

E-SMART series**> E-SMART series description**

Fig. 1

E-SMART

The E-SMART series linear units are available in four sizes: 30 - 50 - 80 - 100 mm. They have a self-supporting structure with a robust profile of extruded and anodized aluminum. The thrust force is transmitted by a steel reinforced, polyurethane belt. The moving carriage is guided and supported by a recirculating ball guide system featuring one or more blocks.

> The components

Extruded bodies

The anodized aluminum extrusions used for the bodies of the E-SMART series linear units are designed and manufactured by industry experts to optimize weight while maintaining mechanical strength. (see physical-chemical characteristics below). The dimensional tolerances comply with EN 755-9 standard.

Driving belt

The Rollon SMART series linear units use steel reinforced polyurethane drive belts with AT pitch. This type of belt is ideal due to its high load transmission characteristics, compact size, and low noise. Used in conjunction with a backlash-free pulley, smooth alternating motion can be achieved.

Optimization of the maximum belt width/body dimension ratio enables the following performance characteristics to be achieved:

- High speed
- Low noise
- Low wear

Carriage

The carriage of the E-SMART series linear units is made of machined anodized aluminum. The dimensions vary depending on the type. Rollon offers multiple carriages to accommodate a vast array of applications.

General data about aluminum used: AL 6060

Chemical composition [%]

Al	Mg	Si	Fe	Mn	Zn	Cu	Impurities
Remainder	0.35-0.60	0.30-0.60	0.30	0.10	0.10	0.10	0.05-0.15

Tab. 1

Physical characteristics

Density	Coeff. of elasticity	Coeff. of thermal expansion (20°-100°C)	Thermal conductivity (20°C)	Specific heat (0°-100°C)	Resistivity	Melting point
$\frac{\text{kg}}{\text{dm}^3}$	$\frac{\text{kN}}{\text{mm}^2}$	$\frac{10^{-6}}{\text{K}}$	$\frac{\text{W}}{\text{m} \cdot \text{K}}$	$\frac{\text{J}}{\text{kg} \cdot \text{K}}$	$\Omega \cdot \text{m} \cdot 10^{-9}$	°C
2.7	70	23.8	200	880-900	33	600-655

Tab. 2

Mechanical characteristics

Rm	Rp (02)	A	HB
$\frac{\text{N}}{\text{mm}^2}$	$\frac{\text{N}}{\text{mm}^2}$	%	—
250	200	10	75

Tab. 3

> The linear motion system

The linear motion system has been designed to meet the load capacity, speed, and maximum acceleration conditions of a wide variety of applications.

Performance characteristics:

- The ball bearing guides with high load capacity are mounted in a dedicated seat on the aluminum body.
- The carriage of the linear unit is assembled on preloaded ball bearing blocks that enables the carriage to withstand loading in the four main directions.
- The ball bearing carriages of the SP versions are also fitted with a retention cage that eliminates "steel-steel" contact between adjacent revolving parts and prevents misalignment.
- The blocks have seals on both sides and, when necessary, an additional scraper can be fitted for very dusty conditions.

The linear motion system described above offers:

- High speed and acceleration
- High load capacity
- High permissible bending moments
- Low friction
- Long life
- Low noise

> The driving heads

The couple of symmetrical heads is designed to allow the highest freedom while sizing the application and mounting the gearbox on the E-SMART series linear actuators. Therefore, it is possible to assembly the gearbox on both the heads, either on the right or the left side, by means of a standard assembly kit. This feature is also useful when the unit is assembled to be part of a multiaxis system.

The assembly kit includes: shrink disk; adapter plate and fixing hardware; and can be ordered with the actuator. Different kits are available to accommodate gearboxes from the major brands on the market. For more information see pag. SS-15.

The same logic is valid when mounting the shaft to connect two units in parallel.

E-SMART section

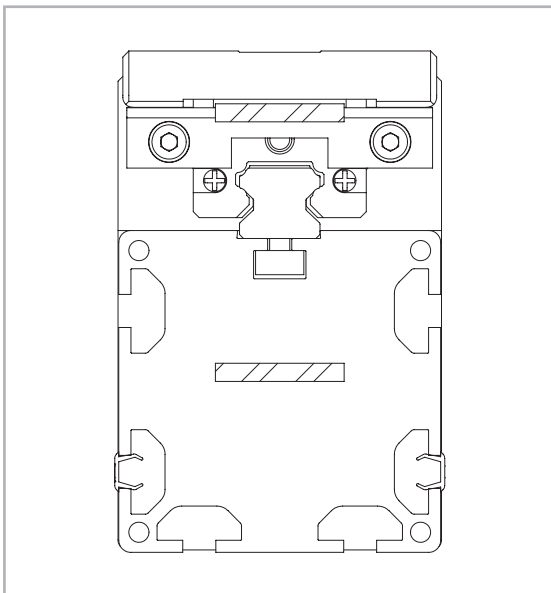
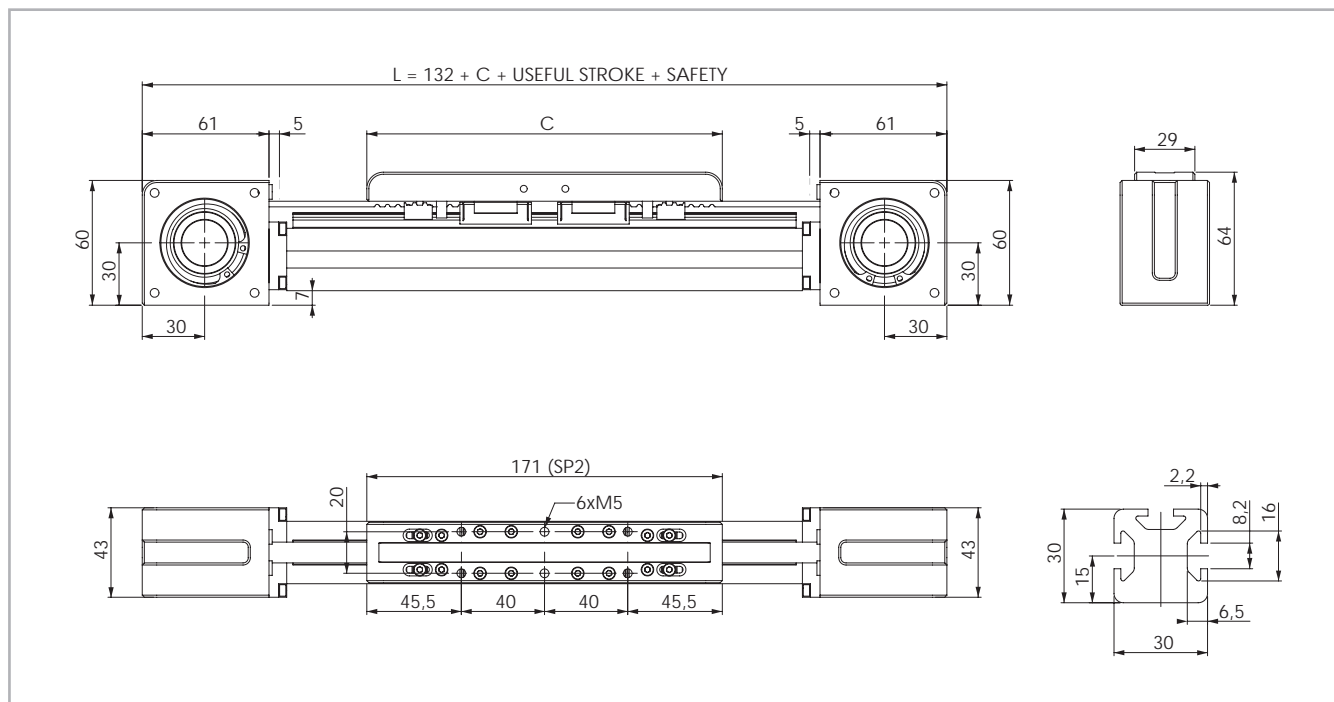


