

# Series 5E electromechanical axis

Sizes 50, 65, 80



- » Multiposition system with transmission of the movement with toothed belt
- » Suitable for high dynamics
- » Possibility to connect the motor on 4 sides
- » Large range of motor interfaces
- » Possibility to use magnetic proximity switches and/or inductive sensors
- » IP 40
- » Max stroke 6 meters
- » Plates to realize multi-axis systems
- » Accessories for cables fixing
- » Presence of internal channels for re-lubrication
- » Large range of axis mounting accessories

Series 5E axes are mechanical linear actuators in which the rotary movement generated by a motor is converted into a linear movement by means of a toothed belt.

The Series 5E, available in 3 sizes, 50, 65 and 80, is realized by means of a special self-supporting square profile, in which the components have been completely integrated, assuring compactness and light weight. The presence of a recirculating ball guide grants high stiffness and resistance to external loads.

To protect the internal elements from potential contaminants from the external environment, the profile has been closed with a stainless steel plate. The axis is equipped with a magnet that makes it possible to use external proximity switches (Series CSH), allowing operations like homing or extra-stroke readings to be performed. Moreover, these actuators also have accessories in order to be used with inductive sensors. The Series 5E is equipped with specific interface kits making it possible to connect the motor on 4 sides. The use with high dynamics and the possibility to realize multi-axis systems, make the Series 5E particularly suitable for the packaging and assembly sectors.

## GENERAL DATA

<b>Construction</b>	electromechanical axis with toothed belt
<b>Design</b>	open profile with protection plate
<b>Operation</b>	multi-position linear actuator
<b>Sizes</b>	50, 65, 80
<b>Strokes</b>	50 ÷ 4000 mm for size 50; 50 ÷ 6000 mm for sizes 65 and 80
<b>Type of guide</b>	internal, with recirculating balls (cage type)
<b>Fixing</b>	by means of slots on the profile and special clamps
<b>Mounting motor</b>	on all 4 sides
<b>Operating temperature</b>	-10°C ÷ +50°C
<b>Storage temperature</b>	-20°C ÷ +80°C
<b>Protection class</b>	IP 40
<b>Lubrication</b>	centralized lubrication by means of internal channels
<b>Repeatability</b>	± 0.05 mm
<b>Duty cycle</b>	100%
<b>Use with external sensors</b>	Series CSH magnetic switches in special slots or inductives by means of supports

## CODING EXAMPLE

5E	S	050	TBL	0200	A	S	1
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<b>5E</b>	SERIES
<b>S</b>	PROFILE: S = square section
<b>050</b>	FRAME SIZE: 050 = 50x50 mm 065 = 65x65 mm 080 = 80x80 mm
<b>TBL</b>	TRANSMISSION: TBL = toothed belt
<b>0200</b>	TOTAL STROKE [TS]: 0050 ÷ 4000 mm for size 050 0050 ÷ 6000 mm for sizes 065 and 080
<b>A</b>	VERSION: A = standard
<b>S</b>	TYPE OF SLIDER: S = standard
<b>1</b>	NUMBER OF SLIDERS: 1 = 1 slider

## MECHANICAL CHARACTERISTICS

	Measuring unit	Size 50	Size 65	Size 80
<b>RECIRCULATING BALL GUIDE (CAGE TYPE)</b>				
Number of RDS blocks	pcs	2	2	2
Dynamic load of RDS blocks (C)	N	10600	28400	44600
Max admissible load ( $C_{max z}$ ) ( $C_{max y}$ )	N	3100*	8300*	13100*
Max admissible moment ( $M_{max x}$ )	Nm	22.44	96.00	216.60
Max admissible moment ( $M_{max y}$ ) ( $M_{max z}$ )	Nm	45.30	269.40	525.00
Max linear speed of mechanics ( $V_{max}$ )	m/s	5	5	5
Max linear acceleration of mechanics ( $a_{max}$ )	m/s <sup>2</sup>	50	50	50
(*) Value refers to a covered distance of 2,000 km with fully supported system				
<b>TOOTHED BELT</b>				
Type		20 AT 5 HP	32 AT 5 HP	32 AT 10 HP
Pitch	mm	5	5	10
Max tensile strength	N	1795	2890	6570
Max load at break	N	7180	11570	26295
Max applicable load ( $C_{max x}$ )	N	1110	1786	4061
<b>PULLEY</b>				
Primitive pulley diameter	mm	31.83	47.75	63.66
Number of teeth	z	20	30	20
Linear movement per pulley round	mm/round	100	150	200
<b>PROFILE</b>				
Moment of surface inertia $I_y$	mm <sup>4</sup>	1.89 · 10 <sup>6</sup>	4.94 · 10 <sup>6</sup>	1.23 · 10 <sup>6</sup>
Moment of surface inertia $I_z$	mm <sup>4</sup>	2.48 · 10 <sup>6</sup>	6.97 · 10 <sup>6</sup>	1.68 · 10 <sup>6</sup>
Weight stroke zero	kg/m	2.15	4.60	8.90
Weight per stroke meter	kg/m	3.35	5.40	5.90
Mass in movement	kg	0.45	1.10	2.30
Mass in movement per stroke meter	kg/m	0.13	0.21	0.41

## SERIES 5E STROKE

TS = total stroke (WS + 2S2)

LEGEND:

WS = Working stroke

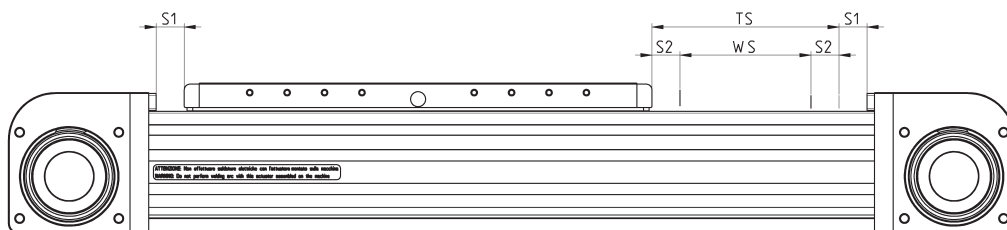
S2 = Safety extra-stroke on request

S1 = Standard extra-stroke [5ES050.. = 15mm]

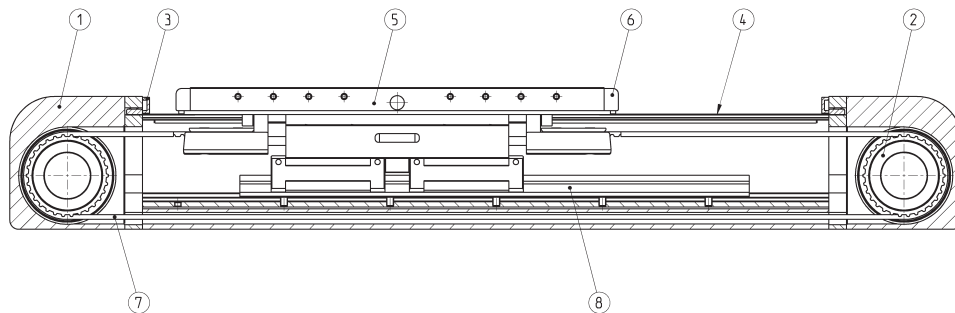
[5ES065.. = 15mm]

[5ES080.. = 15mm]

NOTE: The safety extra-stroke must be foreseen by the client and be included in the total stroke TS.



## SERIES 5E MATERIALS



COMPONENTS	MATERIALS
1. End cap	Aluminium
2. Pulley	Steel
3. End cap bumper	Technopolymer
4. Protection plate	Steel
5. Slider	Aluminium
6. Bumper	Technopolymer
7. Toothed belt	PU + Steel
8. Recirculating ball guide	Aluminium

## How to calculate the life of the axis 5E

The correct dimensioning of the axis 5E, used individually or in a cartesian system with several axes, you need to consider some facts, both static and dynamic. Among these, the most important are described on the following pages.

