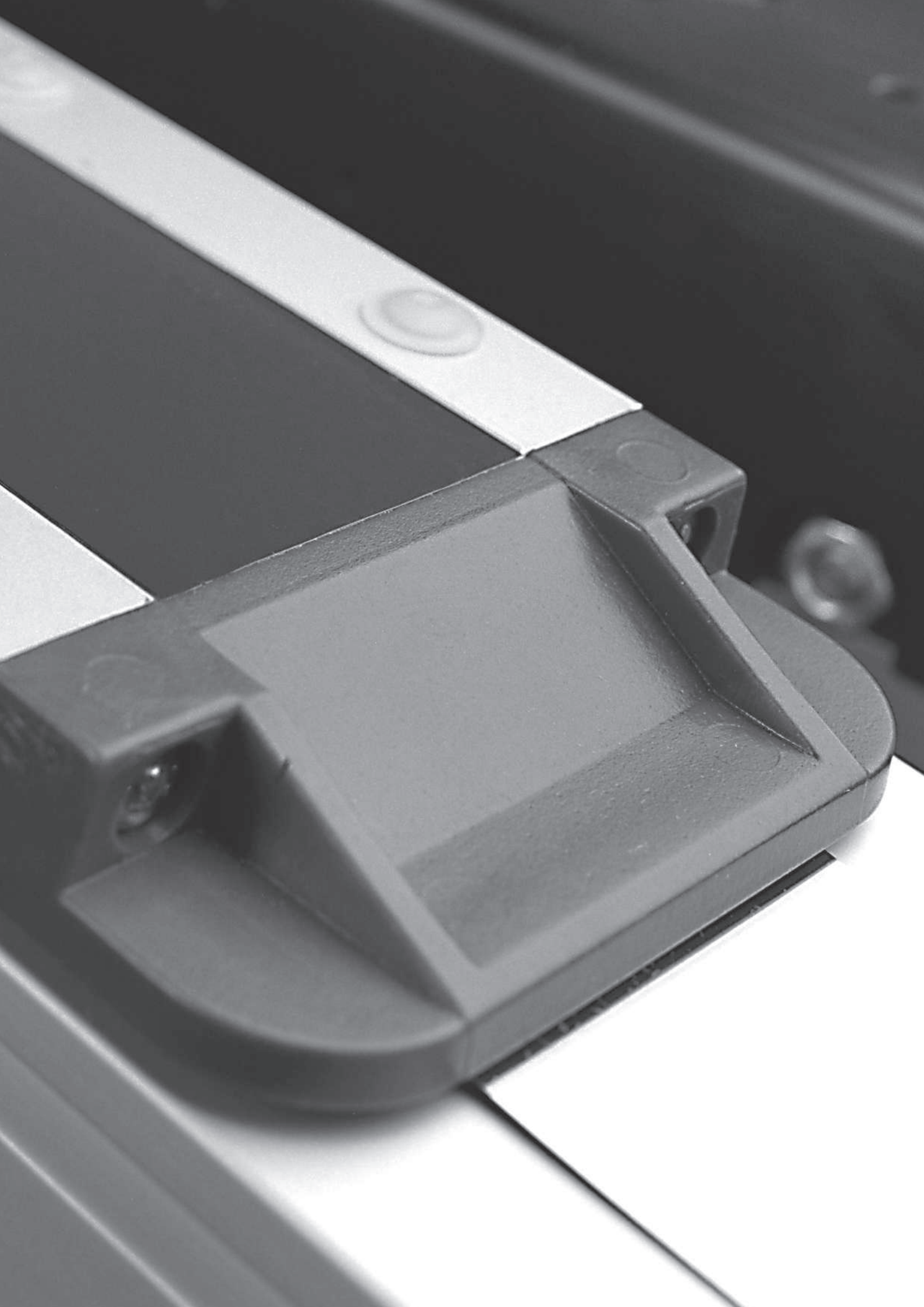
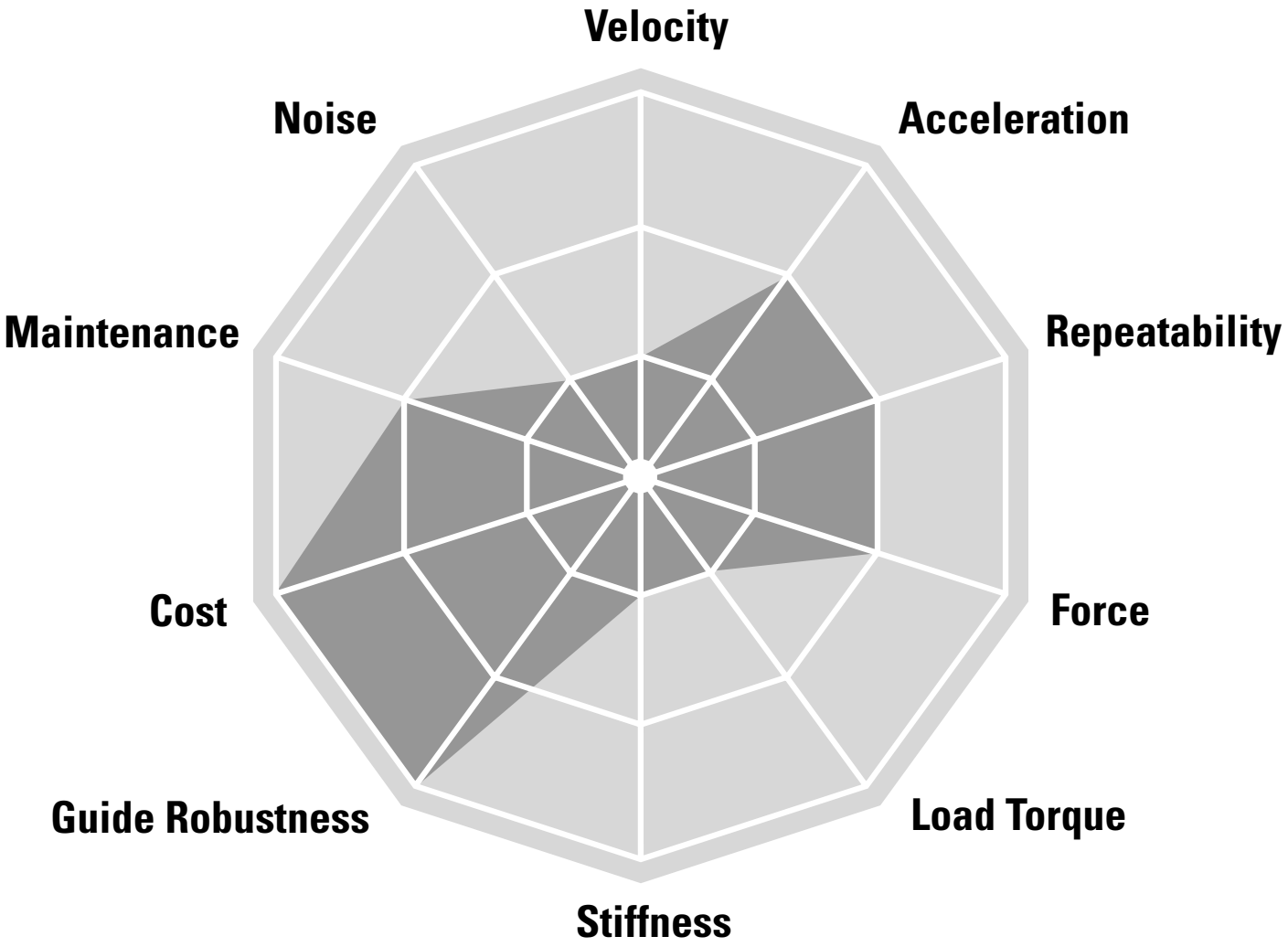


Linear Units with Ball Screw Drive and Slide Guide

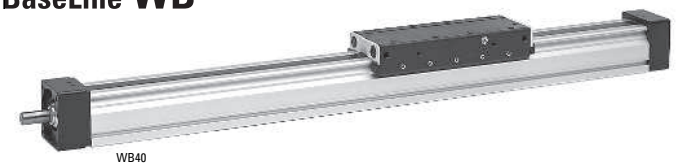
BaseLine, Movopart



Typical Applications

Typical applications are where low to medium loads needs to be moved at low to medium speed. These units are also suited for harsh environments. Typical examples are all types of machines in the food, chemical, paper and wood working industry. Materials handling is another area where these units are ideal.