Fig. 2

> E-SMART 30 SP2

E-SMART 30 Dimensions



The length of the safety stroke is provided on request according to the customer's specific requirements.

Fig. 3

Technical data

	Type
	E-SMART 30 SP2
Max. useful stroke length [mm]	3700
Max. positioning repeatability [mm]*1	± 0.05
Max. speed [m/s]	4.0
Max. acceleration [m/s ²]	50
Type of belt	10 AT 5
Type of pulley	Z 24
Pulley pitch diameter [mm]	38.2
Carriage displacement per pulley turn [mm]	120
Carriage weight [kg]	0.28
Zero travel weight [kg]	1.83
Weight for 100 mm useful stroke [kg]	0.16
Starting torque [Nm]	0.15
Moment of inertia of pulleys [g · mm ²]	57.630
Rail size [mm]	12 mini

*1) Positioning repeatability is dependent on the type of transmission used.

Tab. 4

E-SMART 30 - Load capacity

Type	F _x [N]		F _y [N]		F _z [N]	M _x [Nm]	M _y [Nm]	M _z [Nm]
	Stat.	Dyn.	Stat.	Dyn.	Stat.	Stat.	Stat.	Stat.
E-SMART 30 SP2	385	242	7060	6350	7060	46.2	166	166

See verification under static load and lifetime on page SS-30 and SS-31

Tab. 7

Moments of inertia of the aluminum body

Type	I _x [10 ⁷ mm ⁴]	I _y [10 ⁷ mm ⁴]	I _p [10 ⁷ mm ⁴]
E-SMART 30 SP2	0.003	0.003	0.007

Tab. 5

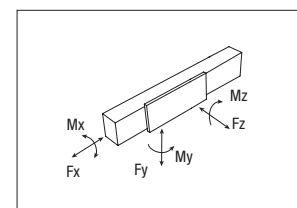
Driving belt

The driving belt is manufactured from a friction resistant polyurethane and with steel cords for high tensile stress resistance.

Type	Type of belt	Belt width [mm]	Weight [kg/m]
E-SMART 30 SP2	10 AT 5	10	0.033

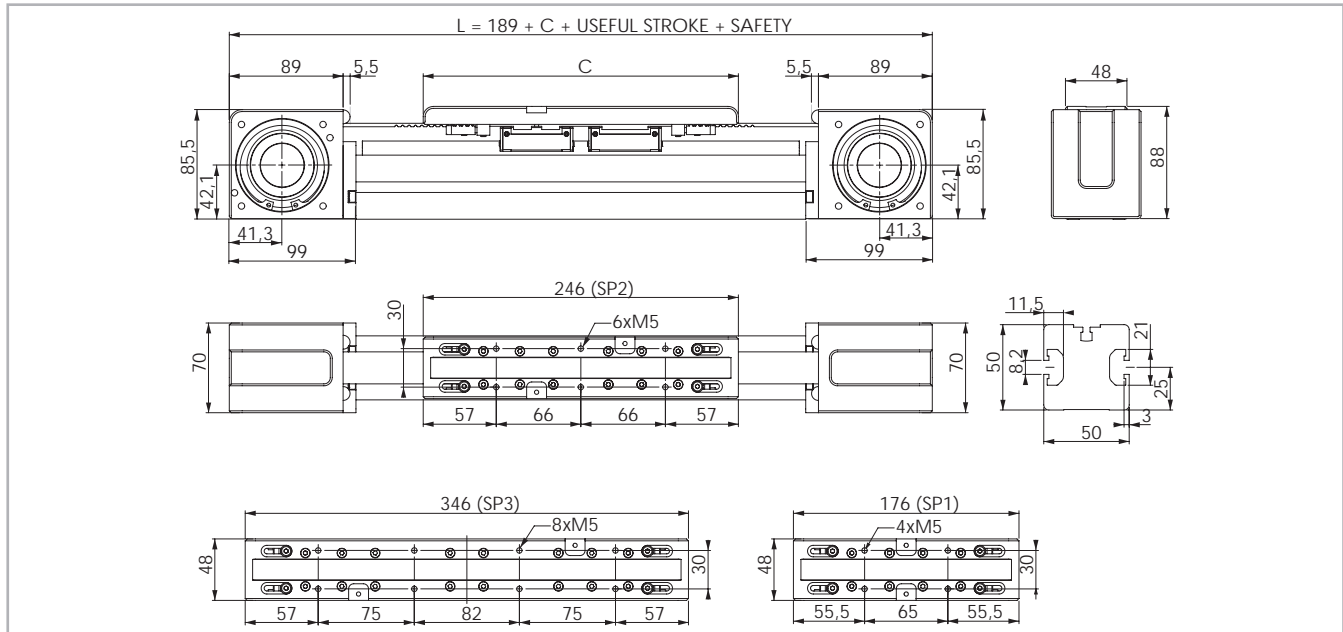
Tab. 6

Belt length (mm) = 2 x L - 100 (SP2)



> E-SMART 50 SP1 - SP2 - SP3

E-SMART 50 Dimensions



The length of the safety stroke is provided on request according to the customer's specific requirements.

Fig. 4

Technical data

	Type		
	E-SMART 50 SP1	E-SMART 50 SP2	E-SMART 50 SP3
Max. useful stroke length [mm]*1	6145	6075	5975
Max. positioning repeatability [mm]*2	± 0.05	± 0.05	± 0.05
Max. speed [m/s]	4.0	4.0	4.0
Max. acceleration [m/s ²]	50	50	50
Type of belt	25 AT 5	25 AT 5	25 AT 5
Type of pulley	Z 40	Z 40	Z 40
Pulley pitch diameter [mm]	63.66	63.66	63.66
Carriage displacement per pulley turn [mm]	200	200	200
Carriage weight [kg]	0.54	0.85	1.21
Zero travel weight [kg]	4.89	5.4	6.16
Weight for 100 mm useful stroke [kg]	0.34	0.34	0.34
Starting torque [Nm]	0.35	0.35	0.55
Moment of inertia of pulleys [g · mm ²]	891.270	891.270	891.270
Rail size [mm]	15	15	15

*1) It is possible to obtain stroke up to 11.270 (SP1), 11.200 (SP2), 11.100 (SP3) by means of special Rollon joints. Tab. 8

*2) Positioning repeatability is dependent on the type of transmission used.

