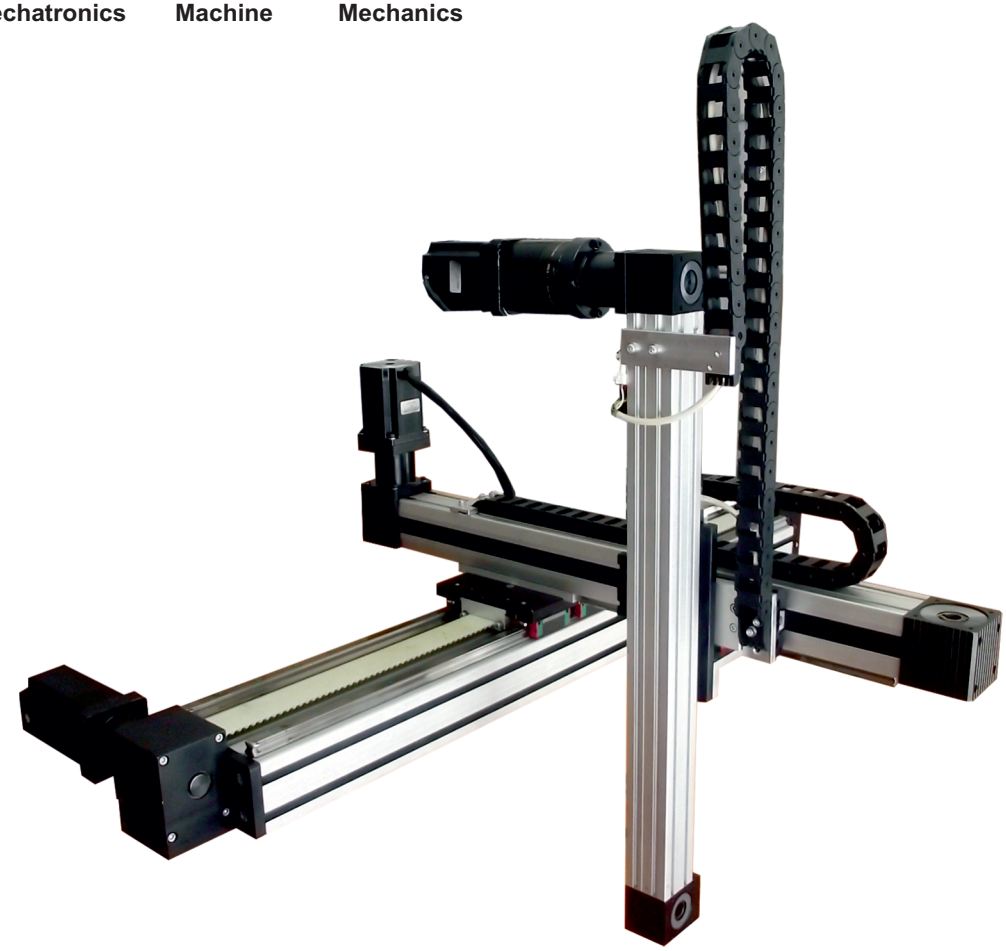
LINEAR MOTION SYSTEMS


Robotic


Mechatronics


Machine


Mechanics



Driven Guidances

Axial Movements

Positioining

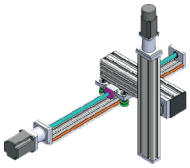
8.0 PRODUCT CATALOGUE

www.doguskalip.com.tr

DOĞUŞ KALIP®
METAL VE FORM SAN. DIŞ. TİC. LTD.ŞTİ.



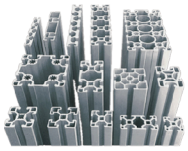
ROBOTIC MARKET®



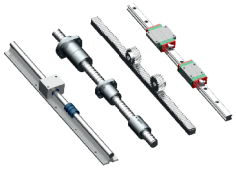
MECHATRONİCS MARKET®



CONVEYOR MARKET®

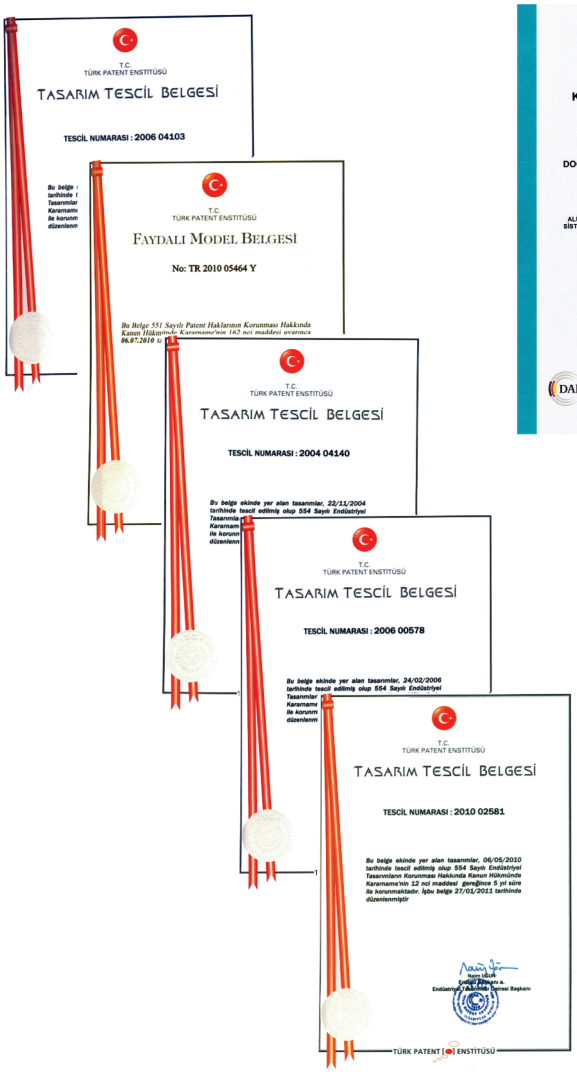


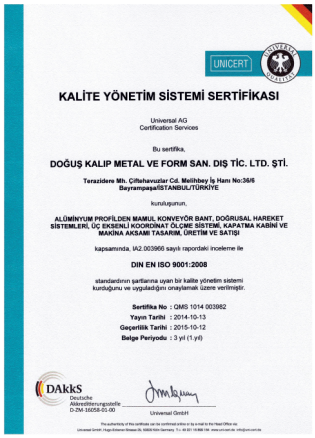
INDUSTRIAL PROFILE MARKET®

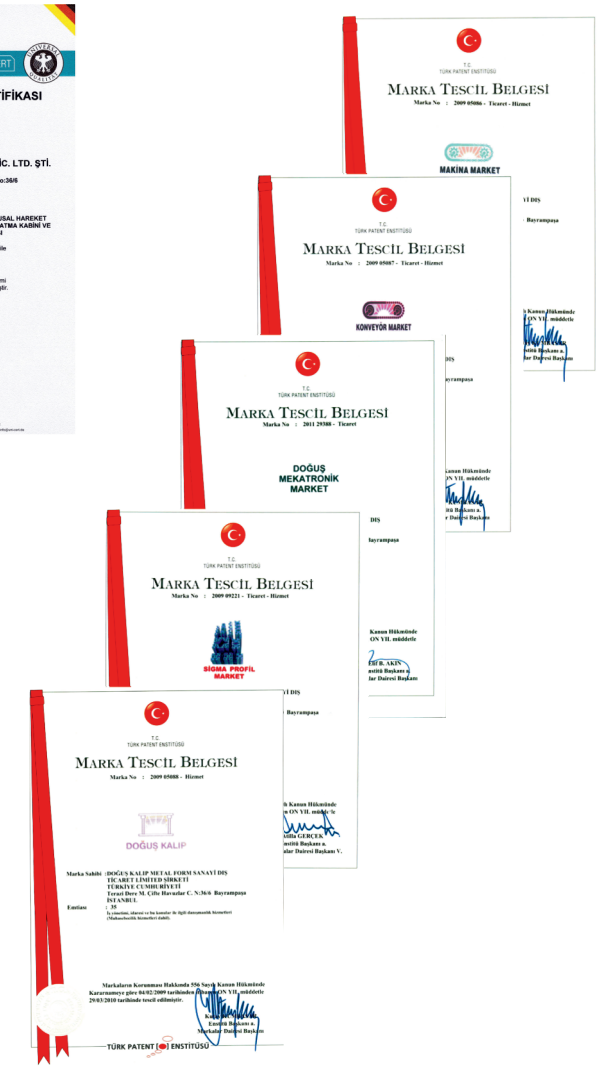


MACHINE MARKET®

The Brands One Each Above Are Doğuş Kalıp Trademarks







Doğuş Kalıp Metal ve Form San. Tic. Ltd. Şti which started business in 1994 and made name by manufacturing cutting and plastering mould, progressive mould for different sectors, has improved its experience by carrying out activities in production and spare part manufacturing since 1998.

Doğuş Kalıp has started producing Aluminium Industrial Profiles,fastening-connecting parts and their accessories on conveying and automation systems after 2002.

It has contributed to national labour force by manufacturing the equipments which were n imported products.

Since 2006, Dogus Kalip has focused on research and development on linear motion systems and multi-axis motion systems and produced world-ranking technological systems by using its own resources.

Today, there is a great competition in both quality and speed by using cutting-edge technological systems and newly developed products in production process and manufacturing industries .

Doğuş Kalıp is a manufacturer of the products which used in serial manufacturing of mechatronics and automation technology applications. We are proud with our research and development department facilities on developing the neccessary products in mechatronic sector.

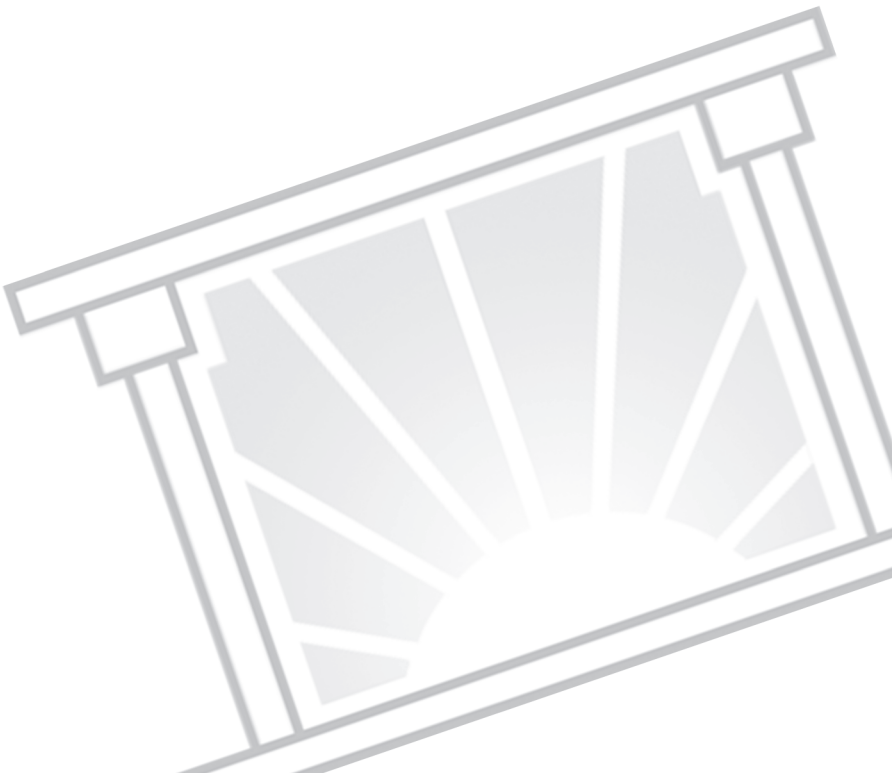
Our main target is improving the systems and equipments in neccesity of our sector with our expanding quantity of staff and background.

We have partnership with lots of manufacturer in mechatronics and automation sector due to our product range expanding day by day.

Our marketing strategy is almost completed in domestic market with Dogus Kalip's regional and local dealers and Doğuş Kalıp is to be continue to trading with foreign countries.

We know our responsibility to giving best service and high quality to our customer and partners.We wish to share our experience and develop your business in close future.....

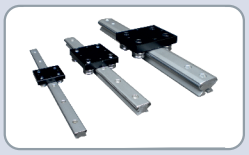
DOĞUŞ KALIP





Applications

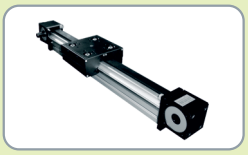




Non Driven Systems

- Shaft Support Units
- Block Guidances
- Profile Guidances

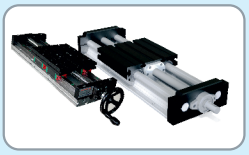




Belt Driven Systems

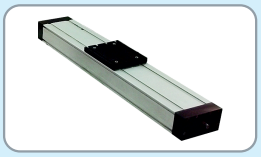
- T-Slot Series
- Dktm Series
- Compact Series
- Block Series





Ballscrew Driven Systems

- Dkvm Series
- Dkzm Series
- Compact Series
- Bridge Series
- Spot Series

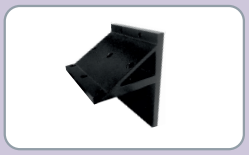




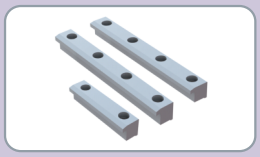
Rack Driven Systems

- Block Series
- Bridge Series
- Series



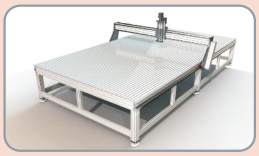


Module Equipments





CNC Construction



Index / Pages

Design And Applications			5-9
Shaft Support Units (Ø12) Shaft Support Units (Ø16) Shaft Support Units(Ø20) Shaft Support Units (Ø25) Shaft Support Units(Ø30) Shaft Support Units (Ø40)	Roller Block Guidance (Ø4) Roller Block Guidance (Ø6) Makaralı Blok Yatak (Ø8) Roller Block Guidance (Ø12) Roller Block Guidance (Ø20)	Roller Block Guidance (U type) (Ø8) Lineer Kapalı Blok Yatak (15) Profile Guidance (38x50) Profile Guidance (60x80) Profile Guidance (80x80)	10-19
Belt Driven Timing Belt Module (38x50) Belt Driven Timing Belt Module (60x80) Belt Driven Timing Belt Module (80x80) Belt Driven Timing Belt Module (45x45) Belt Driven Timing Belt Module (45x90) Belt Driven Timing Belt Module (90x90)	Belt Driven Timing Belt Module (90x180) Belt Driven Timing Belt Module (Ø12) Belt Driven Timing Belt Module (Ø20) Timing Belt Block Module (opposite ways) DKTM Timing Belt Module (Ø20) DKTM Timing Belt Module (Ø30)	Timing Tunnel Belt Modu (80x80) Timing Belt Compakt Modul (64x64) Timing Belt Compakt Modul (80x80) Timing Belt Compakt Modul (100x100) Linear Timing Belt Modul (90x90) Linear Timing Belt Modul (90x180)	20-51
Dkvm Ballscrew Module (Ø12) Dkvm Ballscrew Module (Ø16) Dkvm Ballscrew Module (Ø20) Dkvm Ballscrew Module (Ø25) Dkvm Ballscrew Module (Ø30) Z Axis Ballscrew Module (15)	Z Axis Ballscrew Module (20) Compact Ballscrew Module (50x110) Compact Ballscrew Module (65x165) Compact Ballscrew Module (80x160) Compact Ballscrew Module (100x100) Spot Ballscrew Module (45x90)	Spot Ballscrew Module (90x90) Spot Ballscrew Module (90x180) Bridge Ballscrew Module(90x90) Bridge Ballscrew Module (90x180)	52-73
Rack Block Module (Ø12) Rack Block Module (Ø20) Rack Bridge Module (90x90) Rack Bridge Module (90x180) Rack Module (80x80)			74-81
X-Y, Y-Z Axis Adapter Module Connection Adapter			82-83
Mini CNC Size Midi CNC Size Big CNC Size			84-87

LINEAR MOTION SYSTEM

Any kind of process in mechanic and automatization systems is ensured via progressive circular and linear motions. Regardless of the type of the process, any process should be placed in an axial guide and bcaring so that the motion is maintained in an appropriate and stable way.

For any kind of loading and speed implementation, abrasion sholud be avoided in order to keep bearing sensitivity and tolerance figures. For this reason bedding materials are made of hardened and ground steel. Bearing surfaces are covered with felt shield and protective bellows in order to ensure a long-lasting operation quality.

Doğuş Kalıp, Produced in accordance with the specifications mentioned above, provides optional designs to be implemented in various operation environments and for different amountts of loading.

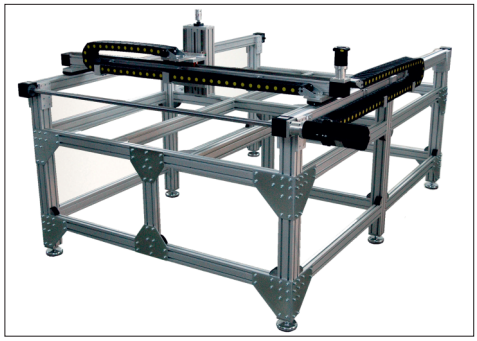
The moment and the stimulation alternatives needed for the axial motions are composed in accordance with the units in which they are used. The bearing materials placed on the Aluminum profile frames provides practical implementation and avoid unnecessary loading on the system. The canal structures on the current surfaces ensure that any kind of additional part is included during the process and facilitates adjustment.

It is possible to direct axial coordination motions via the controller and control board in accordance with the process due to the integration of various engines in linear motion systems.

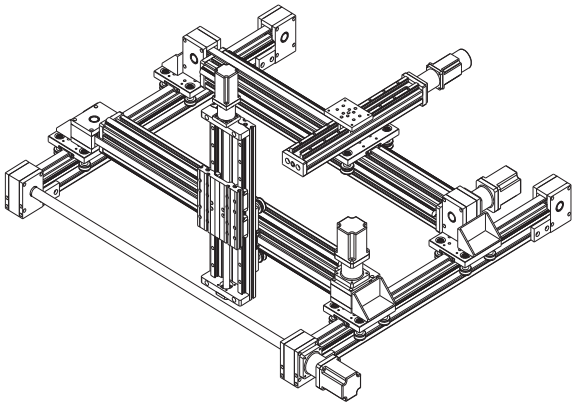
The bearing units produced in difficult conditions and at high-costs formerly are produced By Doğuş Kalıp as instans high-tech units. These instant system provide axical solutions under the scope of multi optional categories.

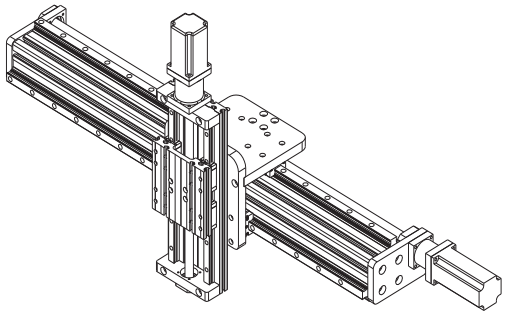
While these units provide standart options in the category of Lincar Motion System, they also make specific various sizes and additional options available.

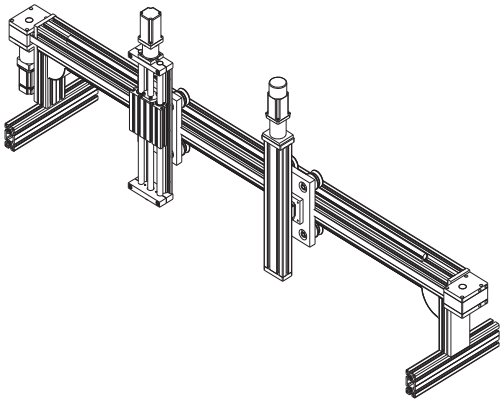
The reason why these system are favored most is that they are produced in a very short time period and they provide appropriate cost solutions.

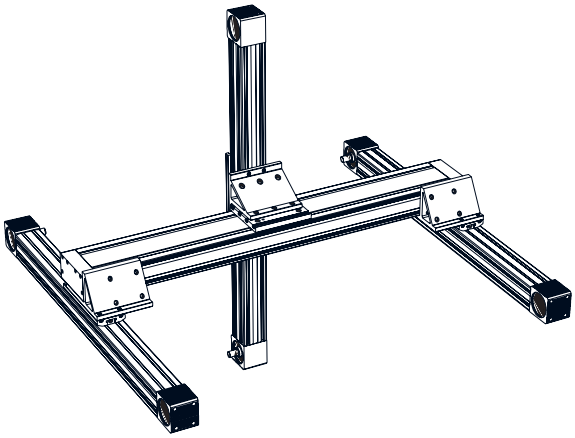


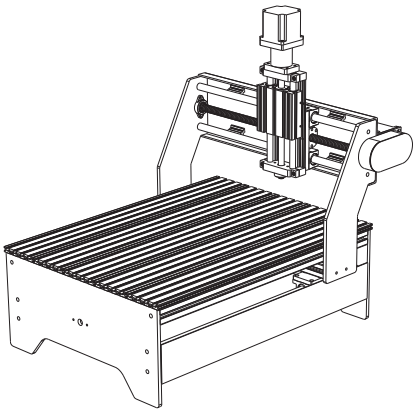
LINEER MOTION SYSTEMS
PRESENT IDEAL SOLUTIONS
ON YOUR DESIGNS

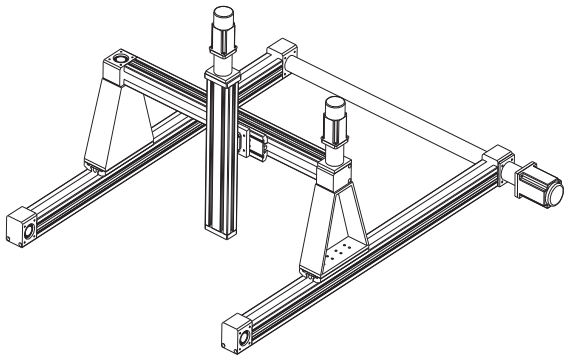




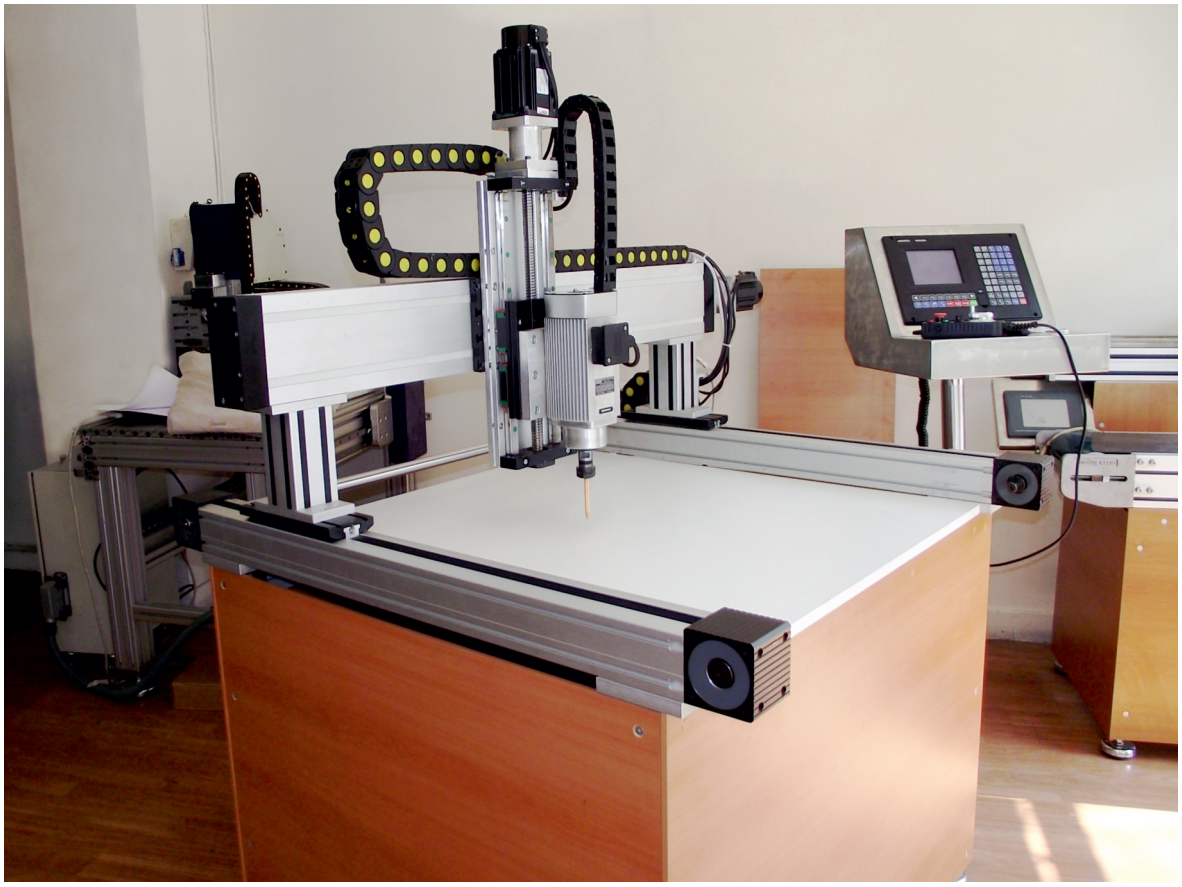




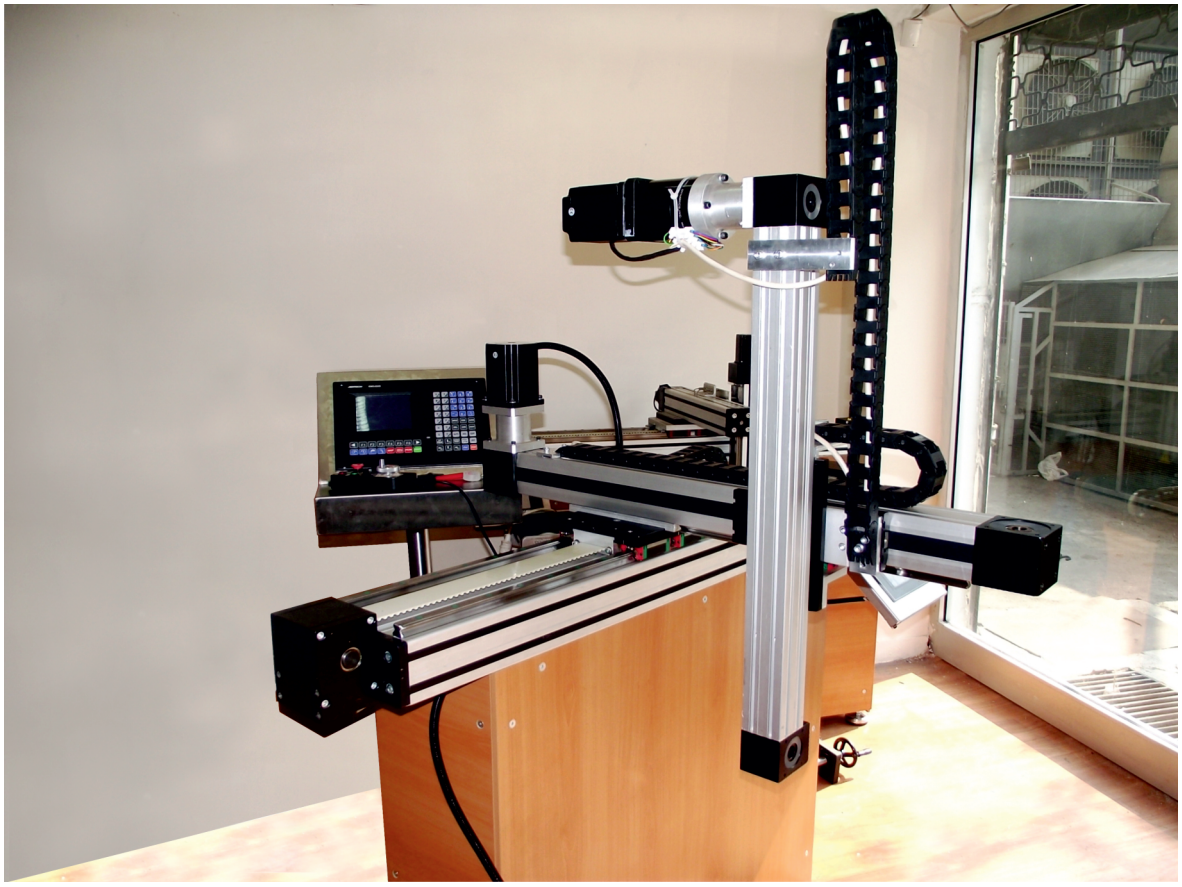




Gantry Systems



Cartesian Robot



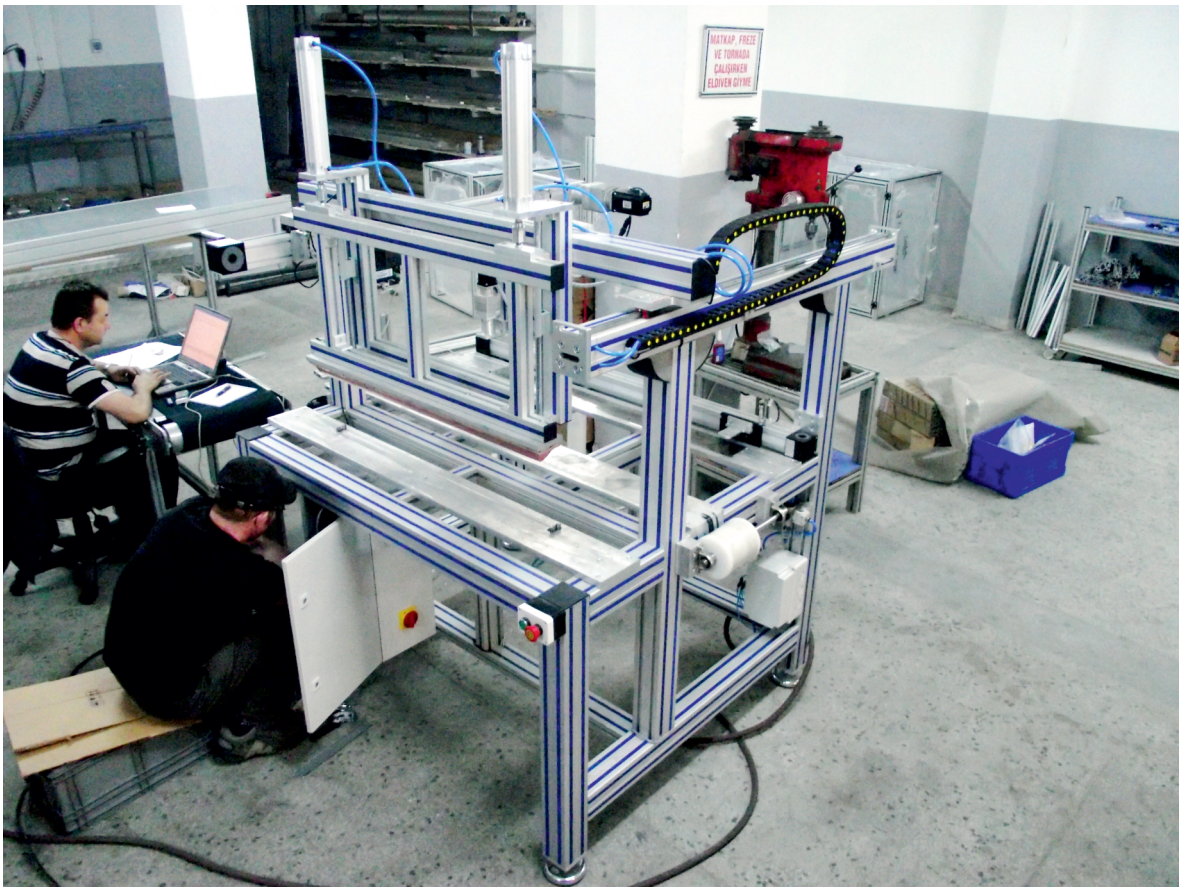
Printing Machine



Plasma Cutting Machine



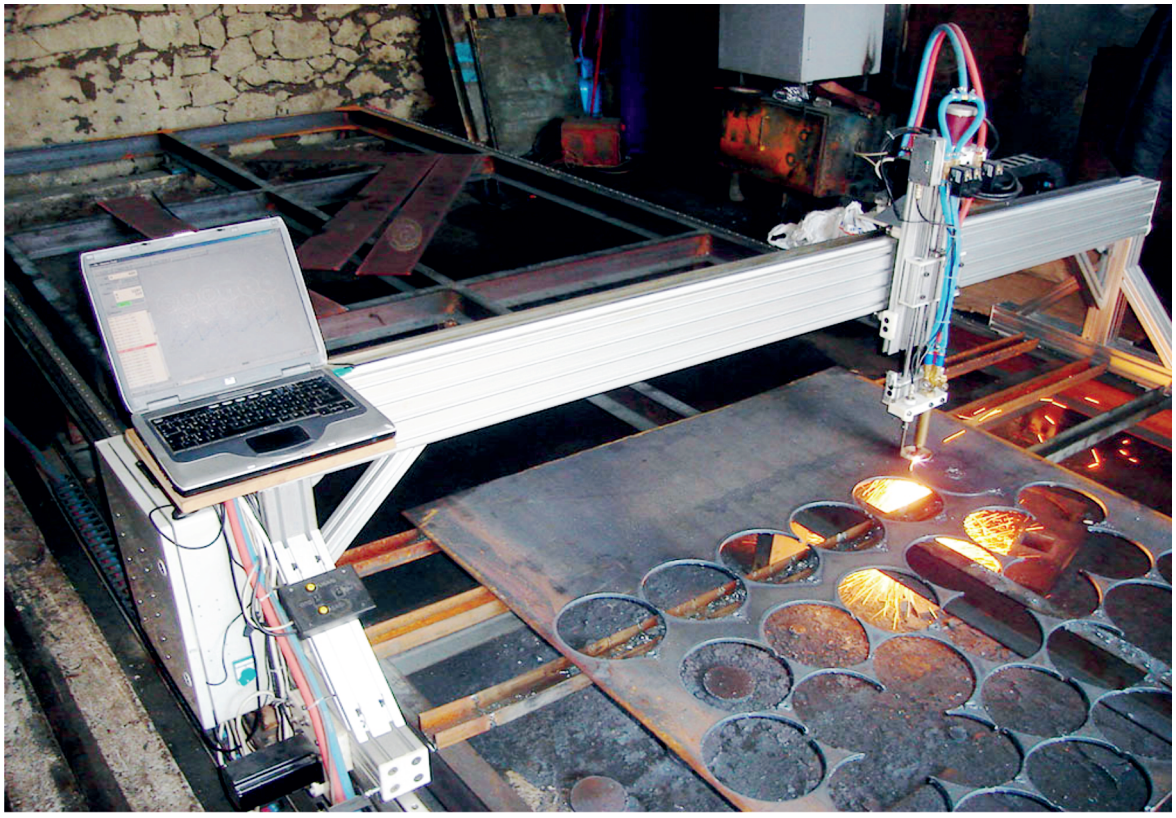
Folio Press Machine



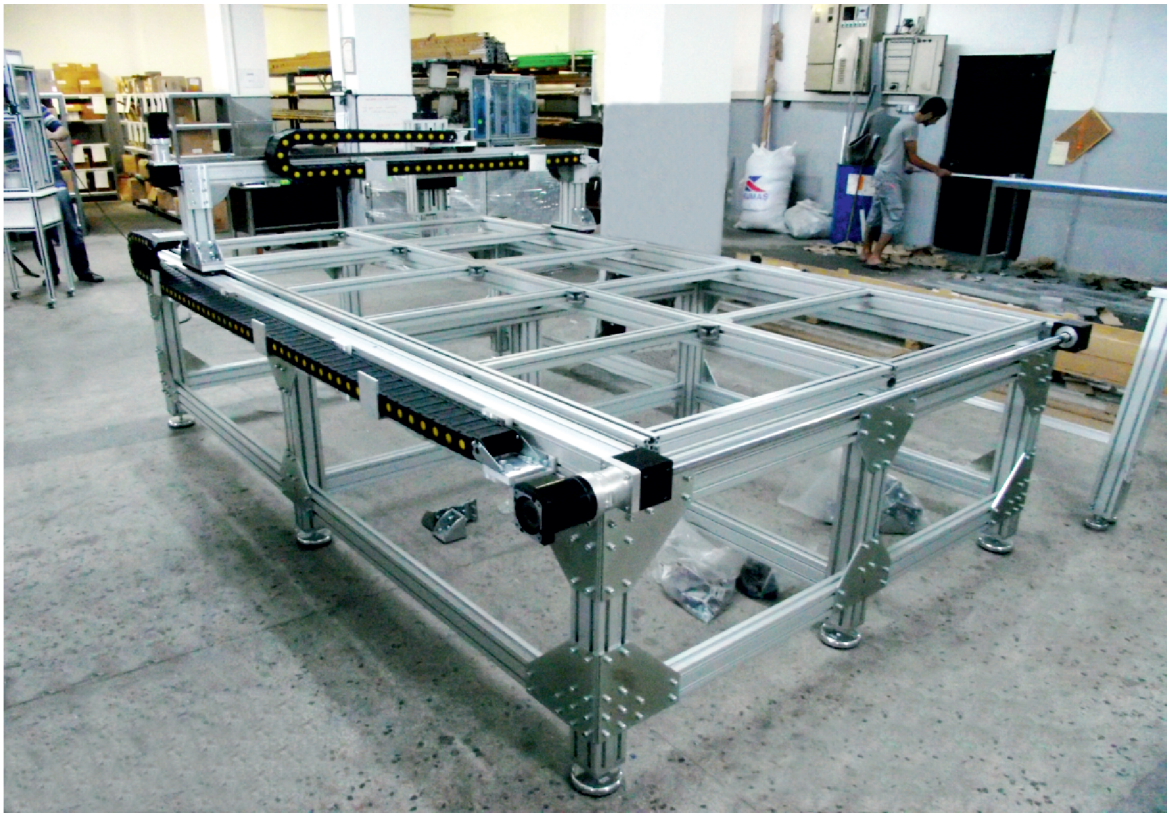
Barcoding Machine

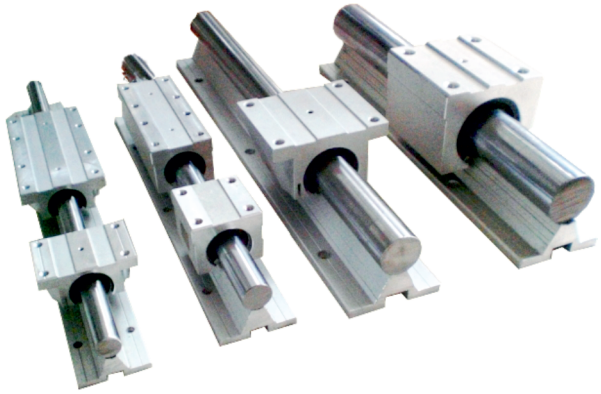


Plasma Cutting Machine



Plasma Cutting Machine





Technical Features

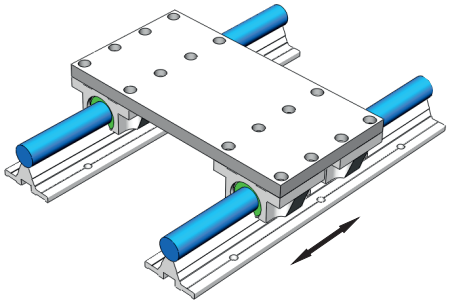
1- Shaft Support Profile ; Aluminium(6063) T5 Anodized Coated

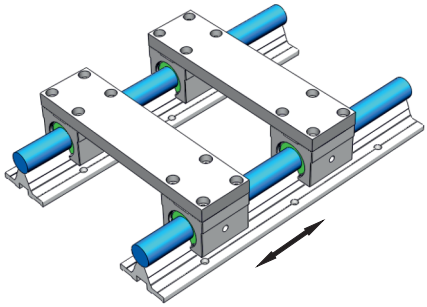
2- Linear Shaft ; Ø 12-16-20-25-30-40 Chrome Coated (20-33µm), Hardened, Cf53- H7

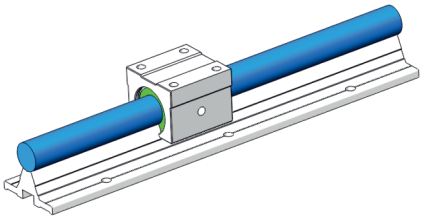
3- Linear Bearings; LME UUOP Ø 12-16-20-25-30-40

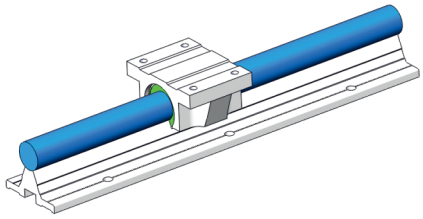
4- Linear Shaft Hardness Value ; 60 - 62 HRC

Applications

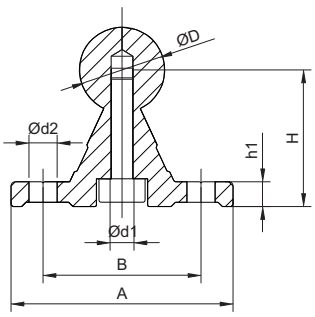


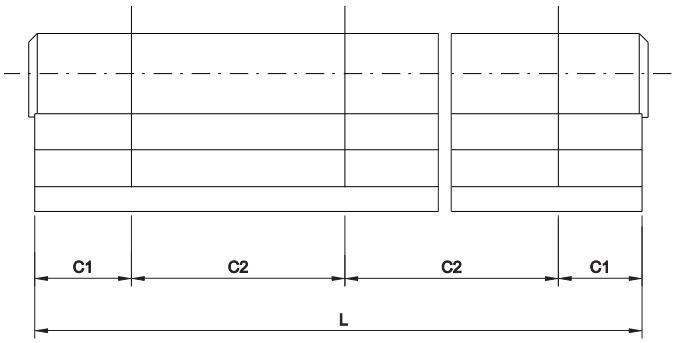




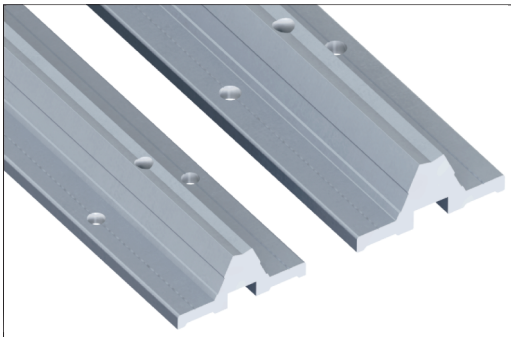


Shaft Support+Shaft Mounted





Code	ØD	B	A	H	h1	Ød1	Ø d2	C1	C2	L	Weight Kg/m
4.1.10.016040.0.12.0	Ø12	29	40	22	5	Ø4,5	Ø4,5	50	75	6000	1.571
4.1.10.018045.0.16.0	Ø16	33	45	26	5	Ø5,5	Ø5,5	50	100	6000	2.422
4.1.10.022052.0.20.0	Ø20	37	52	32	5.8	Ø6,6	Ø6,6	50	100	6000	3.701
4.1.10.024057.0.25.0	Ø25	42	57	36	6	Ø9	Ø6,6	60	120	6000	5.296
4.1.10.028069.0.30.0	Ø30	51	69	42	7	Ø11	Ø9	75	150	6000	7.561
4.1.10.032073.0.40.0	Ø40	55	73	50	8	Ø11	Ø9	100	200	6000	11.917



Technical Features

1- Shaft Support Profile ; Aluminium(6063) T5 Eloxal Coated

2- Eloxal Type ; Mat Naturel (White)

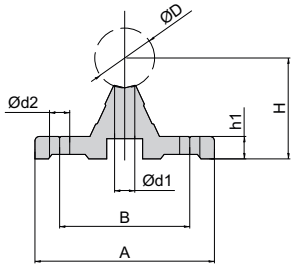
3- Eloxal Thickness ; 10 - 12 µm

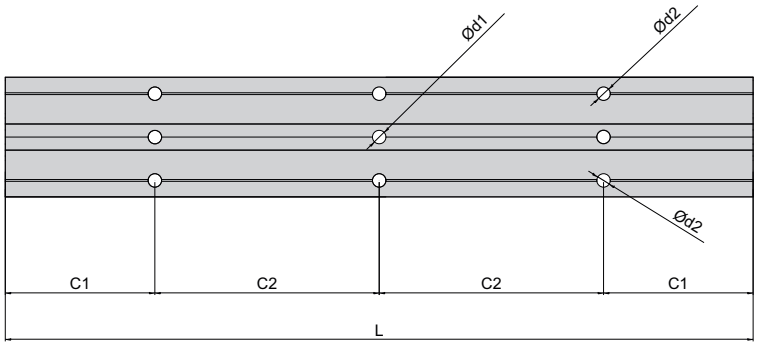
4- Hardness Value ; 70 -76 Brinell

5- Yield Strenght ; 160 N/mm²

6- Tensile Strenght ; 215 N/mm²

7- Modulus Elasticity ; 7000 Kg/mm²





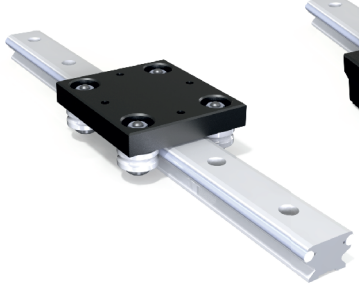
Drilled Profile

Code	ØD	B	A	H	h1	Ød1	Ød2	C1	C2	L	Weight Kg/m
1.3.12.040016.01	Ø12	29	40	22	5	Ø4,5	Ø4,5	50	75	6000	0.678
1.3.16.045018.01	Ø16	33	45	26	5	Ø5,5	Ø5,5	50	100	6000	0.825
1.3.20.052022.01	Ø20	37	52	32	5.8	Ø6,6	Ø6,6	50	100	6000	1.242
1.3.25.057024.01	Ø25	42	57	36	6	Ø9	Ø6,6	60	120	6000	1.39
1.3.30.069027.01	Ø30	51	69	42	7	Ø11	Ø9	75	150	6000	1.98
1.3.40.073030.01	Ø40	55	73	50	8	Ø11	Ø9	100	200	6000	2.71

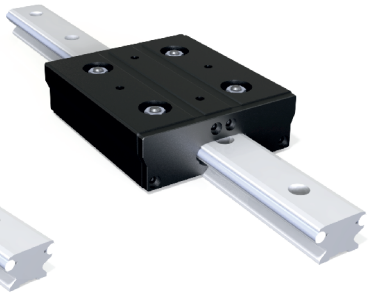
Use Properties

Shaft support units can be used on long applications. Due to shaft supported below, deflection won't occur and linearity problem is minumum even on long applications. Shaft support units are low cost and can be used on mechanical and automation units safely.

