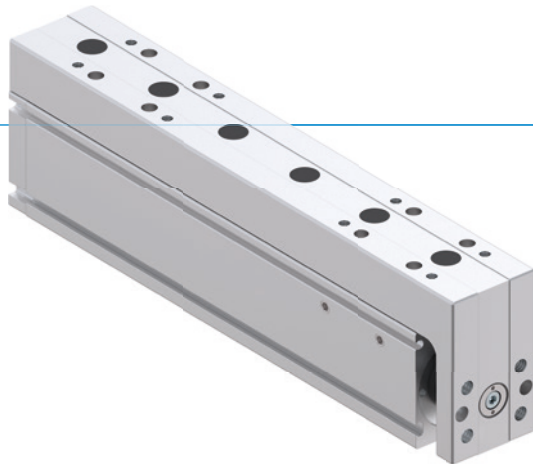


COMPACT AXES

SERIES ACS

▶ PRODUCT ADVANTAGES

CANopen  **IO-Link**



▶ High precision and load capacity

The BLDC motor, combined with the ball screw, ensures precise and dynamic movements. The one-piece slide, milled from a solid block, reliably absorbs the loads together with the double rail carriages over millions of cycles.

▶ Integrated control electronics with optional STO function

The integrated control electronics (optionally IO-Link or CANopen control) with optional safe torque off function provide additional security. This means that the application can be brought into operation more quickly, since there is no complicated cabling or configuration work needed.

▶ Low space requirement and efficient in operation

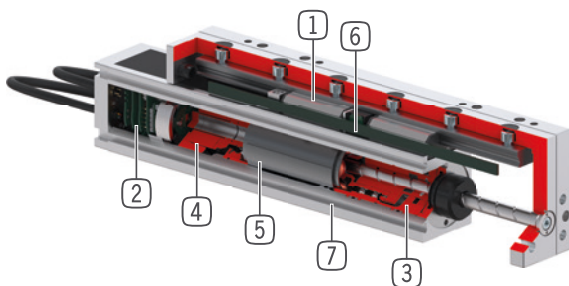
Despite its compact external dimensions, an optional clamping element can be integrated that holds the slide securely and energy-efficiently in any position of its freely configurable movement profile.

▶ SERIES CHARACTERISTICS

Installation size		Variants	
ACSX0		IL	CO
 High movement speed		•	•
 CANopen			•
 IO-Link		•	
 Integrated clamping element (optional)		•	•
 STO (optional)		•	•
 Profile rail guide		•	•
 Powerful		•	•
 Integrated BasicStop		•	•
 Positionable		•	•
 Absolute linear position measuring system		•	•



► BENEFITS IN DETAIL



- ① **Two rail carriages**
 - High force and torque absorption due to two rail carriages and a one-piece slide
 - High durability and good lubrication behavior even at short strokes
- ② **Integrated control electronics with optional STO function**
 - Integrated control electronics save space, costs and cabling effort
- ③ **Lubrication system**
 - Minimum maintenance effort with maximum service life
- ④ **Clamping element (optional)**
 - Increased safety thanks to the NC design
 - Energy and cost reduction thanks to possible motor shutoff
- ⑤ **Standard ball screw with BLDC motor**
 - Lubrication intervals of up to 5 million cycles
 - High power in a small amount of space
 - Precise and effective force transmission thanks to the ball screw
- ⑥ **Absolute linear position measuring system**
 - No need for reference runs
 - Precise monitoring of individual movement profiles with maximum precision
- ⑦ **Housing**
 - No interference contours
 - Low space requirement
 - Lots of assembly options

► TECHNICAL DATA

Installation size	Stroke, can be controlled	Max. feed force F _x	Max. speed	Max. acceleration
	[mm]	[N]	[m/s]	[m/s ²]
ACS40	100	170	0.80	20
ACS60	150	270	1.00	17

► FURTHER INFORMATION IS AVAILABLE ONLINE



All information just a click away at: www.zimmer-group.com. Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.

COMPACT AXES

INSTALLATION SIZE ACS60

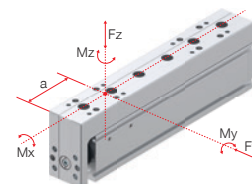
► PRODUCT SPECIFICATIONS

CANopen IO-Link



► Forces and moments

Maximum force and moment capacity.



