

Linear modules LE

LE-50 - LE-70-D

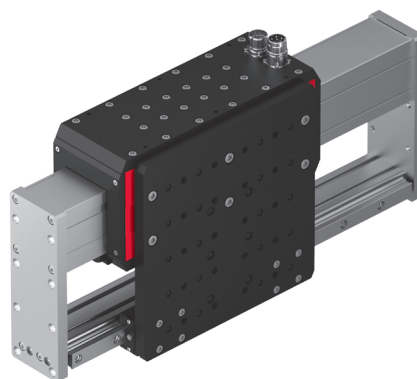
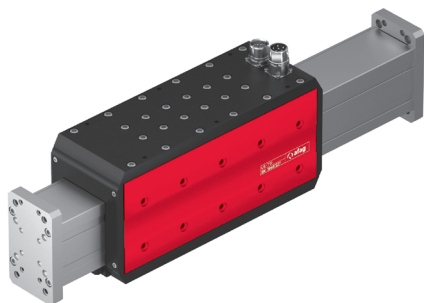
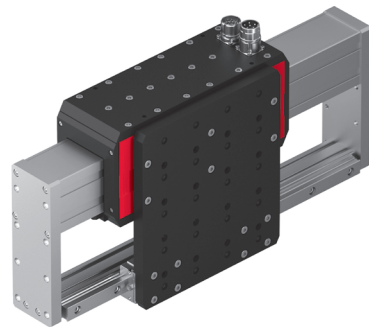
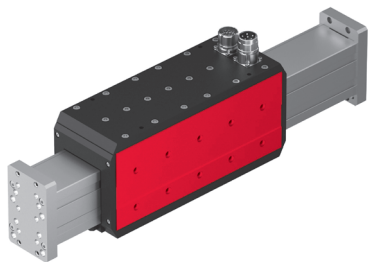
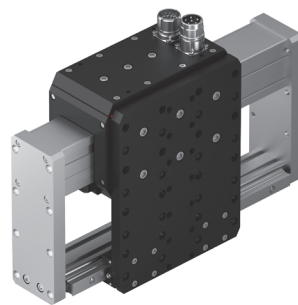


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Linear modules LE

LE-50



- Highly dynamic and accurate
- Low-noise
- Diverse position measuring systems



LE-50	
Attachment grid	48 mm
Attachment thread	M6
Operating temperature	10 - 40 °C
Storage temperature	0 - 50 °C
Humidity	< 90 %

Type	LE-50-XXX-SIN	LE-50-XXX TTL	LE-50-XXX-ABS-B	LE-50-XXX-ABS-S
Order number	50407225	50307890	50447984	50443272
Max. stroke	600 mm	600 mm	600 mm	600 mm
Stroke increment	20 mm from 100 mm	20 mm from 100 mm	20 mm from 100 mm	20 mm from 100 mm
Net weight	5.028 kg	5.028 kg	5.031 kg	5.031 kg
Weight/100 mm stroke	0.84 kg	0.84 kg	0.84 kg	0.84 kg
Weight, slide	4.1 kg	4.1 kg	4.1 kg	4.1 kg
Weight, cantilever (100 mm stroke)	3.4 kg	3.4 kg	3.4 kg	3.4 kg
Noise Level	67 dB (A)	67 dB (A)	67 dB (A)	67 dB (A)
Nominal current	3 A	3 A	3 A	3 A
Maximalstrom	9 A	9 A	9 A	9 A
Nominal voltage	max. 600 VDC	max. 600 VDC	max. 600 VDC	max. 600 VDC
Supply voltage	5 VDC	5 VDC	5 VDC	5 VDC
Drive	Linear motor	Linear motor	Linear motor	Linear motor
Protection type	IP 30	IP 30	IP 30	IP 30
Max. speed v	3.5 m/s	3.5 m/s	3.5 m/s	3.5 m/s
Max. acceleration a	40 m/s ²	40 m/s ²	40 m/s ²	40 m/s ²
Peak force Fx	170 N	170 N	170 N	170 N
Constant force Fx	70 N	70 N	70 N	70 N
Connection resistance	4.02 Ohm	4.02 Ohm	4.02 Ohm	4.02 Ohm
Connection inductance	20.83 mH	20.83 mH	20.83 mH	20.83 mH
Channel	A, /A, B, /B, Z, /Z		Clk, /Clk, DATA, /DATA	
Force constant	29.4 N/A	29.4 N/A	29.4 N/A	29.4 N/A
Counter-voltage constant	24.1 V (m/s)	24.1 V (m/s)	24.1 V (m/s)	24.1 V (m/s)
Pole pair distance	38 mm	38 mm	38 mm	38 mm
Digital incremental encoder	RS422	RS422	RS422	RS422
Resolution	1 period/mm	1 µm/increment	0.9765625 µm (1000/1024 µm)	
Repeat accuracy	+/- 0.01 mm	+/- 0.01 mm	+/- 0.01 mm	+/- 0.01 mm
Mounting position	↔	↔	↔	↔

The technical data pertains to Afag standard test conditions.
 Cleanroom class ISO 14644-1, class ISO 7
 *XXX = stroke

Included in the delivery

(Catalogue HT accessories)

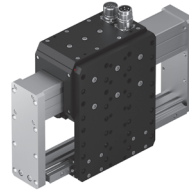
- 2x Centering bushing Ø7x3
- 2x Centering bushing Ø8x3.5
- 2x Centering bushing Ø9x4
- 4x Mounting screw M4x16
- 4x Mounting screw M6x16

Accessories

- Only for -SIN/-TTL: Servoregler SE-Power

24 months following commissioning, but a maximum of 27 months following delivery

Technical data



LE-50-D

LE-50-D	
Attachment grid	48 mm
Attachment thread	M6
Operating temperature	10 - 40 °C
Storage temperature	0 - 50 °C
Humidity	< 90 %

Type	LE-50-D-XXX-SIN	LE-50-D-XXX TTL	LE-50-D-XXX-ABS-B	LE-50-D-XXX-ABS-S
Order number	50407228	50308538	50447987	50443275
Max. stroke	600 mm	600 mm	600 mm	600 mm
Stroke increment	20 mm from 100 mm	20 mm from 100 mm	20 mm from 100 mm	20 mm from 100 mm
Net weight	7.603 kg	7.603 kg	7.606 kg	7.606 kg
Weight/100 mm stroke	0.84 kg	0.84 kg	0.84 kg	0.84 kg
Weight, slide	4.1 kg	4.1 kg	4.1 kg	4.1 kg
Weight, cantilever (100 mm stroke)	3.4 kg	3.4 kg	3.4 kg	3.4 kg
Noise Level	67 dB (A)	67 dB (A)	67 dB (A)	67 dB (A)
Nominal current	3 A	3 A	3 A	3 A
Maximalstrom	9 A	9 A	9 A	9 A
Nominal voltage	max. 600 VDC	max. 600 VDC	max. 600 VDC	max. 600 VDC
Supply voltage	5 VDC	5 VDC	5 VDC	5 VDC
Drive	Linear motor	Linear motor	Linear motor	Linear motor
Protection type	IP 30	IP 30	IP 30	IP 30
Max. speed v	3.5 m/s	3.5 m/s	3.5 m/s	3.5 m/s
Max. acceleration a	40 m/s ²	40 m/s ²	40 m/s ²	40 m/s ²
Peak force Fx	170 N	170 N	170 N	170 N
Constant force Fx	70 N	70 N	70 N	70 N
Connection resistance	4.02 Ohm	4.02 Ohm	4.02 Ohm	4.02 Ohm
Connection inductance	20.83 mH	20.83 mH	20.83 mH	20.83 mH
Channel	A, /A, B, /B, Z, /Z		Clk, /Clk, DATA, /DATA	
Force constant	29.4 N/A	29.4 N/A	29.4 N/A	29.4 N/A
Counter-voltage constant	24.1 V (m/s)	24.1 V (m/s)	24.1 V (m/s)	24.1 V (m/s)
Pole pair distance	38 mm	38 mm	38 mm	38 mm
Digital incremental encoder	RS422	RS422	RS422	RS422
Resolution	1 period/mm	1 µm/increment	0.9765625 µm (1000/1024 µm)	
Repeat accuracy	+/- 0.01 mm	+/- 0.01 mm	+/- 0.01 mm	+/- 0.01 mm
Mounting position	↔	↔	↔	↔

The technical data pertains to Afag standard test conditions.

Cleanroom class ISO 14644-1, class ISO 7

Note: The LE-50-D can only be operated with movable slide. The operation with fixed slide and moving profile is not allowed.