BaseLine WB



WB40

Features

- Can be installed in all directions
- Plastic cover band
- Robust external slide guides
- Ball screw or lead screw drive

Parameter		WB40	WB60
Profile size (width × height)	[mm]	40 × 37	60 × 59
Stroke length (S max), maximum	[mm]	1000	5200
Linear speed, maximum	[m/s]	0,25	1,0
Dynamic carriage load (Fz), maximum	[N]	250	650
Remarks		Ball screw or lead screw drive	Ball screw or lead screw drive
Page		50	52

Movopart M

M75

Features

- Can be installed in all directions
- Self-adjusting stainless steel cover band
- Patented internal self-adjusting prism slide guides
- Wash down protected versions available

Parameter		M55	M75	M100
Profile size (width × height)	[mm]	58 × 55	86 × 75	108 × 100
Stroke length (S max), maximum	[mm]	3000	4000	6000
Linear speed, maximum	[m/s]	1,0	1,6	1,6
Dynamic carriage load (Fz), maximum	[N]	400	1485	3005
Remarks		single ball nut or composite nut	single ball nut or composite nut	single ball nut or composite nut
Page		54	56	58

Movopart **MD**

M100D

Features

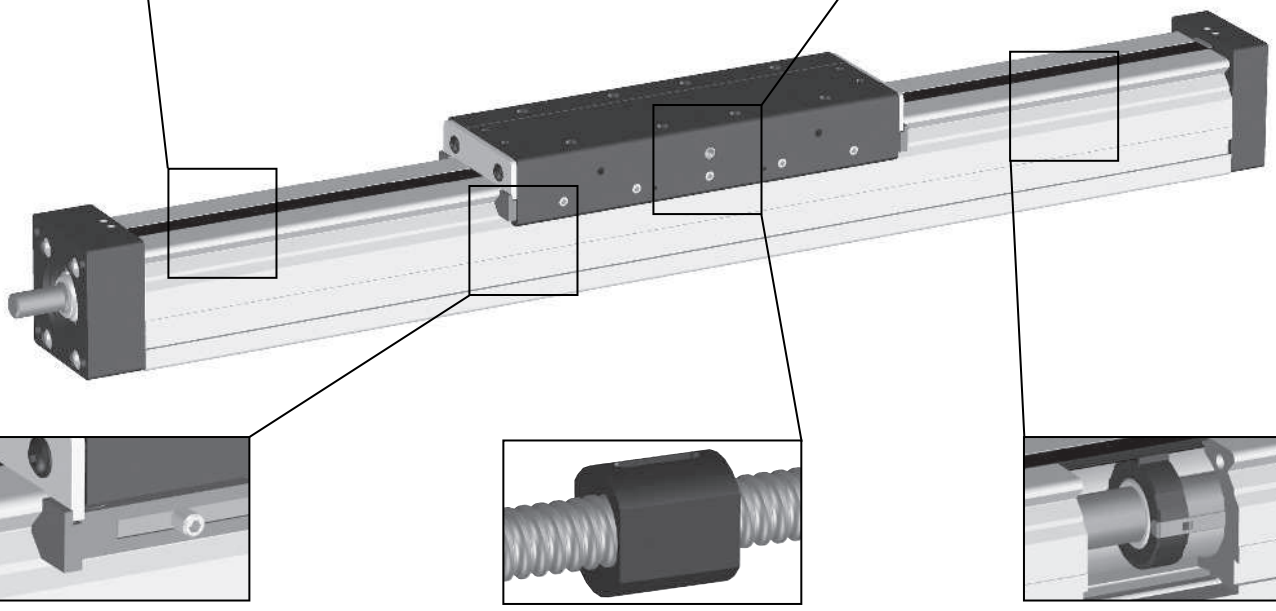
- Can be installed in all directions
- Self-adjusting stainless steel cover band
- Patented intenal self-adjusting prism slide guides
- Wash down protected versions available

Parameter		M75D	M100D
Profile size (width × height)	[mm]	86 × 75	108 × 100
Stroke length (S max), maximum	[mm]	3550	6000
Linear speed, maximum	[m/s]	1,6	1,6
Dynamic carriage load (Fz), maximum	[N]	1485	3005
Remarks		double ball nuts	double ball nuts
Page		60	62

WB-Series Technical Presentation

Cover band
The durable plastic cover band protect the interior of the unit from the penetration of dirt, dust and liquids.

Central lubrication
One central lubrication point on the carriage services the entire unit resulting in a minimum maintenace required.



Slide guides
The robust and accurate slide guides can be easily replaced by the user whenever needed.

Drive
Select between the fast high precision ball screw or the robust lead screw with composite nut.

Screw support
The screw support system reduce noise and vibrations and permits high speed at long stroke lengths.

WB40

Ball Screw or Lead Screw Drive, Slide Guide

» Ordering key - see page 206
» Accessories - see page 137
» Additional data - see page 192

General Specifications

Parameter	WB40
Profile size (w × h) [mm]	40 × 37
Type of screw	ball or lead screw with single nut
Carriage sealing system	plastic cover band
Screw supports	none
Lubrication	central lubrication of all parts that require lubrication
Included accessories	4 × mounting clamps

Performance Specifications

Parameter		WB40
Stroke length (S max), maximum	[mm]	1000
Linear speed, maximum	[m/s]	0,25
Acceleration, maximum	[m/s²]	5
Repeatability	[± mm]	0,05
Input speed, maximum Ball screw units Lead screw units with composite nut	[rpm]	 3000 1500
Operation temperature limits	[°C]	0 – 80
Dynamic load (Fx), maximum ball screw units / lead screw units	[N]	 200 / 500
Dynamic load (Fy), maximum	[N]	200[1]
Dynamic load (Fz), maximum	[N]	250[1]
Dynamic load torque (Mx), maximum	[Nm]	6[1]
Dynamic load torque (My), maximum	[Nm]	15[1]
Dynamic load torque (Mz), maximum	[Nm]	10[1]
Drive shaft force (Frd), maximum	[N]	80
Drive shaft torque (Mta), maximum	[Nm]	1
Screw diameter (d0)	[mm]	12
Screw lead (p) ball screw units / lead screw units	[mm]	 5 / 4, 8
Weight of unit with zero stroke of every 100 mm of stroke of each carriage	[kg]	 1,07 0,30 0,45

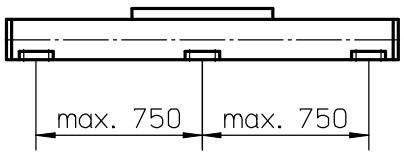
[1] Value for the complete unit

Carriage Idle Torque (M idle) [Nm]

Input speed [rpm]	Screw lead [mm]		
	p = 4	p = 5	p = 8
150	-	0,02	-
1500	-	0,35	-
3000	-	0,50	-

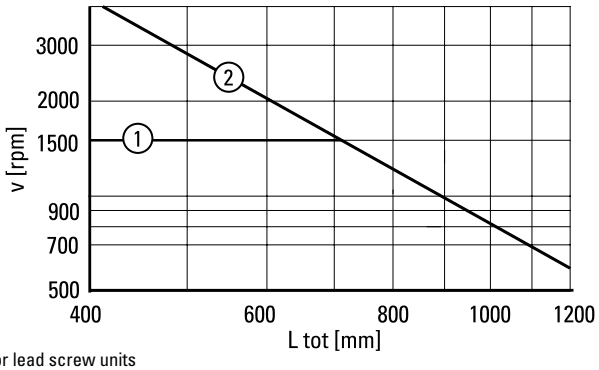
M idle = the input torque needed to move the carriage with no load on it.

Deflection of the Profile



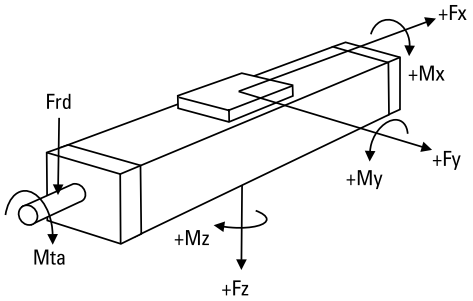
A mounting clamp must be installed at least at every 750 mm to be able to operate the maximum load. Less clamps may be required if less load is being operated, see the additional technical data for more information.

