

SKF shaft measurement reporting form

Application/Equipment:		All units in mm inch
Equipment location:		
Bearing position:		
Bearing part number:		
Dimensional specifications	Shaft O.D.	Housing bore

3A and 3B are used for split housings

Location	Shaft Distance L from reference point				Housing Distance L from reference point			
	L_a	L_b	L_c	L_d	L_A	L_B	L_C	L_D
	Measured diameter at location				Measured diameter at location			
	a	b	(c)	(d)	A	B	(C)	(D)
1								
2								
3 (3A)								
3 (3B)								
4								
	Avg. Col. a	Avg. Col. b	Avg. Col. c	Avg. Col. d	Avg. Col. A	Avg. Col. B	Avg. Col. C	Avg. Col. D
Average of averages								

Person measuring:	Printed name	Signature
Remarks: <i>Shaft and housing material, condition of mounting surfaces, issues, etc.</i>		
Date:	Checked by:	

Instructions for use

Rolling bearings are reliable machine elements that can provide long service life, provided they are properly mounted and maintained. Proper mounting calls for experience as well as care, cleanliness, accuracy, the correct mounting method and the use of appropriate tools for the job.

A bearing will only perform satisfactorily if the associated components have the requisite accuracy and if the prescribed tolerances are adhered to. Therefore:

- Remove any burrs or rust.
- Check the dimensional and form accuracy of all associated components of the bearing arrangement.
- Check cylindrical shaft seats. Using a micrometer, measure in at least two places on the shaft seat. Be sure to measure in four directions (see figure on previous page).
- Housing seats are usually checked in two places with an internal micrometer or other comparable measuring gauge. Be sure to measure in four directions (see figure on previous page).
- Record the measurement values of the shaft and bore diameters for future reference. Use the measurement report form.

	Metric shaft size range	Inch shaft size range	Measurement places/planes
Small seats	$d \leq 80 \text{ mm}$	$d \leq 3\text{-}1/8"$	Two
Medium-size seats	$80 \text{ mm} < d < 200 \text{ mm}$	$3\text{-}1/8" < d < 8" \text{ (7-7/8")}$	Two to three
Large seats	$d \geq 200 \text{ mm}$	$d \geq 8" \text{ (7-7/8")}$	Three to four

When measuring, it is important that the components and the measuring instruments are at the same approximate temperature. This is particularly important where large bearings and their associated components are concerned.

Safety

To minimize the chance of injury, when handling or mounting bearings:

- Always wear gloves, especially when handling heated bearings or working with lubricants.
- Always use appropriate lifting or carrying tools.
- Never strike the bearing directly with any hard object such as a steel hammer or a chisel.

For additional information about recommended dimensional and geometric tolerances of bearing seats and abutments, visit "Radial location of bearings" section on www.skf.com, "Radial location of bearings" section on page 165 of Rolling Bearings catalog 10000 EN (October 2012), or section "Shaft and housing fits" on page 51 of the Bearing Installation and Maintenance Guide (Pub 140-710 Feb 2014).

For detailed mounting instructions for specific bearings (per bearing designation), visit www.skf.com/mount. For additional information about SKF mounting tools, including mechanical tools, hydraulic tools, heating equipment and gloves, visit www.mapro.skf.com.

SKF Training Solutions (STS) offers a comprehensive range of training courses in mounting. Contact your local SKF representative for additional information, or visit www.skf.com/services.