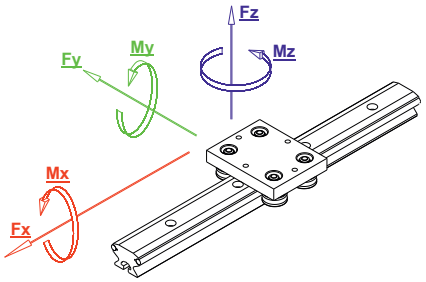
OPEN TYPE



CLOSED TYPE



Load Capacity

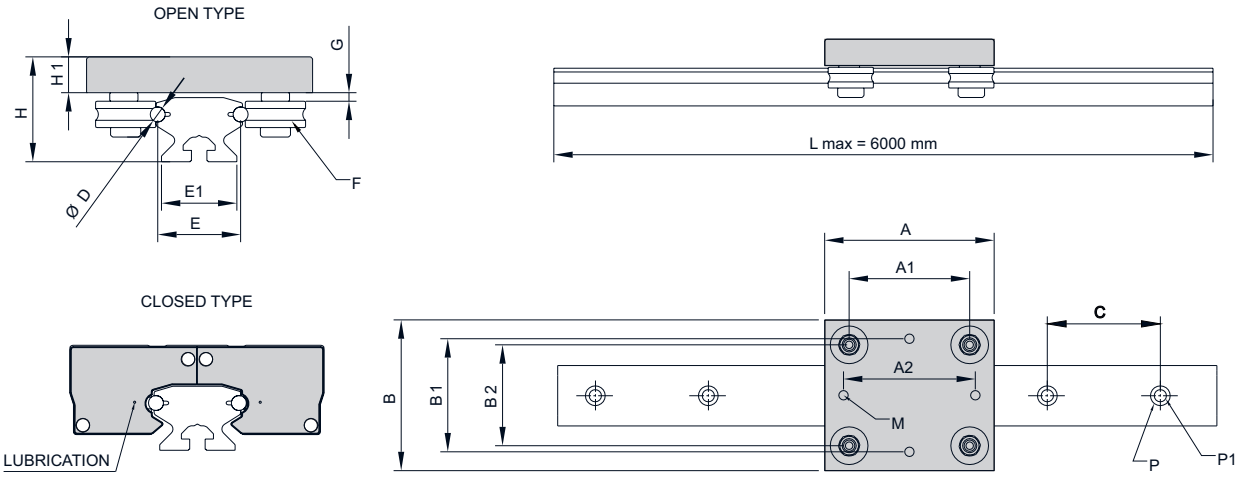


Load		Static	Ø4 Block	Ø6 Block	Ø8 Block
F_x	(N)				
F_y	(N)	170	360	580	
F_z	(N)	230	490	740	
Moment					
M_x	(Nm)	20	30	58	
M_y	(Nm)	20	40	48	
M_z	(Nm)	35	55	64	

Technical Features

Body	;	12x17 - 20x24 - 40x34 Profile (Aluminium 6063) T5
Max Speed	;	3 m/sec - 4 m/sec - 5 m/sec
Stud Bolt	;	(M4x1) - (M6x2) - (M8x14) Consentric and Eccentric
Linear Shaft	;	Ø4 - Ø6 - Ø8 Chrome coated , hardened linear shaft
Track Roller Bearing	;	LFR 50/5-4 KDD / LFR 50/8-6 KDD / RV 200-8 KDD

Technical Details



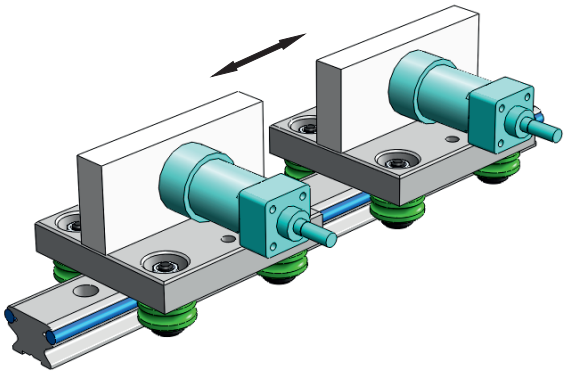
Block Guidance Body

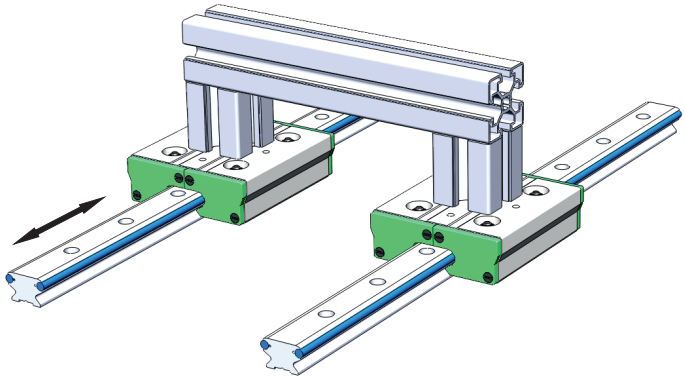
Code	Product Name	ØD	C	P	P1	E	E1
5.1.01.012017.01.04	Ø4 BLOCK GUIDANCE	4	60	7.5	4.5	16	17
5.1.01.020024.01.06	Ø6 BLOCK GUIDANCE	6	60	10.5	6.5	26	24
5.1.01.034040.01.08	Ø8 BLOCK GUIDANCE	8	120	13.5	8.5	44	40

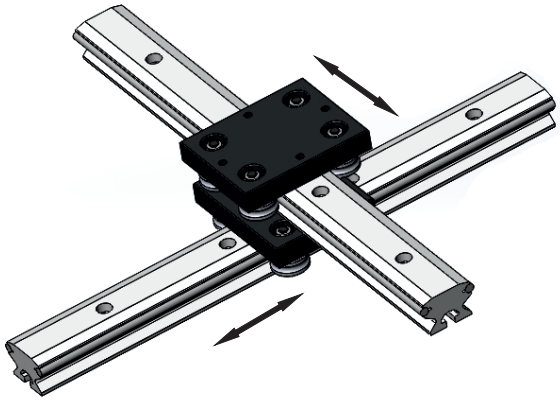
Moving Plate

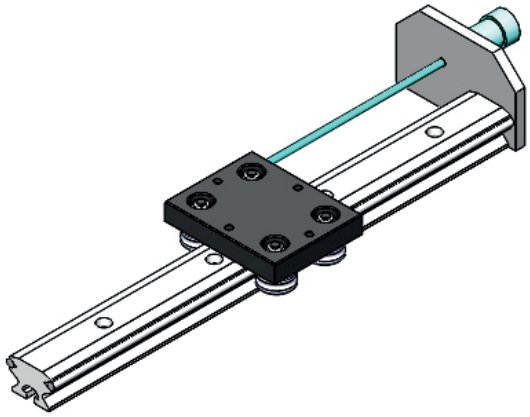
Code	Product Name	ØD	B	B1	B2	A	A1	A2	M	G	H	H1	F (BEARING)
6.1.01.012017.055055.1.4	Ø4 BLOCK	4	55	40	34	50	31	40	M5	0.5	23	9.5	LFR 50 / 5-4
6.1.02.020024.090080.1.4	Ø6 BLOCK	6	80	60	53.5	90	64	70	M6	1	35.5	14	LFR 50 / 8-6 KDD
6.1.01.020024.090080.1.4	Ø6 BLOCK (CLOSED)	6	100	60	53.5	115	64	70	M6	1	35.5	14	LFR 50 / 8-6 KDD
6.1.01.034040.095100.1.4	Ø8 BLOCK	8	120	100	80.5	95	55	75	M8	4.5	55.6	19	RV 200 - 8.32.14 KDD
6.1.02.034040.115135.1.4	Ø8 BLOCK (CLOSED)	8	135	100	80.5	115	55	75	M8	4.5	55.6	19	RV 200 - 8.32.14 KDD

Applications

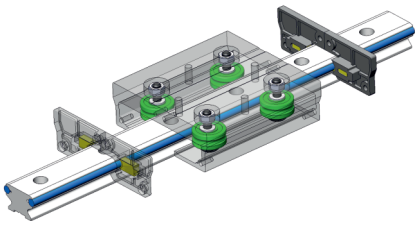




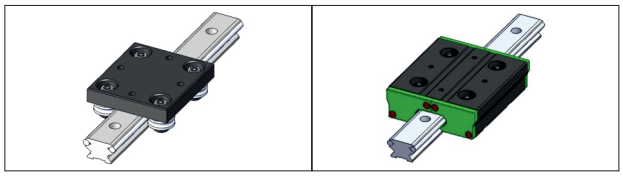




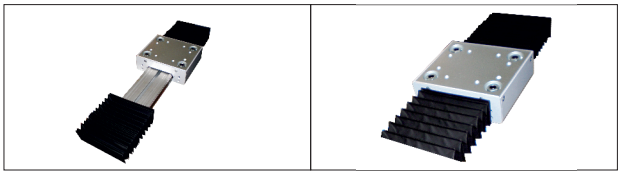
Options



Lubricating System and Bearing Protection Shield

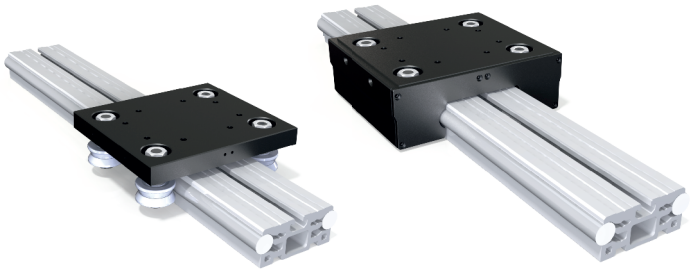


Dust Proof Units (Protecting Bellows)

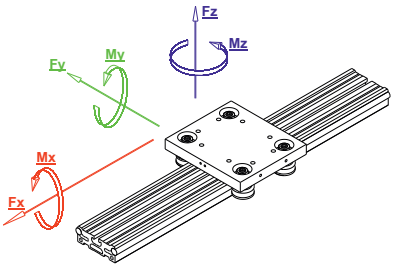


OPEN TYPE

CLOSED TYPE



Load Capacity



Load	Static	Ø 12	Ø 20
F_x	(N)		
F_y	(N)	870	1260
F_z	(N)	1100	1870
Moment			
M_x	(Nm)	70	95
M_y	(Nm)	65	85
M_z	(Nm)	75	115

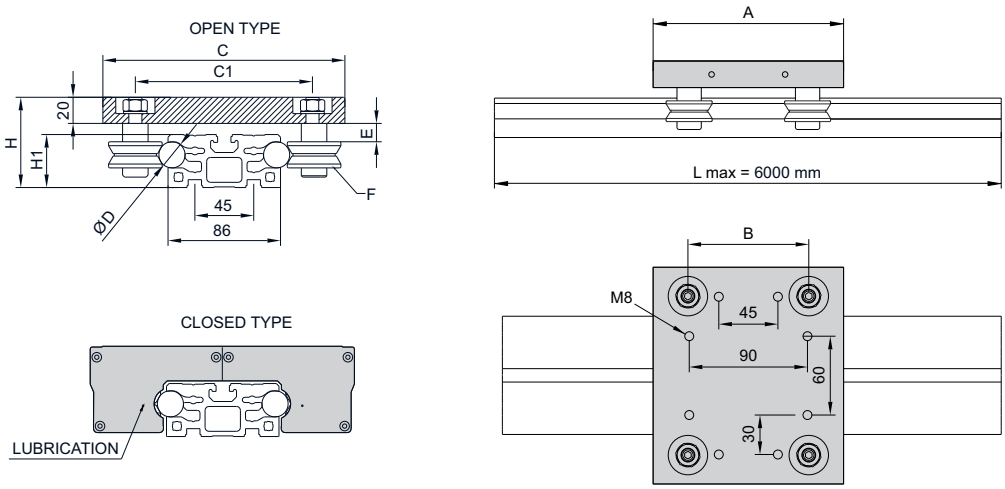
Technical Features

Body	;	30x82 - 40x86 Profile (Aluminium 6063) T5
Max Speed	;	5 m/sec
Stud Bolt	;	(M10X10) - (M12X14) Consentric and Eccentric
Linear Shaft	;	Ø12 - Ø20 Chrome coated hardened linear shaft
Track Roller Bearing	;	RV 201-12 KDD / RV 202-15 KDD / RV 203-17 KDD

Technical Details

Block guidance

Code	Product Name	ØD	C	C1
5.1.01.030082.01.12	Ø12 BLOCK GUIDANCE	12	82	78
5.1.01.040086.01.20	Ø20 BLOCK GUIDANCE	20	86	80

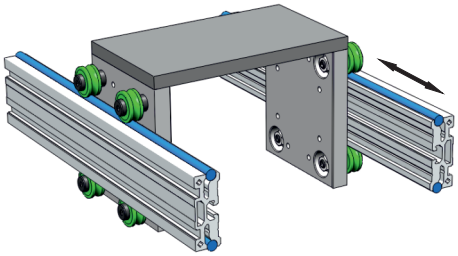


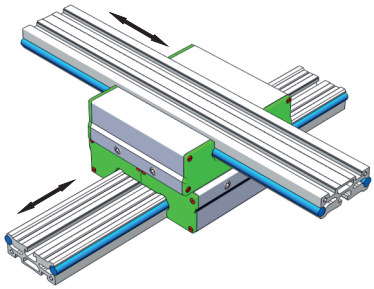
Moving Plate

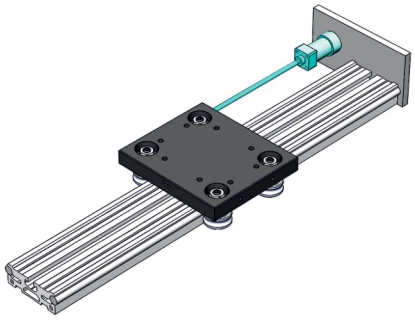
Code	Product Name	ØD	A	B	C	C1	E	H	H1	F (Bearing)
6.1.01.030082.145165.1.4	Ø12 BLOK RV 201	12	145	92	165	121	10	58	30	RV 201-12.35.16 KDD
6.1.02.030082.145165.1.4	Ø12 BLOK LFR 5201 (CLOSED)	12	155	92	182	121	10	58	30	

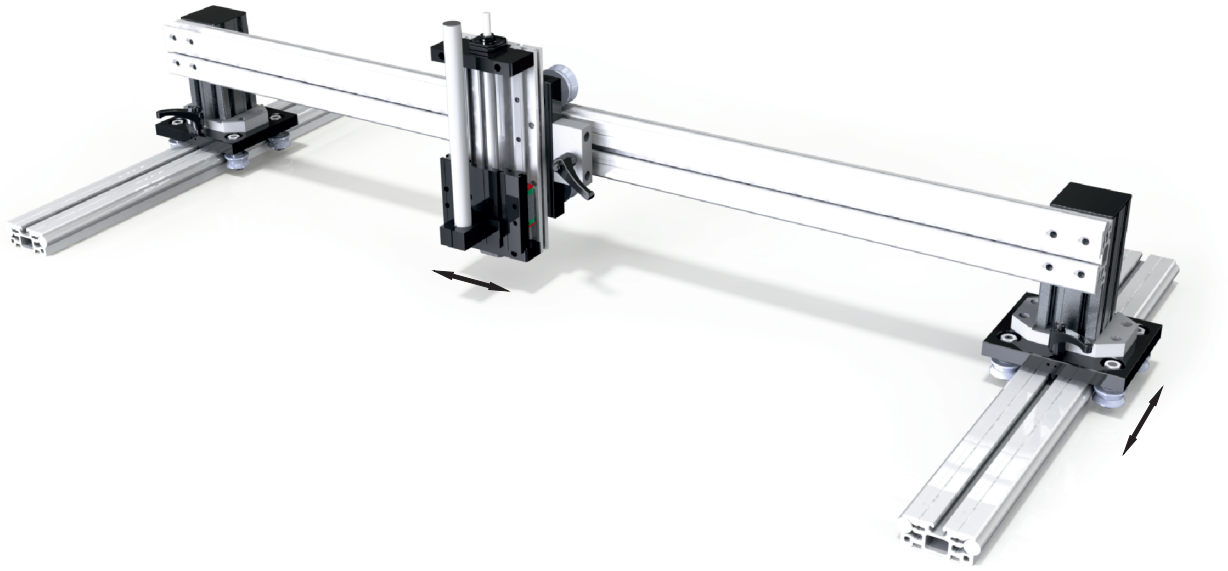
Code	Product Name	ØD	A	B	C	C1	E	H	H1	F (Bearing)
6.1.01.040086.165185.1.4	Ø20 BLOCK RV202	20	165	105	185	135	14	69	40	RV 202-15.41.20 KDD
6.1.02.040086.165185.1.4	Ø20 BLOCK RV202 (CLOSED)	20	175	105	202	135	14	69	40	

Applications



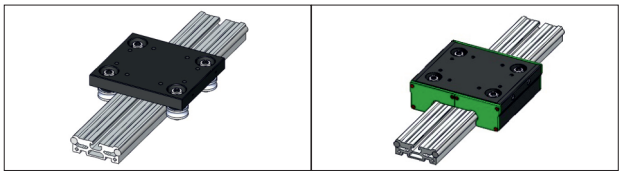




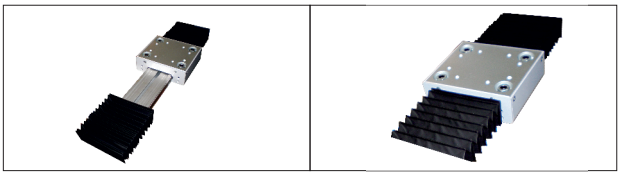


Options

Lubricating System and Bearing Protection Shield



Dust Proof Units (Protecting Bellows)



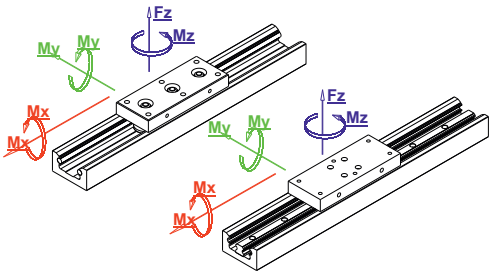
ROLLER TYPE



LINEAR TYPE



Load Capacity



Load		Static	Roller Type	Linear Type
F_x	(N)			
F_y	(N)		480	765
F_z	(N)		610	946
Moment				
M_x	(Nm)		12	37
M_y	(Nm)		15	34
M_z	(Nm)		23	50

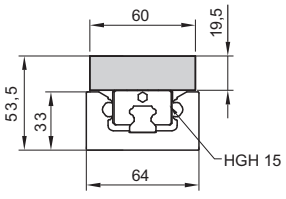
Technical Features

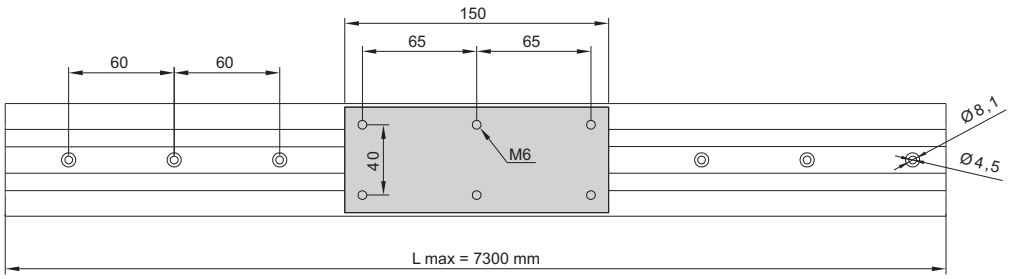
Body	;	64x33 Profile (Aluminium 6063)
MaxSpeed	;	5 m/sec
Stud Bolt	;	(Ø10 M8xF4,5) Consentric and Eccentric
Linear Shaft	;	Ø8 Chrome Coated (20-33µm), Hardened, Cf53- H7
Track Roller Bearing	;	RV200 - 8 KDD
Linear Rail	;	15 Linear Rail
Linear Block	;	15 Low-narrow Linear Block

Technical Details

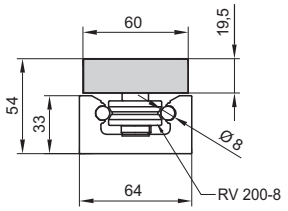
Profile	Moving Plate	
Code	**Code**	**Product Name**
5.1.01.033064.01.08	6.1.01.033064.060150.1.3	3 Roller Moving Plate (open Type)
	6.1.02.033064.060150.1.3	3 Roller Moving Plate (Closed Type)
	6.1.01.033064.060150.1.4	4 Roller Moving Plate (open Type)
	6.1.02.033064.060150.1.4	4 Roller Moving Plate (Closed Type)
5.1.01.033064.02.15	6.1.03.033064.060150.1.3	Linear Block

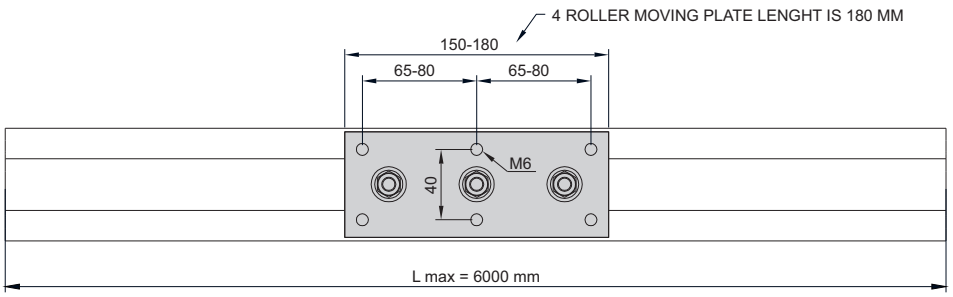
15' Linear Block Guidance
Code: 5.1.01.033064.02.15



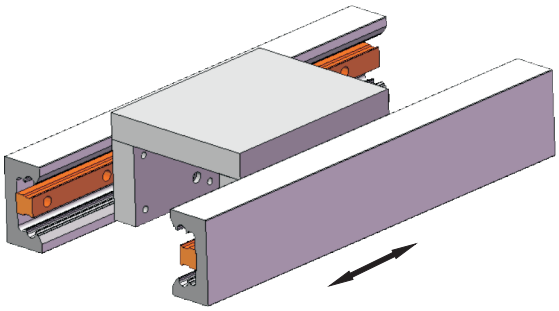


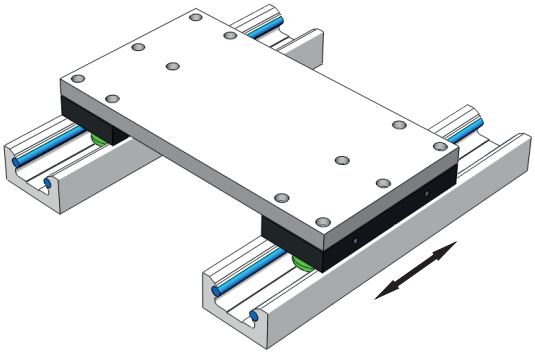
Roller Block Guidance (U type) Ø8
Code: 5.1.01.033064.01.08





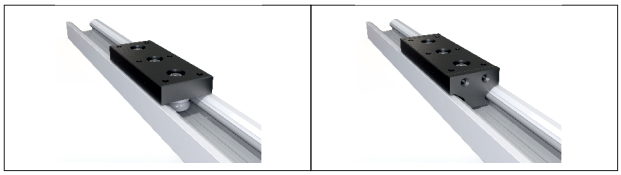
Applications



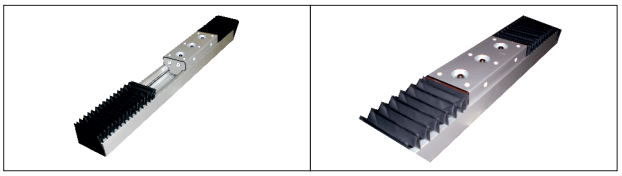


Options

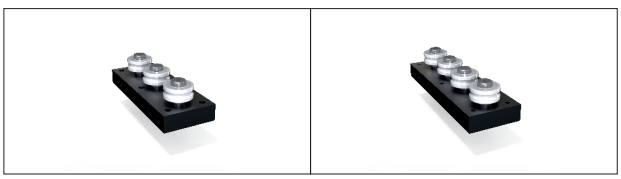
Lubricating System and Bearing Protection Shield



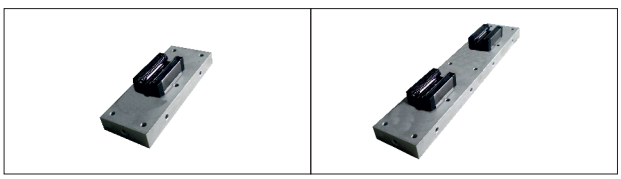
Dust Proof Units (Protecting Bellows)

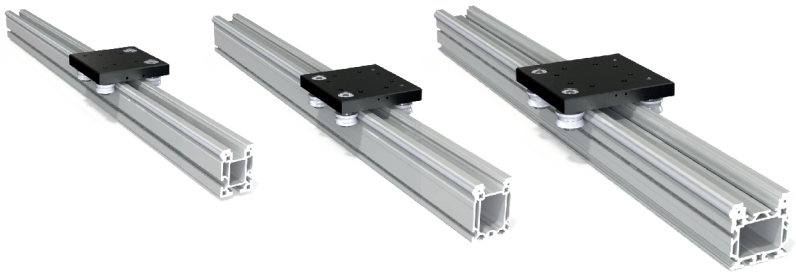


Moving Plate with 3 or 4 bearing



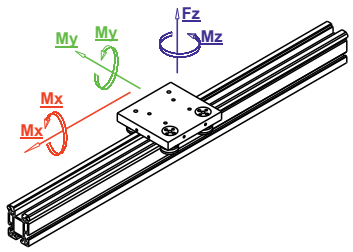
Moving Plate with 1 or 2 linear block





NEW PRODUCT

Load Capacity



Load	Static	38X50	60X80	80X80
F_x	(N)			
F_y	(N)	480	765	2030
F_z	(N)	610	946	2530
Moment				
M_x	(Nm)	12	37	150
M_y	(Nm)	15	34	145
M_z	(Nm)	23	50	175

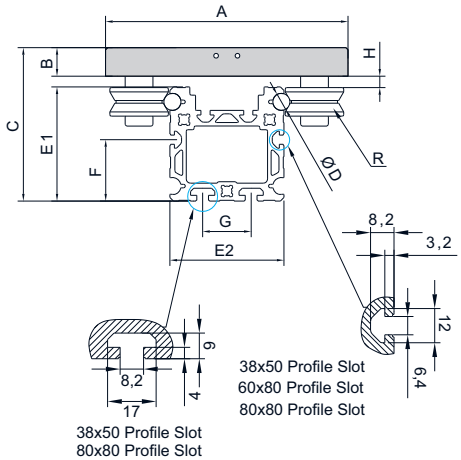
Technical Features

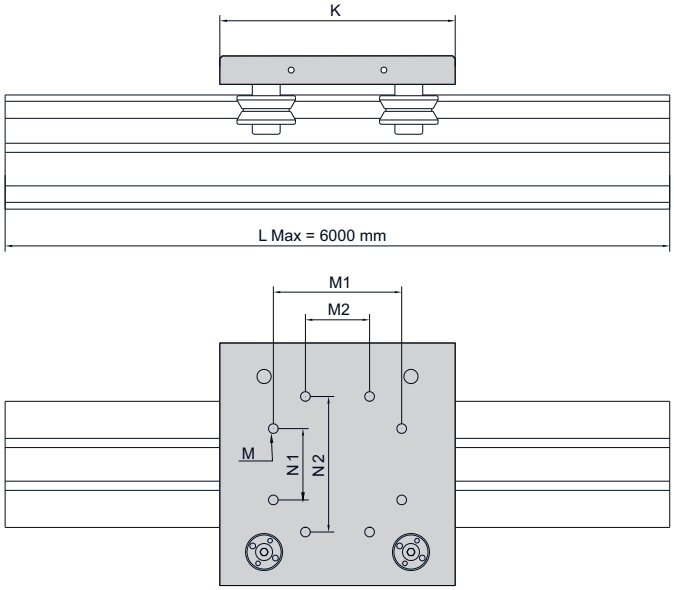
Body	;	38x50 / 60x80 / 80x80 Profile (Aluminium 6063) T5
Max Speed	;	3 m/sec / 5 m/sec / 8 m/sec
Stud Bolt	;	(Ø8 M6xF4,5) (Ø12 M10xF8,5) (Ø15 M12xF8) Consentric and Eccentric
Shaftl	;	Ø6 / Ø10 / Ø12 Chrome Coated (20-33µm), Hardened, Cf53- H7
Track Roller Bearing	;	LFR 50/8-6 KDD / RV 201-12 KDD

Technical Details

Block

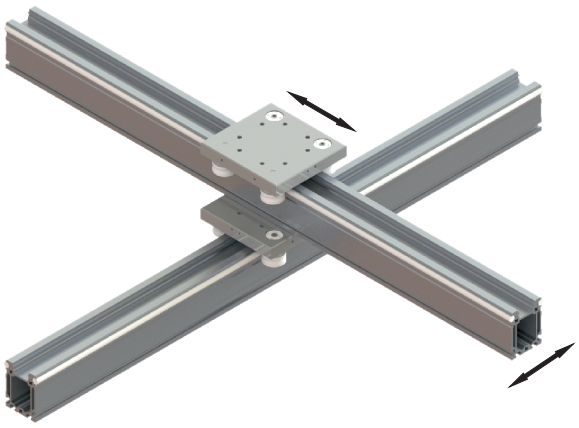
Code	Product Name
6.1.01.038050.100100.1.4	38X50 Moving Plate
6.1.01.060080.150150.1.4	60X80 Moving Plate
6.1.01.080080.165165.1.4	80X80 Moving Plate

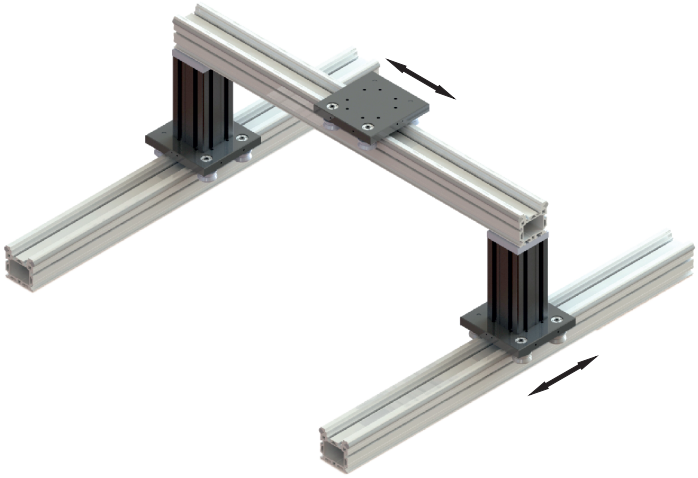




Code	Product Name	A	B	C	ØD	E1	E2	F	G	H	K	M	M1	M2	N1	N2	R
5.1.01.038050.01.06	38x50 Guidance	95	14,5	69	6	50	38	15	-----	4	100	5	45	----	30	----	LFR 50 / 8-6 KDD
5.1.01.060080.01.10	60x80 Guidance	140	19,5	107	10	80	60	12	32	8,5	150	8	90	45	45	90	RV 201-12.35.16
5.1.01.080080.01.12	80x80 Guidance	170	20	107,5	12	80	80	43	34	8	165	8	90	45	45	90	RV 201-12.35.16

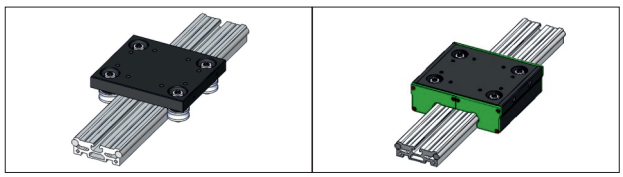
Applications



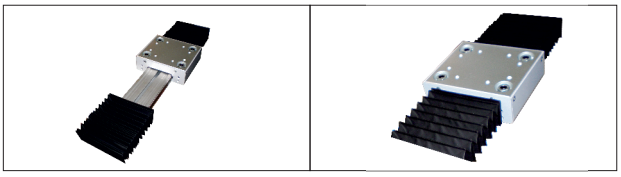


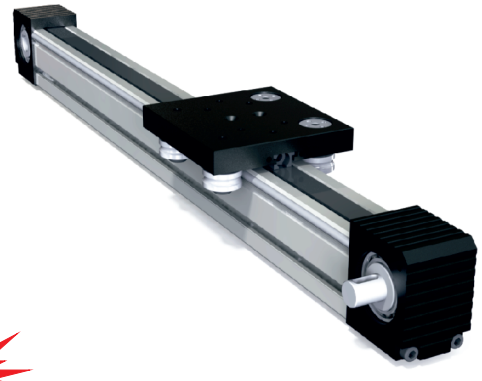
Options

Lubricating System and Bearing Protection Shield



Dust Proof Units (Protecting Bellows)

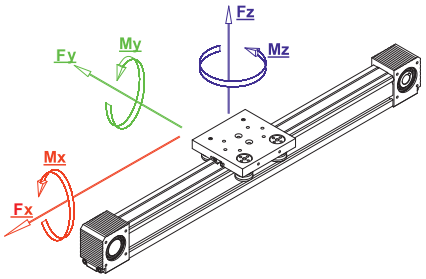




NEW PRODUCT

Product Code : 5.3.03.038050.1.01.2.Stroke

Load Capacity

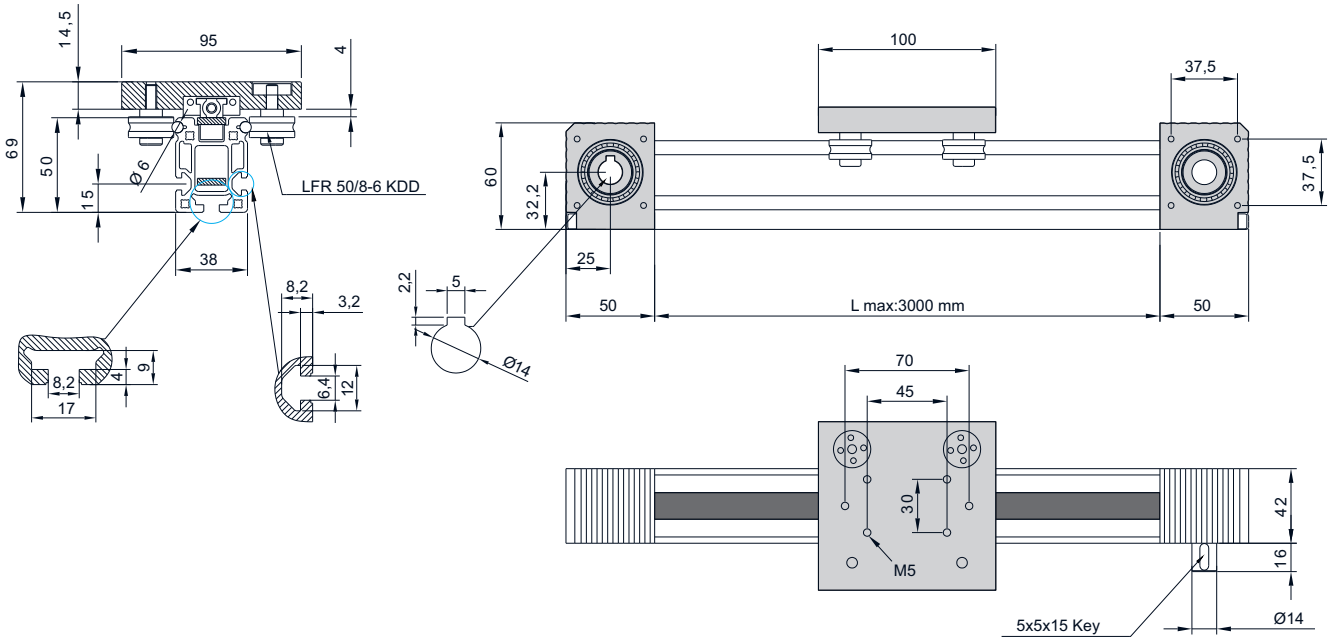


Load		Static
F_x	(N)	320
F_y	(N)	800
F_z	(N)	1000
Moment		
M_x	(Nm)	90
M_y	(Nm)	150
M_z	(Nm)	80

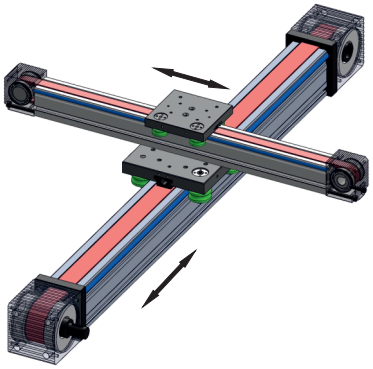
Technical Features

Body	;	38x50 Profile (Aluminium 6063) T5
Max Speed	;	3 m/sec
Pitch	;	105 mm
Timing Belt	;	5M-15/16 Steel cord PU
Timing Pulley	;	Z21-5M-16F
Shaft	;	Ø6 Chrome Coated (20-33µm), Hardened, Cf53- H7
Track Roller Bearing	;	LFR 50/8-6 - KDD
Belt Tensile Force	;	1500 N
Belt Pitch	;	5 mm
Positioning accuracy	;	0,2 mm

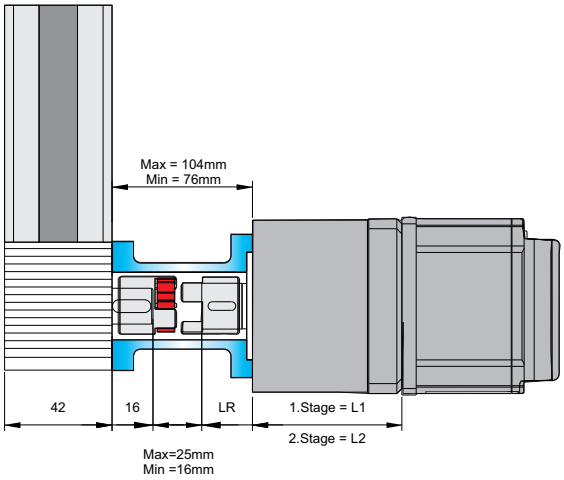
Technical Details



Applications



Gearbox Connection Details

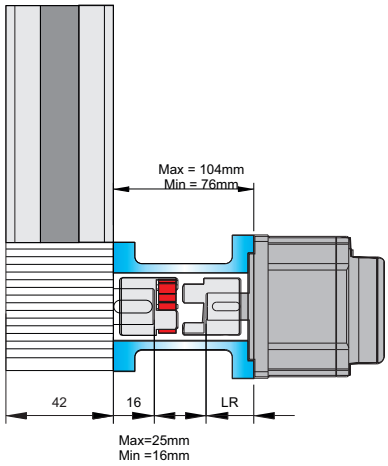


GEARBOX TYPE	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for750W -1kW -1.5 kW Servo)	112 mm	152 mm

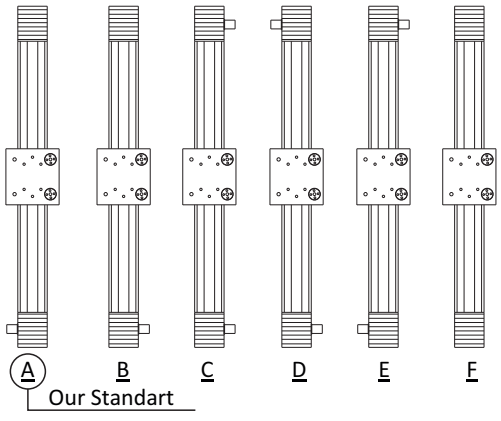
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.STAGE : 3-4-5-7-10
2.STAGE : 15-16-20-25-30-35-40-50-70-100
Max. Output Torque 104 Nm
Max. Input Rev/min : 6000 rpm

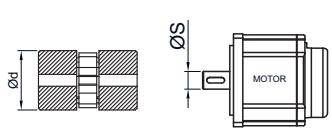
Motor Connection Details



Drive Shaft Directions

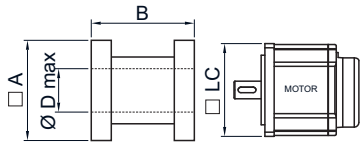


Coupling Options



COUPLING	Ød	ØS
GS 14	30	0 - 15
GS 19	40	16 - 20

Motor Flange Options



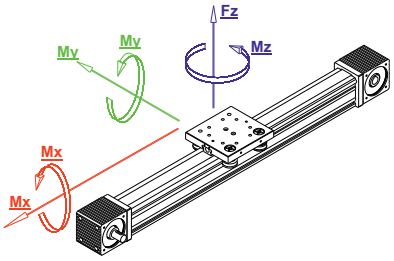
FLANGE	A	B	ØDmax	LC
60 x 60	50 - 60	65 - 73	35	50 - 60
85 x 85	65 - 85	80 - 90	47	65 - 85



NEW PRODUCT

Ürün Kodu : 5.3.03.060080.1.02.2.Strok

Load Capacity

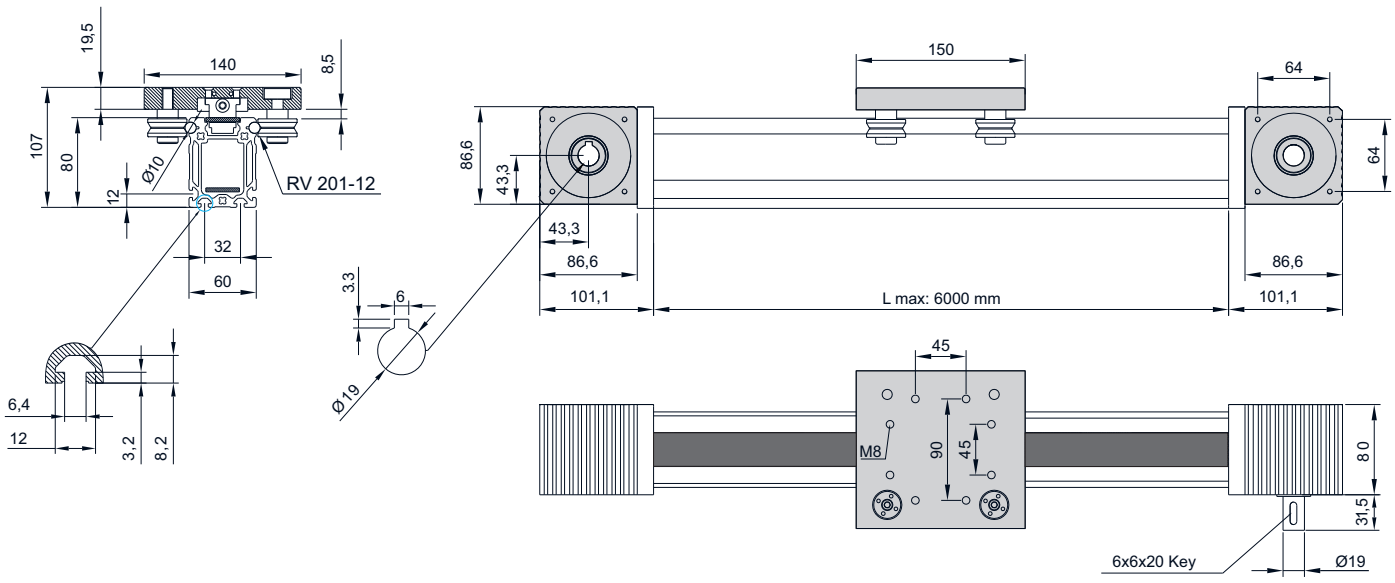


Load		Static
F_x	(N)	640
F_y	(N)	2030
F_z	(N)	1505
Moment		
M_x	(Nm)	120
M_y	(Nm)	145
M_z	(Nm)	162

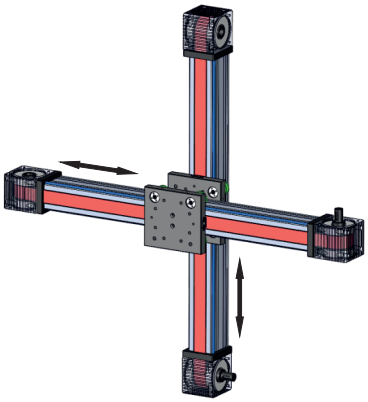
Technical Features

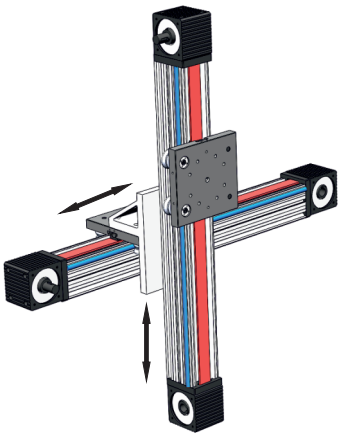
Body	;	60x80 Profile (Alüminyum 6063) T5
Max Speed	;	5 m/sec
Pitch	;	200 mm
Timing Belt	;	5M-30 Steel cord PU
Timing Pulley	;	Z40-5M-30F
Shaft	;	Ø10 Chrome Coated (20-33µm), Hardened, Cf53- H7
Track Roller Bearing	;	RV 201-12 KDD / LFR 5201-10 KDD
Belt Tensile Force	;	2000 N
Belt Pitch	;	5 mm
Positioning accuracy	;	0,2 mm