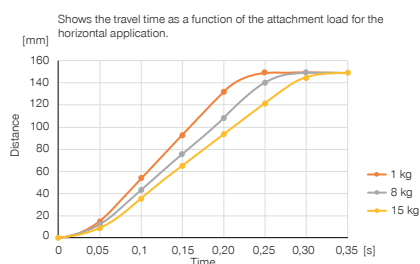
	static	dynamic*
F_y [N]	10000	1400
F_z [N]	10000	3500
M_x [Nm]	120	28
M_y [Nm]	350	110
M_z [Nm]	350	60

*for 5 million cycles at a force or torque

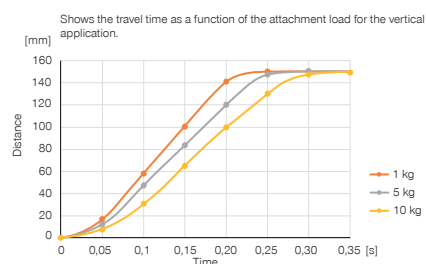
$a = 82,7$ mm

a = Distance from the front of the slide to the center of the profile rail guide

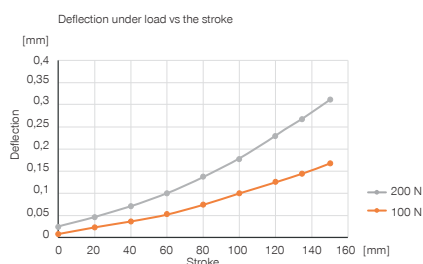
► Distance-time diagram



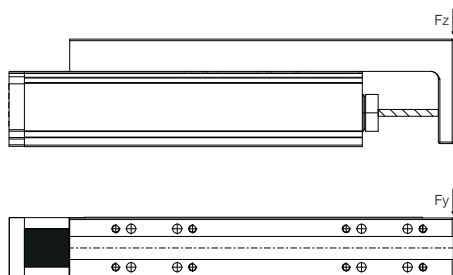
► Distance-time diagram



► Load diagram F_z



► Load diagram F_y



► TECHNICAL DATA

	► Technical data			
Order no.	ACS60150IL20-00-A	ACS60150IL20-01-A	ACS60150IL20-40-A	ACS60150IL20-41-A
Stroke, can be controlled [mm]	150	150	150	150
Type of drive	electrical	electrical	electrical	electrical
Drive	BLDC motor	BLDC motor	BLDC motor	BLDC motor
Control	IO-Link	IO-Link	IO-Link	IO-Link
Rated feed force F _x [N]	150	150	150	150
Max. feed force F _x [N]*	270	270	270	270
Max. acceleration [m/s ²]	17	17	17	17
Max. speed [m/s]	1.00	1.00	1.00	1.00
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01
Safety function		STO		STO
Supply voltage [V]	24	24	24	24
Nominal current [A]	7,0	7,0	7,0	7,0
Current consumption max. [A]	14.0	14.0	14.0	14.0
Clamping element holding force [N]			630	630
Operating temperature [°C]	5 ... +50	5 ... +50	5 ... +50	5 ... +50
Certifications	CE / UKCA / LABS / REACH / RoHS	CE / UKCA / LABS / REACH / RoHS	CE / UKCA / LABS / REACH / RoHS	CE / UKCA / LABS / REACH / RoHS
Protection to IEC 60529	IP40	IP40	IP40	IP40
Weight [kg]	4.9	4.9	5.1	5.1
Moving mass [kg]	1.32	1.32	1.32	1.32

Order no.	ACS60150CO20-00-A	ACS60150CO20-01-A	ACS60150CO20-40-A	ACS60150CO20-41-A
Stroke, can be controlled [mm]	150	150	150	150
Type of drive	electrical	electrical	electrical	electrical
Drive	BLDC motor	BLDC motor	BLDC motor	BLDC motor
Control	CANopen	CANopen	CANopen	CANopen
Rated feed force F _x [N]	150	150	150	150
Max. feed force F _x [N]*	270	270	270	270
Max. acceleration [m/s ²]	17	17	17	17
Max. speed [m/s]	1.00	1.00	1.00	1.00
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01
Safety function		STO		STO
Supply voltage [V]	24	24	24	24
Nominal current [A]	7,0	7,0	7,0	7,0
Current consumption max. [A]	14.0	14.0	14.0	14.0
Clamping element holding force [N]			630	630
Operating temperature [°C]	5 ... +50	5 ... +50	5 ... +50	5 ... +50
Certifications	CE / UKCA / LABS / REACH / RoHS	CE / UKCA / LABS / REACH / RoHS	CE / UKCA / LABS / REACH / RoHS	CE / UKCA / LABS / REACH / RoHS
Protection to IEC 60529	IP40	IP40	IP40	IP40
Weight [kg]	4.9	4.9	5.1	5.1
Moving mass [kg]	1.32	1.32	1.32	1.32