E-SMART 50 - Load capacity

Type	F _x [N]		F _y [N]		F _z [N]	M _x [Nm]	M _y [Nm]	M _z [Nm]
	Stat.	Dyn.	Stat.	Dyn.	Stat.	Stat.	Stat.	Stat.
E-SMART 50 SP1	1050	750	15280	9945	15280	120	90	90
E-SMART 50 SP2	1050	750	30560	19890	30560	240	1054	1054
E-SMART 50 SP3	1050	750	45840	29835	45840	360	2582	2582

See verification under static load and lifetime on page SS-30 and SS-31

Tab. 11

Moments of inertia of the aluminum body

Type	I _x [10 ⁷ mm ⁴]	I _y [10 ⁷ mm ⁴]	I _p [10 ⁷ mm ⁴]
E-SMART 50 SP	0.021	0.020	0.041

Tab. 9

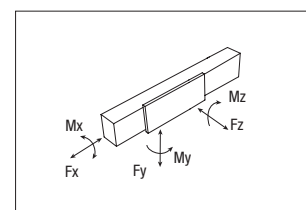
Driving belt

The driving belt is manufactured from a friction resistant polyurethane and with steel cords for high tensile stress resistance.

Type	Type of belt	Belt width [mm]	Weight [kg/m]
E-SMART 50 SP	25 AT 5	25	0.080

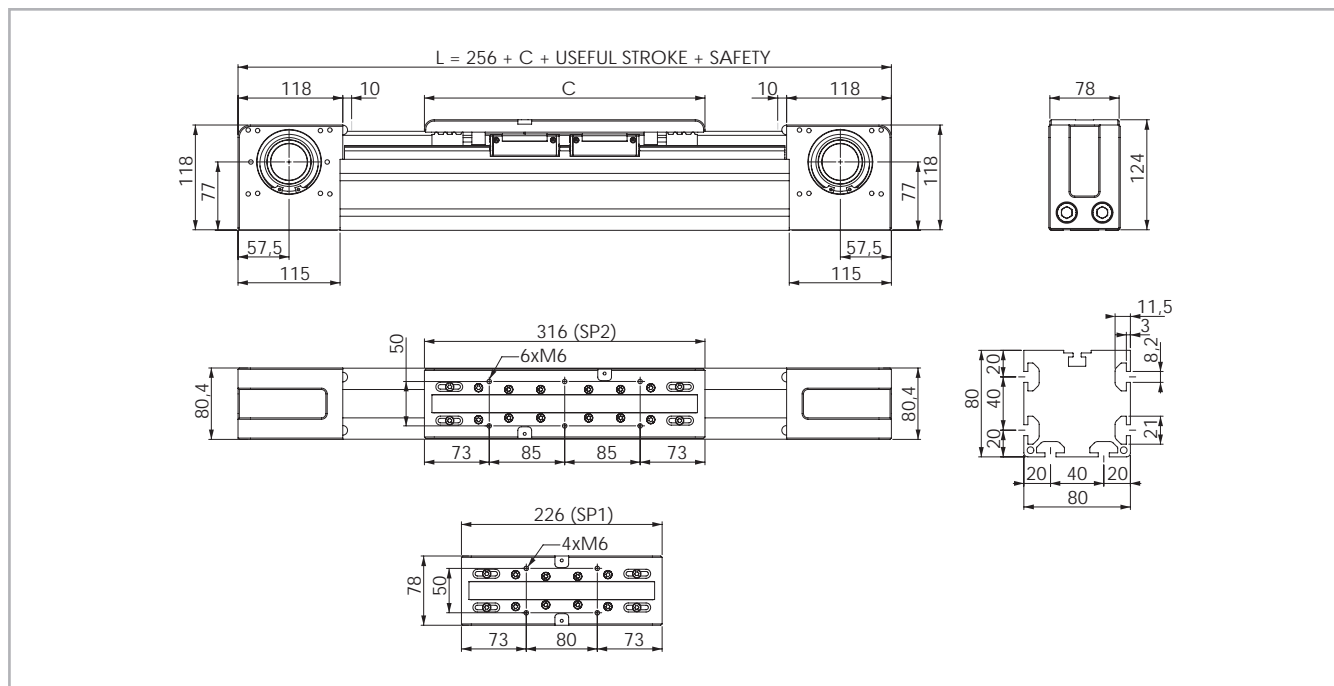
Tab. 10

Belt length (mm) = 2 x L - 60 (SP1)
 2 x L - 125 (SP2)
 2 x L - 225 (SP3)



> E-SMART 80 SP1 - SP2

E-SMART 80 Dimensions



The length of the safety stroke is provided on request according to the customer's specific requirements.

Fig. 5

Technical data

	Type	
	E-SMART 80 SP1	E-SMART 80 SP2
Max. useful stroke length [mm]*1	6060	5970
Max. positioning repeatability [mm]*2	± 0.05	± 0.05
Max. speed [m/s]	4.0	4.0
Max. acceleration [m/s ²]	50	50
Type of belt	32 AT 10	32 AT 10
Type of pulley	Z 21	Z 21
Pulley pitch diameter [mm]	66,84	66,84
Carriage displacement per pulley turn [mm]	210	210
Carriage weight [kg]	1.34	1.97
Zero travel weight [kg]	9.94	11.31
Weight for 100 mm useful stroke [kg]	0.76	0.76
Starting torque [Nm]	0.95	1.3
Moment of inertia of pulleys [g · mm ²]	938.860	938.860
Rail size [mm]	20	20

*1) It is possible to obtain stroke up to 11.190 (SP1), 11.100 (SP2) by means of special Rollon joints.

*2) Positioning repeatability is dependent on the type of transmission used.

Tab. 12

E-SMART 80 - Load capacity

Type	F _x [N]		F _y [N]		F _z [N]	M _x [Nm]	M _y [Nm]	M _z [Nm]
	Stat.	Dyn.	Stat.	Dyn.	Stat.	Stat.	Stat.	Stat.
E-SMART 80 SP1	2523	1672	25630	18318	25630	260	190	190
E-SMART 80 SP2	2523	1672	51260	36637	51260	520	1874	1874

See verification under static load and lifetime on page SS-30 and SS-31

Tab. 15
SS-7

Moments of inertia of the aluminum body

Type	I _x [10 ⁷ mm ⁴]	I _y [10 ⁷ mm ⁴]	I _p [10 ⁷ mm ⁴]
E-SMART 80 SP	0.143	0.137	0.280

Tab. 13

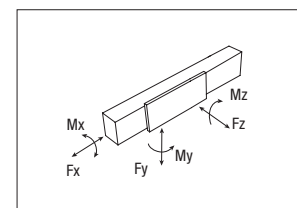
Driving belt

The driving belt is manufactured from a friction resistant polyurethane and with steel cords for high tensile stress resistance.