### CALCULATION OF LIFE [km]

$$L_{eq} = \left( \frac{C_{ma}}{C_{eq} \cdot f_w} \right)^3 \cdot 2000$$

$L_{eq}$  = Life of the axis 5E [km]

$C_{ma}$  = Maximum admissible load [N]

$C_{eq}$  = Equivalent load [N]

$f_w$  = safety coefficient according to the working conditions

### CALCULATION OF EQUIVALENT LOAD

$$C_{eq} = |F_y| + |F_z| + C_{ma} \cdot \left| \frac{M_x}{M_{x,ma}} \right| + C_{ma} \cdot \left| \frac{M_y}{M_{y,ma}} \right| + C_{ma} \cdot \left| \frac{M_z}{M_{z,ma}} \right|$$

When compression/traction and side loads as well as bending or torque moments act on the system, you need to calculate the equivalent load acting on the system.

$C_{eq}$  = Equivalent load [N]

$F_y$  = Force acting along the Y-axis [N]

$F_z$  = Force acting along the Z-axis [N]

$C_{ma}$  = Max admissible load [N]

$M_x$  = Moment along X-axis [Nm]

$M_y$  = Moment along Y-axis [Nm]

$M_z$  = Moment along Z-axis [Nm]

$M_{x,ma}$  = Max admissible moment along X-axis [Nm]

$M_{y,ma}$  = Max admissible moment along Y-axis [Nm]

$M_{z,ma}$  = Max admissible moment along Z-axis [Nm]

## How to calculate the max deflection and verification of distance between supports

The electromechanical axis 5E is a self-supporting system and can also be used between 2 or more supports without the need of a continuous contact surface.

The maximum value of the deflection generated by the deformation of the system must never exceed the following calculation:

$f_{max}$  = Maximum admissible deflection [mm]

$c_{max}$  = Maximum stroke of axis 5E [mm]

$$f_{max} = c_{max} \cdot 5 \cdot 10^{-4}$$

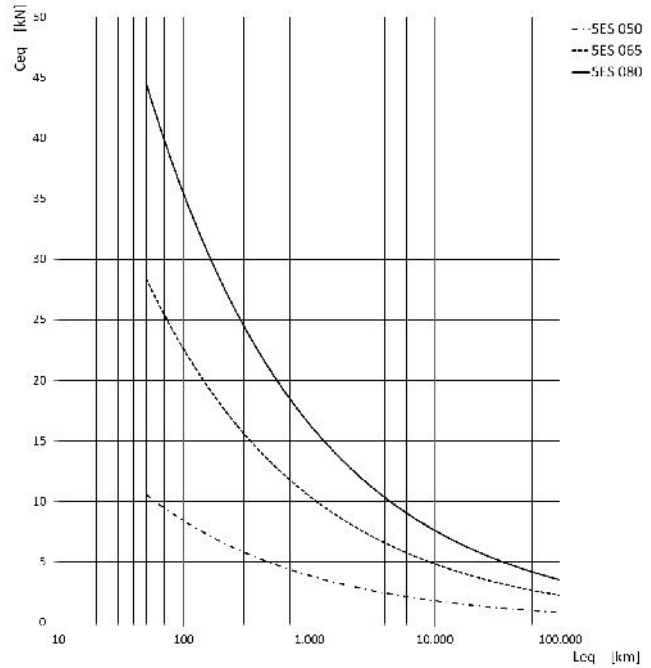
NOTE: for a quicker choice, please see the graphs on the following pages.

APPLICATION	ACCELERATION [ m/s <sup>2</sup> ]	SPEED [ m/s ]	DUTY CYCLE	$f_w$ COEFFICIENT
light	< 10	< 1.5	< 35%	1 ÷ 1.25
normal	10 ÷ 25	1.5 ÷ 2.5	35% ÷ 65%	1.25 ÷ 1.5
heavy	> 25	> 2.5	> 65%	1.5 ÷ 3

**LIFE OF THE SERIES 5E AXIS ACCORDING TO THE EQUIVALENT LOAD**

\* Curves calculated with  $f_w = 1$

$C_{eq}$  = Equivalent load applied on the axis 5E [kN]  
 $L_{eq}$  = Life of the axis 5E [km]


**EQUIVALENT LOAD**

To determine the moment acting on the axis  $x, M_x$ , in an accurate way, refer to the following formula:

$$M_x = F_y \cdot (h + h_1)$$

where:

$M_x$  = Moment along X-axis [Nm]

$F_y$  = Force acting along the Y-axis [N]

$h$  = fixed distance for axis 5E [mm]

$h_1$  = application arm [mm]

$G_1$  = origin of the system of 5E axis coordinates

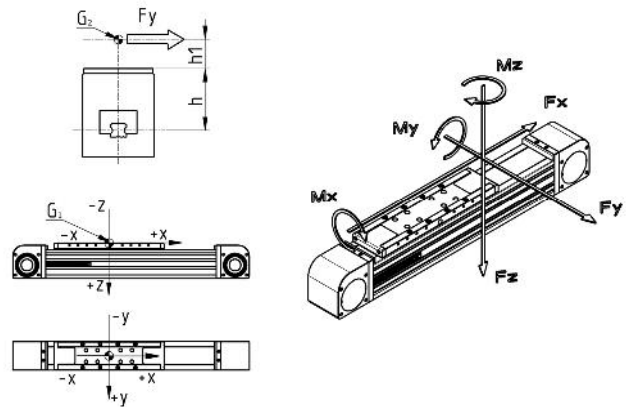
$G_2$  = barycentre of application of acting forces

NOTE: here below, the "h" values are reported for the three sizes.

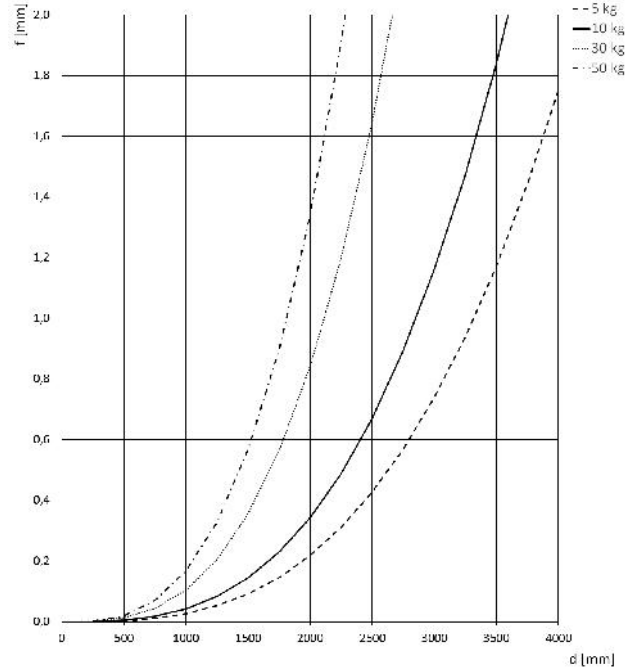
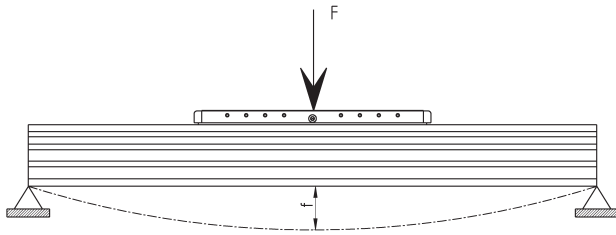
-  $h = 45.5$  mm (5E050)

-  $h = 56$  mm (5E065)

-  $h = 69.5$  mm (5E080)