*XXX = stroke

Included in the delivery

(Catalogue HT accessories)

- 2x Centering bushing Ø7x3
- 2x Centering bushing Ø8x3.5
- 2x Centering bushing Ø9x4
- 4x Mounting screw M4x16
- 4x Mounting screw M6x16

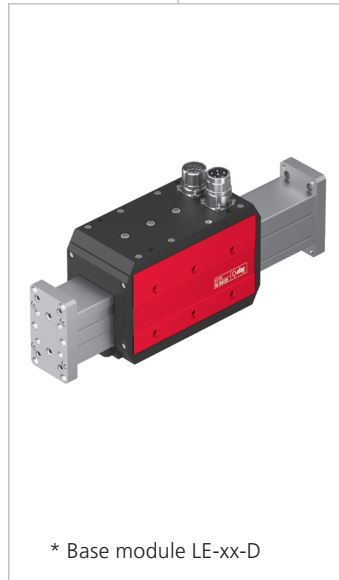
Accessories

- Only for -SIN/-TTL: Servoregler SE-Power

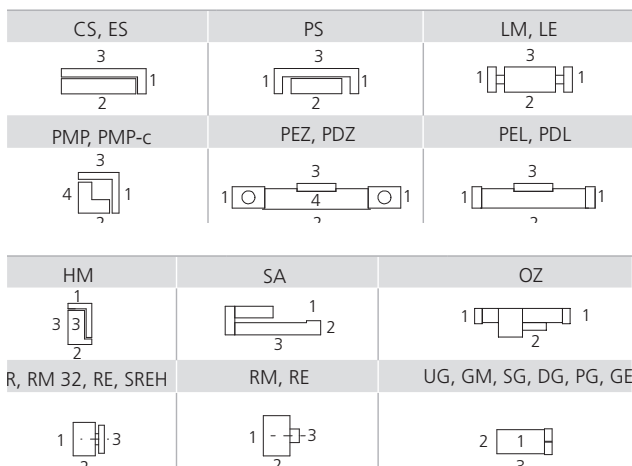
24 months following commissioning, but a maximum of 27 months following delivery



PDZ-128	3	VP 119	2,3
PDZ-160	3	VP 119	2,3
PDZ-200	3	VP 143	2,3
LE-50	3*	< direct >	2,3
LE-60	3*	< direct >	2,3
LE-70	3*	< direct >	2,3
PS 32	2	< direct >	2,3
	1,3	VP 146	2,3
HM 25	1	VP 146	2,3
CR 32	3	VP 146	2,3
RM 63	3	VF 407	2,3
PMP	1,3	VP 136	2,3
MT 45x2a	1	< direct >	2,3
MT 45x2b	1	< direct >	2,3
MTZ 45x2	1	< direct >	2,3



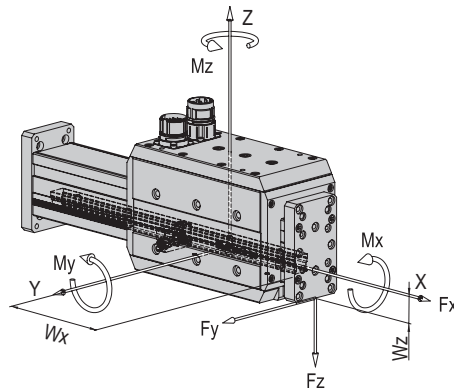
1	direct	2	ES12
1	< direct >	2	ES20
2,3	VP 112	2	
1,2,3	< direct >	2	ES30
1	< direct >	3	SA-1
2,3	VP 113	3	
1	< direct >	3	SA-3
2,3	VP 113	3	
3*	< direct >	2,3	LE-50
1	VP 147	1	RE-50
2,3	VP 127	1	
1	VP 146	1	RE-75
2,3	VP 148	1	
1	< direct >	1	GM RE
2,3	VP 112	1	
1	< direct >	2	SG-50
2,3	VP 120	2	
1	< direct >	2	CS 12
2,3	VP 120	2	
1	< direct >	2	CS 16
1	VP120	2	
1	< direct >	2	CS 20
1	VP117	2	
1	VP 117	2	LM 16
2,3	VS 501	2	
1,2,3	VP 146	2	LM 20
1,2,3	VP 146	2	
1	VP 137	2,3	PS 16
2,3	VP 146	2,3	
2,3	VP 113	2,3	HM 10
1	VP 137	3	
2,3	< direct >	2	HM 16
2,3	VP 113	3	
1	< direct >	2	CR 16
2,3	< direct >	1	
1	VP 117	1	
2,3	VP 119	2	
2,3	< direct >	1	CR 20
1	VP 117	1	
2,3	VP 119	2	
1	VP 117	1	RM 16
1	VP 127	2	
2,3	VP 147	1	
2,3	VP 147	1	
1	VP 117	1	RM 25
1,2,3	VP 146	2	
1,2,3	VP 507	1	
1	< direct >	1,2	DG 16
1	< direct >	1,2	DG 20
1	< direct >	1,2	PG 20
1**	VP 107	1,2	UG 20
1**	< direct >	1,2	UG 25



Note that there might be different mounting positions from one module to another one.
The required connection elements and the range of support columns are depicted in the catalogue HT accessories.



Type	LE-50-XXX-SIN	LE-50-XXX-TTL	LE-50-XXX-ABS-B	LE-50-XXX-ABS-S
Max. torque Mx	30 Nm	30 Nm	30 Nm	30 Nm
Max. torque My	*180 Nm	*180 Nm	*180 Nm	*180 Nm
Max. torque Mz	**140 Nm	**140 Nm	**140 Nm	**140 Nm
Effective distance Wx	83 mm	83 mm	83 mm	83 mm
Effective distance Wz	24 mm	24 mm	24 mm	24 mm
Peak force Fx	170 N	170 N	170 N	170 N



$$\frac{M_x}{M_{x \max}} + \frac{M_y}{M_{y \max}} + \frac{M_z}{M_{z \max}} < 1$$

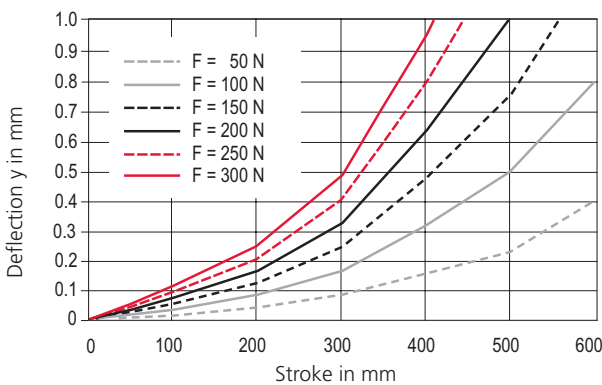
Maximum payload/type	LE-50-XXX-SIN	LE-50-XXX-TTL	LE-50-XXX-ABS-B	LE-50-XXX-ABS-S
Installation position (horizontal) for mounting side 1	10 kg	10 kg	10 kg	10 kg
Installation position (horizontal) for mounting side 3	10 kg	10 kg	10 kg	10 kg

