

Smart Servo Package

Simple, fast and diverse



The Smart Servo Package – simple, fast and diverse

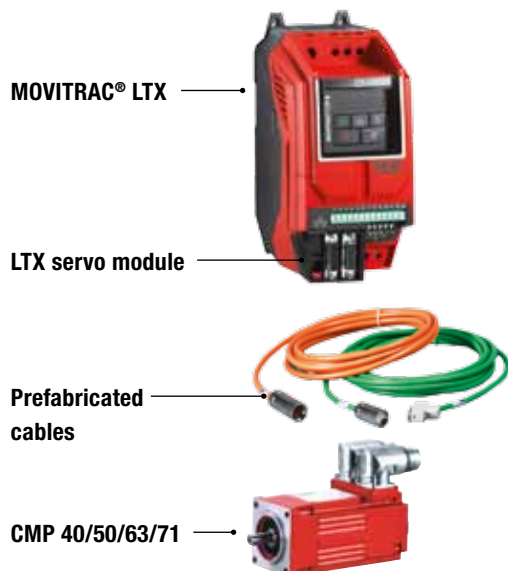
The Smart Servo Package from SEW-EURODRIVE contains all the components required for a complete automation solution in one coordinated product package. It has been optimized specifically for the most important application criteria in the power range up to 11 kW (15 HP) and in the voltage range of 1 or 3x AC 230 V and 3x AC 460 V.

The goal is to make a servo or automation task simpler, faster, and easier to implement.

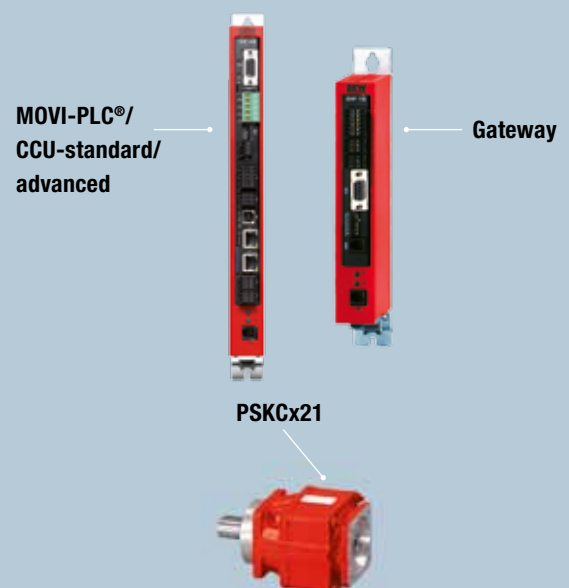
The Smart Servo Package includes the following components:

- Flexible universal servo inverter (MOVITRAC® LTX)
- Highly dynamic servomotors with absolute encoders (CMP40, 50, 63, 71)
- Programmable or configurable SEW controller (MOVI-PLC® / CCU)
- Compact planetary servo gear units (PSC)
- “Ready-to-use” accessories (cables, chokes, filters, etc.)

Core products (standard package)



Extension products (can be optionally combined)



MOVITRAC® LTX servo inverters

- 1x / 3x AC 230 V and 3x AC 460 V
(0.75 kW ... 11.0 kW, 1.0 HP ... 15.0 HP)
- 2 frame sizes / 8 different power ratings
- Powerful output stage
- Overload: 200% for 60 s / 250% for 2 s
- Controller interfaces or analog interfaces
- Works with Synchronous motors with HIPERFACE® encoders

Servomotors

- Optimized combination with MOVITRAC® LTX
- CMP 40/50/63/71 motors
- Standstill torques up to 13.1 Nm
and Peak torques up to 34.2 Nm
- Base speed 4500 rpm
- Multi-turn absolute encoder
- Optional holding brake

Optional servo gear units

- **Planetary servo gear units**
 - PSC 221 / 321 / 521 / 621 single-stage
 - Gear ratios $i = 5, 7, 10$
- With adapter mounting or directly mounted at the factory

Prefabricated cables and accessories

- Prefabricated cables in standard lengths: 5 / 10 / 15 m

Controllers from SEW-EURODRIVE: MOVI-PLC® or CCU

MOVI-PLC®

- IEC 61131 programming (LD, FBD, STL, ST, SFC)
- Preconfigured program module to quickly implement an application
- Graphical configuration and diagnostics (MultiMotion)
- CPU performance class “Standard”
 - Positioning and speed applications
- CPU performance class “Advanced”
 - functions of the performance class “Standard”
 - Synchronous operation, caming, kinematics, etc.

CCU

- Simple and convenient startup with operating software (MotionStudio)
- Simple configuration of the application without programming using the Application Configurator
- Standardized fieldbus interfaces to the higher-level controller
- CPU performance class “Standard”
 - Positioning and speed applications
- CPU performance class “Advanced”
 - functions of the performance class “Standard”
 - Multi-axis application modules (energy-efficient SRS, SyncCrane, etc.)