Technical Details



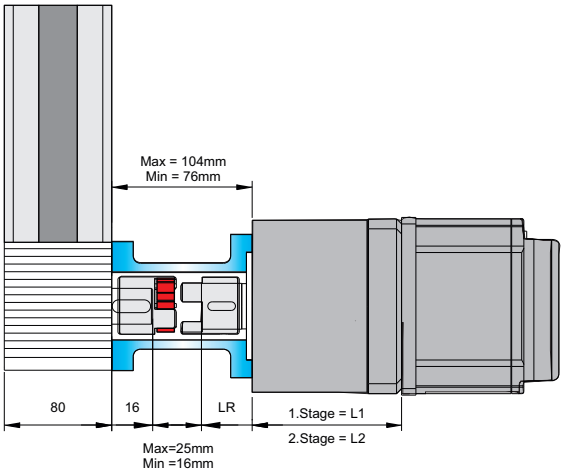
Applications





Gearbox Connection Details

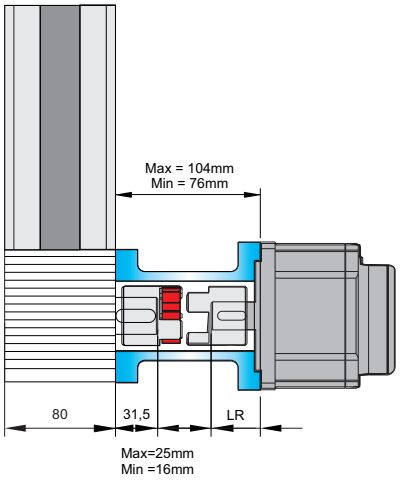
Motor Connection Details



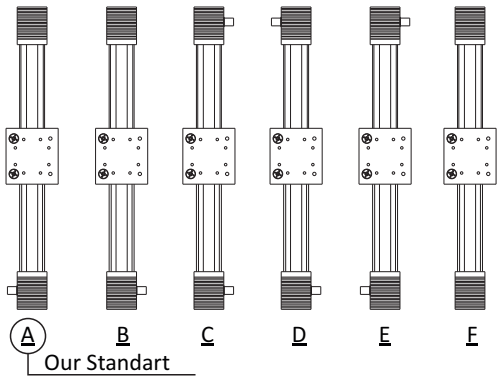
Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

PE 70 & PE 90 Series
Gearbox Options

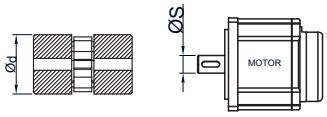
Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm



Drive Shaft Directions

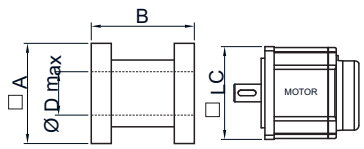


Coupling Options



Coupling	Ød	ØS
GS 14	30	0 - 15
GS 19	40	16 - 20

Motor Flange Options

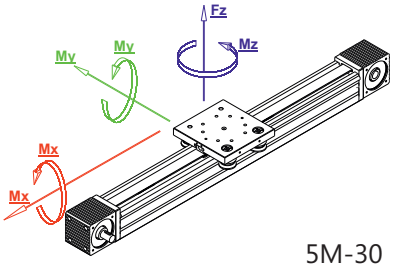


Flange	A	B	ØDmax	LC
60 x 60	50 - 60	65 - 73	35	50 - 60
85 x 85	65 - 85	80 - 90	47	65 - 85



NEW PRODUCT

Load Capacity

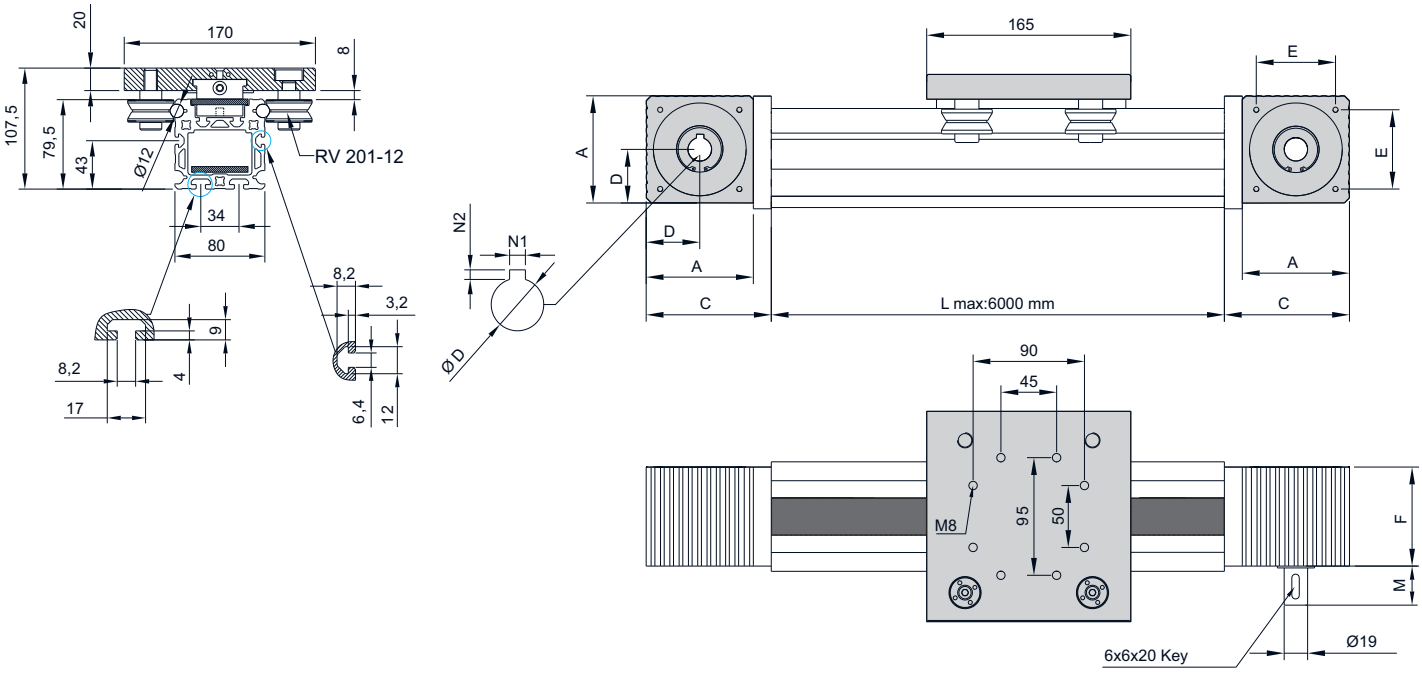


Load		Static	5M-30 8M-50
	F_x	(N)	640
	F_y	(N)	2030
	F_z	(N)	2530
Moment			
	M_x	(Nm)	150
	M_y	(Nm)	145
	M_z	(Nm)	175

Technical Features

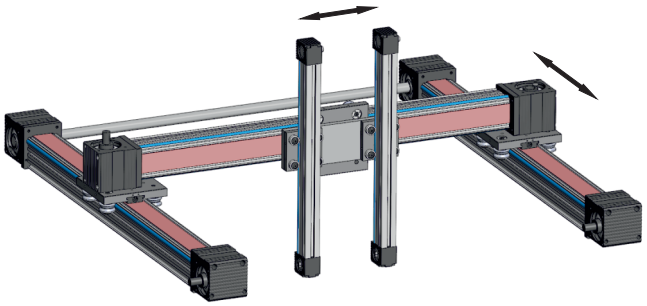
Body	;	80x80 Profile (Aluminium 6063) T5
Max Speed	;	5 m/sec - 6 m/sec
Pitch	;	192 mm - 200 mm
Timing Belt	;	5M-30 & 8M-50 Steel cord PU
Timing Pulley	;	Z40-5M-30F & Z24-8M-50F
Shaft	;	Ø12 Chrome Coated (20-33µm), Hardened, Cf53- H7
Track Roller Bearing	;	RV201 - 12 KDD / RV202 - 15 KDD
Belt Tensile Force	;	2000 - 3000 N
Belt Pitch	;	5 mm - 8 mm
Positioning accuracy	;	0,2 mm

Technical Details

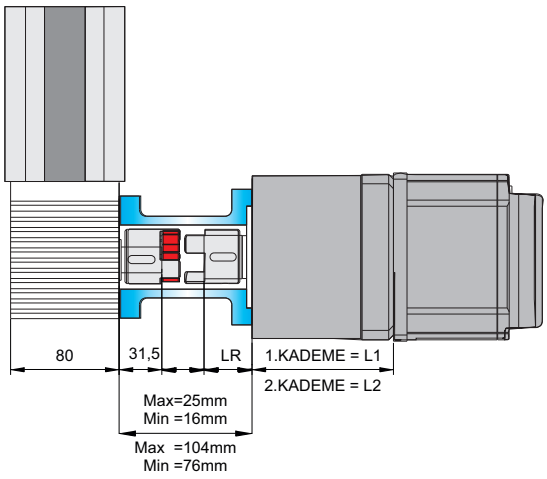


Code	Models	A	C	D	E	F	K	M	N1	N2	ØD
5.3.03.080080.1.02.2.Stroke	5M-30	86,6	101,1	43,3	64	80	50	31,5	6	3,3	19
5.3.03.080080.1.03.2.Stroke	8M-50	100	114,5	50	70,7	101	70	33,7	8	4	25

Applications



Gearbox Connection Details

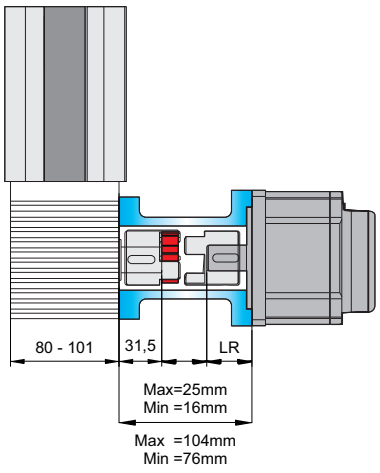


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

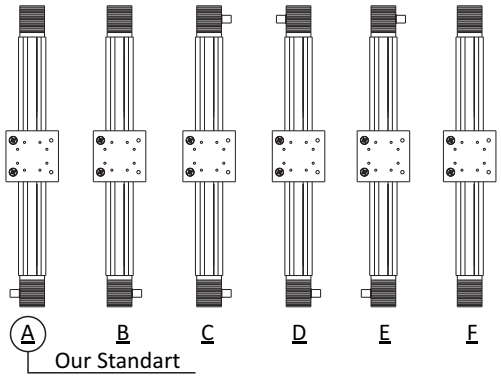
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

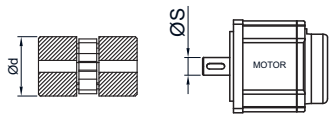
Motor Connection Details



Drive Shaft Directions

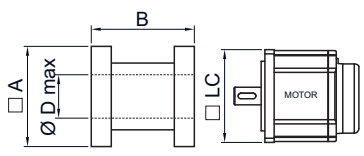


Coupling Options

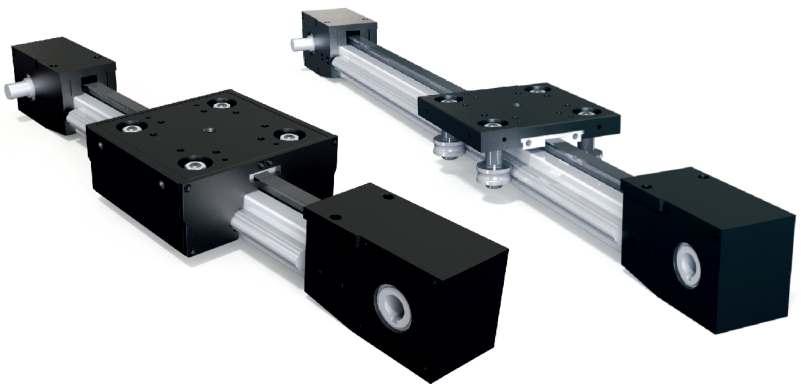


Coupling	Ød	ØS
GS 19	40	16 - 20
GS 24	55	21 - 28

Motor Flange Options

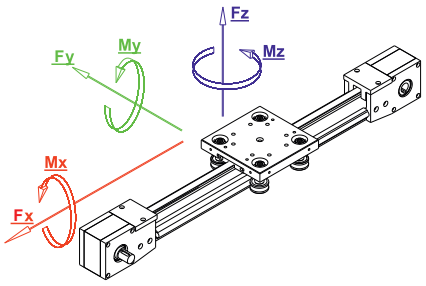


Flange	A	B	ØDmax	LC
85 x 85	65 - 85	80 - 90	47	65 - 85
95 x 95	75 - 95	83 - 104	60	75 - 95



Product Code : 5.3.02.045045.1.01.2.Stroke

Load Capacity

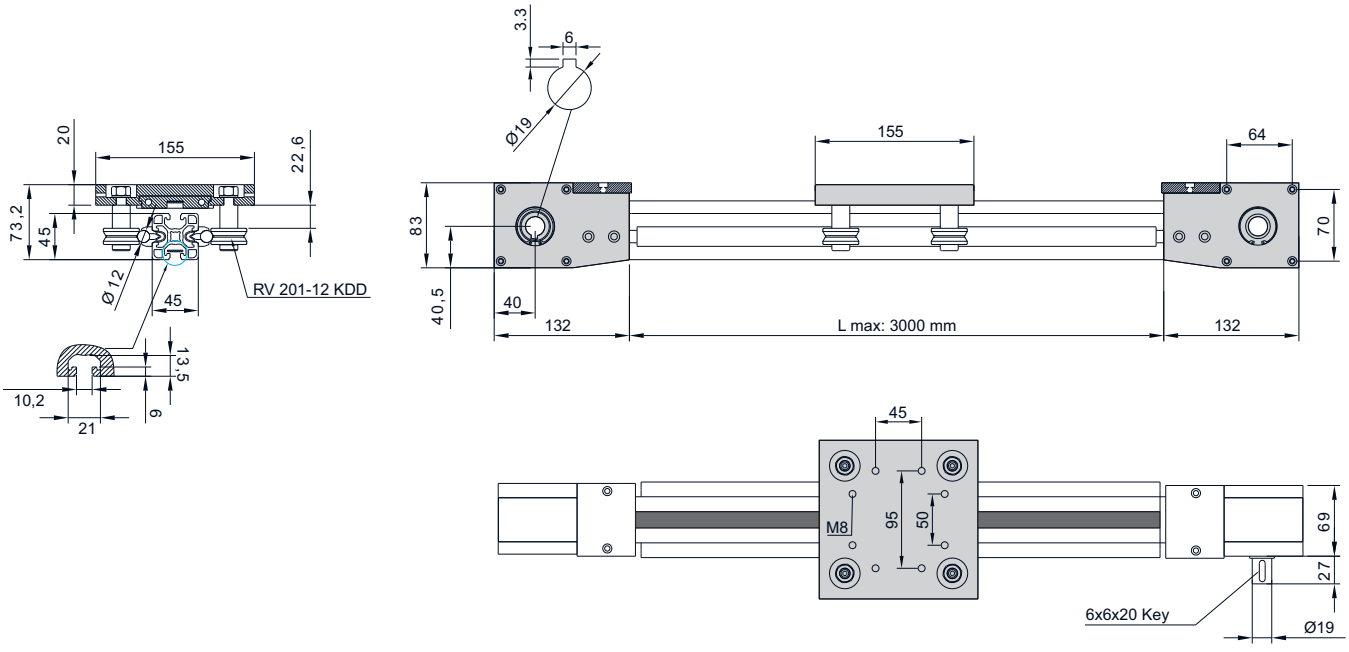


Load		Static
F_x	(N)	640
F_y	(N)	1100
F_z	(N)	1100
Moment		
M_x	(Nm)	115
M_y	(Nm)	110
M_z	(Nm)	145

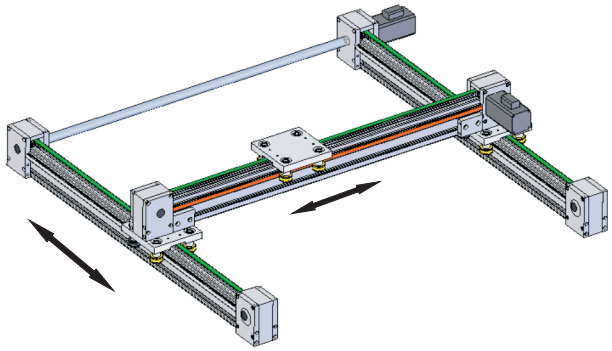
Technical Features

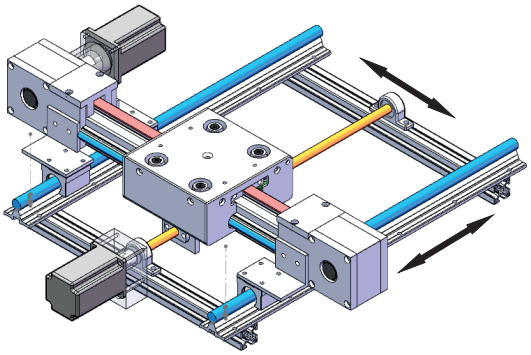
Body	;	45x45 Profile (Aluminium 6063) T5
Max Speed	;	3 m/sec
Pitch	;	150 mm
Timing Belt	;	5M-15 Steel cord PU
Timing Pulley	;	Z30-5M-16F
Shaft	;	Ø12 Chrome Coated (20-33µm), Hardened, Cf53- H7
Track Roller Bearing	;	RV 201-12 KDD
Belt Tensile Force	;	1500 N
Belt Pitch	;	5 mm
Positioning accuracy	;	0,2 mm

Technical Details

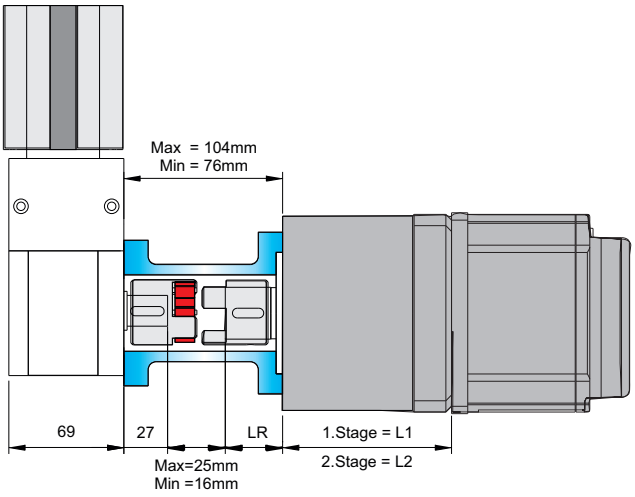


Applications





Gearbox Connection Details

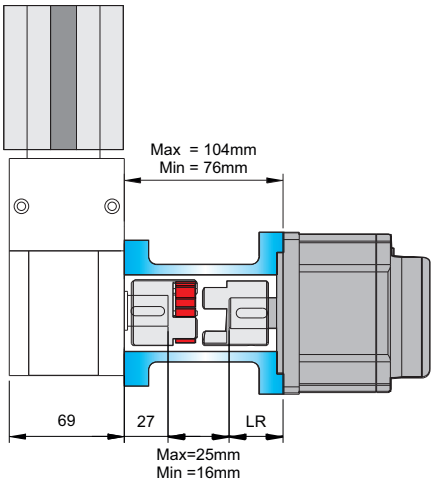


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

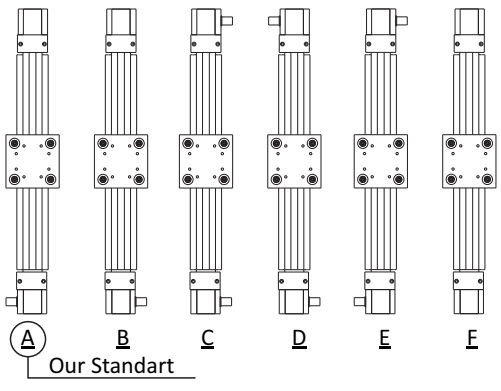
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min :6000 rpm

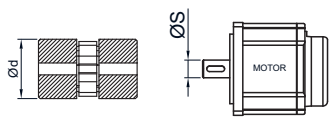
Motor Connection Details



Drive Shaft Directions

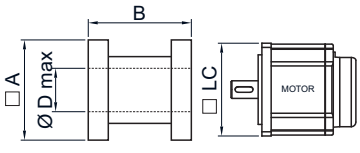


Coupling Options

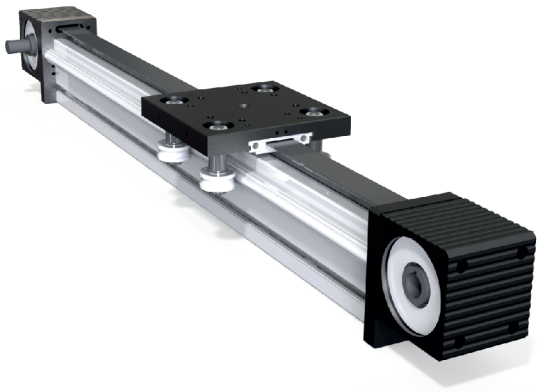


Coupling	Ød	ØS
GS 14	30	0 - 15
GS 19	40	16 - 20

Motor Flange Options

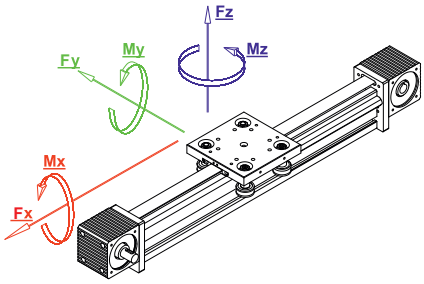


Flange	A	B	ØDmax	LC
60 x 60	50 - 60	65 - 73	35	50 - 60
85 x 85	65 - 85	80 - 90	47	65 - 85



Product Code : 5.3.02.045090.1.02.2.Stroke

Load Capacity

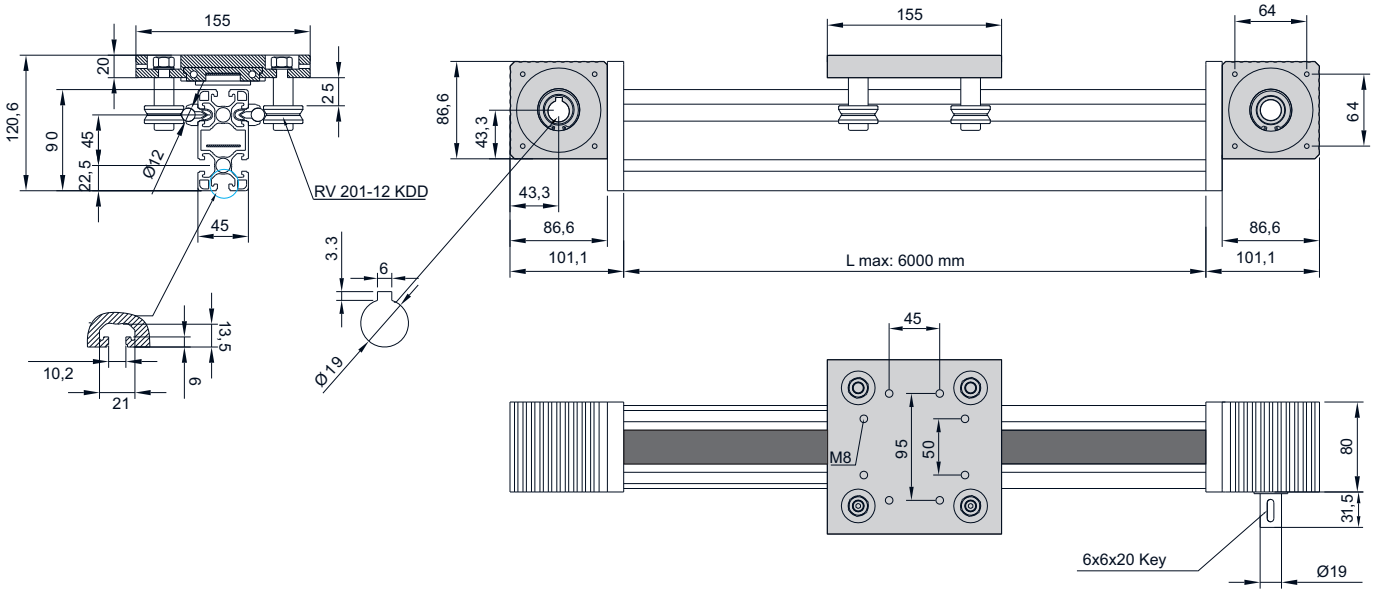


Load		Static
F_x	(N)	640
F_y	(N)	885
F_z	(N)	1150
Moment		
M_x	(Nm)	75
M_y	(Nm)	70
M_z	(Nm)	86

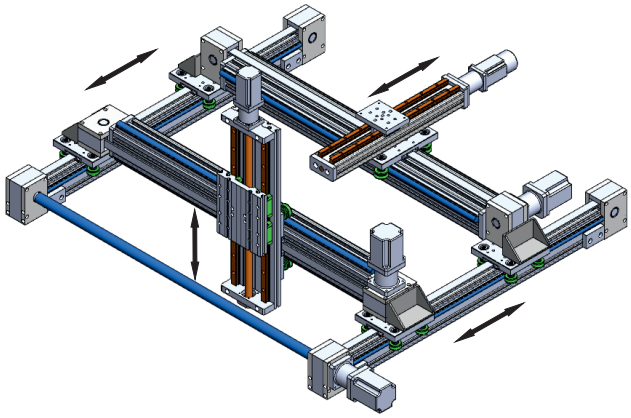
Technical Features

Body	;	45x90 Profile (Aluminium 6063) T5
Max Speed	;	5 m/sec
Pitch	;	200 mm
Timing Belt	;	5M - 30F Steel cord PU
Timing Pulley	;	Z40-5M-30F
Shaft	;	Ø12 Chrome Coated (20-33µm), Hardened, Cf53- H7
Track Roller Bearing	;	RV 201-12 KDD
Belt Tensile Force	;	2000 N
Belt Pitch	;	5 mm
Positioning accuracy	;	0,2 mm

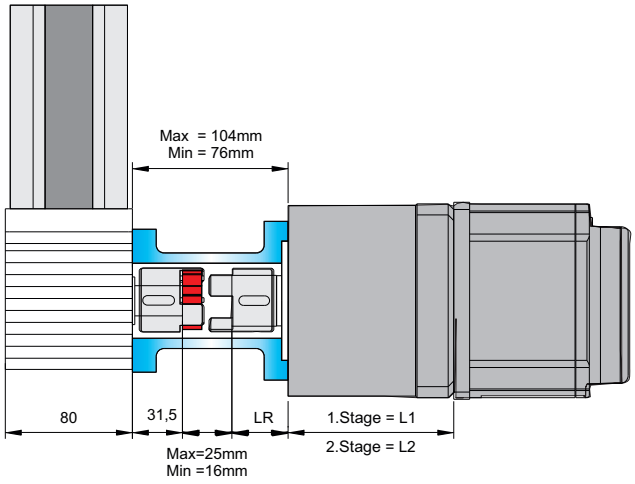
Technical Details



Applications



Gearbox Connection Details

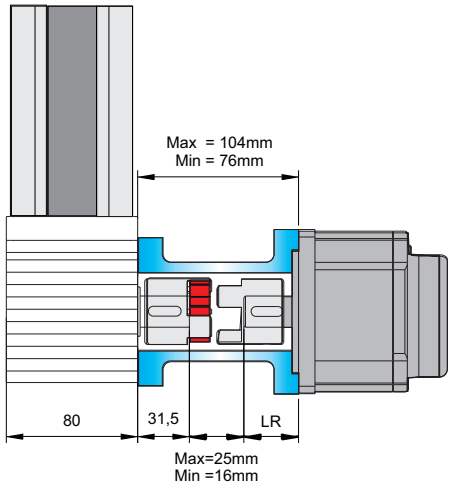


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

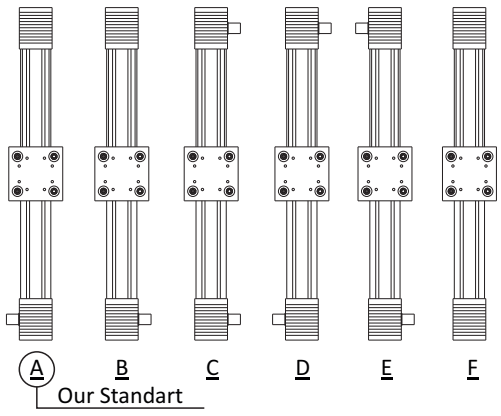
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

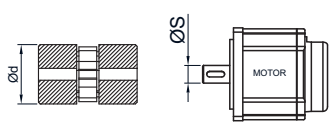
Motor Connection Details



Drive Shaft Directions

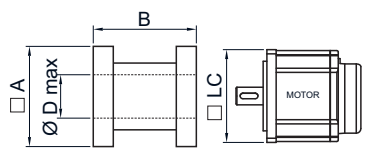


Coupling Options

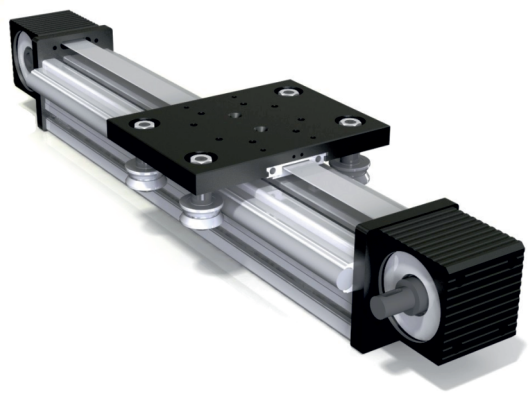


Coupling	Ød	ØS
GS 19	40	16 - 20
GS 24	55	21 - 28

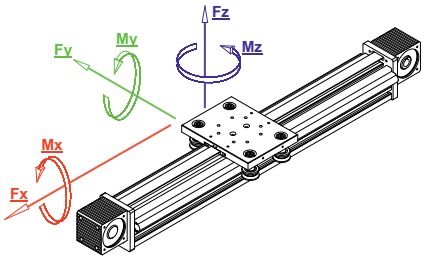
Motor Flange Options



Flange	A	B	ØDmax	LC
85 x 85	65 - 85	80 - 90	47	65 - 85
95 x 95	75 - 95	83 - 104	60	75 - 95



Load Capacity

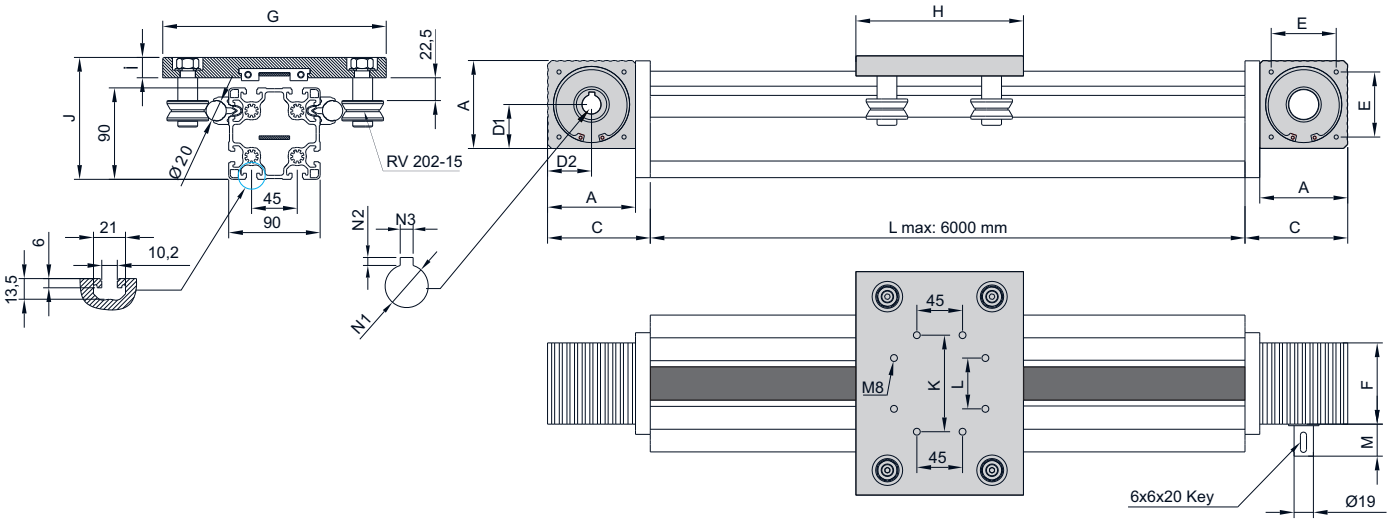


Load		Static
Fx	(N)	750 / 950
Fy	(N)	1295
Fz	(N)	1780
Moment		
Mx	(Nm)	102
My	(Nm)	88
Mz	(Nm)	98

Technical Features

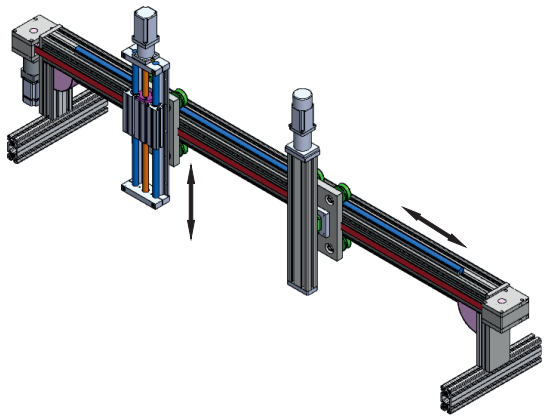
Body	;	90x90 Profile (Aluminium 6063) T5
Max Speed	;	5 m/sec - 6 m/sec
Pitch	;	200 mm / 192 mm
Timing Belt	;	5M-30F & 8M-50F Steel cord PU
Timing Pulley	;	Z40-5M-30F & Z24-8M-50
Shaft	;	Ø20 Chrome Coated (20-33µm), Hardened, Cf53- H7
Track Roller Bearing	;	RV 202-15 KDD & RV 203-17 KDD
Belt Tensile Force	;	2000 N / 3000 N
Belt Pitch	;	5 mm / 8 mm
Positioning accuracy	;	0,2 mm

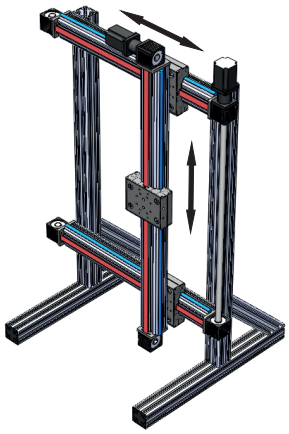
Technical Details



Code	Models	A	C	D1	D2	E	F	G	H	İ	J	K	L	M	N1	N2	N3
5.3.02.090090.1.02.2.Stroke	5M-30	86,6	101,1	43,3	43,3	64	80	220	165	20	120	95	50	31,5	19	3,3	6
5.3.02.090090.1.03.2.Stroke	8M-50	100	114,5	41,5	45	70,7	101	250	185	24,6	126,6	140	45	33.75	25	4	8

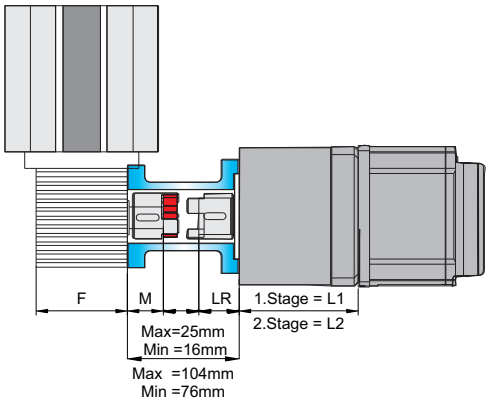
Applications





Gearbox Connection Details

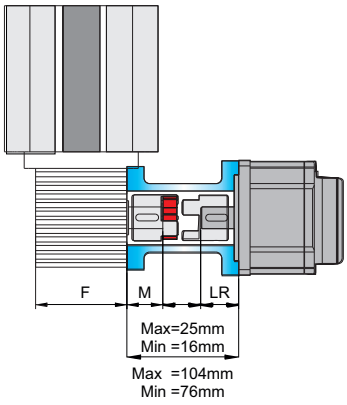
Motor Connection Details



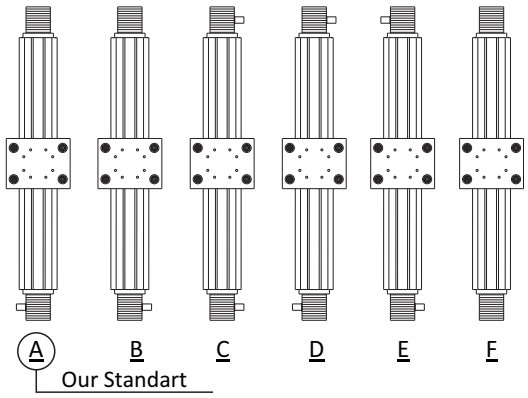
Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

PE 70 & PE 90 Series
Gearbox Options

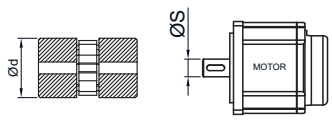
Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm



Drive Shaft Directions

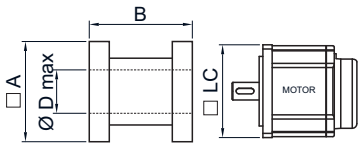


Coupling Options

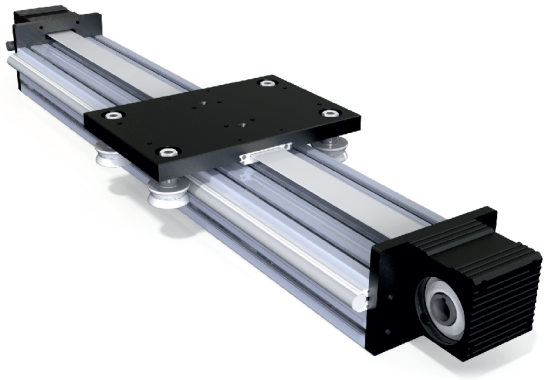


Coupling	Ød	ØS
GS 19	40	16 - 20
GS 24	55	21 - 28

Motor Flange Options

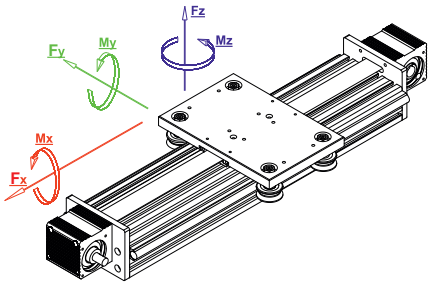


Flange	A	B	ØDmax	LC
85 x 85	65 - 85	80 - 90	47	65 - 85
95 x 95	75 - 95	83 - 104	60	75 - 95



Product Code : 5.3.02.090180.1.03.2.Stroke

Load Capacity

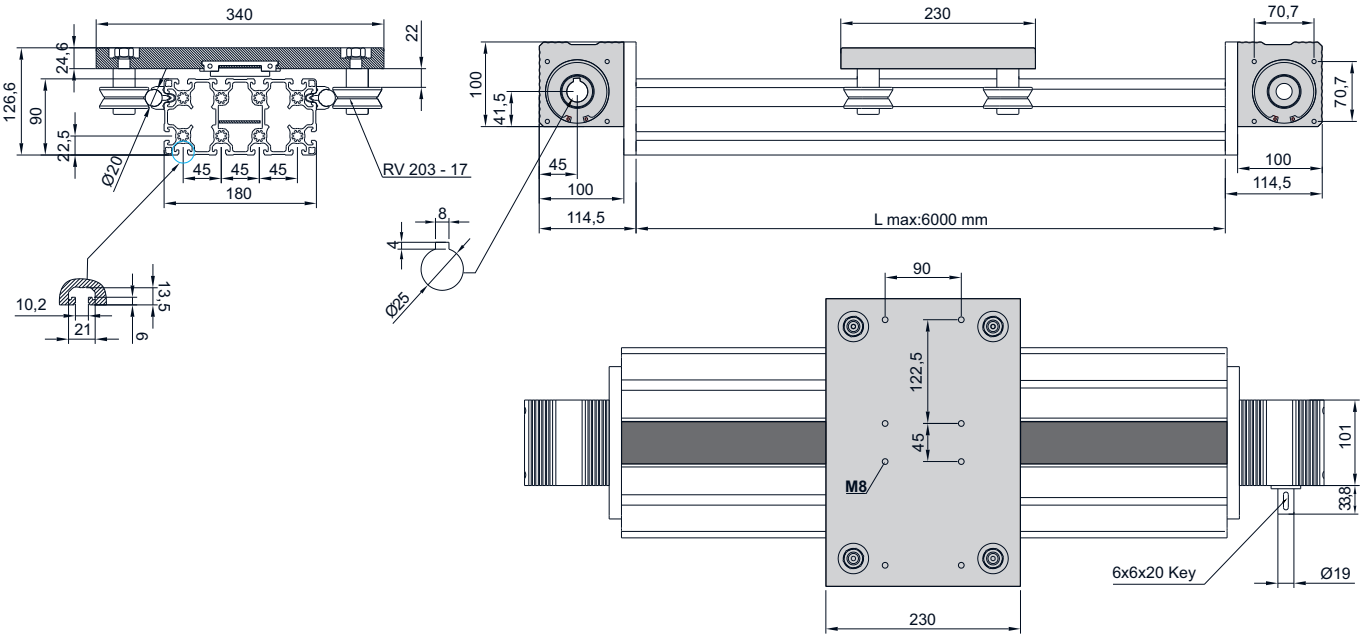


Load		Static
F_x	(N)	950
F_y	(N)	1618
F_z	(N)	2225
Moment		
M_x	(Nm)	152
M_y	(Nm)	120
M_z	(Nm)	146

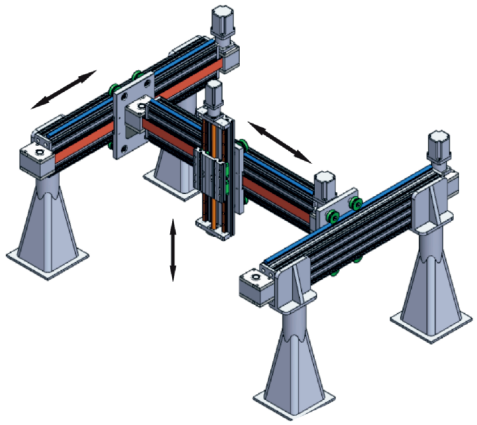
Technical Features

Body	;	90x180 Profile (Aluminium 6063) T5
Max Speed	;	6 m/sec
Pitch	;	192 mm
Timing Belt	;	8M-50F Steel cord PU
Timing Pulley	;	Z24-8M-50F
Shaft	;	Ø20 Chrome Coated (20-33µm), Hardened, Cf53- H7
Track Roller Bearing	;	RV203-17 KDD
Belt Tensile Force	;	3000 N
Belt Pitch	;	8 mm
Positioning accuracy	;	0,2 mm

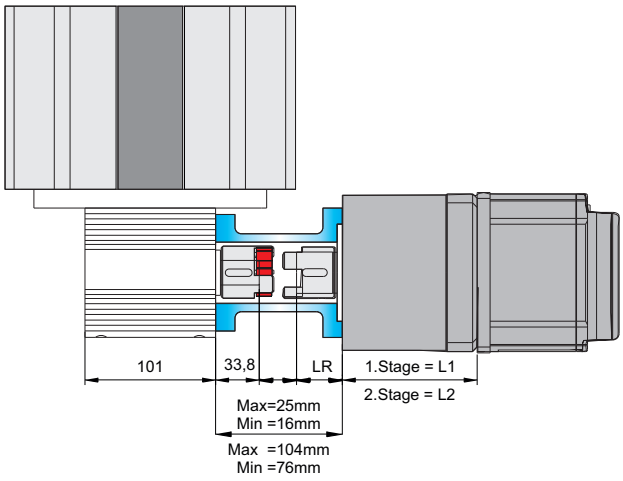
Technical Details



Applications



Gearbox Connection Details

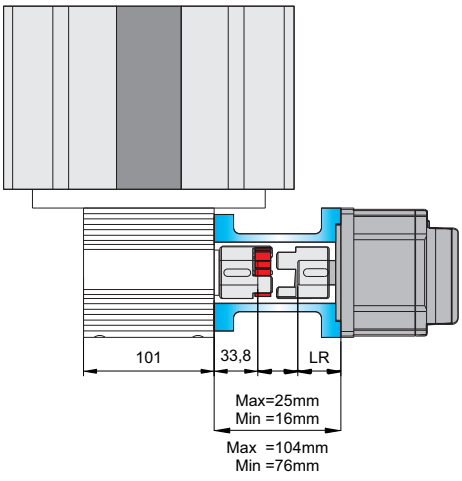


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for750W -1kW -1.5 kW Servo)	112 mm	152 mm