Critical Speed



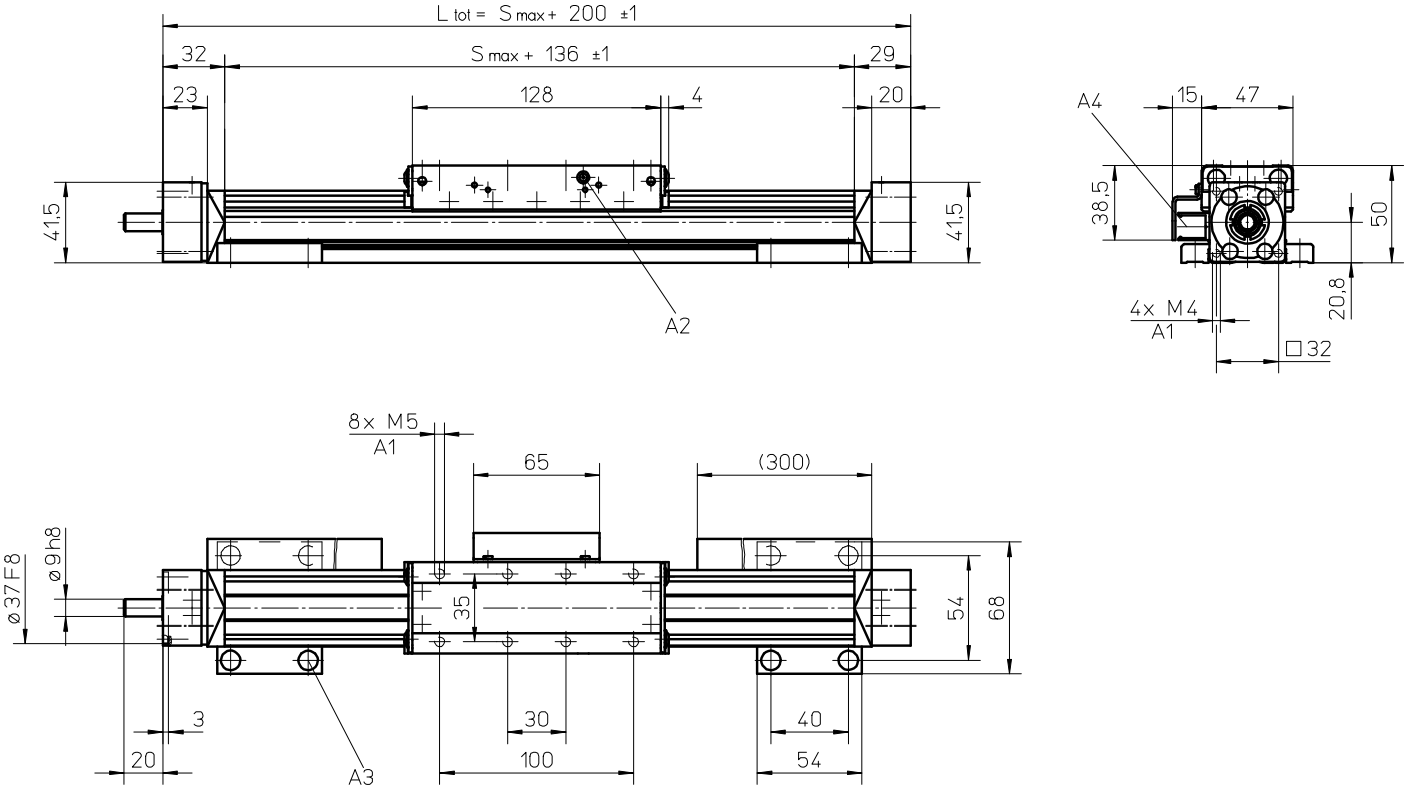
1: For lead screw units
2: For ball screw units

Definition of Forces



WB40

Ball Screw or Lead Screw Drive, Slide Guide



A1: depth 10
A2: lubricating nipple DIN3405 D 1/A
A3: socket cap screw ISO4762-M5×20 8.8
A4: ENF inductive sensor rail option kit (optional)

WB60

Ball Screw or Lead Screw Drive, Slide Guide

» Ordering key - see page 206
» Accessories - see page 137
» Additional data - see page 192

General Specifications

Parameter	WB60
Profile size (w × h) [mm]	60 × 59
Type of screw	ball or lead screw with single nut
Carriage sealing system	plastic cover band
Screw supports	number of screw supports to be specified by customer at order
Lubrication	central lubrication of all parts that require lubrication
Included accessories	4 × mounting clamps

Performance Specifications

Parameter		WB60
Stroke length (S max), maximum	[mm]	5200
Linear speed, maximum	[m/s]	1,0
Acceleration, maximum	[m/s²]	5
Repeatability	[± mm]	0,05
Input speed, maximum Ball screw units Lead screw units with composite nut	[rpm]	 3000 1500
Operation temperature limits	[°C]	0 – 80
Dynamic load (Fx), maximum ball screw units / lead screw units	[N]	 2500 / 2500
Dynamic load (Fy), maximum	[N]	500[1]
Dynamic load (Fz), maximum	[N]	650[1]
Dynamic load torque (Mx), maximum	[Nm]	30[1]
Dynamic load torque (My), maximum	[Nm]	70[1]
Dynamic load torque (Mz), maximum	[Nm]	50[1]
Drive shaft force (Frd), maximum	[N]	150
Drive shaft torque (Mta), maximum	[Nm]	17
Screw diameter (d0)	[mm]	20
Screw lead (p) ball screw units / lead screw units	[mm]	 5, 20 / 8
Weight of unit with zero stroke of every 100 mm of stroke of each carriage	[kg]	 3,63 0,72 1,17

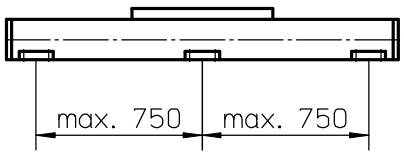
[1] Value for the complete unit

Carriage Idle Torque (M idle) [Nm]

Input speed [rpm]	Screw lead [mm]		
	p = 5	p = 8	p = 20
150	0,5	-	0,7
1500	1,0	-	1,35
3000	1,5	-	1,8

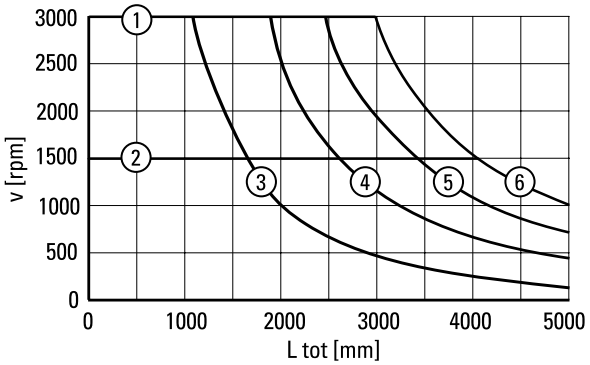
M idle = the input torque needed to move the carriage with no load on it.

Deflection of the Profile



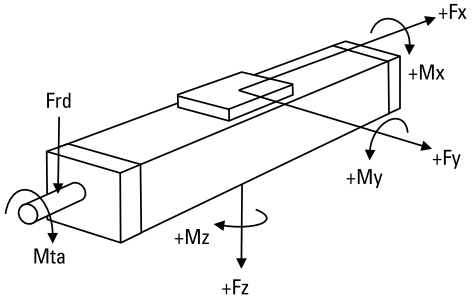
A mounting clamp must be installed at least at every 750 mm to be able to operate the maximum load. Less clamps may be required if less load is being operated, see the additional technical data for more information.

Critical Speed



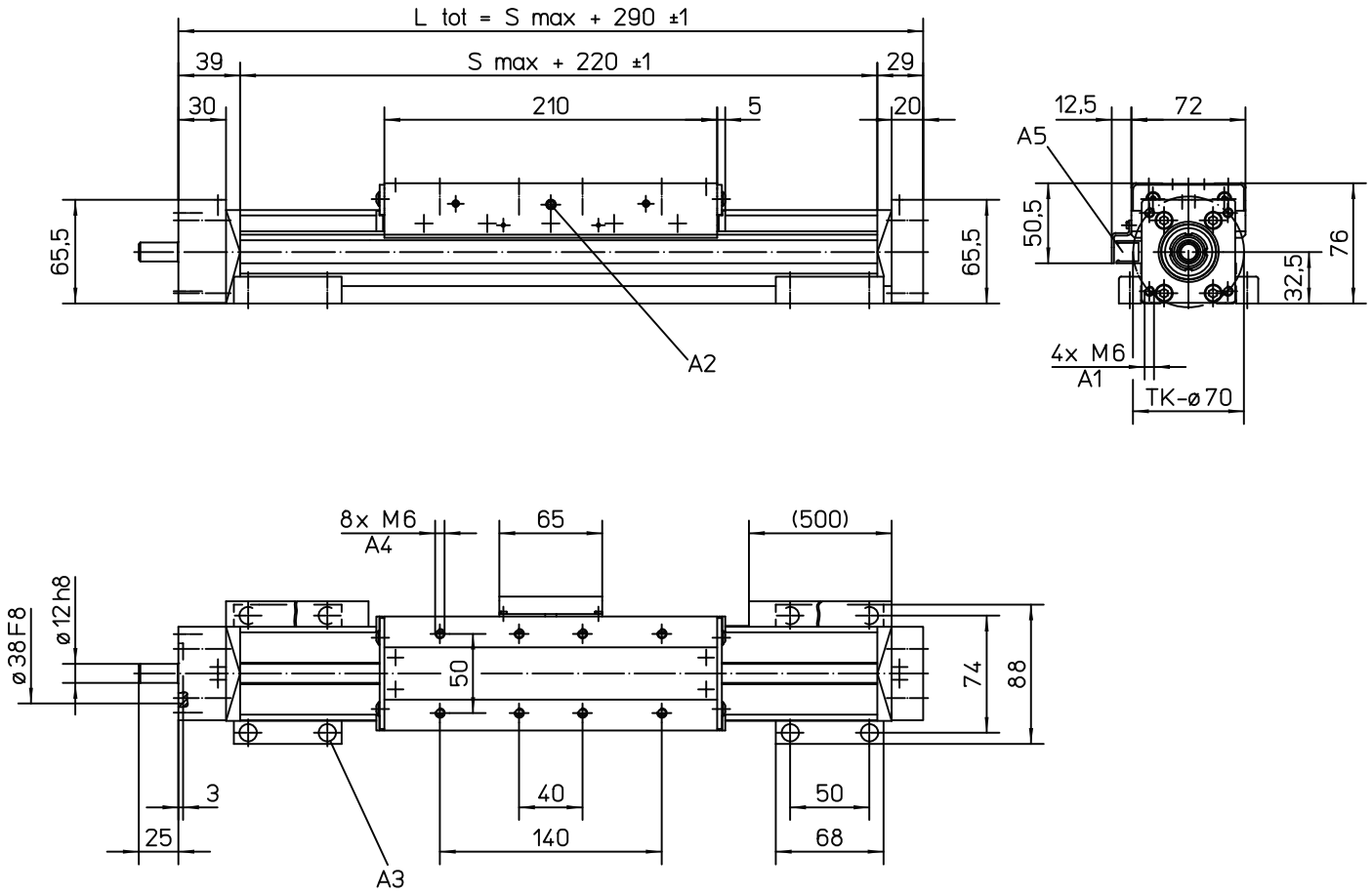
1: Max. input speed for ball screw units
2: Max. input speed for lead screw units
3: No screw supports required
4: One pair of screw supports required
5: Two pairs of screw supports required
6: Three pairs of screw supports required