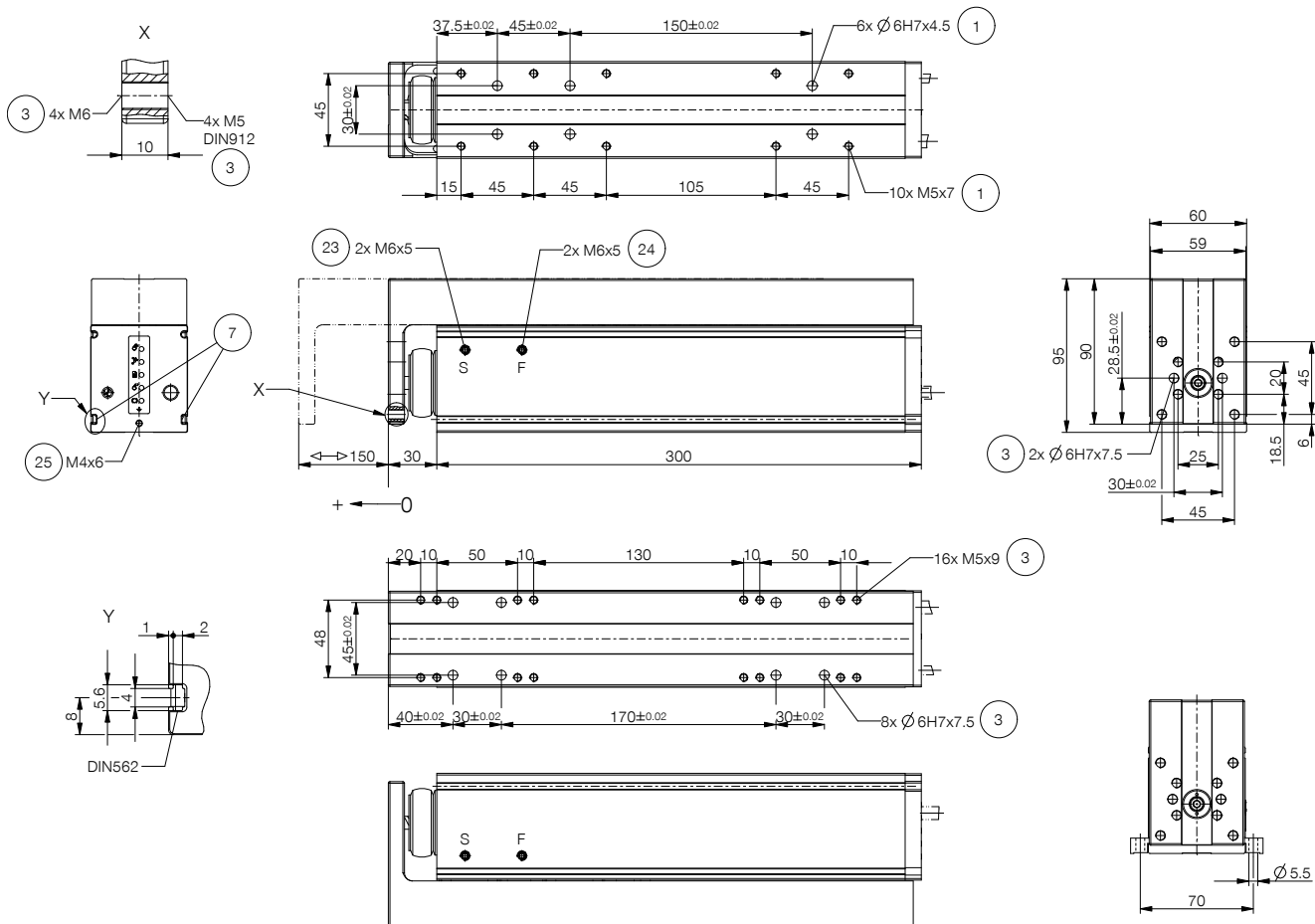
*for max. 500 ms

COMPACT AXES

INSTALLATION SIZE ACS60

► TECHNICAL DRAWINGS

- ① Fixing linear cylinder
- ② Energy supply IO-Link
- ③ Fixing application
- ⑦ Groove for clamping claw
- 23 Lubrication for ball screw
- 24 Lubrication for linear guide
- 25 Ground
- 26 STO
- 27 Power
- 29 CAN IN
- 30 CAN OUT