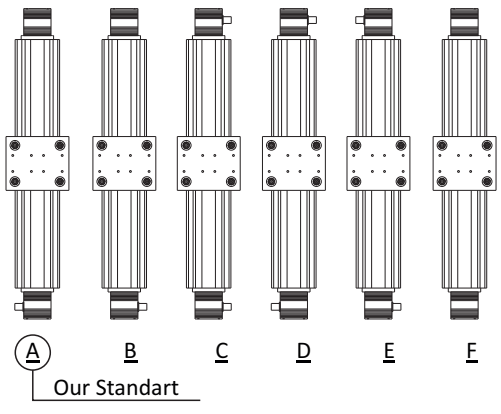
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

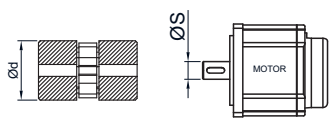
Motor Connection Details



Drive Shaft Directions

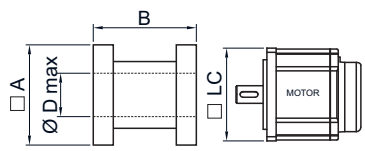


Coupling Options

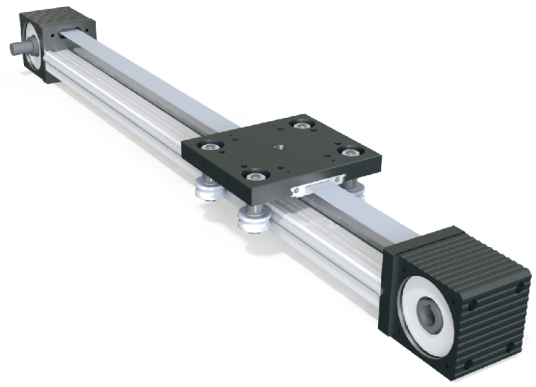


Coupling	Ød	ØS
GS 19	40	16 - 20
GS 24	55	21 - 28

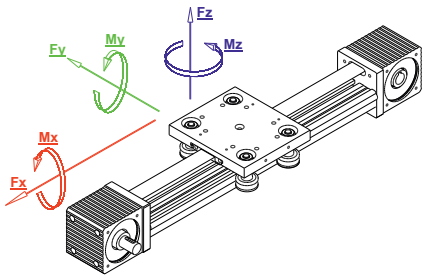
Motor Flange Options



Flange	A	B	ØDmax	LC
95 x 95	75 - 95	83 - 104	60	75 - 95
120 x 120	95 - 120	85 - 100	70	95 - 120



Load Capacity

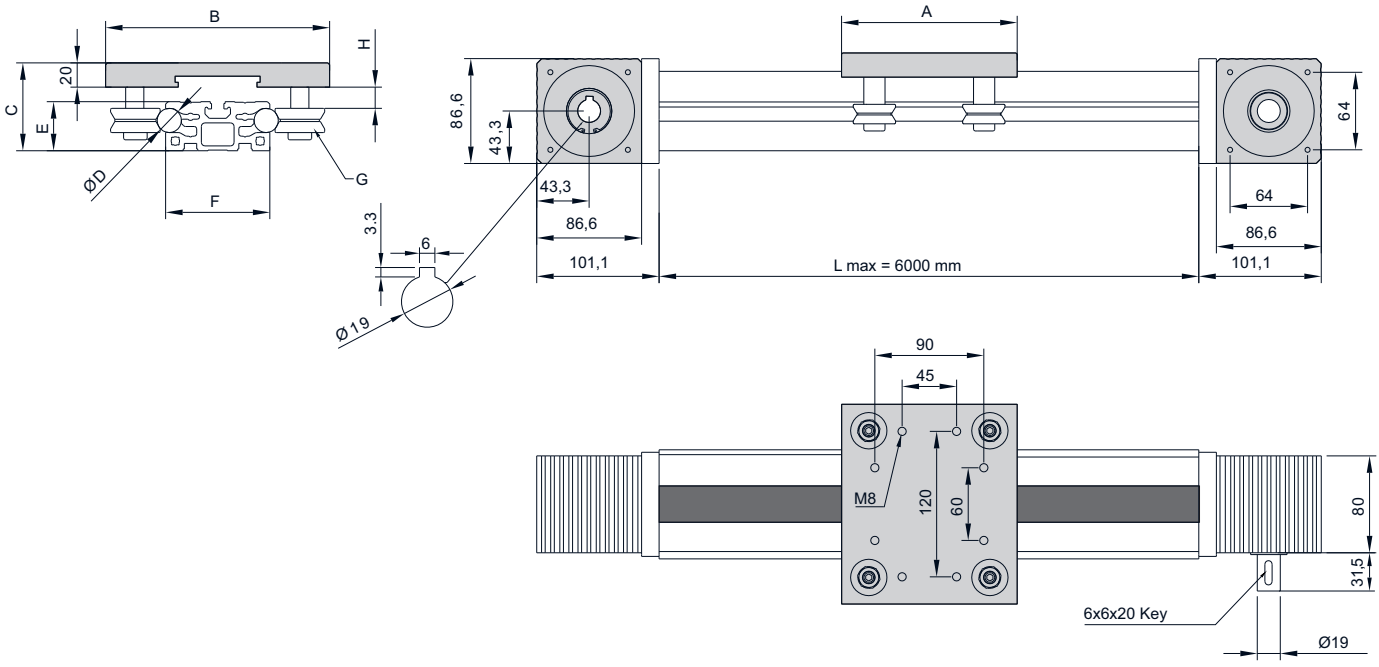


Load		Static	Ø12 TRG	Ø20 TRG
F_x		(N)	750	750
F_y		(N)	870	1260
F_z		(N)	1100	1870
Moment				
M_x		(Nm)	70	95
M_y		(Nm)	65	85
M_z		(Nm)	75	115

Technical Features

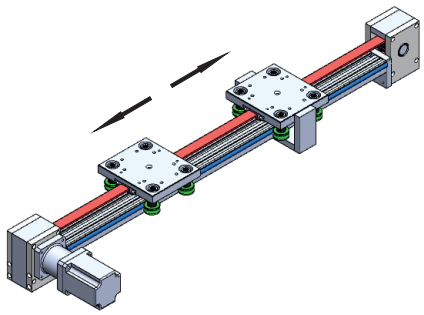
Body	;	30X82 - 40X86 Profile (Aluminium 6063) T5
Max Speed	;	5 m/sec
Pitch	;	200 mm
Timing Belt	;	5M-30 Steel cord PU
Timing Pulley	;	Z40-5M-30
Shaft	;	Ø12-Ø20 Chrome Coated (20-33µm), Hardened, Cf53- H7
Track Roller Bearing	;	RV 201-12 KDD / RV 202-15 KDD
Belt Tensile Force	;	2000 N
Belt Pitch	;	5 mm
Positioning accuracy	;	0,2 mm

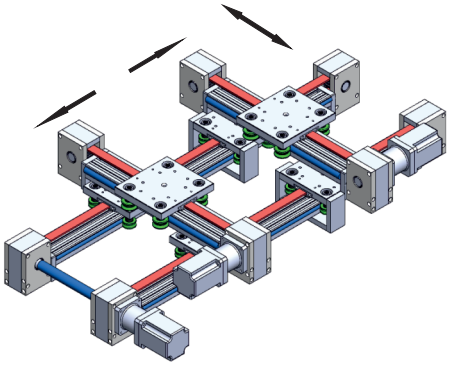
Technical Details



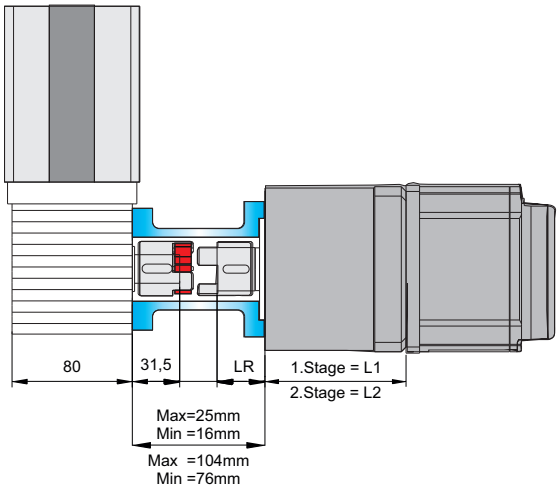
Code	Product Name	ØD	A	B	C	E	F	H	G
5.3.01.030082.1.02.2.Stroke	Ø12 Timing Belt Block	12	165	145	70,5	30	82	22.6	RV 201 -12
5.3.01.040086.1.02.2.Stroke	Ø20 Timing Belt Block	20	185	165	72.5	40,5	86	17.5	RV 202- 15

Applications





Gearbox Connection Details

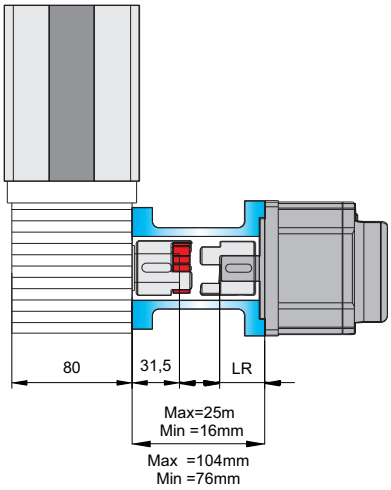


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

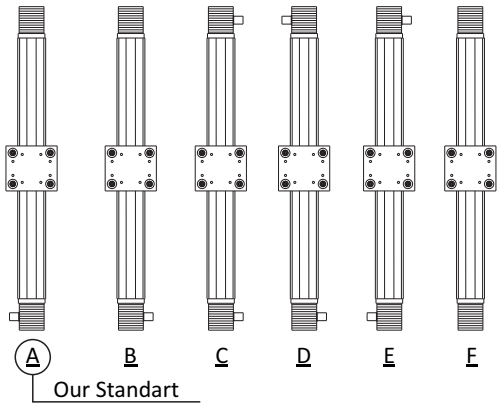
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

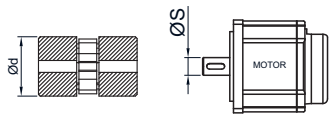
Motor Connection Details



Drive Shaft Directions

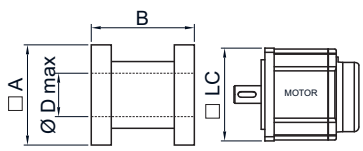


Coupling Options

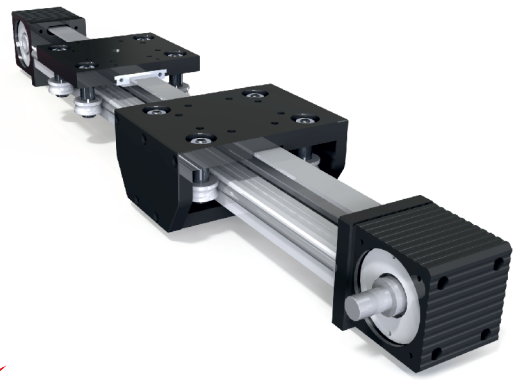


Coupling	Ød	ØS
GS 19	40	16 - 20
GS 24	55	21 - 28

Motor Flange Options



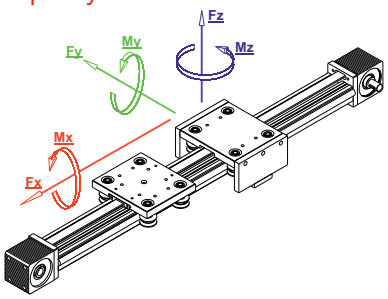
Flange	A	B	ØDmax	LC
85 x 85	65 - 85	80 - 90	47	65 - 85
95 x 95	75 - 95	83 - 104	60	75 - 95



NEW PRODUCT

Product Code : 5.3.10.030082.1.02.2.Stroke

Load Capacity

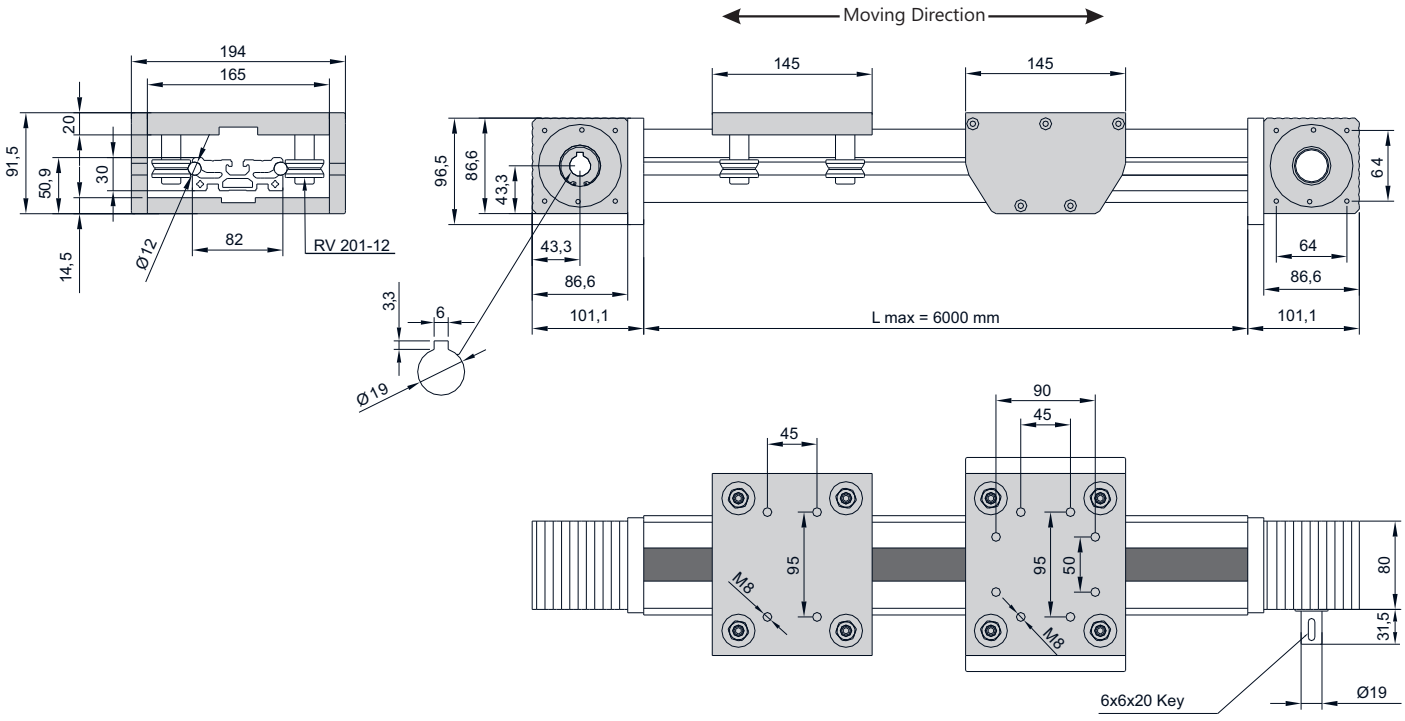


Load		Static
F_x	(N)	750
F_y	(N)	870
F_z	(N)	1100
Moment		
M_x	(Nm)	70
M_y	(Nm)	65
M_z	(Nm)	75

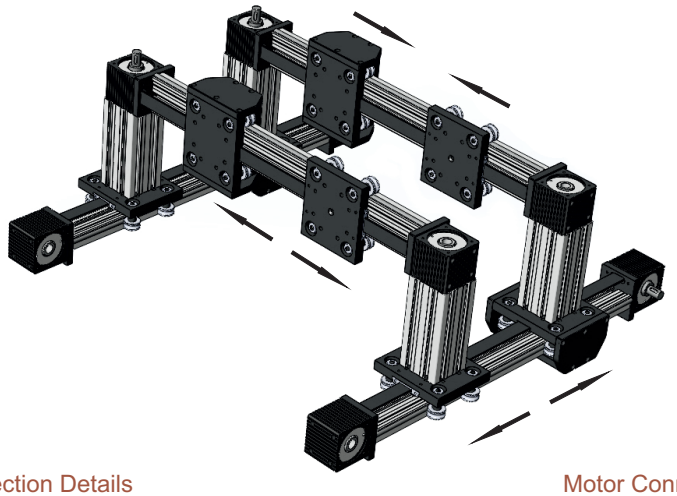
Technical Features

Body	;	30X82 Profile (Aluminium 6063) T5
Max Speed	;	5 m/sec
Pitch	;	200 mm
Timing Belt	;	5M-30 Steel cord PU
Timing Pulley	;	Z40-5M-30
Shaft	;	Ø12 Chrome Coated (20-33µm), Hardened, Cf53- H7
Track Roller Bearing	;	RV 201-12 KDD
Belt Tensile Force	;	2000 N
Belt Pitch	;	5 mm
Positioning accuracy	;	0,2 mm

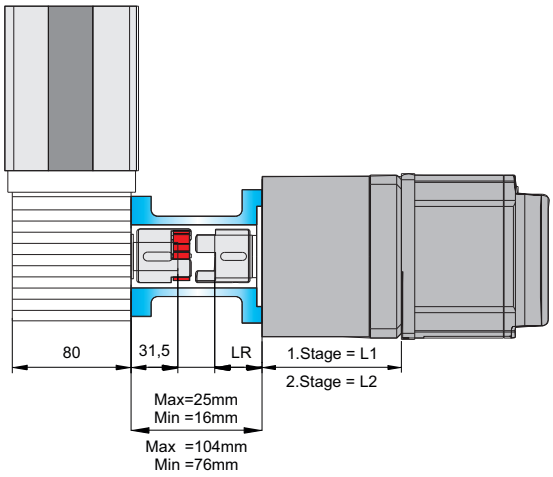
Technical Details



Applications



Gearbox Connection Details

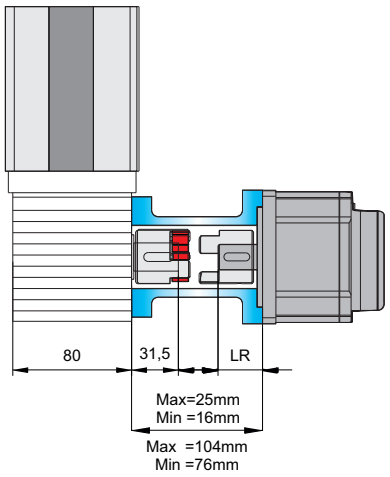


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

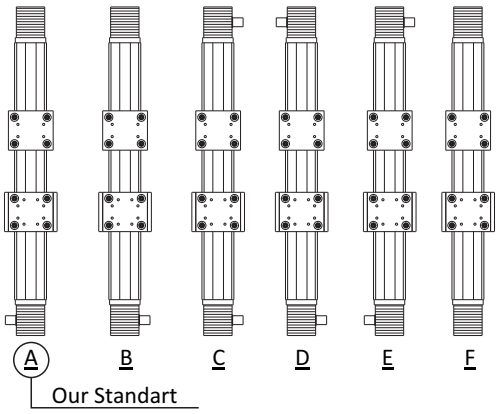
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

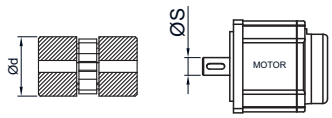
Motor Connection Details



Drive Shaft Directions

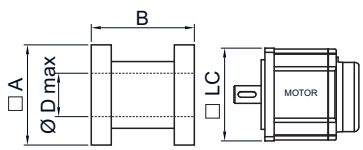


Coupling Options

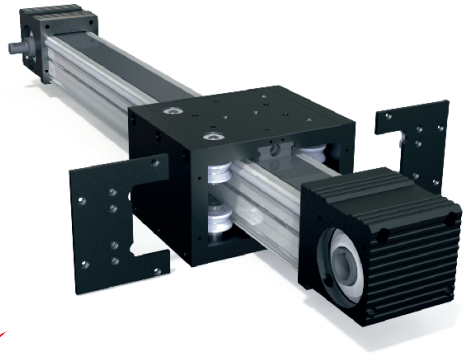


Coupling	Ød	ØS
GS 19	40	16 - 20
GS 24	55	21 - 28

Motor Flange Options



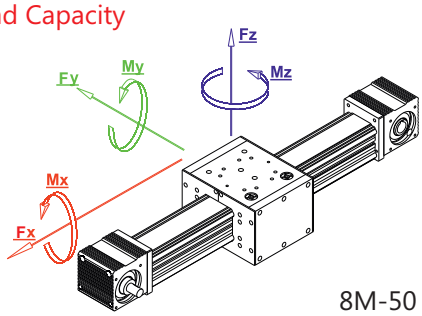
Flange	A	B	ØDmax	LC
85 x 85	65 - 85	80 - 90	47	65 - 85
95 x 95	75 - 95	83 - 104	60	75 - 95



NEW PRODUCT

Product Code : 5.3.09.080080.1.03.2.Stroke

Load Capacity

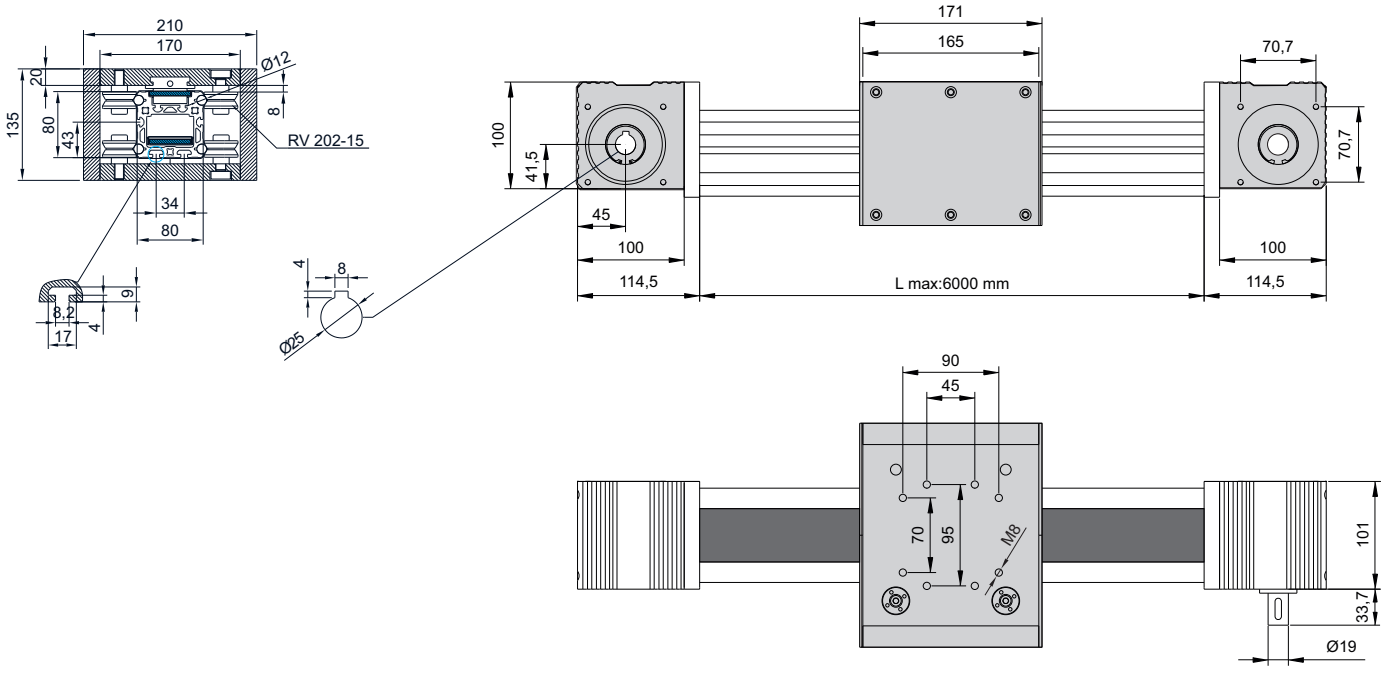


Load	Static	8M-50 TUNNEL
F_x	(N)	1066
F_y	(N)	2706
F_z	(N)	3420
Moment		
M_x	(Nm)	300
M_y	(Nm)	290
M_z	(Nm)	350

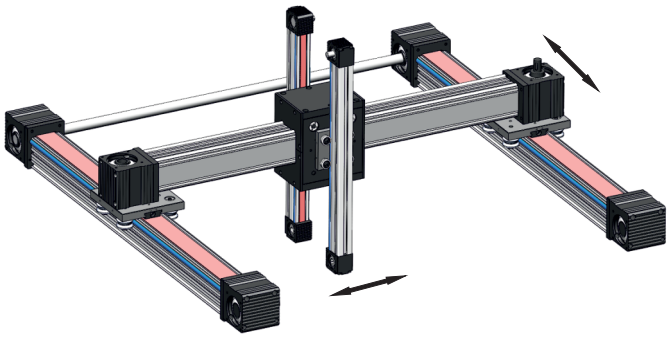
Technical Features

Body	;	80x80 Profile (Aluminium 6063) T5
Max Speed	;	6 m/sec
Pitch	;	192 mm
Timing Belt	;	8M-50 Steel cord PU
Timing Pulley	;	Z24-8M-50F
Shaft	;	Ø12 Chrome Coated, Hardened, H7
Track Roller Bearing	;	RV202-15 KDD / RV 201-12 KDD
Belt Tensile Force	;	3000 N
Belt Pitch	;	8 mm
Positioning accuracy	;	0,2 mm

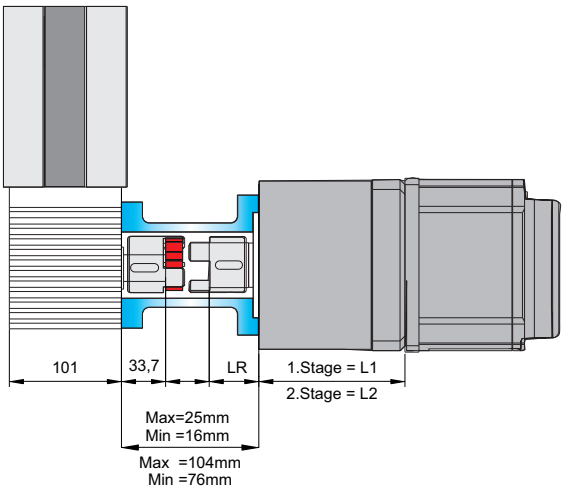
Technical Details



Applications



Gearbox Connection Details

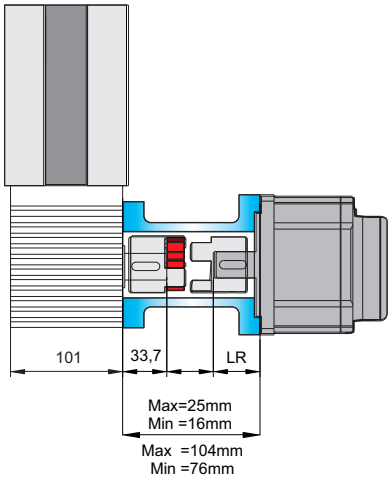


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

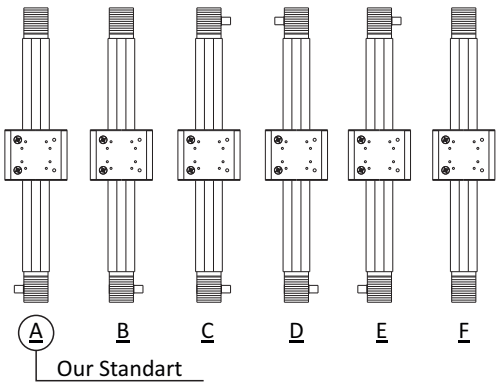
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

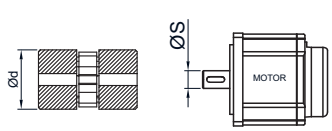
Motor Connection Details



Drive Shaft Directions

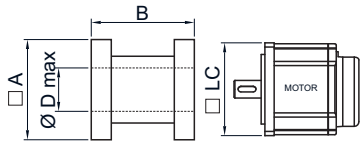


Coupling Options

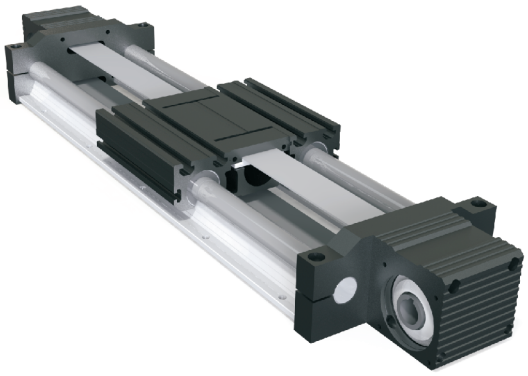


Coupling	Ød	ØS
GS 19	40	16 - 20
GS 24	55	21 - 28
GS 28	65	29 - 36

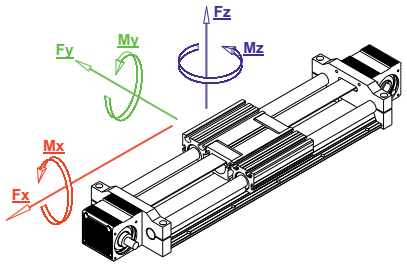
Motor Flange Options



Flange	A	B	ØDmax	LC
85 x 85	65 - 85	80 - 90	47	65 - 85
95 x 95	75 - 95	83 - 104	60	75 - 95
120x120	95 - 120	85 - 100	70	95 - 120



Load Capacity

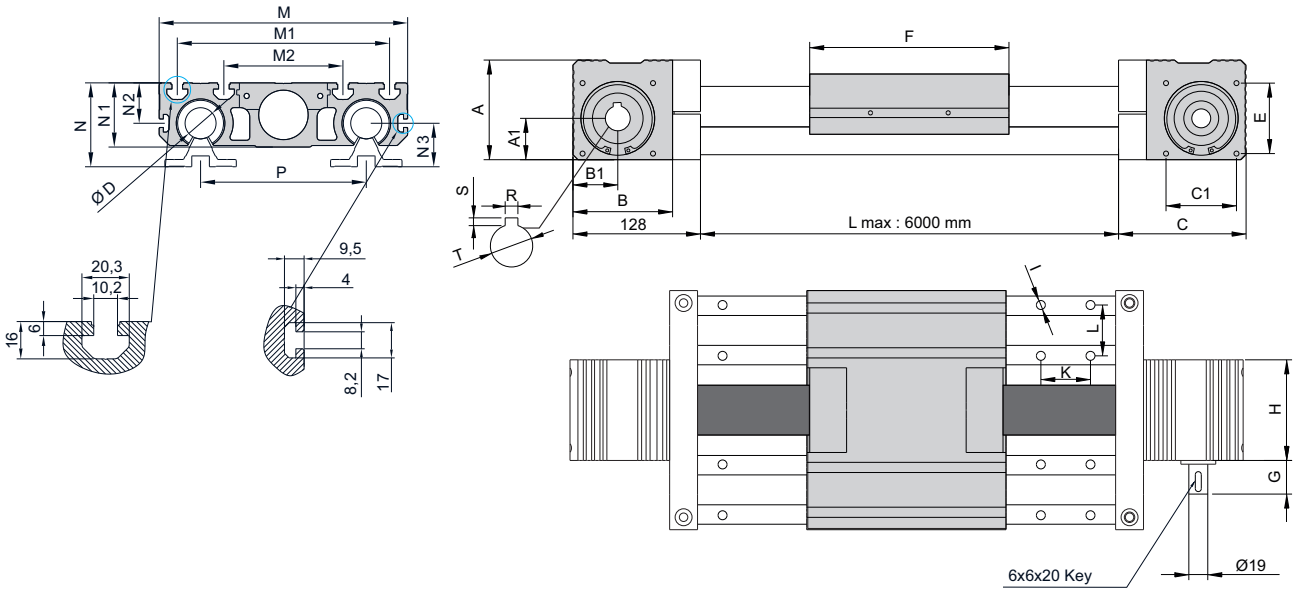


Load		Static	DKTM-20	DKTM-30
F_x		(N)	750	950
F_y		(N)	1744	3441
F_z		(N)	2180	4552
Moment				
M_x		(Nm)	224	360
M_y		(Nm)	175	224
M_z		(Nm)	185	234

Technical Features

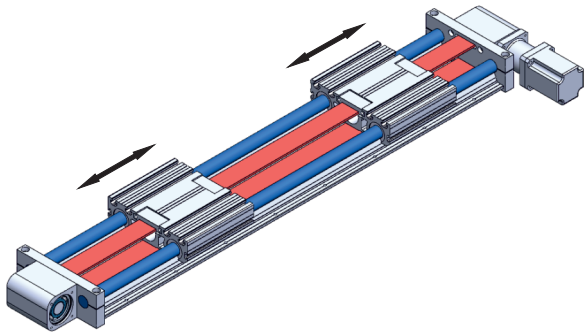
Body	;	Ø20 - Ø 30 Shaft Support Profile
Allowable Speed	;	2 m/sec
Pitch	;	200 mm / 192 mm
Timing Belt	;	5M-30 / 8M-50
Timing Pulley	;	Z40-5M-30F / Z24-8M-50F
Shaft	;	Ø20 - Ø30 Chrome Coated (20-33µm), Hardened, Cf53- H7
Moving Plate	;	LME 20 UU OP - LME 30 UU OP
Belt Breaking Force	;	2000 N / 3000 N
Belt Pitch	;	5 mm - 8 mm
Positioning accuracy	;	0,2 mm

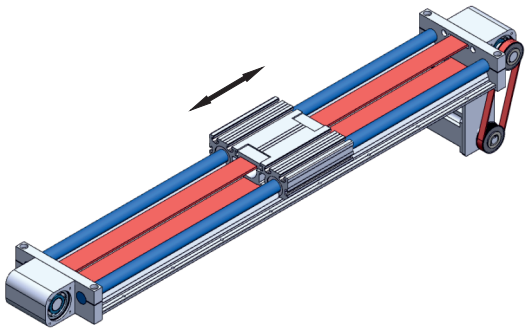
Technical Details



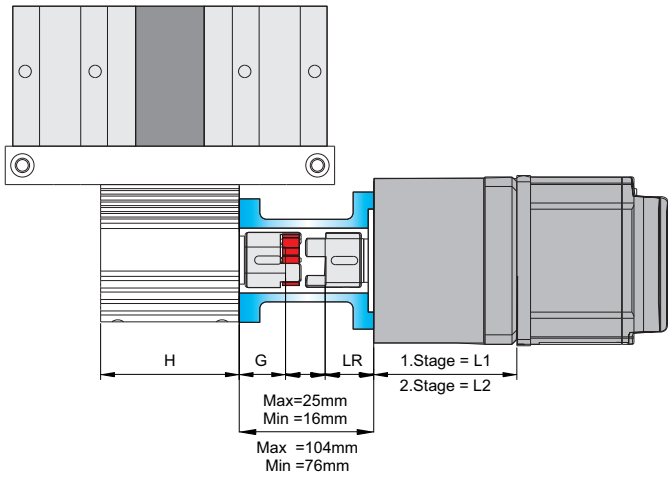
Code	Product Name	ØD	A	A1	B	B1	C1	E	F	G	H	I	K	L	M	M1	M2	N	N1	N2	N3	P	R	S	T
5.3.06.150150.3.02.2.Strok	DKTM - 20	20	84	40	66,4	33,5	54	45	150	29,75	64	6,6	100	37	150	58	---	59,3	49	15	32,3	90	6	3,3	19
5.3.06.200240.3.03.2.Strok	DKTM - 30	30	100	41,5	100	55	70,7	70,7	200	33,75	101	9	150	51	240	205	115	81	62	39	42	160	8	4	25

Applications





Gearbox Connection Details

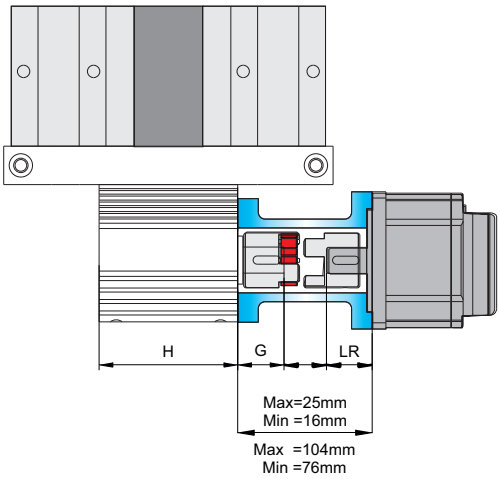


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

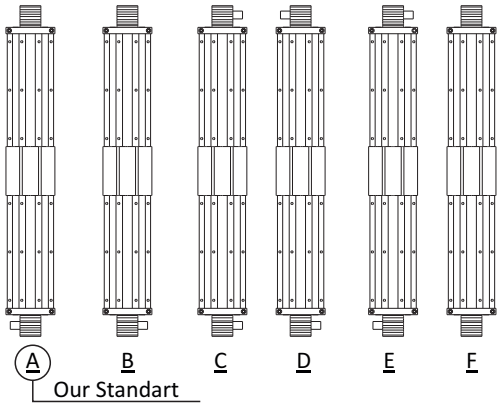
PE 70 & PE 90 Series
Gearbox Options

Çevrim Oranları :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

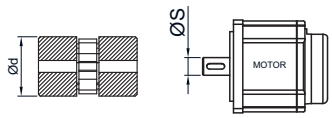
Motor Connection Details



Drive Shaft Directions

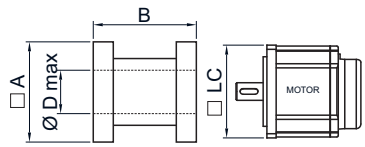


Coupling Options

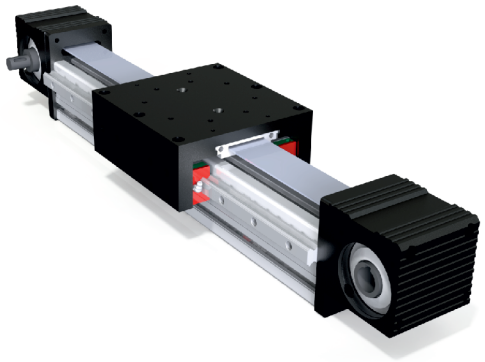


Coupling	Ød	ØS
GS 19	40	16 - 20
GS 24	55	21 - 28

Motor Flange Options

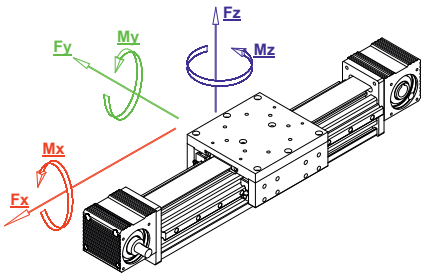


Flange	A	B	ØDmax	LC
85 x 85	65 - 85	80 - 90	47	65 - 85
95 x 95	75 - 95	83 - 104	60	75 - 95



Product Code : 5.3.02.090090.2.03.2.Stroke

Load Capacity



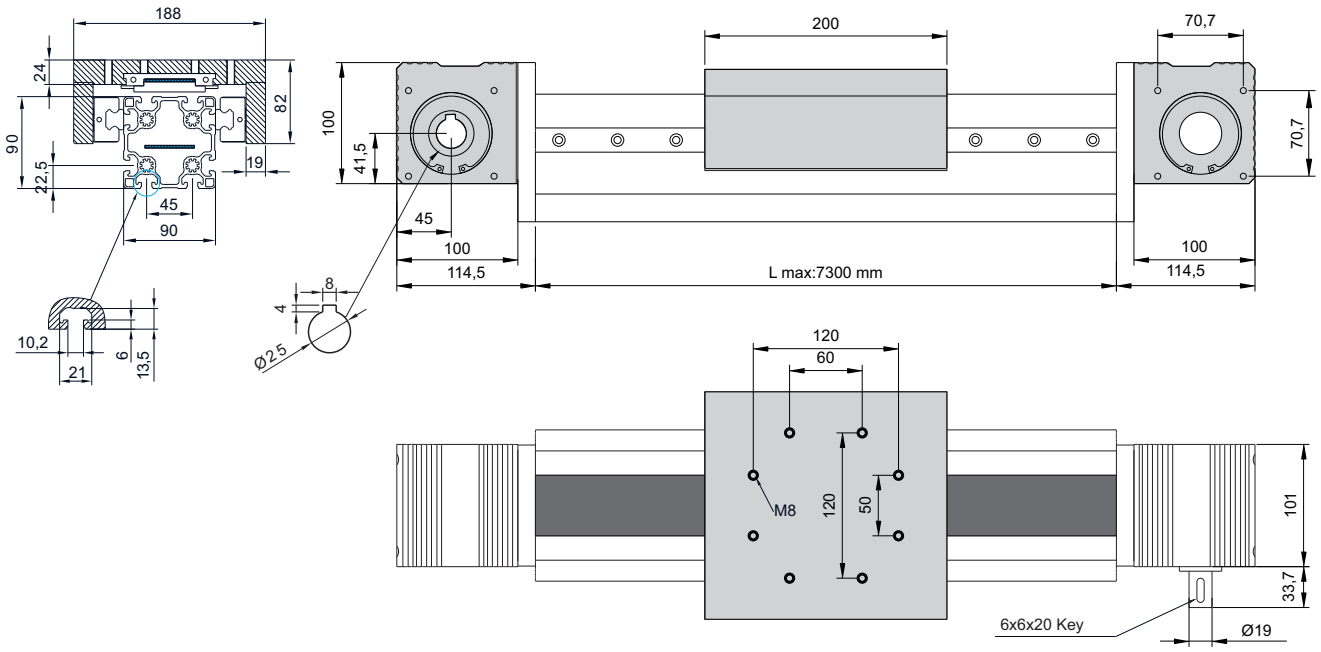
Load		Static
F_x	(N)	950
F_y	(N)	2785
F_z	(N)	3863
Moment		
M_x	(Nm)	690
M_y	(Nm)	435
M_z	(Nm)	435

Note: Module has 4 pieces of blocks

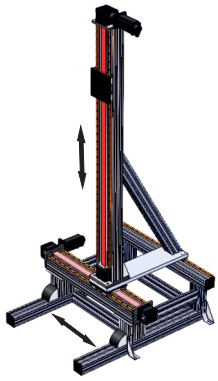
Technical Features

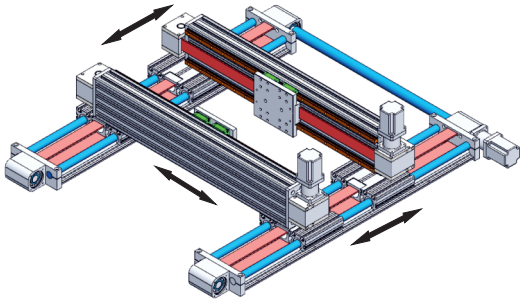
Body	;	90x90 Profile (Aluminium 6063) T5
Max Speed	;	5 m/sec
Pitch	;	192mm
Timing Belt	;	8M-F50 Steel cord PU
Timing Pulley	;	Z24-8M-50F
Linear Rail	;	20' Linear Rail
Linear Block	;	20' Narrow Linear Block
Belt Breaking Force	;	8 mm
Belt Pitch	;	0,1 mm
Positioning accuracy	;	

Technical Details

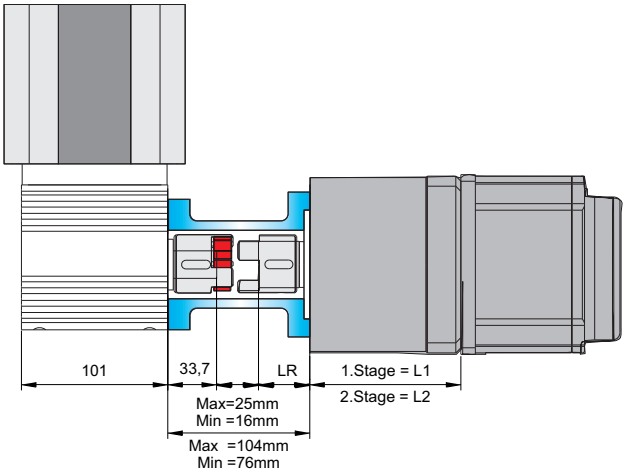


Applications





Gearbox Connection Details

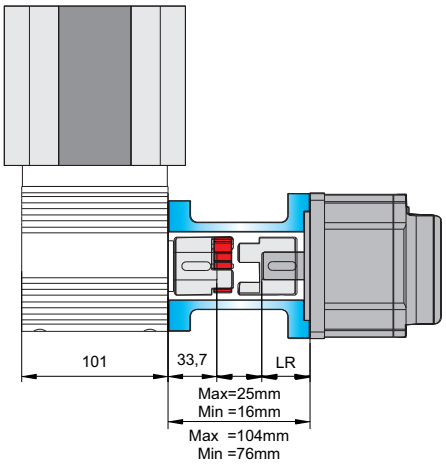


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

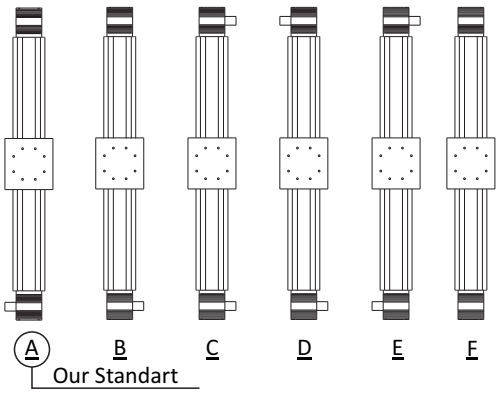
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