Connection to non-SEW controllers

Fieldbus interfaces

Using the UOH/DFx gateways, the Smart Servo Package can be easily used as speed controlled drive on any controller.

Analog interfaces

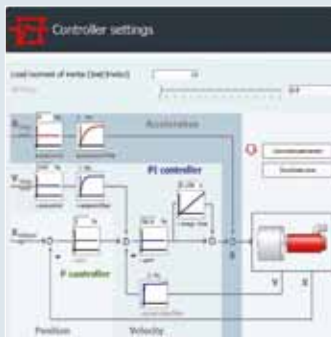
Connection with a non-SEW controller can be easily established with the interfaces +/-10 V, step & direction and encoder control.

Smart Automation with controllers from SEW-EURODRIVE

Smart Automation – with the CCU software package (Configurable Control Unit): configurable, standardized and simple

For applications with demanding positioning and speed requirements, motion control made by SEW-EURODRIVE offers a configurable control unit (CCU) with standardized quick start application modules, which eliminate the need for programming. Its functions match the specific

application and can be configured quickly and easily without any programming knowledge. An integrated diagnostic function enables quick and simple startup. The predefined solution modules only require the entry of basic application parameters.



Drive	Motor	Encoder	Controller	Application	Start	Stop	Emergency	Feedback
1	SEW 2000	SEW 2000	SEW 2000	SEW 2000	SEW 2000	SEW 2000	SEW 2000	SEW 2000
2	SEW 2000	SEW 2000	SEW 2000	SEW 2000	SEW 2000	SEW 2000	SEW 2000	SEW 2000
3	SEW 2000	SEW 2000	SEW 2000	SEW 2000	SEW 2000	SEW 2000	SEW 2000	SEW 2000
4	SEW 2000	SEW 2000	SEW 2000	SEW 2000	SEW 2000	SEW 2000	SEW 2000	SEW 2000
5	SEW 2000	SEW 2000	SEW 2000	SEW 2000	SEW 2000	SEW 2000	SEW 2000	SEW 2000

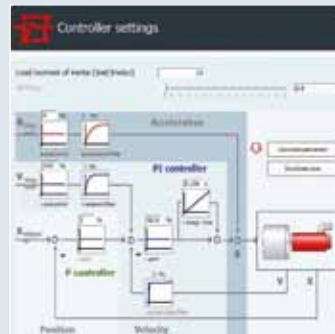
Overview of benefits:

- Parameterizable solutions for demanding motion control applications
- Applications modules can be used for all drive electronics components from SEW-EURODRIVE
- Easy graphical configuration
- Convenient module diagnostics with control mode for fast startup without active higher-level PLC
- Process data monitor with control mode to support fieldbus startup
- Integrated trace for drive optimization and process diagnostics
- Engineering via USB or Ethernet
- Data management via SD card for the entire application module and all drive parameters

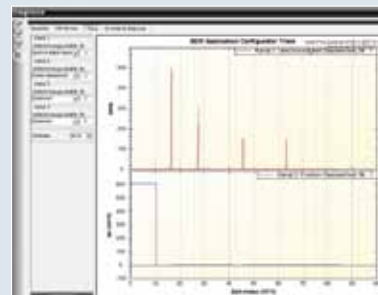
Smart Automation – MOVI-PLC® with the MultiMotion software package: universal, customizable and fast

MultiMotion is the ideal program module for applications where several axes are connected via synchronization or electronic cam. This makes it the ideal solution platform for all types of processing machines. The functionality of the program module is independent of the drive electronics used, for example the MOVITRAC® LTX universal inverter or MOVIAxis®.

The automation solution can be simulated, parameterized and programmed offline at the desk using virtual axes. The MultiMotion program module is available in two types: “MultiMotion” or “MultiMotion light”. The performance of MultiMotion makes it suited as a general solution platform for all production machines, while MultiMotion light is primarily suited for positioning and speed-controlled applications.



