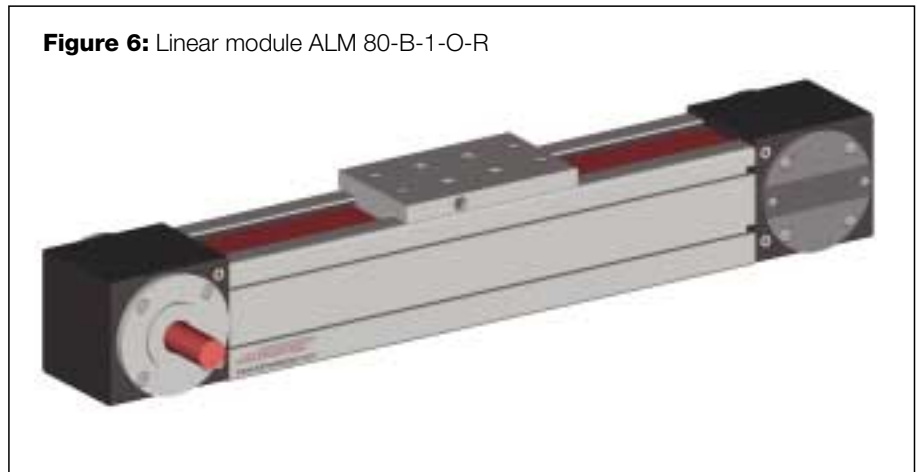


4.2.1 Dimension Table
Type ALM 80-B with
Belt Drive

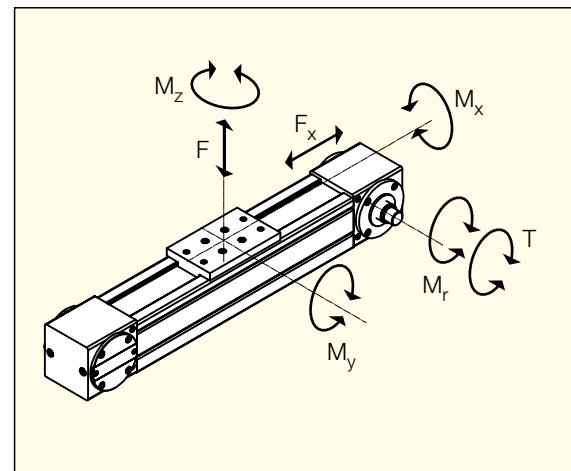
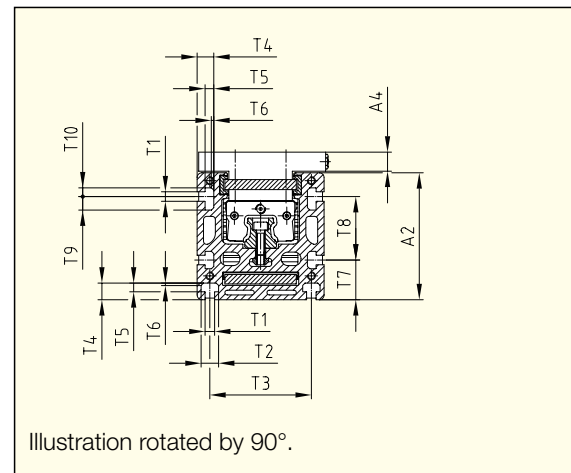
Figure 6: Linear module ALM 80-B-1-O-R

