS			
	 [mm <sup>2</sup> ]						
MDSKS036-13	(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25			
MDSKS036-23	(4 × 1.5 + (2 × 0.5))						
MDSKS056-23	(4 × 2.5 + (2 × 0.5))						
MDSKS056-33							
MDSKS071-03							
MDSKS071-13							

							
		Connection cable					
(4 × 1.0 + (2 × 0.5))							
 EYP0003AxxxxM01A00							
 EYP0010AxxxxM01A00							
 EYP0003AxxxxM04A00							
 EYP0010AxxxxM04A00							
(4 × 1.5 + (2 × 0.5))							
 EYP0004AxxxxM01A00							
 EYP0011AxxxxM01A00							
 EYP0004AxxxxM04A00							
 EYP0011AxxxxM04A00							
(4 × 2.5 + (2 × 0.5))							
 EYP0005AxxxxM01A00							
 EYP0012AxxxxM01A00							
 EYP0005AxxxxM04A00							
 EYP0012AxxxxM04A00							

			
	Extension cable	Connection cable	
<b>(4 × 1.0 + (2 × 0.5))</b>			
	EYP0003VxxxxM01P04		EYP0003AxxxxM01A00
	EYP0003VxxxxM04P04		EYP0010AxxxxM01A00
	EYP0010VxxxxM01P04		EYP0003AxxxxM04A00
	EYP0010VxxxxM04P04		EYP0010AxxxxM04A00
<b>(4 × 1.5 + (2 × 0.5))</b>			
	EYP0004VxxxxM01P04		EYP0004AxxxxM01A00
	EYP0004VxxxxM04P04		EYP0011AxxxxM01A00
	EYP0011VxxxxM01P04		EYP0004AxxxxM04A00
	EYP0011VxxxxM04P04		EYP0011AxxxxM04A00
<b>(4 × 2.5 + (2 × 0.5))</b>			
	EYP0005VxxxxM01P04		EYP0005AxxxxM01A00
	EYP0005VxxxxM04P04		EYP0012AxxxxM01A00
	EYP0012VxxxxM01P04		EYP0005AxxxxM04A00
	EYP0012VxxxxM04P04		EYP0012AxxxxM04A00

### Selection tables for motor cables

MDSKS motor  
MDSKS036-13 ... MDSKS071-13

#### Motors with terminal boxes

						
		9300 servo	9400	ECS		
MDSKS036-13 MDSKS036-23 MDSKS056-23 MDSKS056-33 MDSKS071-03 MDSKS071-13	$(4 \times 1.0 + (2 \times 0.5))$	U, V, W, PE	X105, X107	X24, X25		
	$(4 \times 1.5 + (2 \times 0.5))$					
	<b>Connection cable</b>					
	$(4 \times 1.0 + (2 \times 0.5))$	— EYP0003YxxxxA00A00  EYP0010YxxxxA00A00				
	<b>Extension cable</b>		<b>Connection cable</b>			
	$(4 \times 1.0 + (2 \times 0.5))$	—  EYP0003VxxxxA00P04  EYP0010VxxxxA00P04	— EYP0003AxxxxM01A00  EYP0010AxxxxM01A00 — EYP0003AxxxxM04A00  EYP0010AxxxxM04A00			
	$(4 \times 1.5 + (2 \times 0.5))$		$(4 \times 1.5 + (2 \times 0.5))$			
	—  EYP0004VxxxxA00P04  EYP0011VxxxxA00P04	— EYP0004AxxxxM01A00  EYP0011AxxxxM01A00 — EYP0004AxxxxM04A00  EYP0011AxxxxM04A00				

3.5.2 MDSKS071-33

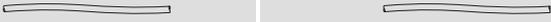
Motors with plug connections

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MDSKS071-33	(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 1.5 + (2 × 0.5))					
	(4 × 2.5 + (2 × 0.5))					

		
	(4 × 1.0 + (2 × 0.5))	 -
		 EYP0010AxxxxM01A00
	(4 × 1.5 + (2 × 0.5))	 -
		 EYP0010AxxxxM04A00
	(4 × 1.5 + (2 × 0.5))	 EYP0004AxxxxM01A00
		 EYP0011AxxxxM01A00
		 EYP0004AxxxxM04A00
		 EYP0011AxxxxM04A00
	(4 × 2.5 + (2 × 0.5))	 EYP0005AxxxxM01A00
		 EYP0012AxxxxM01A00
		 EYP0005AxxxxM04A00
		 EYP0012AxxxxM04A00

### Selection tables for motor cables

MDSKS motor  
MDSKS071-33

			
	Extension cable	Connection cable	
<b>(4 × 1.0 + (2 × 0.5))</b>			
	 -  -  EYP0010VxxxxM01P04  EYP0010VxxxxM04P04	 -  EYP0010AxxxxM01A00  -  EYP0010AxxxxM04A00	
<b>(4 × 1.5 + (2 × 0.5))</b>			
	 EYP0004VxxxxM01P04  EYP0004VxxxxM04P04  EYP0011VxxxxM01P04  EYP0011VxxxxM04P04	 EYP0004AxxxxM01A00  EYP0011AxxxxM01A00  EYP0004AxxxxM04A00  EYP0011AxxxxM04A00	
<b>(4 × 2.5 + (2 × 0.5))</b>			
	 EYP0005VxxxxM01P04  EYP0005VxxxxM04P04  EYP0012VxxxxM01P04  EYP0012VxxxxM04P04	 EYP0005AxxxxM01A00  EYP0012AxxxxM01A00  EYP0005AxxxxM04A00  EYP0012AxxxxM04A00	

## Motors with terminal boxes

						
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	
MDSKS071-33	(4 × 1.0 + (2 × 0.5))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 1.5 + (2 × 0.5))					
	(4 × 2.5 + (2 × 0.5))					

			
		Connection cable	
	(4 × 1.0 + (2 × 0.5))		
	 EYP0010YxxxxA00A00		
	(4 × 1.5 + (2 × 0.5))		
	 EYP0004YxxxxA00A00		
	 EYP0011YxxxxA00A00		
	(4 × 2.5 + (2 × 0.5))		
	 EYP0005YxxxxA00A00		
	 EYP0012YxxxxA00A00		

The EYP0005... system cable can only be connected to the motor using an enlarger.  
The EYP0012... system cable can only be connected to the motor using an enlarger.

					
	Extension cable		Connection cable		
	<b>(4 × 1.0 + (2 × 0.5))</b>				
	 -		 -		
	 EYP0010VxxxxA00P04		 EYP0010AxxxxM01A00		
			 -		
			 EYP0010AxxxxM04A00		
	<b>(4 × 1.5 + (2 × 0.5))</b>				
	 EYP0004VxxxxA00P04		 EYP0004AxxxxM01A00		
	 EYP0011VxxxxA00P04		 EYP0011AxxxxM01A00		
			 EYP0004AxxxxM04A00		
			 EYP0011AxxxxM04A00		
	<b>(4 × 2.5 + (2 × 0.5))</b>				
	 EYP0005VxxxxA00P04		 EYP0005AxxxxM01A00		
	 EYP0012VxxxxA00P04		 EYP0012AxxxxM01A00		
			 EYP0005AxxxxM04A00		
			 EYP0012AxxxxM04A00		

The EYP0005... system cable can only be connected to the motor using an enlarger.

The EYP0012... system cable can only be connected to the motor using an enlarger.

3.6 MQA motor

3.6.1 MQA20L14

Motors with plug connections

							
		9300 servo	9400	ECS			
MQA20L14-...2Fxx	(4 × 4.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25			
	(4 × 6.0 + (2 × 1.0))						
	(4 × 10.0 + (2 × 1.0))						
	(4 × 16.0 + (2 × 1.0))						

			
		Connection cable	
MQA20L14-...2Fxx	(4 × 4.0 + (2 × 1.0))	 -	
		 EYP0013AxxxxM02A00	
	(4 × 6.0 + (2 × 1.0))	 -	
		 EYP0013AxxxxM05A00	
	(4 × 6.0 + (2 × 1.0))	 EYP0007AxxxxM03A00	
		 EYP0014AxxxxM03A00	
		 EYP0007AxxxxM06A00	
		 EYP0014AxxxxM06A00	
	(4 × 10.0 + (2 × 1.0))	 EYP0008AxxxxM03A00	
		 EYP0015AxxxxM03A00	
		 EYP0008AxxxxM06A00	
		 EYP0015AxxxxM06A00	
	(4 × 16.0 + (2 × 1.0))	 EYP0009AxxxxM03A00	
		 EYP0016AxxxxM03A00	
		 EYP0009AxxxxM06A00	
		 EYP0016AxxxxM06A00	

### Selection tables for motor cables

MQA motor  
MQA20L14

			
	Extension cable	Connection cable	
<b>(4 × 4.0 + (2 × 1.0))</b>			
 -	 -  EYP0013AxxxxM02A00	 -  EYP0013AxxxxM05A00	
 EYP0013VxxxxM05P05			
<b>(4 × 6.0 + (2 × 1.0))</b>			
 EYP0007VxxxxM06P06	 EYP0007AxxxxM03A00  EYP0014AxxxxM03A00	 EYP0007AxxxxM06A00  EYP0014AxxxxM06A00	
 EYP0014VxxxxM06P06			
<b>(4 × 10.0 + (2 × 1.0))</b>			
 EYP0008VxxxxM06P06	 EYP0008AxxxxM03A00  EYP0015AxxxxM03A00	 EYP0008AxxxxM06A00  EYP0015AxxxxM06A00	
 EYP0015VxxxxM06P06			
<b>(4 × 16.0 + (2 × 1.0))</b>			
 EYP0009VxxxxM06P06	 EYP0009AxxxxM03A00  EYP0016AxxxxM03A00	 EYP0009AxxxxM06A00  EYP0016AxxxxM06A00	
 EYP0016VxxxxM06P06			

Motors with terminal boxes

							
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS		
		(4 × 4.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		
		(4 × 6.0 + (2 × 1.0))					
(4 × 10.0 + (2 × 1.0))							

			
	<b>Connection cable</b>		
	(4 × 4.0 + (2 × 1.0))		
	—		
		EYP0013YxxxxA00A00	
	(4 × 6.0 + (2 × 1.0))		
	—		
		EYP0007YxxxxA00A00	
		EYP0014YxxxxA00A00	
	(4 × 10.0 + (2 × 1.0))		
—			
	EYP0008YxxxxA00A00		
	EYP0015YxxxxA00A00		

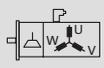
					
	<b>Extension cable</b>			<b>Connection cable</b>	
	(4 × 4.0 + (2 × 1.0))				
	—			—	
		EYP0013VxxxxA00P05			EYP0013AxxxxM02A00
	(4 × 6.0 + (2 × 1.0))				
	—			—	
		EYP0007VxxxxA00P06			EYP0007AxxxxM03A00
		EYP0014VxxxxA00P06			EYP0014AxxxxM03A00
	(4 × 10.0 + (2 × 1.0))				
	—			—	
		EYP0008VxxxxA00P06			EYP0008AxxxxM06A00
		EYP0015VxxxxA00P06			EYP0015AxxxxM06A00

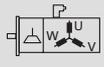
### 3 Selection tables for motor cables

MQA motor  
MQA20L29

#### 3.6.2 MQA20L29

##### Motors with plug connections

						
		 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>	
MQA20L29-...2Fxx	$(4 \times 10.0 + (2 \times 1.0))$ $(4 \times 16.0 + (2 \times 1.0))$	U, V, W, PE	X105, X107	X24, X25		

			
	<b>Connection cable</b>		
$(4 \times 10.0 + (2 \times 1.0))$			
 -			
 EYP0015AxxxxM03A00			
 -			
 EYP0015AxxxxM06A00			
<hr/>			
$(4 \times 16.0 + (2 \times 1.0))$			
 EYP0009AxxxxM03A00			
 EYP0016AxxxxM03A00			
 EYP0009AxxxxM06A00			
 EYP0016AxxxxM06A00			

			
	<b>Extension cable</b>	<b>Connection cable</b>	
$(4 \times 10.0 + (2 \times 1.0))$			
 -		 -	
 EYP0015VxxxxM06P06		 EYP0015AxxxxM03A00	
		 -	
		 EYP0015AxxxxM06A00	
<hr/>			
$(4 \times 16.0 + (2 \times 1.0))$			
 EYP0009VxxxxM06P06		 EYP0009AxxxxM03A00	
 EYP0016VxxxxM06P06		 EYP0016AxxxxM03A00	
		 EYP0009AxxxxM06A00	
		 EYP0016AxxxxM06A00	

## Motors with terminal boxes

						
		 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>	
MQA20L29-...2Fxx	$(4 \times 10.0 + (2 \times 1.0))$ $(4 \times 16.0 + (2 \times 1.0))$	U, V, W, PE	X105, X107	X24, X25		

		
$(4 \times 10.0 + (2 \times 1.0))$		
 -		
 EYP0015YxxxxA00A00		
$(4 \times 16.0 + (2 \times 1.0))$		
 EYP0009YxxxxA00A00		
 EYP0016YxxxxA00A00		

The EYP0009... system cable can only be connected to the motor using an enlarger.  
 The EYP0016... system cable can only be connected to the motor using an enlarger.

			
$(4 \times 10.0 + (2 \times 1.0))$			
 -		 -	
 EYP0015VxxxxA00P06		 EYP0015AxxxxM03A00	
		 -	
		 EYP0015AxxxxM06A00	
$(4 \times 16.0 + (2 \times 1.0))$			
 EYP0009VxxxxA00P06		 EYP0009AxxxxM03A00	
		 EYP0016AxxxxM03A00	
		 EYP0009AxxxxM06A00	
 EYP0016VxxxxA00P06		 EYP0016AxxxxM06A00	

The EYP0009... system cable can only be connected to the motor using an enlarger.  
 The EYP0016... system cable can only be connected to the motor using an enlarger.

### 3 Selection tables for motor cables

MQA motor  
MQA22P08

#### 3.6.3 MQA22P08

##### Motors with terminal boxes

						
		9300 servo	9400	ECS		
MQA22P08-...2Fxx	(4 × 4.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		
	(4 × 6.0 + (2 × 1.0))					
	(4 × 10.0 + (2 × 1.0))					
	(4 × 16.0 + (2 × 1.0))					

			
	Connection cable		
	(4 × 4.0 + (2 × 1.0))	— —	
		EYP0013YxxxxA00A00	
	(4 × 6.0 + (2 × 1.0))	— —	
		EYP0014YxxxxA00A00	
	(4 × 10.0 + (2 × 1.0))	— —	
		EYP0015YxxxxA00A00	
	(4 × 16.0 + (2 × 1.0))	— —	
		EYP0016YxxxxA00A00	

All system cables listed can only be connected using a reducer.