Axis	Parameter	Value
Axis 1 (Control: PI)	Max. Velocity [mm/s]	1000
	Max. Acceleration [mm/s²]	10000
Axis 2 (Control: PI)	Max. Velocity [mm/s]	1000
	Max. Acceleration [mm/s²]	10000
Axis 3 (Control: PI)	Max. Velocity [mm/s]	1000
	Max. Acceleration [mm/s²]	10000
Axis 4 (Control: PI)	Max. Velocity [mm/s]	1000
	Max. Acceleration [mm/s²]	10000
Axis 5 (Control: PI)	Max. Velocity [mm/s]	1000
	Max. Acceleration [mm/s²]	10000
Axis 6 (Control: PI)	Max. Velocity [mm/s]	1000
	Max. Acceleration [mm/s²]	10000



Overview of benefits:

- Universal (MOVIDRIVE®, MOVIAxis®, MOVITRAC® LTX, MOVIGEAR® B)
- Engineering via USB or Ethernet
- Data is managed using an SD card for the entire application module and all drive parameters
- Real and virtual axes are treated the same
- Program functions can be tested offline without physical axes
- Graphical configuration and diagnostics without programming tool
- Comprehensive functionality
 - Automatic coupling to any position in the cam profile
 - Overlaying profiles
 - Ideal as motion platform for the entire machine spectrum

Smart Drive with Smart Technology – MOVITRAC® LTP and LTX servo module

MOVITRAC® LTX is easy to use, saves time during startup and is cost-optimized for its field of application. MOVITRAC® LTX is particularly suited for normal positioning applications and multi-axis applications with dynamic control in small to medium-sized machines or machine modules.

MOVITRAC® LTX is available in two sizes for 1x / 3x AC 230 V and 3x AC 460 V and covers a power range of up to 11 kW (15.0 HP).

MOVITRAC® LTP-B



LTX servo module



Size	Dimensions (mm)		
	Height	Width	Depth
2	221	110	185
3	261	132	205

Overview of benefits:

MOVITRAC® LTX excels by its functionality, flexibility and connectivity.

- Analog interfaces for connecting non-SEW controllers
- Gateway and controller connection for higher-quality automation and drive tasks
- Integrated brake chopper and braking resistors that can be integrated
- Simple and convenient keypad
- Optional cable sets for easily connecting inverters and controllers (CCU/MOVI-PLC® and gateway) available

MOVITRAC® LTX – Simple and complete

Basic unit functions	
User level – password management	✓
Keypad (5 keys)	✓
Bus that can be integrated	✓
DC bus can be connected upstream ¹⁾	✓
Brake management, hoist capable	✓
Digital inputs (5)/analog inputs (2)	✓
Digital outputs/analog outputs (2)	✓
2x relays (brake control)	✓

Technology functions	
X, V control	✓
Easy tuning	✓
2x touch probe	✓
Analog interface +/- 10 V (setpoint values)	✓
Step + direction interface (setpoint values)	✓
Encoder interface (setpoint values)	✓
Jog mode	✓
Reference travel	✓
Limit switches	✓

Safety technology	
STO (Safe Torque Off) cat. 3 ¹⁾	✓

Fieldbus/network communication	
PROFIBUS DP-V1	*
DeviceNet	*
PROFINET	*
EtherNet/IP	*
Modbus/TCP	*
SBUS	✓
Ethernet TCP/IP, UDP/IP	*

Diagnostics/service/monitoring	
C2 EMC class	✓
Scope/trace	*
Thermal motor management	✓
Thermal inverter management	✓
Central data storage/SD card	*
Auto reload data record for axis replacement	*

Encoder/motor data	
Synchronous motor operation	✓
Automatic motor identification	✓
Multi-turn encoder	✓

* Controller from SEW-EURODRIVE or UOH/DFx gateway needed
¹⁾ In preparation

Type MC LTP-B. ... (1x AC 230 V)	Size	Part no.	I _n 100 %	Up to 60 s 200%	Up to 2 s 250%	Power
0008-2B1-4-00	2	1825 1382	3.2 A	6.3 A	7.9 A	0.75 kW
0015-2B1-4-00		1825 1528	5.5 A	10.9 A	13.7 A	1.5 kW
0022-2B1-4-00		1825 1641	6.9 A	13.7 A	17.2 A	2.2 kW

Type MC LTP-B. ... (3x AC 230 V)	Size	Part no.	I _n 100 %	Up to 60 s 200%	Up to 2 s 250%	Power
0008-2A3-4-00	2	1825 1358	3.2 A	6.3 A	7.9 A	0.75 kW
0015-2A3-4-00		1825 1471	5.5 A	10.9 A	13.7 A	1.5 kW
0022-2A3-4-00		1825 1617	6.9 A	13.7 A	17.2 A	2.2 kW
0030-2A3-4-00	3	1825 1722	9.5 A	18.9 A	23.6 A	3.0 kW
0040-2A3-4-00		1825 1765	12.6 A	25.2 A	31.5 A	4.0 kW
0055-2A3-4-00		1825 1846	16.5 A	24.7 A	33.0 A	5.5 kW