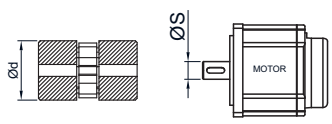
Motor Connection Details



Drive Shaft Directions

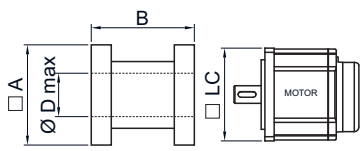


Coupling Options

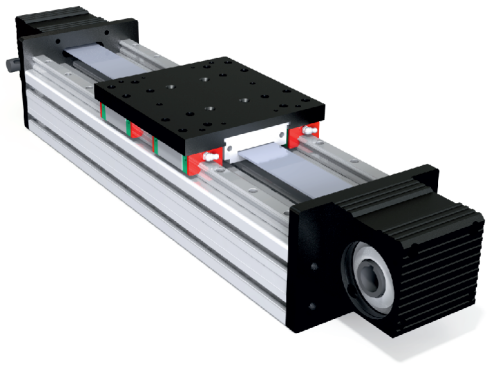


Coupling	Ød	ØS
GS 19	40	16 - 20
GS 24	55	21 - 28

Motor Flange Options

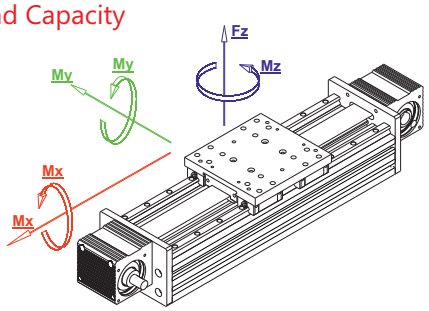


Flange	A	B	ØDmax	LC
85x 85	65 - 85	80 - 90	47	65 - 85
95 x 95	75 - 95	83 - 104	60	75 - 95



Product Code : 5.3.02.090180.2.03.2.Stroke

Load Capacity



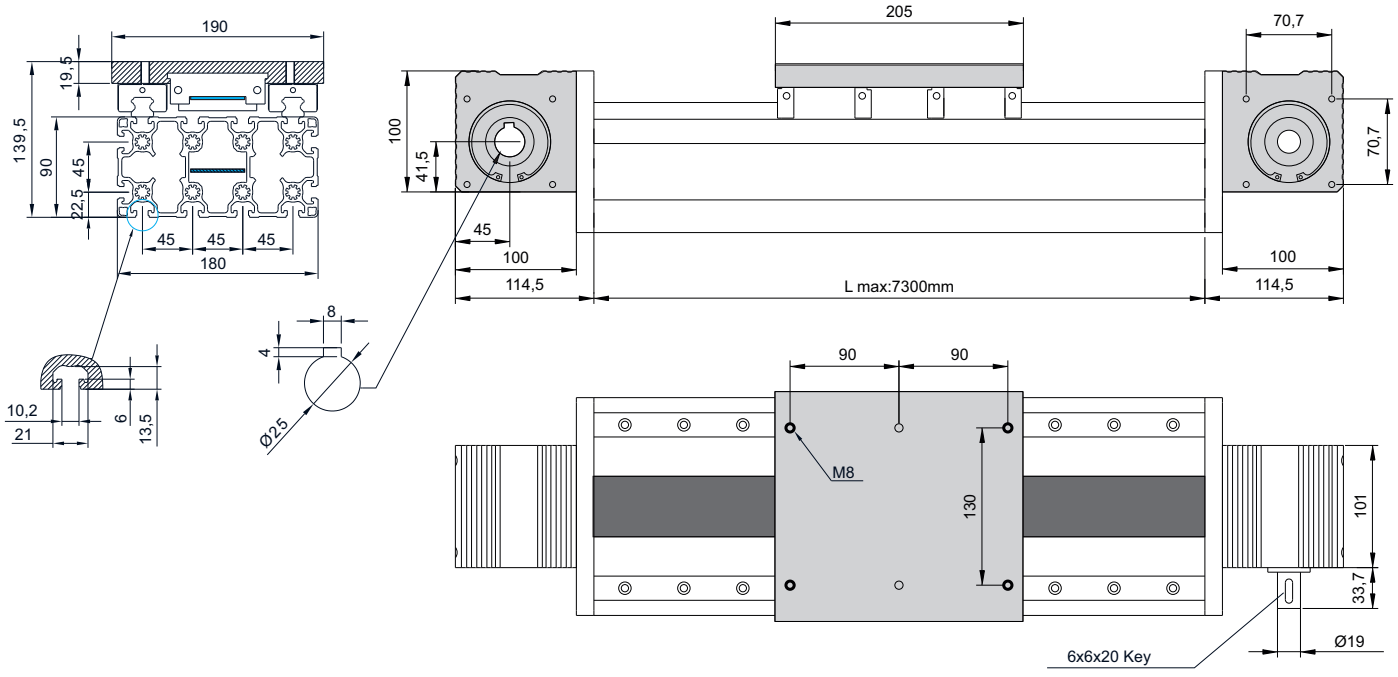
Load		Static
F_x	(N)	950
F_y	(N)	3960
F_z	(N)	5184
Moment		
M_x	(Nm)	780
M_y	(Nm)	528
M_z	(Nm)	528

Note: Module has 4 pieces of blocks

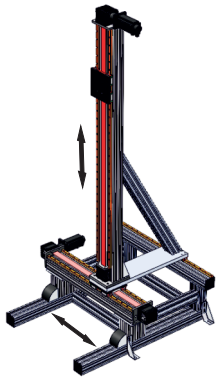
Technical Features

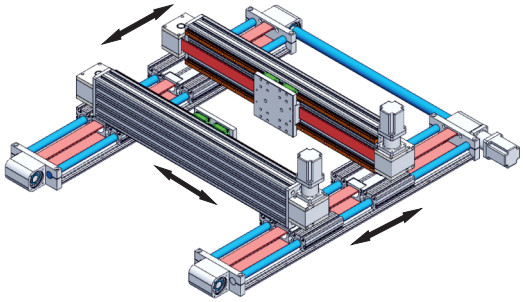
Body	;	90x180 Profile (Aluminium 6063) T5
Max Speed	;	5 m/sec
Pitch	;	192mm
Timing Belt	;	8M-F50 Steel cord PU
Timing Pulley	;	Z24-8M-50F
Linear Rail	;	20' Linear Rail
Track Roller Bearing	;	20' Dar Narrow Linear Block
Belt Tensile Force	;	3000 N
Belt Pitch	;	8 mm
Positioning accuracy	;	0,1 mm

Technical Details

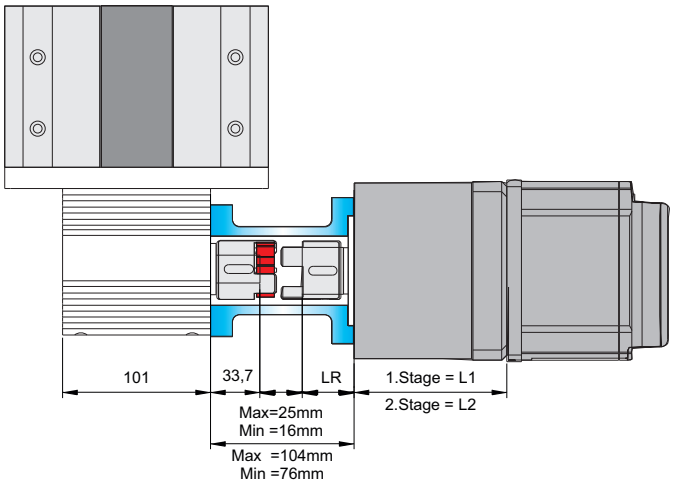


Applications





Gearbox Connection Details

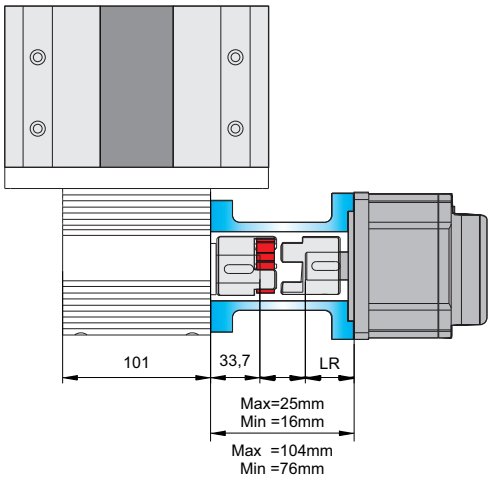


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

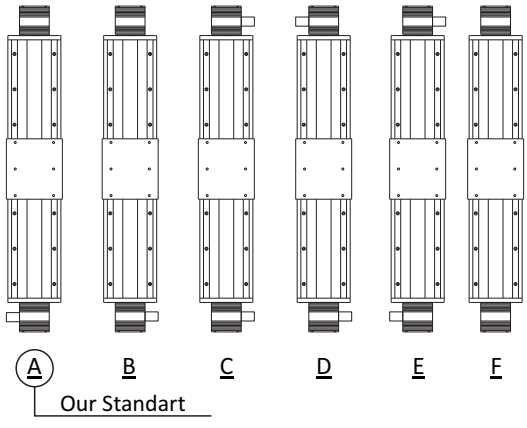
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

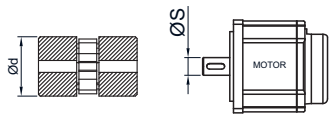
Motor Connection Details



Drive Shaft Directions

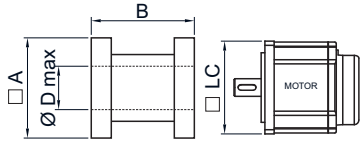


Coupling Options

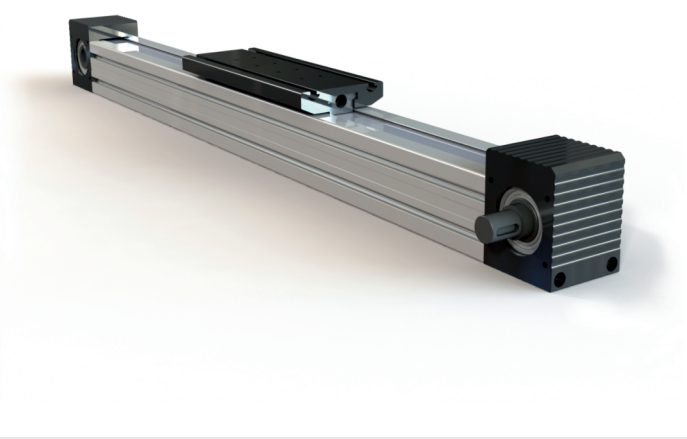


Coupling	Ød	ØS
GS 24	55	21 - 28
GS 28	65	29 - 36

Motor Flange Options

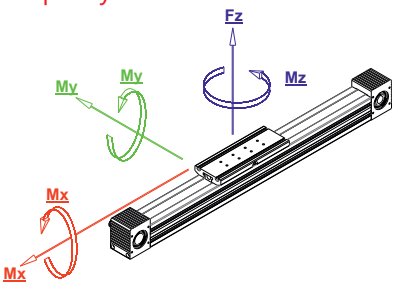


Flange	A	B	ØDmax	LC
95 x 95	75 - 95	83 - 104	60	75 - 95
120 x 120	95 - 120	85 - 100	70	95 - 120



Product Code : 5.3.03.064064.2.02.2.Stroke

Load Capacity



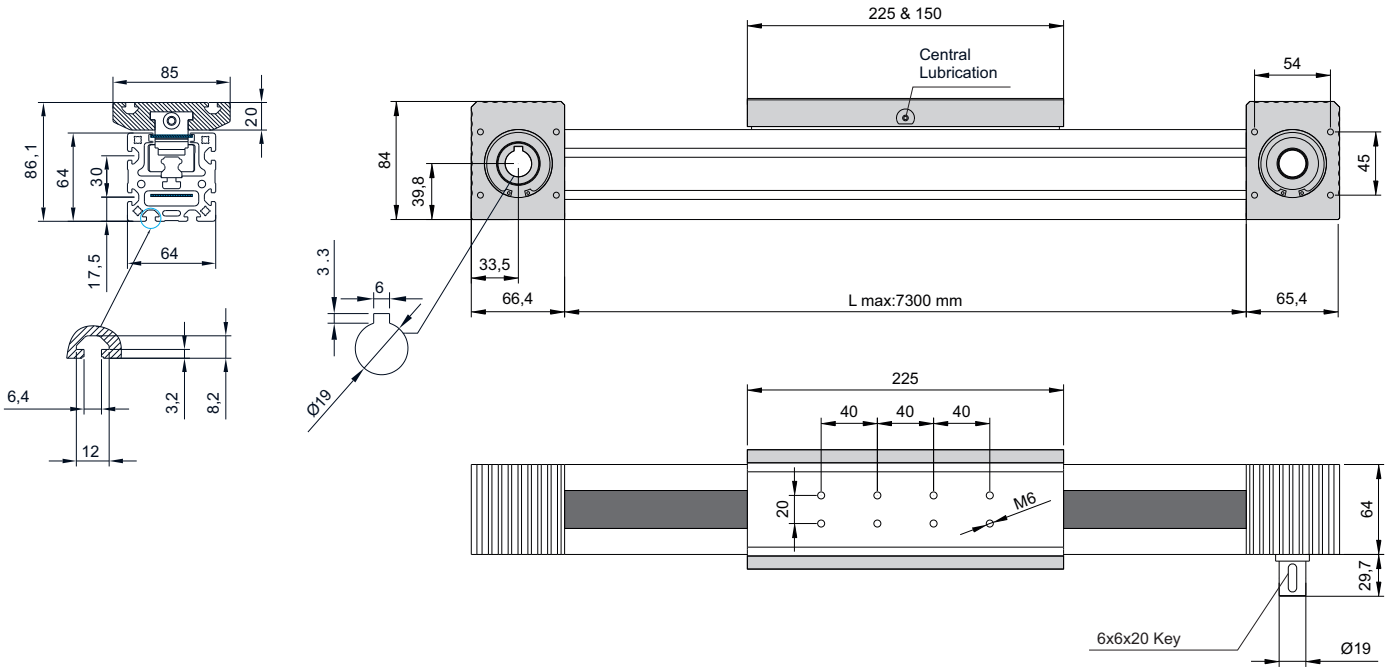
Load	Static	
F_x	(N)	750
F_y	(N)	1505
F_z	(N)	2030
Moment		
M_x	(Nm)	120
M_y	(Nm)	140
M_z	(Nm)	135

Note: Module has 2 pieces of blocks

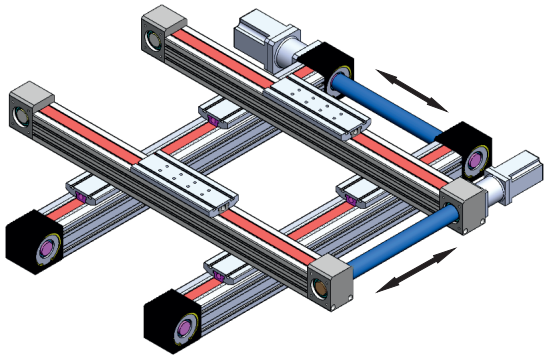
Technical Features

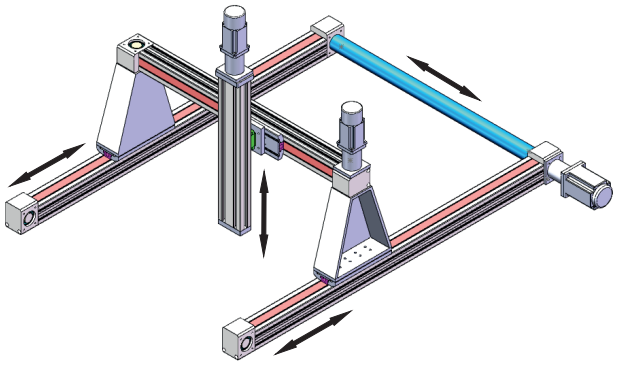
Body	;	64x64 Profile (Aluminium 6063) T5
Max Speed	;	5 m/sec
Pitch	;	130mm
Timing Belt	;	Z26-5M-30F
Timing Pulley	;	5m-F30 Z=26
Linear Rail	;	15' Linear Rail
Track Roller Bearing	;	15' Low-Narrow Linear Block
Belt Tensile Force	;	2000 N
Belt Pitch	;	5 mm
Positioning accuracy	;	0,1 mm

Technical Details



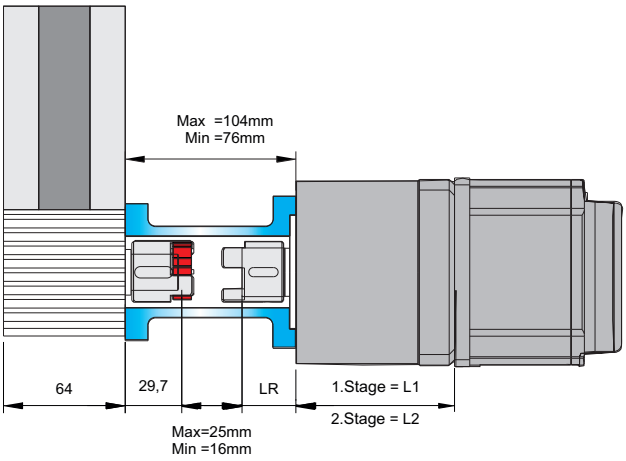
Applications

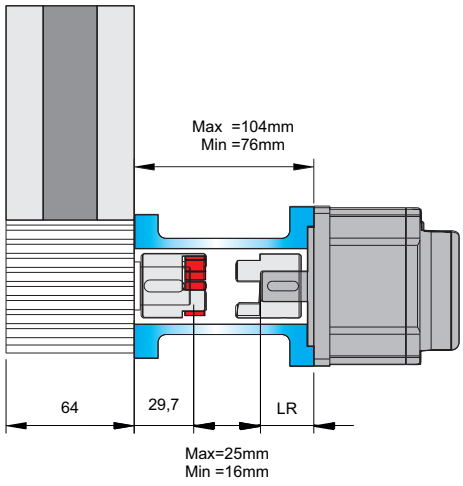




Gearbox Connection Details

Motor Connection Details



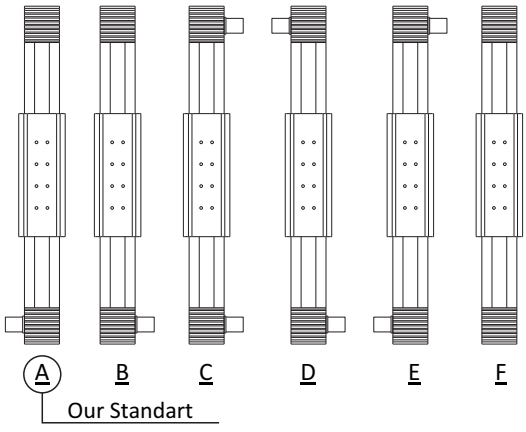


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

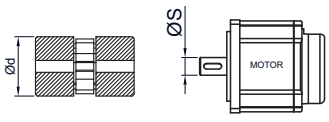
PE 70 & PE 90 Serisies
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

Drive Shaft Directions

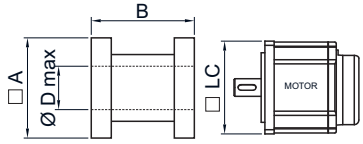


Coupling Options

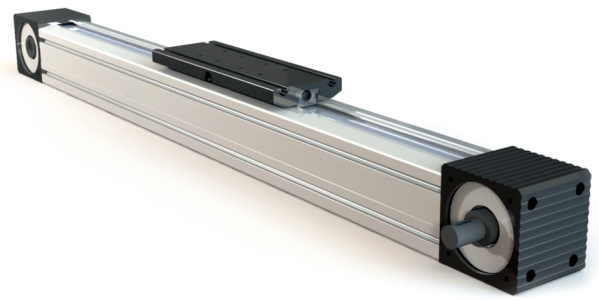


Coupling	Ød	ØS
GS 14	30	0 - 15
GS 19	40	16 - 20

Motor Flange Options

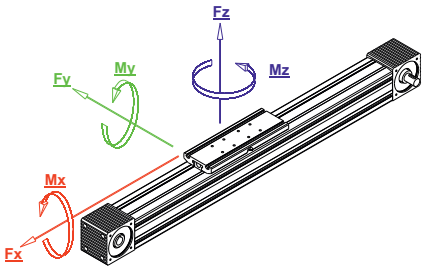


Flange	A	B	ØDmax	LC
60 x 60	50 - 60	65 - 73	35	50 - 60
85x 85	65 - 85	80 - 90	47	65 - 85



Product Code : 5.3.03.080080.2.02.2.Stroke

Load Capacity



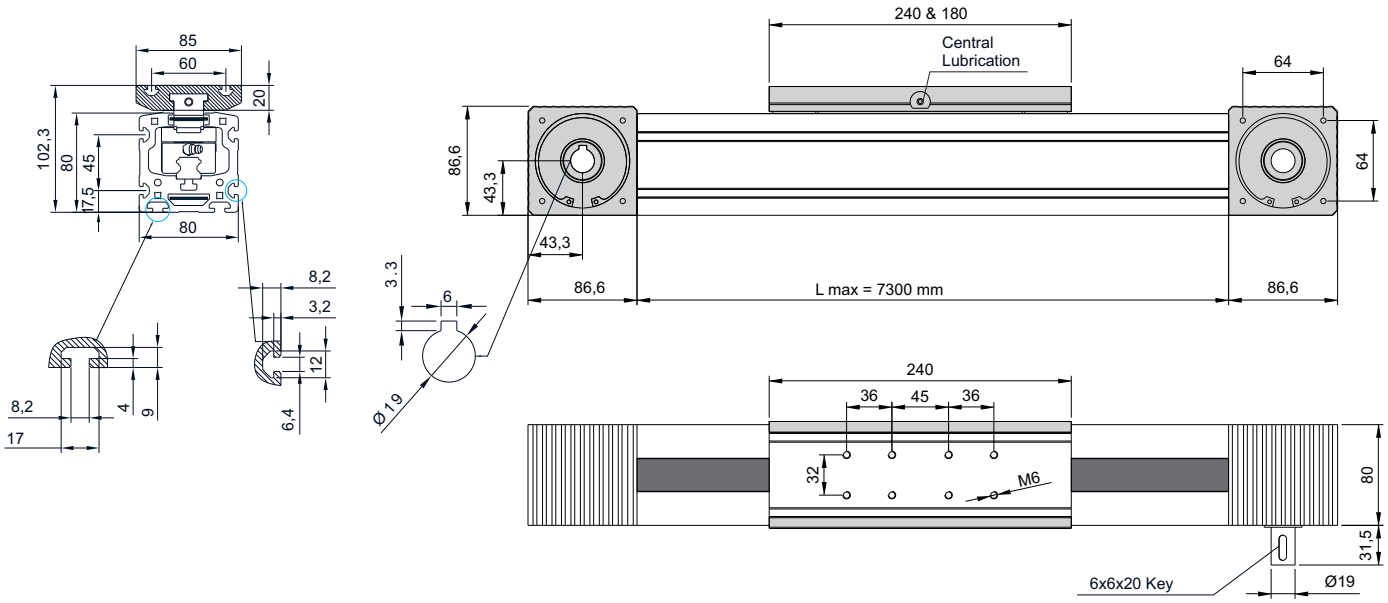
Load		Static
F_x	(N)	750
F_y	(N)	2330
F_z	(N)	2080
Moment		
M_x	(Nm)	155
M_y	(Nm)	184
M_z	(Nm)	172

Note: Module has 2 pieces of blocks

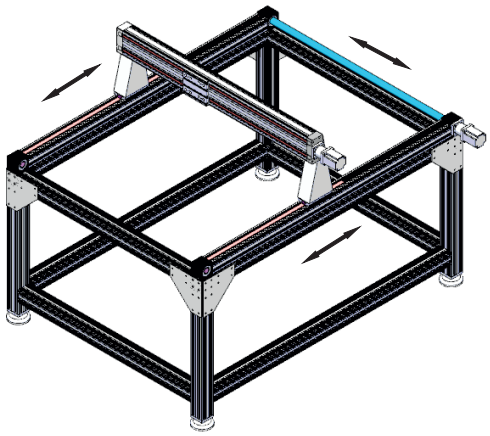
Technical Features

Body	80x80 Profile (Aluminium 6063) T5
Max Speed	5 m/sec
Pitch	300 mm / 0,1 mm
Timing Belt	200mm
Acceleration	500 mm/s2
Timing Pulley	5M-F30 NFT coated
Linear Rail	5m-F30 Z=40
Linear Block	20' Linear Rail
Belt Tensile Force	20' Low-Narrow Linear Block
Belt Pitch	2000 N
Positioning accuracy	5 mm
	0,1 mm

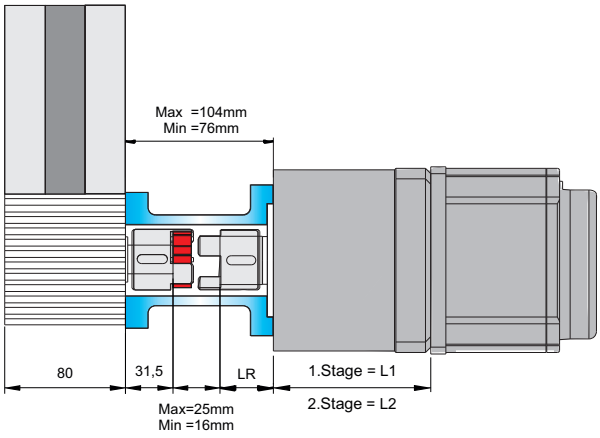
Technical Details



Applications



Gearbox Connection Details

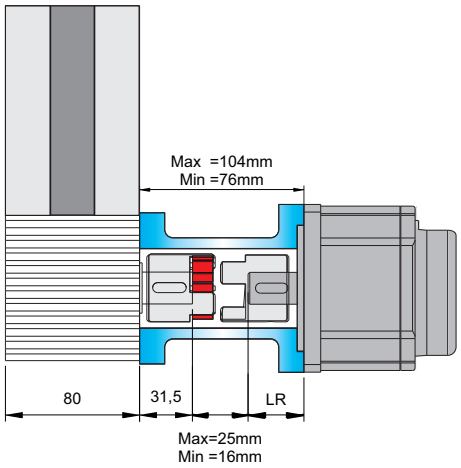


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

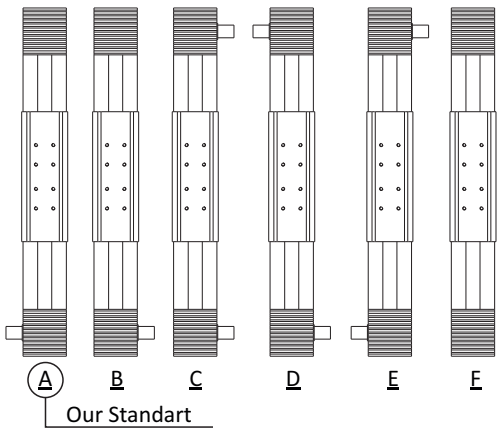
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

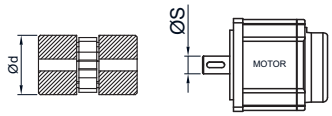
Motor Connection Details



Drive Shaft Directions

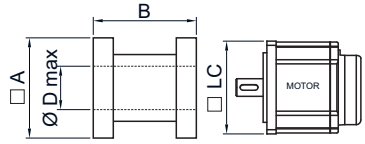


Coupling Options

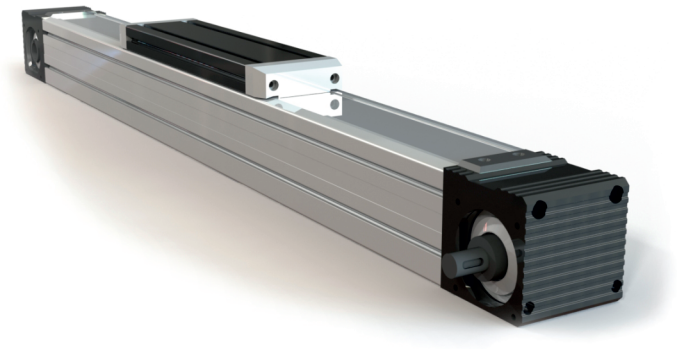


Coupling	Ød	ØS
GS 19	40	16 - 20
GS 24	55	21 - 28

Motor Flange Options

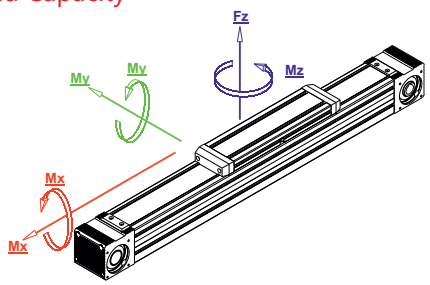


Flange	A	B	ØDmax	LC
85x 85	65 - 85	80 - 90	47	65 - 85
95 x 95	75 - 95	83 - 104	60	75 - 95



Product Code : 5.3.03.100100.2.03.2.Stroke

Load Capacity



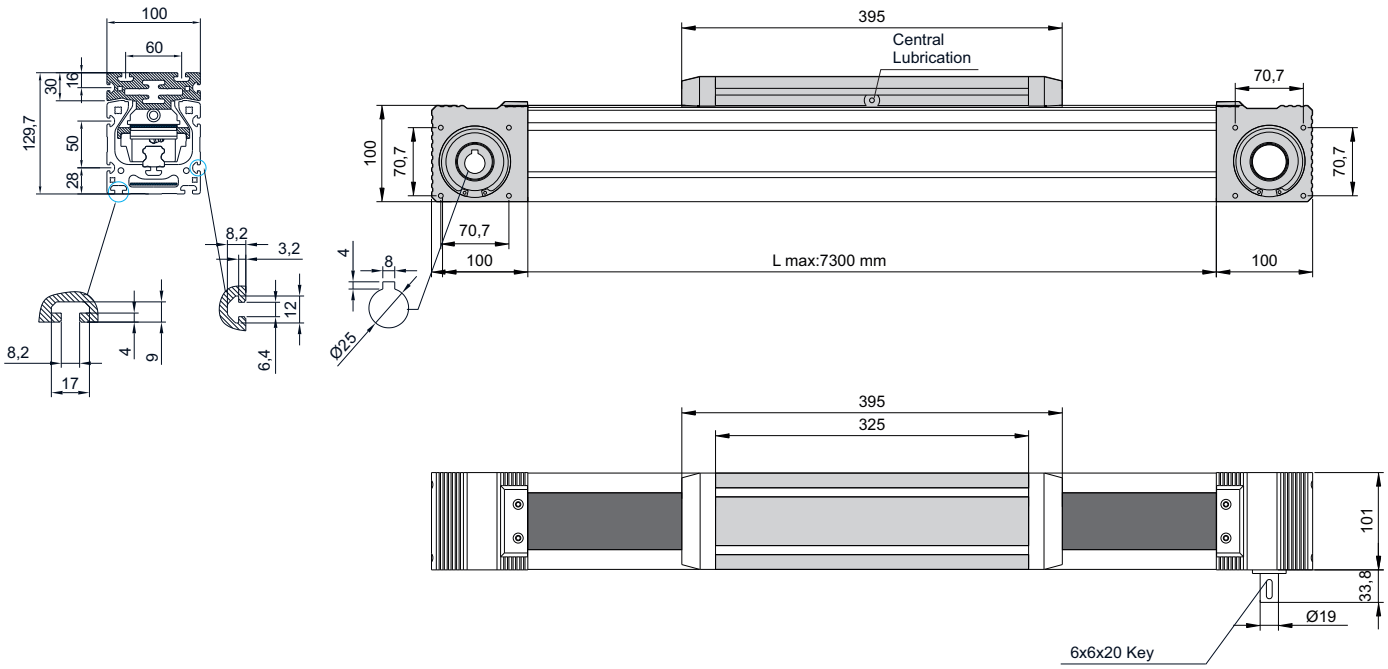
Load		Static
F_x	(N)	950
F_y	(N)	2800
F_z	(N)	3450
Moment		
M_x	(Nm)	197
M_y	(Nm)	230
M_z	(Nm)	220

Note: Module has 2 pieces of blocks

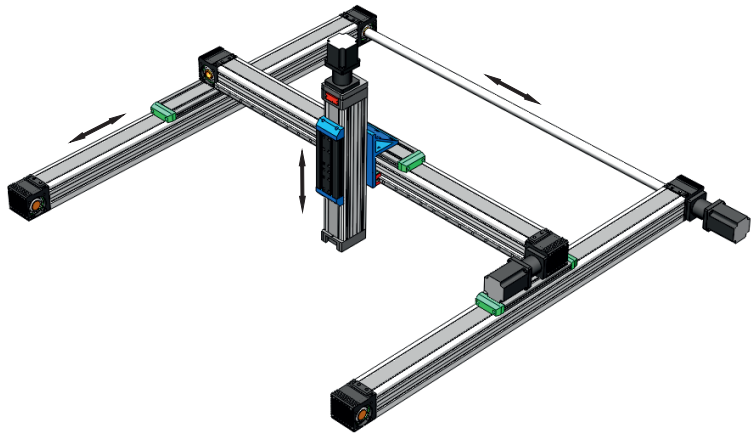
Technical Features

Body	;	100x100 Profile Aluminium(6063) T5
Max Speed	;	5 m/sec
Pitch	;	192mm
Timing Belt	;	8M-F50 NFT coated
Timing Pulley	;	8m-F50 Z=24
Linear Rail	;	25 Linear Rail
Linear Block	;	25 Wide Linear Block
Belt Tensile Force	;	3000 N
Belt Pitch	;	8 mm
Protection	;	0,3x60 mm Metal sheet protection
Positioning Accuracy	;	0,1 mm

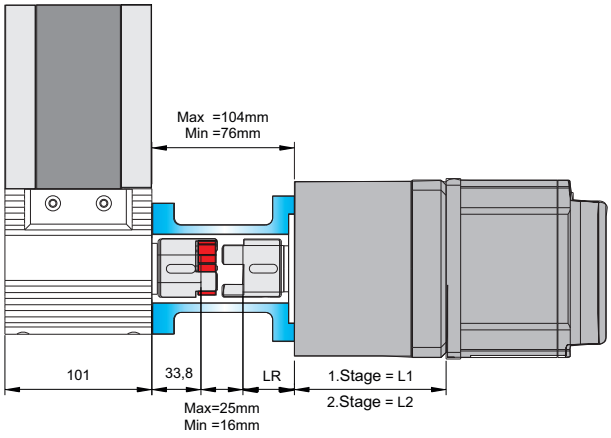
Technical Details



Applications



Gearbox Connection Details

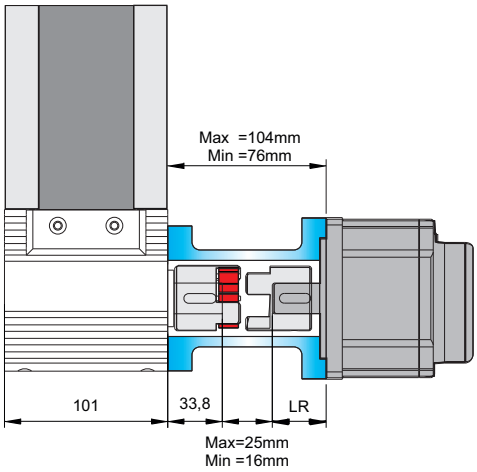


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

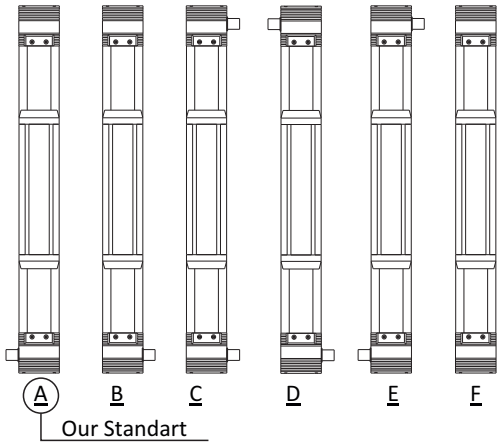
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

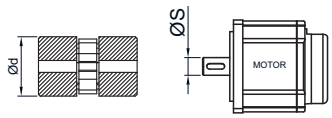
Motor Connection Details



Drive Shaft Directions

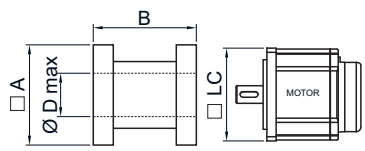


Coupling Options



Coupling	Ød	ØS
GS 19	40	16 - 20
GS 24	55	21 - 28
GS 28	65	29 - 36

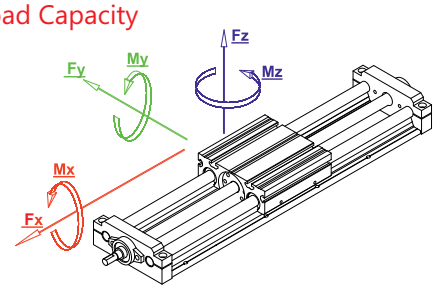
Motor Flange Options



Flange	A	B	ØDmax	LC
85 x 85	65 - 85	80 - 90	47	65 - 85
95x 95	75 - 95	83 - 104	60	75 - 95
120 x 120	95 - 120	85 - 100	70	95 - 120



Load Capacity



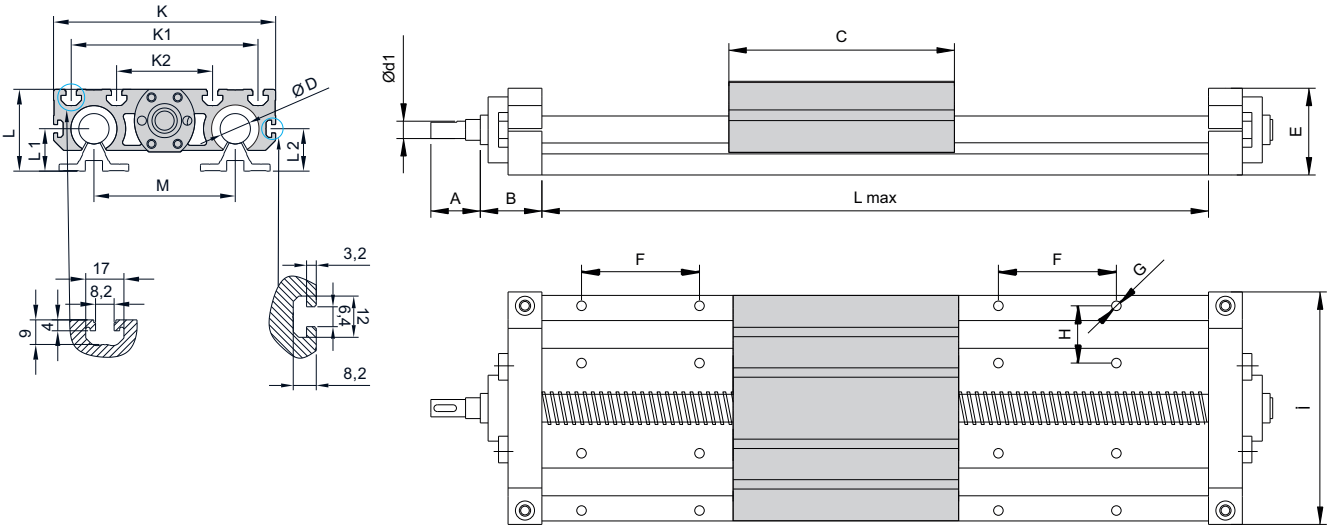
Load	Static	Dkvm 12	Dkvm 16	Dkvm 20	Dkvm 25	Dkvm 30
F_x	(N)	385	505	618	713	912
F_y	(N)	910	1205	1744	2323	2950
F_z	(N)	1215	1512	2180	2904	3450
Moment						
M_x	(Nm)	125	167	228	360	410
M_y	(Nm)	95	126	195	234	290
M_z	(Nm)	110	146	204	224	280

Note: Module has 2 pieces of blocks

Technical Features

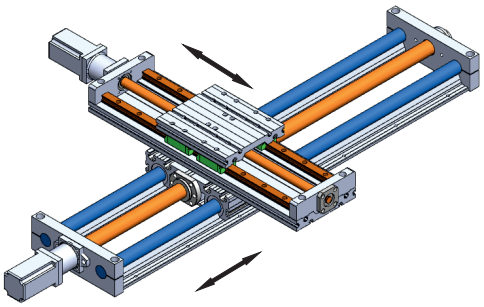
Body	;	Ø12 - 16 - 20 - 25 - 30 Shaft Support Profile Aluminium(6063) T5
Max Speed	;	0,09 - 0,12 - 0,38 - 0,13 - 0,52 - 0,17 - 0,34 - 0,85 - 0,46 m/sec
Pitch	;	5 mm - 10 mm - 16 mm - 20 mm - 25mm
Ballscrew	;	Ø12-05 - 16-05 - 16-16 - 20-05 - 20-20 - 25-05 - 25-10 - 25-25 - 32-10 Pitch
Flange Nut	;	Ø12-05 - 16-05 - 16-16 - 20-05 - 20-20 - 25-05 - 25-10 - 25-25 - 32-10 FSU Type
Linear Bearing	;	LME Ø12 - 16 - 20 - 25 - 30 UU OP
Shaft	;	Ø12 - 16 - 20 - 25 - 30 Chrome Coated (20-33µm), Hardened, Cf53- H7
Positioning Accuracy	;	0,2 mm

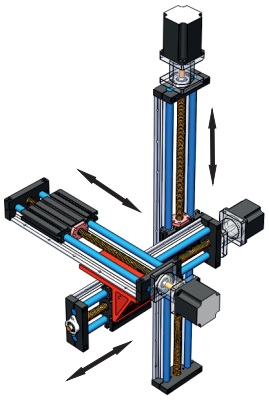
Technical Details



Code	Product Name	Ballscrew	ØD	Ød1	A	B	C	E	F	G	H	İ	K	K1	K2	L	L1	L2	M	L max
5.2.05.110110.3.02.2.Strok	DKVM 12	12-05	12	10	27	30	110	44	75	4.5	29	115	110	-	60	49.5	22	38	75	572
5.2.05.130130.3.02.2.Strok	DKVM 16	16-05	16	10	20	20	130	60	100	5.5	33	130	130	-	70	54	26	39	85	2000
5.2.05.130130.3.04.2.Strok		16-16																		
5.2.05.150150.3.05.2.Strok	DKVM 20	20-05	20	15	27.5	17.5	150	64	100	6.6	37	150	150	-	58	59	32	44	90	2500
5.2.05.150150.3.07.2.Strok		20-20																		
5.2.05.175175.3.08.2.Strok	DKVM 25	25-05	25	15	25	25	175	72	120	6.6	42	180	180	-	90	72	36	57	120	3000
5.2.05.175175.3.09.2.Strok		25-10																		
5.2.05.175175.3.10.2.Strok		25-25																		
5.2.05.200240.3.11.2.Strok	DKVM 30	32-05	30	19	30	27	200	85	150	9	51	240	240	205	115	81	42	42	160	3500
5.2.05.200240.3.12.2.Strok		32-10																		

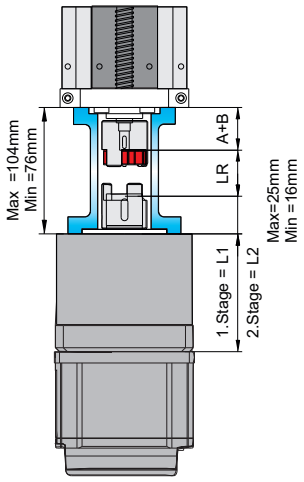
Applications

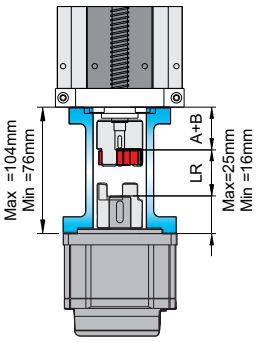




Gearbox Connection Details

Motor Connection Details



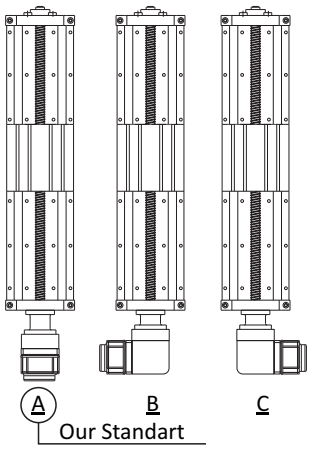


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

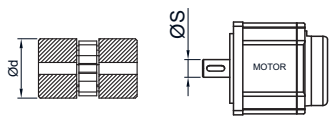
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

Drive Shaft Directions

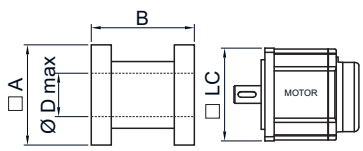


Coupling Options

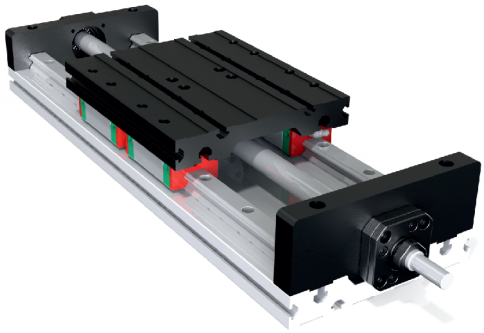


Coupling	Ød	ØS
GS 14	30	0 - 15
GS 19	40	16 - 20
GS 24	55	21 - 28

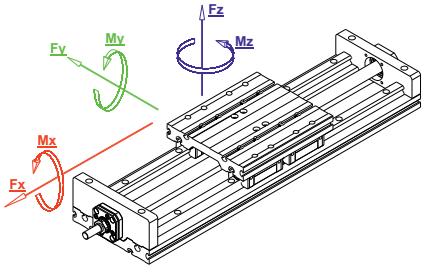
Motor Flange Options



Flange	A	B	ØDmax	LC
60 x 60	50 - 60	65 - 73	35	50 - 60
85 x 85	65 - 85	80 - 90	47	65 - 85
95 x 95	75 - 95	83 - 104	60	75 - 95