			
	Extension cable	Connection cable	
	<b>(4 × 4.0 + (2 × 1.0))</b>		
	 -	 -	
	 EYP0013VxxxxA00P05	 EYP0013AxxxxM02A00	
		 -	
		 EYP0013AxxxxM05A00	
	<b>(4 × 6.0 + (2 × 1.0))</b>		
	 EYP0007VxxxxA00P06	 EYP0007AxxxxM03A00	
		 EYP0014AxxxxM03A00	
	 EYP0014VxxxxA00P06	 EYP0007AxxxxM06A00	
		 EYP0014AxxxxM06A00	
	<b>(4 × 10.0 + (2 × 1.0))</b>		
	 EYP0008VxxxxA00P06	 EYP0008AxxxxM03A00	
		 EYP0015AxxxxM03A00	
	 EYP0015VxxxxA00P06	 EYP0008AxxxxM06A00	
		 EYP0015AxxxxM06A00	
	<b>(4 × 16.0 + (2 × 1.0))</b>		
	 EYP0009VxxxxA00P06	 EYP0009AxxxxM03A00	
		 EYP0016AxxxxM03A00	
	 EYP0016VxxxxA00P06	 EYP0009AxxxxM06A00	
		 EYP0016AxxxxM06A00	

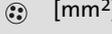
All system cables listed can only be connected using a reducer.

### 3 Selection tables for motor cables

MQA motor  
MQA22P14

#### 3.6.4 MQA22P14

##### Motors with terminal boxes

						
		 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>	
MQA22P14-...2Fxx	$(4 \times 10.0 + (2 \times 1.0))$ $(4 \times 16.0 + (2 \times 1.0))$	U, V, W, PE	X105, X107	X24, X25		

			
	<b>Connection cable</b>		
	$(4 \times 10.0 + (2 \times 1.0))$		
	 -  EYP0015YxxxxA00A00		
	$(4 \times 16.0 + (2 \times 1.0))$		
	 EYP0009YxxxxA00A00  EYP0016YxxxxA00A00		

			
	<b>Extension cable</b>	<b>Connection cable</b>	
	$(4 \times 10.0 + (2 \times 1.0))$		
	 -  EYP0015VxxxxA00P06	 -  EYP0015AxxxxM03A00  -  EYP0015AxxxxM06A00	
	$(4 \times 16.0 + (2 \times 1.0))$		
	 EYP0009VxxxxA00P06  EYP0016VxxxxA00P06	 EYP0009AxxxxM03A00  EYP0016AxxxxM03A00  EYP0009AxxxxM06A00  EYP0016AxxxxM06A00	

3.6.5 MQA26T05

Motors with terminal boxes

						
		 [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>	
MQA26T05-...2Fxx	(4 × 10.0 + (2 × 1.0)) (4 × 16.0 + (2 × 1.0))	U, V, W, PE	X105, X107	X24, X25		

			
	<b>Connection cable</b>		
	(4 × 10.0 + (2 × 1.0))		
	 -		
	 EYP0015YxxxxA00A00		
	(4 × 16.0 + (2 × 1.0))		
	 EYP0009YxxxxA00A00		
	 EYP0016YxxxxA00A00		

Die EYP0009... system cable can only be connected to the motor using a reducer.  
 Die EYP0015... system cable can only be connected to the motor using a reducer.  
 Die EYP0016... system cable can only be connected to the motor using a reducer.

					
	<b>Extension cable</b>		<b>Connection cable</b>		
	(4 × 10.0 + (2 × 1.0))				
	 -		 -		
	 EYP0015VxxxxA00P06		 EYP0015AxxxxM03A00		
			 -		
			 EYP0015AxxxxM06A00		
	(4 × 16.0 + (2 × 1.0))				
	 EYP0009VxxxxA00P06		 EYP0009AxxxxM03A00		
			 EYP0016AxxxxM03A00		
			 EYP0009AxxxxM06A00		
	 EYP0016VxxxxA00P06		 EYP0016AxxxxM06A00		

Die EYP0009... system cable can only be connected to the motor using a reducer.  
 Die EYP0015... system cable can only be connected to the motor using a reducer.  
 Die EYP0016... system cable can only be connected to the motor using a reducer.

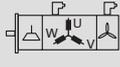
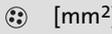
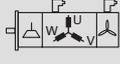
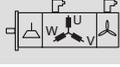
## 4 Selection tables for fan cables

### MCS motor

## 4 Selection tables for blower cables

### 4.1 MCS motor

#### 1-phase fan with plug connection

			
	 [mm <sup>2</sup> ] 5 × 1.0		
MCS...Fxx			
			
	<b>Connection cable</b>		
	5 × 1.0		
		EYL0001AxxxxL02A00	
		EYL0002AxxxxL02A00	
		EYL0001AxxxxL04A00	
	EYL0002AxxxxL04A00		
			
	<b>Extension cable</b>		
	5 × 1.0		
		EYL0001VxxxxL02J04	
		EYL0001VxxxxL04J04	
		EYL0002VxxxxL02J04	
		EYL0002VxxxxL04J04	
		EYL0001AxxxxL02A00	
		EYL0002AxxxxL02A00	
		EYL0001AxxxxL04A00	
	EYL0002AxxxxL04A00		

4.2 MCA motor

1-phase fan with plug connection

	⊙ [mm <sup>2</sup> ]	
MCA...Fxx	5 × 1.0	

	<b>Connection cable</b>	
	5 × 1.0	
	EYL0001AxxxxL02A00	
	EYL0002AxxxxL02A00	
	EYL0001AxxxxL04A00	
	EYL0002AxxxxL04A00	

	<b>Extension cable</b>	<b>Connection cable</b>	
	5 × 1.0		
	EYL0001VxxxxL02J04	EYL0001AxxxxL02A00	
	EYL0001VxxxxL04J04	EYL0002AxxxxL02A00	
	EYL0002VxxxxL02J04	EYL0001AxxxxL04A00	
	EYL0002VxxxxL04J04	EYL0002AxxxxL04A00	

1-phase fan with terminal box

	⊙ [mm <sup>2</sup> ]	
MCA...Fxx	5 × 1.0	

	<b>Connection cable</b>	
	5 × 1.0	
	EYL0001YxxxxA00A00	
	EYL0002YxxxxA00A00	

	<b>Extension cable</b>	<b>Connection cable</b>	
	5 × 1.0		
	EYL0001VxxxxA00J04	EYL0001AxxxxL02A00	
		EYL0002AxxxxL02A00	
		EYL0001AxxxxL04A00	
	EYL0002VxxxxA00J04	EYL0002AxxxxL04A00	

## 4 Selection tables for fan cables

### MDFKS motor

#### 4.3 MDFKS motor

##### 1-phase fan with plug connection

	⊙ [mm <sup>2</sup> ]	
MDFKS...	5 × 1.0	

	<b>Connection cable</b>	
	5 × 1.0	
	EYL0001AxxxxL01A00	
	EYL0002AxxxxL01A00	
	EYL0001AxxxxL03A00	
	EYL0002AxxxxL03A00	

	<b>Extension cable</b>	<b>Connection cable</b>	
	5 × 1.0		
	EYL0001VxxxxL01J03	EYL0001AxxxxL01A00	
	EYL0001VxxxxL03J03	EYL0002AxxxxL01A00	
	EYL0002VxxxxL01J03	EYL0001AxxxxL03A00	
	EYL0002VxxxxL03J03	EYL0002AxxxxL03A00	

##### 1-phase fan with terminal box

	⊙ [mm <sup>2</sup> ]	
MDFKS...	5 × 1.0	

	<b>Connection cable</b>	
	5 × 1.0	
	EYL0001YxxxxA00A00	
	EYL0002YxxxxA00A00	

	<b>Extension cable</b>	<b>Connection cable</b>	
	5 × 1.0		
	EYL0001VxxxxA00J03	EYL0001AxxxxL01A00	
		EYL0002AxxxxL01A00	
		EYL0001AxxxxL03A00	
	EYL0002VxxxxA00J03	EYL0002AxxxxL03A00	

4.4 MDFMA motor

1-phase fan with plug connection

	⊙ [mm <sup>2</sup> ]	
MDFMA...	5 × 1.0	

	<b>Connection cable</b>	
	5 × 1.0	
	EYL0001AxxxxL02A00	
	EYL0002AxxxxL02A00	
	EYL0001AxxxxL04A00	
	EYL0002AxxxxL04A00	

	<b>Extension cable</b>	<b>Connection cable</b>	
	5 × 1.0		
	EYL0001VxxxxL02J04	EYL0001AxxxxL02A00	
	EYL0001VxxxxL04J04	EYL0002AxxxxL02A00	
	EYL0002VxxxxL02J04	EYL0001AxxxxL04A00	
	EYL0002VxxxxL04J04	EYL0002AxxxxL04A00	

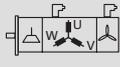
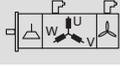
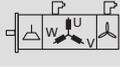
1-phase fan with terminal box

	⊙ [mm <sup>2</sup> ]	
MDFMA...	5 × 1.0	

	<b>Connection cable</b>	
	5 × 1.0	
	EYL0001YxxxxA00A00	
	EYL0002YxxxxA00A00	

	<b>Extension cable</b>	<b>Connection cable</b>	
	5 × 1.0		
	EYL0001VxxxxA00J04	EYL0001AxxxxL02A00	
		EYL0002AxxxxL02A00	
		EYL0001AxxxxL04A00	
	EYL0002VxxxxA00J04	EYL0002AxxxxL04A00	

### 3-phase fan with plug connection

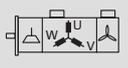
			
	 [mm <sup>2</sup> ] 5 × 1.0		
MDFMA...			
			
	<b>Connection cable</b>		
	5 × 1.0		
	 EYL0001AxxxxL05A00		
	 EYL0002AxxxxL05A00		
 EYL0001AxxxxL06A00			
 EYL0002AxxxxL06A00			
			
	<b>Extension cable</b>		
	5 × 1.0		
	 EYL0001VxxxxL05J05		
	 EYL0001VxxxxL06J05		
	 EYL0002VxxxxL05J05		
	 EYL0002VxxxxL06J05		
	 EYL0001AxxxxL05A00		
	 EYL0002AxxxxL05A00		
 EYL0001AxxxxL06A00			
 EYL0002AxxxxL06A00			

### 3-phase fan with terminal box

			
	 [mm <sup>2</sup> ] 5 × 1.0		
MDFMA...			
			
	<b>Connection cable</b>		
	5 × 1.0		
 EYL0001YxxxxA00A00			
 EYL0002YxxxxA00A00			
			
	<b>Extension cable</b>		
	5 × 1.0		
	 EYL0001VxxxxA00J05		
	 EYL0002VxxxxA00J05		
	 EYL0001AxxxxL05A00		
	 EYL0002AxxxxL05A00		
 EYL0001AxxxxL06A00			
 EYL0002AxxxxL06A00			

4.5 MDFQA motor

3-phase fan with terminal box

			
	 [mm <sup>2</sup> ]		
MDFQA...	5 × 1.0		
			
	<b>Connection cable</b>		
	5 × 1.0		
	 EYL0001YxxxxA00A00  EYL0002YxxxxA00A00		
			
	<b>Extension cable</b>		
	5 × 1.0		
	 EYL0001VxxxxA00J05  EYL0002VxxxxA00J05	 EYL0001AxxxxL05A00  EYL0002AxxxxL05A00  EYL0001AxxxxL06A00  EYL0002AxxxxL06A00	

## 5 Selection tables for feedback cables

### Resolver cables

## 5 Selection tables for feedback cables

### 5.1 Resolver cables

#### Feedbacks with plug connections

							
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	9300 vector	8200 vector
RSx	3 (2 × 0.14) + (3 × 0.14)	X7	X7	X7	–	–	–

			
	Connection cable		
	 EYF0017AxxxxF01S01		9300 servo, ECS
	 EYF0020AxxxxF01S04		
	 EYF0017AxxxxF05S01		
	 EYF0020AxxxxF05S04		
	 EYF0017AxxxxF01S02		9400
	 EYF0020AxxxxF01S05		
	 EYF0017AxxxxF05S02		
	 EYF0020AxxxxF05S05		

			
	Extension cable	Connection cable	
	 EYF0017VxxxxF01G06	 EYF0017AxxxxF01S01	9300 servo, ECS
	 EYF0020VxxxxF01G06	 EYF0020AxxxxF01S04	
	 EYF0017VxxxxF05G06	 EYF0017AxxxxF05S01	
	 EYF0020VxxxxF05G06	 EYF0020AxxxxF05S04	
	 EYF0017VxxxxF01G06	 EYF0017AxxxxF01S02	9400
	 EYF0020VxxxxF01G06	 EYF0020AxxxxF01S05	
	 EYF0017VxxxxF05G06	 EYF0017AxxxxF05S02	
	 EYF0020VxxxxF05G06	 EYF0020AxxxxF05S05	

Feedbacks with terminal boxes

							
	⊕ [mm <sup>2</sup> ]	<b>9300 servo</b>	<b>9400</b>	<b>ECS</b>	<b>9300 vector</b>	<b>8200 vector</b>	<b>8400</b>
RSx	3 (2 × 0.14) + (3 × 0.14)	X7	X7	X7	–	–	–

		
	<b>Connection cable</b>	
	 EYF0017AxxxxA00S01  EYF0020AxxxxA00S04	9300 servo, ECS
	 EYF0017AxxxxA00S02  EYF0020AxxxxA00S05	9400

			
	<b>Extension cable</b>	<b>Connection cable</b>	
	 EYF0017VxxxxA00G06  EYF0020VxxxxA00G06	 EYF0017AxxxxF01S01  EYF0020AxxxxF01S04  EYF0017AxxxxF05S01  EYF0020AxxxxF05S04	9300 servo, ECS
	 EYF0017VxxxxA00G06  EYF0020VxxxxA00G06	 EYF0017AxxxxF01S02  EYF0020AxxxxF01S05  EYF0017AxxxxF05S02  EYF0020AxxxxF05S05	9400

## 5

# Selection tables for feedback cables

Encoder cables

TTL incremental encoder and ITD22 sin/cos encoder

## 5.2

### Encoder cables

#### 5.2.1

#### TTL incremental encoder and ITD22 sin/cos encoder

#### Feedbacks with plug connections

							
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	9300 vector	8200 vector
TTL 512 TTL 1024 TTL 4096 ITD 21 ITD 22	4 (2 × 0.14) + (2 × 1.0)	X8	X8 X9 1)	X8	X8	–	–

<sup>1)</sup> Connection via the E94AYFLF module is also possible.

			
		Connection cable	
	 EYF0018AxxxxF02W02  EYF0019AxxxxF02W04  EYF0018AxxxxF06W02  EYF0019AxxxxF06W04	9300 servo, ECS, 9300 vector	
	 EYF0018AxxxxF02S03  EYF0019AxxxxF02S03  EYF0018AxxxxF06S03  EYF0019AxxxxF06S03	9400	

				
			Extension cable	Connection cable
	 EYF0018VxxxxF02G07  EYF0018VxxxxF06G07  EYF0019VxxxxF02G07  EYF0019VxxxxF06G07	 EYF0018AxxxxF02W02  EYF0019AxxxxF02W04  EYF0018AxxxxF06W02  EYF0019AxxxxF06W04	9300 servo, ECS, 9300 vector	
	 EYF0018VxxxxF02G07  EYF0018VxxxxF06G07  EYF0019VxxxxF02G07  EYF0019VxxxxF06G07	 EYF0018AxxxxF02S03  EYF0019AxxxxF02S03  EYF0018AxxxxF06S03  EYF0019AxxxxF06S03	9400	

## Feedbacks with terminal boxes

							
	⊙ [mm <sup>2</sup> ]	9300 servo	9400	ECS	9300 vector	8200 vector	8400
TTL 512 TTL 1024 TTL 4096 ITD 21 ITD 22	4 (2 × 0.14) + (2 × 1.0)	X8	X8 X9 <sup>1)</sup>	X8	X8	-	-

<sup>1)</sup> Connection via the E94AYFLF module is also possible.

