

# Linear tables with open shaft guidance system and ball screw drive LTS30-180-2010-MM-0 (Series LTS..-KGT..-MM-0)

without bellows, with double 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](https://www.schaeffler.de/content.schaeffler.de/en/news_media/index.jsp)) or by telephone on +49 (91 32) 82 - 28 97.

B1	180 mm
H	77 mm
L	180 mm
<p>Length calculation:  <math>L_{tot} = \text{total stroke} + L + L4 + L5</math>                  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 <math>L_{tot}</math> of the actuator.</p>	
1)	Lubrication nipple NIP.
b87	68 mm Tolerance: +0,2/-0,2
D7	30 mm Tolerance for diameter: h7
d74	0 mm

D8	9 mm	
d85	10 mm	Tolerance for diameter: h7
d86	60 mm	Tolerance for diameter = h7
G4	M12	
G43	M12	
G5	M12	
G87	M6	
H1	60 mm	
h1	35 mm	
H12	16 mm	
H5	58 mm	
h5	29 mm	
H7	7 mm	
h85	42 mm	
h87	44 mm	Tolerance: +0,2/-0,2
jB4	150 mm	
JB43	158 mm	
jB8	51 mm	
jL4	12,5 mm	
JL43	158 mm	

jL8	150 mm	<p>Location of support rails: As standard, the support rails are supplied with a symmetrical hole pattern. With a symmetrical hole pattern, <math>aL = aR</math>. Calculation of hole pattern: The number of hole pitches is the whole number equivalent to: <math>n = (L_{tot} - L4 - L5 - 2 * aR_{min}) / jL8</math> The spacing <math>aL</math> between the end of the support rail and the nearest hole centre point is calculated from: <math>aR, aL = (L_{tot} - L4 - L5 - n * jL8)</math></p>
K43	M10	
L4	38 mm	
L5	25 mm	
L74	0 mm	
L85	18 mm	
L86	9,4 mm	
L88	36,5 mm	
Ltot	5850 mm	
Rx	98,6 mm	
Rz	96 mm	
S	10 mm	
S8	15 mm	
t43	26 mm	
T8	7,5 mm	

t87	15 mm	
mLAW	4,3 kg	
mBOL	$L_{tot} * 0,0171 + 2,07$ kg	
		<p>Total mass calculation:  <math>m_{tot} = mLAW + mBOL + m1 + m2 + m3</math>                      - Insert given masses.                      - Unavailable masses = 0.</p>
Vmax	0,5 m/s	
	0,025 mm	Repeat accuracy: +/-
amax	20 m/s <sup>2</sup>	
	(0)-(+80) °C	Operating temperature
do	20 mm	Spindle diameter
P	10 mm	Spindle pitch
	0,846 kg * cm <sup>2</sup>	Mass moment of inertia of threaded spindle.
Ca	12700 N	<p>Basic dynamic load rating of spindle nut                      Basic load ratings according to DIN 69051. Due to the modified calculation algorithms in DIN 69051, the basic load ratings Ca and C0 may differ in comparison with older data.</p>
C0	22100 N	<p>Basic static load rating of spindle nut                      Basic load ratings according to DIN 69051. Due to the modified calculation algorithms in DIN 69051, the basic load ratings Ca and C0 may differ in comparison with older data.</p>

	ZKLN1545-2RS-PE	Rolling bearings
Ca	17900 N	Basic axial dynamic load rating of spindle bearing arrangement
C0a	28000 N	Basic axial static load rating of spindle bearing arrangement
	17 Nm	Max. drive torque on drive stud
	KBO30-PP-AS	Linear ball bearings
C	9760 N	Load direction I: Compressive load Design of linear ball bearing guidance systems: see Catalogue WF1.
C0	12000 N	Load direction I: Compressive load Design of linear ball bearing guidance systems: see Catalogue WF1.
C	5930 N	Load direction II: Tensile load Design of linear ball bearing guidance systems: see Catalogue WF1.
C0	7600 N	Load direction II: Tensile load Design of linear ball bearing guidance systems: see Catalogue WF1.
C	8970 N	Load direction III: Lateral load Design of linear ball bearing guidance systems: see Catalogue WF1.
C0	10700 N	Load direction III: Lateral load Design of linear ball bearing guidance systems: see Catalogue WF1.
M0x per	340 Nm	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

		<p>must be reduced.</p> <p>For design criteria of the linear guidance system, see Catalogue WF1.</p>
$M_{0y}$ per	450 Nm	<p>Permissible static moment rating (per carriage)</p> <p>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.</p> <p>For design criteria of the linear guidance system, see Catalogue WF1.</p>
$M_{0z}$ per	345 Nm	<p>Permissible static moment rating (per carriage)</p> <p>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.</p> <p>For design criteria of the linear guidance system, see Catalogue WF1.</p>