Type MC LTP-B. ... (3x AC 460 V)	Size	Part no.	I _n 100 %	Up to 60 s 200%	Up to 2 s 250%	Power
0008-5A3-4-00	2	1825 1412	1.6 A	3.2 A	4.0 A	0.75 kW
0015-5A3-4-00		1825 1552	3.1 A	6.2 A	7.7 A	1.5 kW
0022-5A3-4-00		1825 1684	4.2 A	8.4 A	10.5 A	2.2 kW
0040-5A3-4-00	3	1825 1803	6.4 A	12.8 A	16.0 A	4.0 kW
0055-5A3-4-00		1825 1870	9.5 A	19 A	23.7 A	5.5 kW
0075-5A3-4-00		1825 1927	12.6 A	25.2 A	31.5 A	7.5 kW
0110-5A3-4-00		1825 1986	16.5 A	33 A	41.3 A	11.0 kW

Drive/inverter LTX AC 230 V

- The inverter is determined by the selected motor
- The corresponding inverter is selected according to the supply voltage 1x or 3x AC 230 V
- **LTX-H1A is always needed!**

Drive/inverter LTX AC 460 V

- The inverter is determined by the selected motor
- **LTX-H1A is always needed!**

Smart Motors – CMP servomotors: compact and functional

The CMP servomotors with matched AC 230 V or 400 V windings are part of the electro-mechanics of the Smart Servo Package. Their control range is optimized for MOVITRAC® LTX based on a multiturn feedback. The motors are optionally available with brake and come equipped with keyway and key as standard.

The following motors are available with the corresponding assignment to MOVITRAC® LTX units:

Servomotors AC 230 V

with brake, speed class 4500 rpm

Type	Part no. for logistics and stockkeeping	$J_{\text{BMOT}} \times 10^{-4} \text{ kgm}^2$	$M_{\text{B}} \text{ Nm}$
CMP40M / BP / KY / AKOH / SB1	1477 0490	0.18	0.95
CMP50S / BP / KY / AKOH / SB1	1477 0504	0.48	3.1
CMP50M / BP / KY / AKOH / SB1	1477 0512	0.73	4.3
CMP50L / BP / KY / AKOH / SB1	1477 0520	0.98	4.3
CMP63S / BP / KY / AKOH / SB1	1477 0539	1.49	7
CMP63M / BP / KY / AKOH / SB1	1477 0547	2.26	9.3
CMP63L / BP / KY / AKOH / SB1	1477 0555	3.03	9.3

without brake, speed class 4500 rpm

Type	Part no. for logistics and stockkeeping	$J_{\text{BMOT}} \times 10^{-4} \text{ kgm}^2$
CMP40M / BP / KY / AKOH / SM1	1477 0415	0.15
CMP50S / BP / KY / AKOH / SM1	1477 0423	0.42
CMP50M / BP / KY / AKOH / SM1	1477 0431	0.67
CMP50L / BP / KY / AKOH / SM1	1477 0458	0.92
CMP63S / BP / KY / AKOH / SM1	1477 0466	1.15
CMP63M / BP / KY / AKOH / SM1	1477 0474	1.92
CMP63L / BP / KY / AKOH / SM1	1477 0482	2.69

Servomotors AC 400 V

with brake, speed class 4500 rpm

Type	Part no. for logistics and stockkeeping	$J_{\text{BMOT}} \times 10^{-4} \text{ kgm}^2$	$M_{\text{B}} \text{ Nm}$
CMP40M / BP / KY / AKOH / SB1	1477 0881	0.18	0.95
CMP50S / BP / KY / AKOH / SB1	1477 0903	0.48	3.1
CMP50M / BP / KY / AKOH / SB1	1477 0911	0.73	4.3
CMP50L / BP / KY / AKOH / SB1	1477 0938	0.98	4.3
CMP63S / BP / KY / AKOH / SB1	1477 0946	1.49	7
CMP63M / BP / KY / AKOH / SB1	1477 0954	2.26	9.3
CMP63L / BP / KY / AKOH / SB1	1477 0962	3.03	9.3
CMP71M / BP / KY / AKOH / SB1	1477 0989	4.5	14
CMP71L / BP / KY / AKOH / SB1	1477 0997	6.6	14

without brake, speed class 4500 rpm


Type	Part no. for logistics and stockkeeping	$J_{\text{BMOT}} \times 10^{-4} \text{ kgm}^2$
CMP40M / KY / AKOH / SM1	14770784	0.15
CMP50S / KY / AKOH / SM1	14770792	0.42
CMP50M / KY / AKOH / SM1	14770806	0.67
CMP50L / KY / AKOH / SM1	14770814	0.92
CMP63S / KY / AKOH / SM1	14770822	1.15
CMP63M / KY / AKOH / SM1	14770830	1.92
CMP63L / KY / AKOH / SM1	14770849	2.69
CMP71M / KY / AKOH / SM1	14770865	4.08
CMP71L / KY / AKOH / SM1	14770873	6.18

Overview of benefits:

The CMP series allows for fast and simple connection via right-angle plug connectors. The standard shaft type of CMP servomotors has a keyway/key. As an option, this servomotor series can be combined with single stage planetary gear units (with adapter or directly mounted).