		
	<b>Connection cable</b>	
	 EYF0018AxxxxA00W02  EYF0019AxxxxA00W04	9300 servo, ECS, 9300 vector
	 EYF0018AxxxxA00S03  EYF0019AxxxxA00S03	9400

			
	<b>Extension cable</b>	<b>Connection cable</b>	
	 EYF0018VxxxxA00G07  EYF0019VxxxxA00G07	 EYF0018AxxxxF02W02  EYF0019AxxxxF02W04  EYF0018AxxxxF06W02  EYF0019AxxxxF06W04	9300 servo, ECS, 9300 vector
	 EYF0018VxxxxA00G07  EYF0019VxxxxA00G07	 EYF0018AxxxxF02S03  EYF0019AxxxxF02S03  EYF0018AxxxxF06S03  EYF0019AxxxxF06S03	9400

## 5 Selection tables for feedback cables

Encoder cables  
TTL CDD50 incremental encoder

### 5.2.2 TTL CDD50 incremental encoder

#### Feedbacks with plug connections

							
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	9300 vector	8200 vector
CDD50	4 (2 × 0.14) + (2 × 1.0)	X8	–	X8	X8	–	–

			
		Connection cable	
	 EYF0018AxxxxF02W02  EYF0019AxxxxF02W04  EYF0018AxxxxF06W02  EYF0019AxxxxF06W04	9300 servo, ECS, 9300 vector	

				
			Extension cable	Connection cable
	 EYF0018VxxxxF02G07  EYF0018VxxxxF06G07  EYF0019VxxxxF02G07  EYF0019VxxxxF06G07	 EYF0018AxxxxF02W02  EYF0019AxxxxF02W04  EYF0018AxxxxF06W02  EYF0019AxxxxF06W04	9300 servo, ECS, 9300 vector	

#### Feedbacks with terminal boxes

							
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	9300 vector	8200 vector
CDD50	4 (2 × 0.14) + (2 × 1.0)	X8	–	X8	X8	–	–

			
		Connection cable	
	 EYF0018AxxxxA00W02  EYF0019AxxxxA00W04	9300 servo, ECS, 9300 vector	

				
			Extension cable	Connection cable
	 EYF0018VxxxxA00G07  EYF0019VxxxxA00G07	 EYF0018AxxxxF02W02  EYF0019AxxxxF02W04  EYF0018AxxxxF06W02  EYF0019AxxxxF06W04	9300 servo, ECS, 9300 vector	

## 5.2.3 HTL incremental encoder

### Feedbacks with plug connections

							
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	9300 vector	8200 vector
HTL 512 HTL 1024 HTL 2048	4 (2 × 0.14) + (2 × 1.0)	–	–	–	X8	X3 <sup>1)</sup>	X4, X5 <sup>2)</sup>

<sup>1)</sup> Connection via the E82ZAFSC module or the E82ZAFAC module is possible.

<sup>2)</sup> Connection to 8400 Stateline (X4) / Highline (X5) via spring terminal.

			
			Connection cable
	 EYF0018AxxxxF02W02  EYF0019AxxxxF02W04  EYF0018AxxxxF06W02  EYF0019AxxxxF06W04	9300 vector	
	 EYF0018AxxxxF02A00  EYF0019AxxxxF02A00  EYF0018AxxxxF06A00  EYF0019AxxxxF06A00		8200 vector 8400

				
				Extension cable
	 EYF0018VxxxxF02G07  EYF0018VxxxxF06G07  EYF0019VxxxxF02G07  EYF0019VxxxxF06G07	 EYF0018AxxxxF02W02  EYF0019AxxxxF02W04  EYF0018AxxxxF06W02  EYF0019AxxxxF06W04	9300 vector	
	 EYF0018VxxxxF02G07  EYF0018VxxxxF06G07  EYF0019VxxxxF02G07  EYF0019VxxxxF06G07	 EYF0018AxxxxF02A00  EYF0019AxxxxF02A00  EYF0018AxxxxF06A00  EYF0019AxxxxF06A00		8200 vector 8400

## Feedbacks with terminal boxes

							
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	9300 vector	8200 vector
HTL 512 HTL 1024 HTL 2048	4 (2 × 0.14) + (2 × 1.0)	–	–	–	X8	X3 <sup>1)</sup>	X4, X5 <sup>2)</sup>

<sup>1)</sup> Connection via the E82ZAFSC module or the E82ZAFAC module is possible.

<sup>2)</sup> Connection to 8400 Stateline (X4) / Highline (X5) via spring terminal.

		
	 EYF0018AxxxxA00W02  EYF0019AxxxxA00W04	9300 vector
	 EYF0018YxxxxA00A00  EYF0019YxxxxA00A00	8200 vector 8400

			
	 EYF0018VxxxxA00G07  EYF0019VxxxxA00G07	 EYF0018AxxxxF02W02  EYF0019AxxxxF02W04  EYF0018AxxxxF06W02  EYF0019AxxxxF06W04	9300 vector
	 EYF0018VxxxxA00G07  EYF0019VxxxxA00G07	 EYF0018AxxxxF02A00  EYF0019AxxxxF02A00  EYF0018AxxxxF06A00  EYF0019AxxxxF06A00	8200 vector 8400

5.2.4 Sin/cos encoder with Hiperface interface

Feedbacks with plug connections

							
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	9300 vector	8200 vector
SRS50 SRM50	4 (2 × 0.14) + (2 × 1.0)	X8	X8	X8	–	X3 <sup>1)</sup>	–

<sup>1)</sup> Connection via the E82ZAFSC module or the E82ZAFAC module is possible.

			
			Connection cable
	 EYF0018AxxxxF02W02  EYF0019AxxxxF02W04	9300 servo, ECS,	
	 EYF0018AxxxxF06W02  EYF0019AxxxxF06W04		
	 EYF0018AxxxxF02S03  EYF0019AxxxxF02S03		9400
	 EYF0018AxxxxF06S03  EYF0019AxxxxF06S03		
 EYF0018AxxxxF02A00  EYF0019AxxxxF02A00	8200 vector		
 EYF0018AxxxxF06A00  EYF0019AxxxxF06A00			

## Selection tables for feedback cables

Encoder cables

Sin/cos encoder with Hiperface interface

			
	Extension cable	Connection cable	
	 EYF0018VxxxxF02G07	 EYF0018AxxxxF02W02	9300 servo, ECS,
	 EYF0018VxxxxF06G07	 EYF0019AxxxxF02W04	
	 EYF0019VxxxxF02G07	 EYF0018AxxxxF06W02	
	 EYF0019VxxxxF06G07	 EYF0019AxxxxF06W04	
	 EYF0018VxxxxF02G07	 EYF0018AxxxxF02S03	9400
	 EYF0018VxxxxF06G07	 EYF0019AxxxxF02S03	
	 EYF0019VxxxxF02G07	 EYF0018AxxxxF06S03	
	 EYF0019VxxxxF06G07	 EYF0019AxxxxF06S03	
 EYF0018VxxxxF02G07	 EYF0018AxxxxF02A00	8200 vector	
 EYF0018VxxxxF06G07	 EYF0019AxxxxF02A00		
 EYF0019VxxxxF02G07	 EYF0018AxxxxF06A00		
 EYF0019VxxxxF06G07	 EYF0019AxxxxF06A00		

## Feedbacks with terminal boxes

							
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	9300 vector	8200 vector
SRS50 SRM50	4 (2 × 0.14) + (2 × 1.0)	X8	X8	X8	–	X3 <sup>1)</sup>	–

<sup>1)</sup> Connection via the E82ZAFSC module or the E82ZAFAC module is possible.

		
	 EYF0018AxxxxA00W02  EYF0019AxxxxA00W04	9300 servo, ECS,
	 EYF0018AxxxxA00S03  EYF0019AxxxxA00S03	9400
	 EYF0018YxxxxA00A00  EYF0019YxxxxA00A00	8200 vector

			
	 EYF0018VxxxxA00G07  EYF0019VxxxxA00G07	 EYF0018AxxxxF02W02  EYF0019AxxxxF02W04  EYF0018AxxxxF06W02  EYF0019AxxxxF06W04	9300 servo, ECS,
	 EYF0018VxxxxA00G07  EYF0019VxxxxA00G07	 EYF0018AxxxxF02S03  EYF0019AxxxxF02S03  EYF0018AxxxxF06S03  EYF0019AxxxxF06S03	9400
	 EYF0018VxxxxA00G07  EYF0019VxxxxA00G07	 EYF0018AxxxxF02A00  EYF0019AxxxxF02A00  EYF0018AxxxxF06A00  EYF0019AxxxxF06A00	8200 vector

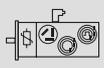
## 5 Selection tables for feedback cables

Encoder cables

Sin/cos encoder with EnDat interface (2.1)

### 5.2.5 Sin/cos encoder with EnDat interface (2.1)

#### Feedbacks with plug connections

							
		9300 servo	9400	ECS	9300 vector	8200 vector	8400
ECN2048 EQI0032 EQN2048	 [mm <sup>2</sup> ] $3 (2 \times 0.14) + (4 \times 0.14) + 2 (2 \times 0.5)$	–	X8	–	–	–	–

			
	Connection cable		
	 EYF0021AxxxxF03S03  –		9400
	 EYF0021AxxxxF07S03  –		

			
	Extension cable	Connection cable	
	 EYF0021VxxxxF03G08  EYF0021VxxxxF07G08	 EYF0021AxxxxF03S03  –	9400
	 EYF0022VxxxxF03G08  EYF0022VxxxxF07G08	 EYF0021AxxxxF07S03  –	

Feedbacks with terminal boxes

							
		9300 servo	9400	ECS	9300 vector	8200 vector	8400
ECN2048 EQI0032 EQN2048	☺ [mm <sup>2</sup> ] 3 (2 × 0.14) + (4 × 0.14) + 2 (2 × 0.5)	–	X8	–	–	–	–

			
	Connection cable		
	 EYF0021AxxxxA00S03		9400
	 –		

			
	Extension cable	Connection cable	
	 EYF0021VxxxxA00G08	 EYF0021AxxxxF03S03	9400
		 –	
	 EYF0022VxxxxA00G08	 EYF0021AxxxxF07S03	
		 –	

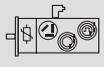
## 5 Selection tables for feedback cables

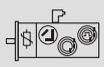
Encoder cables

TTL Renco R35i incremental encoder

### 5.2.6 TTL Renco R35i incremental encoder

#### Feedbacks with plug connections

							
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	9300 vector	8200 vector
R35i	$5 (2 \times 0.14) + (4 \times 0.14) + (2 \times 0.5)$	–	–	–	–	–	P4

			
		Connection cable	
	 EYF0023AxxxxF04S06  –  EYF0023AxxxxF08S06  –	94P	

				
		Extension cable	Connection cable	
	 EYF0023VxxxxF04G09  EYF0023VxxxxF08G09  EYF0024VxxxxF04G09  EYF0024VxxxxF08G09	 EYF0023AxxxxF04S06  –  EYF0023AxxxxF08S06  –	94P	

#### Feedbacks with terminal boxes

							
		 [mm <sup>2</sup> ]	9300 servo	9400	ECS	9300 vector	8200 vector
R35i	$5 (2 \times 0.14) + (4 \times 0.14) + (2 \times 0.5)$	–	–	–	–	–	P4

			
		Connection cable	
	 EYF0023AxxxxA00S06  –	94P	

				
		Extension cable	Connection cable	
	 EYF0023VxxxxA00G09  EYF0024VxxxxA00G09	 EYF0023AxxxxF04S06  –  EYF0023AxxxxF08S06  –	94P	

## 6 Selection tables for digital frequency cables

### 6.1 9300 servo controllers

							
Master	 [mm <sup>2</sup> ]	9300 servo	9400	ECS	9300 vector	8200 vector	EMF 2132IB <sup>1)</sup>
9300 servo, X10	3 (2 × 0.14) + (3 × 0.14)	X9	X9 <sup>2)</sup>	X8	X9	–	

			
	Connection cable		
		EYD0017AxxxxW01S01	9300 servo, 9300 vector, ECS, EMF2132IB
		EYD0017AxxxxW03S01	9400

### 6.2 9400 servo controllers

							
Master	 [mm <sup>2</sup> ]	9300 servo	9400	ECS	9300 vector	8200 vector	EMF 2132IB <sup>1)</sup>
9400, X10 <sup>2)</sup>	3 (2 × 0.14) + (3 × 0.14)	X9	X9 <sup>2)</sup>	X8	X9	–	

			
	Connection cable		
		EYD0017AxxxxW01S02	9300 servo, 9300 vector, ECS, EMF2132IB
		EYD0017AxxxxW03S02	9400

<sup>1)</sup> Digital frequency distributor

<sup>2)</sup> E94AYFLF digital frequency module

## 6 Selection tables for master frequency cables ECS servo controllers

### 6.3 ECS servo controllers

							
Master	 [mm <sup>2</sup> ]	9300 servo	9400	ECS	9300 vector	8200 vector	EMF 2132IB <sup>1)</sup>
ECS, X8	3 (2 × 0.14) + (3 × 0.14)	X9	X9 <sup>2)</sup>	X8	X9	–	

		
	<b>Connection cable</b>	
	 EYD0017AxxxxW01W01	9300 servo, 9300 vector, ECS, EMF2132IB
	 EYD0017AxxxxW03W01	9400

### 6.4 9300 vector frequency inverters

							
Master	 [mm <sup>2</sup> ]	9300 servo	9400	ECS	9300 vector	8200 vector	EMF 2132IB <sup>1)</sup>
9300 vector, X10	3 (2 × 0.14) + (3 × 0.14)	X9	X9 <sup>2)</sup>	X8	X9	–	

		
	<b>Connection cable</b>	
	 EYD0017AxxxxW01S01	9300 servo, 9300 vector, ECS, EMF2132IB
	 EYD0017AxxxxW03S01	9400

<sup>1)</sup> Digital frequency distributor

<sup>2)</sup> E94AYFLdigital frequency module

### 6.5 EMF2132IB digital frequency distributor

							
Master	 [mm <sup>2</sup> ]	9300 servo	9400	ECS	9300 vector	8200 vector	EMF 2132IB <sup>1)</sup>
EMF2132IB <sup>1)</sup>	3 (2 × 0.14) + (3 × 0.14)	X9	X9 <sup>2)</sup>	X8	X9	–	

		
	<b>Connection cable</b>	
	 EYD0017AxxxxW01S01	9300 servo, 9300 vector, ECS, EMF2132IB
	 EYD0017AxxxxW03S01	9400

<sup>1)</sup> Digital frequency distributor

<sup>2)</sup> E94AYFLF digital frequency module

## 7 Spare parts for system cables

### Motor cables

## 7 Spare parts for system cables



### Note!

- ▶ You must specify the EWZ... order number when ordering spare contacts.
  - One packaging unit contains 10 pieces.
- ▶ The tool required to crimp the spare contacts is specified in the mounting instructions for the EWS... connector.