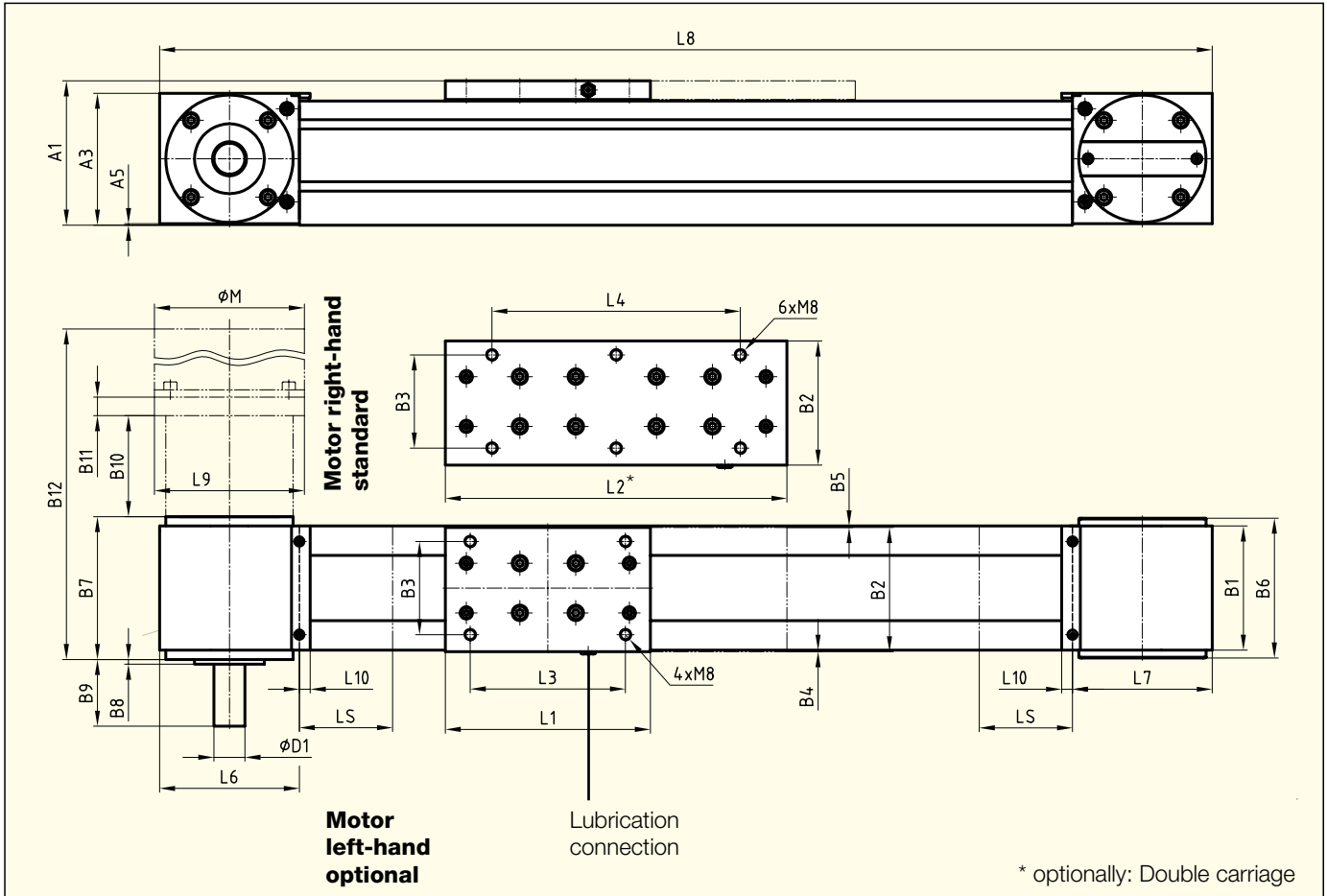


Technical Data

		ALM 80-B	
		Single carriage	Double carriage
Maximum permissible central force F	(N)	1600	3200
Dyn. load bearing value C of the linear guideway	(N)	14400	28800
Permissible bending moment with full support	M_x (Nm)	72	144
	M_y (Nm)	42	210
	M_z (Nm)	36	144
Max. permissible tensile force F_x of the belt	(N)	1300	1300
Max. recommended load to be moved with high dynamism	(N)	80	80
Static friction moment M_f (with 1 carriage)	(Ncm)	80	80
Profile support recommended as from	(mm)	1000	1000
Max. stroke	One-part (mm)	6740	6652
	Multi-part (mm)	12000	11912
Installation position		any	any
Positioning accuracy*	(mm/m)	$\pm 0.3/0.3$	$\pm 0.3/0.3$
Repeatability*	(mm)	$\pm 0.05/1000$	$\pm 0.05/1000$
Feed per motor revolution without gearing	(mm)	192	192
Maximum travelling speed v_{max}	with load 30 kg (m/s)	3.5	3.5
	with load 80 kg (m/s)	1.5	1.5
Maximum diameter of drive shaft	(mm)	20	20
Maximum drive torque T	(Nm)	75	75

* Dependent on the type of motor





Standard Stroke (mm)	Single carriage	110	410	810	1410	2010	2810	3510	4210	5010	5810	6510
		210	510	1010	1610	2210	3010	3810	4510	5210	6010	6710
		310	610	1210	1810	2510	3210	4010	4810	5510	6210	
Standard Stroke (mm)	Double carriage	22	322	722	1322	1922	2722	3422	4122	4922	5722	6422
		122	422	922	1522	2122	2922	3722	4422	5122	5922	6622
		222	522	1122	1722	2422	3122	3922	4722	5422	6122	

Special- and intermediate strokes available on request!

Overall length L8 (mm)	Single carriage	$L8 = \text{stroke} + 450$
	Double carriage	$L8 = \text{stroke} + 538$
Weight without motor (kg)	Single carriage	$m_s = 8.55 + (0.91 \text{ per } 100 \text{ mm stroke})$
	Double carriage	$m_d = 9.25 + (0.91 \text{ per } 100 \text{ mm stroke})$

A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	D1	ØM
93	80	86	12	1	80	80	60	1	1	90	92	3	43	*	*	*	20 _{h5}	*

L1	L2	L3	L4	L6	L7	L9	L10	LS _{min} **	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10
132	220	100	160	100	100	*	7	59	6	11	64	10.5	5.5	1.5×45°	25	40	8.5	5.5

* Dependent on the type of motor

** LS is a safety overrun corresponding to the actual application for avoiding collision damage. It amounts to a minimum of 59 mm!

All dimensions in mm. Subject to dimensional and design modifications!