Assembly sides module mounting

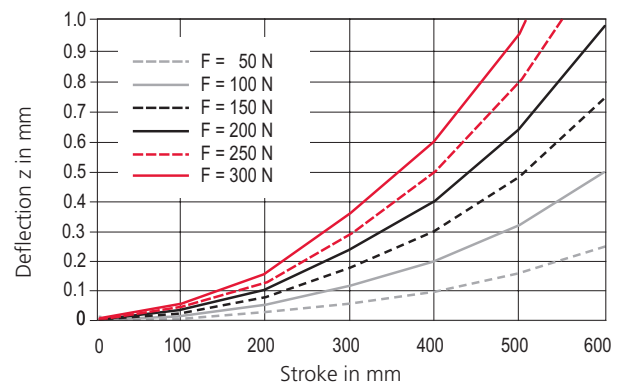


Load diagrams

Deflection in Y direction LE-50



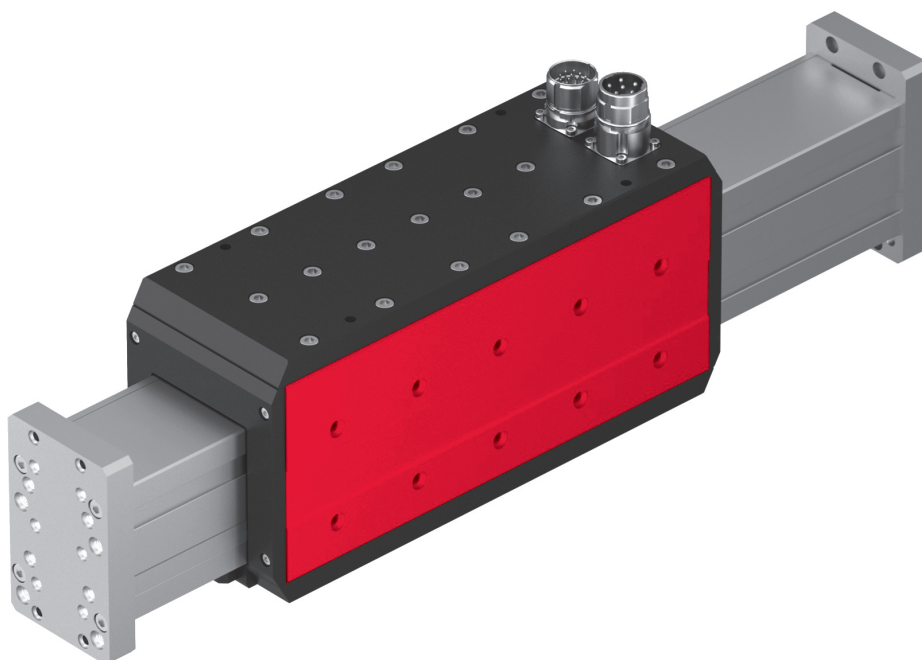
Deflection in Z direction LE-50



*corresponds to: 1 mm deflection on course 500 mm and f = 300 N
 **corresponds to: 1 mm deflection on course 400 mm and f = 300 N

Linear modules LE

LE-60

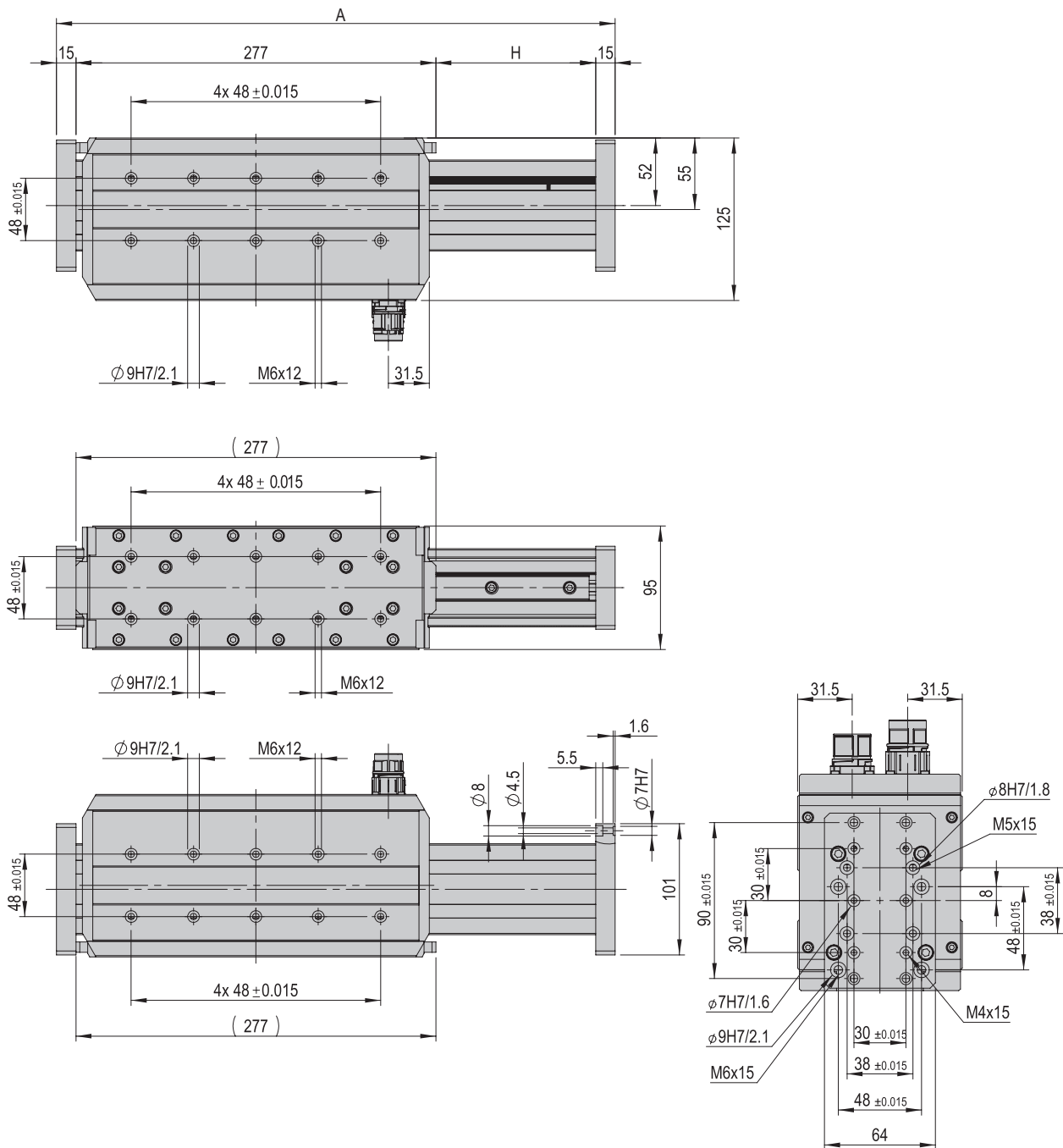


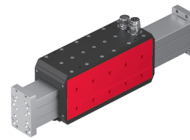
- Highly dynamic and accurate
- Low-noise
- Diverse position measuring systems

Dimensions and dimension drawings

LE-60

Type	LE-60-XXX-SIN	LE-60-XXX TTL	LE-60-XXX-ABS-B	LE-60-XXX-ABS-S
A	H + 330 mm	H + 330 mm	H + 330 mm	H + 330 mm
H	100-800 mm	100-800 mm	100-800 mm	100-800 mm





LE-60	
Attachment grid	48 mm
Attachment thread	M6
Operating temperature	10 - 40 °C
Storage temperature	0 - 50 °C
Humidity	< 90 %

Type	LE-60-XXX-SIN	LE-60-XXX-TTL	LE-60-XXX-ABS-B	LE-60-XXX-ABS-S
Order number	50407226	50307891	50447985	50443273
Max. stroke	800 mm	800 mm	800 mm	800 mm
Stroke increment	20 mm from 100 mm	20 mm from 100 mm	20 mm from 100 mm	20 mm from 100 mm
Net weight	10.304 kg	10.304 kg	10.316 kg	10.316 kg
Weight/100 mm stroke	0.9 kg	0.9 kg	0.9 kg	0.9 kg
Weight, slide	5.6 kg	5.6 kg	5.6 kg	5.6 kg
Weight, cantilever (100 mm stroke)	4 kg	4 kg	4 kg	4 kg
Noise Level	69 dB (A)	69 dB (A)	69 dB (A)	69 dB (A)
Nominal current	5 A	5 A	5 A	5 A
Maximalstrom	15 A	15 A	15 A	15 A
Nominal voltage	max. 600 VDC	max. 600 VDC	max. 600 VDC	max. 600 VDC
Supply voltage	5 VDC	5 VDC	5 VDC	5 VDC
Drive	Linear motor	Linear motor	Linear motor	Linear motor
Protection type	IP 30	IP 30	IP 30	IP 30
Max. speed v	3.5 m/s	3.5 m/s	3.5 m/s	3.5 m/s
Max. acceleration a	40 m/s ²	40 m/s ²	40 m/s ²	40 m/s ²
Peak force F _x	350 N	350 N	350 N	350 N
Constant force F _x	150 N	150 N	150 N	150 N
Connection resistance	2.1 Ohm	2.1 Ohm	2.1 Ohm	2.1 Ohm
Connection inductance	10.41 mH	10.41 mH	10.41 mH	10.41 mH
Channel	A, /A, B, /B, Z, /Z		Clk, /Clk, DATA, /DATA	
Force constant	29.4 N/A	29.4 N/A	29.4 N/A	29.4 N/A
Counter-voltage constant	24.1 V (m/s)	24.1 V (m/s)	24.1 V (m/s)	24.1 V (m/s)
Pole pair distance	38 mm	38 mm	38 mm	38 mm
Digital incremental encoder	RS422	RS422	RS422	RS422
Resolution	1 period/mm	1 µm/increment	0.9765625 µm (1000/1024 µm)	
Repeat accuracy	+/- 0.01 mm	+/- 0.01 mm	+/- 0.01 mm	+/- 0.01 mm
Mounting position	↔	↔	↔	↔

