

Linear tables with open shaft guidance system and ball screw drive LTS40-230-2505-M-1 (Series LTS..-KGT..-M-1)

with 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.

B1	230 mm
H	95 mm
L	230 mm
<p>Length calculation: $L_{tot} = \text{total stroke} * FBL + L + L4 + L5 + BB$ 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 NIP.
b87	68 mm Tolerance: +0,2/-0,2
BB	22 mm
D7	40 mm Tolerance for diameter: h7

d74	0 mm	
D8	9 mm	
d85	16 mm	Tolerance for diameter: h7 Thread witness marks may be present on the pin.
d86	66 mm	Tolerance for diameter = h7
FBL	1,27	
G4	M16	
G43	M16	
G5	M16	
G87	M8	
H1	77 mm	
h1	45 mm	
H12	17 mm	
H5	72 mm	
h5	36 mm	
H7	8 mm	
h85	50 mm	
h87	56 mm	Tolerance: +0,2/-0,2
JB4	190 mm	
JB43	202 mm	

jB8	55 mm	
jL4	15 mm	
JL43	202 mm	
jL8	200 mm	<p>Location of support rails: As standard, the support rails are supplied with a symmetrical hole pattern. With a symmetrical hole pattern, $aL = aR$. Calculation of hole pattern: The number of hole pitches is the whole number equivalent to: $n = (L_{tot} - L4 - L5 - 2 * aR_{min}) / jL8$ The spacing aL between the end of the support rail and the nearest hole centre point is calculated from: $aR, aL = (L_{tot} - L4 - L5 - n * jL8)$</p>
K43	M12	
L4	39 mm	
L5	30 mm	
L74	0 mm	
L85	23 mm	
L86	9,4 mm	
L88	46 mm	
Ltot	5850 mm	
Rx	134 mm	
Rz	122 mm	
S	5 mm	

S ₈	15 mm	
t ₄₃	34 mm	
T ₈	7,5 mm	
t ₈₇	18 mm	
m _{LAW}	8,8 kg	
m _{BOL}	$L_{tot} * 0,0281 + 3,46$ kg	
	<p>Total mass calculation: $m_{tot} = m_{LAW} + m_{BOL} + m_1 + m_2 + m_3$ - Insert given masses. - Unavailable masses = 0.</p>	
v _{max}	0,25 m/s	
a _{max}	20 m/s ²	
	0,05 mm	Repeat accuracy: +/-
	(0)-(+80) °C	Operating temperature
d _o	25 mm	Spindle diameter
P	5 mm	Spindle pitch
	2,25 kg * cm ²	Mass moment of inertia of threaded spindle.
C _a	12300 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 C_a and C₀ may differ in comparison with older data.</p>

C ₀	22500 N	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 C _a and C ₀ may differ in comparison with older data.
	ZKLN1747-2RS-PE	Rolling bearings
C _a	18800 N	Basic axial dynamic load rating of spindle bearing arrangement
C _{0a}	31000 N	Basic axial static load rating of spindle bearing arrangement
	12 Nm	Max. drive torque on drive stud
	KBO40-PP-AS	Linear ball bearings
C	16100 N	Load direction I: Compressive load Design of linear ball bearing guidance systems: see Catalogue WF1.
C ₀	18400 N	Load direction I: Compressive load Design of linear ball bearing guidance systems: see Catalogue WF1.
C	9760 N	Load direction II: Tensile load Design of linear ball bearing guidance systems: see Catalogue WF1.
C ₀	12500 N	Load direction II: Tensile load Design of linear ball bearing guidance systems: see Catalogue WF1.
C	14910 N	Load direction III: Lateral load Design of linear ball bearing guidance systems: see Catalogue WF1.
C ₀	16800 N	Load direction III: Lateral load Design of linear ball bearing guidance systems: see Catalogue WF1.

M_{0x} per	670 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_{0y} per	960 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	730 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>