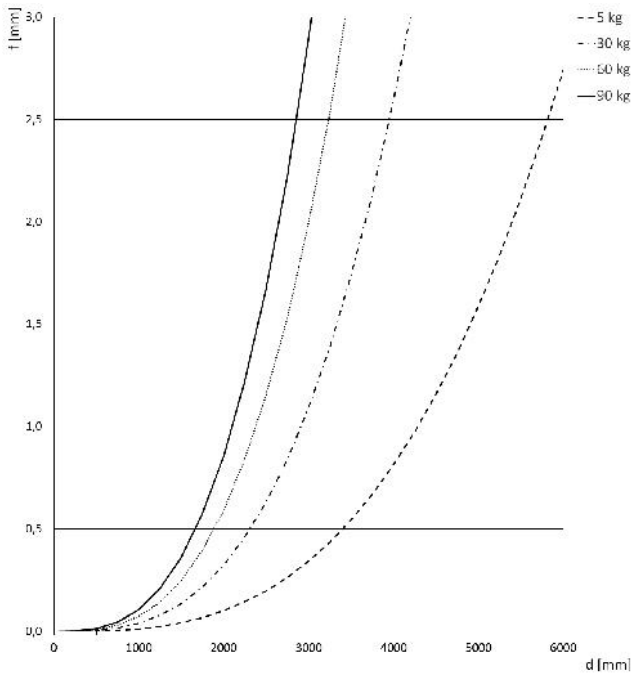


DEFLECTION ACCORDING TO THE DISTANCE OF THE SUPPORTS



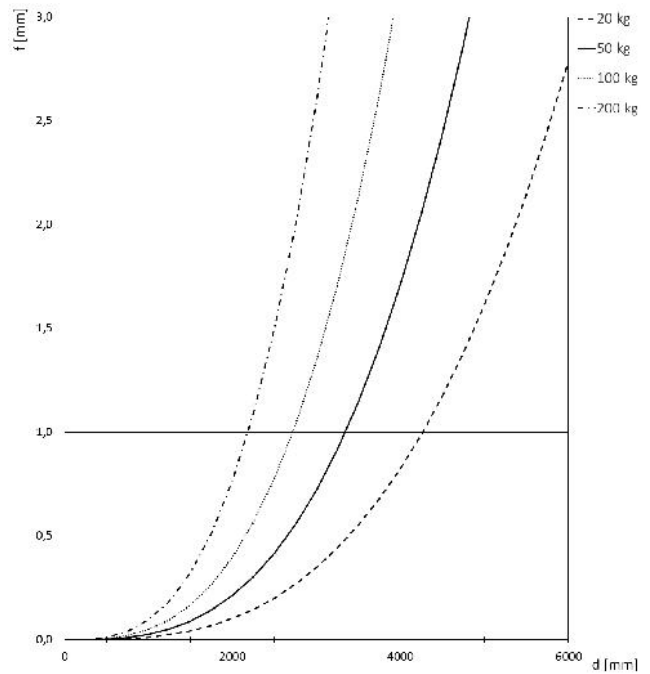
Size 50 x 50

f = deflection generated between the supports [mm]  
 d = distance between the supports [mm]



Size 65 x 65

f = deflection generated between the supports [mm]  
 d = distance between the supports [mm]



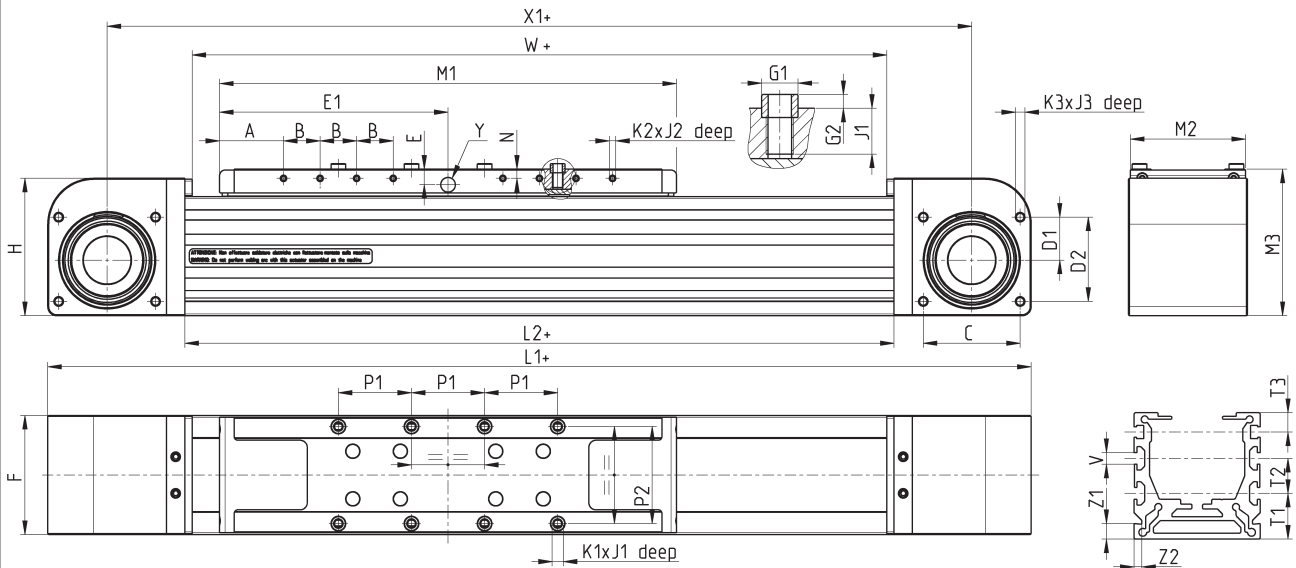
Size 80 x 80

f = deflection generated between the supports [mm]  
 d = distance between the supports [mm]

## Series 5E electromechanical axis

1

MOVEMENT



Size	A	B	C	D1	D2	E	E1	F	$\phi$ G1 [h8]	G2	H	L1	L2	M1	M2	M3	N	P1	P2	K1	J1	K2	J2	K3	J3	T1	T2	T3	V	Y	X1	W	Z1	Z2
50	32.5	15	37	17	32	8.5	100	50	6	2	60	354	238	200	48	65	5	30	40	M4	8.5	M3	5	M4	8	20	*	10	6	**	304	230	8	4
65	35	20	53	23.5	46	8.5	125	65	8	3	75	438	288	250	63	80	5	40	53	M5	10	M3	6	M5	10	23.5	18	10	6	**	373	280	8	4
80	35	30	68	30.5	60.5	11.5	165	80	10	3	95	548	368	330	78	100	8	55	64	M6	12.5	M4	8.5	M5	10	25	25	10	8	**	468	360	8	4

Size	WEIGHT STROKE ZERO [kg]	WEIGHT PER METER [kg/m]
50	2.15	3.35
65	4.6	5.4
80	8.9	5.9

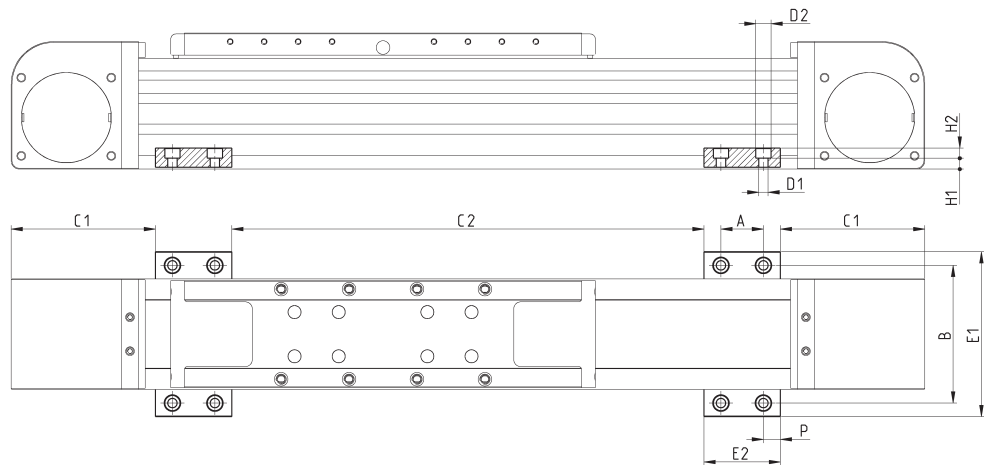
## Side clamping bracket Mod. BGS

Material: Aluminium



Supplied with:  
2x clamps

\* according to the span  
(max admissible  
deflection)  
recommended value  
500 mm



