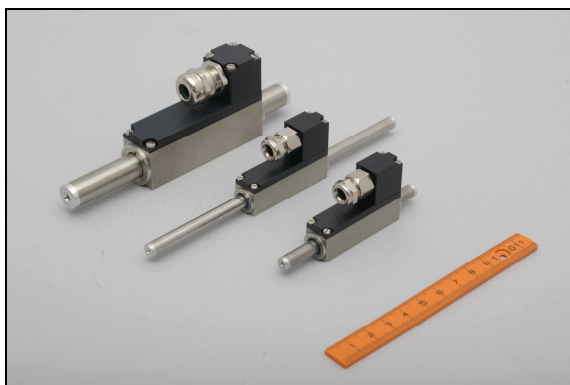


QUICKSHAFT® Dynamic Miniature Linear Servo Drives

QUICKSHAFT® are ironless, tubular and dynamic miniature linear direct servo drives. With an excellent performance/volume ratio, the drives are especially suitable for applications with high-dynamic positioning tasks in tight spaces.



QUICKSHAFT® Miniature Linear Servo Drives

- miniaturized linear direct drives
- peak force 27,6 N
- 3phase ironless tubular construction
- integrated, incremental measurement system, sensing of the drive magnets
- integrated plain bearings
- speed up to 5 m/s
- acceleration up to 600 m/s²
- positioning accuracy +/- 0,05 mm

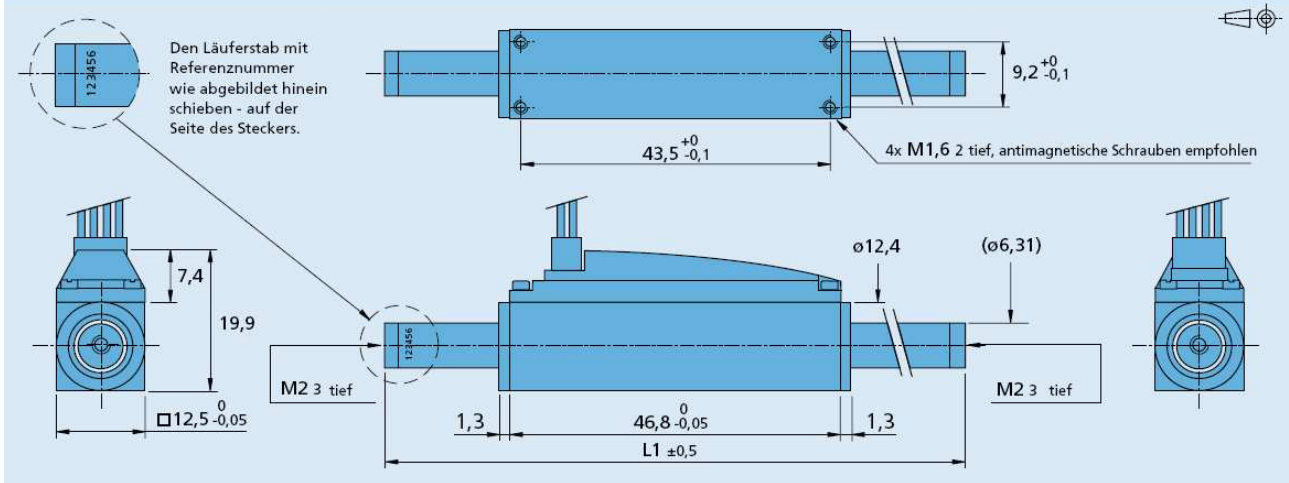
Technical Data QUICKSHAFT® Miniature Linear Servo Drives LM1247 & LM2070

Motor Type	LM1247 -020	LM1247 -080	LM1247 -120	LM2070 -040	LM2070 -080	LM2070 -120
Operating Data						
stroke [mm]	20	80	120	40	80	120
peak force ¹⁾		10,5			27,6	
cont. force [N]		3,6			9,2	
peak current [A]		1,64			2,4	
force constane [N/A]		6,43			11,64	
resistance phace-phase [Ω]		13,17			10,83	
back EMF constant [V _{peak} /m/s]		5,25			9,5	
slider mass [g]	18	35	43	98	140	168
max. speed [m/s] ¹⁾	5,0	5,0	5,0	5,0	5,0	5,0
resolution [mm]		0,006			0,008	
repetitive accuracy [mm]		+/- 0,05				
absolute accuracy [mm]	+/- 0,12	+/- 0,18	+/- 0,22	+/- 0,2	+/- 0,3	+/- 0,4
motor weigth [g]	67	84	92	246	288	316
standard connector	cable gland, 10 cm cable with DSUB-9 connector					
optional connector				flange connector 8poles option „B“		
optional connector	direct cable outlet for cable chain option „Z“					
operating temperature [°C]	-20 to +125					
rel. humidity [%]	0 to 90 not condensing					
IP protection class	IP20					

¹⁾ Only with LinMot® controller and 72 DC bus voltage!