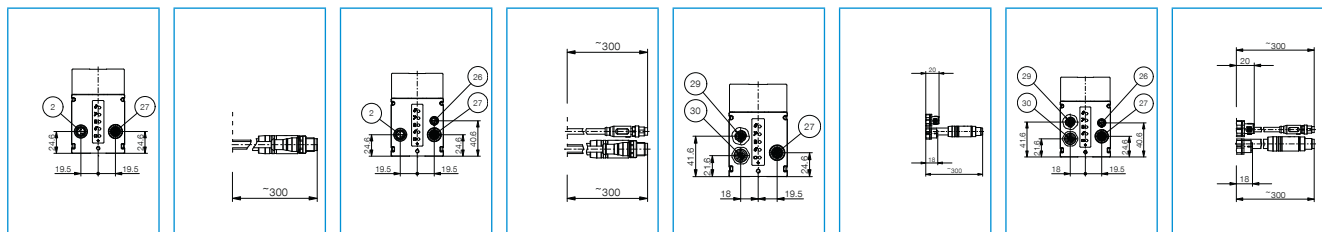


ACS60150IL20-00-A / ACS60150IL20-40-A

ACS60150IL20-01-A / ACS60150IL20-41-A

ACS60150CO20-00-A / ACS60150CO20-40-A

ACS60150CO20-01-A / ACS60150CO20-41-A



► RECOMMENDED ACCESSORIES



MECHANICAL PARTS



ZUB171097
Clamping claws



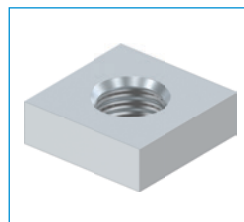
ZUB171098
Mounting kit



C71412061009
Cone lubricating nipple



CNOR02558
Funnel lubricating nipple



C056200039
Square nut

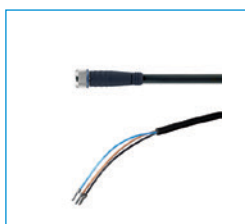
► RECOMMENDED ACCESSORY IO-LINK



CONNECTIONS / OTHER



KAG500IL
Plug-in connector straight 5 m -
plug, female connector M12



KAG500
Plug-in connector Straight Ca-
ble 5m - female connector M8



CSTE02006
Connecting line, straight, 5 m -
M12 plug, female connector, 5-pin



CSTE02007
Connecting line, straight, 2 m -
M12 plug, female connector, 5-pin

► RECOMMENDED ACCESSORY CANOPEN



CONNECTIONS / OTHER



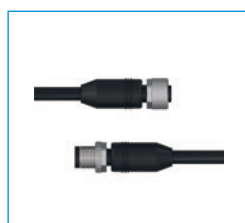
KAG500
Plug-in connector Straight Ca-
ble 5m - female connector M8



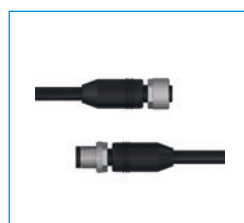
CSTE02006
Connecting line, straight, 5 m -
M12 plug, female connector, 5-pin