- Particularly compact, convection-cooled motor
- The low-inertia rotor of the CMP motor minimizes the amount of energy required for motor acceleration

- Spring-loaded holding brake

- Can be used worldwide due to 

Smart Gears – PSC planetary servo gear units: flexible and economical

The servomotors can be combined optionally with planetary gear units via B5 flange to suit application requirements. SEW-EURODRIVE also offers these servo gear units for direct mounting according to the requirements. The gear units in the Smart Servo Package are always single-stage gear units with key.

PSC servo gear units

– Select the servo gear unit by means of the part number

– Make sure the adapter matches the motor size

Type	Part no. for logistics and stockkeeping	Motor	Ratio	$J_{\text{GEAR UNIT}} \times 10^{-4} \text{ kgm}^2$
PSKC221 with motor adapter ECH02/01/02	1477 0563	CMP40	i = 5	0.26
	1477 0571		i = 7	0.23
	1477 0598		i = 10	0.22
PSKC221 with motor adapter ECH02/08/04	1477 0601	CMP50	i = 5	0.26
	1477 0628		i = 7	0.23
	1477 0636		i = 10	0.22
PSKC321 with motor adapter ECH03/08/04	1477 0644	CMP50	i = 5	0.92
	1477 0652		i = 7	0.85
	1477 0660		i = 10	0.81
PSKC321 with motor adapter ECH03/13/06	1477 0679	CMP63	i = 5	0.92
	1477 0687		i = 7	0.85
	1477 0695		i = 10	0.81
PSKC521 with motor adapter ECH05/13/6	1477 0709	CMP63	i = 5	3
	1477 0717		i = 7	2.7
	1477 0725		i = 10	2.5
PSKC521 with motor adapter EPH 05/26/13	1477 1004	CMP71	i = 5	3.2
	1477 1012		i = 7	2.9
	1477 1020		i = 10	2.6
PSKC621 with motor adapter EPH 05/26/13	1477 1039	CMP71	i = 5	4.4
	1477 1047		i = 7	3.6
	1477 1055		i = 10	3.1

Overview of benefits:

- High permitted torques up to 338 Nm (in the Smart Servo Package)
- High permitted overhung loads up to 6000 N
- 99% for highest energy efficiency
- Maximum reliability, availability and service life
- Low angular backlash <10 angular minutes for accurate positioning
- Lubrication for life with oil lubrication (for maintenance-free operation)
- Low self-heating due to high efficiency
- Any mounting position is possible resulting in great installation flexibility and reduced stock-keeping
- Easy motor mounting using ECH adapter
- With surface protection OS1 to OS4 as option
- Direct mounting as option

Smart Accessories – The connection between the products: complete, fast and trouble-free

Motor and encoder cables

For simple connection to motors and inverters, all cables are available in 5 predefined standard lengths. Furthermore, variants are offered for cable carrier installation and fixed installation as well as brakemotor and non-brakemotor cables. Using non-SEW cables can reduce the package performance.

Cable length	Encoder cable, 6 x 2 x 0.25 mm ²	
	Fixed installation	Cable carrier installation
5	13324535-05	13324551-05
10	13324535-10	13324551-10
15	13324535-15	13324551-15

Cable length	Motor cable without brake, 4 x 1.5 mm ²		Motor cable without brake ¹⁾ , 4 x 2.5 mm ²	
	Fixed installation	Cable carrier installation	Fixed installation	Cable carrier installation
5	5904544-05	5906245-05	05904552-05	05906253-05
10	5904544-10	5906245-10	05904552-10	05906253-10
15	5904544-15	5906245-15	05904552-15	05906253-15

Cable length	Motor cable with brake, 4 x 1.5 mm ² + 2 x 1 mm ²		Motor cable with brake ¹⁾ , 4 x 2.5 mm ² + 3 x 1 mm ²	
	Fixed installation	Cable carrier installation	Fixed installation	Cable carrier installation
5	13354345-05	13354388-05	13354353-05	13354396-05
10	13354345-10	13354388-10	13354353-10	13354396-10
15	13354345-15	13354388-15	13354353-15	13354396-15

1) When using a CMP71L with MC LTP-B0110-5A3-4-00 applying full nominal current.

Communication kits and setup accessories

The smart servo package comes complete with easy-to-use kits for connecting multiple axes to each other and to the MOVI-PLC® /gateway. The remote keypad allows the user access from outside the switch cabinet or control panel. The parameter copy memory stick can be used for quick setup when commissioning multiple drives with the same parameters.

Basic set A: Includes a MOVI-PLC® /gateway connection cable, branch cable to an axis, and a Y terminating resistor. Is required when connecting at least one axis to MOVI-PLC®/gateway.