Type	Type of belt	Belt width [mm]	Weight [kg/m]
E-SMART 80 SP	32 AT 10	32	0.186

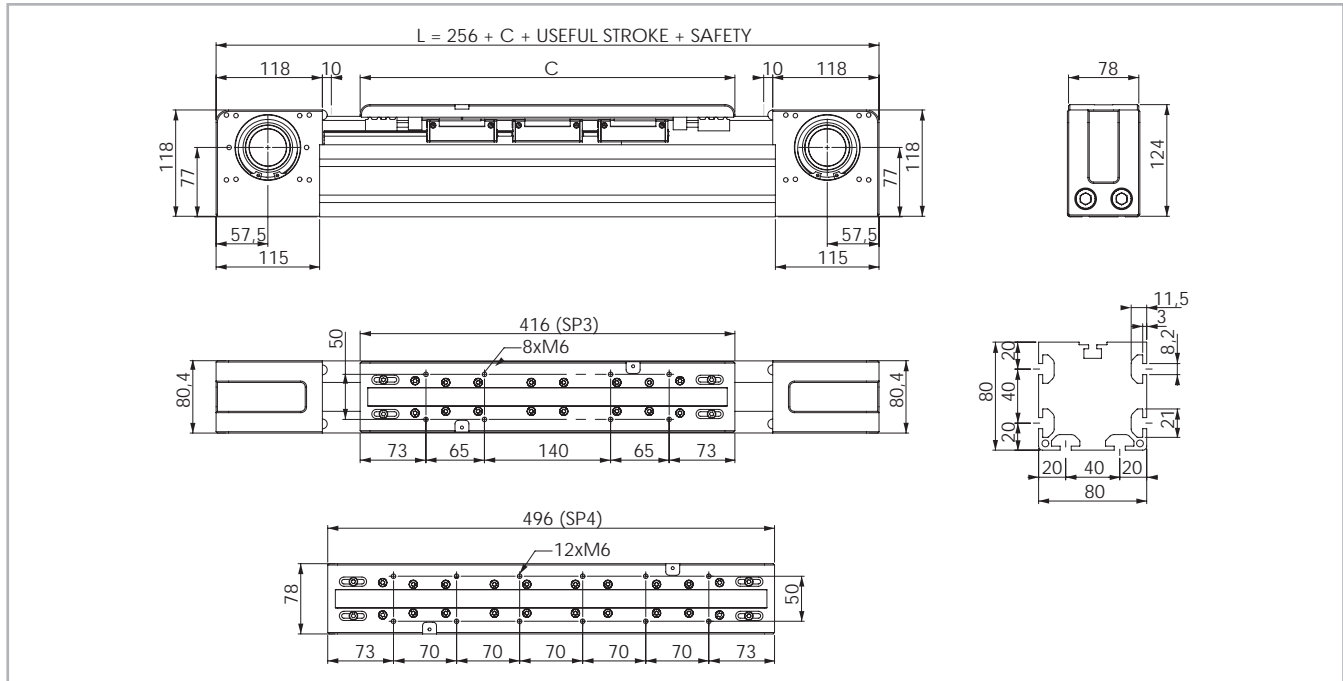
Tab. 14

Belt length (mm) = 2 x L - 135 (SP1)
2 x L - 225 (SP2)



> E-SMART 80 SP3 - SP4

E-SMART 80 Dimensions



The length of the safety stroke is provided on request according to the customer's specific requirements.

Fig. 6

Technical data

	Type	
	E-SMART 80 SP3	E-SMART 80 SP4
Max. useful stroke length [mm]*1	5870	5790
Max. positioning repeatability [mm]*2	± 0.05	± 0.05
Max. speed [m/s]	4.0	4.0
Max. acceleration [m/s ²]	50	50
Type of belt	32 AT 10	32 AT 10
Type of pulley	Z 21	Z 21
Pulley pitch diameter [mm]	66,84	66,84
Carriage displacement per pulley turn [mm]	210	210
Carriage weight [kg]	2.63	3.23
Zero travel weight [kg]	12.83	14.06
Weight for 100 mm useful stroke [kg]	0.76	0.76
Starting torque [Nm]	1.4	1.52
Moment of inertia of pulleys [g · mm ²]	938.860	938.860
Rail size [mm]	20	20

*1) It is possible to obtain stroke up to 11.000 (SP3), 10.920 (SP4) by means of special Rollon joints.
 *2) Positioning repeatability is dependent on the type of transmission used.

Tab. 16

E-SMART 80 - Load capacity

Type	F _x [N]		F _y [N]		F _z [N]	M _x [Nm]	M _y [Nm]	M _z [Nm]
	Stat.	Dyn.	Stat.	Dyn.	Stat.	Stat.	Stat.	Stat.
E-SMART 80 SP3	2523	1672	76890	54956	76890	780	4870	4870
E-SMART 80 SP4	2523	1672	102520	73274	102520	1040	6920	6920

See verification under static load and lifetime on page SS-30 and SS-31

Tab. 19

Moments of inertia of the aluminum body

Type	I _x [10 ⁷ mm ⁴]	I _y [10 ⁷ mm ⁴]	I _p [10 ⁷ mm ⁴]
E-SMART 80 SP	0.143	0.137	0.280

Tab. 17

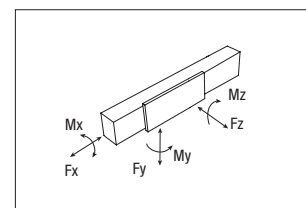
Driving belt

The driving belt is manufactured from a friction resistant polyurethane and with steel cords for high tensile stress resistance.