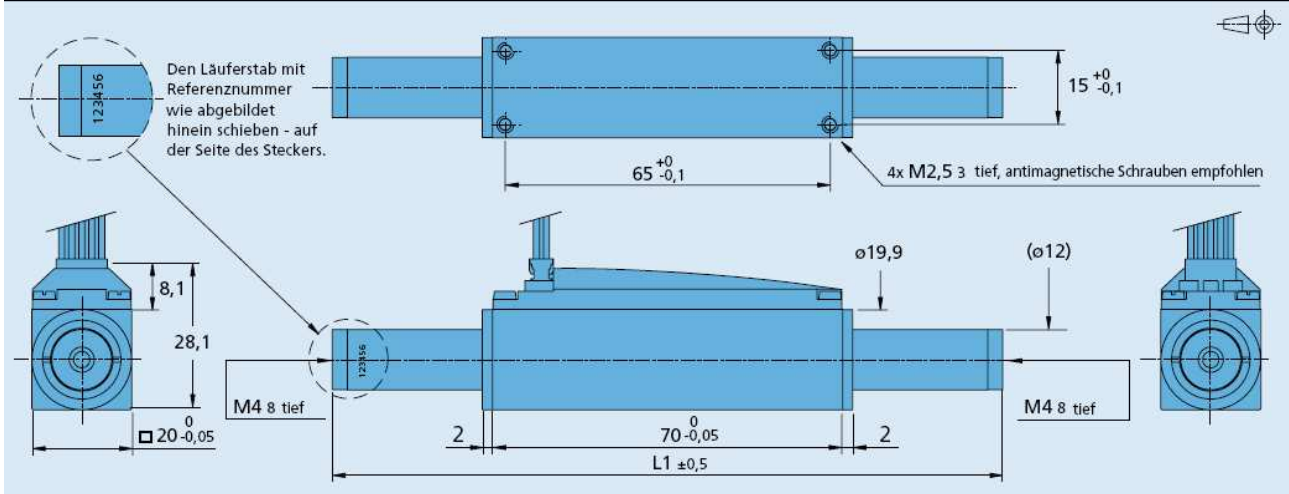
Dimensions QUICKSHAFT® Linear Servo Drives

Lineare DC-Servomotoren LM 1247



Drawing of connector not exact, depending on connector option!

Lineare DC-Servomotoren LM 2070



Drawing of connector not exact, depending on connector option!

STEP files on demand!

Stroke Range QUICKSHAFT® Linear Servo Drives

	Motor type	LM 1247 -020	LM 1247 -080	LM 1247 -120	LM 2070 -040	LM 2070 -080	LM 2070 -120
	stroke [mm]	20	80	120	40	80	120
	length L1 [mm]	82	154	190	134	182	218
	stator length [mm]	49,4	49,4	49,4	74	74	74
	A [mm]	6,3	12,3	10,3	10	14	12
	B [mm]	26,3	92,3	130,3	50	94	132

Minimal Mounting Distances

Motor type	LM1247	LM2070
minimal mounting distances		
motor to motor in parallel configuration C [mm]	25	35
motor to motor in 90° configuration C [mm]	17	30
motor to ferromagnetic material D [mm]	18	20
motor to conductive material D [mm]	6,3	10
motor to non conductive material D [mm]	3,2	6

Connector Assignments QUICKSHAFT® Linear Servo Drives and Positioning Controllers

Standard Connector

motor connector	
D-Sub 9pole (m)	
contact no.	signal
1	phase A
2	phase C
3	+ 5 V
4	hall A
5	hall C
6	phase B
7	-/-
8	GND
9	hall B
housing	N.C.

Connector Option „-B“

motor connector	
flange connector 8pole (m)	
contact no.	signal
1	phase B
2	+5V
3	hall B
4	phase C
5	hall C
6	phase A
7	hall A
8	GND
housing	N.C.

Connector Option „-Z“

motor connector	
pin row 2x5 10pole (m)	
contact no.	signal
1	phase C
2	hall A
3	+5V
4	GND
5	hall B
6	hall C
7	phase B
8	phase A
9 + 10	N.C.
housing	N.C.

Positioning Controllers

brand		
LinMot®	FAULHABER®	TECHNOSOFT®

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