CSTE02007
Connecting line, straight, 2 m -
M12 plug, female connector, 5-pin



CSTE02008
Connecting line, straight, 5 m -
M12 plug, female connector, 5-pin

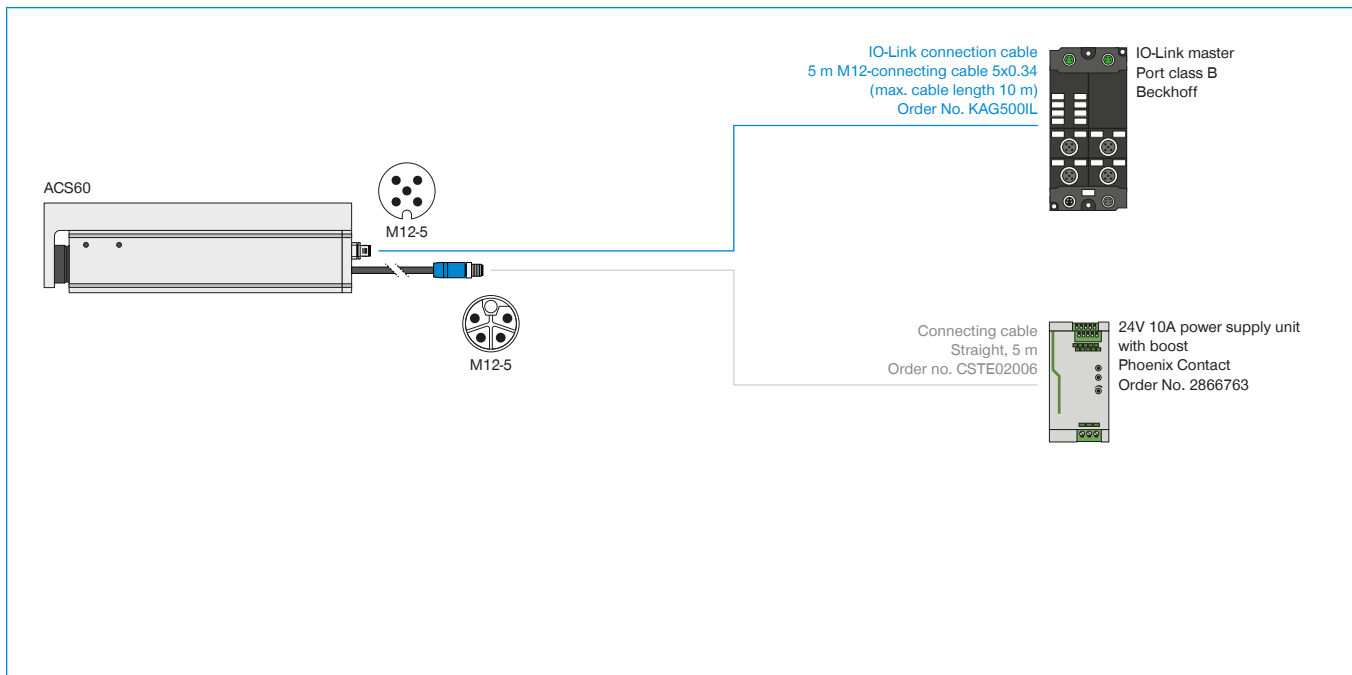


CSTE02009
Connecting line, straight, 2 m - M8
