

OSP-E..SB

Linear Drive with Ball Screw

Size 25, 32, 50



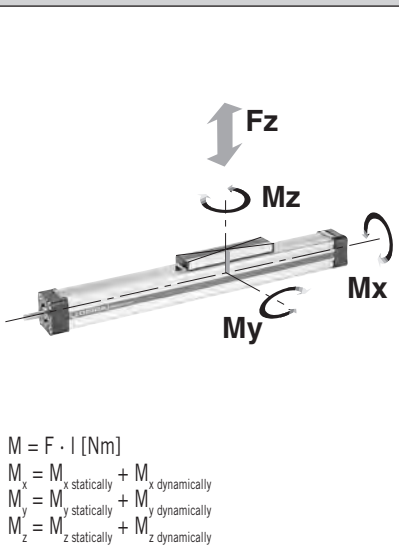
Standard Versions:

- Standard carrier with internal plain bearing guide
- Dovetail profile for mounting of accessories and the actuator itself
- Pitches of Ball Screw Spindle
 - Type OSP-E25 : 5 mm
 - Type OSP-E32: 5 , 10 mm
 - Type OSP-E50: 5, 10, 25 mm

Options:

- Tandem-Version
- Clean room-version, according to DIN EN ISO 14644-1
- Displacement Measuring System SFI-plus (Data Sheet 1.40.035E)

Forces, loads and moments



Performance Overview

Characteristics	Unit	Description					
		OSP-E25SB		OSP-E32SB		OSP-E50SB	
Series		OSP-E25SB		OSP-E32SB		OSP-E50SB	
Pitch	[mm]	5	5	10	5	10	25
Max. speed	[m/s]	0.25	0.25	0.5	0.25	0.5	1.25
Linear motion per revolution drive shaft	[mm]	5	5	10	5	10	25
Max. rpm, drive shaft	[min ⁻¹]	3 000	3 000		3 000		
Max. effective action force F _A	[N]	250	600		1 500		
Corresponding torque on drive shaft	[Nm]	0.35	0.75	1.3	1.7	3.1	7.3
No-load torque	[Nm]	0.2	0.2	0.3	0.3	0.4	0.5
Max. allowable torque on drive shaft	[Nm]	0.6	1.5	2.8	4.2	7.5	20
Repeatability	[mm/m]	±0.05		±0.05		±0.05	
Max. Standard stroke length	[mm]	1100	2000		3200		

Maximum Permissible Loads

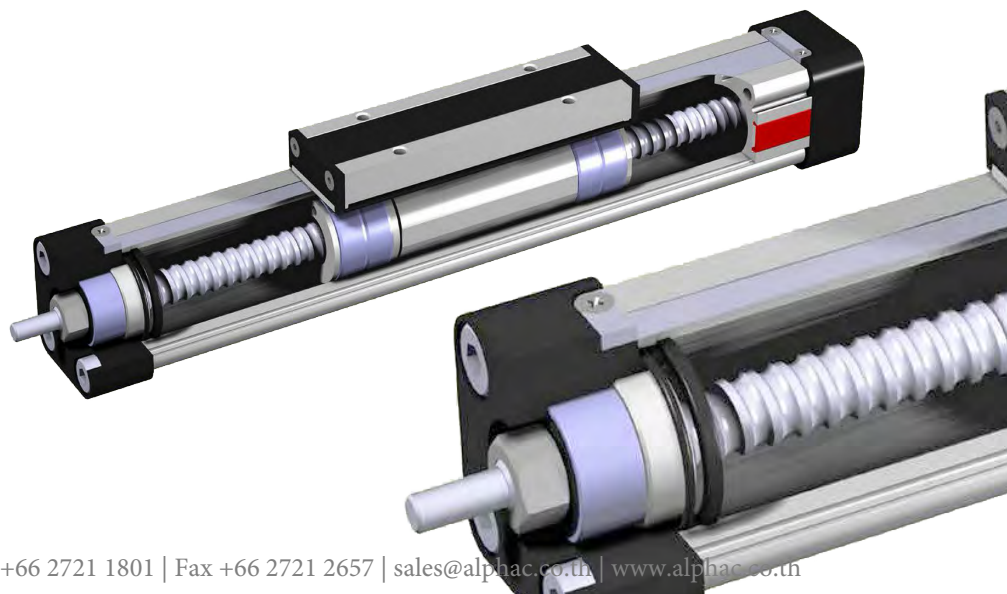
T3

Series	Max. applied load [N] Fz	Max. moments [Nm]		
		Mx	My	Mz
OSP-E25SB	500	2	12	8
OSP-E32SB	1 200	8	25	16
OSP-E50SB	3 000	16	80	32

