

Technical Requirements - Slewing Rings



Please fill in the form and return to:

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 Email: slewing.rings@imo.de

1. Contact

Customer

Company	Home page
Contact person	Email
Street	Phone
Country	Fax
ZIP/City	

2. Application description (please include a drawing)

Are detailed specifications available? (Please countercheck them with this sheet). Please briefly describe the application.

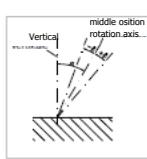
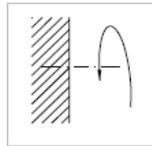
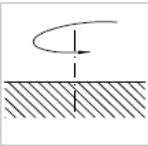
New design Yes No --> Existing type/drawing:

What must be given special consideration? What problems arise? Application-specific requirements?

Operating temperature	Minimum <input type="text"/> °C	Normal <input type="text"/> °C	Maximum <input type="text"/> °C
Survival temperature (outside of operation)	Minimum <input type="text"/> °C		Maximum <input type="text"/> °C
Are special seals required?	No <input type="checkbox"/>	Yes <input type="checkbox"/> against	_____
Are inspection reports required?	No <input type="checkbox"/>	Yes <input type="checkbox"/> which	_____ e.g. 3.1 according to EN 10204
Are acceptances required?	No <input type="checkbox"/>	Yes <input type="checkbox"/> which	_____ e.g. 3.2 according to EN 10204
Standards/certifying authorities to be considered?	No <input type="checkbox"/>	Yes <input type="checkbox"/> which	_____ e.g. Lloyds, ISO, DNV, GL, etc.
Anti-corrosion agent desired?	No <input type="checkbox"/>	Yes <input type="checkbox"/> which	_____ e.g. galvanization, paint, etc.

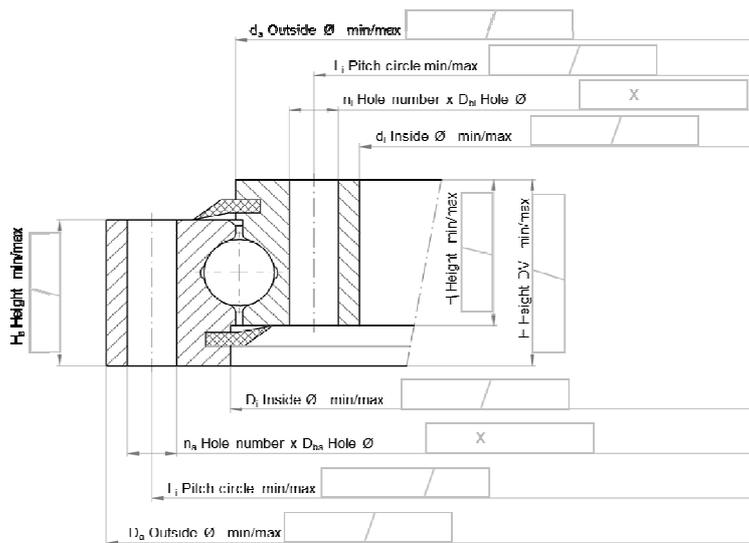
Position of rotation axis

Vertical Horizontal Changing α Degrees middle position of rotation axis
 $\pm \beta$ Degrees angle range



3. Dimensions of the slewing ring

Specify minimum and maximum values. Please enter fixed dimensions under "min". Please include drawings, if available.



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4. Gearing

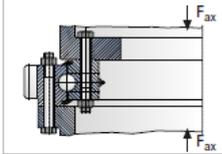
If possible, please include a drawing of the pinion.
Which ring is geared

		internal <input type="checkbox"/>	external <input type="checkbox"/>	none <input type="checkbox"/>
Module	m	<input type="text"/> mm		Number of drives / pinions
Number of teeth	z	<input type="text"/> -	<input type="text"/> -	<input type="text"/> -
Tooth width	b	<input type="text"/> mm	<input type="text"/> mm	Center distance
Profile correction factor	x	<input type="text"/> -	<input type="text"/> -	<input type="text"/> mm
Head height adjustment factor	k	<input type="text"/> -	<input type="text"/> -	
Helix angle	beta	<input type="text"/> °		

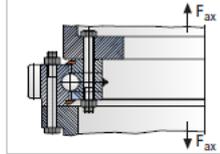
5. Loads

Load type

Supported load Hanging axial load Mixed axial load

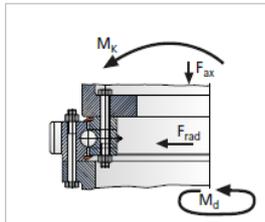


Axial load relieves screws on the inner and outer ring



Axial load adds additional stress to screws on the inner and outer ring

	Inner ring	Outer ring
Tensile force on		
Compressive force on		



Load-increasing application factors must be included in the loads.

			Operating load during the rotary motion		Load during downtime of the bearing	
			Normal	Maximum	Maximum	Extreme load
Axial load	F_{ax}	kN				
Radial load	F_{rad}	kN				
Tilting moment	M_k	kNm				
Gear circumferential force	f_z	kN				
Torque (slewing ring)	M_d	kNm				
Duty percentage	ED	%				

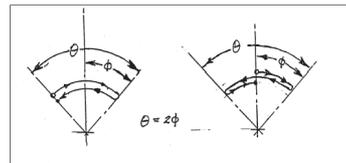
Continuous rotation without interruption

Rotational speed (slewing ring)	n	rpm		
Rotational speed max. (slewing ring)	n_{max}	rpm		
Operating hours per year		h/a		

Or

Rotary motion with interruption --> cycle description:

Slewing angle	θ	Degrees		
Angular acceleration	α_0	rad/s ²		
Slewing time	t_{s1}	Sec.		
Interruption time	t_{U1}	Sec.		
Number of cycles per operating hour		1/h		
Operating hours per year		h/a		



Shocks or vibrations No Yes

Direction of rotation Same Changing

Equipment utilization time in years a

6. Issue of offer

Foreseeable annual requirement	<input type="text"/>	Units/year
Desired delivery time	<input type="text"/>	Weeks
Desired offer date	<input type="text"/>	
Planned lot size	<input type="text"/>	Units/delivery
Customer price proposal	<input type="text"/>	Euro/unit

7. Comments

Date _____

Name of the editor _____