Definition of Forces



WB60

Ball Screw or Lead Screw Drive, Slide Guide



A1: depth 12
A2: lubricating nipple DIN3405 D 1/A
A3: socket cap screw ISO4762-M6×20 8.8
A4: depth 10
A5: ENF inductive sensor rail option kit (optional)

M55

Ball Screw Drive, Slide Guide

» Ordering key - see page 207
» Accessories - see page 137
» Additional data - see page 192

General Specifications

Parameter	M55
Profile size (w × h) [mm]	58 × 55
Type of screw	ball screw with single nut
Carriage sealing system	self-adjusting steel cover band
Screw supports	number of screw supports to be specified by customer at order
Lubrication	lubrication of ball screw
Included accessories	none

Performance Specifications

Parameter		M55
Stroke length (S max), maximum	[mm]	3000
Linear speed, maximum	[m/s]	1,0
Acceleration, maximum	[m/s²]	8
Repeatability	[± mm]	0,05
Input speed, maximum ball nut units / composite nut units	[rpm]	 3000 / 1500
Operation temperature limits	[°C]	-20 – 70
Dynamic load (Fx), maximum ball nut units / composite nut units	[N]	 1000 / 500
Dynamic load (Fy), maximum	[N]	400[1]
Dynamic load (Fz), maximum	[N]	400[1]
Dynamic load torque (Mx), maximum	[Nm]	9[1]
Dynamic load torque (My), maximum	[Nm]	23[1]
Dynamic load torque (Mz), maximum	[Nm]	23[1]
Drive shaft force (Frd), maximum	[N]	200
Drive shaft torque (Mta), maximum	[Nm]	12
Screw diameter (d0)	[mm]	16
Screw lead (p) ball nut units / composite nut units	[mm]	 5, 5,08, 10, 20 / 32
Weight of unit with zero stroke of every 100 mm of stroke of carriage of option single screw support of option double screw supports	[kg]	 3,06 0,44 1,20 0,83 1,88

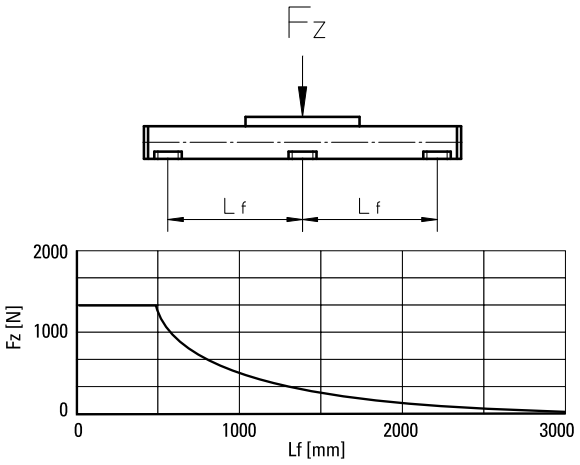
[1] Value for the complete unit

Carriage Idle Torque (M idle) [Nm]

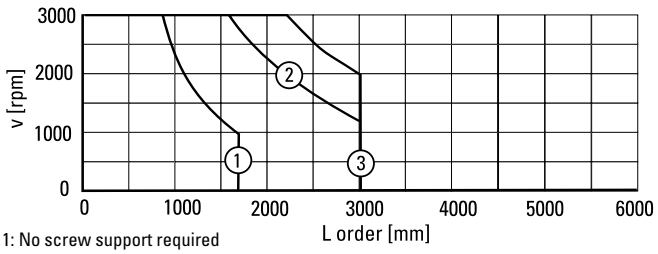
Input speed [rpm]	Screw lead [mm]				
	p = 5	p = 5,08	p = 10	p = 20	p = 32[1]
500 - no screw supports	0,10	0,10	0,15	0,30	0,80
500 - with screw supports	0,13	0,13	0,27	0,45	1,00

[1] Value for cmposite nut.
M idle = the input torque needed to move the carriage with no load on it.

Deflection of the Profile

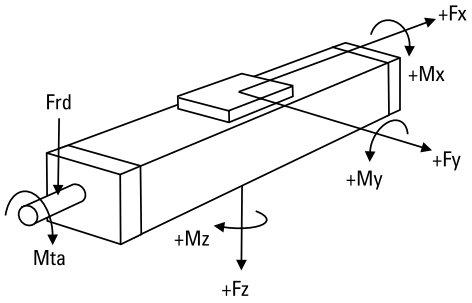


Critical Speed



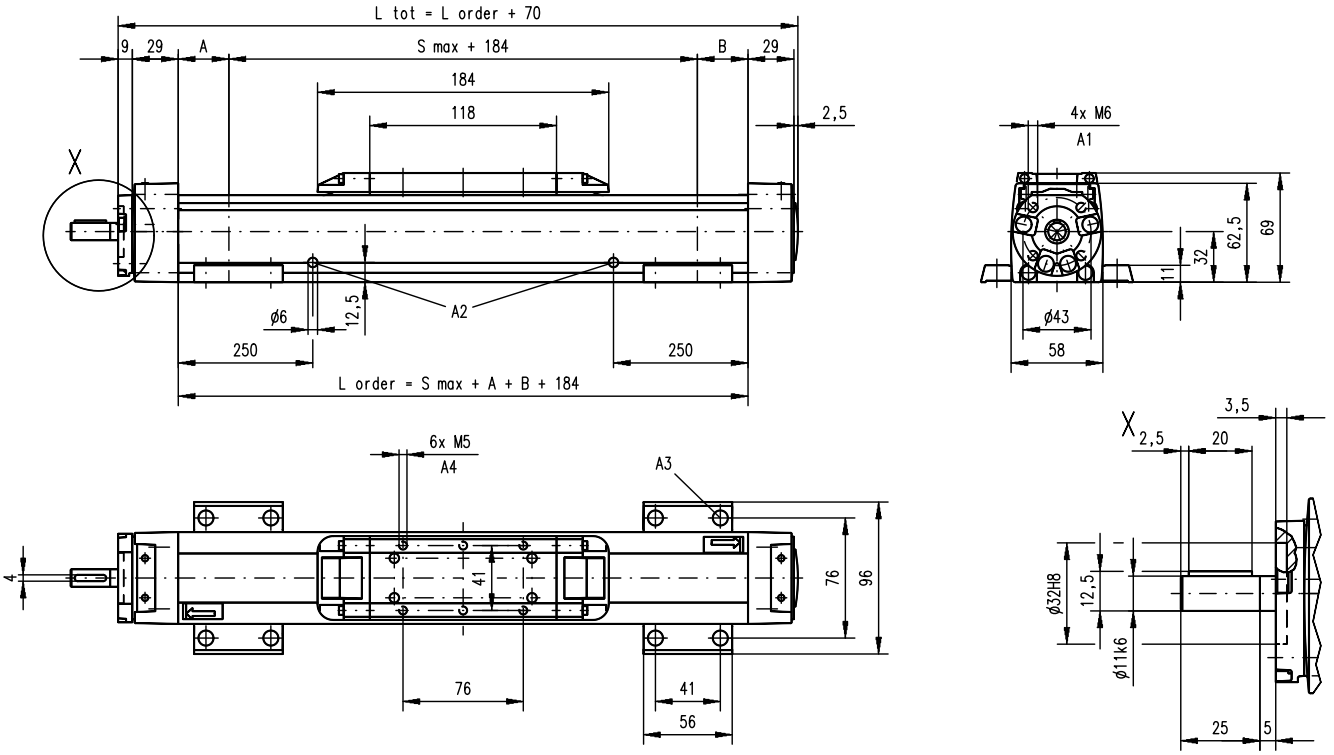
1: No screw support required
2: Single screw support required
3: Double screw supports required

Definition of Forces



M55

Ball Screw Drive, Slide Guide

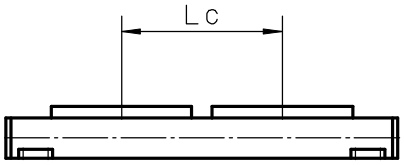


A1: depth 7,5, Heli coil
A2: lubrication holes
A3: ø9,5/ø5,5 for socket head cap screw M5
A4: depth 7,5, Heli coil