Mod.	Size	A	B	C1	C2	∅D1	∅D2	E1	E2	H1	H2	P	Weight (g)
BGS-5E-M5	50	25	66	68	*	5.5	9	82	45	6.4	6	10	45
BGS-5E-M5	65	25	81	85	*	5.5	9	97	45	6.4	6	10	45
BGS-5E-M5	80	25	96	100	*	5.5	9	112	45	6.4	6	10	45
BGS-5E-M6	50	25	66	68	*	6.5	10.5	82	45	5.4	7	10	40
BGS-5E-M6	65	25	81	85	*	6.5	10.5	97	45	5.4	7	10	40
BGS-5E-M6	80	25	96	100	*	6.5	10.5	112	45	5.4	7	10	40

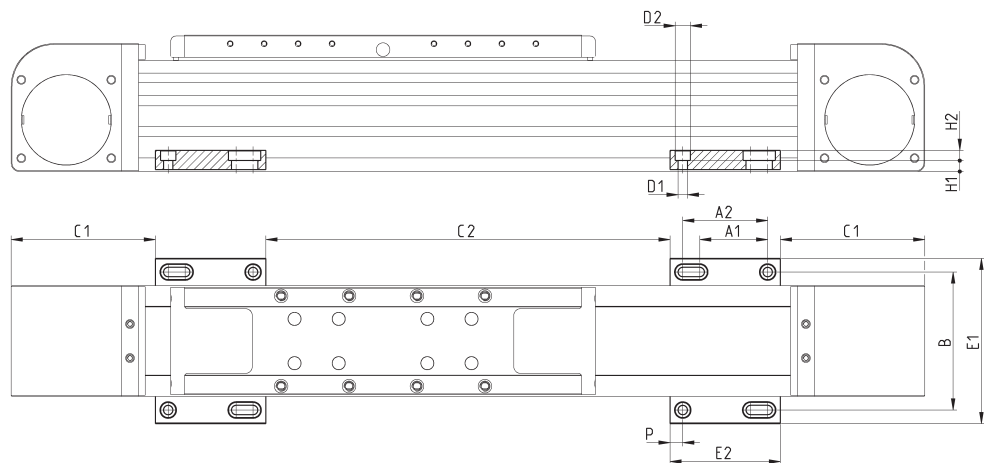
## Perforated side clamping bracket Mod. BGA

Material: Aluminium



Supplied with:  
2x clamps with perforation

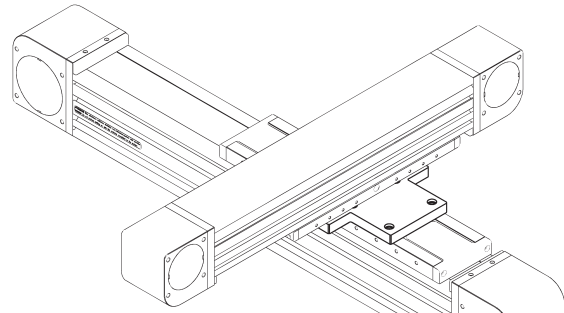
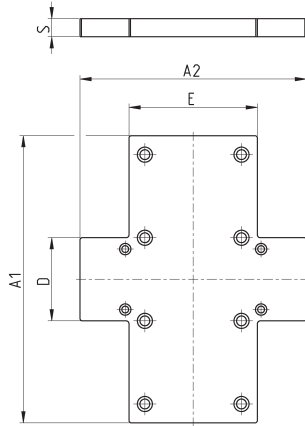
\* according to the span  
(max admissible  
deflection)  
recommended value  
500 mm



Mod.	Size	A1	A2	B	C1	C2	∅D1	∅D2	E1	E2	H1	H2	P	Weight (g)
BGA-5E-M5	50	40	50	66	68	*	5.5	9	82	65	6.4	6	7.5	60
BGA-5E-M5	65	40	50	81	85	*	5.5	9	97	65	6.4	6	7.5	60
BGA-5E-M5	80	40	50	96	100	*	5.5	9	112	65	6.4	6	7.5	60
BGA-5E-M6	50	40	50	66	68	*	6.5	10.5	82	65	5.4	7	7.5	55
BGA-5E-M6	65	40	50	81	85	*	6.5	10.5	97	65	5.4	7	7.5	55
BGA-5E-M6	80	40	50	96	100	*	6.5	10.5	112	65	5.4	7	7.5	55

### Interface plate - slider on slider

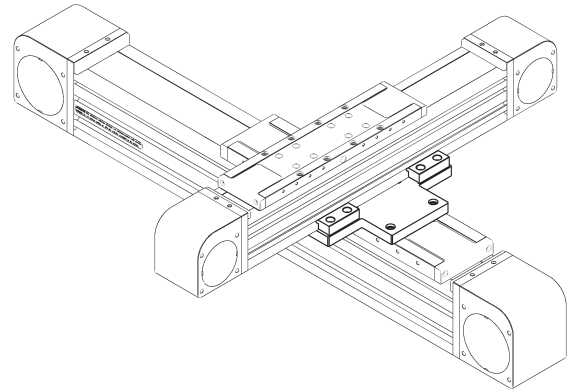
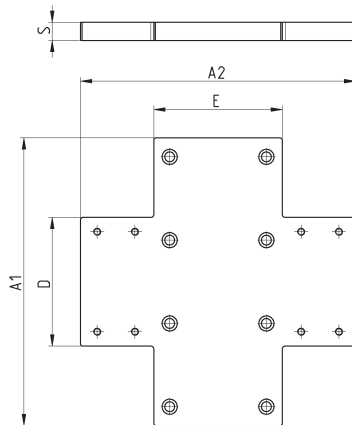
The kit includes: 1 interface plate, 8 screws + 8 lock washers to connect the plate on the slider of the main axis, 4 screws + 4 lock washers to connect the plate on the slider of the secondary axis.



Mod.	Size	A1	A2	D	E	S	Weight (g)
<b>XY-S65-S50</b>	65	150	150	55	70	12	515
<b>XY-S80-S50</b>	80	190	150	55	85	12	690
<b>XY-S80-S65</b>	80	190	150	70	85	12	720

### Interface plate - profile on slider

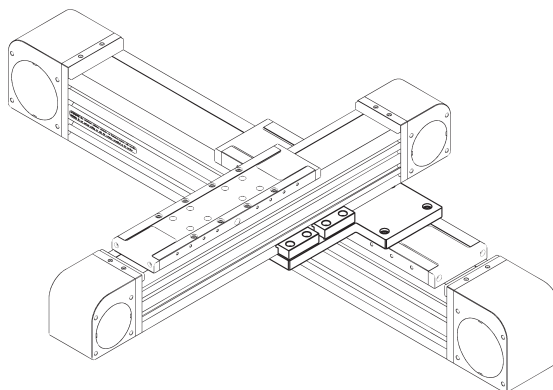
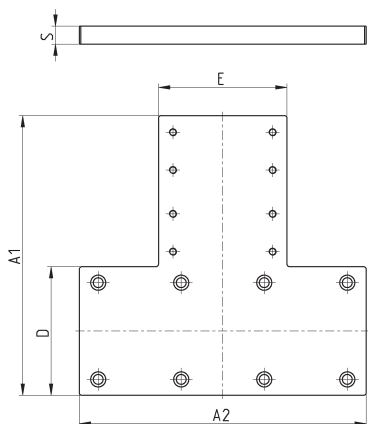
The kit includes: 1 interface plate, 8 screws + 8 lock washers to connect the plate on the slider of the main axis, 4 clamps, 8 screws + 8 lock washers to connect the secondary axis on the plate by means of clamps.