### 7.1 Motor cables

System cable						
	Plug-in connector	Spare contact	System cable	Plug-in connector	Spare contact	
<b>EYP0003...</b>						
EYP0003AxxxxM01A00	EWS0001	EWZ0054	EYP0003YxxxxA00A00	–	–	
EYP0003AxxxxM04A00	EWS1001	EWZ0054	EYP0003YxxxxA00A00	–	–	
EYP0003VxxxxM01P04	EWS0001	EWZ0054	EYP0003YxxxxA00A00	EWS1016	EWZ0059	
EYP0003VxxxxM04P04	EWS1001	EWZ0054	EYP0003YxxxxA00A00	EWS1016	EWZ0059	
EYP0003VxxxxA00P04	–	–	EYP0003YxxxxA00A00	EWS1016	EWZ0059	
EYP0003YxxxxA00A00	–	–	EYP0003YxxxxA00A00	–	–	
<b>EYP0004...</b>						
EYP0004AxxxxM01A00	EWS0001	EWZ0054	EYP0004YxxxxA00A00	–	–	
EYP0004AxxxxM04A00	EWS1001	EWZ0054	EYP0004YxxxxA00A00	–	–	
EYP0004VxxxxM01P04	EWS0001	EWZ0054	EYP0004YxxxxA00A00	EWS1016	EWZ0059	
EYP0004VxxxxM04P04	EWS1001	EWZ0054	EYP0004YxxxxA00A00	EWS1016	EWZ0059	
EYP0004VxxxxA00P04	–	–	EYP0004YxxxxA00A00	EWS1016	EWZ0059	
EYP0004YxxxxA00A00	–	–	EYP0004YxxxxA00A00	–	–	
<b>EYP0005...</b>						
EYP0005AxxxxM01A00	EWS0001	EWZ0054	EYP0005YxxxxA00A00	–	–	
EYP0005AxxxxM04A00	EWS1001	EWZ0054	EYP0005YxxxxA00A00	–	–	
EYP0005VxxxxM01P04	EWS0001	EWZ0054	EYP0005YxxxxA00A00	EWS1016	EWZ0059	
EYP0005VxxxxM04P04	EWS1001	EWZ0054	EYP0005YxxxxA00A00	EWS1016	EWZ0059	
EYP0005VxxxxA00P04	–	–	EYP0005YxxxxA00A00	EWS1016	EWZ0059	
EYP0005AxxxxM02A00	EWS0012	EWZ0054 EWZ0055	EYP0005YxxxxA00A00	–	–	
EYP0005AxxxxM05A00	EWS1012	EWZ0054 EWZ0055	EYP0005YxxxxA00A00	–	–	
EYP0005VxxxxM02P05	EWS0012	EWZ0054 EWZ0055	EYP0005YxxxxA00A00	EWS1014	EWZ0060 EWZ0061	
EYP0005VxxxxM05P05	EWS1012	EWZ0054 EWZ0055	EYP0005YxxxxA00A00	EWS1014	EWZ0060 EWZ0061	
EYP0005VxxxxA00P05	–	–	EYP0005YxxxxA00A00	EWS1014	EWZ0060 EWZ0061	
EYP0005YxxxxA00A00	–	–	EYP0005YxxxxA00A00	–	–	

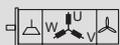
System cable						
	Plug-in connector	Spare contact	System cable	Plug-in connector	Spare contact	
<b>EYP0006...</b>						
EYP0006AxxxxM02A00 	EWS0012	EWZ0054 EWZ0055	EYP0006YxxxxA00A00	—	—	
EYP0006AxxxxM05A00 	EWS1012	EWZ0054 EWZ0055	EYP0006YxxxxA00A00	—	—	
EYP0006VxxxxM05P05 	EWS1012	EWZ0054	EYP0006YxxxxA00A00	EWS1014	EWZ0060	
EYP0006VxxxxM02P05 	EWS0012	EWZ0054 EWZ0055	EYP0006YxxxxA00A00	EWS1014	EWZ0060 EWZ0061	
EYP0006VxxxxM05P05 	EWS1012	EWZ0055	EYP0006YxxxxA00A00	EWS1014	EWZ0061	
EYP0006VxxxxA00P05 	—	—	EYP0006YxxxxA00A00	EWS1014	EWZ0060 EWZ0061	
EYP0006YxxxxA00A00 	—	—	EYP0006YxxxxA00A00	—	—	
<b>EYP0007...</b>						
EYP0007AxxxxM03A00 	EWS0013	EWZ0054 EWZ0056	EYP0007YxxxxA00A00	—	—	
EYP0007AxxxxM06A00 	EWS1013	EWZ0054 EWZ0056	EYP0007YxxxxA00A00	—	—	
EYP0007VxxxxM03P06 	EWS0013	EWZ0054 EWZ0056	EYP0007YxxxxA00A00	EWS1015	EWZ0060 EWZ0062	
EYP0007VxxxxM06P06 	EWS1013	EWZ0054 EWZ0056	EYP0007YxxxxA00A00	EWS1015	EWZ0060 EWZ0062	
EYP0007VxxxxA00P06 	—	—	EYP0007YxxxxA00A00	EWS1015	EWZ0060 EWZ0062	
EYP0007YxxxxA00A00 	—	—	EYP0007YxxxxA00A00	—	—	
<b>EYP0008...</b>						
EYP0008AxxxxM03A00 	EWS0013	EWZ0054 EWZ0056	EYP0008YxxxxA00A00	—	—	
EYP0008AxxxxM06A00 	EWS1013	EWZ0054 EWZ0056	EYP0008YxxxxA00A00	—	—	
EYP0008VxxxxM03P06 	EWS0013	EWZ0054 EWZ0056	EYP0008YxxxxA00A00	EWS1015	EWZ0060 EWZ0062	
EYP0008VxxxxM06P06 	EWS1013	EWZ0054 EWZ0056	EYP0008YxxxxA00A00	EWS1015	EWZ0060 EWZ0062	
EYP0008VxxxxA00P06 	—	—	EYP0008YxxxxA00A00	EWS1015	EWZ0060 EWZ0062	
EYP0008YxxxxA00A00 	—	—	EYP0008YxxxxA00A00	—	—	

System cable						
	Plug-in connector	Spare contact		Plug-in connector	Spare contact	
<b>EYP0009...</b>						
EYP0009AxxxxM03A00 	EWS0013	EWZ0054 EWZ0056	EYP0009YxxxxA00A00	—	—	
EYP0009AxxxxM06A00 	EWS1013	EWZ0054 EWZ0056	EYP0009YxxxxA00A00	—	—	
EYP0009VxxxxM03P06 	EWS0013	EWZ0054 EWZ0056	EYP0009YxxxxA00A00	EWS1015	EWZ0060 EWZ0062	
EYP0009VxxxxM06P06 	EWS1013	EWZ0054 EWZ0056	EYP0009YxxxxA00A00	EWS1015	EWZ0060 EWZ0062	
EYP0009VxxxxA00P06 	—	—	EYP0009YxxxxA00A00	EWS1015	EWZ0060 EWZ0062	
EYP0009YxxxxA00A00 	—	—	EYP0009YxxxxA00A00	—	—	
<b>EYP0010...</b>						
EYP0010AxxxxM01A00 	EWS0001	EWZ0054	EYP0010YxxxxA00A00	—	—	
EYP0010AxxxxM04A00 	EWS1001	EWZ0054	EYP0010YxxxxA00A00	—	—	
EYP0010VxxxxM01P04 	EWS0001	EWZ0054	EYP0010YxxxxA00A00	EWS1016	EWZ0059	
EYP0010VxxxxM04P04 	EWS1001	EWZ0054	EYP0010YxxxxA00A00	EWS1016	EWZ0059	
EYP0010VxxxxA00P04 	—	—	EYP0010YxxxxA00A00	EWS1016	EWZ0059	
EYP0010YxxxxA00A00 	—	—	EYP0010YxxxxA00A00	—	—	
<b>EYP0011...</b>						
EYP0011AxxxxM01A00 	EWS0001	EWZ0054	EYP0011YxxxxA00A00	—	—	
EYP0011AxxxxM04A00 	EWS1001	EWZ0054	EYP0011YxxxxA00A00	—	—	
EYP0011VxxxxM01P04 	EWS0001	EWZ0054	EYP0011YxxxxA00A00	EWS1016	EWZ0059	
EYP0011VxxxxM04P04 	EWS1001	EWZ0054	EYP0011YxxxxA00A00	EWS1016	EWZ0059	
EYP0011VxxxxA00P04 	—	—	EYP0011YxxxxA00A00	EWS1016	EWZ0059	
EYP0011YxxxxA00A00 	—	—	EYP0011YxxxxA00A00	—	—	

System cable						
	Plug-in connector	Spare contact	System cable	Plug-in connector	Spare contact	
<b>EYP0012...</b>						
EYP0012AxxxxM01A00 	EWS0001	EWZ0054	EYP0012YxxxxA00A00	-	-	
EYP0012AxxxxM04A00 	EWS1001	EWZ0054	EYP0012YxxxxA00A00	-	-	
EYP0012VxxxxM01P04 	EWS0001	EWZ0054	EYP0012YxxxxA00A00	EWS1016	EWZ0059	
EYP0012VxxxxM04P04 	EWS1001	EWZ0054	EYP0012YxxxxA00A00	EWS1016	EWZ0059	
EYP0012VxxxxA00P04 	-	-	EYP0012YxxxxA00A00	EWS1016	EWZ0059	
EYP0012YxxxxA00A00 	-	-	EYP0012YxxxxA00A00	-	-	
EYP0012AxxxxM02A00 	EWS0012	EWZ0054 EWZ0055	EYP0012YxxxxA00A00	-	-	
EYP0012AxxxxM05A00 	EWS1012	EWZ0054 EWZ0055	EYP0012YxxxxA00A00	-	-	
EYP0012VxxxxM02P05 	EWS0012	EWZ0054 EWZ0055	EYP0012YxxxxA00A00	EWS1014	EWZ0060 EWZ0061	
EYP0012VxxxxM05P05 	EWS1012	EWZ0054 EWZ0055	EYP0012YxxxxA00A00	EWS1014	EWZ0060 EWZ0061	
EYP0012VxxxxA00P05 	-	-	EYP0012YxxxxA00A00	EWS1014	EWZ0060 EWZ0061	
<b>EYP0013...</b>						
EYP0013AxxxxM02A00 	EWS0012	EWZ0054 EWZ0055	EYP0013YxxxxA00A00	-	-	
EYP0013AxxxxM05A00 	EWS1012	EWZ0054 EWZ0055	EYP0013YxxxxA00A00	-	-	
EYP0013VxxxxM02P05 	EWS0012	EWZ0054 EWZ0055	EYP0013YxxxxA00A00	EWS1014	EWZ0060 EWZ0061	
EYP0013VxxxxM05P05 	EWS1012	EWZ0054 EWZ0055	EYP0013YxxxxA00A00	EWS1014	EWZ0060 EWZ0061	
EYP0013VxxxxA00P05 	-	-	EYP0013YxxxxA00A00	EWS1014	EWZ0060 EWZ0061	
EYP0013YxxxxA00A00 	-	-	EYP0013YxxxxA00A00	-	-	
<b>EYP0014...</b>						
EYP0014AxxxxM03A00 	EWS0013	EWZ0054 EWZ0056	EYP0014YxxxxA00A00	-	-	
EYP0014AxxxxM06A00 	EWS1013	EWZ0054 EWZ0056	EYP0014YxxxxA00A00	-	-	
EYP0014VxxxxM03P06 	EWS0013	EWZ0054 EWZ0056	EYP0014YxxxxA00A00	EWS1015	EWZ0060 EWZ0062	
EYP0014VxxxxM06P06 	EWS1013	EWZ0054 EWZ0056	EYP0014YxxxxA00A00	EWS1015	EWZ0060 EWZ0062	
EYP0014VxxxxA00P06 	-	-	EYP0014YxxxxA00A00	EWS1015	EWZ0060 EWZ0062	
EYP0014YxxxxA00A00 	-	-	EYP0014YxxxxA00A00	-	-	

System cable						
	Plug-in connector	Spare contact		Plug-in connector	Spare contact	
<b>EYP0015...</b>						
EYP0015AxxxxM03A00 	EWS0013	EWZ0054 EWZ0056	EYP0015YxxxxA00A00	–	–	
EYP0015AxxxxM06A00 	EWS1013	EWZ0054 EWZ0056	EYP0015YxxxxA00A00	–	–	
EYP0015VxxxxM03P06 	EWS0013	EWZ0054 EWZ0056	EYP0015YxxxxA00A00	EWS1015	EWZ0060 EWZ0062	
EYP0015VxxxxM06P06 	EWS1013	EWZ0054 EWZ0056	EYP0015YxxxxA00A00	EWS1015	EWZ0060 EWZ0062	
EYP0015VxxxxA00P06 	–	–	EYP0015YxxxxA00A00	EWS1015	EWZ0060 EWZ0062	
EYP0015YxxxxA00A00 	–	–	EYP0015YxxxxA00A00	–	–	
<b>EYP0016...</b>						
EYP0016AxxxxM03A00 	EWS0013	EWZ0054 EWZ0056	EYP0016YxxxxA00A00	–	–	
EYP0016AxxxxM06A00 	EWS1013	EWZ0054 EWZ0056	EYP0016YxxxxA00A00	–	–	
EYP0016VxxxxM03P06 	EWS0013	EWZ0054 EWZ0056	EYP0016YxxxxA00A00	EWS1015	EWZ0060 EWZ0062	
EYP0016VxxxxM06P06 	EWS1013	EWZ0054 EWZ0056	EYP0016YxxxxA00A00	EWS1015	EWZ0060 EWZ0062	
EYP0016VxxxxA00P06 	–	–	EYP0016YxxxxA00A00	EWS1015	EWZ0060 EWZ0062	
EYP0016YxxxxA00A00 	–	–	EYP0016YxxxxA00A00	–	–	

