

LDS Combined (Combos) and Stand-alone Slip Tables

for Vibration Test Systems

The LDS® range of oil-film slip tables are designed for ease of installation while providing maximum flexibility.

For testing applications requiring three individual axes, we recommend a LDS trunnion-mounted electrodynamic shaker and slip table. This is available combined in one fabricated frame, or as a stand-alone trunnion-mounted shaker with a separate slip table on a seismic base.

For testing very large or complex payloads, we also offer larger slip tables with multiple bearing positions to suit customers' applications.

LDS Slip Table Series

All LDS slip tables use a custom-designed, rugged steel chassis – allowing for maximum stiffness for the greatest payload. Two types of slip tables are available: Hydrostatic Bearing Table (HBT) series for use with exceptional payloads, and Low Pressure Table (LPT) series for general payload testing.

Combo Systems

The largest of the LDS V700 series and all V800 and V900 series electrodynamic shakers can be supplied as a combo system. All feature the LDS Lin-E-Air body isolation and guidance system, which ensures the body of the electrodynamic shaker is maintained on the central line, minimizing distortion and maximizing low-frequency and payload capabilities.

General Slip Table Features

- Available as stand-alone or combined with a shaker as a complete combo system
- Standard size range: 60 – 1500 mm (24 – 59 in)*
- Tool-grade magnesium slip plates
- Space-efficient design – minimizes floor real estate
- Patented shear pin and tension bolt driver bars
- High-quality composite, high-stability granite base
- Oil film for load support – minimizes table rippling
- Body and base isolation suspension for body of shaker
- Air-glide and castor mobility available

Applications

- Individual testing in three axes
- Avionics and military hardware testing
- Space flight simulation
- Automotive component testing
- Electronic assembly testing

Typical LDS V9 shaker with HBT 1220 slip table



HBT Series Features

The HBT series provides the ideal solution for strenuous vibration test requirements, and the use of linear hydrostatic bearings allows for heavier load-carrying capabilities. HBT slip tables have higher stiffness and greater dynamic stability and damping to cater for heavy loads with a high centre of gravity and overturning moment.

- Hydrostatic load-carrying bearings
- Bearings can be configured to accommodate increasing overturning restraint and load types
- Linear bearings provide axial restraint for low distortion while additional bearings provide tolerance for thermal expansion and contraction

LPT Series Features

The LPT series provides a cost-effective solution for use of vibration tables in most production line and research applications and provides a good general-purpose performance level where high stiffness and large payloads are not required. The slip tables use guidance bearings to minimize axial distortion and an oil film for load support.

- Oil-fed journal bearings
- Bearings positioned on centre line, eliminating the need for adjustment as a result of table expansion and contraction caused by thermal changes

* Custom sizes available upon request

Standard Configurations

Standard Insert Quantities

Based on armature pattern plus a 100-millimetre grid (for metric inserts)/4-inch grid (for imperial inserts). Insert quantities for non-standard patterns are available upon request as special orders (configurations available as non-standard combinations and/or insert patterns are marked with ●)

Slip Table	with V721 Shaker	with V830 Shakers	with V850 Shakers	with V875 Shakers	with V875LS Shakers	with V8 Shakers	with V9 Shaker	with V964 Shaker	with V984 Shaker
LPT600	41	53	65	77	78	–	–	–	–
LPT750	–	75	87	103	107	–	–	–	–
LPT900	–	–	93	109	109	93	–	–	–
LPT1220	–	–	–	189	185	173	149	–	–
HBT600	–	●	61	74	74	45	●	●	–
HBT750	–	●	87	103	103	89	●	●	–
HBT900	–	–	89 93*	105 109*	105 109*	89 93*	73 77*	65	–
HBT1050	–	–	–	–	–	–	–	97	–
HBT1220	–	–	–	183	183	165	149	141	141
HBT1500	–	–	–	–	–	●	●	●	236

* Imperial (4 in) pattern has additional insert positions

Standard Combo Configurations

Standard inserts are based on armature pattern plus 100 mm (3.9 in) grid for metric inserts, plus 4.0 in (101.6 mm) grid for imperial inserts. Non-standard insert patterns and combo sizes are available upon request as special orders

Key:

- ◆ Available as standard configuration
- Available upon request (440 armature only)

Inserts and accessories	V721 LPT600	V830 LPT600	V830 LPT750	V850 LPT600	V850 LPT750	V850 LPT900	V875 LPT600	V875 LPT750	V875 LPT900	V875LS LPT1220	V875LS LPT600	V875LS LPT750	V875LS LPT900	V875LS LPT1220	V8 HBT600	V8 HBT750	V8 HBT900	V8 HBT1220	V875LS HBT600	V875LS HBT750	V875LS HBT900	V875LS HBT1220	V8 HBT600	V8 HBT750	V8 HBT900	V8 HBT1220	V9 HBT600	V9 HBT900	V9 HBT1220	V964 HBT900	V964 HBT1050	V964 HBT1220	V984 HBT1220	V984 HBT1500		
M8	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
M10																			◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
M12																																				
3/8" UNC		◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
1/2" UNC																																				
Air Glide*	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	

* Air glide mobility combination base

Alternative Configurations

Alternative Insert Patterns

Alternative insert patterns are available to suit specific requests. Each request must first be reviewed by your Brüel & Kjær representative.

The following conditions must be taken into consideration when developing non-standard insert patterns:

- Insert grid patterns must have a minimum spacing of 50 mm (1.97 in)
- Inserts must not be positioned too close to other inserts, bearing holes, or gun drillings
- Insert sizes, tensile pull-out, and torque values are limited to those in the table:

Insert Size	Thread Pitch	Torque	Tensile Pull-Out Load		
	mm		Nm	lb ft	kN
M6	1.0	14.0	10.0	34.9	7.85
M8	1.25	34.0	25.0	45.5	10.24
M10	1.5	65.0	48.0	63.6	14.29
M12	1.75	90.0	66.0	80.9	18.19
3/8"	UNC	34.0	25.0	35.7	8.03
1/2"	UNC	75.0	55.0	68.4	15.39

While every effort will be made to accommodate your specific pattern requirements, the feasibility of a non-standard insert pattern will only be finally confirmed upon receipt of order

Brüel & Kjær and all other trademarks, service marks, trade names, logos and product names are the property of Brüel & Kjær or a third-party company.

Brüel & Kjær Sound & Vibration Measurement A/S
DK-2850 Nærum · Denmark · Telephone: +45 77 41 20 00 · Fax: +45 45 80 14 05
www.bksv.com · info@bksv.com
Local representatives and service organisations worldwide

Although reasonable care has been taken to ensure the information in this document is accurate, nothing herein can be construed to imply representation or warranty as to its accuracy, currency or completeness, nor is it intended to form the basis of any contract. Content is subject to change without notice – contact Brüel & Kjær for the latest version of this document.

Brüel & Kjær 

BU 3088-13 2015-10 © Brüel & Kjær. All rights reserved.