Screw support configuration	A [mm]	B [mm]	Ordering length (L order) [mm]	Total length (L tot) [mm]
No screw support	6	6	L order = S max + A + B + 184	L tot = L order + 70
Single screw support	32	32	L order = S max + A + B + 184	L tot = L order + 70
Double screw supports	83	83	L order = S max + A + B + 184	L tot = L order + 70

Double Carriages

Parameter		M55
Minimum distance between carriages (Lc)	[mm]	200
Dynamic load (Fy), maximum	[N]	600
Dynamic load (Fz), maximum	[N]	600
Dynamic load torque (My), maximum	[Nm]	Lc[1] × 0,3
Dynamic load torque (Mz), maximum	[Nm]	Lc[1] × 0,3
Force required to move second carriage	[N]	35
Weight of unit with zero stroke of carriages	[kg]	 5,14 2,40



Screw support configuration	A [mm]	B [mm]	Ordering length (L order) [mm]	Total length (L tot) [mm]
No screw support	6	6	L order = S max + A + B + Lc + 184	L tot = L order + 70
Single screw support	32	32	L order = S max + A + B + Lc + 184	L tot = L order + 70
Double screw supports	83	83	L order = S max + A + B + Lc + 184	L tot = L order + 70

[1] Value in mm

M75

Ball Screw Drive, Slide Guide

» Ordering key - see page 207
» Accessories - see page 137
» Additional data - see page 192

General Specifications

Parameter	M75
Profile size (w × h) [mm]	86 × 75
Type of screw	ball screw with single nut
Carriage sealing system	self-adjusting steel cover band
Screw supports	number of screw supports to be specified by customer at order
Lubrication	lubrication of ball screw
Included accessories	none

Performance Specifications

Parameter		M75
Stroke length (S max), maximum	[mm]	4000
Linear speed, maximum	[m/s]	1,6
Acceleration, maximum	[m/s²]	8
Repeatability	[± mm]	0,05
Input speed, maximum ball nut units / composite nut units	[rpm]	 5000 / 1500
Operation temperature limits	[°C]	-20 – 70
Dynamic load (Fx), maximum ball nut units / composite nut units	[N]	 2500 / 1250
Dynamic load (Fy), maximum	[N]	1485[1]
Dynamic load (Fz), maximum	[N]	1485[1]
Dynamic load torque (Mx), maximum	[Nm]	49[1]
Dynamic load torque (My), maximum	[Nm]	85[1]
Dynamic load torque (Mz), maximum	[Nm]	85[1]
Drive shaft force (Frd), maximum	[N]	600
Drive shaft torque (Mta), maximum	[Nm]	30
Screw diameter (d0)	[mm]	20
Screw lead (p) ball nut units / composite nut units	[mm]	 5, 12,7, 20 / 5
Weight of unit with zero stroke of every 100 mm of stroke of carriage of option single screw support of option double screw supports	[kg]	 6,07 0,82 1,70 1,70 3,58

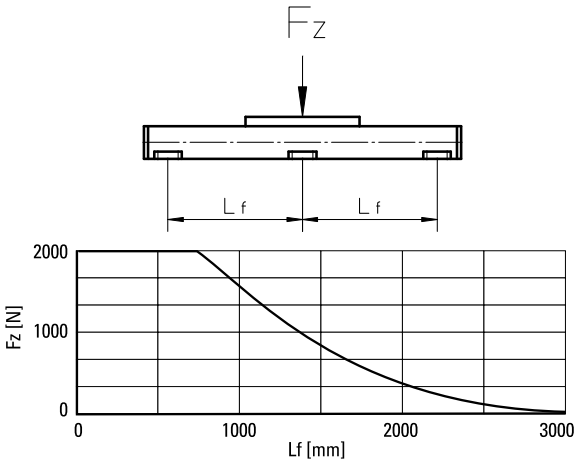
[1] Value for the complete unit

Carriage Idle Torque (M idle) [Nm]

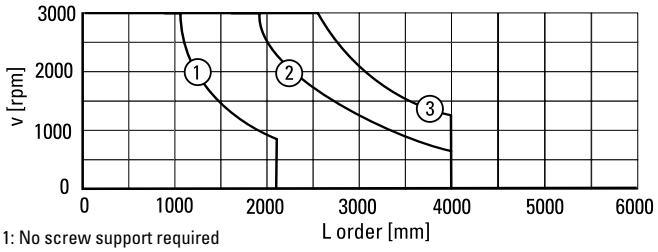
Input speed [rpm]	Screw lead [mm]			
	p = 5	p = 5[1]	p = 12,7	p = 20
500 - no screw supports	0,10	0,20	0,24	0,37
500 - with screw supports	0,15	0,50	0,39	0,57

[1] Value for composite nut.
M idle = the input torque needed to move the carriage with no load on it.

Deflection of the Profile

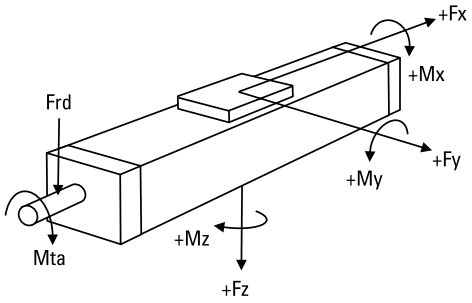


Critical Speed



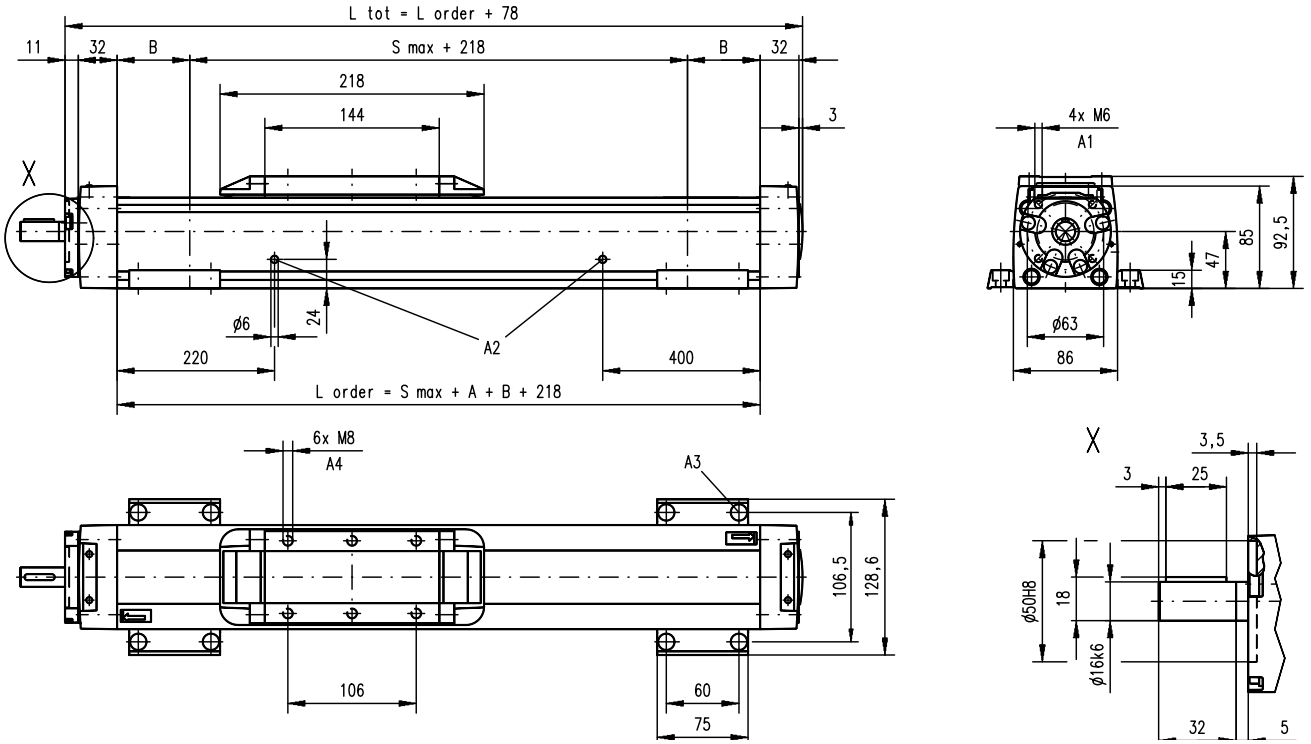
1: No screw support required
2: Single screw support required
3: Double screw supports required

Definition of Forces



M75

Ball Screw Drive, Slide Guide

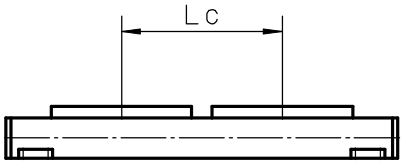


A1: depth 9, Heli coil
A2: lubrication holes
A3: ø13,5/ø8,5 for socket head cap screw M8
A4: depth 8, Heli coil

Screw support configuration	A [mm]	B [mm]	Ordering length (L order) [mm]	Total length (L tot) [mm]
No screw support	5	5	L order = S max + A + B + 218	L tot = L order + 78
Single screw support	60	60	L order = S max + A + B + 218	L tot = L order + 78
Double screw supports	126	126	L order = S max + A + B + 218	L tot = L order + 78