7.2 Blower cables

System cable						
	Plug-in connector	Spare contact	System cable	Plug-in connector	Spare contact	
<b>EYL0001...</b>						
EYL0001AxxxxL01A00 	EWS0003	EWZ0053 EWZ0054	EYL0001YxxxxA00A00	—	—	
EYL0001AxxxxL03A00 	EWS1003	EWZ0053 EWZ0054	EYL0001YxxxxA00A00	—	—	
EYL0001VxxxxL01J03 	EWS0003	EWZ0053 EWZ0054	EYL0001YxxxxA00A00	EWS1002	EWZ0057 EWZ0059	
EYL0001VxxxxL03J03 	EWS1003	EWZ0053 EWZ0054	EYL0001YxxxxA00A00	EWS1002	EWZ0057 EWZ0059	
EYL0001VxxxxA00J03 	—	—	EYL0001YxxxxA00A00	EWS1002	EWZ0057 EWZ0059	
EYL0001AxxxxL02A00 	EWS0021	EWZ0053	EYL0001YxxxxA00A00	—	—	
EYL0001AxxxxL04A00 	EWS1021	EWZ0053	EYL0001YxxxxA00A00	—	—	
EYL0001VxxxxL02J04 	EWS0021	EWZ0053	EYL0001YxxxxA00A00	EWS1022	EWZ0058	
EYL0001VxxxxL04J04 	EWS1021	EWZ0053	EYL0001YxxxxA00A00	EWS1022	EWZ0058	
EYL0001VxxxxA00J04 	—	—	EYL0001YxxxxA00A00	EWS1022	EWZ0058	
EYL0001AxxxxL05A00 	EWS0021	EWZ0053	EYL0001YxxxxA00A00	—	—	
EYL0001AxxxxL06A00 	EWS1021	EWZ0053	EYL0001YxxxxA00A00	—	—	
EYL0001VxxxxL05J05 	EWS0021	EWZ0053	EYL0001YxxxxA00A00	EWS1022	EWZ0058	
EYL0001VxxxxL06J05 	EWS1021	EWZ0053	EYL0001YxxxxA00A00	EWS1022	EWZ0058	
EYL0001VxxxxA00J05 	—	—	EYL0001YxxxxA00A00	EWS1022	EWZ0058	
EYL0001YxxxxA00A00 	—	—	EYL0001YxxxxA00A00	—	—	
<b>EYL0002...</b>						
EYL0002AxxxxL01A00 	EWS0003	EWZ0053 EWZ0054	EYL0002YxxxxA00A00	—	—	
EYL0002AxxxxL03A00 	EWS1003	EWZ0053 EWZ0054	EYL0002YxxxxA00A00	—	—	
EYL0002VxxxxL01J03 	EWS0003	EWZ0053 EWZ0054	EYL0002YxxxxA00A00	EWS1002	EWZ0057 EWZ0059	
EYL0002VxxxxL03J03 	EWS1003	EWZ0053 EWZ0054	EYL0002YxxxxA00A00	EWS1002	EWZ0057 EWZ0059	
EYL0002VxxxxA00J03 	—	—	EYL0002YxxxxA00A00	EWS1002	EWZ0057 EWZ0059	
EYL0002AxxxxL02A00 	EWS0021	EWZ0053	EYL0002YxxxxA00A00	—	—	
EYL0002AxxxxL04A00 	EWS1021	EWZ0053	EYL0002YxxxxA00A00	—	—	
EYL0002VxxxxL02J04 	EWS0021	EWZ0053	EYL0002YxxxxA00A00	EWS1022	EWZ0058	
EYL0002VxxxxL04J04 	EWS1021	EWZ0053	EYL0002YxxxxA00A00	EWS1022	EWZ0058	
EYL0002VxxxxA00J04 	—	—	EYL0002YxxxxA00A00	EWS1022	EWZ0058	
EYL0002AxxxxL05A00 	EWS0021	EWZ0053	EYL0002YxxxxA00A00	—	—	
EYL0002AxxxxL06A00 	EWS1021	EWZ0053	EYL0002YxxxxA00A00	—	—	

System cable						
		Plug-in connector	Spare contact		Plug-in connector	Spare contact
EYL0002VxxxxL05J05		EWS0021	EWZ0053	EYL0002YxxxxA00A00	EWS1022	EWZ0058
EYL0002VxxxxL06J05		EWS1021	EWZ0053	EYL0002YxxxxA00A00	EWS1022	EWZ0058
EYL0002VxxxxA00J05		–	–	EYL0002YxxxxA00A00	EWS1022	EWZ0058
EYL0002YxxxxA00A00		–	–	EYL0002YxxxxA00A00	–	–

### 7.3 Resolver cables

System cable						
	Plug-in connector	Spare contact	System cable	Plug-in connector	Spare contact	
<b>EYF0017...</b>						
EYF0017AxxxxF01S01 	EWS0006	EWZ0053	EYF0017YxxxxA00A00	EWZ0040	–	
EYF0017AxxxxF01S02 	EWS0006	EWZ0053	EYF0017YxxxxA00A00	EWZ0047	–	
EYF0017AxxxxF05S01 	EWS1006	EWZ0053	EYF0017YxxxxA00A00	EWZ0040	–	
EYF0017AxxxxF05S02 	EWS1006	EWZ0053	EYF0017YxxxxA00A00	EWZ0047	–	
EYF0017AxxxxA00S01 	–	–	EYF0017YxxxxA00A00	EWZ0040	–	
EYF0017AxxxxA00S02 	–	–	EYF0017YxxxxA00A00	EWZ0047	–	
EYF0017AxxxxF01A00 	EWS0006	EWZ0053	EYF0017YxxxxA00A00	–	–	
EYF0017AxxxxF05A00 	EWS1006	EWZ0053	EYF0017YxxxxA00A00	–	–	
EYF0017VxxxxF01G06 	EWS0006	EWZ0053	EYF0017YxxxxA00A00	EWS1007	EWZ0058	
EYF0017VxxxxF05G06 	EWS1006	EWZ0053	EYF0017YxxxxA00A00	EWS1007	EWZ0058	
EYF0017VxxxxA00G06 	–	–	EYF0017YxxxxA00A00	EWS1007	EWZ0058	
EYF0017YxxxxA00A00 	–	–	EYF0017YxxxxA00A00	–	–	
<b>EYF0020...</b>						
EYF0020AxxxxF01S04 	EWS0006	EWZ0053	EYF0020YxxxxA00A00	EWZ0051	–	
EYF0020AxxxxF01S05 	EWS0006	EWZ0053	EYF0020YxxxxA00A00	EWZ0052	–	
EYF0020AxxxxF05S04 	EWS1006	EWZ0053	EYF0020YxxxxA00A00	EWZ0051	–	
EYF0020AxxxxF05S05 	EWS1006	EWZ0053	EYF0020YxxxxA00A00	EWZ0052	–	
EYF0020AxxxxA00S04 	–	–	EYF0020YxxxxA00A00	EWZ0051	–	
EYF0020AxxxxA00S05 	–	–	EYF0020YxxxxA00A00	EWZ0052	–	
EYF0020AxxxxF01A00 	EWS0006	EWZ0053	EYF0020YxxxxA00A00	–	–	
EYF0020AxxxxF05A00 	EWS1006	EWZ0053	EYF0020YxxxxA00A00	–	–	
EYF0020VxxxxF01G06 	EWS0006	EWZ0053	EYF0020YxxxxA00A00	EWS1007	EWZ0058	
EYF0020VxxxxF05G06 	EWS1006	EWZ0053	EYF0020YxxxxA00A00	EWS1007	EWZ0058	
EYF0020VxxxxA00G06 	–	–	EYF0020YxxxxA00A00	EWS1007	EWZ0058	
EYF0020YxxxxA00A00 	–	–	EYF0020YxxxxA00A00	–	–	

### 7.4 Encoder cables

System cable						
	Plug-in connector	Spare contact	System cable	Plug-in connector	Spare contact	
<b>EYF0018...</b>						
EYF0018AxxxxF02W02 	EWS0010	EWZ0053	EYF0018YxxxxA00A00	EWZ0049	–	
EYF0018AxxxxF02S03 	EWS0010	EWZ0053	EYF0018YxxxxA00A00	EWZ0048	–	
EYF0018AxxxxF06W02 	EWS1010	EWZ0053	EYF0018YxxxxA00A00	EWZ0049	–	
EYF0018AxxxxF06S03 	EWS1010	EWZ0053	EYF0018YxxxxA00A00	EWZ0048	–	
EYF0018AxxxxA00W02 	–	–	EYF0018YxxxxA00A00	EWZ0049	–	
EYF0018AxxxxA00S03 	–	–	EYF0018YxxxxA00A00	EWZ0048	–	
EYF0018AxxxxF02A00 	EWS0010	EWZ0053	EYF0018YxxxxA00A00	–	–	
EYF0018AxxxxF06A00 	EWS1010	EWZ0053	EYF0018YxxxxA00A00	–	–	
EYF0018VxxxxF02G07 	EWS0010	EWZ0053	EYF0018YxxxxA00A00	EWS1011	EWZ0058	
EYF0018VxxxxF06G07 	EWS1010	EWZ0053	EYF0018YxxxxA00A00	EWS1011	EWZ0058	
EYF0018VxxxxA00G07 	–	–	EYF0018YxxxxA00A00	EWS1011	EWZ0058	
EYF0018YxxxxA00A00 	–	–	EYF0018YxxxxA00A00	–	–	
<b>EYF0019...</b>						
EYF0019AxxxxF02W04 	EWS0010	EWZ0053	EYF0019YxxxxA00A00	EWZ0070	–	
EYF0019AxxxxF02S03 	EWS0010	EWZ0053	EYF0019YxxxxA00A00	EWZ0048	–	
EYF0019AxxxxF06W04 	EWS1010	EWZ0053	EYF0019YxxxxA00A00	EWZ0070	–	
EYF0019AxxxxF06S03 	EWS1010	EWZ0053	EYF0019YxxxxA00A00	EWZ0048	–	
EYF0019AxxxxA00W04 	–	–	EYF0019YxxxxA00A00	EWZ0070	–	
EYF0019AxxxxA00S03 	–	–	EYF0019YxxxxA00A00	EWZ0048	–	
EYF0019AxxxxF02A00 	EWS0010	EWZ0053	EYF0019YxxxxA00A00	–	–	
EYF0019AxxxxF06A00 	EWS1010	EWZ0053	EYF0019YxxxxA00A00	–	–	
EYF0019VxxxxF02G07 	EWS0010	EWZ0053	EYF0019YxxxxA00A00	EWS1011	EWZ0058	
EYF0019VxxxxF06G07 	EWS1010	EWZ0053	EYF0019YxxxxA00A00	EWS1011	EWZ0058	
EYF0019VxxxxA00G07 	–	–	EYF0019YxxxxA00A00	EWS1011	EWZ0058	
EYF0019YxxxxA00A00 	–	–	EYF0019YxxxxA00A00	–	–	
<b>EYF0021...</b>						
EYF0021AxxxxF03S03 	EWS0017	EWZ0053	EYF0021YxxxxA00A00	EWZ0048	–	
EYF0021AxxxxF07S03 	EWS1017	EWZ0053	EYF0021YxxxxA00A00	EWZ0048	–	
EYF0021AxxxxA00S03 	–	–	EYF0021YxxxxA00A00	EWZ0048	–	
EYF0021AxxxxF03A00 	EWS0017	EWZ0053	EYF0021YxxxxA00A00	–	–	
EYF0021AxxxxF07A00 	EWS1017	EWZ0053	EYF0021YxxxxA00A00	–	–	
EYF0021VxxxxF03G08 	EWS0017	EWZ0053	EYF0021YxxxxA00A00	EWS1018	EWZ0058	
EYF0021VxxxxF07G08 	EWS1017	EWZ0053	EYF0021YxxxxA00A00	EWS1018	EWZ0058	
EYF0021VxxxxA00G08 	–	–	EYF0021YxxxxA00A00	EWS1018	EWZ0058	
EYF0021YxxxxA00A00 	–	–	EYF0021YxxxxA00A00	–	–	

System cable						
	Plug-in connector	Spare contact	System cable	Plug-in connector	Spare contact	
<b>EYF0022...</b>						
EYF0022AxxxxF03A00		EWS0017	EWZ0053	EYF0022YxxxxA00A00	–	–
EYF0022AxxxxF07A00		EWS1017	EWZ0053	EYF0022YxxxxA00A00	–	–
EYF0022VxxxxF03G08		EWS0017	EWZ0053	EYF0022YxxxxA00A00	EWS1018	EWZ0058
EYF0022VxxxxF07G08		EWS1017	EWZ0053	EYF0022YxxxxA00A00	EWS1018	EWZ0058
EYF0022VxxxxA00G08		–	–	EYF0022YxxxxA00A00	EWS1018	EWZ0058
EYF0022YxxxxA00A00		–	–	EYF0022YxxxxA00A00	–	–
<b>EYF0023...</b>						
EYF0023AxxxxF04S06		EWS0023	EWZ0053	EYF0023YxxxxA00A00	EWZ0063	–
EYF0023AxxxxF08S06		EWS1023	EWZ0053	EYF0023YxxxxA00A00	EWZ0063	–
EYF0023AxxxxA00S06		–	–	EYF0023YxxxxA00A00	EWZ0063	–
EYF0023AxxxxF04A00		EWS0023	EWZ0053	EYF0023YxxxxA00A00	–	–
EYF0023AxxxxF08A00		EWS1023	EWZ0053	EYF0023YxxxxA00A00	–	–
EYF0023VxxxxF04G09		EWS0023	EWZ0053	EYF0023YxxxxA00A00	EWS1024	EWZ0058
EYF0023VxxxxF08G09		EWS1023	EWZ0053	EYF0023YxxxxA00A00	EWS1024	EWZ0058
EYF0023VxxxxA00G09		–	–	EYF0023YxxxxA00A00	EWS1024	EWZ0058
EYF0023YxxxxA00A00		–	–	EYF0023YxxxxA00A00	–	–
<b>EYF0024...</b>						
EYF0024AxxxxF04A00		EWS0023	EWZ0053	EYF0024YxxxxA00A00	–	–
EYF0024AxxxxF08A00		EWS1023	EWZ0053	EYF0024YxxxxA00A00	–	–
EYF0024VxxxxF04G09		EWS0023	EWZ0053	EYF0024YxxxxA00A00	EWS1024	EWZ0058
EYF0024VxxxxF08G09		EWS1023	EWZ0053	EYF0024YxxxxA00A00	EWS1024	EWZ0058
EYF0024VxxxxA00G09		–	–	EYF0024YxxxxA00A00	EWS1024	EWZ0058
EYF0024YxxxxA00A00		–	–	EYF0024YxxxxA00A00	–	–

#### 7.5 Digital frequency cables

System cable						
	Plug-in connector	Spare contact	System cable	Plug-in connector	Spare contact	
EYD0017...						
EYD0017AxxxxW01S01 	EWZ0027	–	EYF0017YxxxxA00A00	EWZ0040	–	
EYD0017AxxxxW03S02 	EWZ0050	–	EYF0017YxxxxA00A00	EWZ0047	–	
EYD0017AxxxxW01S02 	EWZ0027	–	EYF0017YxxxxA00A00	EWZ0047	–	
EYD0017AxxxxW03S01 	EWZ0050	–	EYF0017YxxxxA00A00	EWZ0040	–	
EYD0017AxxxxW01W01 	EWZ0027	–	EYF0017YxxxxA00A00	EWZ0027	–	
EYD0017AxxxxW03W01 	EWZ0050	–	EYF0017YxxxxA00A00	EWZ0027	–	

