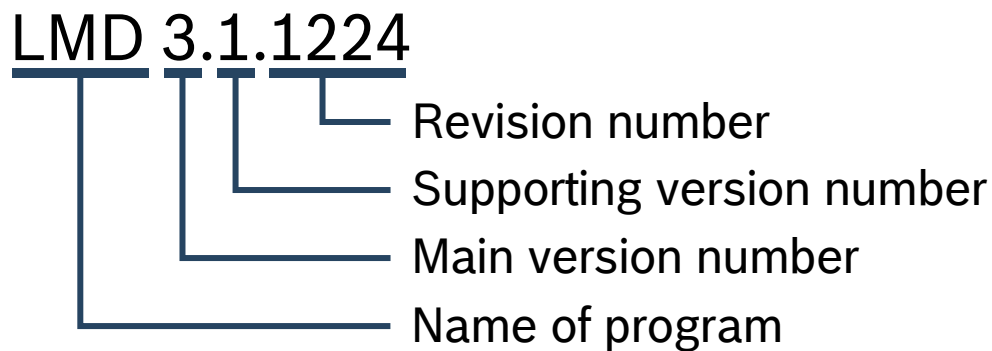


LINEAR MOTION DESIGNER

Release Notes

PROGRAM-VERSIONING



Main version number: - Increase of the number at extensive program change
- The program is no longer backward compatible

Sup. version number: - Increase of the number at new functions
- The program remains backward compatible

Revision number: - Increase of the number at troubleshooting
- The program remains backward compatible

VERSION 1.0

2008

PROGRAM LAUNCH

VERSION 1.1

2012

SUBJECT	MODIFICATION	DESCRIPTION
Database	Updated	Product line „eLINE“ removed

VERSION 2.0

2013

SUBJECT	MODIFICATION	DESCRIPTION
General (NEW)	With dimensioning of Screw Assemblies	All standard Ball- und Planetary- Screw Assemblies available
General	Updated Help page	
Database	NEW: Roller Rail System-Types NEW: Ball Rail System-Types	R1822, R1823, R1854 R1672 R2002, R2012 (High Speed) R2000, R2002, R2010, R2012 (Resist NRII)
SA	Further calculation to maximum acceleration	Ball Screw Assemblies
PRS / SA	Further security checks and warning messages integrated	
PRS / SA	Drop Down-Menu at masses and forces	All masses/forces and positions on one view
PRS / SA	Automated short stroke factor calculation	

VERSION 2.1

JULY 2014

SUBJECT	MODIFICATION	DESCRIPTION
General	Extension of start page	Switch or choose between SA and PRS at any time
General	Further languages	French, Spanish, Chinese
General	Updated Help page	
Database	Updated	Higher load capacity and moments at Ball- and Roller Rail System
SA	Adjusted formula to maximum acceleration	Ball Screw Assemblies
SA	Necessary interval time calculation at 100% switch-on-time	Planetary Screw Assemblies

VERSION 2.1 UPDATE

FEBRUARY 2015

SUBJECT	MODIFICATION	DESCRIPTION
General	Updated Help page	
Database	Updated	Ball Screw Assemblies
SA	Info button to sealing on data page	Description to different sealing
PRS / SA	Adjusted formula to short stroke factor	Specification from development dept.
PRS / SA	Optional short stroke factor	
PRS / SA	Printout also in Spanish, French, Chinese	
Correction	Calculated lifetime at "Input in terms of percentages of time" and "Input in terms of strokes"	Ball Screw Assemblies

SUBJECT	MODIFICATION	DESCRIPTION
General	Dynamic cycle	Changes possible inside the dynamic cycle
General	Updated Disclaimer	
Database	Updated	SA: Higher load capacities SA: 2 new sizes at nut type FED-E-B PRS: New runner block type BSCL
SA	Nut type FED-E-B: Comparison the load capacity of the nut with permissible axial load	Max. permissible axial force at FED-E-B
SA	New tolerance class "T3"	Ball Screw Assemblies
SA	Changed preload classes	NEW (same as Profiled Rail System)
SA	Operating factor at accuracy class T7 and T9	NEW
SA	Limit for load ratio removed	Lifetime is showing up to $C/Fq = 1,0$
PRS	Operating factor at BSCL	NEW
PRS	Operating factor k_f changed to f_w	Due to operating factor at BSCL
PRS	Changed text to screw strength	Based on the new standard ISO 12090-1
PRS / SA	Number of cycles will be calculated	Additional result
PRS / SA	Printout in new design	New Corporate Design

VERSION 3.0	APRIL 2018
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SUBJECT	MODIFICATION	DESCRIPTION
General (NEW)	New Corporate Design	Modern and general DC-Design
General	Help functions	Mouseover function for descriptions
General	Updated Help page	
General	Release notes integrated	
General	Calculation planning guide integrated	Calculation and dimensioning support
General (NEW)	Connection to Configurator and eShop	Seamless Toolchain
Database	Upgrade	SA: Load capacities to end bearings SA: End forms
Database	Updated	SA (BASA): Add preload class C00 FEM-E-B and ZEM-E-S SA: Nut type FSZ-E-B, FSZ-E-S, FDM-E-D and FEM-E-D removed SA: New spindle ends
SA (NEW)	Matching the load capacity of the end bearing with the load capacity of the nut	More security query
SA (NEW)	Matching the maximum drive torque with the max. allowed drive torque (Mp)	More security query
SA	Shown the total stiffness of the drive	Additional Information
SA	Chart to „position dependent, critical speed“	Additional Information
SA	Calculation and selection of the AGK has been removed	Will be included in the program „LinSelect“
PRS / SA	Printout	Result page improved

SUBJECT	MODIFICATION	DESCRIPTION
LB (NEW)	Calculation of the Linear Bushings	Lifetime, matching the max. bending angle
PRS / SA (NEW)	Lubrication	Interval and quantity of the lubricant
General	Automatically update-function	Automatically comparison of the current program version
General	Updated Help page	With help topics to bushings and lubrication
General	Updated Calculation planning guide	With general information to Linear technology
Database	Updated	SA: New nut size 8x5 at FEM-E-B and ZEM-E-S SA: 3 new nut sizes with lead 25mm and 30mm at FEM-E-C; FED-E-B Nut type changed FEM-E-C -> FEM-E-B and FDM-E-C -> FDM-E-B PRS: roller runner block size 25 gen. II
PRS	Calculation of the deflection	1 guide rail / 1 runner block 1 guide rail / 2 runner blocks 2 guide rails / 1 runner block
PRS	Selection support integrated	Support for runner block selection via branch / application
SA	Max. permissible drive torque with mass inertia and acceleration inertia from the moving mass	More exact calculation at drive torque
SA	Pillow block unit	Selection of the spindle with matching pillow block units
PRS / SA	Service life	Calculation of the required service life
PRS / SA	Predefined motion profiles	Simplified input via stroke and time
PRS / SA	Printout revised	PRS/SA with results to lubrication