Mod.	Size	A1	A2	D	E	S	Weight (g)
<b>XY-S65-P50</b>	65	150	162	85	70	12	730
<b>XY-S80-P50</b>	80	190	150	85	85	12	945
<b>XY-S80-P65</b>	80	190	185	100	85	12	1000

### Interface plate - profile on slider - long arm

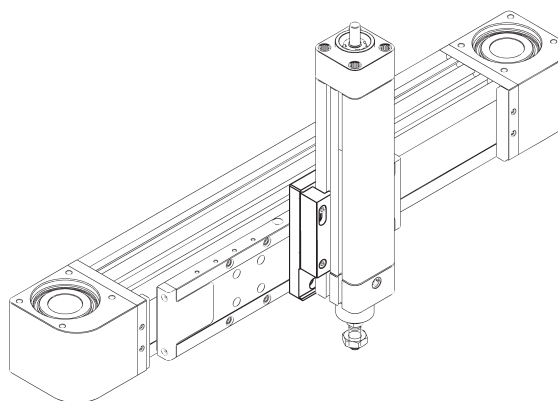
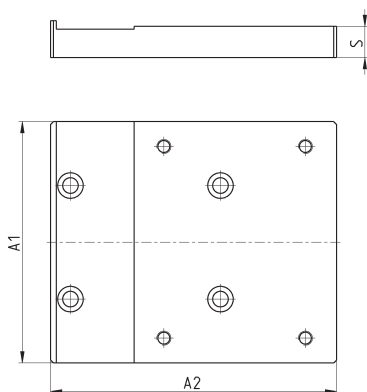
The kit includes: 1 interface plate, 8 screws + 8 lock washers to connect plate on the slider of the main axis, 4 clamps, 8 screws + 8 lock washers to connect plate on the slider of the secondary axis by means of clamps.



Mod.	Size	A1	A2	D	E	S	Weight (g)
XY-S65-P50-T	65	170	150	65	85	12	750
XY-S80-P50-T	80	185	190	85	85	12	960
XY-S80-P65-T	80	185	190	85	100	12	1010

### Interface plate - Series 6E cylinder on slider

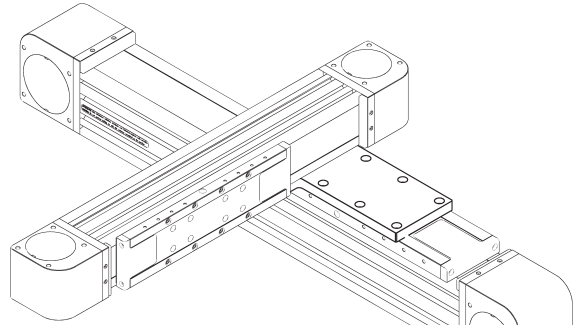
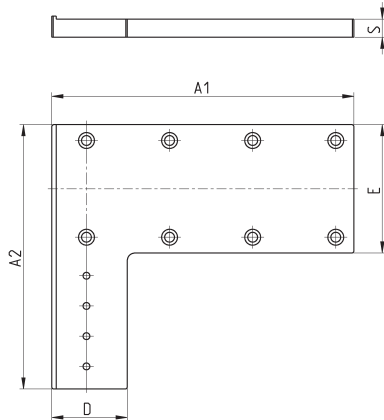
The kit includes: 1 interface plate, 4 screws + 4 lock washers to connect the plate on the slider of the axis, 2 clamps, 8 screws + 8 lock washers to fix the Series 6E cylinder by means of clamps.



Mod.	Size	A1	A2	S	Weight (g)
XY-S65-6E32	65	72	101	11	315
XY-S65-6E40	65	85	101	11	350
XY-S80-6E32	80	75	101	12	385
XY-S80-6E40	80	85	101	12	410
XY-S80-6E50	80	95	110	12	510

**Interface plate - profile side on slider - left position**

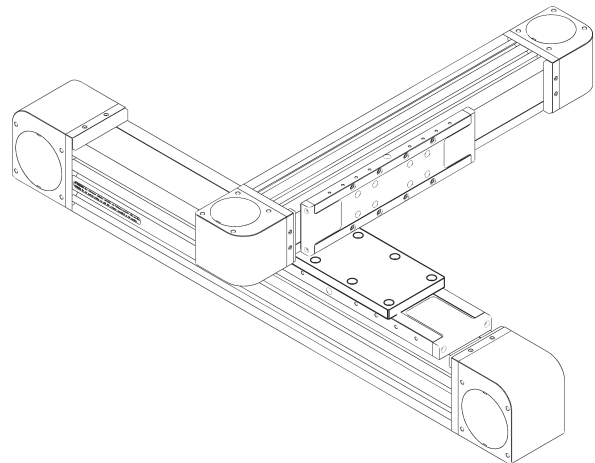
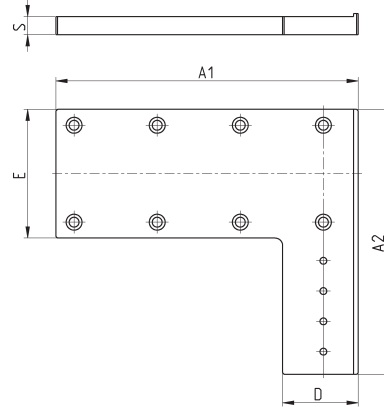
The kit includes: 1 interface plate, 8 screws + 8 lock washers to connect the plate on the slider of the main axis, 4 screws + 4 nuts (8+8 for XY-S80-LL65) for slot to connect the plate on the slider of the secondary axis.



Mod.	Size	A1	A2	D	E	S	Weight (g)
XY-S65-LL50	65	160	160	50	70	11	500
XY-S80-LL50	80	200	175	50	85	12	750
XY-S80-LL65	80	210	195	65	85	12	870

**Interface plate - profile side on slider - right position**

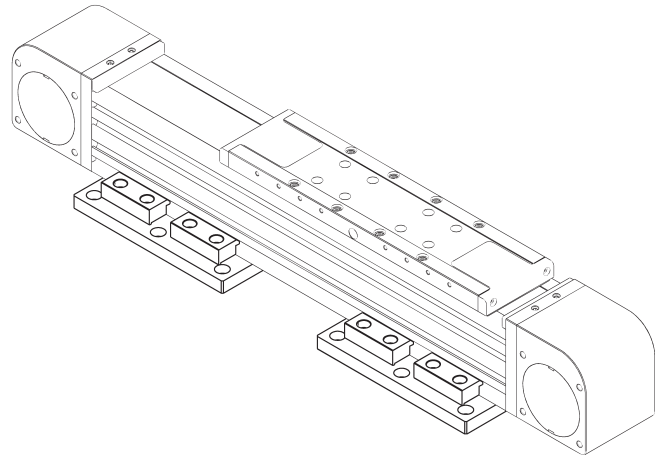
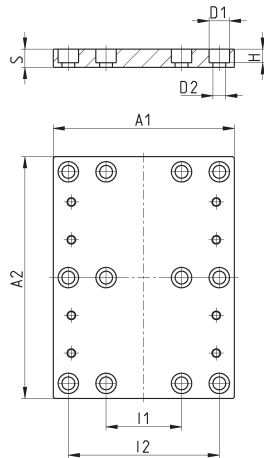
The kit includes: 1 interface plate, 8 screws + 8 lock washers to connect the plate on the slider of the main axis, 4 screws + 4 nuts (8+8 for XY-S80-LR65) for slot to connect the plate on the slider of the secondary axis.



Mod.	Size	A1	A2	D	E	S	Weight (g)
XY-S65-LR50	65	160	160	50	70	11	500
XY-S80-LR50	80	200	175	50	85	12	750
XY-S80-LR65	80	210	195	65	85	12	870

### Fixed interface plate

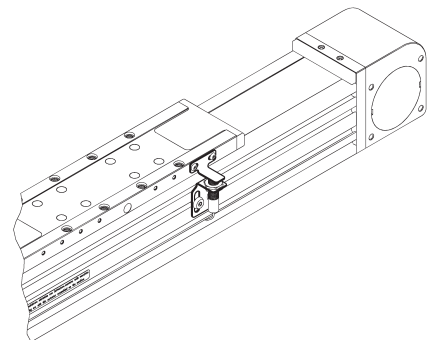
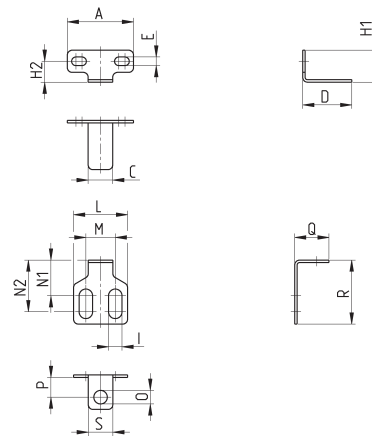
The kit includes: 1 interface plate, 4 clamps, 8 screws to connect the clamps on the plate.