The technical data pertains to Afag standard test conditions.
 Cleanroom class ISO 14644-1, class ISO 7
 *XXX = stroke

Included in the delivery

(Catalogue HT accessories)

- 2x Centering bushing Ø7x3
- 2x Centering bushing Ø8x3.5
- 4x Centering bushing Ø9x4
- 4x Mounting screw M4x18
- 4x Mounting screw M6x18

Accessories

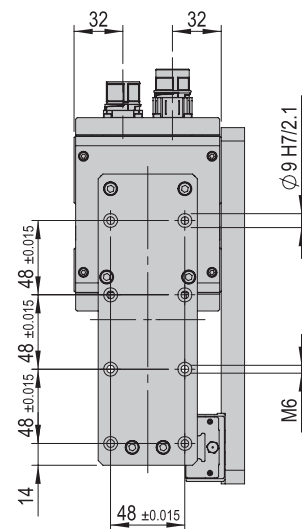
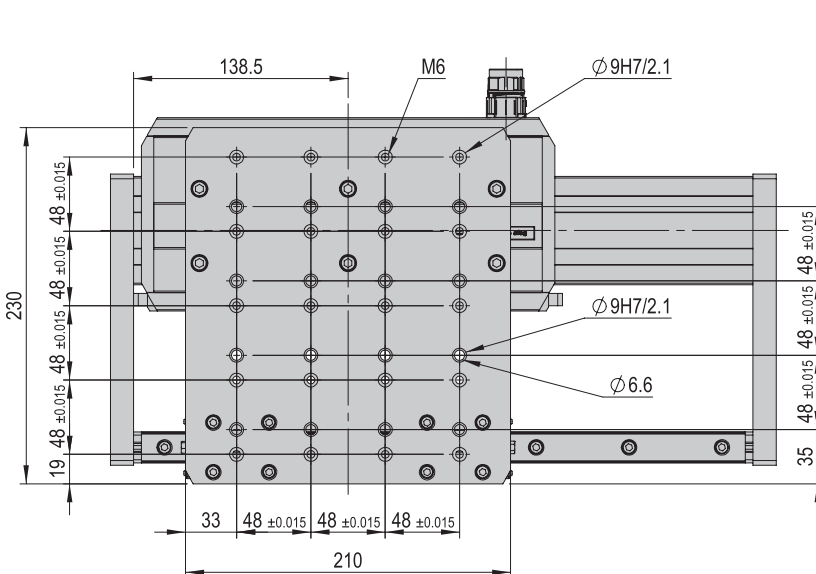
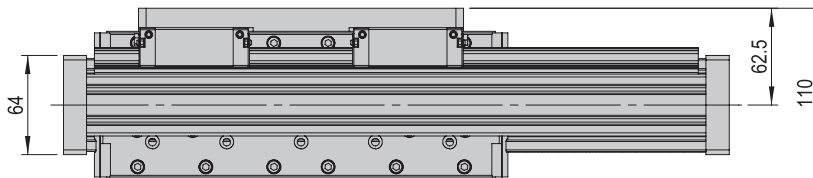
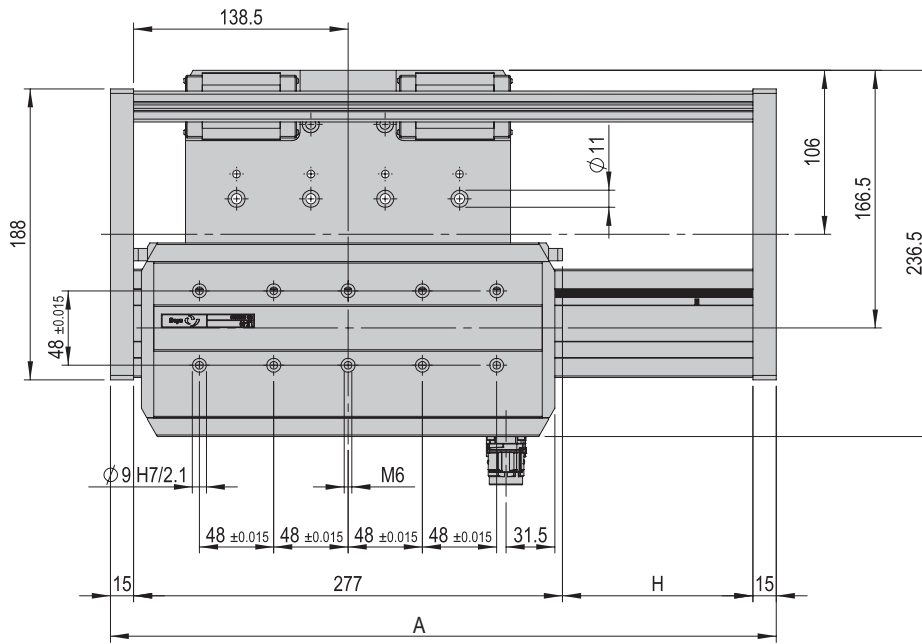
- Only for -SIN-TTL: Servo controller SE-Power

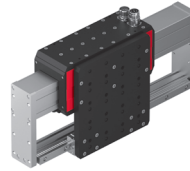
24 months following commissioning, but a maximum of 27 months following delivery

Basic version option for cross setups

LE-60-D

Type	LE-60-D-XXX-SIN	LE-60-D-XXX TTL	LE-60-D-XXX-ABS-B	LE-60-D-XXX-ABS-S
A	H + 330 mm	H + 330 mm	H + 330 mm	H + 330 mm
H	100-800 mm	100-800 mm	100-800 mm	100-800 mm





LE-60-D	
Attachment grid	48 mm
Attachment thread	M6
Operating temperature	10 - 40 °C
Storage temperature	0 - 50 °C
Humidity	< 90 %

Type	LE-60-D-XXX-SIN	LE-60-D-XXX TTL	LE-60-D-XXX-ABS-B	LE-60-D-XXX-ABS-S
Order number	50407229	50319222	50447988	50443276
Max. stroke	800 mm	800 mm	800 mm	800 mm
Stroke increment	20 mm from 100 mm	20 mm from 100 mm	20 mm from 100 mm	20 mm from 100 mm
Net weight	15.204 kg	15.204 kg	15.216 kg	15.216 kg
Weight/100 mm stroke	1.21 kg	1.21 kg	1.21 kg	1.21 kg
Weight, slide	8.2 kg	8.2 kg	8.2 kg	8.2 kg
Weight, cantilever (100 mm stroke)	6.3 kg	6.3 kg	6.3 kg	6.3 kg
Noise Level	69 dB (A)	69 dB (A)	69 dB (A)	69 dB (A)
Nominal current	5 A	5 A	5 A	5 A
Maximalstrom	15 A	15 A	15 A	15 A
Nominal voltage	max. 600 VDC	max. 600 VDC	max. 600 VDC	max. 600 VDC
Supply voltage	5 VDC	5 VDC	5 VDC	5 VDC
Drive	Linear motor	Linear motor	Linear motor	Linear motor
Protection type	IP 30	IP 30	IP 30	IP 30
Max. speed v	3.5 m/s	3.5 m/s	3.5 m/s	3.5 m/s
Max. acceleration a	40 m/s ²	40 m/s ²	40 m/s ²	40 m/s ²
Peak force Fx	350 N	350 N	350 N	350 N
Constant force Fx	150 N	150 N	150 N	150 N
Connection resistance	2.1 Ohm	2.1 Ohm	2.1 Ohm	2.1 Ohm
Connection inductance	10.41 mH	10.41 mH	10.41 mH	10.41 mH
Channel	A, /A, B, /B, Z, /Z		Clk, /Clk, DATA, /DATA	
Force constant	29.4 N/A	29.4 N/A	29.4 N/A	29.4 N/A
Counter-voltage constant	24.1 V (m/s)	24.1 V (m/s)	24.1 V (m/s)	24.1 V (m/s)
Pole pair distance	38 mm	38 mm	38 mm	38 mm
Digital incremental encoder	RS422	RS422	RS422	RS422
Resolution	1 period/mm	1 µm/increment	0.9765625 µm (1000/1024 µm)	
Repeat accuracy	+/- 0.01 mm	+/- 0.01 mm	+/- 0.01 mm	+/- 0.01 mm
Mounting position	↔	↔	↔	↔

The technical data pertains to Afag standard test conditions.