Cable set A (basic set)	Cable length to axis 0.5 m	Content	Quantity	Description
			1	RJ45 open end
Part number	2820 2554	1	Cable terminator + splitter	
Designation	(OP LT 005 A2)	1	Drive connector cable 0.5 m, RJ45-RJ45	

Extension set B: Includes a 0.5 m axis branch cable, an axis-axis cable with a length of 0.5 / 1.0 m, and a Y splitter. (Number of B kits needed = number of axes – 1)

Cable set B (extension set)	Cable length to axis		Content	Quantity	Description
	0.5 m	1 m			
			1	Cable splitter	
Part number	2820 2546	2820 2562	1	Drive connector cable 0.5 m, RJ45-RJ45	
Designation	(OP LT 005 B2)	(OP LT 010 B2)	1	Cable between drives, with variable length	

Accessories	MOVITRAC® LTP-B parameter copy stick	MOVITRAC® LTP-B remote keypad
Part number	1824 1549	1824 1522
Designation	LT BP-C	LT BG-C

Braking resistors

Braking resistors are needed with high dynamics/mass moments of inertia. In such cases, you can choose between braking resistors that can be integrated directly in the housing or braking resistors that are mounted externally.

LTX							
Output current I_n [A]	Size	Braking resistor AC 230 V					
		Horizontal travel distance			Vertical travel distance		
		Type	Part no.	Design	Type	Part no.	Design
3.2	2	BW LT 100 002	1820 8770	Flat design*	BW LT 100 002	1820 8770	Flat design*
5.5	2	BW072-003	0826 0583	Flat design	BW047-005	0826 2683	Flat design
6.9	2	BW047-005	0826 2683	Flat design	BW027-006	0822 4226	Wire resistor
9.5	3	BW047-005	0826 2683	Flat design	BW147-T	1820 1342	Flat design
12.6	3	BW147-T	1820 1342	Wire resistor	BW147-T	1820 1342	Wire resistor
16.5	3	BW147-T	1820 1342	Wire resistor	BW247-T	1820 0842	Wire resistor

* can be integrated in the inverter

LTX							
Output current I_n [A]	Size	Braking resistor AC 460 V					
		Horizontal travel distance			Vertical travel distance		
		Type	Part no.	Design	Type	Part no.	Design
1.6	2	BW LT 100 002	1820 8770	Flat design*	BW LT 100 002	1820 8770	Flat design*
3.1	2	BW100-005	0826 2691	Flat design	BW100-005	0826 2691	Flat design
4.2	2	BW100-005	0826 2691	Flat design	BW100-005	0826 2691	Wire resistor
6.4	2	BW100-006	0821 7017	Flat design	BW100-006	0821 7017	Flat design
9.5	3	BW147-T	1820 1342	Wire resistor	BW247-T	1820 0842	Wire resistor
12.6	3	BW147-T	1820 1342	Wire resistor	BW247-T	1820 0842	Wire resistor
16.5	3	BW247-T	1820 0842	Wire resistor	BW347-T	1820 1350	Wire resistor

* can be integrated in the inverter

Braking resistor for AC 230 V

- The braking resistor is selected depending on the horizontal or vertical travel distance
- **Info 1:** in horizontal operation, 1/7 of the nominal power is assumed as braking power
- **Info 2:** in vertical operation, 1/3 of the nominal power is assumed as braking power

Braking resistor for AC 460 V

- The braking resistor is selected depending on the horizontal or vertical travel distance
- **Info 1:** in horizontal operation, 1/7 of the nominal power is assumed as braking power
- **Info 2:** in vertical operation, 1/3 of the nominal power is assumed as braking power

Line chokes

The optional line chokes reduce the generation of harmonics and power supply distortion. Furthermore, they protect MOVITRAC® LTX against voltage peaks and power supply peaks.

LTX					
Output current I_n [A]	Size	Power [kW]	Output choke	Phase	Part no.
3.2 / 1 ph	2	750 W	ND LT 010 290 31	3	1820 1644
3.2 / 3 ph			ND LT 010 290 53		1820 1679
5.5 / 1 ph	2	1.5	ND LT 010 290 21	3	1820 1644
5.5 / 3 ph			ND LT 010 290 53		1820 1679
6.9 / 1 ph	2	2.2	ND LT 010 290 21	3	1820 1644
6.9 / 3 ph			ND LT 010 290 53		1820 1679
9.5	3	3	ND LT 036 081 53	3	1820 1679
12.6	3	4	ND LT 036 081 53	3	1820 1687
16.5	3	5.5	ND LT 036 081 53	3	1820 1687