Mod.	Size	A1	A2	$\varnothing$ D1	$\varnothing$ D2	H	I1	I2	S	Weight (g)
<b>X-P50</b>	50	95	140	9	5.5	6	45	80	8	275
<b>X-P65</b>	65	120	140	10.5	6.5	7	50	100	10	430
<b>X-P80</b>	80	120	140	13.5	8.5	9	50	100	12	570

### Kit to fix the inductive sensor

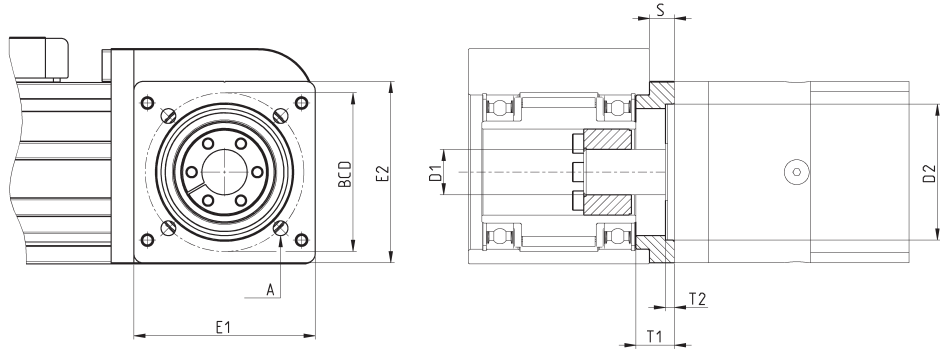
The kit includes: 1 sensor dog, 2 screws to fix the sensor dog, 1 sensor supporting plate, 2 screws to connect the sensor supporting plate, 2 nuts for the slot.



Mod.	Size	A	C	D	E	H1	H2	I	L	M	N1	N2	$\varnothing$ O	P	Q	R	S	Weight (g)
<b>SIS-M5-50/65</b>	50-65	27	10	20	3.5	13	8.5	5.5	22	12	14.5	21	5.5	8	14	26	10	10
<b>SIS-M8-65</b>	65	27	10	20	3.5	13	8.5	8.5	25	15	10.5	24	8.5	10	18.5	30	15	10
<b>SIS-M5-80</b>	80	45	15	20	4.5	16	10.5	5.5	22	12	14.5	21	5.5	8	14	26	10	15
<b>SIS-M8-80</b>	80	45	15	20	4.5	16	10.5	8.5	25	15	10.5	24	8.5	10	18.5	30	15	15

**Kit to connect the reducer**

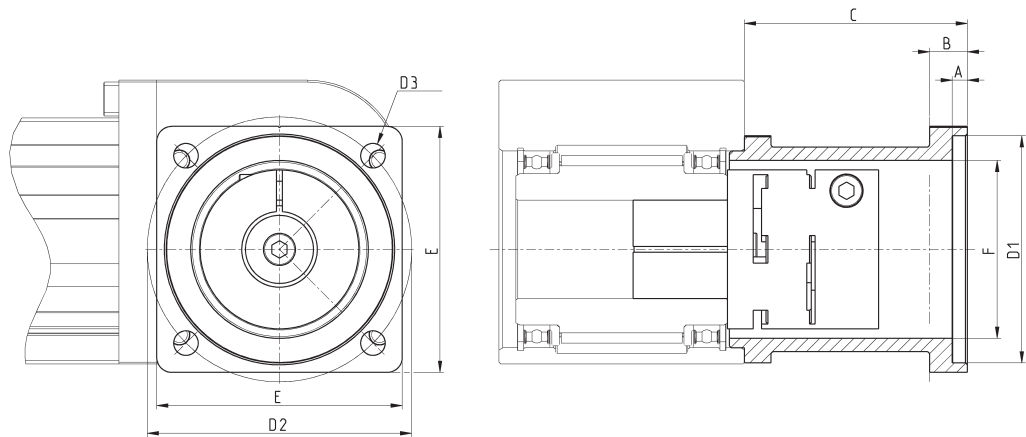
The kit includes: 1 connection fange, 4 screws + 4 lock washers to connect the fange, 1 locking set, 4 screws + 4 lock washers to connect the reducer.


**DIMENSIONS**

Mod.	Size	E1	E2	S	BCD	øA	øD1	øD2 [H7]	T1	T2	Weight (g)
<b>FR-5E-50</b>	50	48	43	6	34	4.5	10	Ø26	10	10	85
<b>FR-5E-65</b>	65	63	60	7	52	5.5	14	Ø40	11	11	140
<b>FR-5E-80</b>	80	80	80	11	70	6.5	20	Ø6	17	4	325

**Kit to connect the reducer - enhanced series**

The kit includes: 1 connection fange, 4 screws + 4 lock washers to connect the fange, 1 expansion coupling, 4 screws + 4 lock washers to connect the reducer.


**DIMENSIONS**

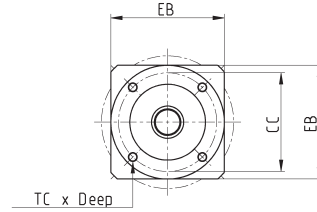
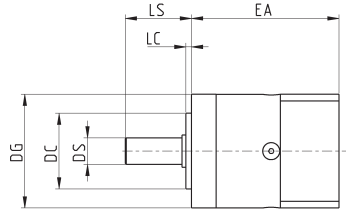
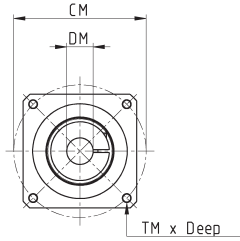
Mod.	Size	øD1 [H7]	A	øD2	øD3	B	C	E	F	Weight (g)
<b>FRH-5E-50</b>	50	40	4	52	5.5	8	55	50	34	170
<b>FRH-5E-65</b>	65	60	4	70	6.5	10	63	65	47	530

## REDUCER CODING EXAMPLE

<b>GB</b>	<b>040</b>	<b>03</b>	<b>D</b>	<b>0100</b>
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<b>GB</b>	REDUCER
<b>040</b>	SIZE: 040 = Ø40 060 = Ø60 080 = Ø80
<b>03</b>	REDUCTION RATIO: 03 i = 3 05 i = 5 07 i = 7 10 i = 10
<b>D</b>	TYPE: D = straight A = angular
<b>0100</b>	PREPARATION OF THE MOTOR: 0100 = Brushless 100W (size 040 only) 0400 = Brushless 400W (size 060 only) 0750 = Brushless 750W (size 080 only) 0024 = Nema 24