Cleanroom class ISO 14644-1, class ISO 7

Note: The LE-60-D can only be operated with movable slide. The operation with fixed slide and moving profile is not allowed.

*XXX = stroke

Included in the delivery

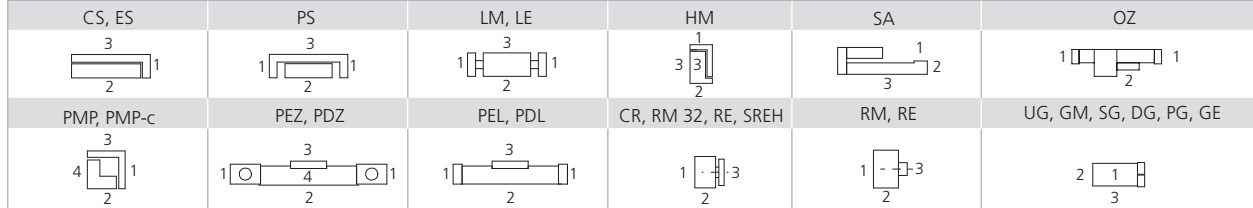
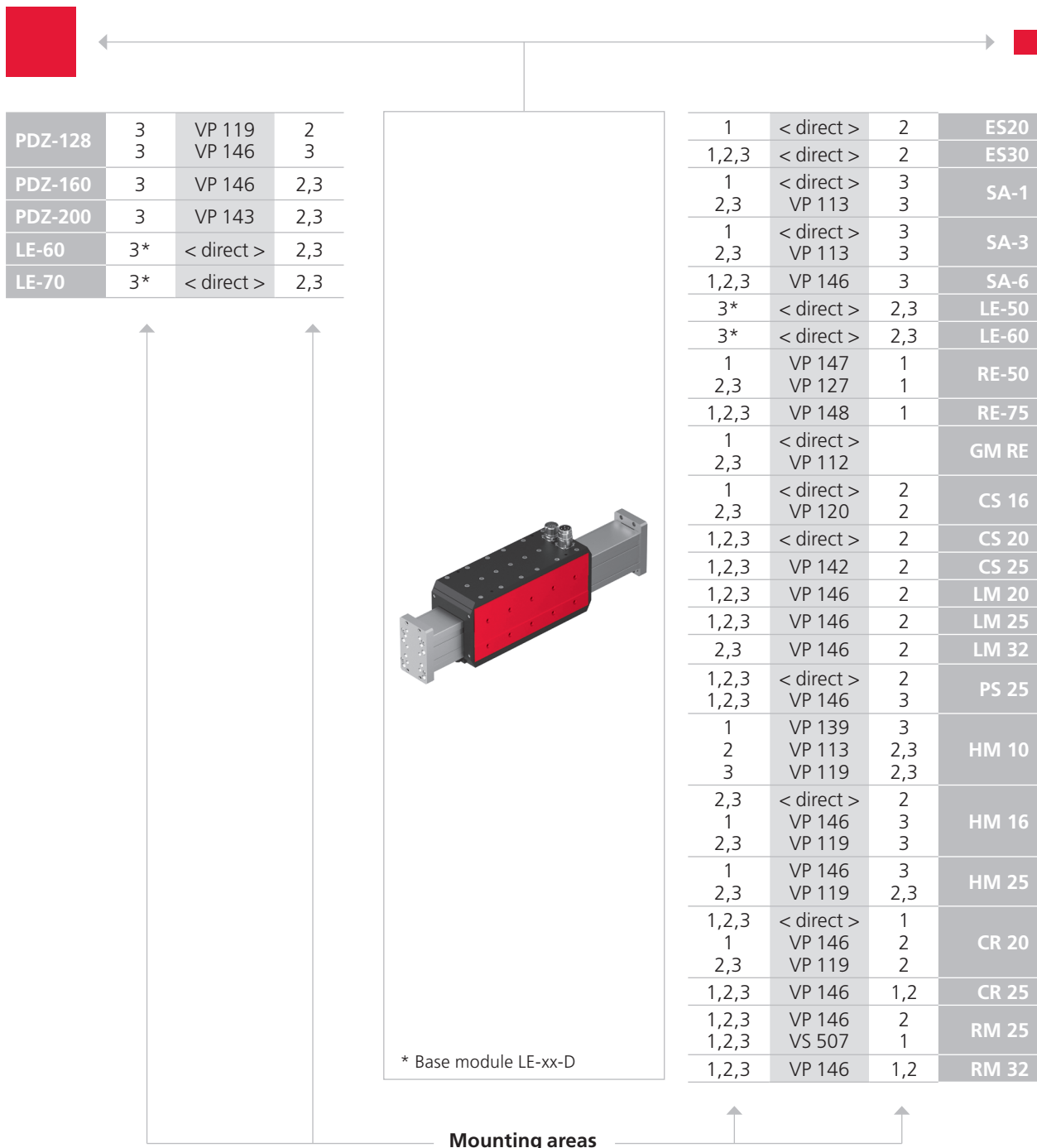
(Catalogue HT accessories)

- 2x Centering bushing Ø7x3
- 2x Centering bushing Ø8x3.5
- 4x Centering bushing Ø9x4
- 4x Mounting screw M4x18
- 4x Mounting screw M6x18

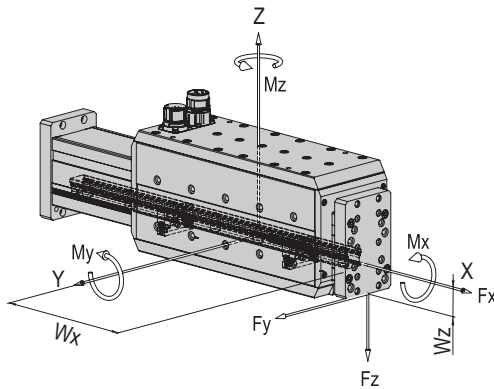
Accessories

- Only for -SIN/-TTL: Servo controller SE-Power

24 months following commissioning, but a maximum of 27 months following delivery



Type	LE-60-XXX-SIN	LE-60-XXX-TTL	LE-60-XXX-ABS-B	LE-60-XXX-ABS-S
Max. torque Mx	50 Nm	50 Nm	50 Nm	50 Nm
Max. torque My	*270 Nm	*270 Nm	*270 Nm	*270 Nm
Max. torque Mz	**220 Nm	**220 Nm	**220 Nm	**220 Nm
Effective distance Wx	133 mm	133 mm	133 mm	133 mm
Effective distance Wz	30 mm	30 mm	30 mm	30 mm
Peak force Fx	350 N	350 N	350 N	350 N

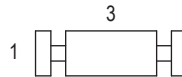


$$\frac{M_x}{M_{x \max}} + \frac{M_y}{M_{y \max}} + \frac{M_z}{M_{z \max}} < 1$$

Maximum payload/type	LE-60-XXX-SIN	LE-60-XXX-TTL	LE-60-XXX-ABS-B	LE-60-XXX-ABS-S
Installation position (horizontal) for mounting side 1	20 kg	20 kg	20 kg	20 kg
Installation position (horizontal) for mounting side 3	20 kg	20 kg	20 kg	20 kg

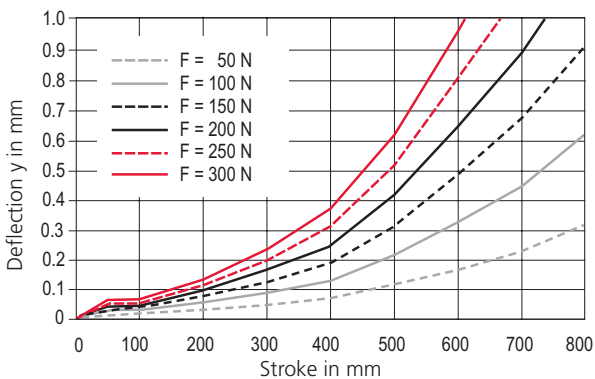
Assembly sides module mounting

horizontal:

