ISO 15242-3:2017-08 (E)

Rolling bearings - Measuring methods for vibration - Part 3: Radial spherical and tapered roller bea rings with cylindrical bore and outside surface

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1

4 Measurement process 1
4.1 Rotational frequency 1
4.2 Bearing axial load 2

5 Measurement and evaluation methods 2
5.1 Physical quantity measured 2
5.2 Frequency domain 2
5.3 Measurement of pulses and spikes 3
5.4 Measurement 3

6 Conditions for measurement 3
6.1 Bearing conditions for measurement 3
6.1.1 Prelubricated bearings 3
6.1.2 Non-prelubricated bearings 3
6.2 Conditions of the measurement environment 4
6.3 Conditions for the measuring device 4
6.3.1 Stiffness of the spindle/mandrel arrangement 4
6.3.2 Loading mechanism 4
6.3.3 Magnitude and alignment of the external load applied to the bearing 4
6.3.4 Axial location of the transducer and direction of measurement 5
6.3.5 Mandrel 6

Annex A (normative) Measurement of external axial loading alignment 7