Load Capacity

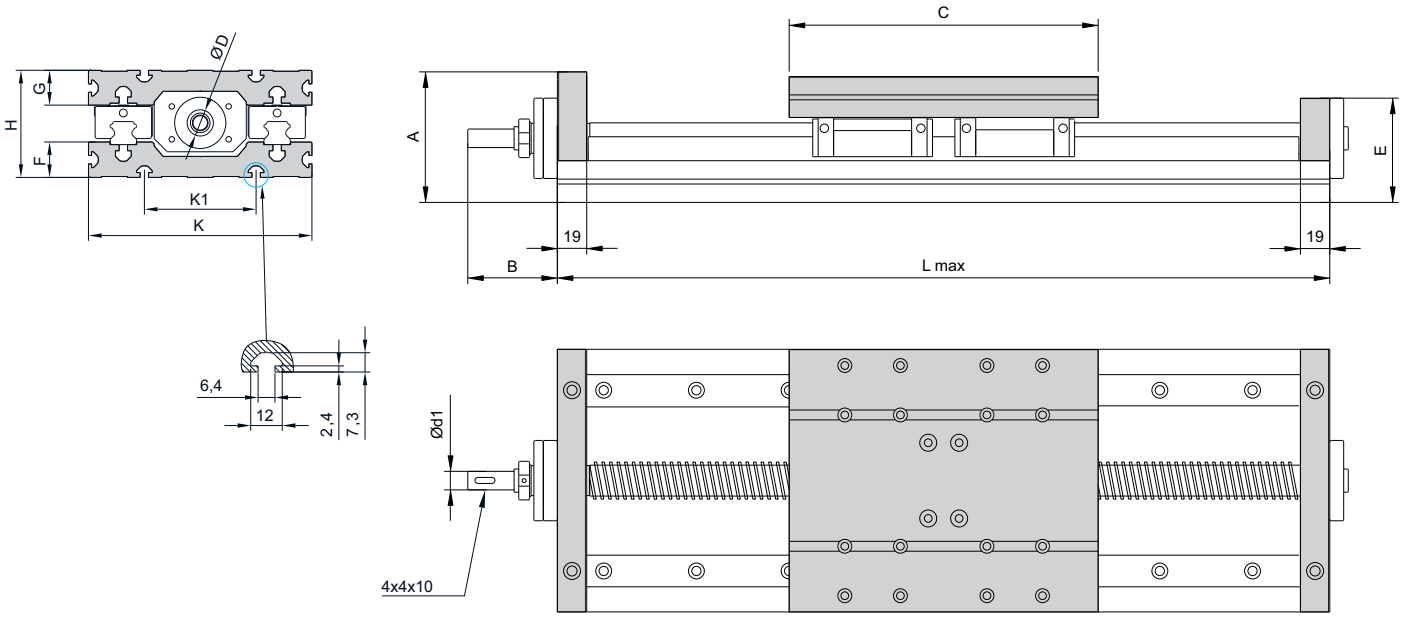


Load Static		DKZM 15 2 blocks	DKZM 20 2 blocks	DKZM 15 4 blocks	DKZM 20 4 blocks
F_x	(N)	1045	2235	2020	3680
F_y	(N)	1080	1925	2080	4400
F_z	(N)	1520	2580	3020	5760
Moment					
M_x	(Nm)	410	650	410	650
M_y	(Nm)	290	440	290	290
M_z	(Nm)	290	440	440	290

Technical Features

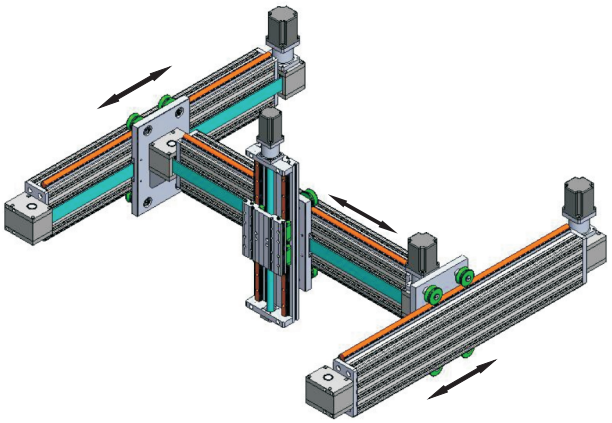
Body	;	22x140 - 27x170 Profile Aluminium (6063) T5
Max Speed	;	0,12 - 0,38 - 0,13 - 0,52 m/sec
Pitch	;	5 mm - 16mm - 20 mm
Ballscrew	;	Ø16-05 - 16-16 - 20-05 - 20-20 Pitch
Flange Nut	;	Ø16-05 - 16-16 - 20-05 - 20-20 FSU Type
Linear Rail	;	15 -20 Linear Rail
Linear Block	;	15 - 20 Narrow Linear Block
Positioning Accuracy	;	0,01 mm

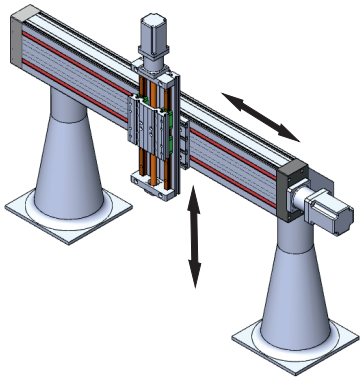
Technical Details



Code	Product Name	Ballscrew	A	B	C	ØD	Ød1	E	F	G	H	K	K1	L max
5.2.07.022140.2.02.1.Stroke	DKZM 15	16 - 05	77,5	49	150	16	12	57,5	22	21,5	70	140	70	2000
5.2.07.027170.2.05.1.Stroke	DKZM 20	20 - 05	84,5	58	200	20	12	67,5	27	26,5	81,5	170	85	2500
5.2.07.022140.2.04.1.Stroke	DKZM 15	16 - 16	77,5	49	150	16	12	57,5	22	21,5	70	140	70	2000
5.2.07.027170.2.07.1.Stroke	DKZM 20	20 - 20	84,5	58	200	20	12	67,5	27	26,5	81,5	170	85	2500

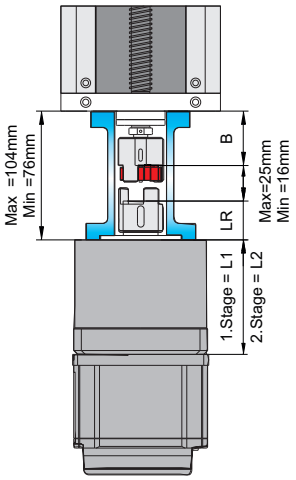
Applications

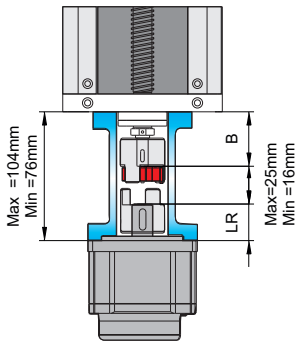




Gearbox Connection Details

Motor Connection Details



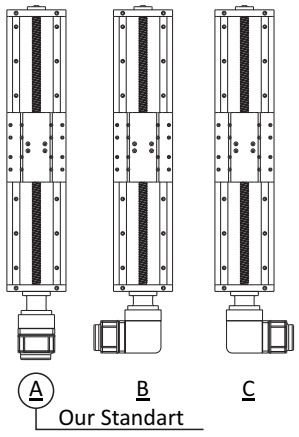


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

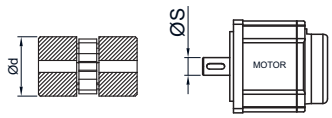
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

Drive Shaft Directions

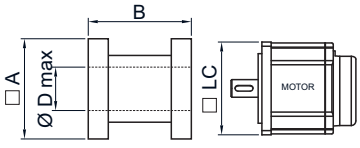


Coupling Options

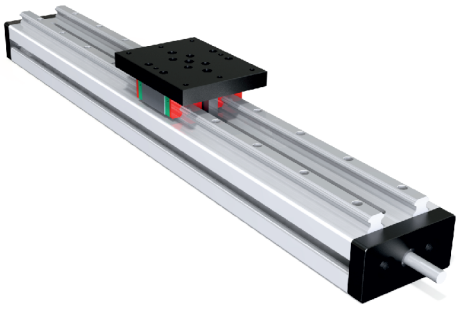


Coupling	Ød	ØS
GS 14	30	0 - 15
GS 19	40	16 - 20
GS 24	55	21 - 28

Motor Flange Options

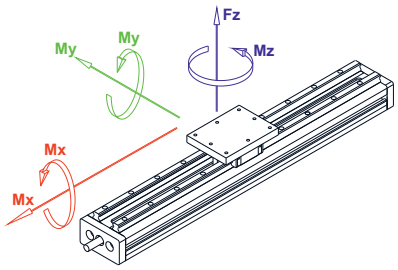


Flange	A	B	ØDmax	LC
60 x 60	50 - 60	65 - 73	35	50 - 60
85 x 85	65 - 85	80 - 90	47	65 - 85
95 x 95	75 - 95	83 - 104	60	75 - 95



Product Code : 5.2.04.045090.2.01.1.Stroke

Load Capacity

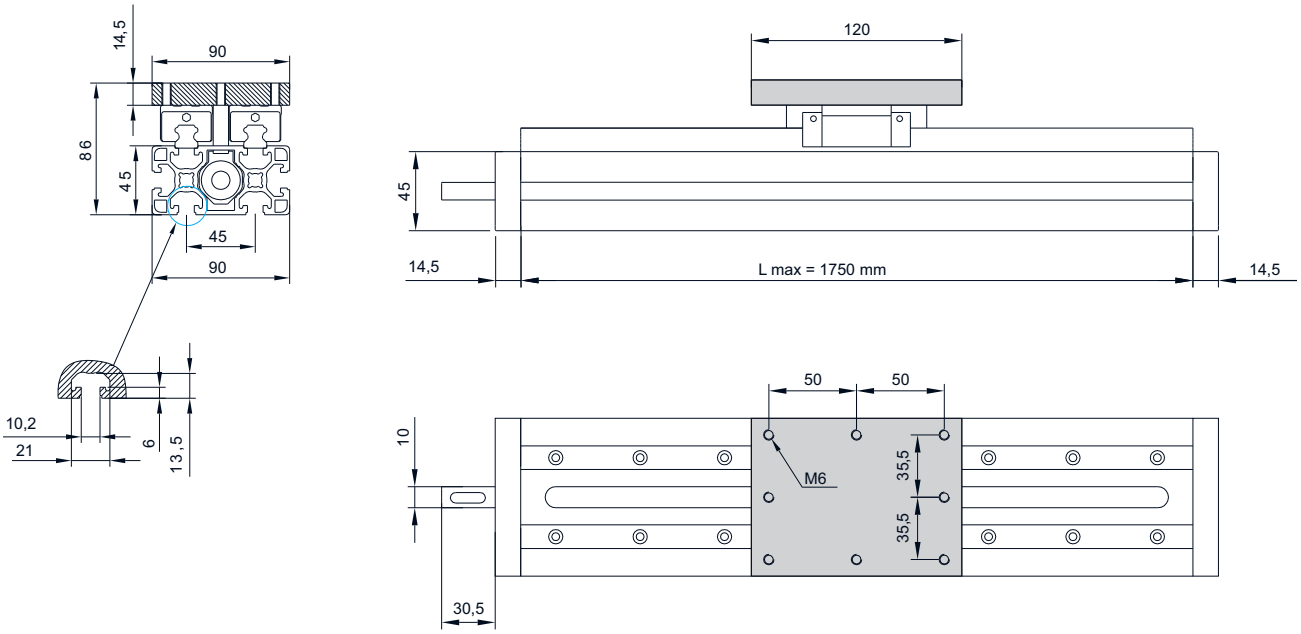


Load	Static	45x90
F_x	(N)	725
F_y	(N)	878
F_z	(N)	1157
Moment		
M_x	(Nm)	110
M_y	(Nm)	70
M_z	(Nm)	75

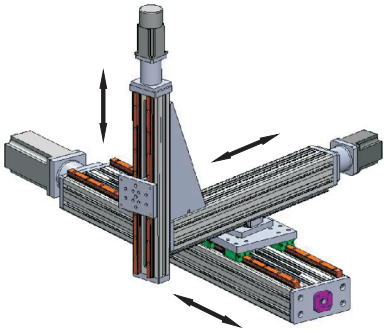
Technical Features

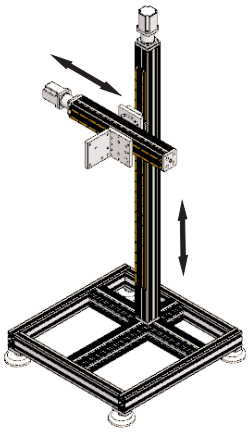
Body	;	45X90 (Heavy) Profile (Aluminium 6063) T5
Max Speed	;	0,1 m/sec
Pitch	;	5 mm
Ballscrew	;	Ø12-05 (Pitch)
Flange Nut	;	RSY-12-05
Linear Rail	;	15' Linear Rail
Linear Block	;	15' Narrow Linear Block
Positioning Accuracy	;	0,01 mm

Technical Details



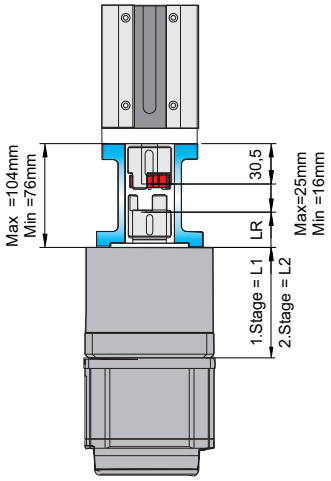
Applications

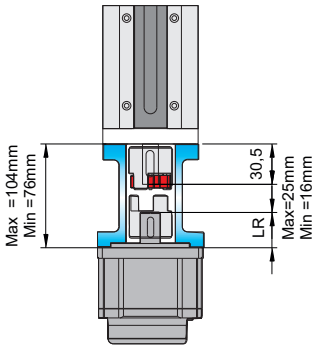




Gearbox Connection Details

Motor Connection Details



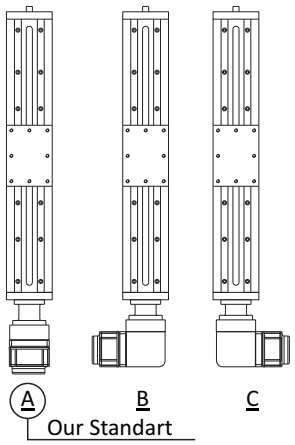


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

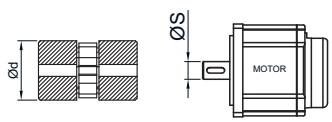
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

Drive Shaft Directions

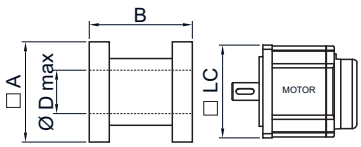


Coupling Options

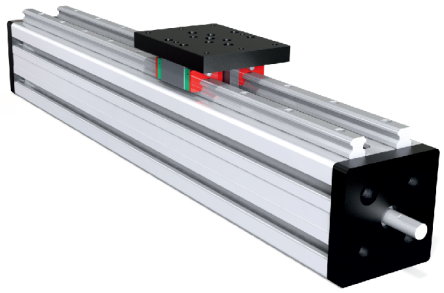


Coupling	Ød	ØS
GS 14	30	0 - 15
GS 19	40	16 - 20

Motor Flange Options

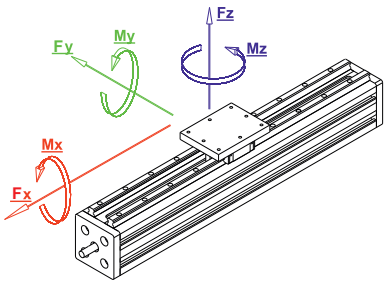


Flange	A	B	ØDmax	LC
60 x 60	50 - 60	65 - 73	35	50 - 60
85 x 85	65 - 85	80 - 90	47	65 - 85



Product Code : 5.2.04.090090.2.02.1.Stroke

Load Capacity

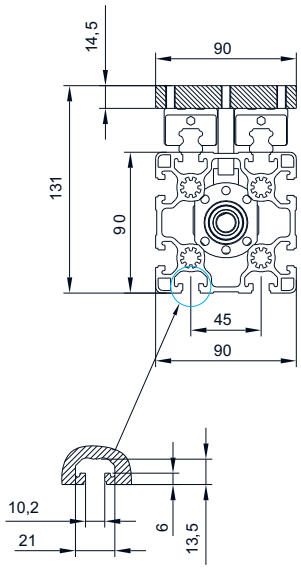


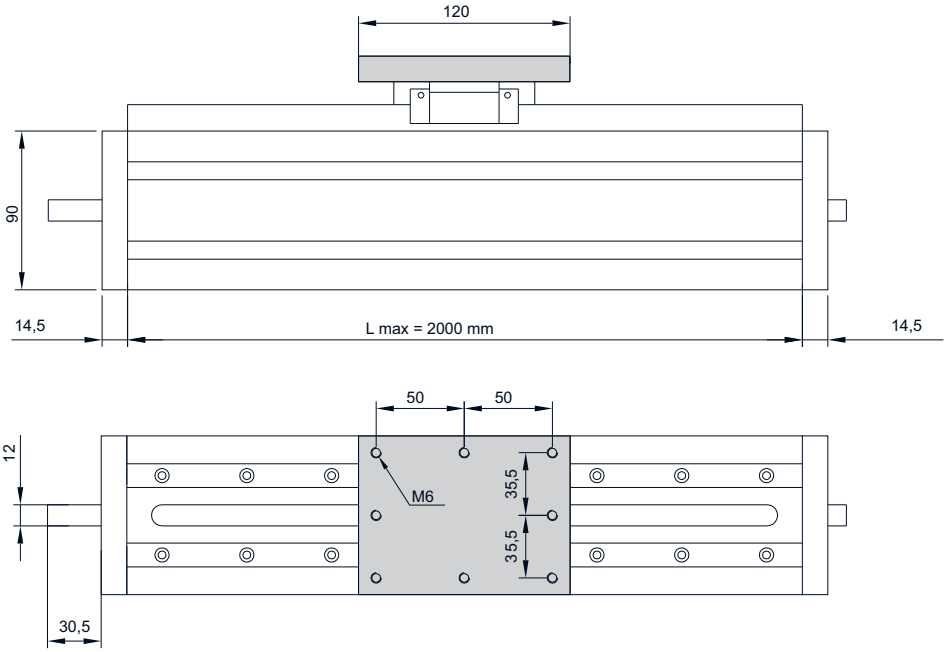
Load	Static	90x90
F_x	(N)	975
F_y	(N)	878
F_z	(N)	1157
Moment		
M_x	(Nm)	140
M_y	(Nm)	80
M_z	(Nm)	95

Technical Features

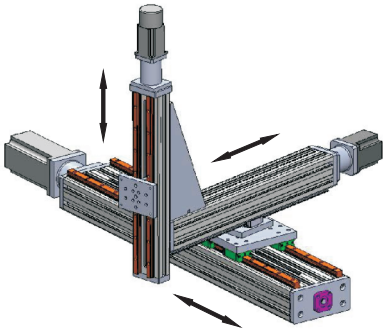
Body	;	90x90 (L) Profile (Aluminium 6063) T5
Max Speed	;	0,12 m/sec
Pitch	;	4mm / 5 mm
Ballscrew	;	Ø16-04 / Ø16-05 (Pitch)
Flange Nut	;	TRP16-04 / FSU 16-05
Linear Rail	;	15' Linear Rail
Linear Block	;	15' Narrow Linear Block
Positioning Accuracy	;	0,01 mm

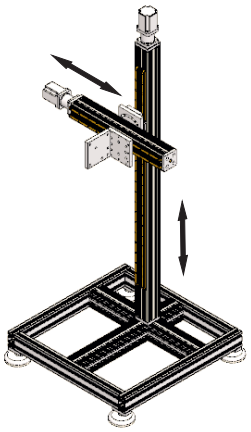
Technical Details





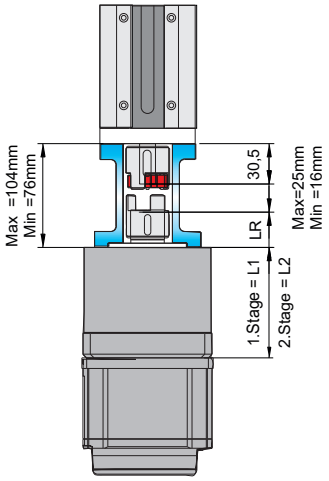
Applications

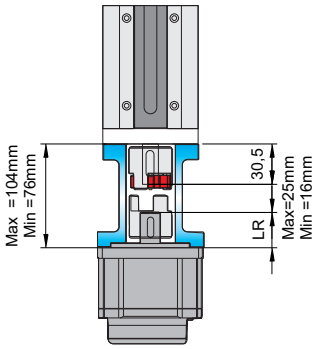




Gearbox Connection Details

Motor Connection Details



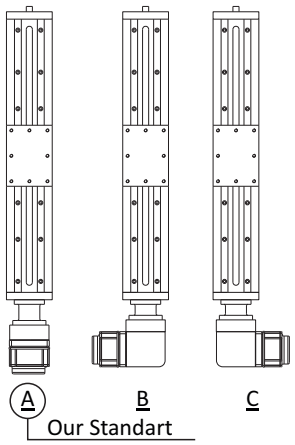


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

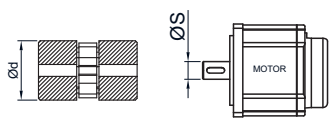
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

Drive Shaft Directions

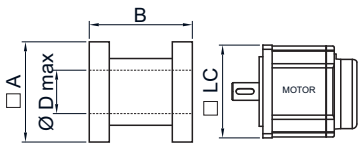


Coupling Options

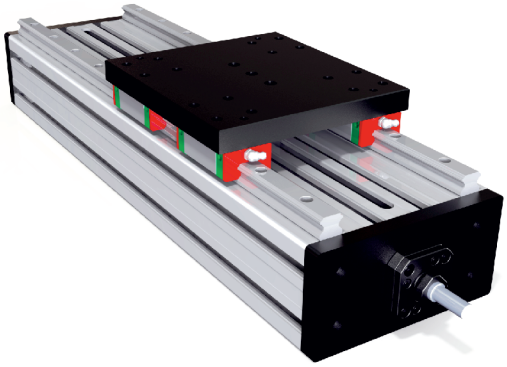


Coupling	Ød	ØS
GS 14	30	0 - 15
GS 19	40	16 - 20

Motor Flange Options

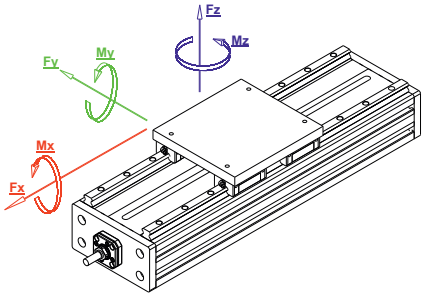


Flange	A	B	ØDmax	LC
60 x 60	50 - 60	65 - 73	35	50 - 60
85 x 85	65 - 85	80 - 90	47	65 - 85



Product Code : 5.2.04.090180.2.05.2.Stroke

Load Capacity

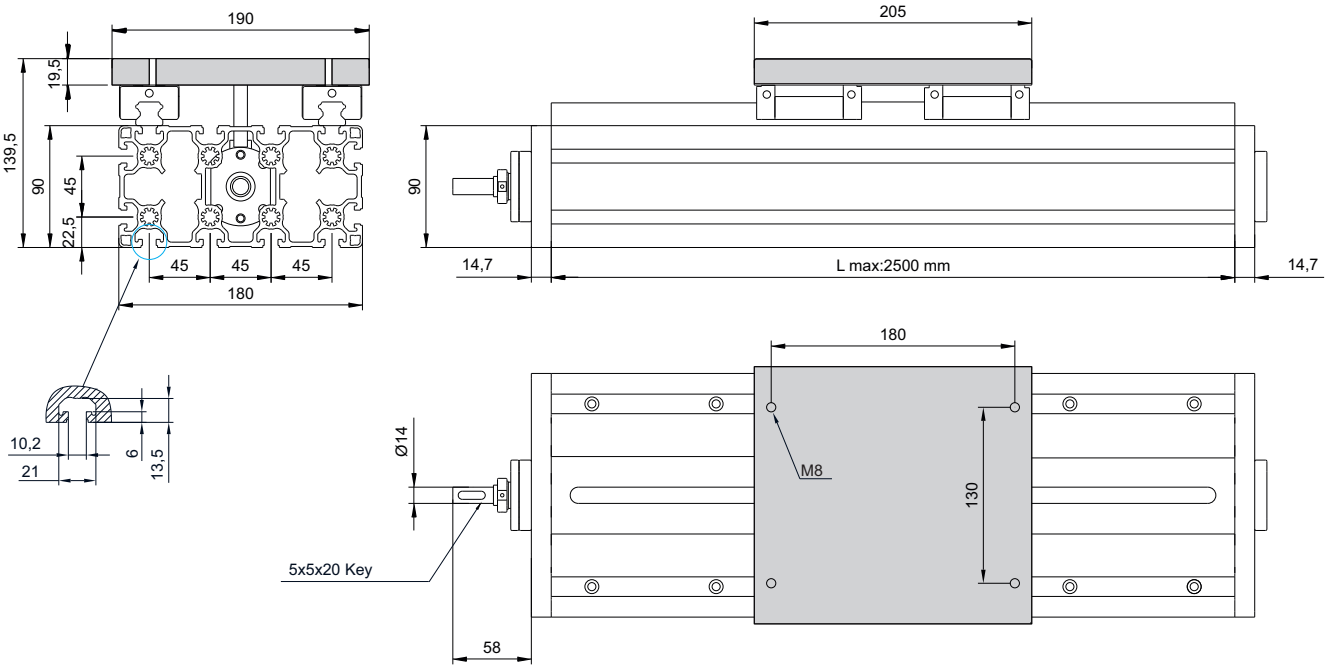


Load	Static	
F_x	(N)	1475
F_y	(N)	3168
F_z	(N)	4147
Moment		
M_x	(Nm)	780
M_y	(Nm)	528
M_z	(Nm)	528

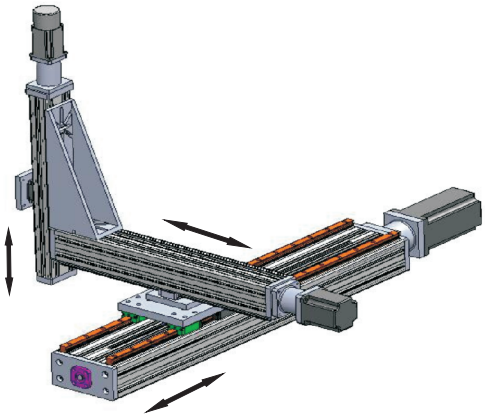
Technical Features

Body	;	90x180 (L) Profile (Aluminium 6063) T5
Max Speed	;	0,13 m/sec
Pitch	;	5 mm
Ballscrew	;	Ø20-05 (Pitch)
Flange Nut	;	FSU-20-05 Flanged nut (With key)
Linear Rail	;	20' Linear Rail
Linear Block	;	20' Narrow Linear Block
Positioning Accuracy	;	0,01 mm

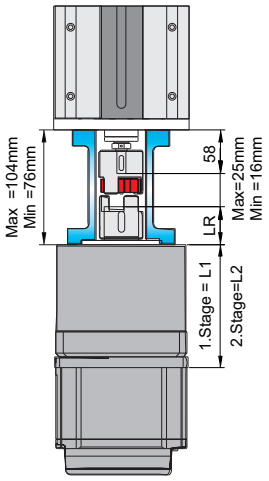
Technical Details



Applications



Gearbox Connection Details

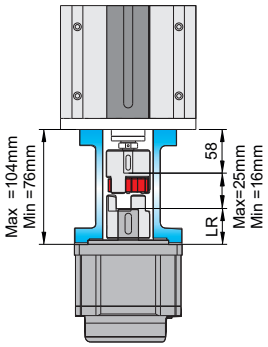


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

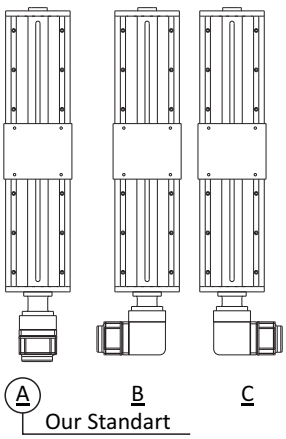
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

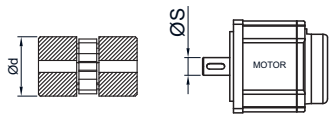
Motor Connection Details



Drive Shaft Directions

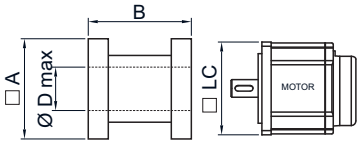


Coupling Options

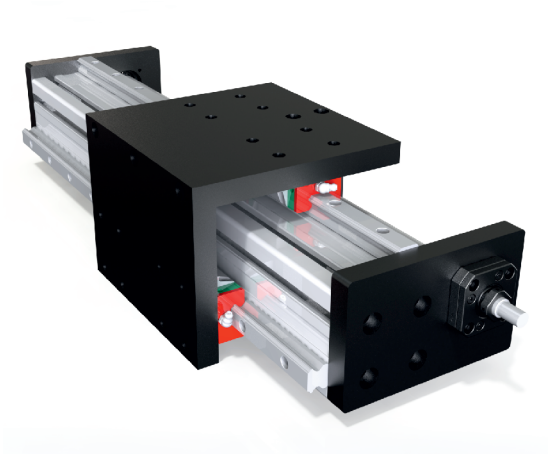


Coupling	Ød	ØS
GS 19	40	16 - 20
GS 24	55	21 - 28
GS 28	65	29 - 36

Motor Flange Options

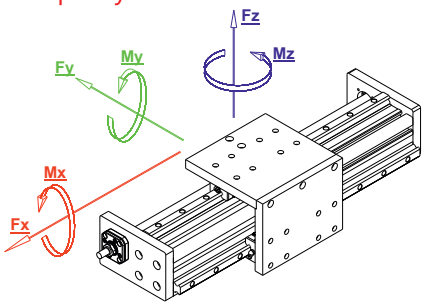


Flange	A	B	ØDmax	LC
85 x 85	65 - 85	80 - 90	47	65 - 85
95 x 95	75 - 95	83 - 104	60	75 - 95
120 x 120	95 - 120	85 - 100	70	95 - 120



Product Code : 5.2.08.090090.2.09.2.Stroke

Load Capacity

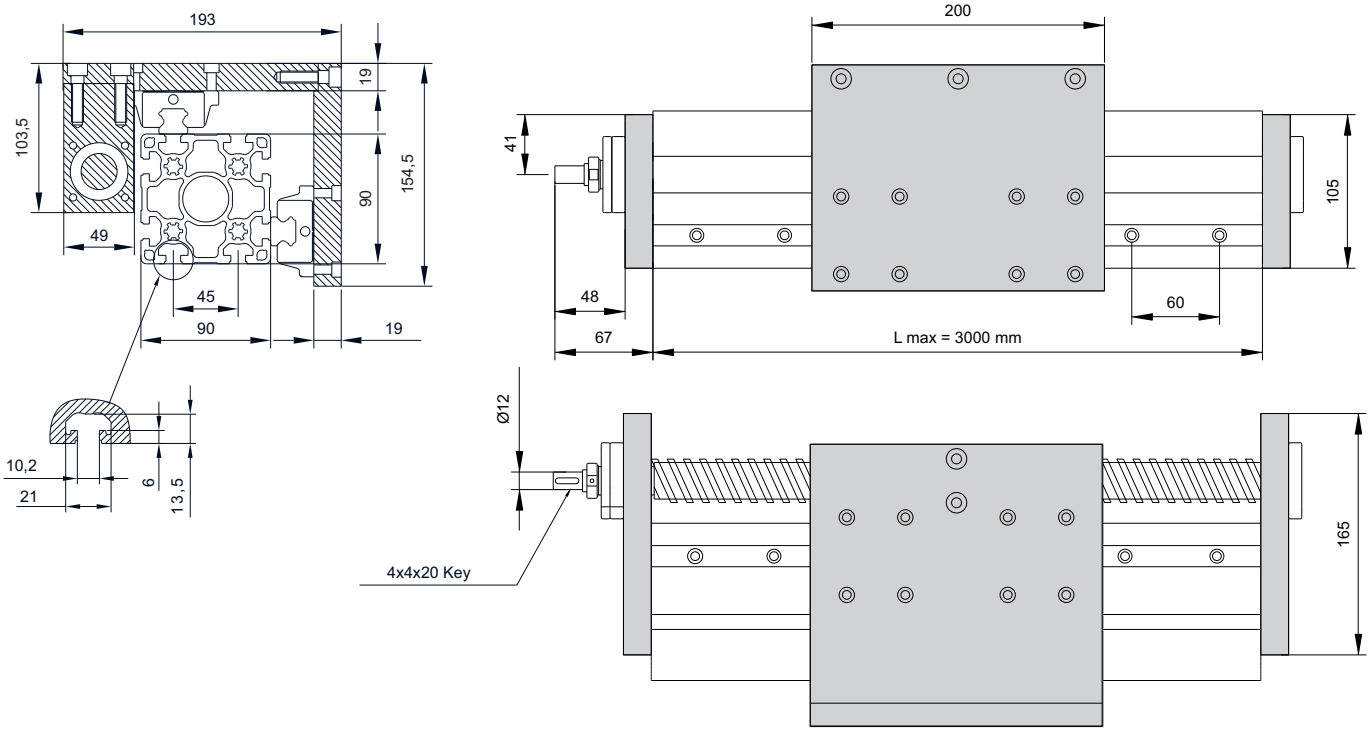


Load		Static
F_x	(N)	1850
F_y	(N)	2750
F_z	(N)	2750
Moment		
M_x	(Nm)	460
M_y	(Nm)	325
M_z	(Nm)	325

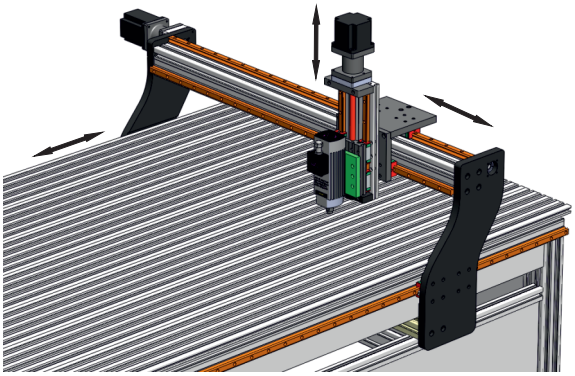
Technical Features

Body	;	90x90 (Heavy) Profile (Aluminium 6063) T5
Max Speed	;	0,17 - 0,34 - 0,85 m/sec
Pitch	;	5 mm - 10 mm - 25 mm
Ballscrew	;	Ø25-05 - Ø25-10 - Ø25-25 Pitch
Flange Nut	;	FSU 25-05 - FSU 25-10 - FSU 25-25
Linear Rail	;	20' Linear Rail
Linear Block	;	20' Narrow Linear Block
Positioning Accuracy	;	0,01 mm

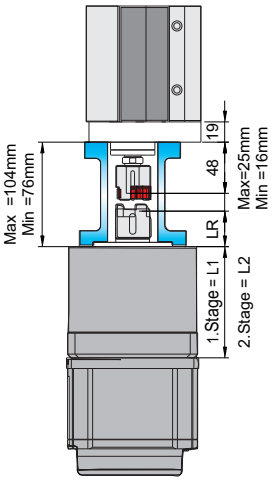
Technical Details



Applications



Gearbox Connection Details

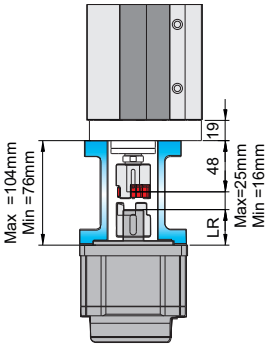


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

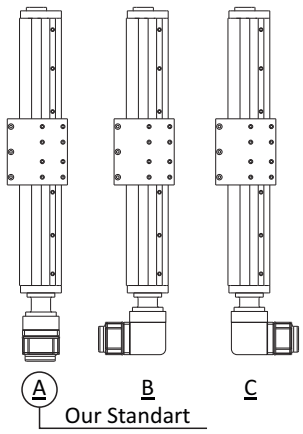
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

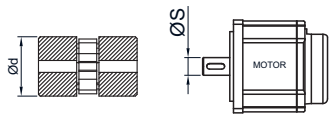
Motor Connection Details



Drive Shaft Directions

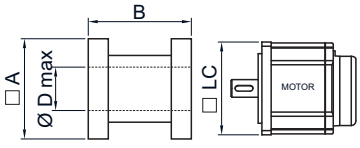


Coupling Options

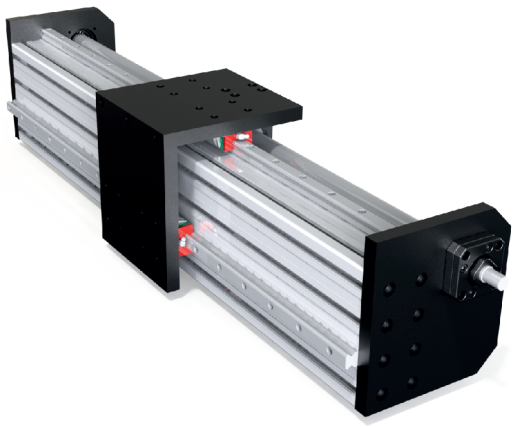


Coupling	Ød	ØS
GS 19	40	16 - 20
GS 24	55	21 - 28
GS 28	65	29 - 36

Motor Flange Options

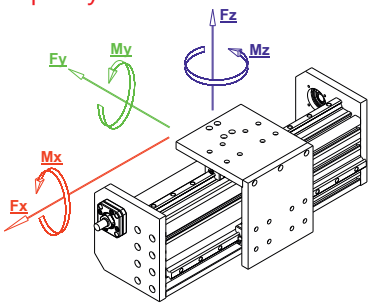


Flange	A	B	ØDmax	LC
85 x 85	65 - 85	80 - 90	47	65 - 85
95 x 95	75 - 95	83 - 104	60	75 - 95
120 x 120	95 - 120	85 - 100	70	95 - 120



Product Code : 5.2.08.090180.2.11.2.Stroke

Load Capacity

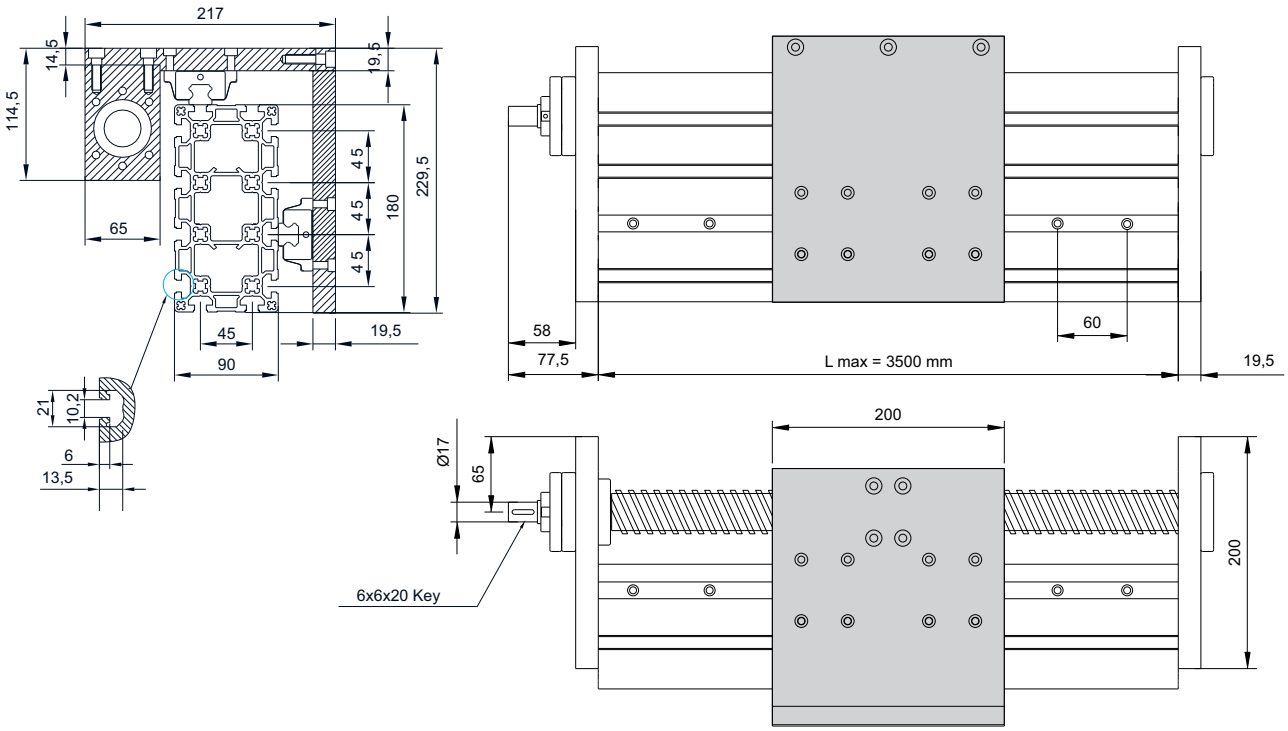


Load		Static	Ø20	Ø32
	F_x	(N)	1475	2050
	F_y	(N)	4250	4250
	F_z	(N)	4250	4250
Moment				
	M_x	(Nm)	780	780
	M_y	(Nm)	485	485
	M_z	(Nm)	485	485

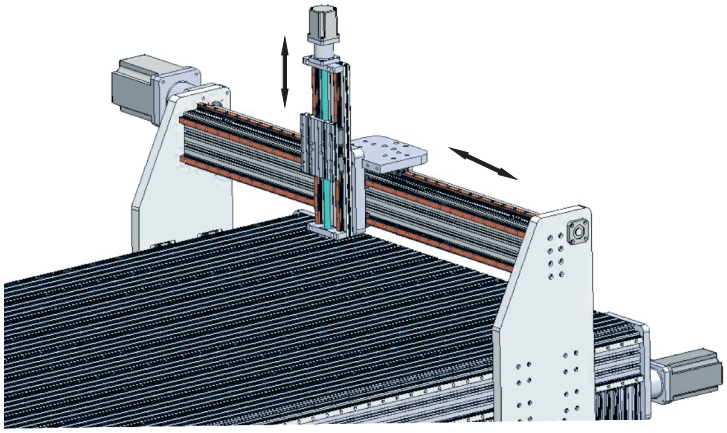
Technical Features

Body	;	90x180 (Heavy) Profile (Aluminium 6063) T5
Max Speed	;	0,23 - 0,13 - 0,52 - 1,47 m/sec
Pitch	;	5 mm - 20 mm - 32 mm
Ballscrew	;	Ø32-05 - Ø20-05 - Ø20-20 - Ø32-32
Flange Nut	;	FSU 32-05 - FSU 20-05 - FSU 20-20 - FSU 32-32
Linear Rail	;	20' Linear Rail
Linear Block	;	20' Narrow Linear Block
Positioning Accuracy	;	0,01 mm

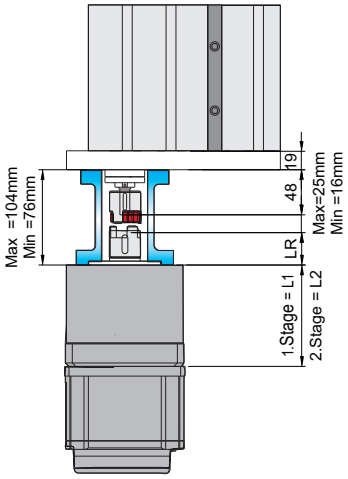
Technical Details



Applications



Gearbox Connection Details

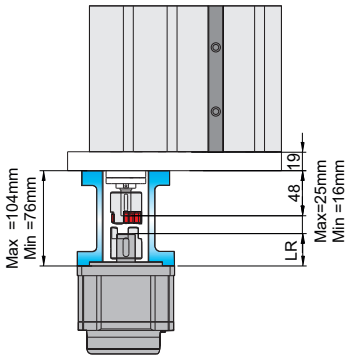


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

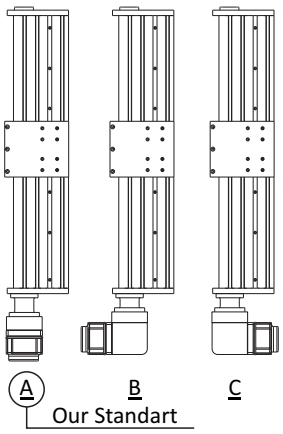
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

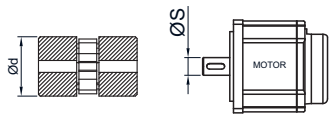
Motor Connection Details



Drive Shaft Directions

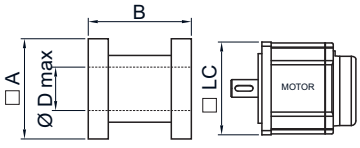


Coupling Options



Coupling	Ød	ØS
GS 19	40	16 - 20
GS 24	55	21 - 28
GS 28	65	29 - 36

Motor Flange Options

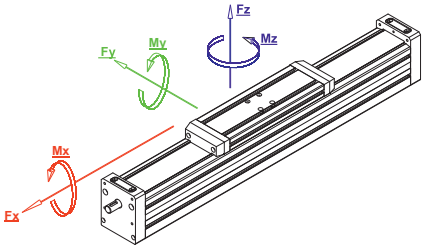


Flange	A	B	ØDmax	LC
85 x 85	65 - 85	80 - 90	47	65 - 85
95 x 95	75 - 95	83 - 104	60	75 - 95
120 x 120	95 - 120	85 - 100	70	95 - 120