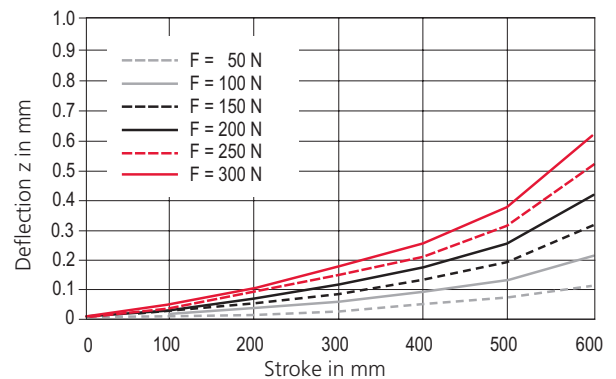


Load diagrams

Deflection in Y direction LE-60



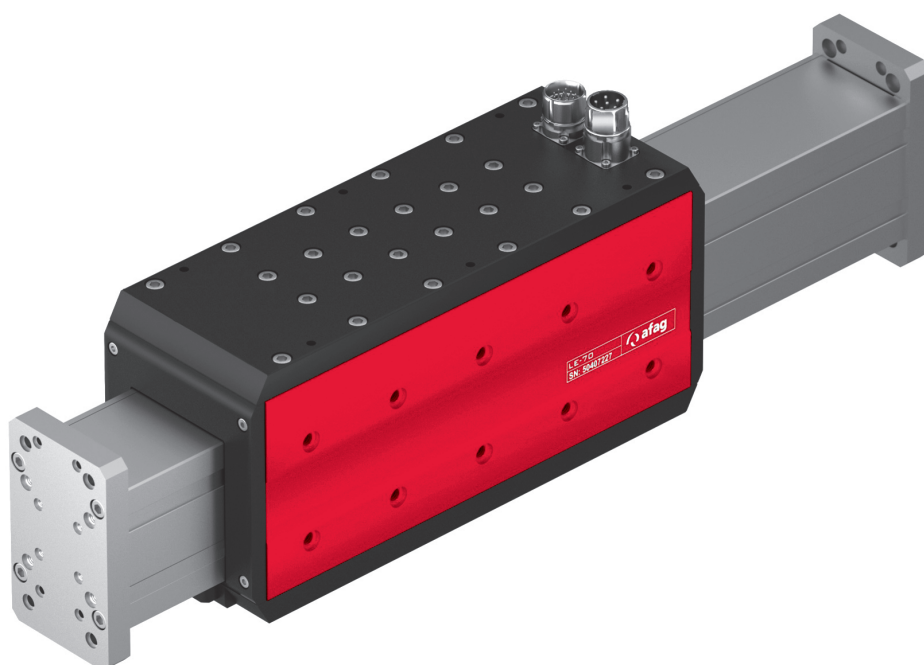
Deflection in Z direction LE-60



*corresponds to: 1 mm deflection on course 750 mm and f = 300 N
 **corresponds to: 1 mm deflection on course 600 mm and f = 300 N

Linear modules LE

LE-70

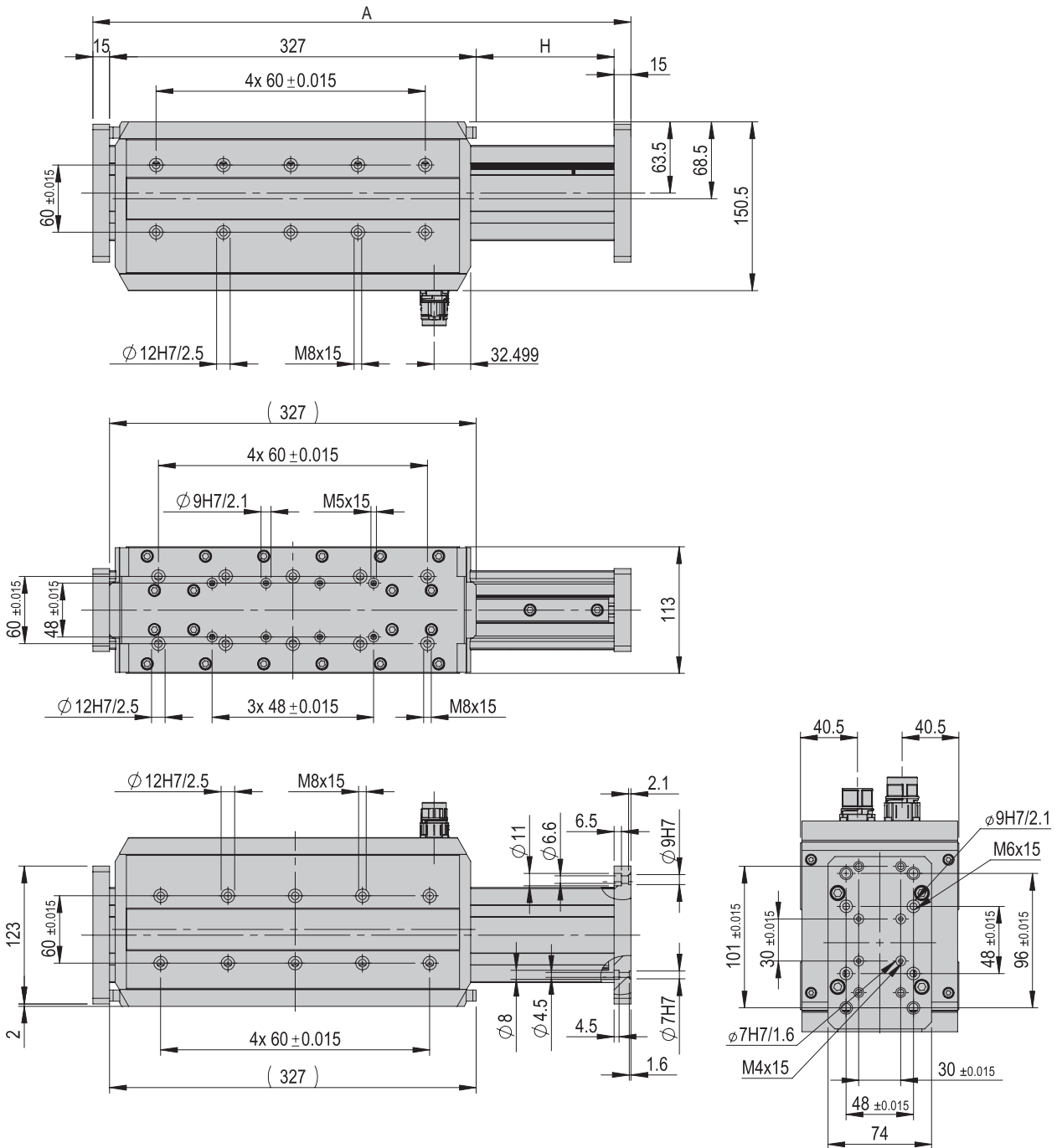


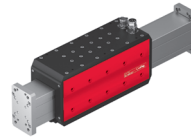
- Highly dynamic and accurate
- Low-noise
- Diverse position measuring systems

Dimensions and dimension drawings

LE-70

Type	LE-70-XXX-SIN	LE-70-XXX TTL	LE-70-XXX-ABS-B	LE-70-XXX-ABS-S
A	H + 380 mm	H + 380 mm	H + 380 mm	H + 380 mm
H	100-1000 mm	100-1000 mm	100-1000 mm	100-1000 mm





LE-70	
Attachment grid	48 mm
Attachment thread	M6
Operating temperature	10 - 40 °C
Storage temperature	0 - 50 °C
Humidity	< 90 %

Type	LE-70-XXX-SIN	LE-70-XXX-TTL	LE-70-XXX-ABS-B	LE-70-XXX-ABS-S
Order number	50407227	50307892	50447986	50443274
Max. stroke	1000 mm	1000 mm	1000 mm	1000 mm
Stroke increment	20 mm from 100 mm	20 mm from 100 mm	20 mm from 100 mm	20 mm from 100 mm
Net weight	16.802 kg	16.802 kg	16.819 kg	16.819 kg
Weight/100 mm stroke	1.3 kg	1.5 kg	1.3 kg	1.3 kg
Weight, slide	10 kg	10 kg	10 kg	10 kg
Weight, cantilever (100 mm stroke)	6.4 kg	6.4 kg	6.4 kg	6.4 kg
Noise Level	72 dB (A)	72 dB (A)	72 dB (A)	72 dB (A)
Nominal current	8 A	8 A	8 A	8 A
Maximalstrom	20 A	20 A	20 A	20 A
Nominal voltage	max. 600 VDC	max. 600 VDC	max. 600 VDC	max. 600 VDC
Supply voltage	5 VDC	5 VDC	9-35 VDC	9-35 VDC
Drive	Linear motor	Linear motor	Linear motor	Linear motor
Protection type	IP 30	IP 30	IP 30	IP 30
Max. speed v	5 m/s	5 m/s	5 m/s	5 m/s
Max. acceleration a	50 m/s ²	50 m/s ²	50 m/s ²	50 m/s ²
Peak force F _x	800 N	800 N	800 N	800 N
Constant force F _x	350 N	350 N	350 N	350 N
Connection resistance	1.69 Ohm	1.69 Ohm	1.69 Ohm	1.69 Ohm
Connection inductance	14.63 mH	14.63 mH	14.63 mH	14.63 mH
Channel	A, /A, B, /B, Z, /Z		Clk, /Clk, DATA, /DATA	
Force constant	53.7 N/A	53.7 N/A	53.7 N/A	53.7 N/A
Counter-voltage constant	44 V (m/s)	44 V (m/s)	44 V (m/s)	44 V (m/s)
Pole pair distance	38 mm	38 mm	38 mm	38 mm
Digital incremental encoder	RS422	RS422	RS422	RS422
Resolution	1 period/mm	1 µm/increment	0.9765625 µm (1000/1024 µm)	
Repeat accuracy	+/- 0.01 mm	+/- 0.01 mm	+/- 0.01 mm	+/- 0.01 mm
Mounting position	↔	↔	↔	↔