Type	Type of belt	Belt width [mm]	Weight [kg/m]
E-SMART 80 SP	32 AT 10	32	0.186

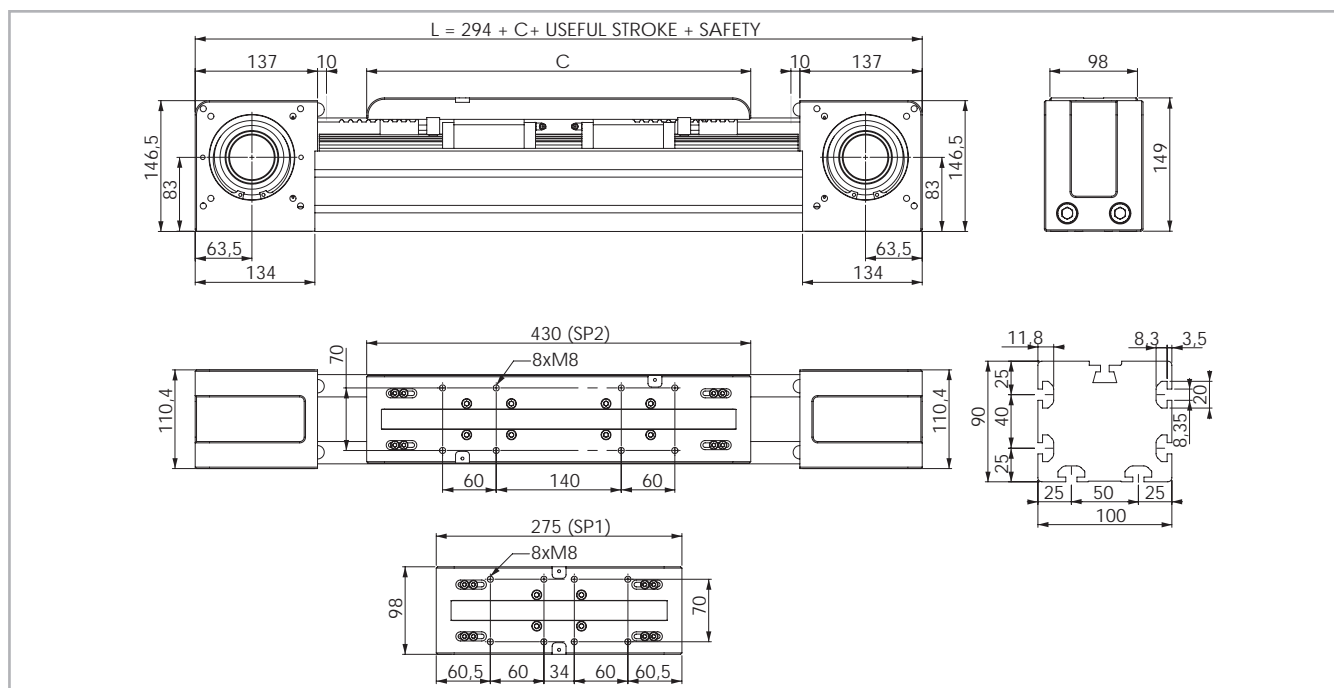
Tab. 18

Belt length (mm) = 2 x L - 325 (SP3)
 2 x L - 405 (SP4)



> E-SMART 100 SP1 - SP2

E-SMART 100 Dimensions



The length of the safety stroke is provided on request according to the customer's specific requirements.

Fig. 7

Technical data

	Type	
	E-SMART 100 SP1	E-SMART 100 SP2
Max. useful stroke length [mm]*1	6025	5870
Max. positioning repeatability [mm]*2	± 0.05	± 0.05
Max. speed [m/s]	4.0	4.0
Max. acceleration [m/s ²]	50	50
Type of belt	50 AT 10	50 AT 10
Type of pulley	Z 27	Z 27
Pulley pitch diameter [mm]	85.94	85.94
Carriage displacement per pulley turn [mm]	270	270
Carriage weight [kg]	2.72	4.42
Zero travel weight [kg]	18.86	22.38
Weight for 100 mm useful stroke [kg]	1.3	1.3
Starting torque [Nm]	2.1	2.4
Moment of inertia of pulleys [g · mm ²]	4.035.390	4.035.390
Rail size [mm]	25	25

*1) It is possible to obtain stroke up to 11.155 (SP1), 11.000 (SP2) by means of special Rollon joints.

*2) Positioning repeatability is dependent on the type of transmission used.

Tab. 20

E-SMART 100 Load capacity

Type	F _x [N]		F _y [N]		F _z [N]	M _x [Nm]	M _y [Nm]	M _z [Nm]
	Stat.	Dyn.	Stat.	Dyn.	Stat.	Stat.	Stat.	Stat.
E-SMART 100 SP1	4980	3390	43620	31192	43620	500	450	450
E-SMART 100 SP2	4980	3390	87240	62385	87240	1000	6805	6805

See verification under static load and lifetime on page SS-30 and SS-31

Tab. 23

Moments of inertia of the aluminum body

Type	I _x [10 ⁷ mm ⁴]	I _y [10 ⁷ mm ⁴]	I _p [10 ⁷ mm ⁴]
E-SMART 100 SP	0.247	0.316	0.536

Tab. 21

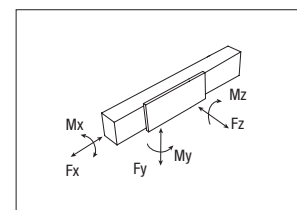
Driving belt

The driving belt is manufactured from a friction resistant polyurethane and with steel cords for high tensile stress resistance.

Type	Type of belt	Belt width [mm]	Weight [kg/m]
E-SMART 100 SP	50 AT 10	50	0.290

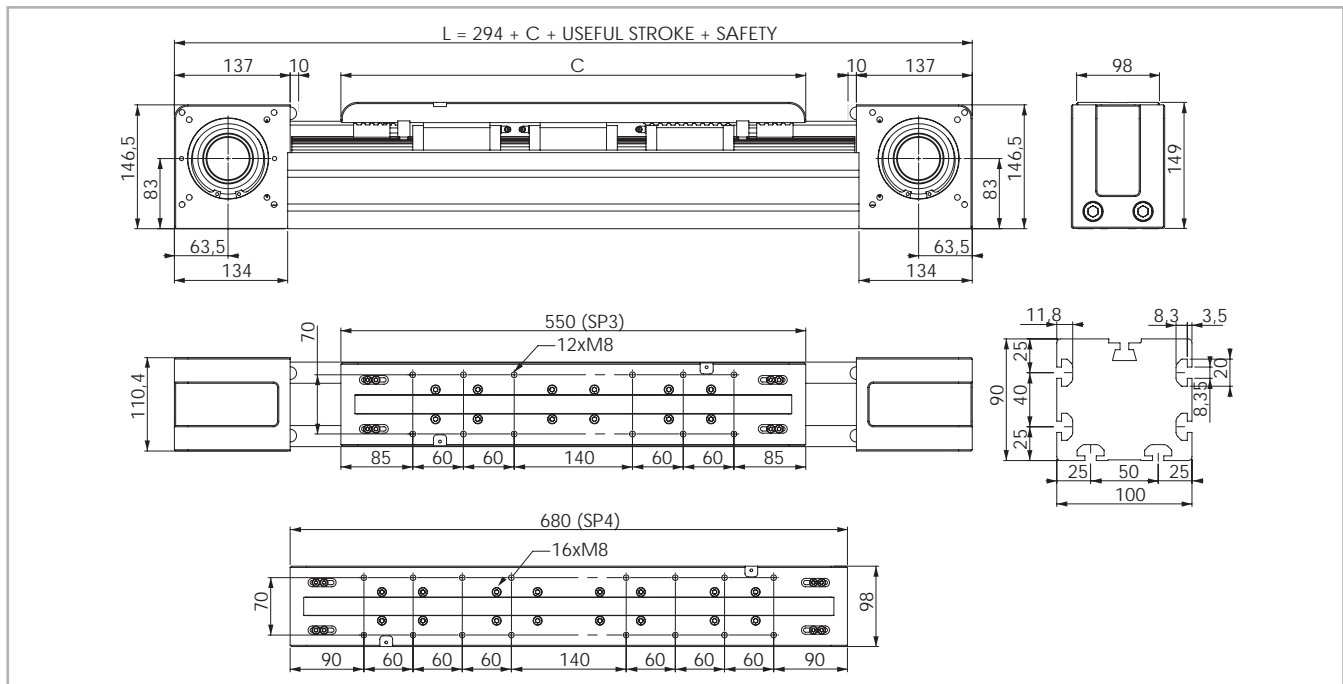
Tab. 22

Belt length (mm) = 2 x L - 120 (SP1)
2 x L - 275 (SP2)



> E-SMART 100 SP3 - SP4

E-SMART 100 Dimensions



The length of the safety stroke is provided on request according to the customer's specific requirements.