Line chokes for 1 and 3 phases / AC 230 V

- Optional: Select an input choke for weak grids

LTX					
Output current I_n [A]	Size	Power [kW]	Output choke	Phase	Part no.
1.6	2	750 W	ND LT 006 480 53	3	1820 1660
3.1	2	1.5	ND LT 006 480 53	3	1820 1660
4.2	2	2.2	ND LT 006 480 53	3	1820 1660
6.4					1820 1679
9.5	3	4	ND LT 010 290 53	3	1820 1679
12.6	3	5.5	ND LT 036 081 53	3	1820 1687
		7.5			
16.5	3	11.0	ND LT 036 081 53	3	1820 1687

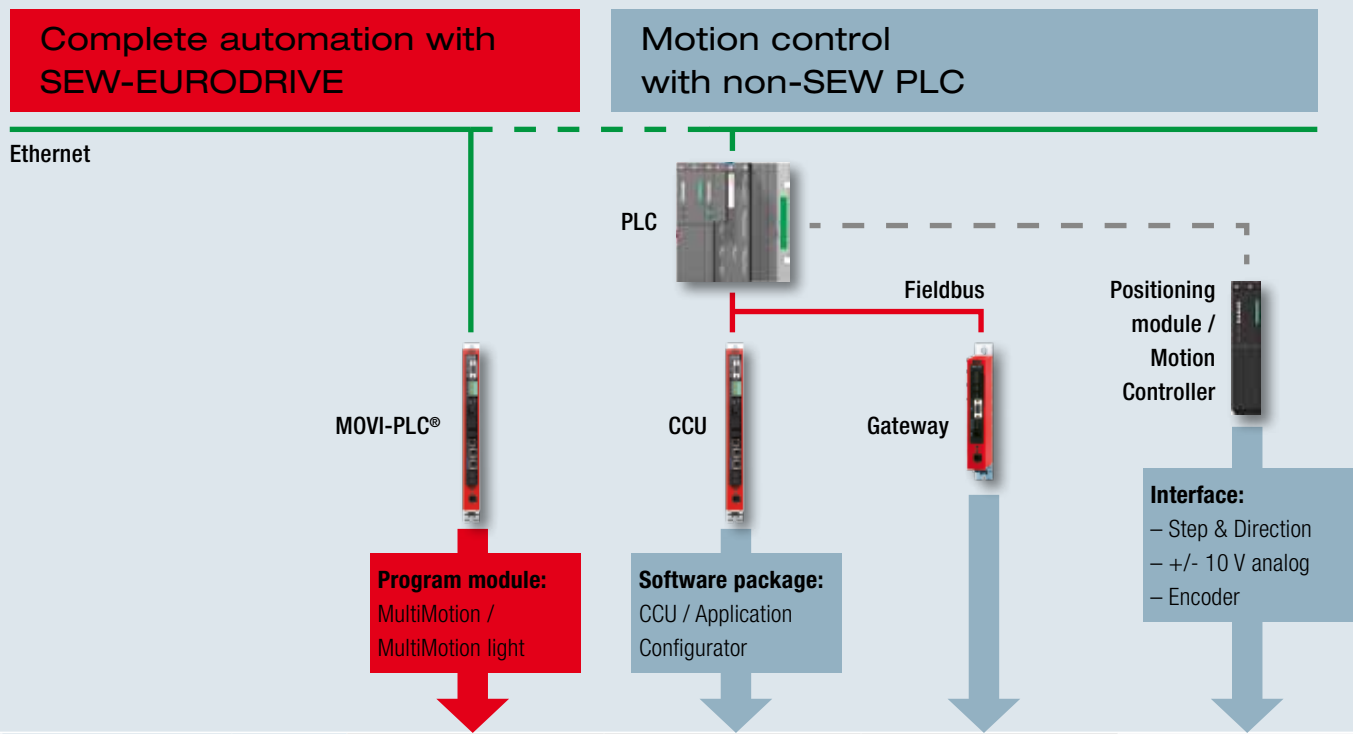
Line chokes for 3 phases / AC 460 V

- Optional: Select an input choke for weak grids

Line filters and EMC

Separate/external line filters are not required because LTX/LTP-B always meets the C2 level according to EN 61800-3.

Smart Solutions – Applications and fields of operation



Application requirements	Speed-controlled applications (MultiMotion, MultiMotion light)	– Speed reference – Open loop – Closed loop	– Speed reference – With 1, 3, 4, 6 PD (process data)	– Speed reference with 3 PD (process data), variable ramps	According to positioning module
	Single-axis positioning applications (MultiMotion, MultiMotion light)	– Reference travel – Positioning (modulo/absolute/relative) – Touch probe	– Reference travel – Positioning (Touch probe/ fieldbus 6 PD) – Universal module for positioning and master-slave		According to positioning module
	Multi-axis Applications*	– Reference travel – Synchronous operation – Electronic cam – Touch probe – Multiaxis interpolation			
	* only with MultiMotion	– Max. 16 axes – Central data storage with SD card	Max. 8 axes via SBus		

A variety of application and control options is available ranging from simple, speed-controlled applications to positioning and complex multi-axis applications.

