Application data sheet

General information

Company name

Contact name

Telephone number

Subject / reference

E-mail address

Date

Type of request

◯ New development ◯ Design verification ◯ Problem solving

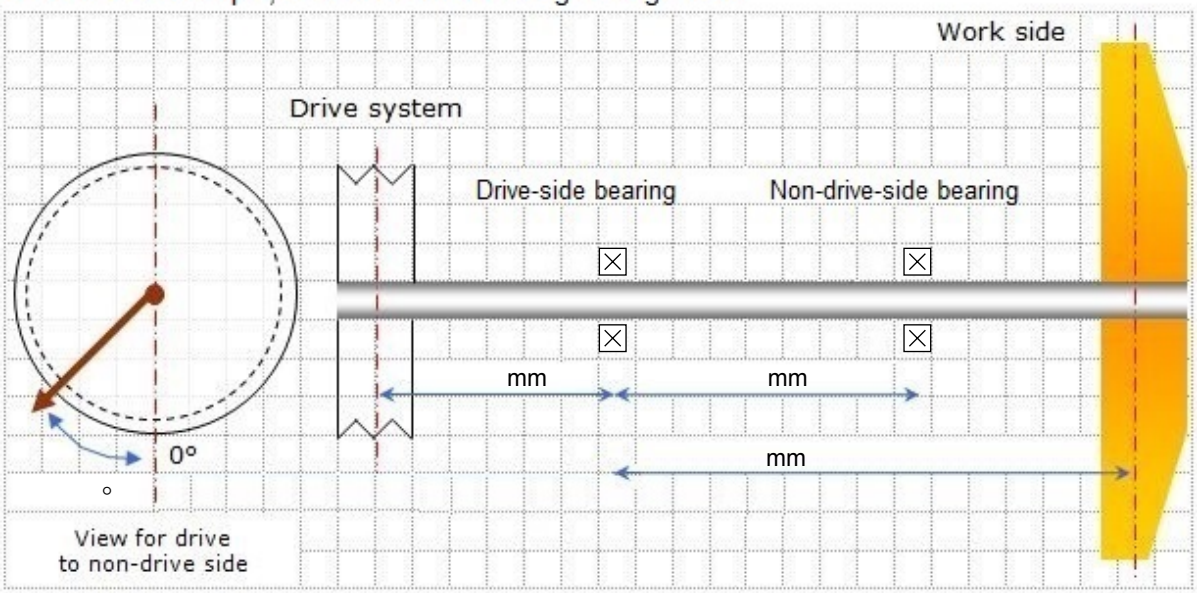
◯ Other

Application

Description

◯ Continous ◯ Not continous, hours a day h/day

Sketch: For example, of an industrial bearing arrangement.



For a different configuration, please add an assembly drawing with corresponding distance of the different components and orientation of the load.

Loads

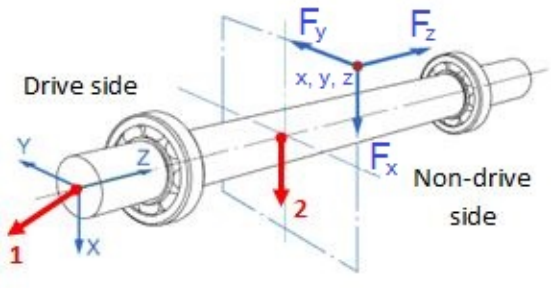
For a single bearing only:

Radial load	kN
Axial load	kN

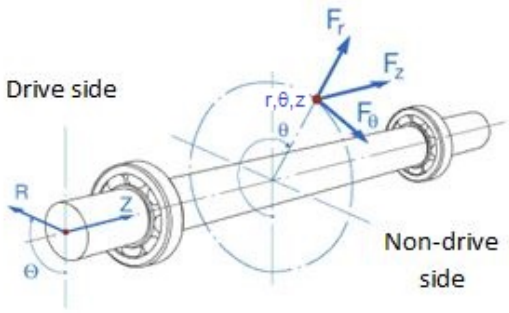
For a shaft and bearings:

Select one of the coordinates system below the loads on the shaft.

◯ Cartesian coordinates ◯ Polar coordinates



Gravity in X-direction



Gravity in direction of θ = 0°

Loads*	Position			External loads		
	X/r	Y/θ	Z	F_x/F_r	F_y/F_θ	F_z
	mm	mm/deg	mm	kN	kN	kN
1						
2						

** Supply information for additional loads in a separate document.*

☐ Peak load kN

☐ Alternating load *Direction of load changes during operation.*

☐ Moment load Nm

If load and/or speed change over time, provide details of the load/speed cycle.

Speed

Nominal speed	r/min
Minimum	r/min
Maximum	r/min
Acceleration	m/s^2
Direction	

Drive system

Power kW

☐ With coupling

Type of coupling

Weight of coupling N

☐ With belt drive

Type of belt

Weight of pulley N

Pitch diameter of pulley mm

Direction of tension θ °

☐ With gears (spur or helical)

Nominal pressure angle α_n °

Helix angle β °

Module m_n mm

Gearmesh position/angle °

Number of teeth pinion z_1

Number of teeth wheel z_2

Centre distance pinion/wheel mm

Gear ◯ driving ◯ driven

Helix hand ◯ none ◯ left-hand ◯ right-hand

Rotation ◯ clockwise ◯ counter-clockwise

Oscillating application

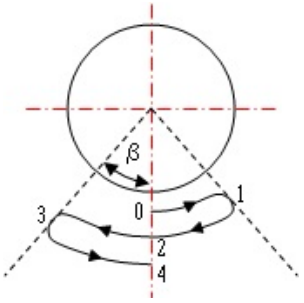
Oscillating angle β °

Frequency f min^{-1}

Period t seconds

Alternating load direction ☐

Alternating load frequency min^{-1}



If load and/or speed changes over time, provide details of the load/speed cycle.

Life requirement h

Bearing

For a single bearing, provide details for the drive side only.

	Drive side	Non-drive side
Bearing part number		
Locating bearing	◯	◯
Operating temperature	/ °C	/ °C
	Inner ring *Outer ring*	*Inner ring* *Outer ring*
Temperature range	min. °C	max. °C

Bearing interface

	Drive side	Non-drive side
Shaft material		
Housing material		
Tolerance shaft		
Tolerance housing		

Lubrication

Lubrication system

☐ Grease lubrication

Grease type (part number)

Relubrication interval h

Relubrication quantity g

Shaft orientation ◯ Horizontal ◯ Vertical

Rotating ring ◯ Inner ring ◯ Outer ring

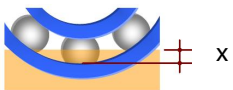
☐ Oil lubrication

Oil type (part number)

☐ Oil bath

Oil bath temperature °C

Oil level at standstill (x) mm



☐ Oil circulation

Oil temperature at sump °C

Oil flow l/mm

Sealing

☐ Integrated sealing (i.e. sealed bearing)

☐ External sealing

Seal bore diameter	mm
Seal outer diameter	mm
Seal width	mm

Medium to be sealed

Internal

External

Pressure	bar

Add any other requirements for seals.

Environment

Ambient temperature	°C

Yes	*No*		*Comments*
◯	◯	Contaminaton	
◯	◯	Humidity/Moisture	
◯	◯	External heat source	
◯	◯	Cooling	
		Other	