Double Carriages

Parameter		M75
Minimum distance between carriages (Lc)	[mm]	250
Dynamic load (Fy), maximum	[N]	2227
Dynamic load (Fz), maximum	[N]	2227
Dynamic load torque (My), maximum	[Nm]	Lc[1] × 1,114
Dynamic load torque (Mz), maximum	[Nm]	Lc[1] × 1,114
Force required to move second carriage	[N]	40
Weight of unit with zero stroke of carriages	[kg]	 9,82 3,40



Screw support configuration	A [mm]	B [mm]	Ordering length (L order) [mm]	Total length (L tot) [mm]
No screw support	5	5	L order = S max + A + B + Lc + 218	L tot = L order + 78
Single screw support	60	60	L order = S max + A + B + Lc + 218	L tot = L order + 78
Double screw supports	126	126	L order = S max + A + B + Lc + 218	L tot = L order + 78

[1] Value in mm

M100

Ball Screw Drive, Slide Guide

» Ordering key - see page 207
» Accessories - see page 137
» Additional data - see page 192

General Specifications

Parameter	M100
Profile size (w × h) [mm]	108 × 100
Type of screw	ball screw with single nut
Carriage sealing system	self-adjusting steel cover band
Screw supports	number of screw supports to be specified by customer at order
Lubrication	lubrication of ball screw
Included accessories	none

Performance Specifications

Parameter		M100
Stroke length (S max), maximum	[mm]	6000
Linear speed, maximum	[m/s]	1,6
Acceleration, maximum	[m/s²]	8
Repeatability	[± mm]	0,05
Input speed, maximum ball nut units / composite nut units	[rpm]	 4000 / 1500
Operation temperature limits	[°C]	-20 – 70
Dynamic load (Fx), maximum ball nut units / composite nut units	[N]	 5000 / 2000
Dynamic load (Fy), maximum	[N]	3005
Dynamic load (Fz), maximum	[N]	3005
Dynamic load torque (Mx), maximum	[Nm]	117
Dynamic load torque (My), maximum	[Nm]	279
Dynamic load torque (Mz), maximum	[Nm]	279
Drive shaft force (Frd), maximum	[N]	1000
Drive shaft torque (Mta), maximum	[Nm]	45
Screw diameter (d0)	[mm]	25
Screw lead (p) ball nut units / composite nut units	[mm]	 5, 10, 25 / 10, 25
Weight of unit with zero stroke of every 100 mm of stroke of carriage of option single screw support of option double screw supports	[kg]	 12,87 1,42 3,50 1,86 4,42

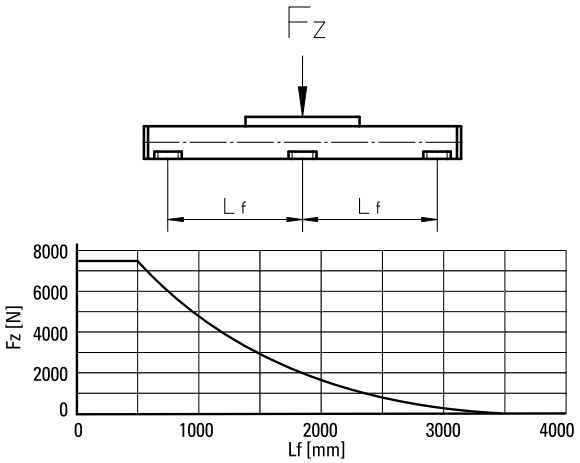
[1] Value for the complete unit

Carriage Idle Torque (M idle) [Nm]

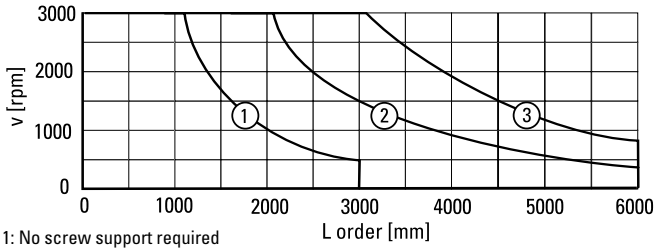
Input speed [rpm]	Screw lead [mm]				
	p = 5	p = 10	p = 10[1]	p = 25	p = 25[1]
500 - no screw supports	0,15	0,25	0,50	0,55	1,00
500 - with screw supports	0,25	0,40	0,80	0,85	1,30

[1] Value for composite nut.
M idle = the input torque needed to move the carriage with no load on it.

Deflection of the Profile

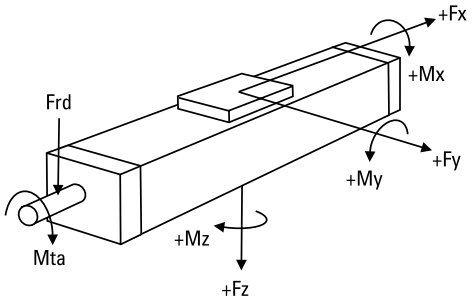


Critical Speed



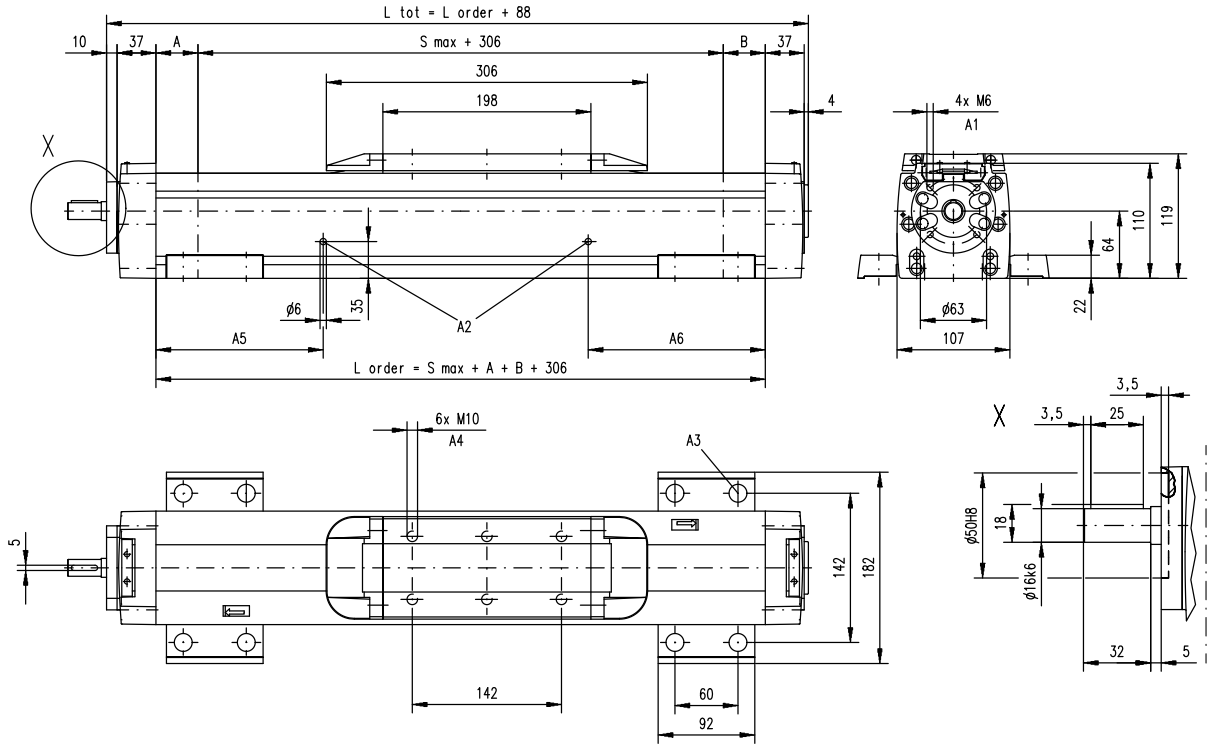
1: No screw support required
2: Single screw support required
3: Double screw supports required

Definition of Forces



M100

Ball Screw Drive, Slide Guide

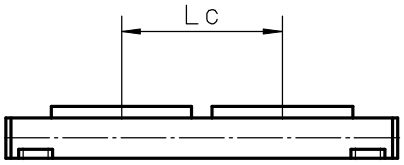


A1: depth 9, Heli coil
A2: lubrication holes
A3: ø17/ø10,5 for socket head cap screw M10
A4: depth 10, Heli coil
A5: 100 (L order <= 1 m), 320 (L order > 1 m)
A6: 100 (L order <= 1 m), 430 (L order > 1 m)

Screw support configuration	A [mm]	B [mm]	Ordering length (L order) [mm]	Total length (L tot) [mm]
No screw support	1	1	L order = S max + A + B + 306	L tot = L order + 88
Single screw support	31	31	L order = S max + A + B + 306	L tot = L order + 88
Double screw supports	86	86	L order = S max + A + B + 306	L tot = L order + 88