Fig. 8

Technical data

	Type	
	E-SMART 100 SP3	E-SMART 100 SP4
Max. useful stroke length [mm]*1	5750	5620
Max. positioning repeatability [mm]*2	± 0.05	± 0.05
Max. speed [m/s]	4.0	4.0
Max. acceleration [m/s ²]	50	50
Type of belt	50 AT 10	50 AT 10
Type of pulley	Z 27	Z 27
Pulley pitch diameter [mm]	85.94	85.94
Carriage displacement per pulley turn [mm]	270	270
Carriage weight [kg]	5.85	7.34
Zero travel weight [kg]	25.22	28.25
Weight for 100 mm useful stroke [kg]	1.3	1.3
Starting torque [Nm]	2.6	2.8
Moment of inertia of pulleys [g · mm ²]	4.035.390	4.035.390
Rail size [mm]	25	25

Tab. 24

*1) It is possible to obtain stroke up to 10.880 (SP3), 10.750 (SP4) by means of special Rollon joints.
 *2) Positioning repeatability is dependent on the type of transmission used.

E-SMART 100 Load capacity

Type	F _x [N]		F _y [N]		F _z [N]	M _x [Nm]	M _y [Nm]	M _z [Nm]
	Stat.	Dyn.	Stat.	Dyn.	Stat.	Stat.	Stat.	Stat.
E-SMART 100 SP3	4980	3390	130860	93577	130860	1500	12039	12039
E-SMART 100 SP4	4980	3390	174480	124770	174480	2000	17710	17710

See verification under static load and lifetime on page SS-30 and SS-31

Tab. 27

Moments of inertia of the aluminum body

Type	I _x [10 ⁷ mm ⁴]	I _y [10 ⁷ mm ⁴]	I _p [10 ⁷ mm ⁴]
E-SMART 100 SP	0.247	0.316	0.536

Tab. 25

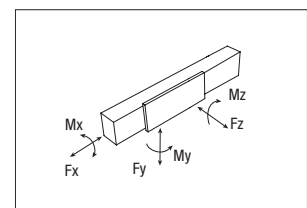
Driving belt

The driving belt is manufactured from a friction resistant polyurethane and with steel cords for high tensile stress resistance.

Type	Type of belt	Belt width [mm]	Weight [kg/m]
E-SMART 100 SP	50 AT 10	50	0.290

Tab. 26

Belt length (mm) = 2 x L - 395 (SP3)
 2 x L - 252 (SP4)



> Lubrication

SP linear units with ball bearing guides

The ball bearing carriages of the SP versions are fitted with a retention cage that eliminates "steel-steel" contact between adjacent revolving parts and prevents misalignment of these in the circuits.

This system guarantees a long interval between maintenances: SP version: every 2000 km or 1 year of use, based on the value reached first. If

a longer service life is required or in case of high dynamic or high loaded applications please contact our offices for further verification.

E-SMART

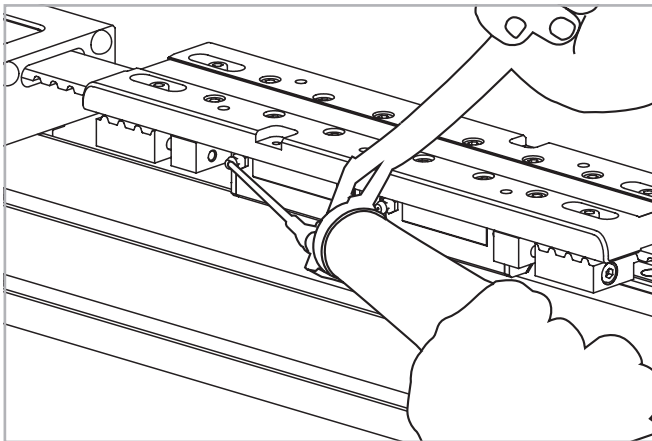


Fig. 9

- Insert the tip of the grease gun into the specific grease blocks.
- Type of lubricant: Lithium soap grease of class NLGI 2.
- For specially stressed applications or hostile environmental conditions, lubrication should be applied out more frequently.
Contact Rollon for further advice

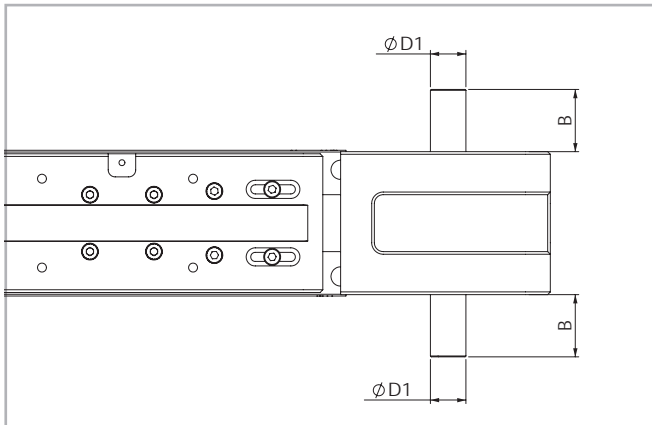
Quantity of lubricant necessary for re-lubrication of each block:

Type	Unit [cm ³]
E-SMART 30	0.5
E-SMART 50	0.2
E-SMART 80	0.5
E-SMART 100	0.6

Tab. 28

> Simple shafts

AS type simple shafts



Position of the simple shaft can be to the right or to the left of the drive head.

Fig. 10

This head configuration is obtained by utilizing an assembly kit delivered as a separate accessory item.

Shaft can be installed on the left or right side of the drive head as decided by the customer.