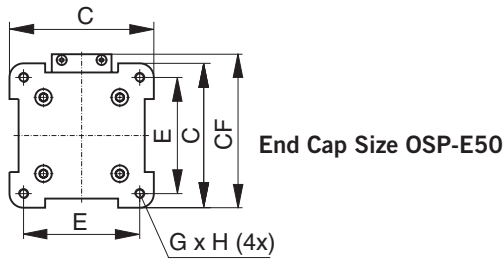
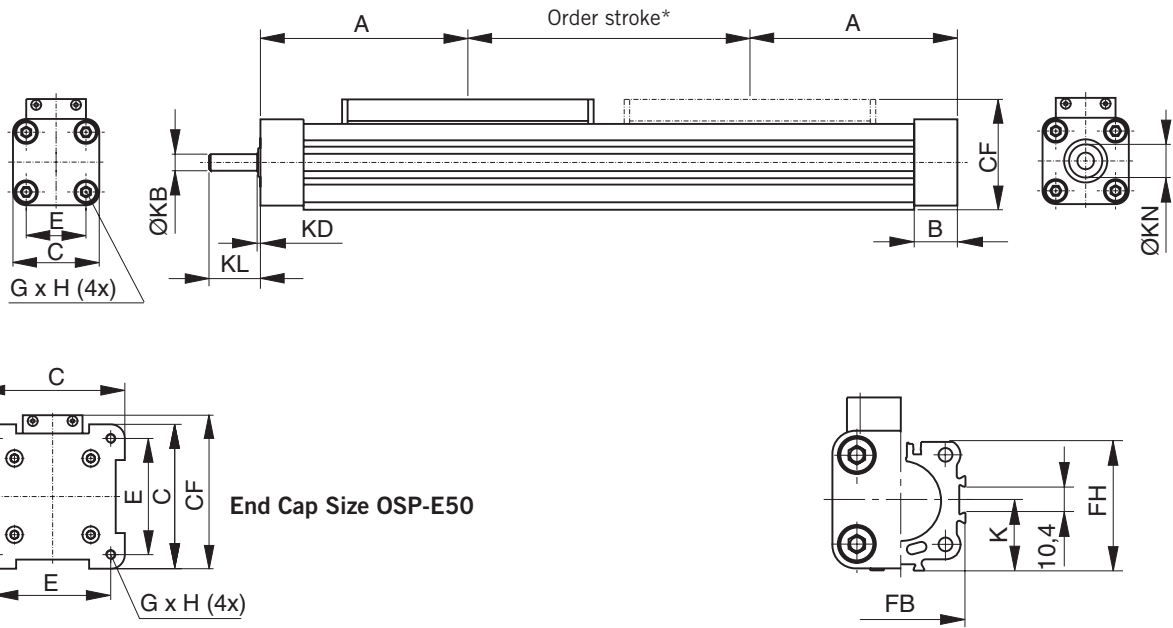
Equation for combined loads

$$\frac{F_z}{F_z \text{ (max)}} + \frac{M_x}{M_x \text{ (max)}} + \frac{M_y}{M_y \text{ (max)}} + \frac{M_z}{M_z \text{ (max)}} \leq 1$$

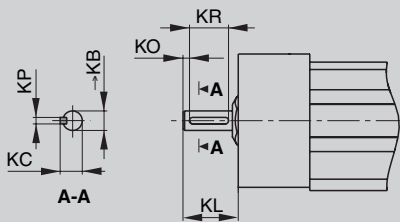
The total of loads must not exceed >1 under any circumstances.



**Linear Drive with Ball Screw Drive – Basic Unit
Series OSP-E..SB**



Plain shaft with keyway (Option)



Dimension Table [mm]

Series	ØKB _{h7}	KC	KL Opt.3	Opt.4	KO	KP ^{P9}	KR
OSP-E25SB	6	6.8	17	24	2	2	12
OSP-E32SB	10	11.2	31	41	5	3	16
OSP-E50SB	15	17	43	58	6	5	28