## IN LINE EPICYCLOIDAL REDUCER

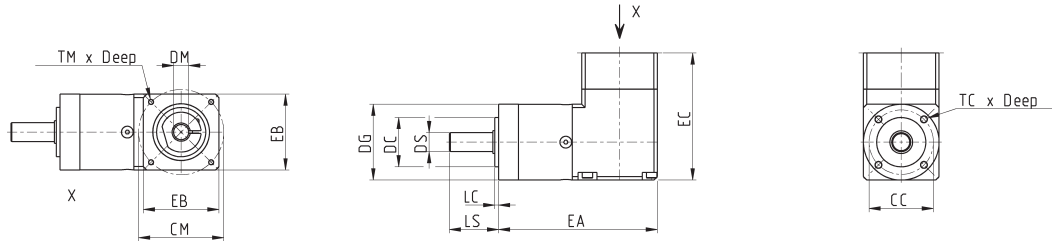


Mod.	BACKLASH	$\phi_{DS}$ [h7]	LS	$\phi_{DC}$ [h7]	LC	$\phi_{CC}$	TC x Deep	EA	EB	$\phi_{DG}$	$\phi_{DM}$	$\phi_{CM}$	TM x Deep
GB-040-03-D-0100	<15'	10	26	26	2	34	M4 x 6	67.5	40	40	8	45	M3 x 8
GB-040-05-D-0100	<15'	10	26	26	2	34	M4 x 6	67.5	40	40	8	45	M3 x 8
GB-040-07-D-0100	<15'	10	26	26	2	34	M4 x 6	67.5	40	40	8	45	M3 x 8
GB-040-10-D-0100	<15'	10	26	26	2	34	M4 x 6	67.5	40	40	8	45	M3 x 8
GB-040-03-D-0024	<15'	10	26	26	2	34	M4 x 6	63.5	60	40	8	66.7	M4 x 10
GB-040-05-D-0024	<15'	10	26	26	2	34	M4 x 6	63.5	60	40	8	66.7	M4 x 10
GB-040-07-D-0024	<15'	10	26	26	2	34	M4 x 6	63.5	60	40	8	66.7	M4 x 10
GB-040-10-D-0024	<15'	10	26	26	2	34	M4 x 6	63.5	60	40	8	66.7	M4 x 10
GB-060-03-D-0400	<15'	14	35	40	3	52	M5 x 8	78	60	60	14	70	M5 x 12
GB-060-05-D-0400	<15'	14	35	40	3	52	M5 x 8	78	60	60	14	70	M5 x 12
GB-060-07-D-0400	<15'	14	35	40	3	52	M5 x 8	78	60	60	14	70	M5 x 12
GB-060-10-D-0400	<15'	14	35	40	3	52	M5 x 8	78	60	60	14	70	M5 x 12
GB-060-03-D-0024	<15'	14	35	40	3	52	M5 x 8	71	60	60	8	66.7	M4 x 10
GB-060-05-D-0024	<15'	14	35	40	3	52	M5 x 8	71	60	60	8	66.7	M4 x 10
GB-060-07-D-0024	<15'	14	35	40	3	52	M5 x 8	71	60	60	8	66.7	M4 x 10
GB-060-10-D-0024	<15'	14	35	40	3	52	M5 x 8	71	60	60	8	66.7	M4 x 10
GB-080-03-D-0750	<15'	20	40	60	3	70	M6 x 10	103.5	80	80	19	90	M6 x 15
GB-080-05-D-0750	<15'	20	40	60	3	70	M6 x 10	103.5	80	80	19	90	M6 x 15
GB-080-07-D-0750	<15'	20	40	60	3	70	M6 x 10	103.5	80	80	19	90	M6 x 15
GB-080-10-D-0750	<15'	20	40	60	3	70	M6 x 10	103.5	80	80	19	90	M6 x 15
GB-080-03-D-0024	<15'	20	40	60	3	70	M6 x 10	93.5	80	80	8	66.7	M4 x 10
GB-080-05-D-0024	<15'	20	40	60	3	70	M6 x 10	93.5	80	80	8	66.7	M4 x 10
GB-080-07-D-0024	<15'	20	40	60	3	70	M6 x 10	93.5	80	80	8	66.7	M4 x 10
GB-080-10-D-0024	<15'	20	40	60	3	70	M6 x 10	93.5	80	80	8	66.7	M4 x 10

## ORTHOGONAL EPICYCLOIDAL REDUCER

1

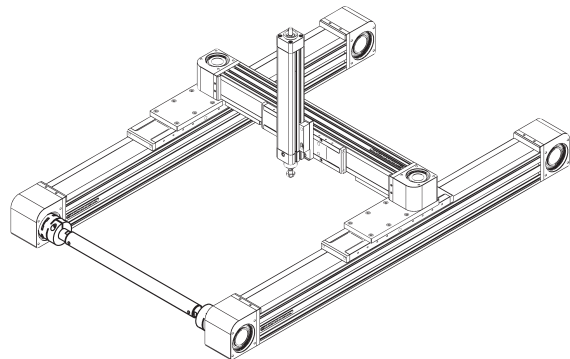
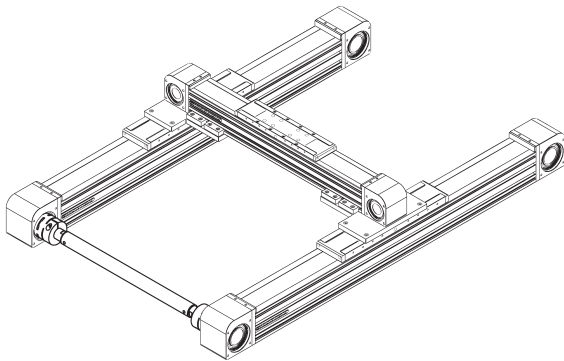
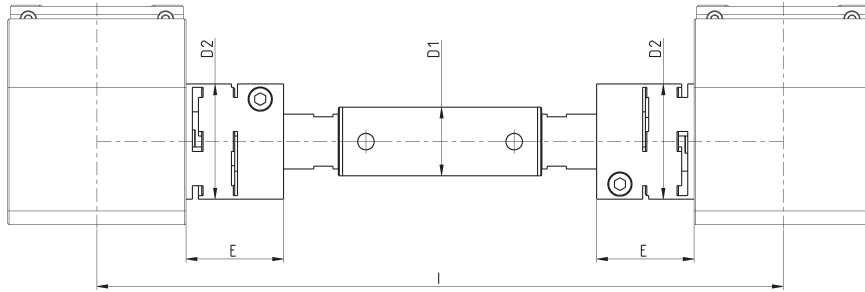
MOVEMENT



Mod.	BACKLASH	$\phi_{DS}$ [h7]	LS	$\phi_{DC}$ [h7]	LC	$\phi_{CC}$	TC x Deep	EA	EB	EC	$\phi_{DG}$	$\phi_{DM}$	$\phi_{CM}$	TM x Deep
GB-040-03-A-0100	<15'	10	26	26	2	34	M4 x 6	84	40	67	40	8	45	M3 x 7
GB-040-05-A-0100	<15'	10	26	26	2	34	M4 x 6	84	40	67	40	8	45	M3 x 7
GB-040-07-A-0100	<15'	10	26	26	2	34	M4 x 6	84	40	67	40	8	45	M3 x 7
GB-040-10-A-0100	<15'	10	26	26	2	34	M4 x 6	84	40	67	40	8	45	M3 x 7
GB-040-03-A-0024	<15'	10	26	26	2	34	M4 x 6	84	60	63	40	8	66.7	M4 x 7
GB-040-05-A-0024	<15'	10	26	26	2	34	M4 x 6	84	60	63	40	8	66.7	M4 x 7
GB-040-07-A-0024	<15'	10	26	26	2	34	M4 x 6	84	60	63	40	8	66.7	M4 x 7
GB-040-10-A-0024	<15'	10	26	26	2	34	M4 x 6	84	60	63	40	8	66.7	M4 x 7
GB-060-03-A-0400	<15'	14	35	40	3	52	M5 x 8	112	60	92.5	60	14	70	M5 x 12
GB-060-05-A-0400	<15'	14	35	40	3	52	M5 x 8	112	60	92.5	60	14	70	M5 x 12
GB-060-07-A-0400	<15'	14	35	40	3	52	M5 x 8	112	60	92.5	60	14	70	M5 x 12
GB-060-10-A-0400	<15'	14	35	40	3	52	M5 x 8	112	60	92.5	60	14	70	M5 x 12
GB-060-03-A-0024	<15'	14	35	40	3	52	M5 x 8	71	60	85.5	60	8	66.7	M4 x 10
GB-060-05-A-0024	<15'	14	35	40	3	52	M5 x 8	71	60	85.5	60	8	66.7	M4 x 10
GB-060-07-A-0024	<15'	14	35	40	3	52	M5 x 8	71	60	85.5	60	8	66.7	M4 x 10
GB-060-10-A-0024	<15'	14	35	40	3	52	M5 x 8	71	60	85.5	60	8	66.7	M4 x 10
GB-080-03-A-0750	<15'	20	40	60	3	70	M6 x 10	144	80	119.5	80	19	90	M6 x 15
GB-080-05-A-0750	<15'	20	40	60	3	70	M6 x 10	144	80	119.5	80	19	90	M6 x 15
GB-080-07-A-0750	<15'	20	40	60	3	70	M6 x 10	144	80	119.5	80	19	90	M6 x 15
GB-080-10-A-0750	<15'	20	40	60	3	70	M6 x 10	144	80	119.5	80	19	90	M6 x 15
GB-080-03-A-0024	<15'	20	40	60	3	70	M6 x 10	144	80	109.5	80	8	66.7	M4 x 10
GB-080-05-A-0024	<15'	20	40	60	3	70	M6 x 10	144	80	109.5	80	8	66.7	M4 x 10
GB-080-07-A-0024	<15'	20	40	60	3	70	M6 x 10	144	80	109.5	80	8	66.7	M4 x 10
GB-080-10-A-0024	<15'	20	40	60	3	70	M6 x 10	144	80	109.5	80	8	66.7	M4 x 10