Units (mm)

Applicable to unit	Shaft type	B	D1	AS assembly kit code
E-SMART 30	AS 12	25	12h7	G000348
E-SMART 50	AS 15	35	15h7	G000851
E-SMART 80	AS 20	36.5	20h7	G000828
E-SMART 100	AS 25	50	25h7	G000649

Tab. 29

> Hollow shaft

Hollow shaft type FP - Standard supply

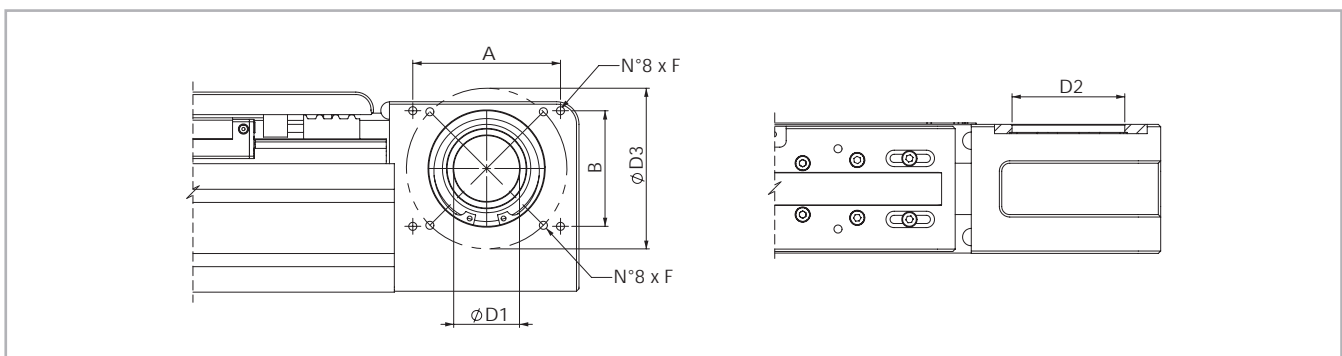


Fig. 11

Units (mm)

Applicable to unit	Shaft type	D1	D2	D3	F	A x B	Drive head code
E-SMART 30	FP 22	22H7	42	68	M5	-	2R
E-SMART 50	FP 34	34H7	72	90	M6	-	2R
E-SMART 80	FP 41	41H7	72	100	M6	92x72	2R
E-SMART 100	FP 50	50H7	95	130	M8	109x109	2R

Tab. 30

An (optional) connection flange is required to fit the standard reduction units selected by Rollon.

For further information contact our offices.

> Linear units in parallel

Synchronization kit for use of SMART linear units in parallel

When movement consisting of two linear units in parallel is essential, a synchronization kit must be used. This consists of original Rollon lamina type precision joints complete with tapered splines and hollow aluminum drive shafts.

Moment of inertia [g·mm²] C1 + C2 · (X-Y)

	C1	C2	Weight [Kg] D1+D2 · (X-Y)	
	[g·mm ²]	[g·mm ²]	D1 [Kg]	D2 [Kg mm]
GK12P	61.456	69	0.308	0.00056
GK15P	906.928	464	2.28	0.00148
GK20P	1.014.968	464	2.48	0.00148
GK25P	5.525.250	4.708	6.24	0.0051

Tab. 31

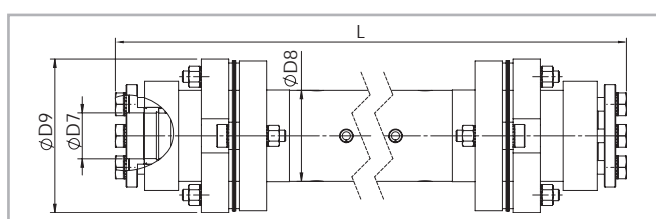


Fig. 12

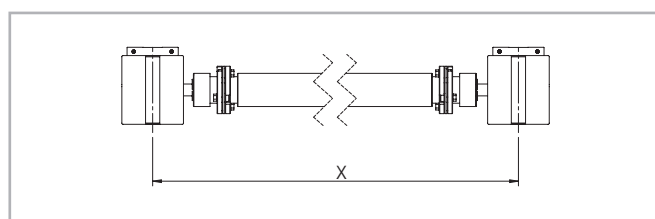


Fig. 13

Dimensions (mm)

Applicable to unit	Shaft type	D7	D8	D9	Y [mm]	Code	Formula for length calculation
E-SMART 30	AP 12	12	25	45	166	GK12P...1A	L= X-51 [mm]
E-SMART 50	AP 15	15	40	69.5	210	GK15P...1A	L= X-79 [mm]
E-SMART 80	AP 20	20	40	69.5	250	GK20P...1A	L= X-97 [mm]
E-SMART 100	AP 25	25	70	99	356	GK25P...1A	L= X-145 [mm]

Tab. 32

> Accessories

Fixing by brackets

The ball bearing guide linear drive system of Rollon SMART System series linear units enables them to support loads in any direction.

They can therefore be installed in any position.

To install the SMART System series units, we recommend use of one of the systems indicated below:

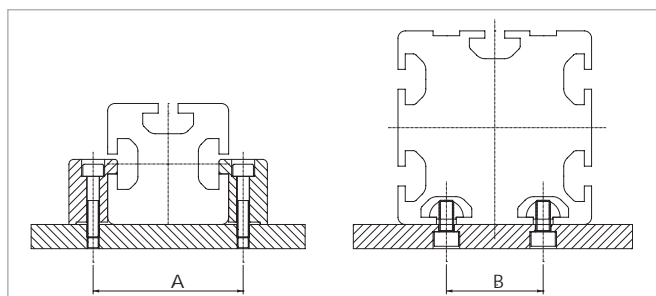


Fig. 14

Dimensions (mm)

	A	B
E-SMART 30	42	-
E-SMART 50	62	-
E-SMART 80	92	40
E-SMART 100	120	50

Tab. 33

Fixing brackets

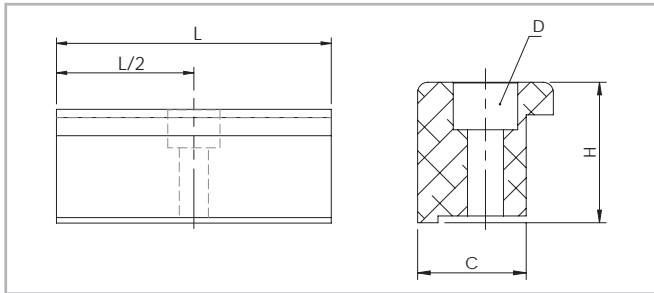
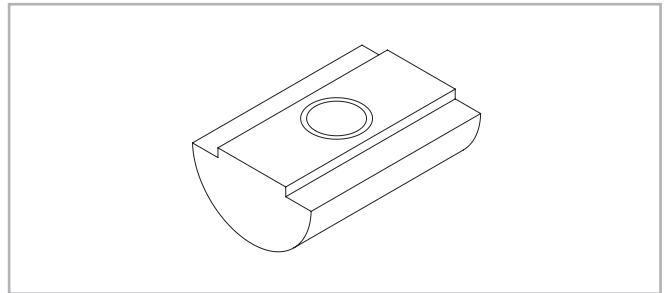


Fig. 15

T-nuts



Steel nuts to be used in the slots of the body.