Product Code : 5.2.03.100100.2.08.2.Stroke

Load Capacity



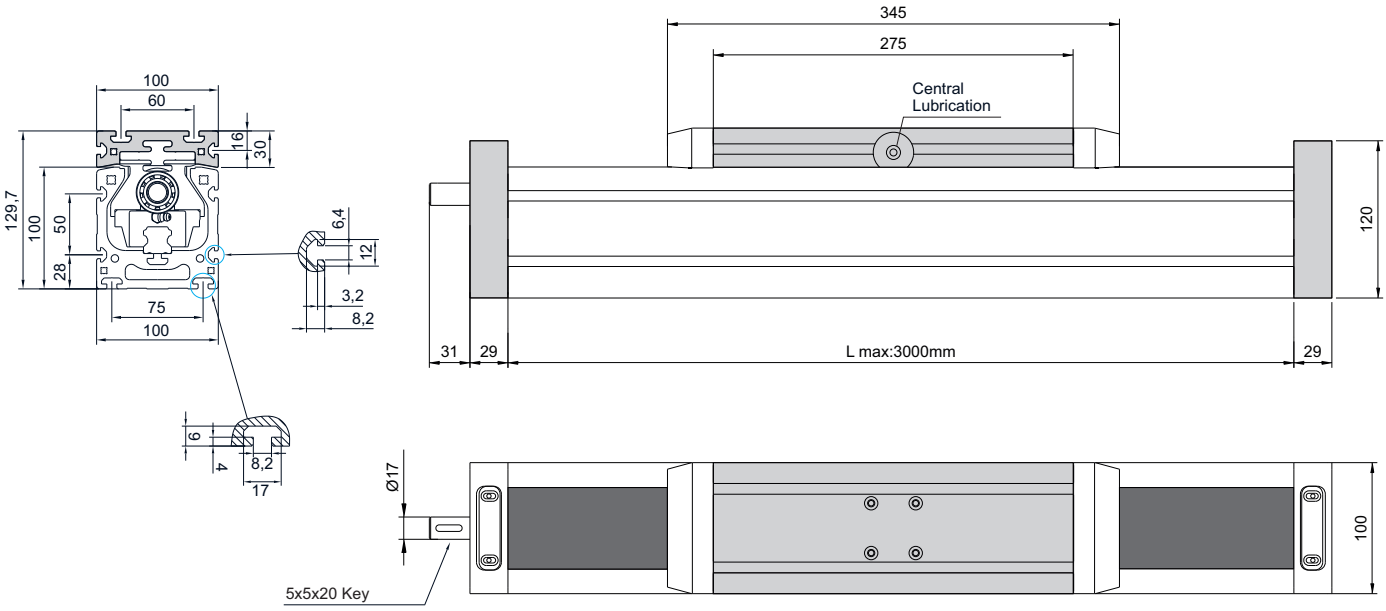
Load	Static	Ø25	Ø20
F_x	(N)	1850	1475
F_y	(N)	2800	2800
F_z	(N)	3450	3450
Moment			
M_x	(Nm)	197	197
M_y	(Nm)	230	230
M_z	(Nm)	220	220

Note: Module has 2 pieces of blocks

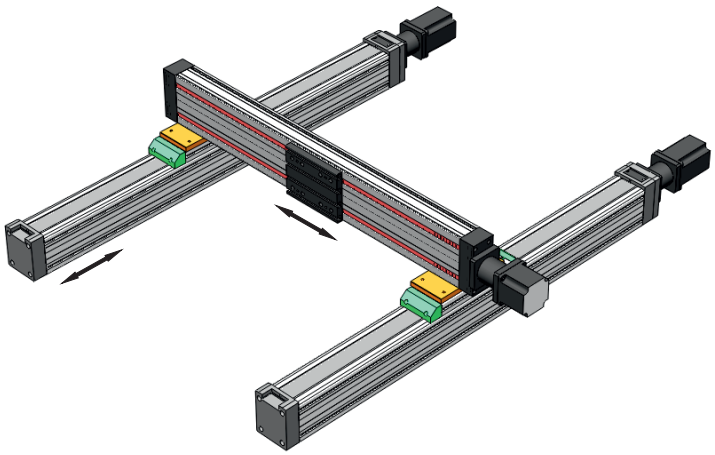
Technical Features

Body	;	100x100 Profile (Aluminium 6063) T5
Max Speed	;	0,17 - 0,34 - 0,52 m/sec
Pitch	;	5mm - 10mm - 20mm
Ballscrew	;	Ø25-05 / Ø25-10 / Ø20-20
Flange Nut	;	SCI 25-05 / FSU 20-20
Linear Rail	;	25' Linear Rail
Linear Block	;	25' Wide Linear Block
Positioning Accuracy	;	0,01 mm

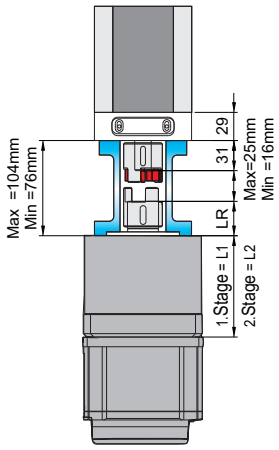
Technical Details



Applications



Gearbox Connection Details

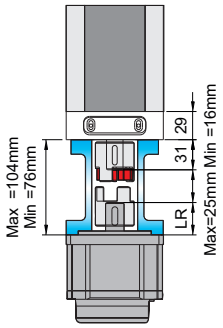


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

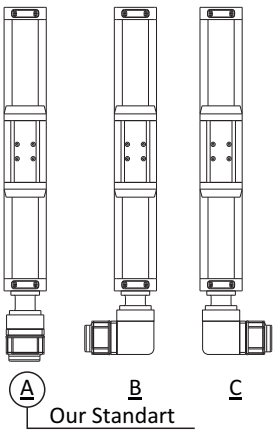
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

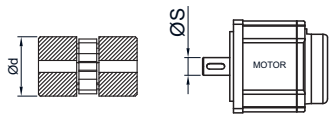
Motor Connection Details



Drive Shaft Directions

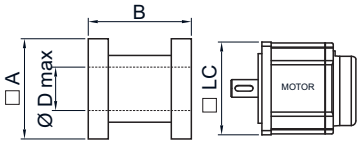


Coupling Options

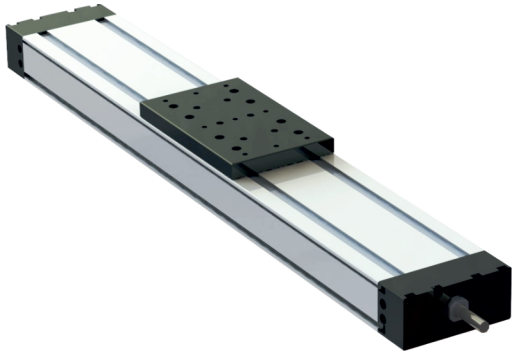


Coupling	Ød	ØS
GS 24	55	21 - 28
GS 28	65	29 - 36

Motor Flange Options

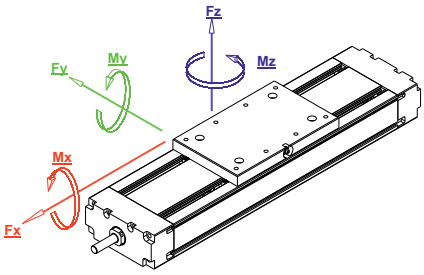


Flange	A	B	ØDmax	LC
95 x 95	75 - 95	83 - 104	60	75 - 95
120 x 120	95 - 120	85 - 100	70	95 - 120



Product Code: 5.2.03.050110.2.02.2.Stroke

Load Capacity



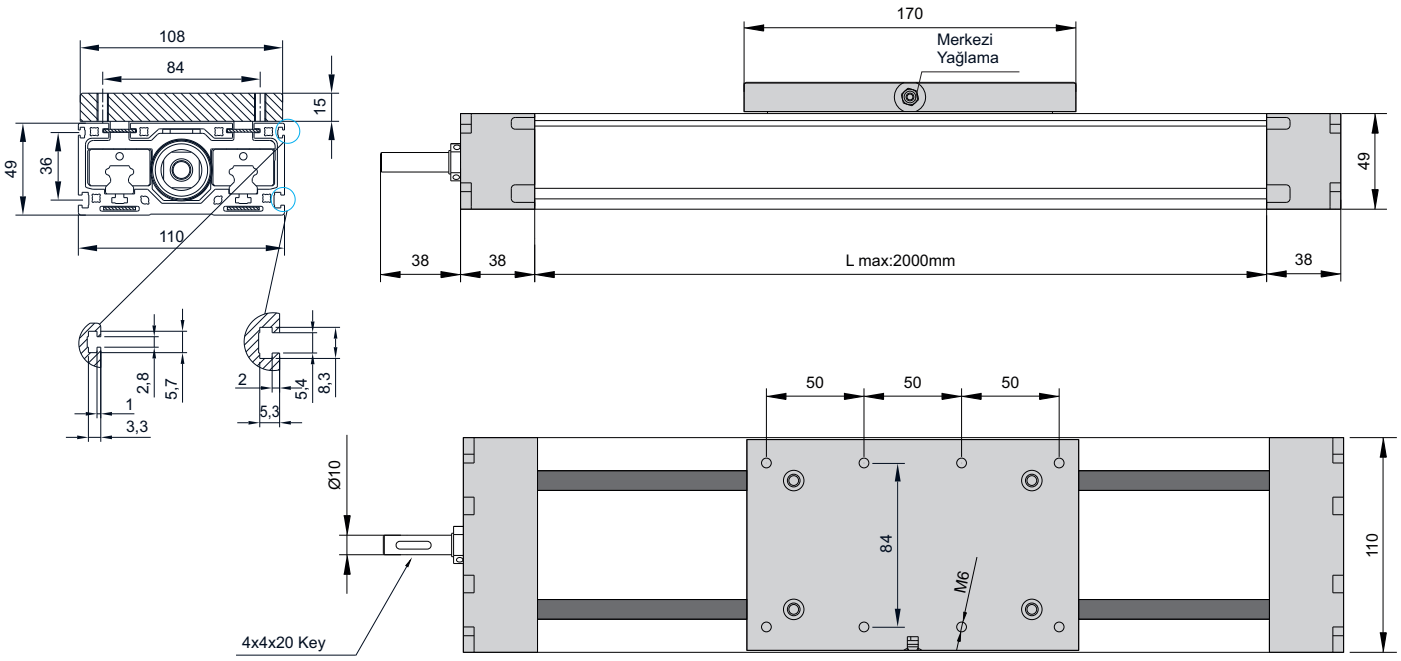
Load		Static
F_x	(N)	975
F_y	(N)	1960
F_z	(N)	2350
Moment		
M_x	(Nm)	145
M_y	(Nm)	115
M_z	(Nm)	115

Note: Module has 4 pieces of blocks

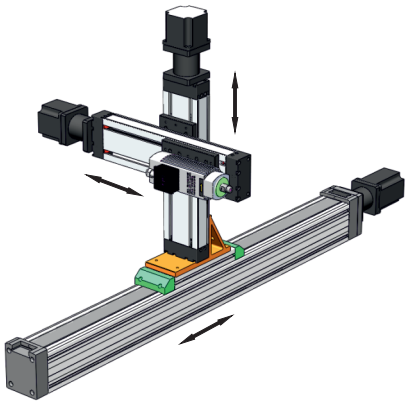
Technical Features

Body	;	50x110 Profile (Aluminium 6063) T5
Max Speed	;	0,12 m/sec
Pitch	;	5 mm
Ballscrew	;	Ø16-05
Romd Nut	;	SCI 16-05
Linear Rail	;	15' Linear Rail
Linear Block	;	15' Narrow Linear Block
Positioning Accuracy	;	0,01mm

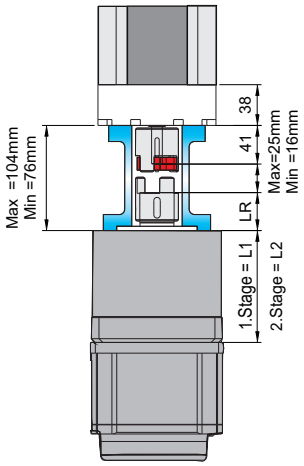
Technical Details



Applications



Gearbox Connection Details

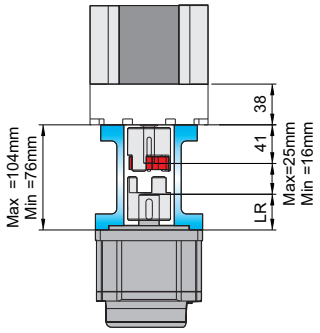


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

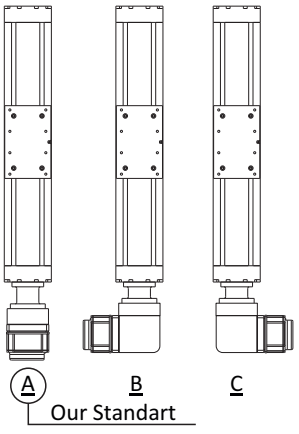
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

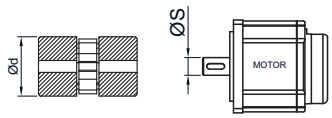
Motor Connection Details



Drive Shaft Directions

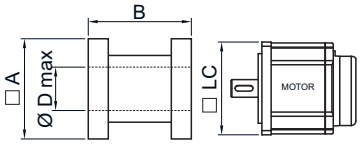


Coupling Options



Coupling	Ød	ØS
GS 14	30	0 - 15
GS 19	40	16 - 20
GS 24	55	21 - 28

Motor Flange Options

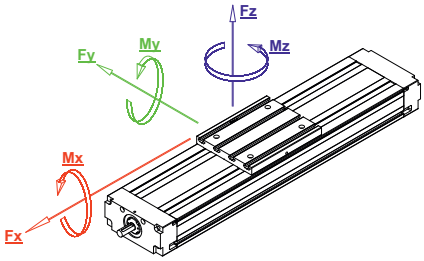


Flange	A	B	ØDmax	LC
60 x 60	50 - 60	65 - 73	35	50 - 60
85 x 85	65 - 85	80 - 90	47	65 - 85
95 x 95	75 - 95	83 - 104	60	75 - 95



Product Code: 5.2.03.065145.2.08.2.Stroke

Load Capacity



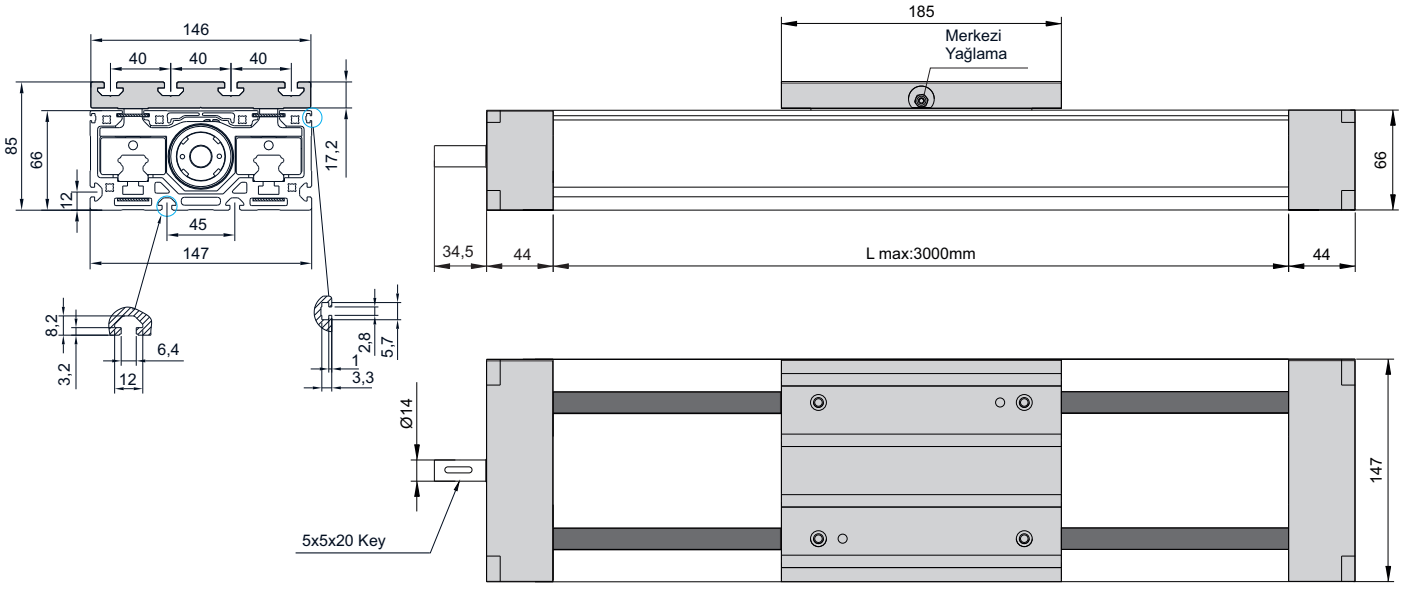
Load		Static
F_x	(N)	1850
F_y	(N)	3900
F_z	(N)	4850
Moment		
M_x	(Nm)	550
M_y	(Nm)	380
M_z	(Nm)	380

Note: Module has 4 pieces of blocks

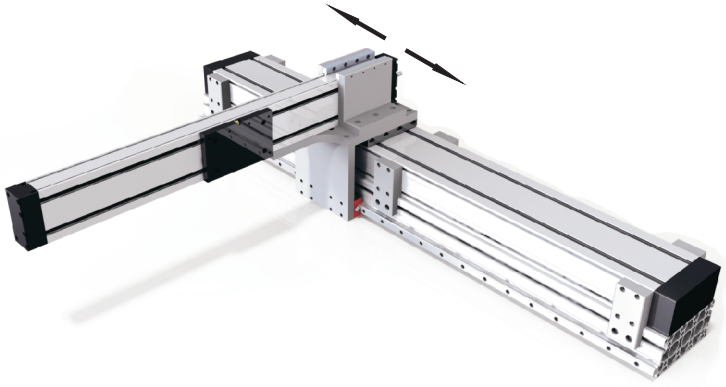
Technical Features

Body	;	66x145 Profile (Aluminium 6063) T5
Max Speed	;	0,13 - 0,17 - 0,52 m/sec
Pitch	;	5mm - 20 mm
Ballscrew	;	Ø20-05 / Ø25-05 / Ø20-20
Romd Nut	;	SCI 25-05 / FSU 20-20
Linear Rail	;	20' Linear Rail
Linear Block	;	20' Narrow Linear Block
Positioning Accuracy	;	0,01 mm

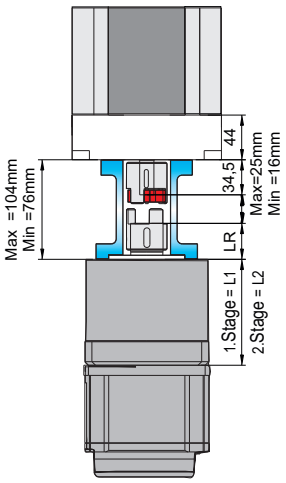
Technical Details



Applications



Gearbox Connection Details

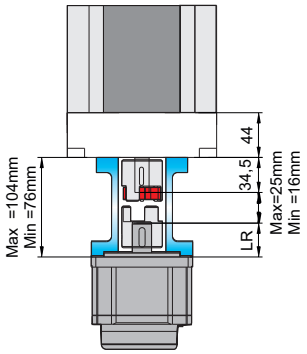


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

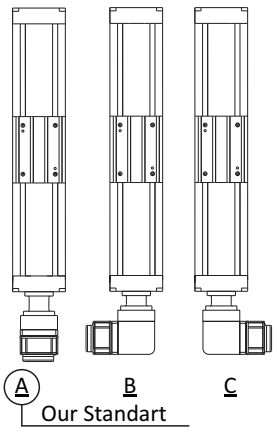
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

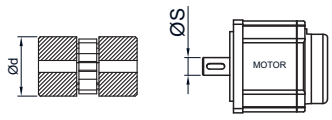
Motor Connection Details



Drive Shaft Directions

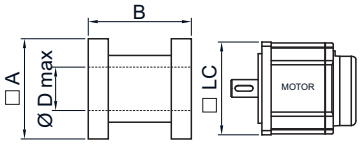


Coupling Options



Coupling	Ød	ØS
GS 19	40	16 - 20
GS 24	55	21 - 28

Motor Flange Options

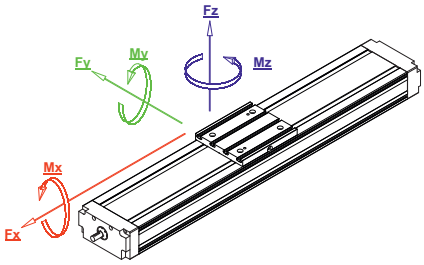


Flange	A	B	ØDmax	LC
85 x 85	65 - 85	80 - 90	47	65 - 85
95 x 95	75 - 95	83 - 104	60	75 - 95



Product Code : 5.2.03.080160.2.09.2.Stroke

Load Capacity



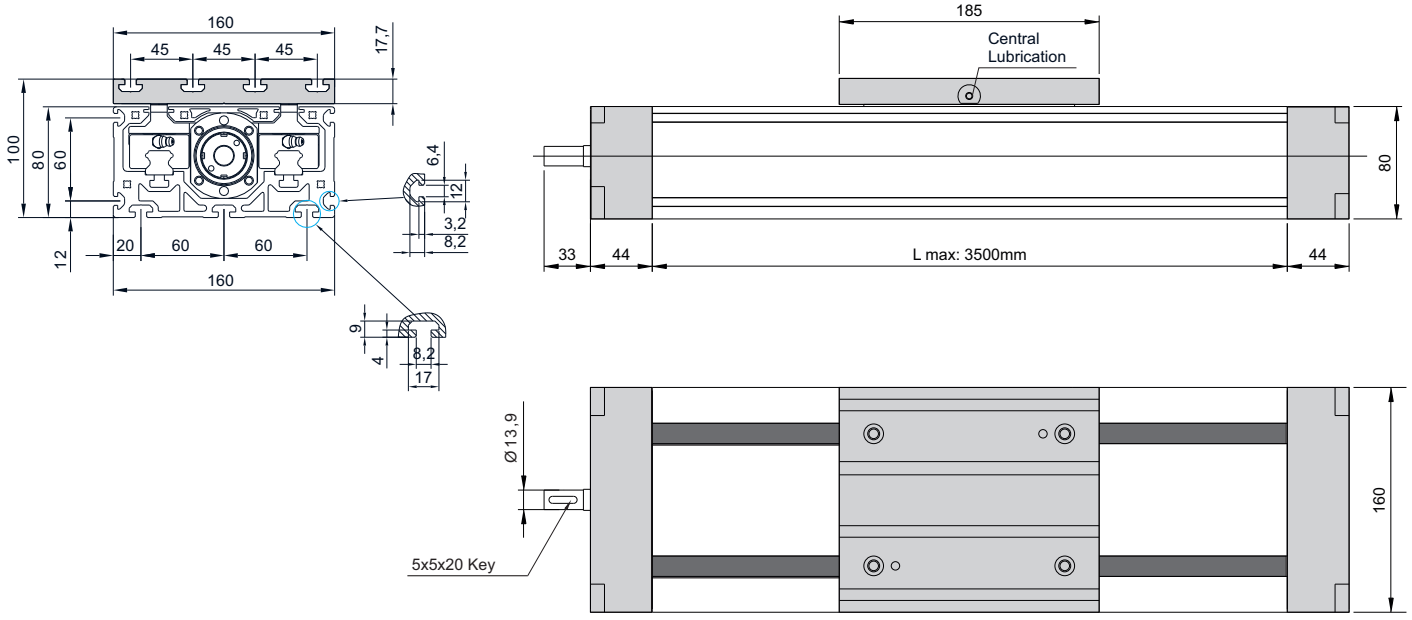
Load		Static
F_x	(N)	1850
F_y	(N)	4400
F_z	(N)	5760
Moment		
M_x	(Nm)	650
M_y	(Nm)	440
M_z	(Nm)	440

Note: Module has 4 pieces of blocks

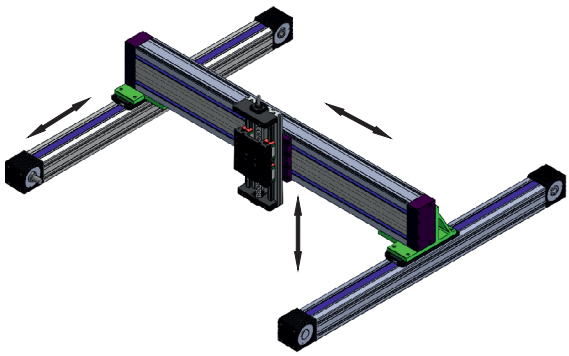
Technical Features

Body	;	80x160 Profile (Aluminium 6063) T5
Max Speed	;	0,17 - 0,34 - 0,52 - 0,85 m/sec
Pitch	;	5mm - 10mm - 25mm
Ballscrew	;	Ø25-05 / Ø25-10 / Ø20-20 / Ø25-25
Flange Nut	;	FSU 25-05 / FSU 20-20 / FSU 25-25
Linear Rail	;	20' Linear Rail
Linear Block	;	20' Narrow Linear Block
Positioning Accuracy	;	0,01 mm

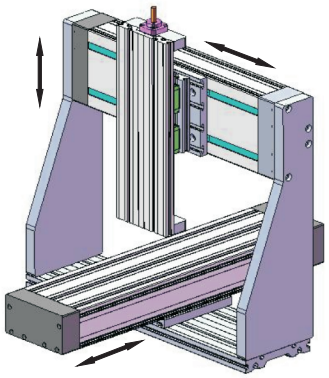
Technical Details



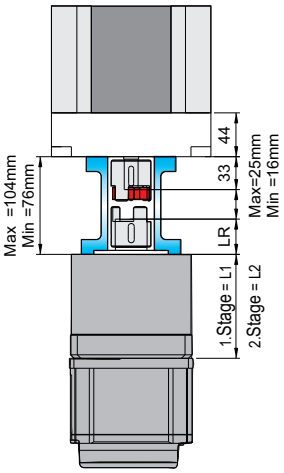
Applications



Gearbox Connection Details



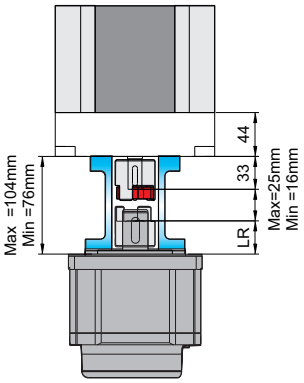
Motor Connection Details



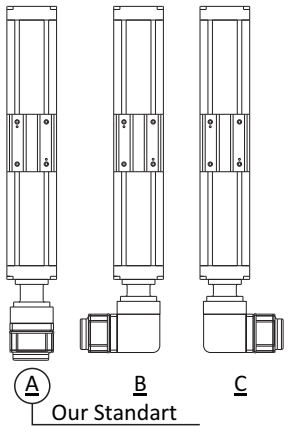
Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

PE 70 & PE 90 Series
Gearbox Options

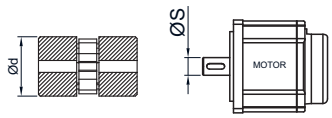
Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm



Drive Shaft Directions

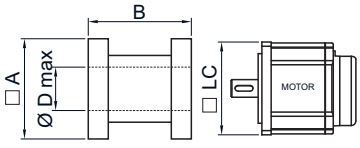


Coupling Options

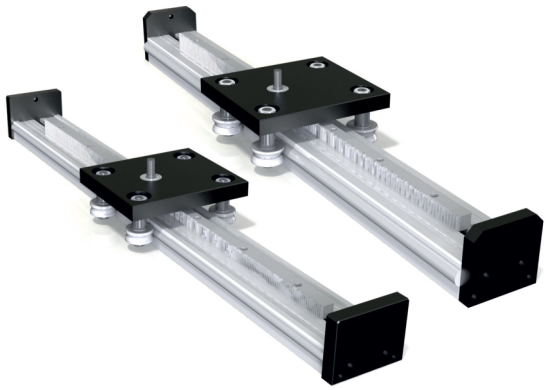


Coupling	Ød	ØS
GS 19	40	16 - 20
GS 24	55	21 - 28

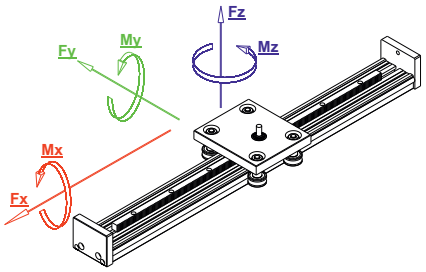
Motor Flange Options



Flange	A	B	ØDmax	LC
85 x 85	65 - 85	80 - 90	47	65 - 85
95 x 95	75 - 95	83 - 104	60	75 - 95



Load Capacity

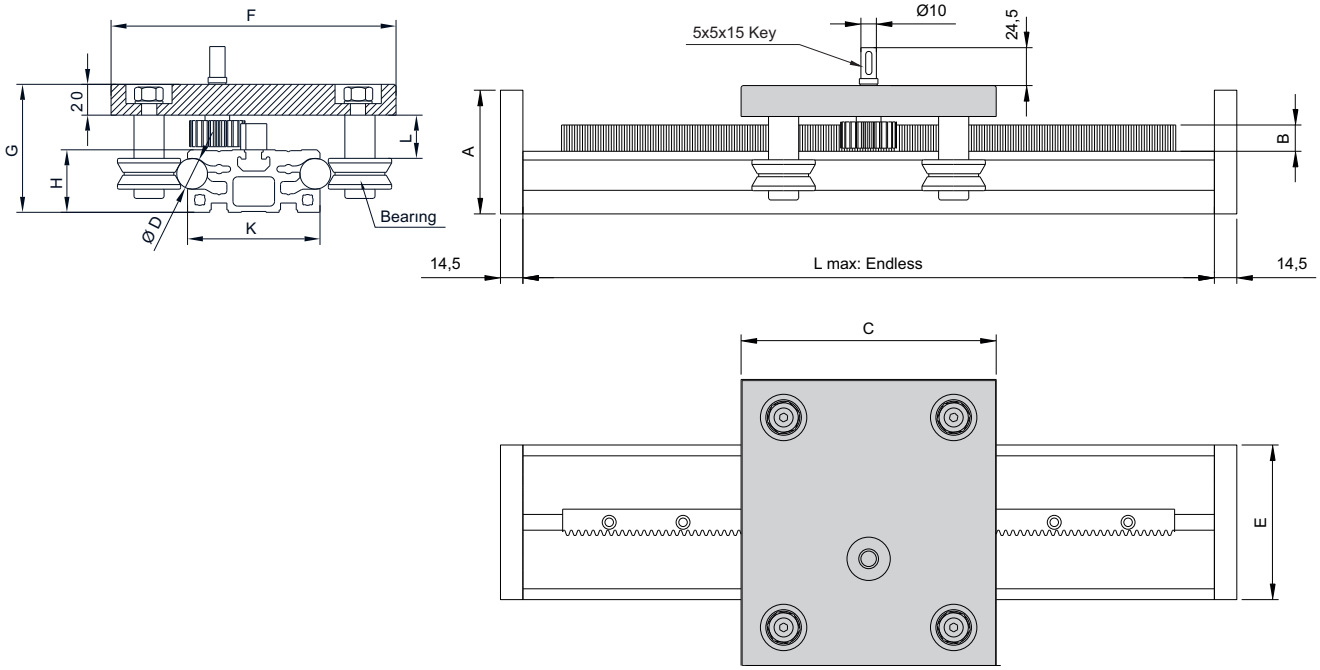


Load		Static	
Fx	(N)	Ø12	Ø20
Fy	(N)	870 - 1260	
Fz	(N)	1100 - 1870	
Moment			
Mx	(Nm)	70 - 95	
My	(Nm)	65 - 85	
Mz	(Nm)	75 - 115	

Technical Features

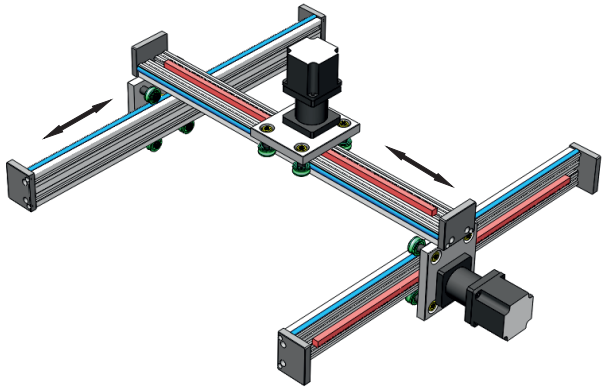
Body	;	30x82 - 40x86 Profile (Aluminium 6063) T5
Wax Speed	;	0,16 - 0,24 mt/sn
Pitch	;	69,08 mm - 103,62 mm
Rack Gear	;	Mod:1 Spur - Mod:1,5 Spur
Pinion Gear	;	Mod:1 Z:22 Flat - Mod:1,5 Z:22 Flat
Shaft	;	Ø12 - Ø20 Chrome Coated (20-33µm), Hardened, Cf53- H7
Track Roller Bearing	;	RV 201-12 KDD - RV 202-15 KDD
Gear Pitch	;	3,14 mm - 4,71 mm
Positioning Accuracy	;	0,2 mm

Technical Details

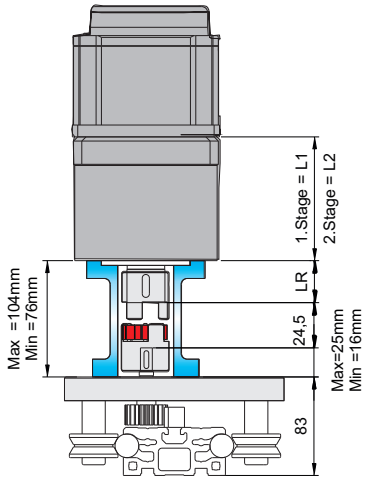


Code	Product Name	A	B	C	ØD	E	F	G	H	K	L	Bearing
5.4.01.030082.1.01.2.Stroke	Ø12 Rack Block Module	70	15X15 - MOD1	145	12	90	165	70,5	40,5	82	22,6	RV 201-12
5.4.01.040086.1.02.2.Stroke	Ø20 Rack Block Module	80	17X17 - MOD1,5	165	20	100	185	83	30	86	28	RV 202-15

Applications



Gearbox Connection Details

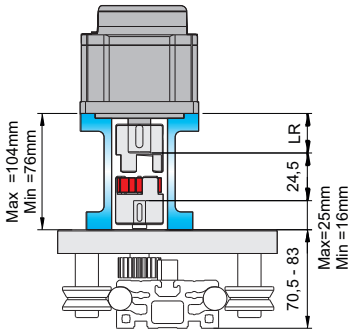


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

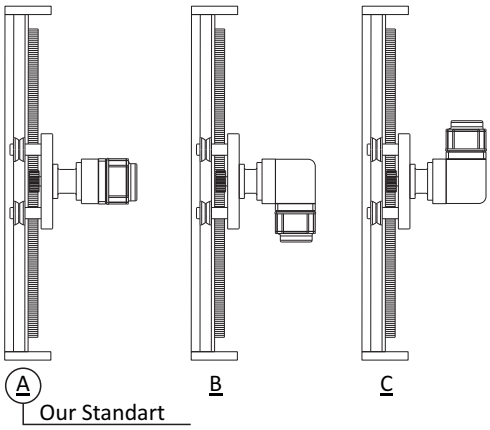
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

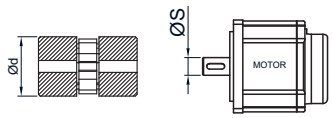
Motor Connection Details



Drive Shaft Directions

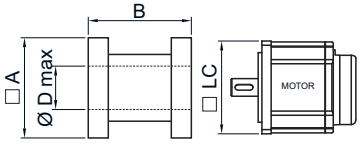


Coupling Options

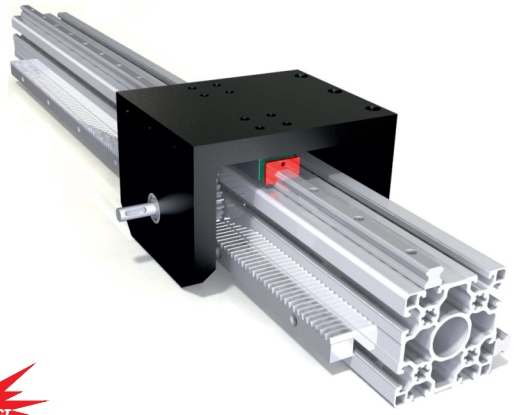


Coupling	Ød	ØS
GS 19	40	16 - 20

Motor Flange Options



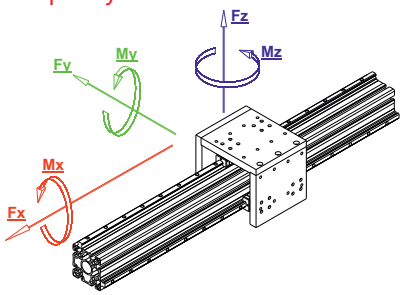
Flange	A	B	ØDmax	LC
85 x 85	65 - 85	80 - 90	47	65 - 85



NEW PRODUCT

Product Code : 5.4.08.090090.2.03.2.Stroke

Load Capacity

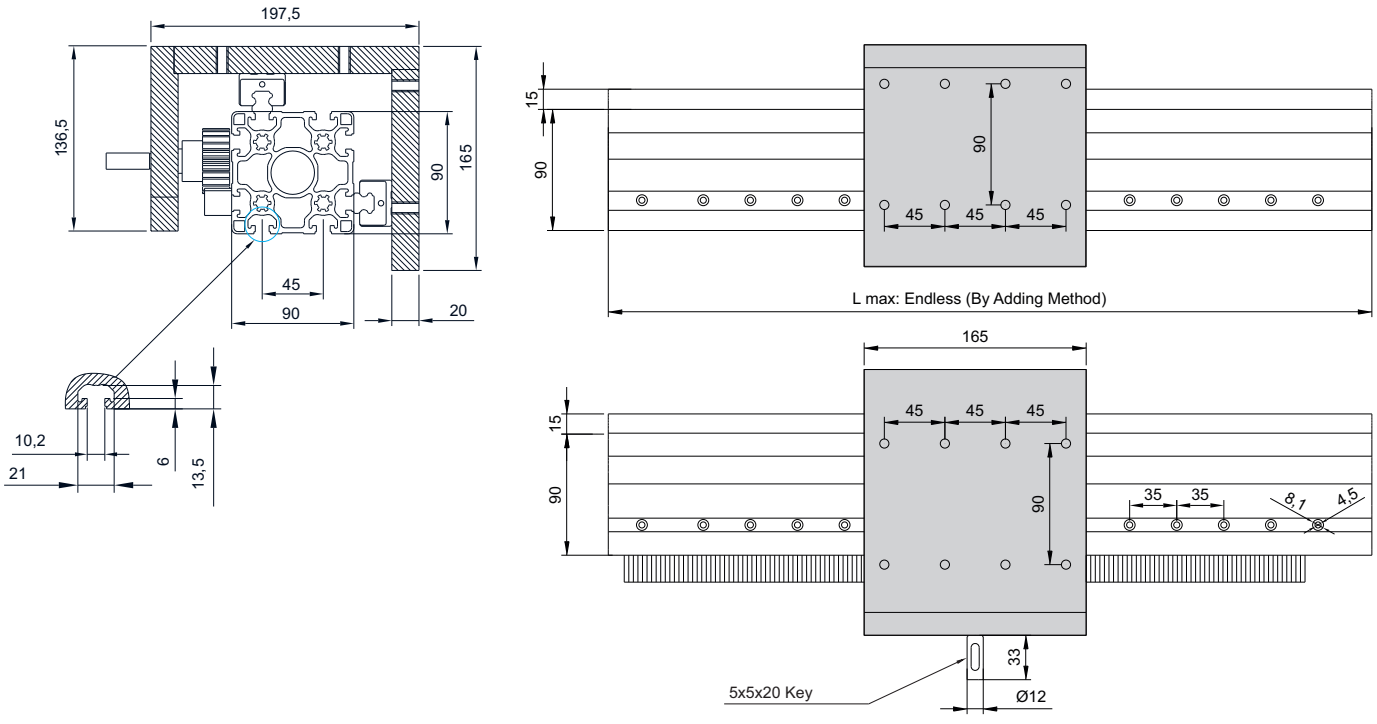


Load		Static
F_x	(N)	
F_y	(N)	2125
F_z	(N)	2125
Moment		
M_x	(Nm)	230
M_y	(Nm)	165
M_z	(Nm)	165

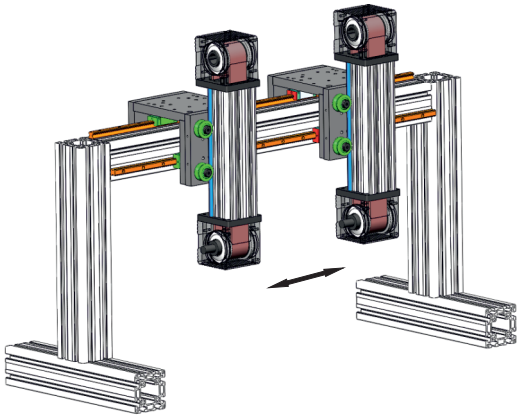
Technical Features

Body	;	90x90 Profile (Aluminium 6063) T5
Max Speed	;	2,2 m/sec
Pitch	;	138,16 mm
Rack Rack	;	Mod:2 Spur - Mod:2 Helical
Pinion Gear	;	Mod:2 Z:22 Spur - Mod:2 Z:22 Helical
Linear Rail	;	15' Linear Rail
Linear Block	;	15' Narrow Linear Block
Gear Pitch	;	6,28 mm
Positioning Accuracy	;	0,2 mm

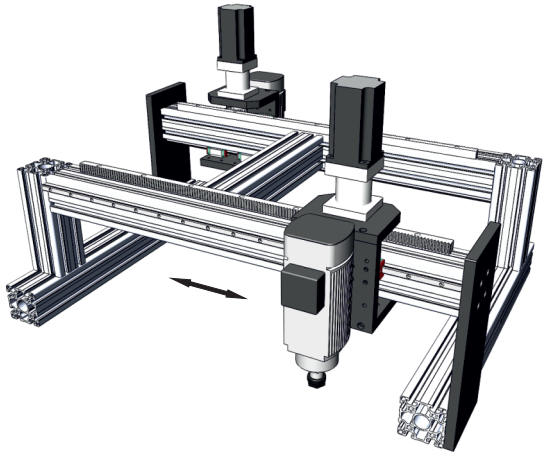
Technical Details



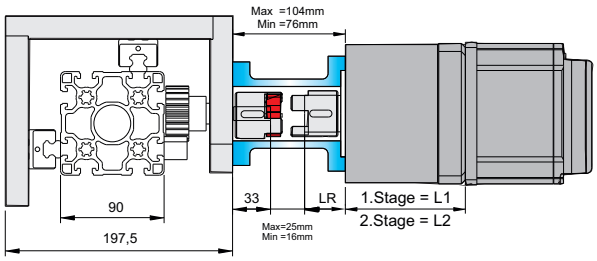
Applications

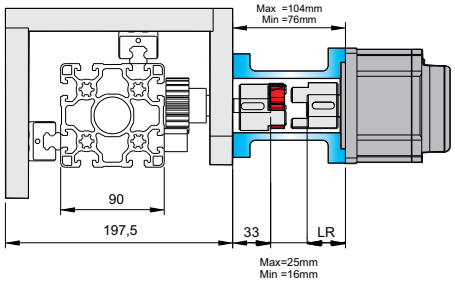


Gearbox Connection Details



Motor Connection Details



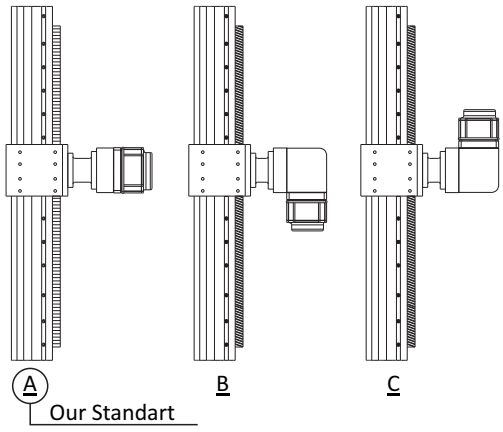


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

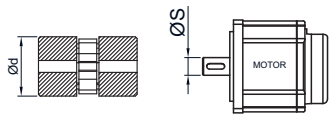
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