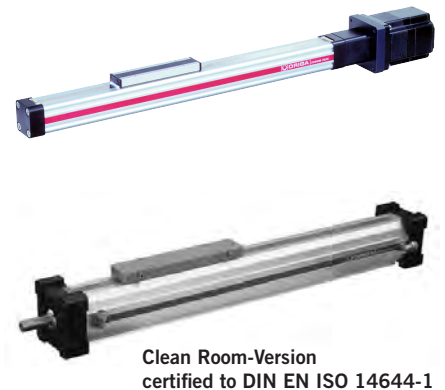
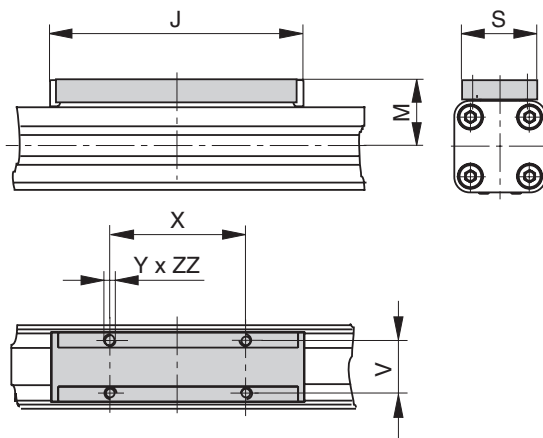
Option 3: Keyway
Option 4: Keyway long version

*** Note:**

The mechanical end position must not be used as a mechanical end stop. Allow an additional safety clearance at both ends equivalent to the linear movement of one revolution of the drive shaft, but at least 25 mm.

Order stroke = required travel + 2 x safety distance.

The use of an AC motor with frequency converter normally requires a larger safety clearance than that required for servo systems. For further information, please contact your local HOERBIGER-ORIGA representative.



Dimension table [mm]

Series	A	B	C	E	G x H	J	K	M	S	V	X	Y	CF	FB	FH	KB	KD	KL	KM _{min}	KN	ZZ
OSP-E25SB	100	22	41	27	M5 x 10	117	21.5	31	33	25	65	M5	52.5	40	39.5	6 _{h7}	2	17	120	13	8
OSP-E32SB	125	25.5	52	36	M6 x 12	152	28.5	38	36	27	90	M6	66.5	52	51.7	10 _{h7}	2	31	165	20	10
OSP-E50SB	175	33	87	70	M6 x 12	200	43	49	36	27	110	M6	92.5	76	77	15 _{h7}	3	43	235	28	10

ORIGA SYSTEM PLUS OSP-E

Electric Drives

OSP-E..B Toothed Belt
High Speed



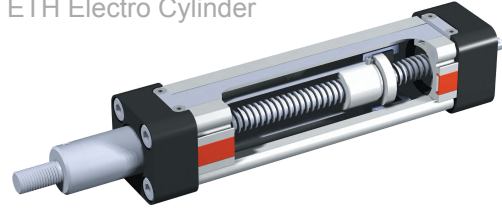
OSP-E..SB Ball Screw
High Force



OSP-E..BH2 Belt Heavy Duty
Single Rail, Recirculating Ball Bearing Guide



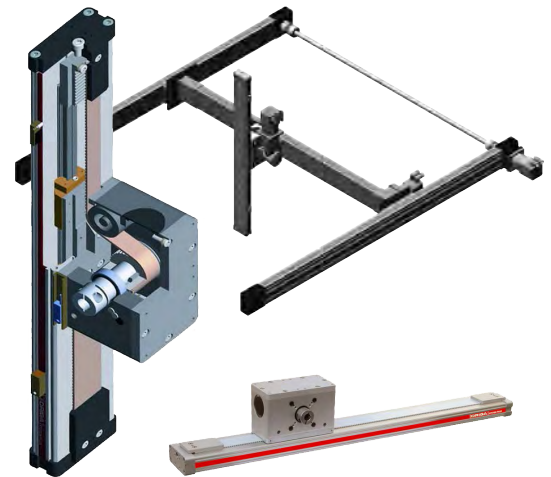
OSP-E..SBR Rod Screw
ETH Electro Cylinder



HMR High Moment Rodless
Double Rails, Recirculating Ball Bearing Guide



OSP-E..BV Belt Vertical
Vertical Lifting in Multi-Axis



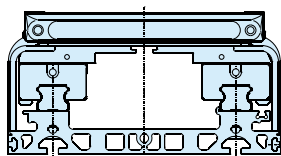
HMR-B Belt
Fast & Positioning



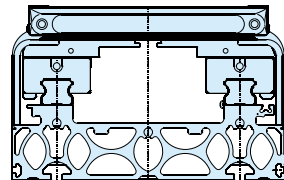
HMR-S Screw
Force & Precision



HMR Basic
Direct mounting on the machine bed



HMR Reinforce
Self-supporting systems



Multi-Axis Systems
XYZ: HMR, BH2, BV, OSP-E with Guide