## 7.6 Plug-in connector properties

## 7.6.1 Cable end on the motor side

Characteristic	Number of poles	Maximum voltage	Core cross-section	Spare contact	Number of contacts required
<b>Power</b>					
EWS0001	6	AC/DC 630 V	0.5 ... 2.5 mm <sup>2</sup>	EWZ0054	6
EWS0012	8	AC/DC 630 V	0.5 ... 1.0 mm <sup>2</sup>	EWZ0054	2
			2.5 ... 4.0 mm <sup>2</sup>	EWZ0055	4
EWS0013	8	AC/DC 630 V	0.5 ... 1.0 mm <sup>2</sup>	EWZ0054	2
			6.0 ... 16.0 mm <sup>2</sup>	EWZ0056	4
EWS1001	6	AC/DC 630 V	0.5 ... 2.5 mm <sup>2</sup>	EWZ0054	6
EWS1012	8	AC/DC 630 V	0.5 ... 1.0 mm <sup>2</sup>	EWZ0054	2
			2.5 ... 4.0 mm <sup>2</sup>	EWZ0055	4
EWS1013	8	AC/DC 630 V	0.5 ... 1.0 mm <sup>2</sup>	EWZ0054	2
			6.0 ... 16.0 mm <sup>2</sup>	EWZ0056	4
<b>Blower</b>					
EWS0003	8	AC/DC 630 V	1.0 ... 2.5 mm <sup>2</sup>	EWZ0053	4
			1.0 ... 2.5 mm <sup>2</sup>	EWZ0054	1
EWS0021	7	AC/DC 630 V	1.0 ... 1.5 mm <sup>2</sup>	EWZ0053	5
EWS1003	8	AC/DC 630 V	1.0 ... 2.5 mm <sup>2</sup>	EWZ0053	4
			1.0 ... 2.5 mm <sup>2</sup>	EWZ0054	1
EWS1021	7	AC/DC 630 V	1.0 ... 1.5 mm <sup>2</sup>	EWZ0053	5
<b>Feedback</b>					
EWS0006	12	AC/DC 125 V	0.14 ... 1.0 mm <sup>2</sup>	EWZ0053	9
EWS0010	12	AC/DC 125 V	0.14 ... 1.0 mm <sup>2</sup>	EWZ0053	10
EWS0017	17	AC/DC 125 V	0.14 ... 0.5 mm <sup>2</sup>	EWZ0053	14
EWS0023	17	AC/DC 125 V	0.14 ... 0.5 mm <sup>2</sup>	EWZ0053	16
EWS1006	12	AC/DC 125 V	0.14 ... 1.0 mm <sup>2</sup>	EWZ0053	9
EWS1010	12	AC/DC 125 V	0.14 ... 1.0 mm <sup>2</sup>	EWZ0053	10
EWS1017	17	AC/DC 125 V	0.14 ... 0.5 mm <sup>2</sup>	EWZ0053	14
EWS1023	17	AC/DC 125 V	0.14 ... 0.5 mm <sup>2</sup>	EWZ0053	16
<b>Digital frequency</b>					
EWZ0027	9	AC/DC 50 V	0.14 mm <sup>2</sup>	–	–
EWZ0040	9	AC/DC 50 V	0.14 mm <sup>2</sup>	–	–
EWZ0047	9	AC/DC 50 V	0.14 mm <sup>2</sup>	–	–

## 7.6.2

## Cable end on the controller side

Characteristic	No. of poles	Maximum voltage	Core cross-section	Spare contact	Number of contacts required
<b>Power</b>					
EWS1016	6	AC/DC 630 V	1.0 ... 2.5 mm <sup>2</sup>	EWZ0059	6
EWS1014	8	AC/DC 630 V	0.5 ... 1.0 mm <sup>2</sup>	EWZ0060	2
			2.5 ... 4.0 mm <sup>2</sup>	EWZ0061	4
EWS1015	8	AC/DC 630 V	0.5 ... 1.0 mm <sup>2</sup>	EWZ0060	2
			6.0 ... 16.0 mm <sup>2</sup>	EWZ0062	4
<b>Blower</b>					
EWS1002	8	AC/DC 630 V	1.0 ... 2.5 mm <sup>2</sup>	EWZ0057	4
			1.0 ... 2.5 mm <sup>2</sup>	EWZ0059	1
EWS1022	7	AC/DC 630 V	1.0 ... 1.5 mm <sup>2</sup>	EWZ0058	7
<b>Feedback</b>					
EWS1007	12	AC/DC 125 V	0.14 ... 1.0 mm <sup>2</sup>	EWZ0058	9
EWS1011	12	AC/DC 125 V	0.14 ... 1.0 mm <sup>2</sup>	EWZ0058	10
EWS1018	17	AC/DC 125 V	0.14 ... 0.5 mm <sup>2</sup>	EWZ0058	14
EWS1024	17	AC/DC 125 V	0.14 ... 0.5 mm <sup>2</sup>	EWZ0058	16
EWZ0040	9	AC/DC 50 V	0.14 mm <sup>2</sup>	–	–
EWZ0047	9	AC/DC 50 V	0.14 mm <sup>2</sup>	–	–
EWZ0048	15	AC/DC 50 V	0.14 ... 0.5 mm <sup>2</sup>	–	–
EWZ0051	9	AC/DC 50 V	0.14 mm <sup>2</sup>	–	–
EWZ0052	9	AC/DC 50 V	0.14 mm <sup>2</sup>	–	–
EWZ0063	15	AC/DC 50 V	0.14 ... 0.5 mm <sup>2</sup>	–	–
EWZ0049	9	AC/DC 50 V	0.14 mm <sup>2</sup>	–	–
EWZ0070 <sup>1)</sup>	9	AC/DC 50 V	0.14 mm <sup>2</sup>	–	–
<b>Digital frequency</b>					
EWZ0027	9	AC/DC 50 V	0.14 mm <sup>2</sup>	–	–
EWZ0050	9	AC/DC 50 V	0.14 mm <sup>2</sup>	–	–

- 1) When Sub-D plug EWZ0070 is used, an additional free space of 50 mm must be considered due to the depth of the plug. If the required free space is not available, a connection cable for fixed installation and plug EWZ0049 can be used in combination with an extension cable suitable for trailing to solve the application.

## 8 System cable wiring

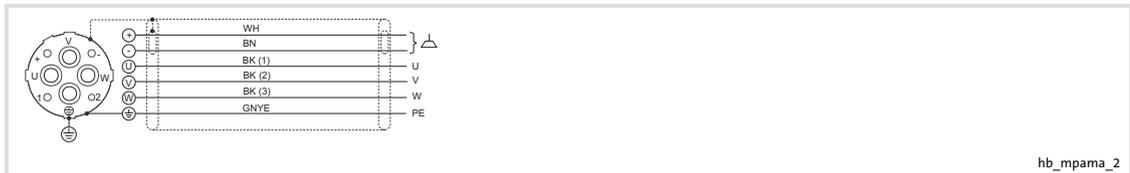
### 8.1 Motor cables

#### 8.1.1 Connection cables with single-sided plug-in connector

EYPxxxxAxxxxM01A00, EYPxxxxAxxxxM04A00

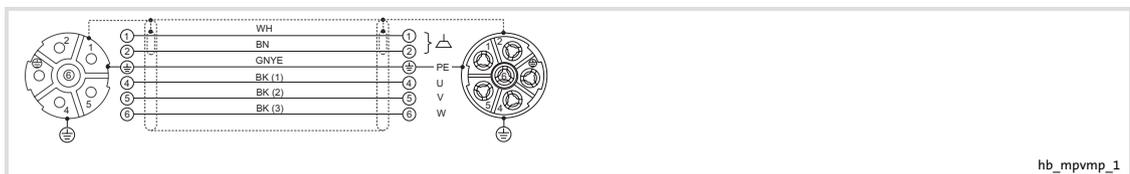


EYPxxxxAxxxxM02A00, EYPxxxxAxxxxM05A00,  
EYPxxxxAxxxxM03A00, EYPxxxxAxxxxM06A00

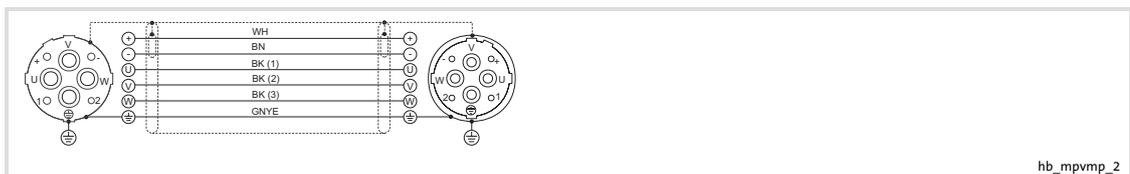


#### 8.1.2 Extension cables with double-sided plug-in connector

EYPxxxxVxxxxM01P04, EYPxxxxVxxxxM04P04



EYPxxxxVxxxxM02P05, EYPxxxxVxxxxM05P05,  
EYPxxxxVxxxxM03P06, EYPxxxxVxxxxM06P06



# 8

## Wiring of the system cables

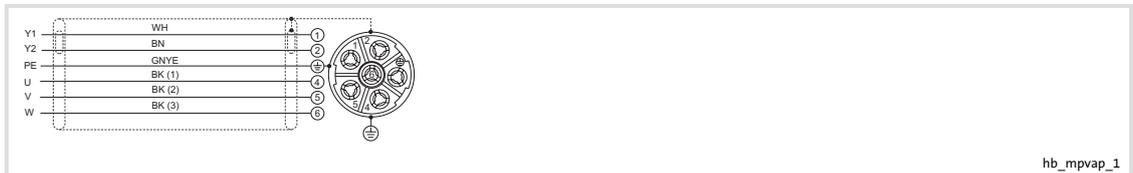
### Motor cables

#### Extension cables with single-sided plug-in connector

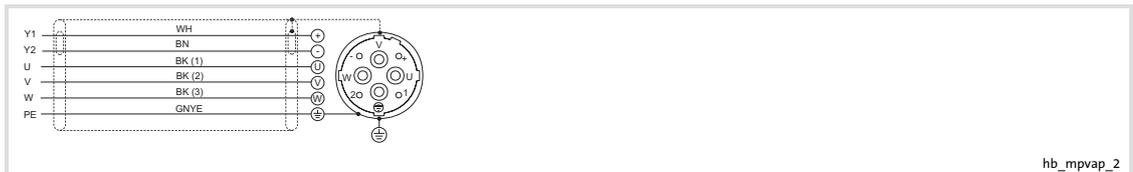
### 8.1.3

#### Extension cables with single-sided plug-in connector

##### EYPxxxxVxxxxA00P04



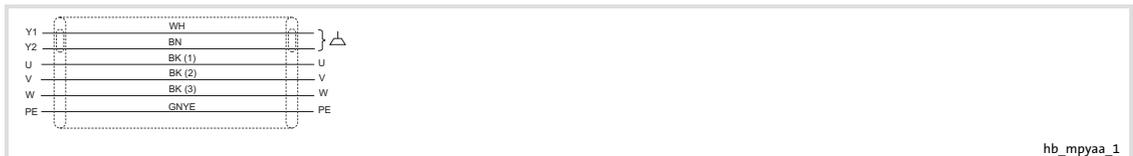
##### EYPxxxxVxxxxA00P05, EYPxxxxVxxxxA00P06



### 8.1.4

#### Cable without plug-in connector

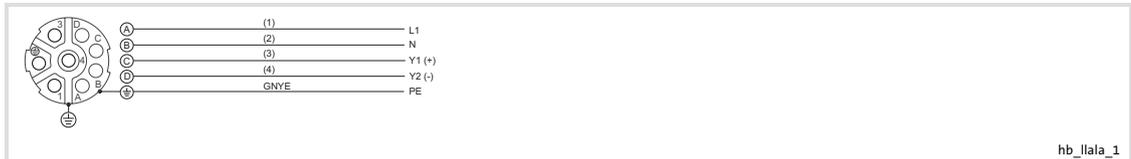
##### EYPxxxxYxxxxA00A00



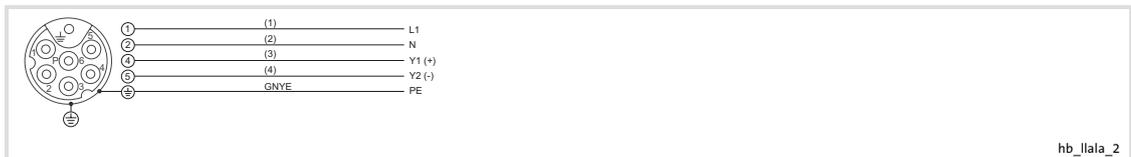
### 8.2 Blower cables

#### 8.2.1 Connection cables with single-sided plug-in connector

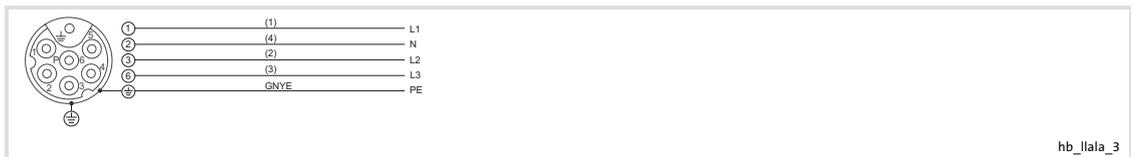
**EYLxxxxAxxxxL01A00, EYLxxxxAxxxxL03A00**



**EYLxxxxAxxxxL02A00, EYLxxxxAxxxxL04A00**



**EYLxxxxAxxxxL05A00, EYLxxxxAxxxxL06A00**

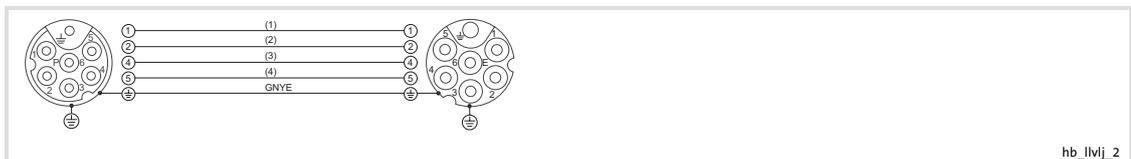


#### 8.2.2 Extension cables with double-sided plug-in connector

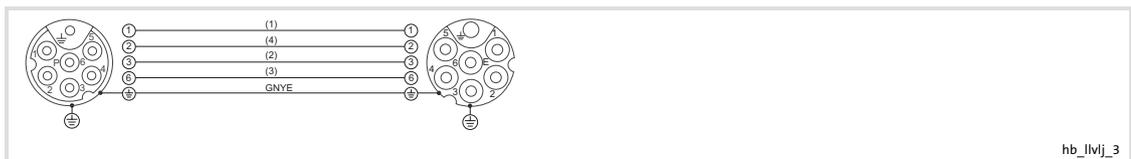
**EYLxxxxVxxxxL01J03, EYLxxxxVxxxxL03J03**