plug, M12 female connector, 5-pin

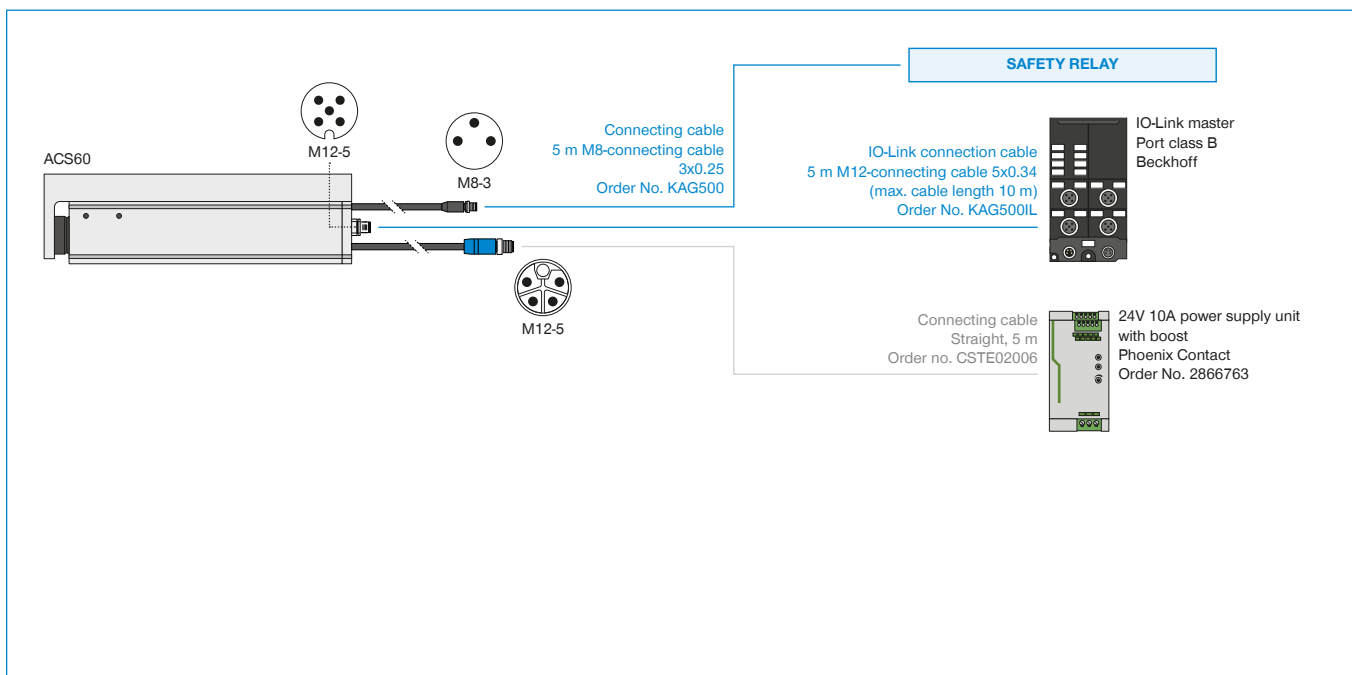
SECURED CONFIGURATION EXAMPLES

ACS60

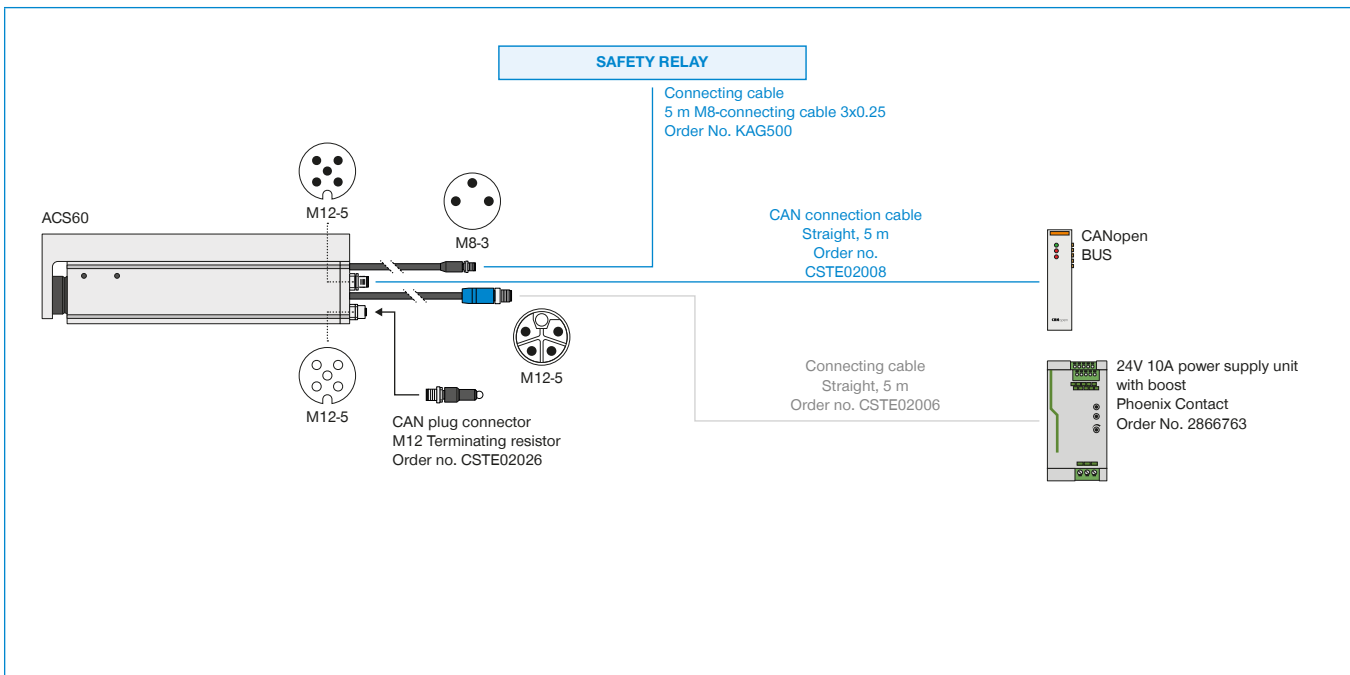
► ACS60 IO-LINK



► ACS60 IO-LINK WITH STO



► ACS60 CANOPEN WITH STO



► 2X ACS60 CANOPEN WITH STO