The technical data pertains to Afag standard test conditions.
 Cleanroom class ISO 14644-1, class ISO 7
 *XXX = stroke

Included in the delivery

(Catalogue HT accessories)

- 2x Centering bushing Ø7x3
- 2x Centering bushing Ø8x3.5
- 4x Centering bushing Ø9x4
- 4x Mounting screw M4x18
- 4x Mounting screw M6x18

Accessories

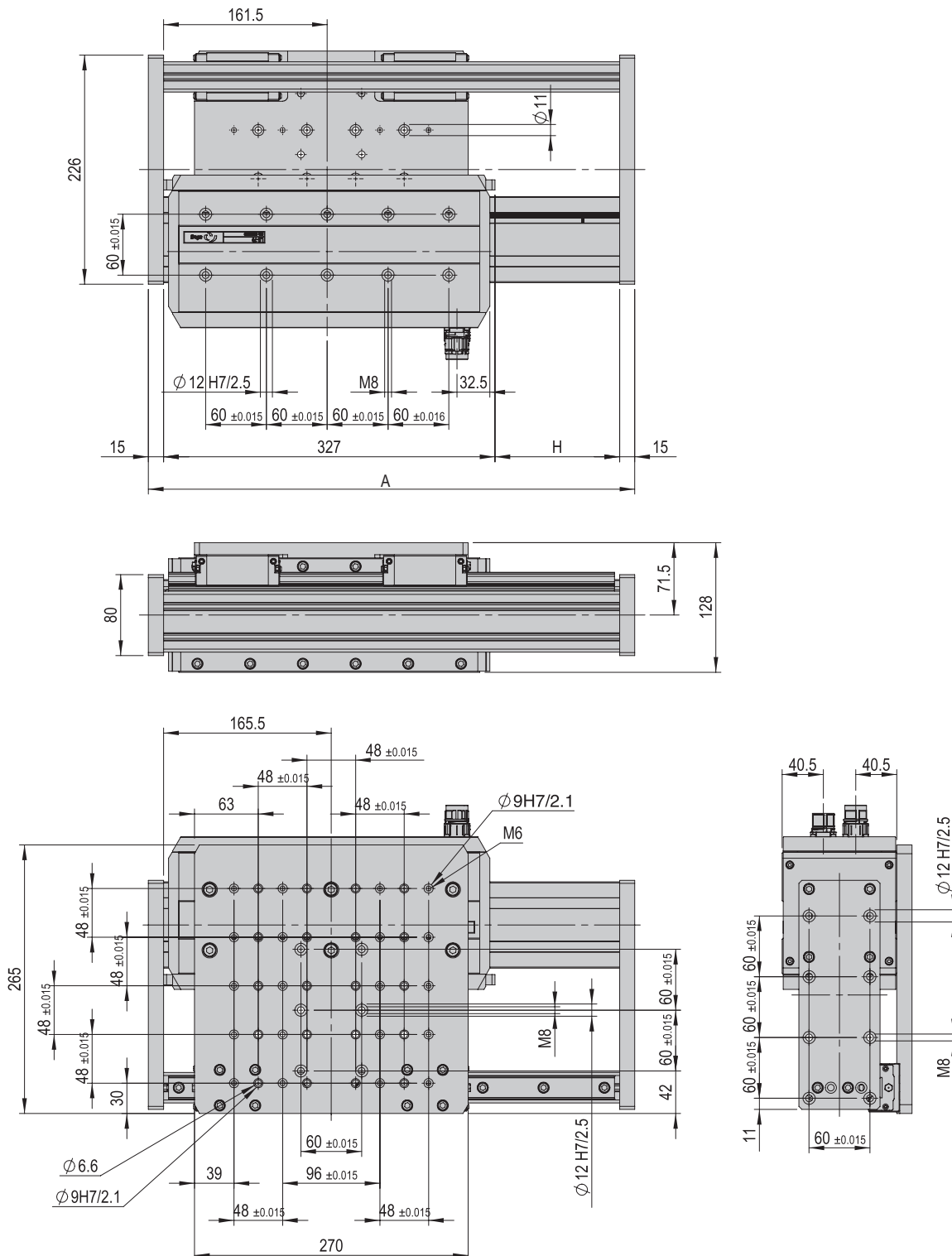
- Only for -SIN/-TTL: Servo controller SE-Power

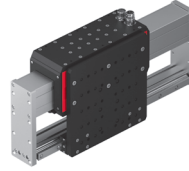
24 months following commissioning, but a maximum of 27 months following delivery

Basic version option for cross setups

LE-70-D

Type	LE-70-D-XXX-SIN	LE-70-D-XXX TTL	LE-70-D-XXX-ABS-B	LE-70-D-XXX-ABS-S
A	H + 380 mm	H + 380 mm	H + 380 mm	H + 380 mm
H	100-1000 mm	100-1000 mm	100-1000 mm	100-1000 mm





LE-70-D	
Attachment grid	48 mm
Attachment thread	M6
Operating temperature	10 - 40 °C
Storage temperature	0 - 50 °C
Humidity	< 90 %

Type	LE-70-D-XXX-SIN	LE-70-D-XXX TTL	LE-70-D-XXX-ABS-B	LE-70-D-XXX-ABS-S
Order number	50407230	50319225	50447989	50443277
Max. stroke	1000 mm	1000 mm	1000 mm	1000 mm
Stroke increment	20 mm from 100 mm	20 mm from 100 mm	20 mm from 100 mm	20 mm from 100 mm
Net weight	23.75 kg	23.75 kg	23.767 kg	23.767 kg
Weight/100 mm stroke	2 kg	2 kg	2 kg	2 kg
Weight, slide	14 kg	14 kg	14 kg	14 kg
Weight, cantilever (100 mm stroke)	9.4 kg	9.4 kg	9.4 kg	9.4 kg
Noise Level	72 dB (A)	72 dB (A)	72 dB (A)	72 dB (A)
Nominal current	8 A	8 A	8 A	8 A
Maximalstrom	20 A	20 A	20 A	20 A
Nominal voltage	max. 600 VDC	max. 600 VDC	max. 600 VDC	max. 600 VDC
Supply voltage	5 VDC	5 VDC	5 VDC	5 VDC
Drive	Linear motor	Linear motor	Linear motor	Linear motor
Protection type	IP 30	IP 30	IP 30	IP 30
Max. speed v	5 m/s	5 m/s	5 m/s	5 m/s
Max. acceleration a	50 m/s ²	50 m/s ²	50 m/s ²	50 m/s ²
Peak force Fx	800 N	800 N	800 N	800 N
Constant force Fx	350 N	350 N	350 N	350 N
Connection resistance	1.69 Ohm	1.69 Ohm	1.69 Ohm	1.69 Ohm
Connection inductance	14.63 mH	14.63 mH	14.63 mH	14.63 mH
Channel	A, /A, B, /B, Z, /Z		Clk, /Clk, DATA, /DATA	
Force constant	53.7 N/A	53.7 N/A	53.7 N/A	53.7 N/A
Counter-voltage constant	44 V (m/s)	44 V (m/s)	44 V (m/s)	44 V (m/s)
Pole pair distance	38 mm	38 mm	38 mm	38 mm
Digital incremental encoder	RS422	RS422	RS422	RS422
Resolution	1 period/mm	1 µm/increment	0.9765625 µm (1000/1024 µm)	
Repeat accuracy	+/- 0.01 mm	+/- 0.01 mm	+/- 0.01 mm	+/- 0.01 mm
Mounting position	↔	↔	↔	↔

The technical data pertains to Afag standard test conditions.
Cleanroom class ISO 14644-1, class ISO 7

Note: The LE-70-D can only be operated with movable slide. The operation with fixed slide and moving profile is not allowed.