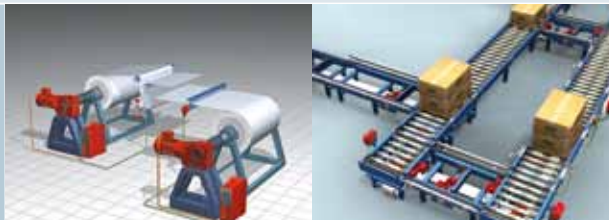
The following table shows the **application options**. A distinction is made between Smart Servo Package **with SEW controllers or SEW gateways** and the combination **with non-SEW controllers**.

The application categories (speed-controlled application, etc.) are shown as selection criteria. The solution options are described according to the chosen controller/gateway and the required application.

The Smart Servo Package is the perfect solution for nearly any industry. Logistics, packaging or handling systems are particularly appropriate fields of application as these are automation-intensive industries. The various control and integration options of the automation structure create the prerequisites for using the Smart Servo Package in a flexible manner.

Examples of speed-controlled applications:

- Simple, energy-optimized conveyor belt/fan application with synchronous motors
- Winder applications



Examples of positioning applications:

- Feed motions
- Feeder/dispenser
- Packer
- Simple gantries
- Switches
- Carton erector



Examples of multi-axis applications:

- Linked conveyor belts with processing stations
- Electronic cam applications
- Applications with electronic gear unit
- Wrapper
- Packer, Carton erector



Smart Benefits with controllers from SEW-EURODRIVE

The most convenient and powerful option for using the Smart Servo Package is to combine it with controllers from SEW-EURODRIVE. All components are matched in the overall system to yield optimized functionality.

The many benefits for customers can be summed up by the keywords:

Simple, fast and diverse.

Simple

Simple stands for straightforward processing, optimized serviceability, and streamlined stock-keeping:

- The option card can be integrated by the customer resulting in maximum order picking flexibility.
- All parts of the Smart Servo Package can be ordered easily and quickly by their part numbers.
- All gear units are available as adapter gear units and can therefore be easily installed/removed by the customer.
- Central data management of the axis system in the controllers and auto reload for service purposes.

Fast

Fast stands for maximum time savings due to predefined product combinations and function solutions:

- When selecting your Smart Servo Package.
- When carrying out the project planning for drive components.
- When installing and assembling the motors and gear units.
- When starting up the drive package (e.g. easy setup of pre-configured components and basic parameters).

Diverse

Diverse stands for broad applicability and a high level of adaptability:

- In the product combinations using the appropriate motor and gear unit types.
- In the integration and connection through a wide range of controllers/gateways/analog interfaces.
- Due to gear unit lubrication regardless of the mounting position.
- By configurable or parameterizable/programmable software packages on different controller platforms.



If a drive/automation solution is required for 1x / 3x AC 230 V or 3x AC 460 V, up to 11.1 kW with peak torques up to 338 Nm when combined with optional planetary gear units, there is no “smarter” choice than the Smart Servo Package from SEW-EURODRIVE.
www.smart-servo-package.com



Smart Benefits with non-SEW controllers

The versatile Smart Servo Package can also be used with non-SEW controllers thanks to the analog interfaces offered.

Overview of benefits:

- Step, direction and analog interfaces make it possible to replace stepper motor amplifiers and to use the most basic controllers and motion controllers.
- The integrated electronic gear unit allows for gradually adjusting the input pulse/frequency to the required setpoint speed.
- All internal unit functions are available and usable via digital inputs (reference travel, fixed speeds, touch probe inputs, limit switches, etc.).
- Unit-internal convenient functions continue to be fully usable.
- Unit parameterization and diagnostics is possible at any time via LT Shell using the parameterization interface, which is accessible from the front panel.

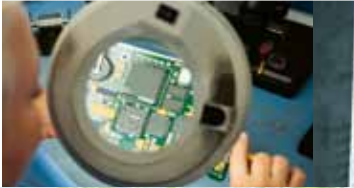
How we're driving the world

With uncompromising quality that reduces the cost and complexity of daily operations.

With drives and controls that automatically improve your productivity.

With comprehensive knowledge in virtually every branch of industry today.

With industry-leading training and 24-hour technical support, nationwide.



SEW-EURODRIVE
Driving the world

With a global presence that offers responsive and reliable solutions. Anywhere.

With a worldwide service network that is always close at hand.

With innovative technology that solves tomorrow's problems today.

With online information and software updates, via the Internet, available around the clock.

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