Drive Shaft Directions

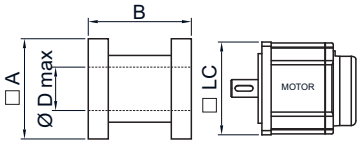


Coupling Options

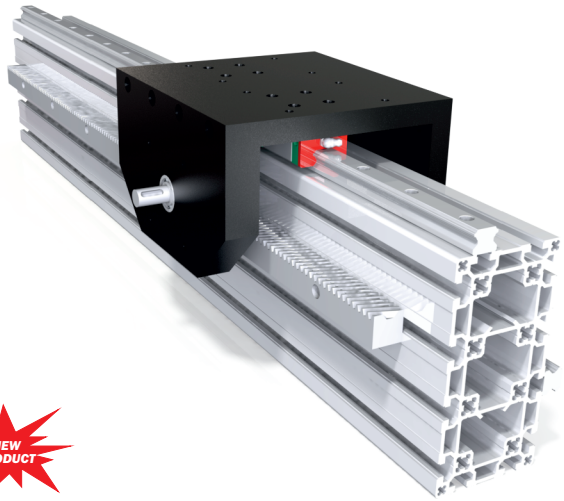


Coupling	Ød	ØS
GS 19	40	16 - 20

Motor Flange Options

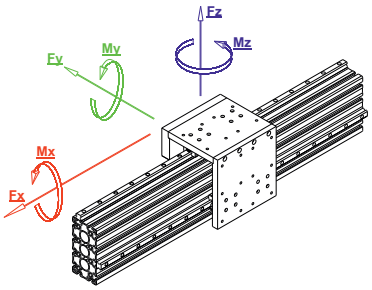


Flange	A	B	ØDmax	LC
85 x 85	65 - 85	80 - 90	47	65 - 85



Product Code : 5.4.08.090180.2.03.2.Stroke

Load Capacity

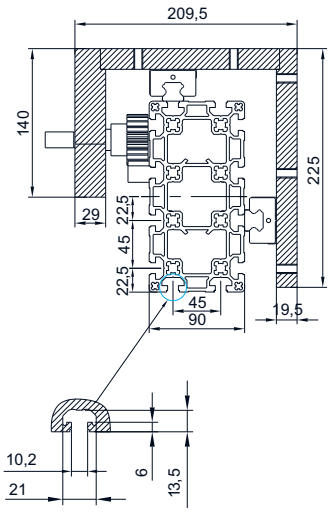


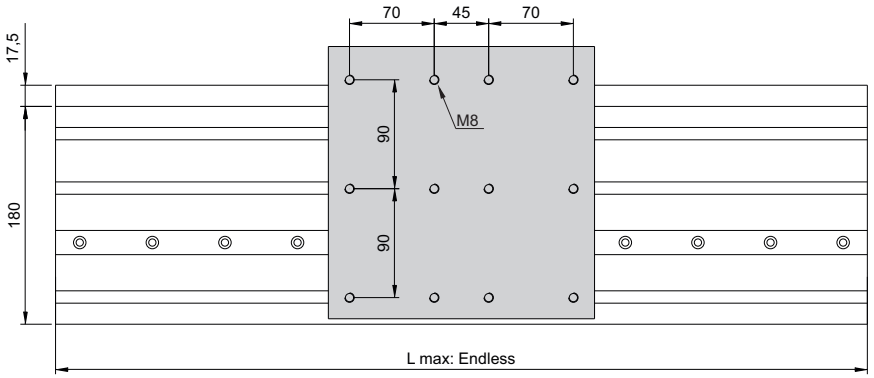
Load		Static
F_x	(N)	
F_y	(N)	2450
F_z	(N)	2450
Moment		
M_x	(Nm)	390
M_y	(Nm)	1245
M_z	(Nm)	245

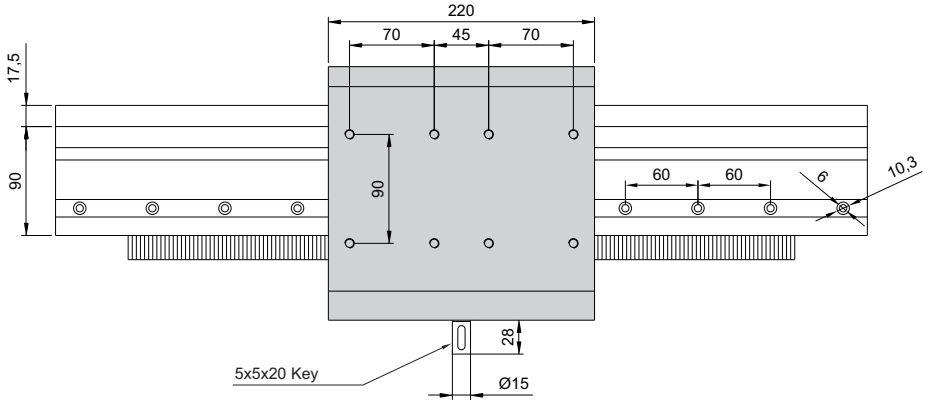
Technical Features

Body	;	90x90 Profile (Aluminium 6063) T5
Max Speed	;	2,2 m/sec
Pitch	;	138,16 mm
Rack Rack	;	Mod:2 Spur - Mod:2 Helical
Pinion Gear	;	Mod:2 Z:22 Spur - Mod:2 Z:22 Helical
Linear Rail	;	20' Linear Guideway
Linear Block	;	20' Narrow Linear Block
Gear Pitch	;	6,28 mm
Positioning Accuracy	;	0,2 mm

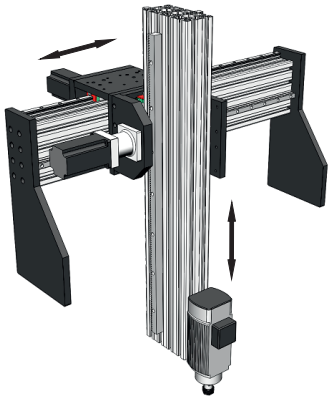
Technical Details

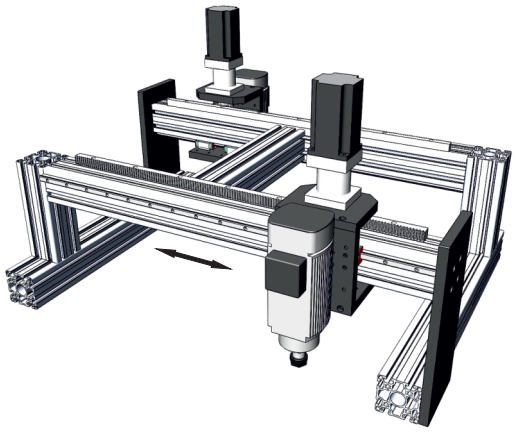






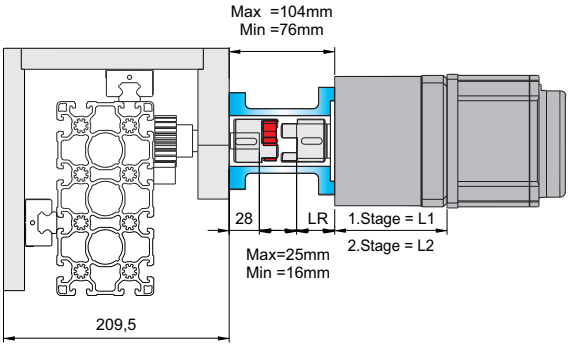
Applications

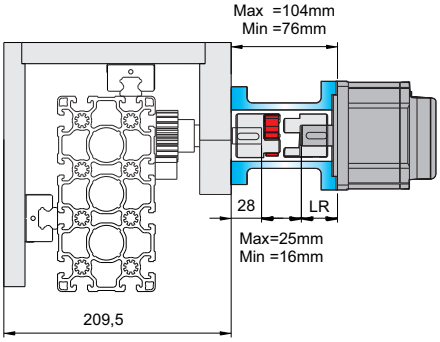




Gearbox Connection Details

Motor Connection Details



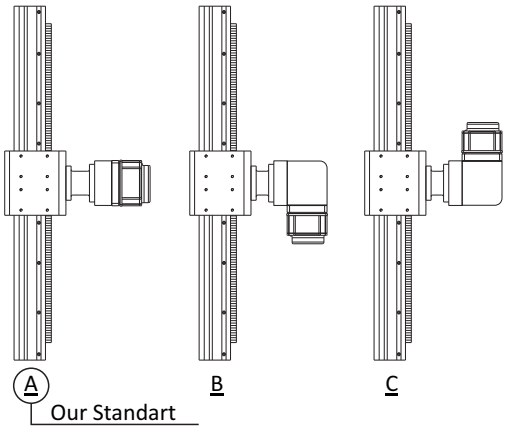


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

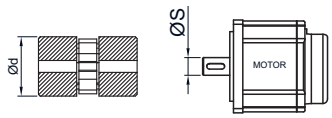
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

Drive Shaft Directions

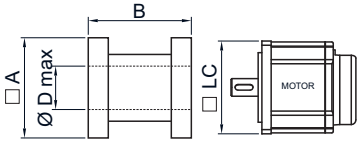


Coupling Options

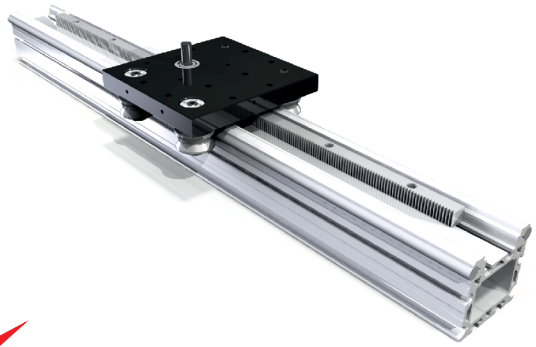


Coupling	Ød	ØS
GS 19	40	16 - 20
GS 24	55	21 - 28

Motor Flange Options



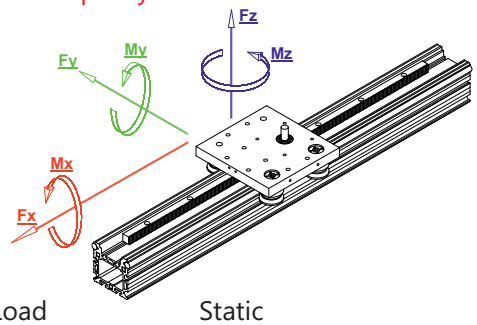
Flange	A	B	ØDmax	LC
85 x 85	65 - 85	80 - 90	47	65 - 85
95 x 95	75 - 95	83 - 104	60	75 - 95



NEW PRODUCT

Product Code : 5.4.08.080080.1.01.2.Stroke

Load Capacity

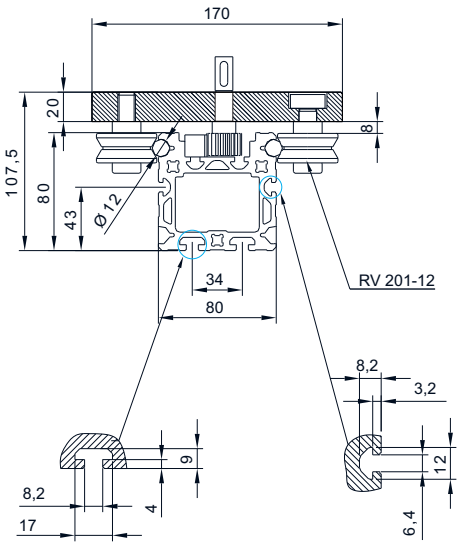


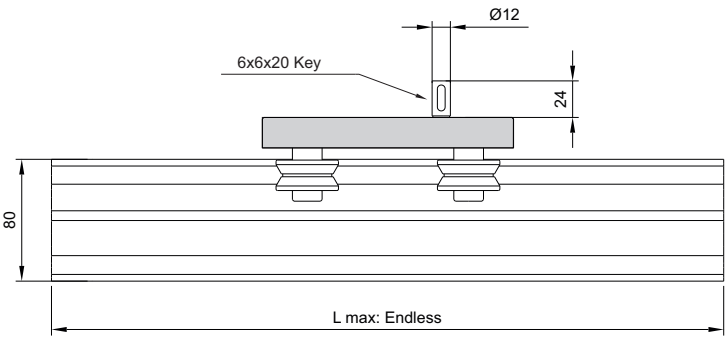
Load		Static
F_x	(N)	
F_y	(N)	870
F_z	(N)	1100
Moment		
M_x	(Nm)	70
M_y	(Nm)	65
M_z	(Nm)	75

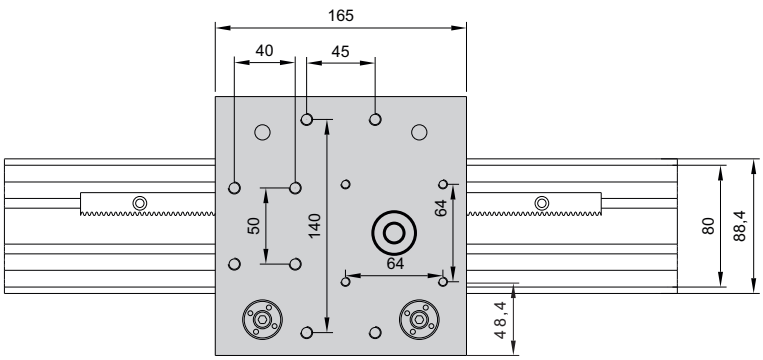
Technical Features

Body	;	80x80 Profile (Aluminium 6063) T5
Max Speed	;	1,1 m/sec
Pitch	;	69,08 mm
Rack Rack	;	Mod:1 Spur
Pinion Gear	;	Mod:1 Z:22 Spur
Shaft	;	Ø12 Chrome Coated (20-33µm), Hardened, Cf53- H7
Track Roller Bearing	;	RV 201-12 KDD
Gear Pitch	;	3,14 mm
Positioning Accuracy	;	0,2 mm

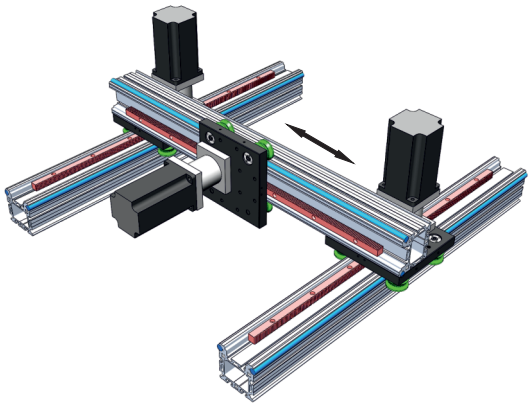
Technical Details



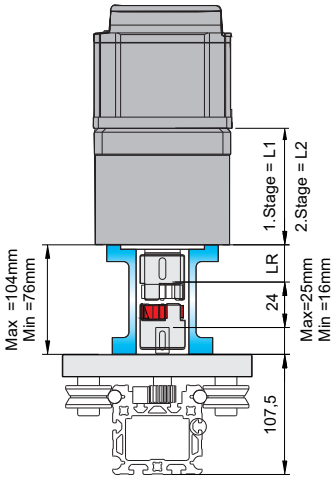




Applications



Gearbox Connection Details

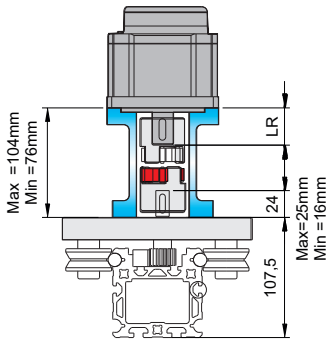


Gearbox Type	L1	L2
PE 70 (Best for 400W Servo)	98.5 mm	131.5 mm
PE 90 (Best for 750W, 1Kw, 1.5Kw Servo)	112 mm	152 mm

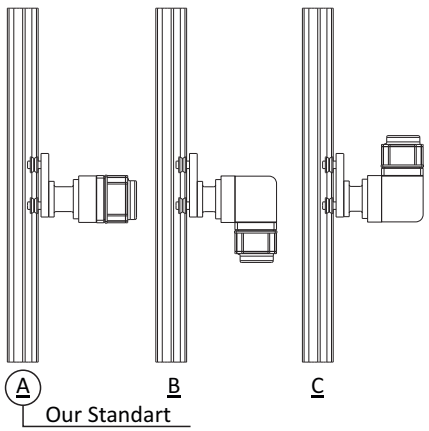
PE 70 & PE 90 Series
Gearbox Options

Ratio Options :
1.Stage : 3-4-5-7-10
2.Stage : 15-16-20-25-30-35-40-50-70-100
Max Output Torque : 104 Nm
Max. Input Rev/min : 6000 rpm

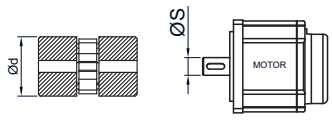
Motor Connection Details



Drive Shaft Directions

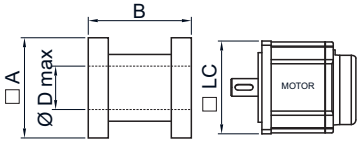


Coupling Options



Coupling	Ød	ØS
GS 19	40	16 - 20

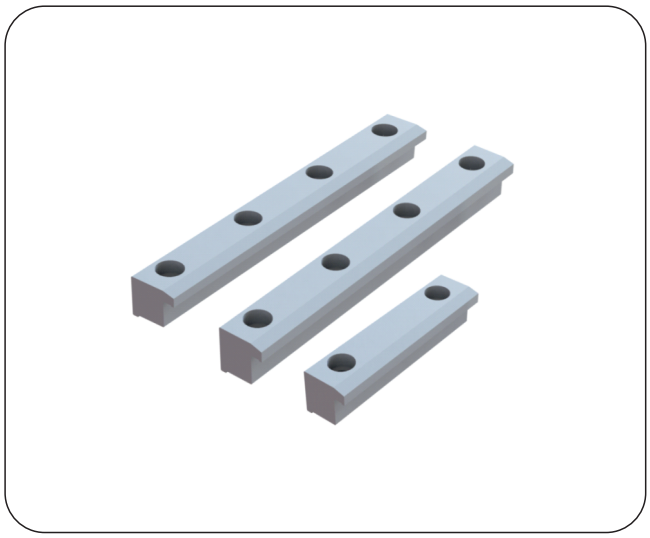
Motor Flange Options

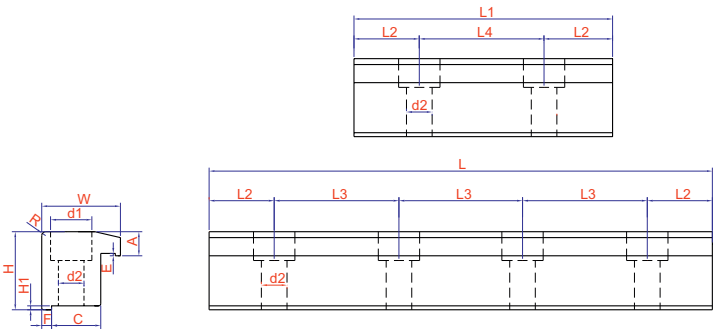


Flange	A	B	ØDmax	LC
85 x 85	65 - 85	80 - 90	47	65 - 85

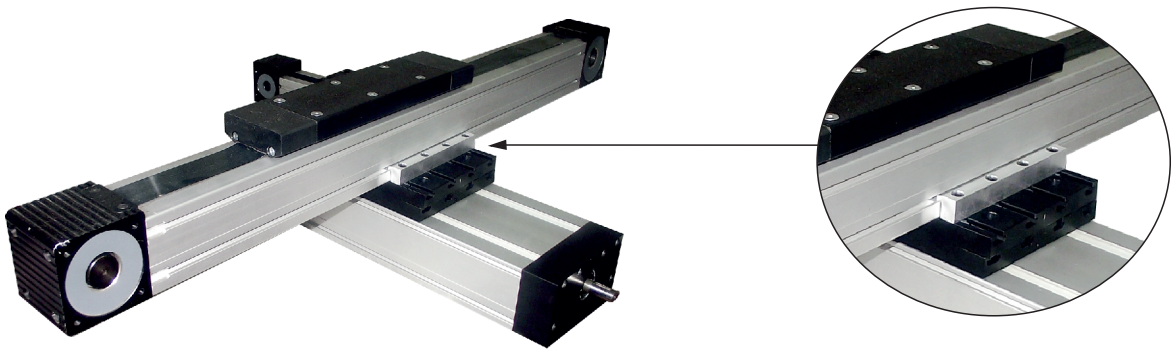
Using Areas

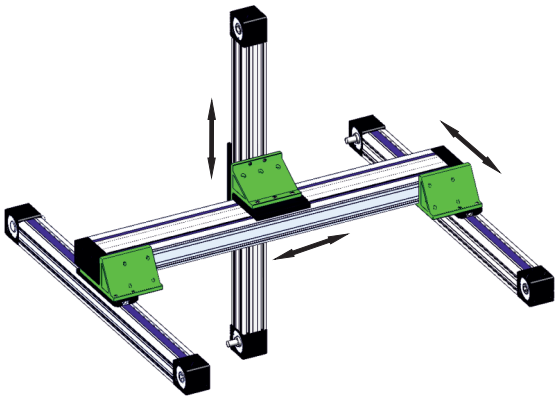
it's a kind of part which provides practical connection opportunities by using T slots on the modules

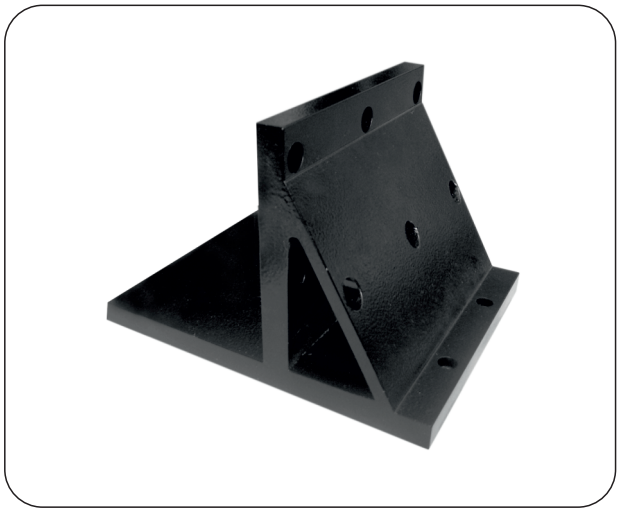


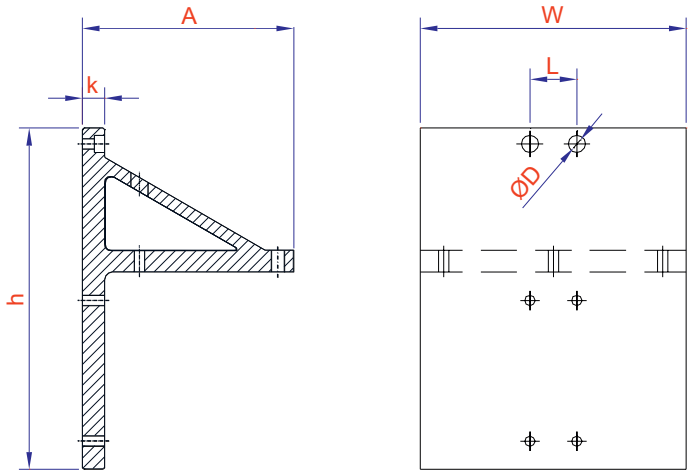


Code	Models	H	H1	d2	d1	E	A	R	W	C	L	L1	L2	L3	L4	F
7.26.080064.000000.00.10	80 x 80 - 64 x 64 Module Connection Adapter	19,8	1	6,5	10,5	0,5	6	0,5	20	12,5	160	-	12,5	45	60	2,5
7.26.100100.000000.00.10	100 x 100 Module Connection Adapter	30,3	1	6,5	10,5	0,5	6	0,5	20	12,5	-	85	12,5	-	60	2,5
7.26.045045.000000.00.10	45 x 45 Module Connection Adapter	22,9	1	6,5	10,5	-	5,5	0,5	20	12,5	-	85	12,5	-	60	2,5
7.26.080160.000000.00.10	80 x160 Module Connection Adapter	14,3	1	6,5	10,5	0,5	6	0,5	20	12,5	160	-	12,5	45	60	2,5
7.26.065145.000000.00.10	65 x 145 Module Connection Adapter	14,5	1	6,5	10,5	0,5	6	0,5	20	12,5	145	-	12,5	40	-	2,5
7.26.050110.000000.00.10	50 x110 Module Connection Adapter	10,5	1	6,5	10,5	0,5	6	0,5	20	12,5	-	60	10	-	40	2,5







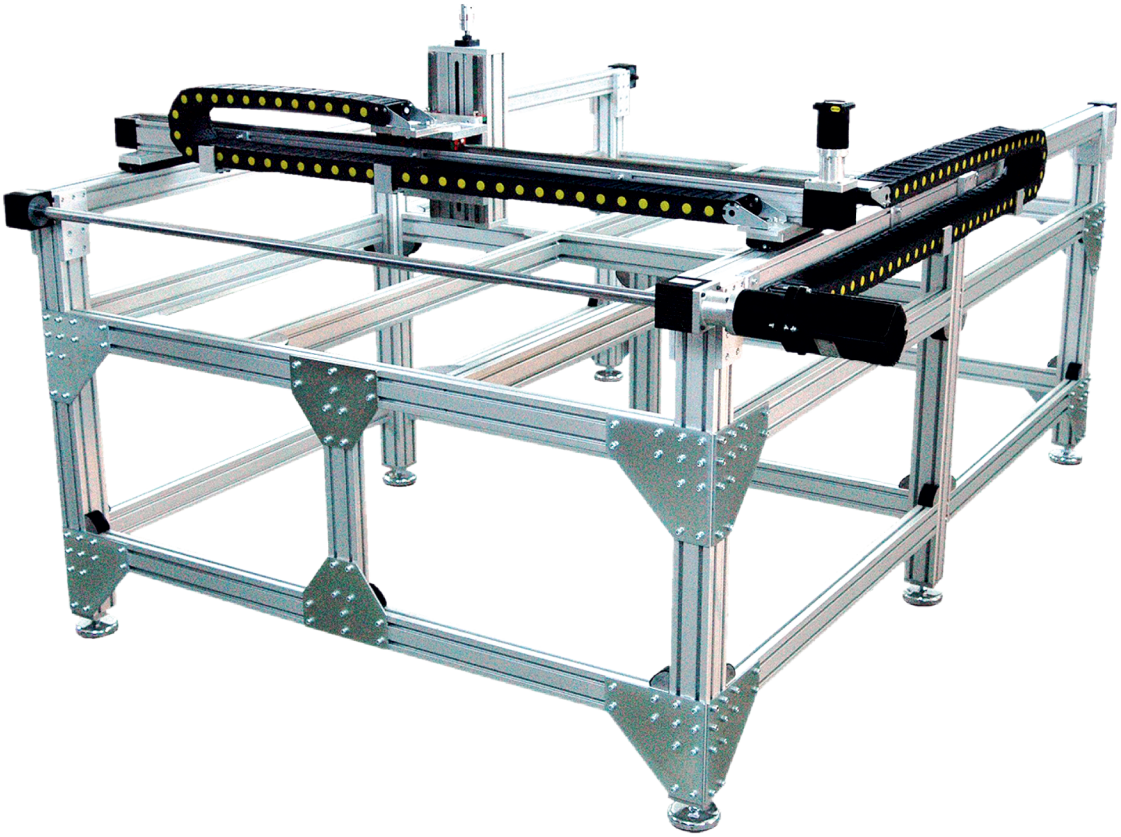


Code	Connection Place	h	ØD	k	W	A	L
7.26.080064.000000.01.10	80x80 - 64x64 X-Y, Y-Z Axis Adapter	218	8,5	14	170	110	30
7.26.080160.000000.01.10	80x80 - 80x160 X-Y, Y-Z Axis Adapter	218	8,5	14	200	110	60
7.26.100100.000000.01.10	100x100 - 100x100 X-Y, Y-Z Axis Adapter	218	8,5	14	200	140	75
7.26.080160.080080.01.10	80x160 - 80x80 X-Y, Y-Z Axis Adapter	218	6,5	14	170	140	60

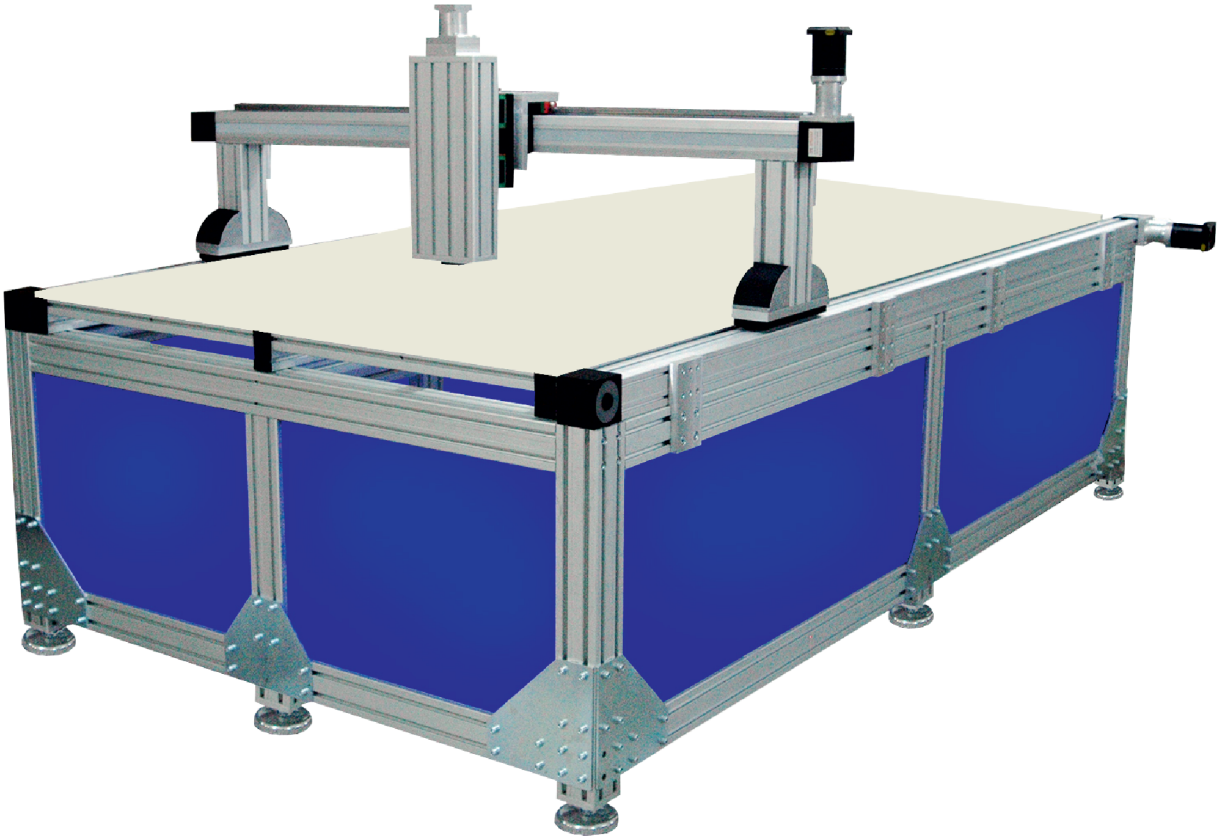
Features

It provides strong x-y , y-z axis connections that is made of die cast aluminium. it absorbs the vibrations with die cast iron material and tie piece structure.

Gantry System



Wood Processing Cnc Router



S-CNC-RV1 / RV2 / RV3

GENERAL FEATURES:

1- it has the features of machining wooden , plastic ,panel glass , aluminium and styrofoam

2- 15'lik Linear Guideway and 4 pieces blocks

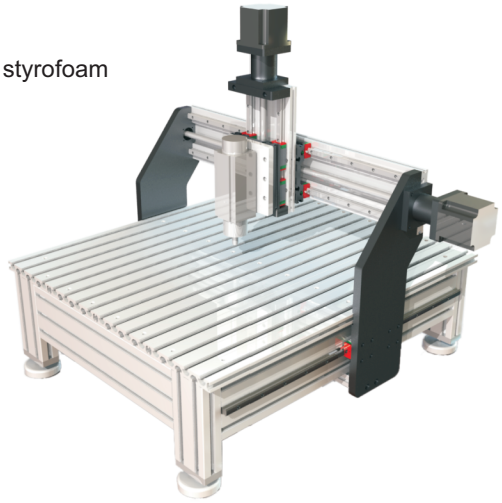
3- Ø16-05 Ballscrew

4- Precise aluminium construction body and modular system.

5- DKZM 15 Z Axis Module

6- Motor mounting options (Stepper or Servo Motor)

7- 22.5x180 T slot aluminium Plate



		Strokes		
Code	**Models**	X	Y	Z
5.9.1.1.0350.0350.0100	S-CNC-RV1	350 mm	350 mm	100 mm
5.9.1.1.0500.0350.0100	S-CNC-RV2	500 mm	350 mm	100 mm
5.9.1.1.0500.0530.0100	S-CNC-RV3	500 mm	530 mm	100 mm

S-CNC-LV1 / LV2 / LV3

GENERAL FEATURES:

1- it has the features of machining wooden , plastic ,panel glass , aluminium and styrofoam

2- Ø16 Hardened Chromed Shaft and four pieces of. Linear bearing

3- Ø16-05 Ballscrew

4- Metal sheet and Aluminium Body

5- DKVM 16 Z Axis Module

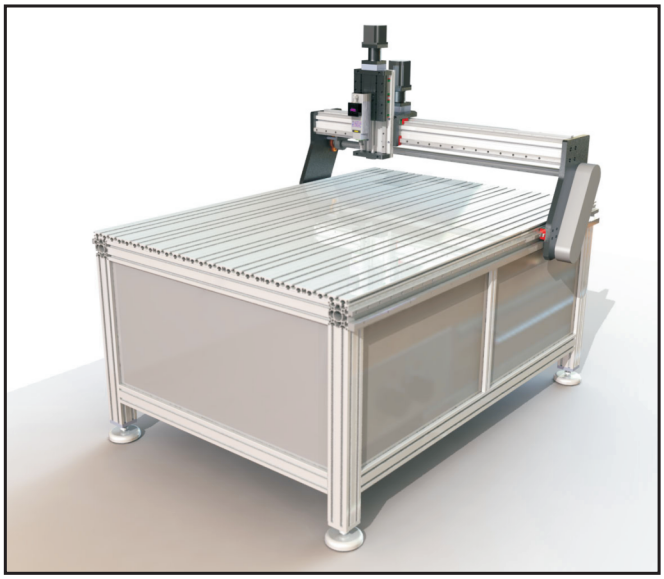
6- Motor mounting options (Stepper or Servo Motor)

7- 15x20 T slot aluminium Plate



		Strokes		
Code	**Models**	X	Y	Z
5.9.1.2.0350.0350.0100	S-CNC-LV1	350 mm	350 mm	100 mm
5.9.1.2.0500.0350.0100	S-CNC-LV2	500 mm	350 mm	100 mm
5.9.1.2.0500.0470.0100	S-CNC-LV3	500 mm	470 mm	100 mm

M-CNC-RV1 / RV2



GENERAL FEATURES:

1- it has the features of machining wooden , plastic ,panel glass, aluminium and styrofoam

2- 20'lik Linear Guideway and four pieces of blocks

3- Ø25-10 Ballscrew axis

4- Precise aluminium construction body and modular system

5- DKZM 15 Z Axis Module

6- Motor mounting options (Stepper or Servo Motor)

7- 22,5x180 T slot aluminium Plate

	Strokes			
Code	**Models**	**X**	**Y**	**Z**
5.9.2.1.1000.1000.0150	M-CNC-RV1	1000 mm	1000 mm	150 mm
5.9.2.1.1500.1000.0150	M-CNC-RV2	1500 mm	1000 mm	150 mm
5.9.2.1.2100.1000.0150	M-CNC-RV3	2100 mm	1000 mm	150 mm
5.9.2.1.2100.1500.0150	M-CNC-RV4	2100 mm	1540 mm	150 mm

M-CNC-KR1 / KR2

GENERAL FEATURES:

1- it has the features of machining wooden , plastic ,panel glass, aluminium and styrofoam

2- Special hollow type design for Plasma , Laser Cutting or Waterjet applications.

3- 20'lik Linear Guideway and four pieces of blocks

4- Mod 1,5 Rack / Z22 Pinion (X -Y Axis)

5- DKZM20 Z Axis Module

6- Precise aluminium construction body and modular system

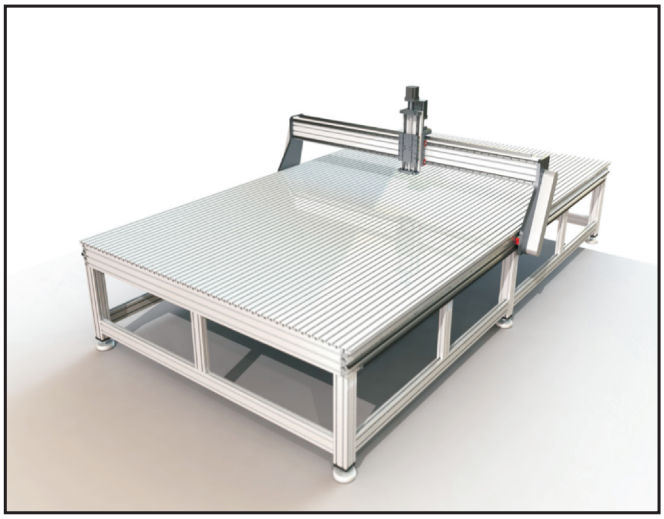
7- Motor mounting options (Stepper or Servo Motor)

8- as optional choice ; 22,5x180 T slot plate



	Strokes			
Code	**Models**	**X**	**Y**	**Z**
5.9.2.2.1500.1000.0150	M-CNC-KR1	1500 mm	1045 mm	150 mm
5.9.2.2.2100.1000.0150	M-CNC-KR2	2100 mm	1000 mm	150 mm
5.9.2.2.2100.1500.0150	M-CNC-KR3	2100 mm	1585 mm	150 mm

L-CNC- KR1 / KR2



GENERAL FEATURES:

1- it has the features of machining wooden , plastic ,panel glass, aluminium and styrofoam

2- 20'lik Linear Guideway and 4 pieces blocks

3- Mod 2 Rack / Pinion(X - Y Axis)

4- Hassas, rijit Alüminyum Konstrüksiyon gövde ve modül sistemi

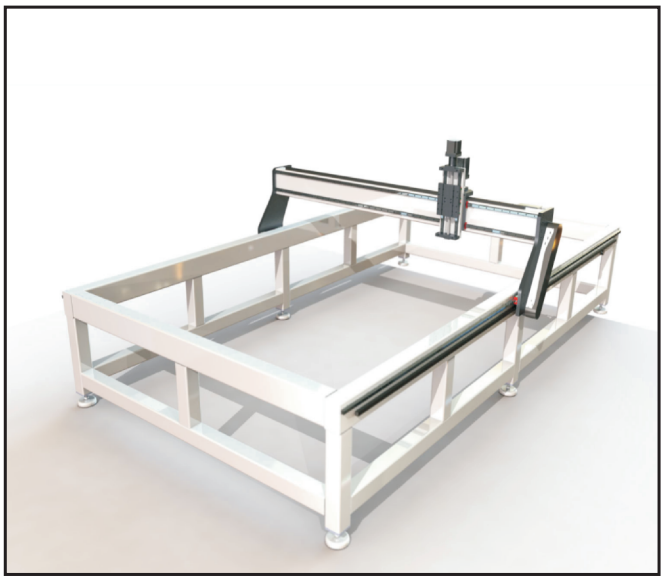
5- DKZM20 Z Axis Module

6- Motor mounting options (Stepper or Servo Motor)

7- 22,5x180 T slot plate

	Strokes			
Code	**Models**	**X**	**Y**	**Z**
5.9.3.1.3000.1500.0200	L-CNC-KR1	3000 mm	1560 mm	200 mm
5.9.3.1.4000.2100.0200	L-CNC-KR2	4000 mm	2100 mm	200 mm
5.9.3.1.6000.2100.0200	L-CNC-KR3	6000 mm	2100 mm	200 mm
5.9.3.1.6000.4000.0200	L-CNC-KR4	6000 mm	4080 mm	200 mm

L-CNC-CL1 / CL2



GENERAL FEATURES:

1- it has the features of machining wooden , plastic ,panel glass, aluminium and styrofoam

2- Special hollow type design for Plasma , Laser Cutting or Waterjet applications.

3- Linear Guideway and four pieces of blocks

4- Rack / Pinion drive

5- Strong Steel Construction

6- DKZM20 Z Axis Module

7- Motor mounting options (Stepper or Servo Motor)

	Strokes			
Code	**Models**	**X**	**Y**	**Z**
5.9.3.2.3000.1500.0200	L-CNC-CL1	3000 mm	1500 mm	200 mm
5.9.3.2.4000.2100.0200	L-CNC-CL2	4000 mm	2100 mm	200 mm
5.9.3.2.6000.2100.0200	L-CNC-CL3	6000 mm	2100 mm	200 mm
5.9.3.2.6000.4000.0200	L-CNC-CL4	6000 mm	4000 mm	200 mm

Notes :

The datum which take part in this technical catalog, it is based on scientific and practical informations.Please take technical team's advice related to how and where you can use the producst.Dogus Kalıp Metal ve Form San. Dış. Tic. Ltd. Şti. couldn't held responsible due to false use. The users are responsible from correct use of product. Our company only is responsible from product quality. This catalog invalidate the informations which take part in the past catalog. Our company has right to make changes witout notice in any information and content detail in this catalog.

In this catalogue renders all drawing, design, photography, and visual elements belong to Doguş Kalıp and cannot be used without permission. Providing keep secret copyright and property rights, It is benefited from this catalog facilities with purpose of personal and non-commercial using. It reserve the right legal proceedings about using against international copyright and trade materials.

ROBOTIC MARKET HAS OPENED!



- Palletizer Type Robots (Pick & Place)
- Cartesian Type Robots
- Delta Type Robots
- Scara Type Robots

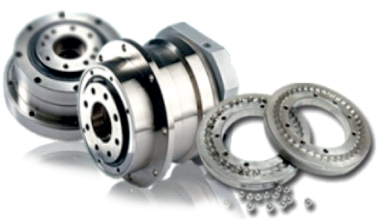
Rotary Table



It is available at our stocks since

Ø 060 - Ø 085 - Ø 130 - Ø 230 - mm diameters

Cycloid Reducer



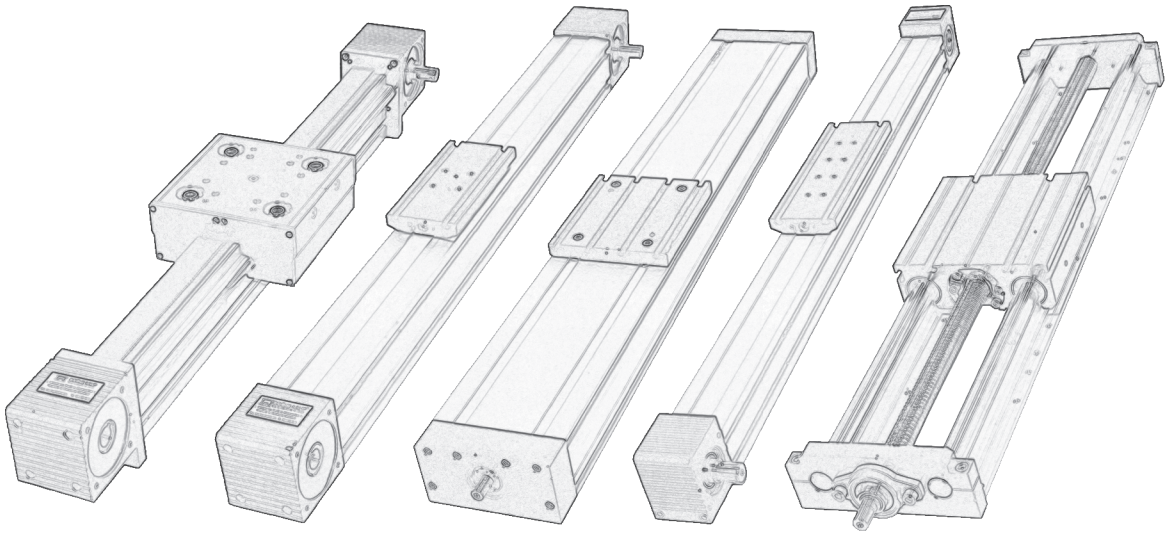
It is available different exchange ratios at our stocks since 50-70-90-110-130 body

90° Transmission Reducer



It is available different exchange ratios at our stocks since 50-70-90-110-130 body

THRUST BEARINGS DRIVE



Basım Yeri: Narfen Medya Reklam Ambalaj Baskı Teknolojileri San. ve Tic. Ltd. Şti.
Ç.O.S.B. Gaziosmanpaşa Mah. 21. Sok. No:9 Çerkezköy / Tekirdağ
Basım Tarihi: 28 / 10 / 2015

DOĞUŞ KALIP®
METAL VE FORM SAN. DIŞ. TİC. LTD.ŞTİ.

T.C. SANAYİ VE TİCARET BAKANLIĞI
KOSGEB
KÜÇÜK VE ORTA ÖLÇEKLİ SANAYİ GELİŞTİRME VE DESTEKLEME İDARESİ BAŞKANLIĞI

İkitelli Branch:
İkitelli Org. San. Böl. Eskoop San. Sit. C2 Blok No: 48
Başakşehir / İSTANBUL
Tel: +90 212 549 24 06 - 07 Fax: +90 212 549 24 11
E-Mail: sales3@doguskalip.com.tr

Bayrampaşa Headquarters:
Terazidere Mah. Çiftehavuzlar Cad. Melihbey İşhanı
No: 36 /6 Bayrampaşa / İSTANBUL
Tel: +90 212 480 08 21 Pbx Fax: +90 212 480 08 35
E-Mail: export@doguskalip.com.tr

İmes Branch:
İmes Sanayi Sitesi C Blok 304 Sokak No: 1
Yukarı Dudullu - Ümraniye / İstanbul
Tel: +90 216 540 11 23 - 24 Fax: +90 216 540 11 25

Hadımköy Branch:
Alkop San. Sitesi Akçaburgaz Mah. 1592 Sokak A11
Blok No: 9 - 10 Esenyurt / İSTANBUL
Tel: +90 212 858 11 13 - 14 Fax: +90 212 858 11 15
E-Mail: sales4@doguskalip.com.tr

İzmir Branch:
Karacaoğlan Mah. 6169 Sokak No: 7-A Işıkkent
Bornova / İZMİR
Tel: +90 232 472 24 61 Pbx Fax: +90 232 472 24 60

Gebze Branch:
Gaziler Mahallesi İbrahim Ağa Caddesi No:273/1
Gebze / KOCAELİ
Tel: +90 262 643 60 40 - 50 Fax: +90 262 643 60 34
E-Mail: sales2@doguskalip.com.tr