*XXX = stroke

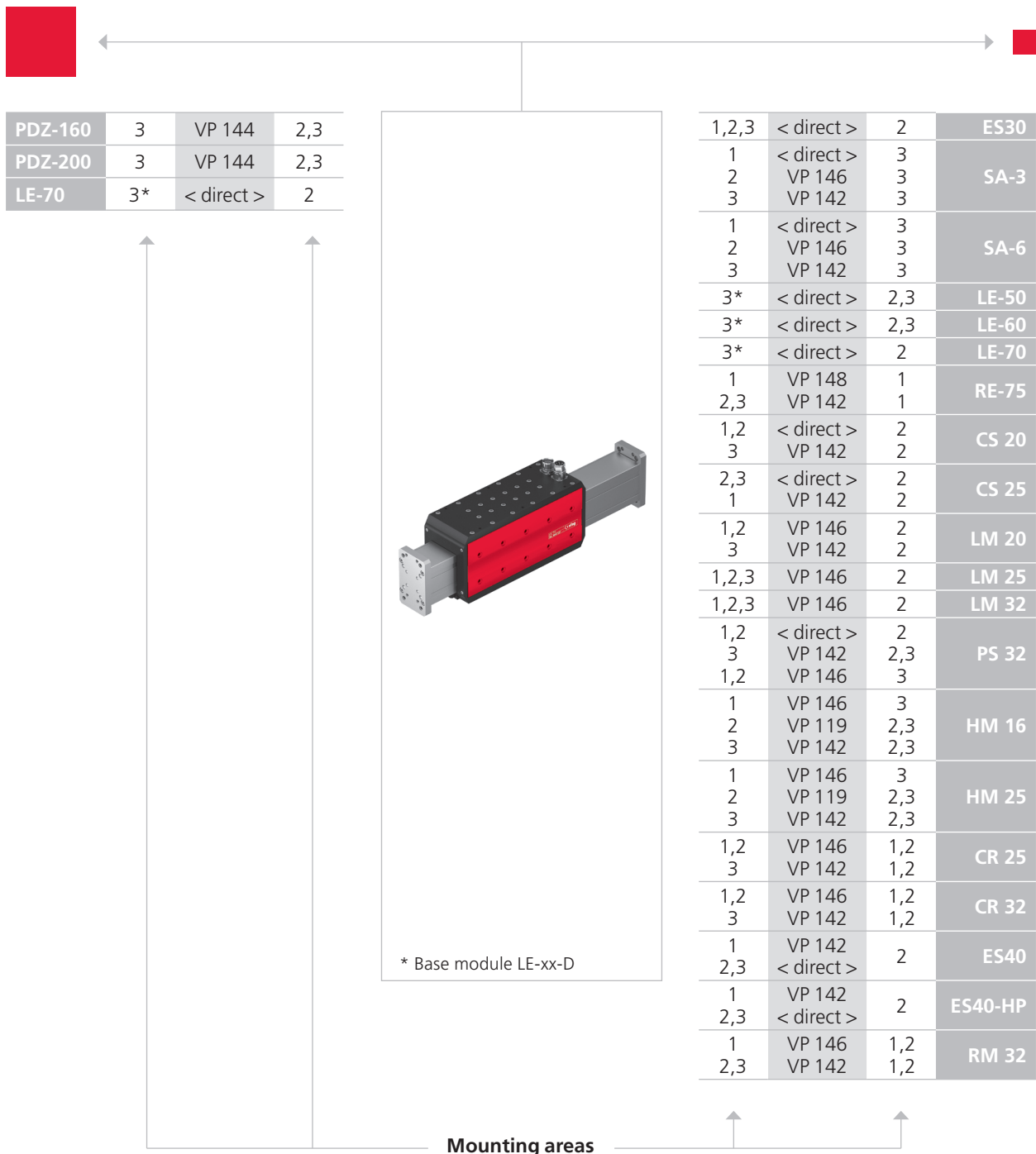
Included in the delivery (Catalogue HT accessories)

- 2x Centering bushing Ø7x3
- 2x Centering bushing Ø8x3.5
- 4x Centering bushing Ø9x4
- 4x Mounting screw M4x18
- 4x Mounting screw M6x18

Accessories

- Only for -SIN/-TTL: Servo controller SE-Power

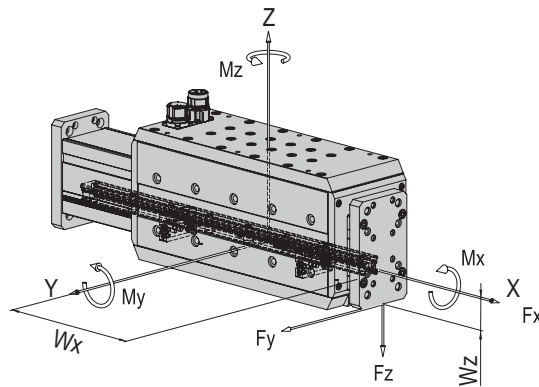
Warranty: 24 months following commissioning, but a maximum of 27 months following delivery



CS, ES 	PS 	LM, LE 	HM 	SA 	OZ
PMP, PMP-c 	PEZ, PDZ 	PEL, PDL 	CR, RM 32, RE, SREH 	RM, RE 	UG, GM, SG, DG, PG, GE

Note that there might be different mounting positions from one module to another one.
The required connection elements and the range of support columns are depicted in the catalogue HT accessories.

Type	LE-70-XXX-SIN	LE-70-XXX-TTL	LE-70-XXX-ABS-B	LE-70-XXX-ABS-S
Max. torque Mx	80 Nm	80 Nm	80 Nm	80 Nm
Max. torque My	*330 Nm	*330 Nm	*330 Nm	*330 Nm
Max. torque Mz	**280 Nm	**280 Nm	**280 Nm	**280 Nm
Effective distance Wx	158 mm	158 mm	158 mm	158 mm
Effective distance Wz	37 mm	37 mm	37 mm	37 mm
Peak force Fx	800 N	800 N	800 N	800 N

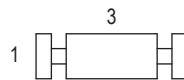


$$\frac{M_x}{M_{x \max}} + \frac{M_y}{M_{y \max}} + \frac{M_z}{M_{z \max}} < 1$$

Maximum payload/type	LE-70-XXX-SIN	LE-70-XXX-TTL	LE-70-XXX-ABS-B	LE-70-XXX-ABS-S
Installation position (horizontal) for mounting side 1	30 kg	30 kg	30 kg	30 kg
Installation position (horizontal) for mounting side 3	30 kg	30 kg	30 kg	30 kg

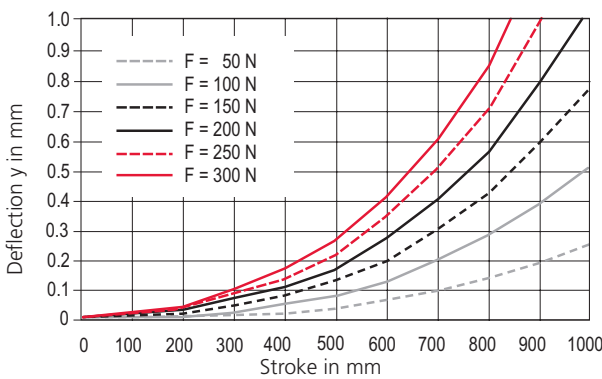
Assembly sides module mounting

horizontal:

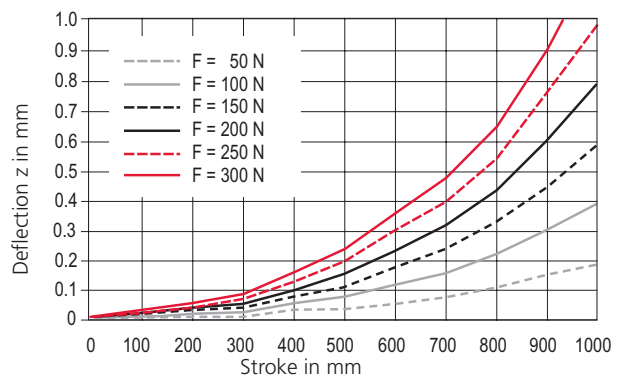


Load diagrams

Deflection in Y direction LE-60



Deflection in Z direction LE-60



*corresponds to: 1 mm deflection on course 950 mm and f = 300 N
 **corresponds to: 1 mm deflection on course 800 mm and f = 300 N