Double Carriages

Parameter		M100
Minimum distance between carriages (Lc)	[mm]	350
Dynamic load (Fy), maximum	[N]	4508
Dynamic load (Fz), maximum	[N]	4508
Dynamic load torque (My), maximum	[Nm]	Lc[1] × 2,254
Dynamic load torque (Mz), maximum	[Nm]	Lc[1] × 2,254
Force required to move second carriage	[N]	45
Weight of unit with zero stroke of carriages	[kg]	 21,34 7,00



Screw support configuration	A [mm]	B [mm]	Ordering length (L order) [mm]	Total length (L tot) [mm]
No screw support	1	1	L order = S max + A + B + Lc + 306	L tot = L order + 88
Single screw support	31	31	L order = S max + A + B + Lc + 306	L tot = L order + 88
Double screw supports	86	86	L order = S max + A + B + Lc + 306	L tot = L order + 88

[1] Value in mm

M75D

Ball Screw Drive, Slide Guide, Double Ball Nuts

» Ordering key - see page 208
» Accessories - see page 137
» Additional data - see page 192

General Specifications

Parameter	M75D
Profile size (w × h) [mm]	86 × 75
Type of screw	ball screw with double nut
Carriage sealing system	self-adjusting steel cover band
Screw supports	number of screw supports to be specified by customer at order
Lubrication	lubrication of ball screw
Included accessories	none

Performance Specifications

Parameter		M75D
Stroke length (S max), maximum	[mm]	3550
Linear speed, maximum	[m/s]	1,6
Acceleration, maximum	[m/s²]	8
Repeatability	[± mm]	0,05
Input speed, maximum	[rpm]	5000
Operation temperature limits	[°C]	-20 – 70
Dynamic load (Fx), maximum	[N]	2500[1]
Dynamic load (Fy), maximum	[N]	1485[1]
Dynamic load (Fz), maximum	[N]	1485[1]
Dynamic load torque (Mx), maximum	[Nm]	49[1]
Dynamic load torque (My), maximum	[Nm]	85[1]
Dynamic load torque (Mz), maximum	[Nm]	85[1]
Drive shaft force (Frd), maximum	[N]	600
Drive shaft torque (Mta), maximum	[Nm]	30
Screw diameter (d0)	[mm]	20
Screw lead (p)	[mm]	5, 20
Weight	[kg]	
of unit with zero stroke		6,57
of every 100 mm of stroke		0,82
of carriage		1,70
of option single screw support		1,70
of option double screw supports		3,58

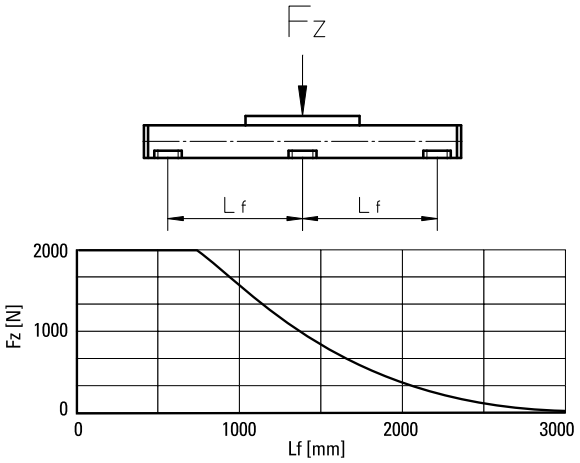
[1] Value for the complete unit

Carriage Idle Torque (M idle) [Nm]

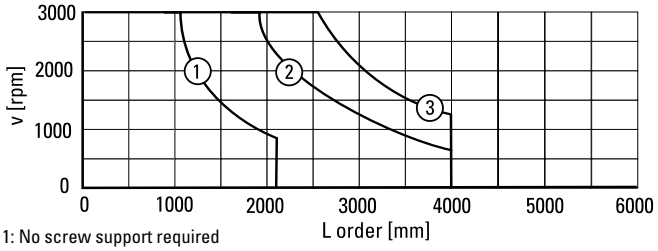
Input speed [rpm]	Screw lead [mm]	
	p = 5	p = 20
500 - no screw supports	0,15	0,5
500 - with screw supports	0,2	0,8

M idle = the input torque needed to move the carriage with no load on it.

Deflection of the Profile

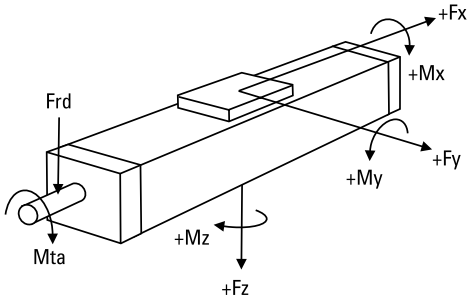


Critical Speed



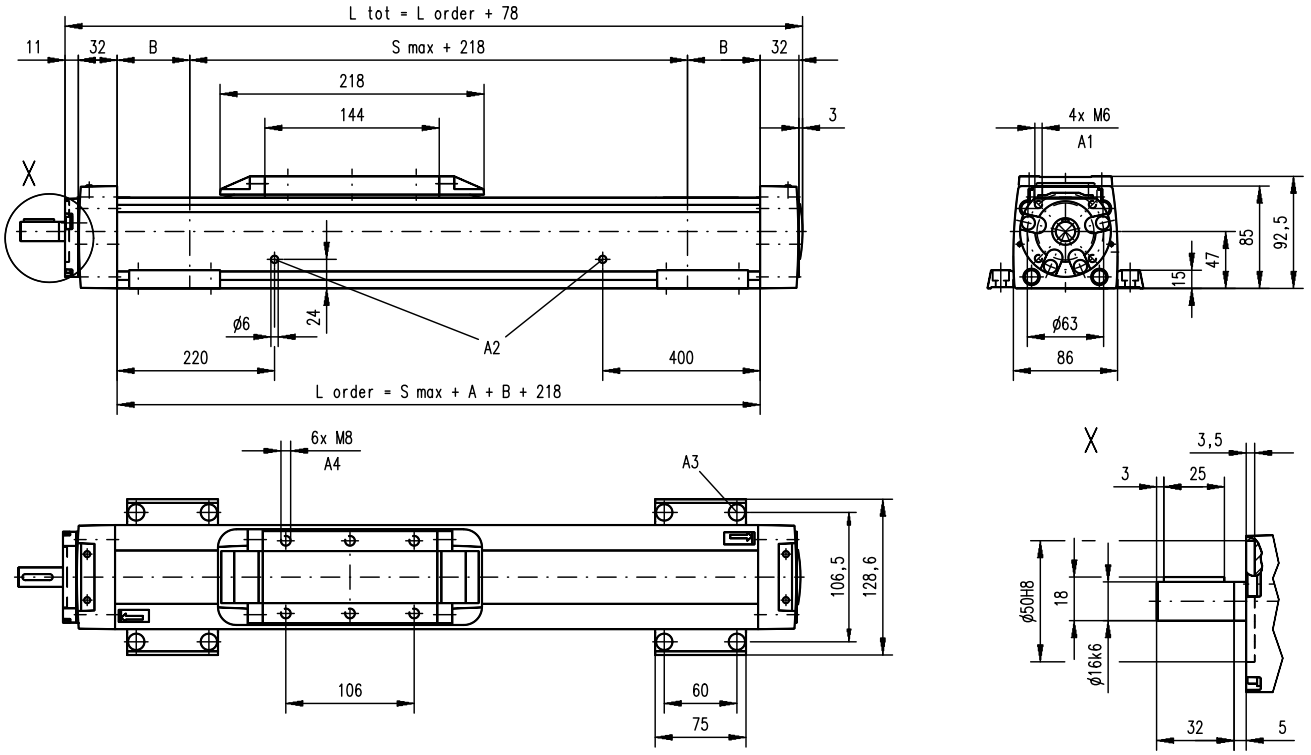
1: No screw support required
2: Single screw support required
3: Double screw supports required

Definition of Forces



M75D

Ball Screw Drive, Slide Guide, Double Ball Nuts

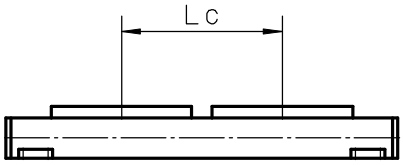


A1: depth 9, Heli coil
A2: lubrication holes
A3: ø13,5/ø8,5 for socket head cap screw M8
A4: depth 8, Heli coil

Screw support configuration	A [mm]	B [mm]	Ordering length (L order) [mm]	Total length (L tot) [mm]
No screw support	5	76	L order = S max + A + B + 218	L tot = L order + 78
Single screw support	60	151	L order = S max + A + B + 218	L tot = L order + 78
Double screw supports	126	216	L order = S max + A + B + 218	L tot = L order + 78

Double Carriages

Parameter		M75D
Minimum distance between carriages (Lc)	[mm]	250
Dynamic load (Fy), maximum	[N]	2227
Dynamic load (Fz), maximum	[N]	2227
Dynamic load torque (My), maximum	[Nm]	Lc[1] × 1,114
Dynamic load torque (Mz), maximum	[Nm]	Lc[1] × 1,114
Force required to move second carriage	[N]	40
Weight of unit with zero stroke of carriages	[kg]	 6,92 3,4