**EYLxxxxVxxxxL02J04, EYLxxxxVxxxxL04J04**



**EYLxxxxVxxxxL05J05, EYLxxxxVxxxxL06J05**



## Wiring of the system cables

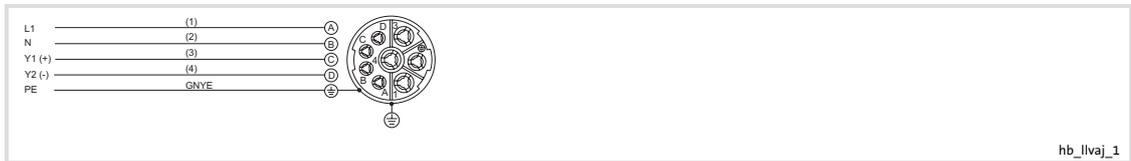
### Blower cables

#### Extension cables with single-sided plug-in connector

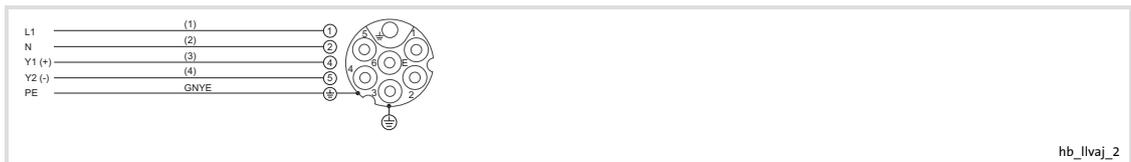
### 8.2.3

#### Extension cables with single-sided plug-in connector

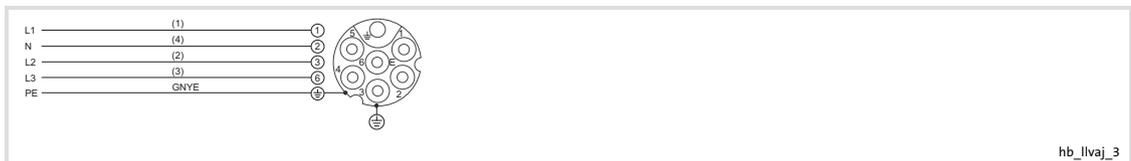
##### EYLxxxxVxxxxA00J03



##### EYLxxxxVxxxxA00J04



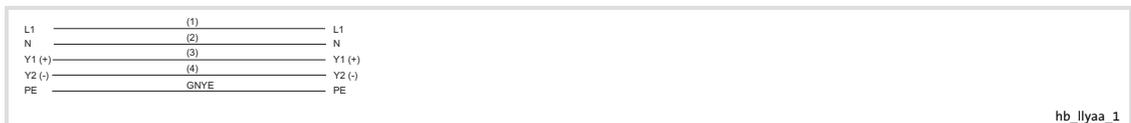
##### EYLxxxxVxxxxA00J05



### 8.2.4

#### Cable without plug-in connector

##### EYLxxxxYxxxxA00A00



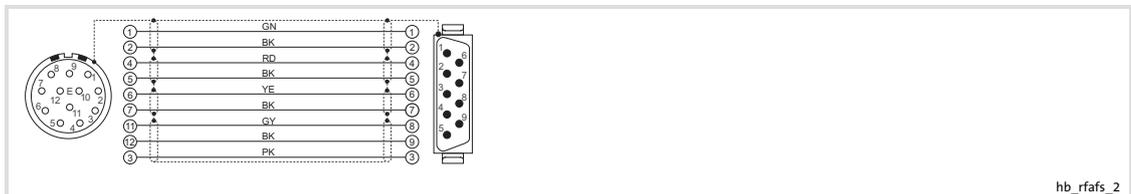
## 8.3 Resolver cables

### 8.3.1 Connection cables with double-sided plug-in connector

**EYFxxxxAxxxxF01S01, EYFxxxxAxxxxF01S04,  
EYFxxxxAxxxxF05S01, EYFxxxxAxxxxF05S04**

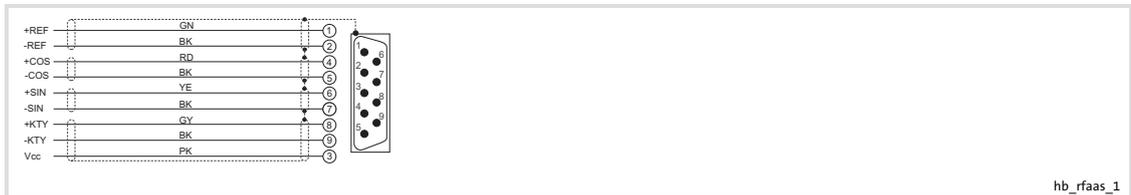


**EYFxxxxAxxxxF01S02, EYFxxxxAxxxxF01S05,  
EYFxxxxAxxxxF05S02, EYFxxxxAxxxxF05S05**

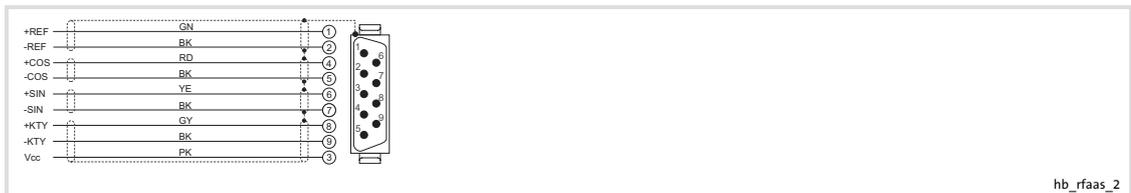


### 8.3.2 Connection cables with single-sided plug-in connector

**EYFxxxxAxxxxA00S01, EYFxxxxAxxxxA00S04**



**EYFxxxxAxxxxA00S02, EYFxxxxAxxxxA00S05**



**EYFxxxxAxxxxF01A00, EYFxxxxAxxxxF05A00**



# 8

## Wiring of the system cables

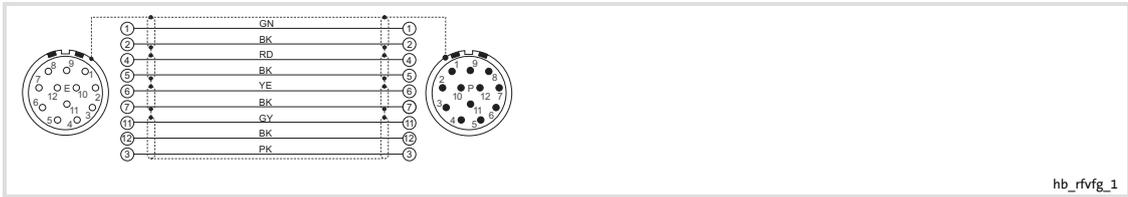
Resolver cables

Extension cables with double-sided plug-in connector

### 8.3.3

#### Extension cables with double-sided plug-in connector

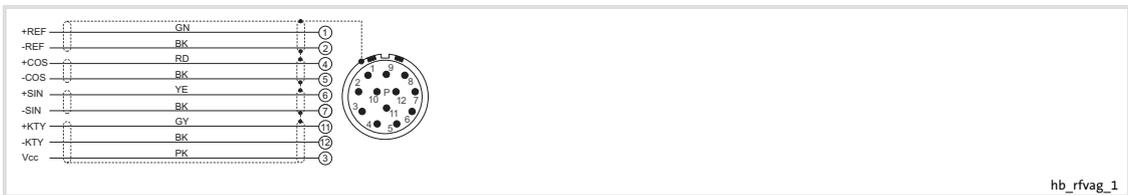
EYFxxxxVxxxxF01G06, EYFxxxxVxxxxF05G06



### 8.3.4

#### Extension cables with single-sided plug-in connector

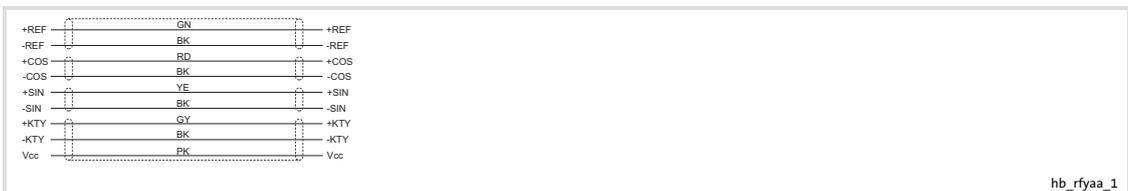
EYFxxxxVxxxxA00G06



### 8.3.5

#### Cable without plug-in connector

EYF0017YxxxxA00A00, EYF0020YxxxxA00A00

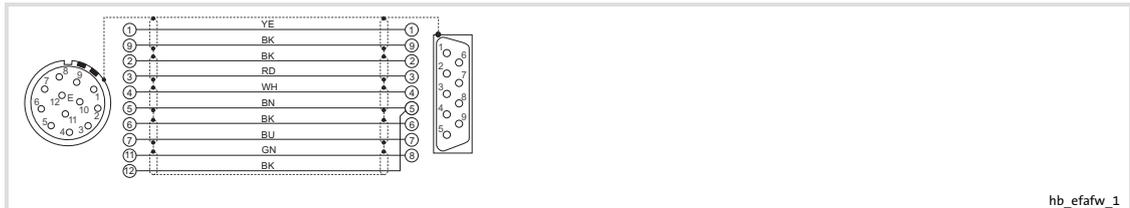


### 8.4 Encoder cables

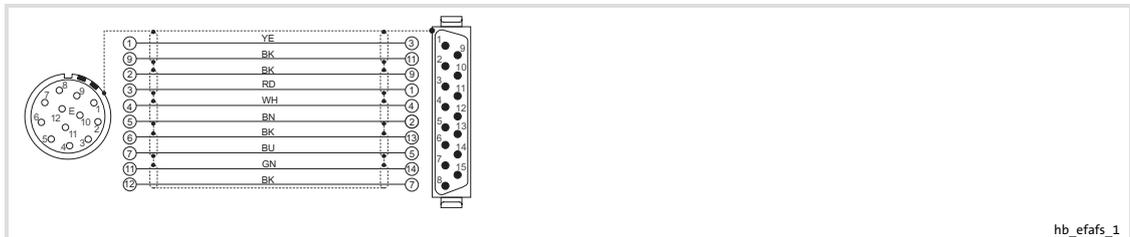
#### 8.4.1 Incremental encoder and sin/cos encoder with Hiperface interface

Connection cables with double-sided plug-in connector

**EYFxxxxAxxxxF02W02, EYFxxxxAxxxxF02W04, EYFxxxxAxxxxF06W02, EYFxxxxAxxxxF06W04**



**EYFxxxxAxxxxF02S03, EYFxxxxAxxxxF06S03**



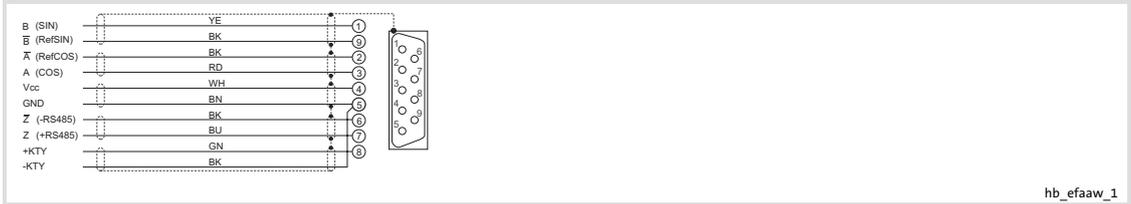
# Wiring of the system cables

## Encoder cables

### Incremental encoder and sin/cos encoder with Hiperface interface

#### Connection cables with single-sided plug-in connector

##### EYFxxxxAxxxxA00W02, EYFxxxxAxxxxA00W04



##### EYF001xAxxxxA00S03



##### EYF0018AxxxxF02A00, EYF0018AxxxxF06A00



##### EYF0019AxxxxF02A00, EYF0019AxxxxF06A00



### Extension cables with double-sided plug-in connector

#### EYF0018VxxxxF02G07, EYF0018VxxxxF06G07



#### EYF0019VxxxxF02G07, EYF0019VxxxxF06G07



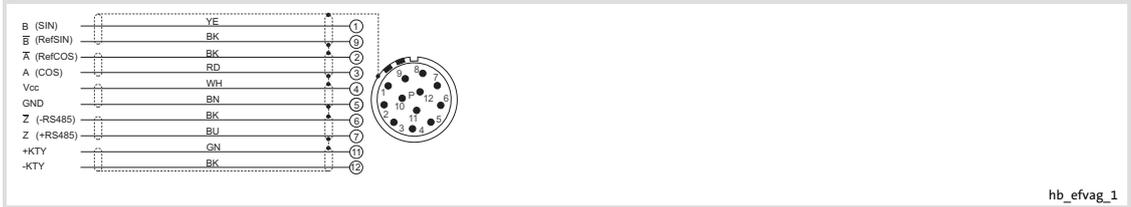
# Wiring of the system cables

## Encoder cables

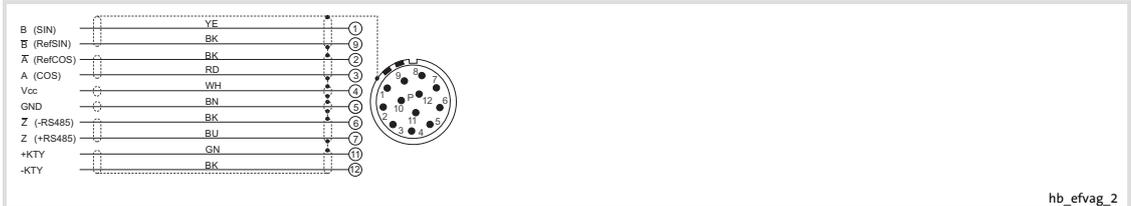
### Incremental encoder and sin/cos encoder with Hiperface interface