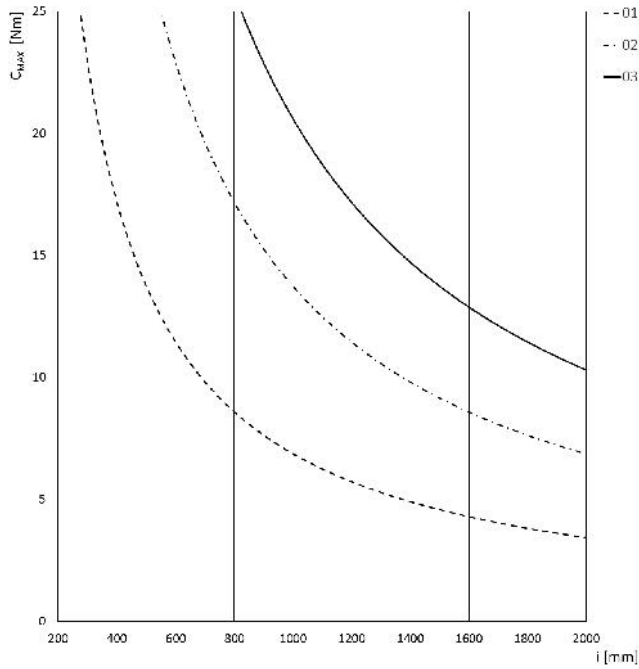
### Parallel connection kit

The kit includes:  
 1x parallel shaft  
 2x expansion couplings



Mod.	Size	l min	l max	$\varnothing D1$	$\varnothing D2$	E	Transmission torque
<b>PS-5E-50-0000</b>	50	200	2000	22	32	26	see graph
<b>PS-5E-65-0000</b>	65	250	2000	25	42	35.5	see graph
<b>PS-5E-80-0000</b>	80	300	2000	30	56	40	see graph

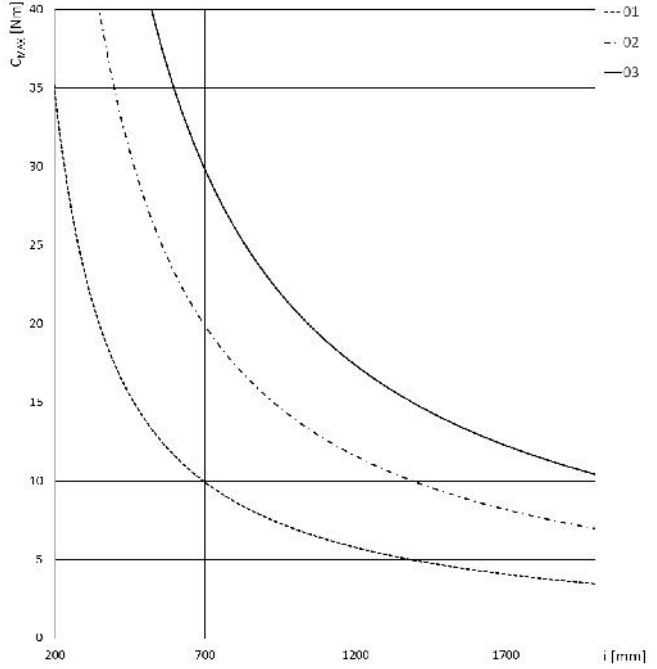
INTERAXIS ACCORDING TO THE MAXIMUM ADMISSIBLE TORQUE



Size 50x50

$C_{max}$  = max applicable torque  
 $i$  = interaxis between the two 5E axes

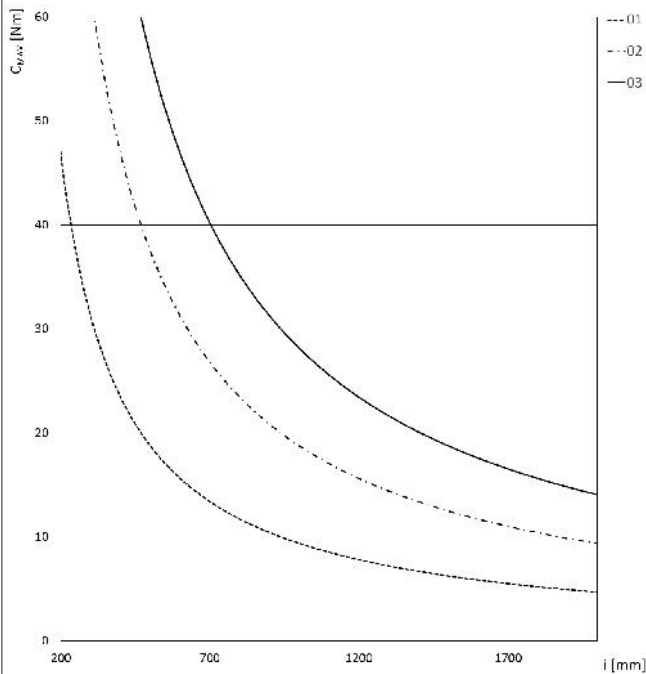
- 01 = lag error 0.1 mm
- 02 = lag error 0.2 mm
- 03 = lag error 0.3 mm



Size 65x65

$C_{max}$  = max applicable torque  
 $i$  = interaxis between the two 5E axes

- 01 = lag error 0.1 mm
- 02 = lag error 0.2 mm
- 03 = lag error 0.3 mm



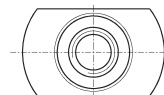
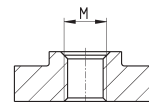
Size 80x80

$C_{max}$  = max applicable torque  
 $i$  = interaxis between the two 5E axes

- 01 = lag error 0.1 mm
- 02 = lag error 0.2 mm
- 03 = lag error 0.3 mm

**Slot nut for sensor CSH**

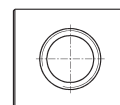
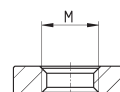
Material: steel



Mod.	Size	M
<b>PCV-5E-CS-M3</b>	50 - 65 - 80	M3
<b>PCV-5E-CS-M4</b>	50 - 65 - 80	M4

**Slot nut 6 - rectangular type**

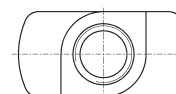
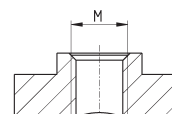
Material: steel



Mod.	Size	M
<b>PCV-5E-C6-M4Q</b>	50 - 65	M4

**Slot nut 6 for front insertion**

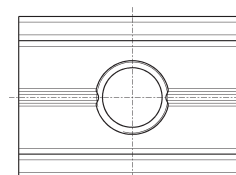
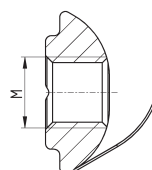
Material: steel



Mod.	Size	M
<b>PCV-5E-C6-M4R</b>	50 - 65	M4

**Slot nut 8 with flexible flap**

Material: steel



Mod.	Size	M
<b>PCV-5E-C8-M5</b>	80	M5
<b>PCV-5E-C8-M6</b>	80	M6