

# Cleanroom Testing Results

## for Standard Bosch Rexroth

### Linear Products

Linear Modules	Speed				
	0.1 m/s	0.4 m/s	0.6 m/s	0.8 m/s	1.2 m/s
CKR-110	ISO 4	ISO 4		ISO 6	
CKR-145	ISO 6	ISO 6			ISO 6
CKK-110	ISO 7	ISO 7		ISO 8	
EMC-040 (w/ flange & coupling)	ISO 6	ISO 8	ISO 8		
MKK-065	ISO 5	ISO 6			ISO 6
MKR-065	ISO 5	ISO 6			ISO 7
MKR-080	ISO 4	ISO 5			ISO 6
PSK-090	ISO 5	ISO 6			ISO 8
PSK-090 (without drive)	ISO 4				

ISO 14644-1	FED STD 209E
ISO 3	Class 1
ISO 4	Class 10
ISO 5	Class 100
ISO 6	Class 1,000
ISO 7	Class 10,000
ISO 8	Class 100,000
ISO 9	Room Air

Ball Rail Guides	Speed			
	0.1 m/s	0.2 m/s	0.4 m/s	1.2 m/s
Mini BRS 9	ISO 4		ISO 5	ISO 7
Mini BRS 12	ISO 4		ISO 6	ISO 7
Mini BRS 15		ISO 5	ISO 6	ISO 7
BSHP 15	ISO 5		ISO 6	ISO 7
BSHP 20	ISO 6		ISO 6	ISO 7
BSHP 25	ISO 5		ISO 6	ISO 6
IMS 20	ISO 5		ISO 6	ISO 6
IMS 25	ISO 6		ISO 6	ISO 6

Ball Screw Drives	Speed					
	0.017 m/s	0.050 m/s	0.1 m/s	0.158 m/s	0.4 m/s	0.6 m/s
BASA 8x2.5	ISO 6	ISO 8		ISO 9		
BASA 12x5			ISO 8		ISO 9	
BASA 16x10			ISO 7		ISO 9	ISO 9

Testing was conducted either by Fraunhofer IPA or at the Bosch Rexroth in-house testing facility. Regardless of location, testing was carried out according to ISO 14644-14, at 100% duty cycle for 100 minutes. Tested products are standard configurations (no special options or preparation) with standard lubrication. In some cases, better cleanroom results can be obtained with simple product modifications. Please contact Bosch Rexroth for more information or to discuss your application.