

Linear tables with closed shaft guidance system and trapezoidal lead screw drive LTE30-180-B-TR20x8-M-0 (Series LTE...-B-TR...-0)

with shaft support block type B, without bellows, with single nut

The datasheet is only an overview of dimensions and basic load ratings of the selected product. Please always observe all the guidelines in these overview pages. Further information is given on many products under the menu item "Description". You can also order comprehensive information via the Catalogue ordering system (https://www.schaeffler.de/content.schaeffler.de/en/news_media/index.jsp) or by telephone on +49 (91 32) 82 - 28 97.

B ₁	180 mm
H	67 mm
L	180 mm
	<p>Length calculation: $L_{tot} = \text{total stroke} + L + L_4 + L_5$ Total stroke (GH) = effective stroke + 2 x S (mm) ATTENTION: The allowance S designates a safety range suitable for the particular application. Observe: - The maximum possible support rail length L_{tot} of the actuator.</p>
1)	Lubrication nipple to DIN 3405-A M6.
2)	Filling openings.
3)	Switching tag connectors on carriage.

B4B	180 mm	
b87	68 mm	Tolerance: +0,2/-0,2
D3	13,5 mm	
D7	30 mm	Tolerance for diameter: h7
d85	10 mm	Tolerance for diameter: h7
D86	32 mm	Tolerance: H7
d86	0 mm	Tolerance for diameter = h7
G3	M12	
G43	M12	
G87	M6x15	
H1	64 mm	
h1	32 mm	
H4B	58 mm	
h4B	29 mm	
H5B	0 mm	
h5B	29 mm	
h85	35 mm	
h87	44 mm	Tolerance: +0,2/-0,2
jB4	150 mm	
JB43	158 mm	

jL3	12,5 mm	
JL43	158 mm	
K43	M10	
L4	38 mm	
L5	25 mm	
L85	18 mm	
L86	0 mm	
L88	36,5 mm	
Ltot	2200 mm	Appropriate maximum total length of linear tables LTE taking account of deflection.
Rx	98,6 mm	
Rz	96 mm	
S	8 mm	
S3	20 mm	
T3	15,5 mm	
t43	26 mm	
T56	0 mm	
T86	2,8 mm	
mLAW	5,04 kg	

mBOL	$L_{tot} * 0,0131 + 19$ kg	
	Total mass calculation: $m_{tot} = m_{LAW} + m_{BOL} + m_1 + m_2 + m_3$ - Insert given masses. - Unavailable masses = 0.	
vmax	0,2 m/s	
amax	2,5 m/s ²	
	0,25	Repeat accuracy: +/-
	(0)-(+80) °C	Operating temperature
do	20 mm	Spindle diameter
P	8 mm	Spindle pitch
	0,81 kg * cm ²	Mass moment of inertia of threaded spindle.
Co	2550 N	Basic static load rating of spindle nut
	In the case of linear tables with trapezoidal lead screw drive, the maximum axial load is restricted by the spindle bearing arrangement. Please consult us regarding the loading of the trapezoidal lead screw drive.	
	2 x 7201-2RS	Rolling bearings
C0a	2550 N	Maximum axial load F a,max on spindle bearing arrangement (locating bearing)
	10 Nm	Max. drive torque on drive stud
	KB30-P	Linear ball bearings
C	9500 N	Load direction I: minimum compressive load

		<p>The deflection of the shafts must be taken into consideration. Design of linear ball bearing guidance systems: see Catalogue WF1.</p>
Co	11400 N	<p>Load direction I: minimum compressive load The deflection of the shafts must be taken into consideration. Design of linear ball bearing guidance systems: see Catalogue WF1.</p>
C	9500 N	<p>Load direction II: minimum tensile load The deflection of the shafts must be taken into consideration. Design of linear ball bearing guidance systems: see Catalogue WF1.</p>
Co	11400 N	<p>Load direction II: minimum tensile load The deflection of the shafts must be taken into consideration. Design of linear ball bearing guidance systems: see Catalogue WF1.</p>
C	9500 N	<p>Load direction II: minimum lateral load The deflection of the shafts must be taken into consideration. Design of linear ball bearing guidance systems: see Catalogue WF1.</p>
Co	11400 N	<p>Load direction II: minimum lateral load The deflection of the shafts must be taken into consideration. Design of linear ball bearing guidance systems: see Catalogue WF1.</p>
M _{0x} per	540 Nm	<p>Permissible static moment rating (per carriage) These values apply if load is evenly distributed over all four linear ball bearings. Values are individual loads. If combined loads are present, these must be reduced. For design criteria of the linear guidance system, see Catalogue WF1.</p>
M _{0y} per	503 Nm	<p>Permissible static moment rating (per carriage) These values apply if load is evenly distributed over all four linear ball bearings.</p>

	<p>Values are individual loads. If combined loads are present, these must be reduced. For design criteria of the linear guidance system, see Catalogue WF1.</p>	
<p>M_{0z} per</p>	<p>393 Nm</p>	<p>Permissible static moment rating (per carriage) These values apply if load is evenly distributed over all four linear ball bearings. Values are individual loads. If combined loads are present, these must be reduced. For design criteria of the linear guidance system, see Catalogue WF1.</p>