#### Extension cables with single-sided plug-in connector

##### EYF0018VxxxxA00G07

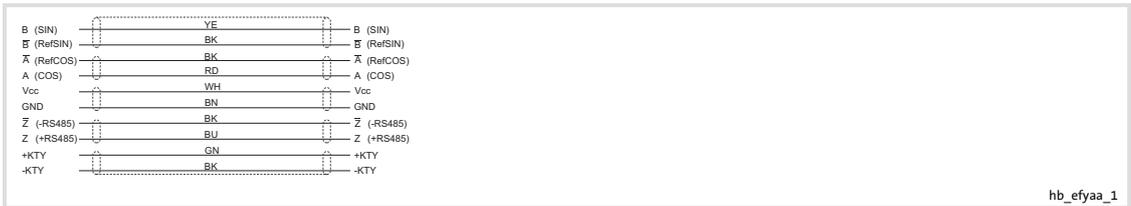


##### EYF0019VxxxxA00G07



#### Cable without plug

##### EYF0018YxxxxA00A00



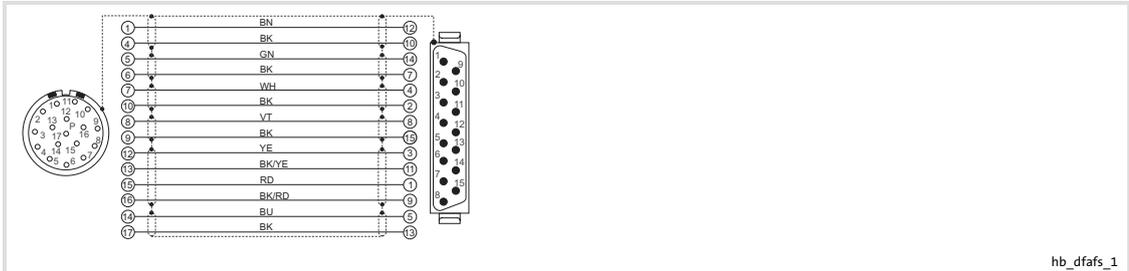
##### EYF0019YxxxxA00A00



## 8.4.2 Sin/cos encoder with EnDat interface (2.1)

### Connection cables with double-sided plug-in connector

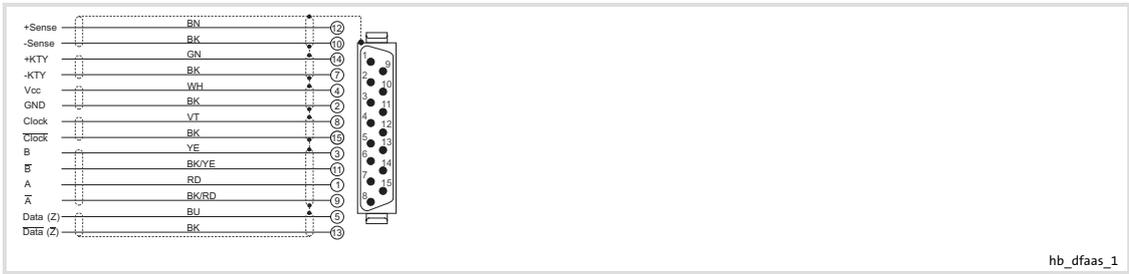
EYFxxxxAxxxxF03S03, EYFxxxxAxxxxF07S03



hb\_dfafs\_1

### Connection cables with single-sided plug-in connector

EYF002xAxxxxA00S03



hb\_dfaas\_1

EYFxxxxAxxxxF03A00, EYFxxxxAxxxxF07A00



hb\_dfafa\_1

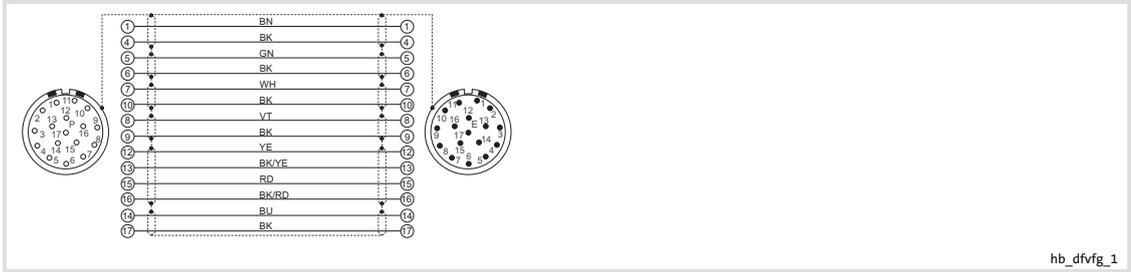
## Wiring of the system cables

### Encoder cables

#### Sin/cos encoder with EnDat interface (2.1)

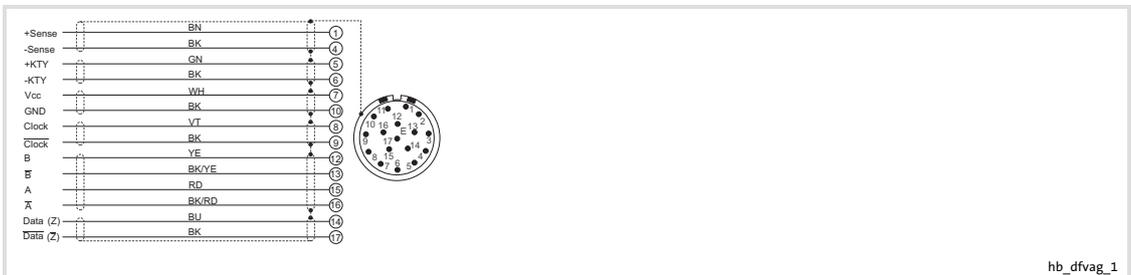
#### Extension cables with double-sided plug-in connector

##### EYFxxxxVxxxxF03G08, EYFxxxxVxxxxF07G08



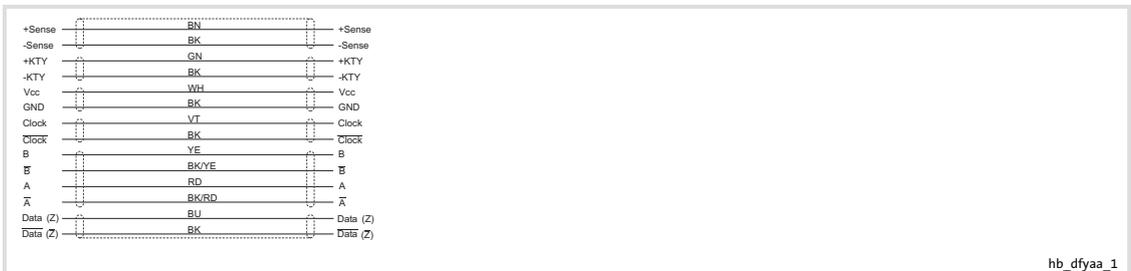
#### Extension cables with single-sided plug-in connector

##### EYFxxxxVxxxxA00G08



#### Cable without plug

##### EYF0021YxxxxA00A00, EYF0022YxxxxA00A00

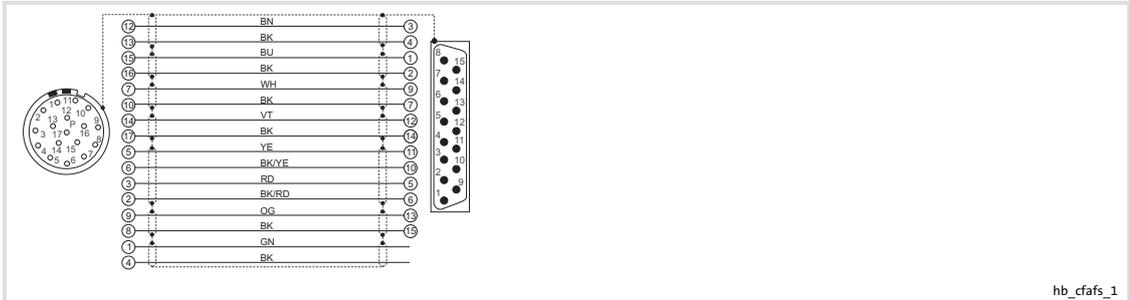


8.4.3

Renco R35i

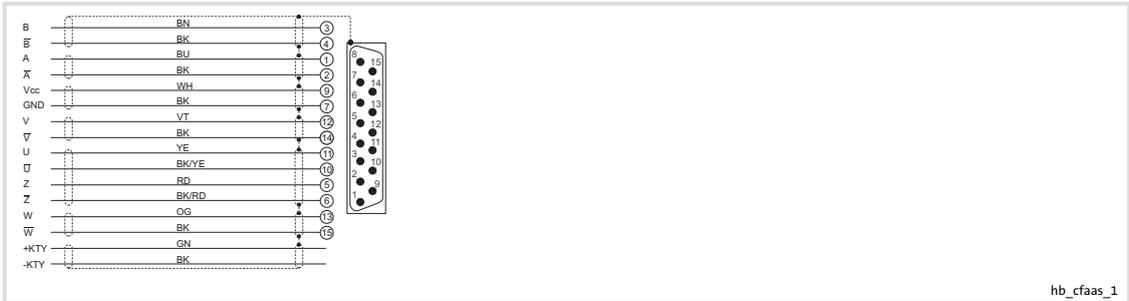
Connection cables with double-sided plug-in connector

EYFxxxxAxxxxF04S06, EYFxxxxAxxxxF08S06



Connection cables with single-sided plug-in connector

EYFxxxxAxxxxA00S06



EYFxxxxAxxxxF04A00, EYFxxxxAxxxxF08A00



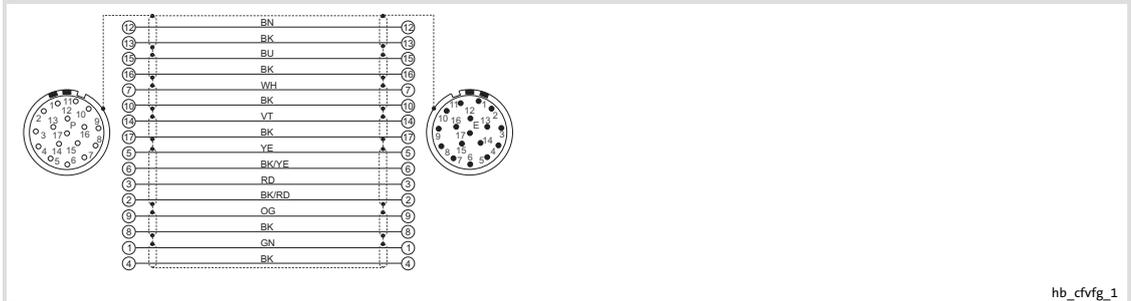
# Wiring of the system cables

Encoder cables

Renco R35i

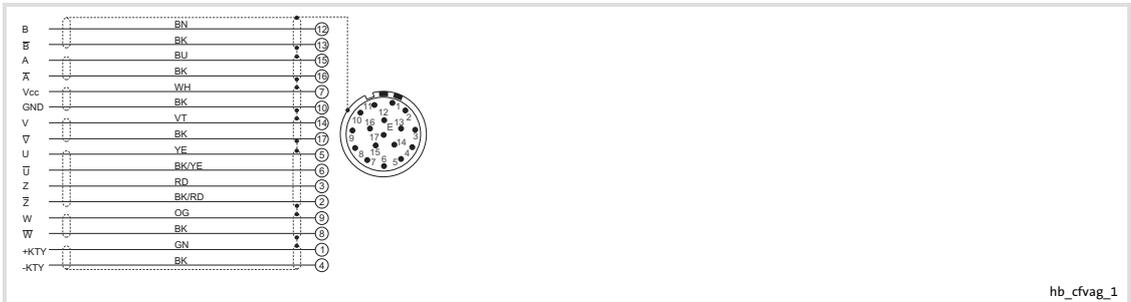
## Extension cables with double-sided plug-in connector

EYFxxxxVxxxxF04G09, EYFxxxxVxxxxF08G09



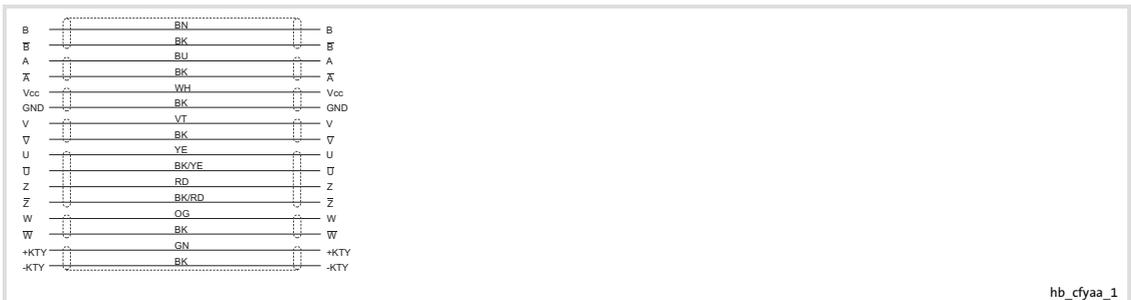
## Extension cables with single-sided plug-in connector

EYFxxxxVxxxxA00G09



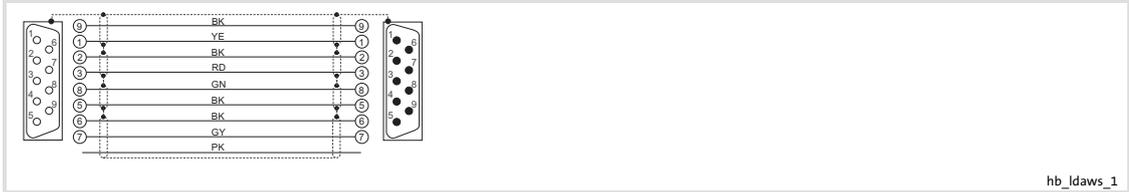
## Cable without plug

EYF0023YxxxxA00A00, EYF0024YxxxxA00A00



8.5 Digital frequency cables

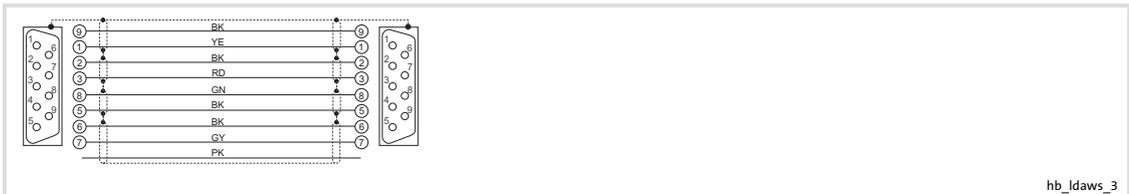
**EYDxxxxAxxxxW01S01**



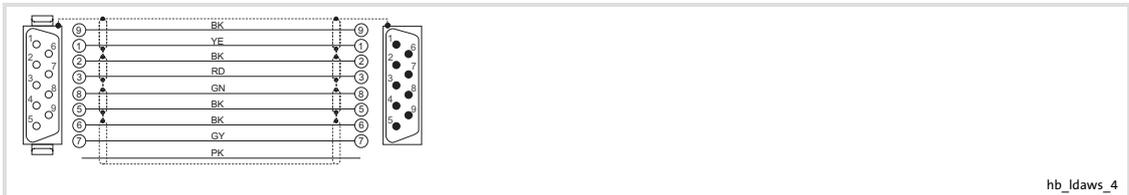
**EYDxxxxAxxxxW01S02**



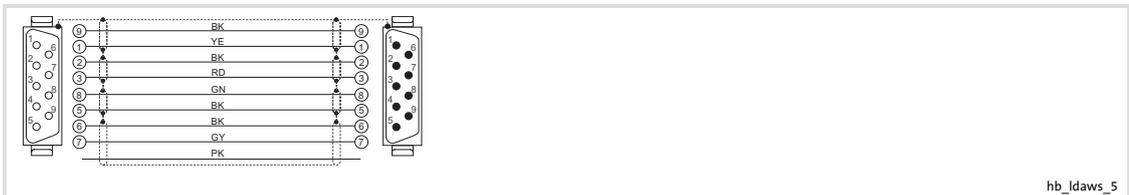
**EYDxxxxAxxxxW01W01**



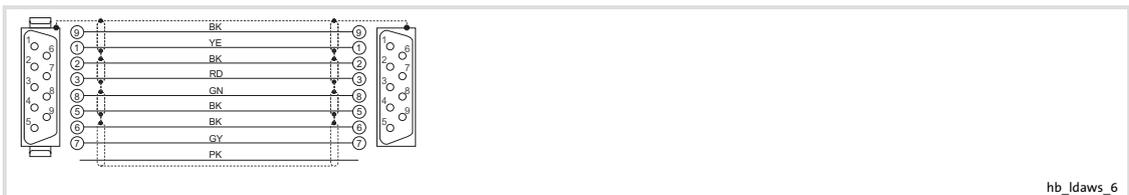
**EYDxxxxAxxxxW03S01**



**EYDxxxxAxxxxW03S02**



**EYDxxxxAxxxxW03W01**









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