Screw support configuration	A [mm]	B [mm]	Ordering length (L order) [mm]	Total length (L tot) [mm]
No screw support	5	76	L order = S max + A + B + Lc + 218	L tot = L order + 78
Single screw support	60	151	L order = S max + A + B + Lc + 218	L tot = L order + 78
Double screw supports	126	216	L order = S max + A + B + Lc + 218	L tot = L order + 78

[1] Value in mm

M100D

Ball Screw Drive, Slide Guide, Double Ball Nuts

» Ordering key - see page 208
» Accessories - see page 137
» Additional data - see page 192

General Specifications

Parameter	M100D
Profile size (w × h) [mm]	108 × 100
Type of screw	ball screw with double nut
Carriage sealing system	self-adjusting steel cover band
Screw supports	number of screw supports to be specified by customer at order
Lubrication	lubrication of ball screw
Included accessories	none

Performance Specifications

Parameter		M100D
Stroke length (S max), maximum	[mm]	6000
Linear speed, maximum	[m/s]	1,6
Acceleration, maximum	[m/s²]	8
Repeatability	[± mm]	0,05
Input speed, maximum	[rpm]	4000
Operation temperature limits	[°C]	-20 – 70
Dynamic load (Fx), maximum	[N]	5000
Dynamic load (Fy), maximum	[N]	3005[1]
Dynamic load (Fz), maximum	[N]	3005[1]
Dynamic load torque (Mx), maximum	[Nm]	117[1]
Dynamic load torque (My), maximum	[Nm]	279[1]
Dynamic load torque (Mz), maximum	[Nm]	279[1]
Drive shaft force (Frd), maximum	[N]	100
Drive shaft torque (Mta), maximum	[Nm]	45
Screw diameter (d0)	[mm]	25
Screw lead (p)	[mm]	5, 10, 25
Weight	[kg]	
of unit with zero stroke		13,87
of every 100 mm of stroke		1,42
of carriage		3,50
of option single screw support		1,86
of option double screw supports		4,42

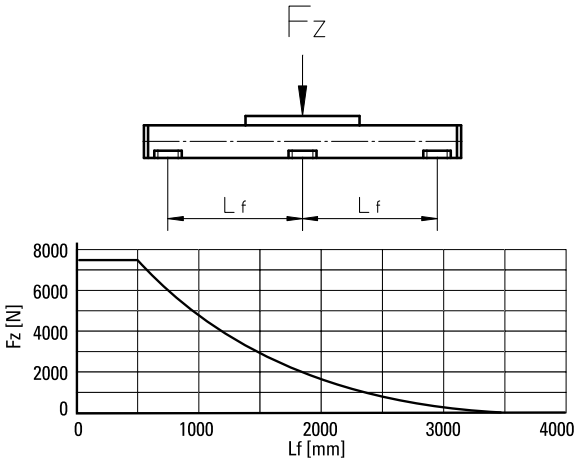
[1] Value for the complete unit

Carriage Idle Torque (M idle) [Nm]

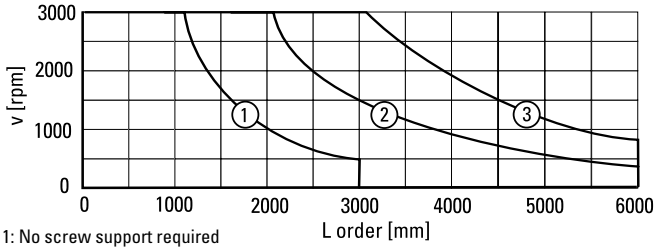
Input speed [rpm]	Screw lead [mm]		
	p = 5	p = 10	p = 25
500 - no screw supports	0,2	0,4	0,8
500 - with screw supports	0,4	0,6	1,3

M idle = the input torque needed to move the carriage with no load on it.

Deflection of the Profile

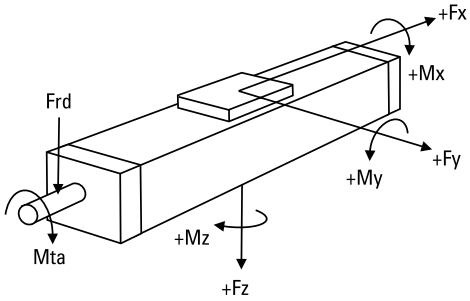


Critical Speed



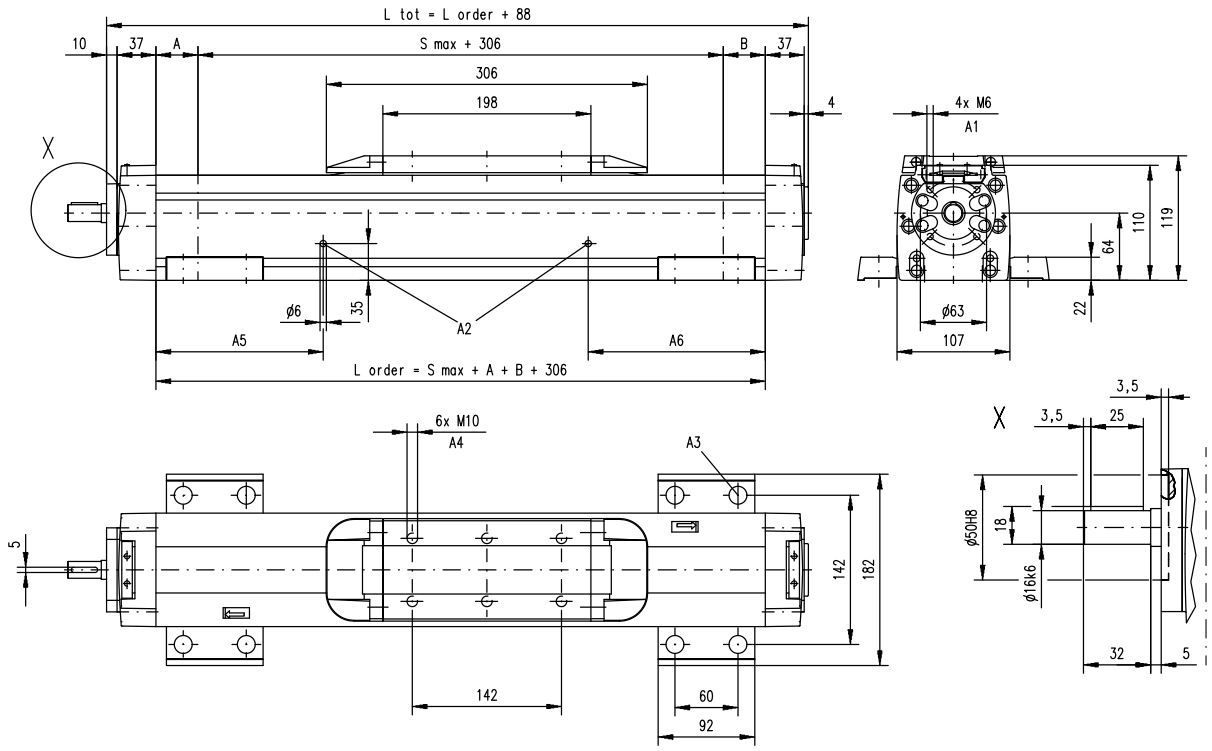
1: No screw support required
2: Single screw support required
3: Double screw supports required

Definition of Forces



M100D

Ball Screw Drive, Slide Guide, Double Ball Nuts

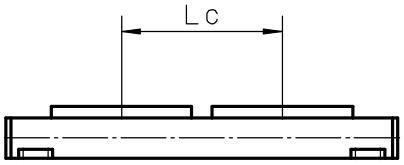


A1: depth 9, Heli coil
A2: lubrication holes
A3: ø17/ø10,5 for socket head cap screw M10
A4: depth 10, Heli coil
A5: 100 (L order <= 1 m), 320 (L order > 1 m)
A6: 100 (L order <= 1 m), 430 (L order > 1 m)

Screw support configuration	A [mm]	B [mm]	Ordering length (L order) [mm]	Total length (L tot) [mm]
No screw support	1	59	L order = S max + A + B + 306	L tot = L order + 88
Single screw support	31	117	L order = S max + A + B + 306	L tot = L order + 88
Double screw supports	86	172	L order = S max + A + B + 306	L tot = L order + 88

Double Carriages

Parameter		M100D
Minimum distance between carriages (Lc)	[mm]	350
Dynamic load (Fy), maximum	[N]	4508
Dynamic load (Fz), maximum	[N]	4508
Dynamic load torque (My), maximum	[Nm]	Lc[1] × 2,254
Dynamic load torque (Mz), maximum	[Nm]	Lc[1] × 2,254
Force required to move second carriage	[N]	45
Weight of unit with zero stroke of carriages	[kg]	 15,43 7,00



Screw support configuration	A [mm]	B [mm]	Ordering length (L order) [mm]	Total length (L tot) [mm]
No screw support	1	59	L order = S max + A + B + Lc + 306	L tot = L order + 88
Single screw support	31	117	L order = S max + A + B + Lc + 306	L tot = L order + 88
Double screw supports	86	172	L order = S max + A + B + Lc + 306	L tot = L order + 88

[1] Value in mm