Fig. 16

Dimensions (mm)

	C	H	L	D	Cod. Rollon
E-SMART 30	16	17.5	50	M5	1001490
E-SMART 50	16	26.9	50	M5	1000097
E-SMART 80	16	20.7	50	M5	1000111
E-SMART 100	31	28.5	100	M10	1002377

Tab. 34

Units (mm)

	Hole	Length	Cod. Rollon
E-SMART 30	M5	20	6000436
E-SMART 50	M6	20	6000437
E-SMART 80	M6	20	6000437
E-SMART 100	M6	20	6000437

Tab. 35

Proximity

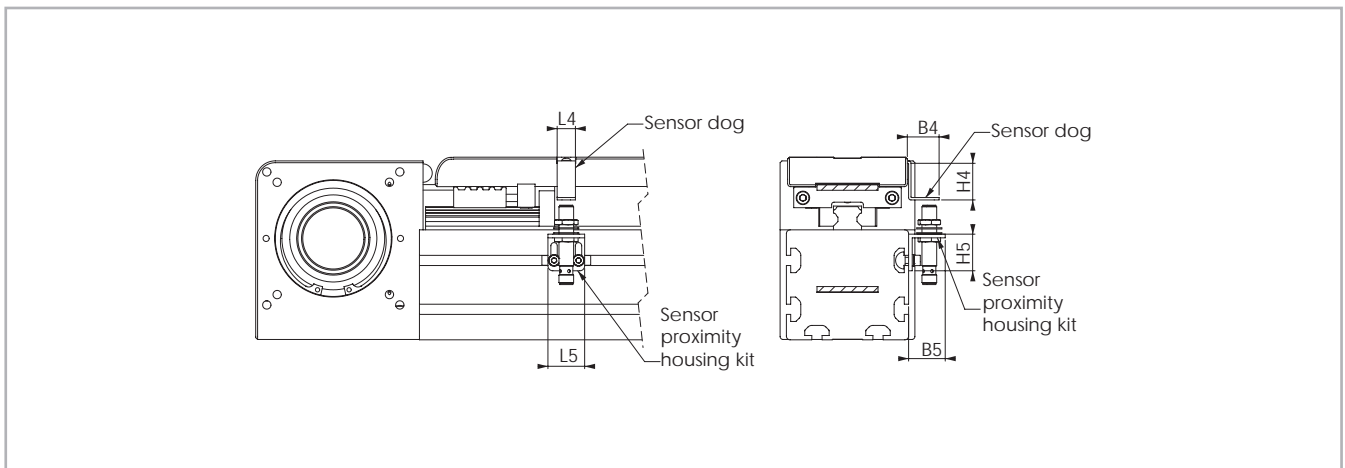


Fig. 17

Sensor proximity housing kit

Aluminum block equipped with T-nuts for fixing

Sensor dog

Iron plate mounted on the carriage used for the proximity operation

Units (mm)

	B4	B5	L4	L5	H4	H5	For proximity	Sensor dog code	Sensor proximity kit code
E-SMART 30	30	30	30	30	15	30	∅ 8	G000847	G000901
E-SMART 50	26	30	15	30	32	30	∅ 8	G000833	G000838
E-SMART 80	26	30	15	30	32	30	∅ 8	G000833	G000838
E-SMART 100	26	30	15	30	32	30	∅ 8	G000833	G000838

Tab. 36

Adapter flange for gearbox assembly

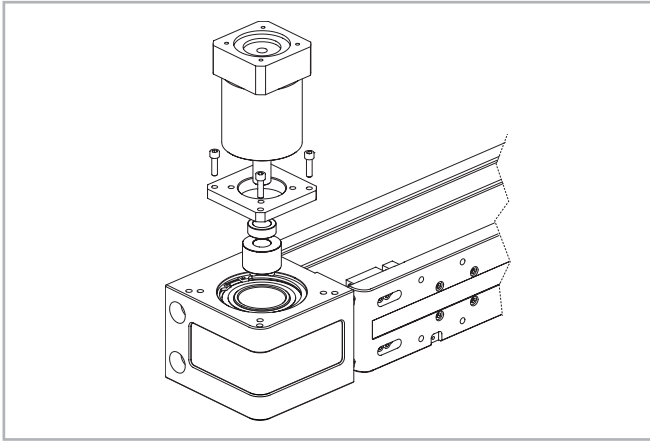


Fig. 18

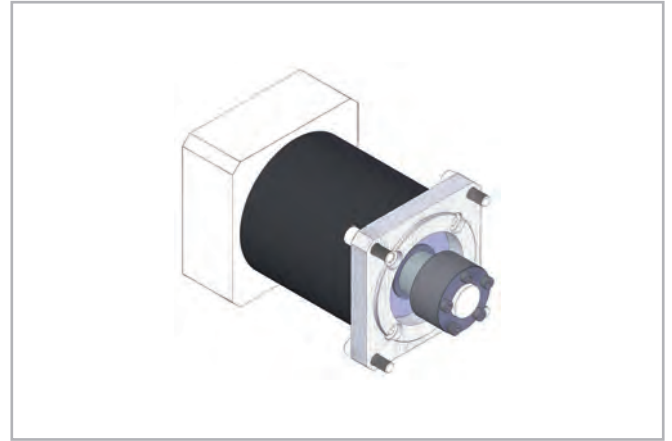


Fig. 19

Assembly kit includes: shrink disk; adapter plate; fixing hardware

Unit type	Gearbox type (not included)	Kit Code
E-SMART 30	MP053	G000356
	LC050; NPO05S; PE2	G000357
	SW030	G000383
E-SMART 50	MP060; PLE60	G000852
	LC070; MPV00; NPO15S; PE3	G000853
	SW040	G000854
E-SMART 80	P3	G000824
	MP080	G000826
	LC090; MPV01; NPO25S; PE4	G000827
	MP105	G000830
	PE3; NPO15S; LC070	G001078
	SPO75; PLN090	G000859
	SPO60; PLN070	G000829
	SW040	G000866
SW050	G000895	
E-SMART 100	MP130	G000482
	LC120; MPV02; NPO35S; PE5	G000483
	LC090; PE4; NPO25S	G000525
	MP105	G000527
	SW050	G000717

Tab. 37

For other gearbox type ask Rollon

Ordering key 

> **Identification codes for the E-SMART linear unit**

L	10	2R	02000	2R	
	03 = 30				
	05 = 50				
	08 = 80				Type (30) 2R=SP2
	10 = 100				Type (50-80) 1R=SP1 - 2R=SP2 - 3R=SP3 - 4R=SP4 Type (100) 1R=SP1 - 2R=SP2 - 3R=SP3 - 4R=SP4
			L=total length of the unit		
			Drive head code <i>see pg. SS-12</i>		
			Linear unit type <i>see from pg. SS-5 to pg. SS-10</i>		
			Linear unit series E-SMART <i>see pg. SS-2</i>		

In order to create identification codes for Actuator Line, you can visit: <http://configureactuator.rollon.com>



Left / right orientation

