Dimensioning outside clamping shaft / hub connection

Shrinkdisc [EN]

Client _____ Project _____

In order to allow us an accurate assessment / design, please fill in all the known data.
If you are able to provide us a drawing, a sketch or similar, please send us such known information too.

Device type:
- ◯ Typ 3-part
- ◯ Typ 2-part
- ◯ SHS (hydraulic)
- ◯ Customized

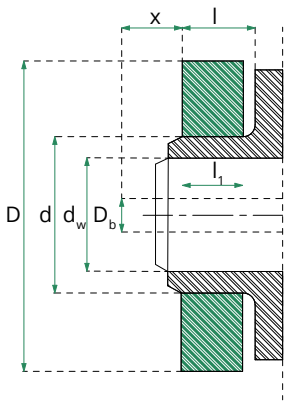
Load configuration:

Motor power	p	[kW]		Max. add. bendig moment	M_b	[Nm]	
Rotary frequence	n	[min^{-1}]		Max. add. axial load	F_{ax}	[N]	
Safety factor	SF			Max. rotary frequence	n_1	[min^{-1}]	
Nominal torque	M_t	[Nm]		operation time		[%]	
Max. torque	$M_{t\,max}$	[Nm]		Number of starts		[n/t]	
Max. add. radial load	F_{rad}	[N]					

Surrounding area:
- ☐ corrosive
- ☐ dust

Temperature range [°C] _____

Geometric details:



Nominal diameter	d	[mm]	
Shaft diameter	d_w	[mm]	
Bore in the shaf	D_b	[mm]	
Deviating shaft tolerances			
Shaft		Hub	
Max. clamping length	l_1	[mm]	
Max. Diameter	D	[mm]	
Max. Mounting depth	l	[mm]	
available space	x	[mm]	

Materials:	**Designation**	**$R_e/R_{p0,2}$ [MPa]**	**E-Moduls [MPa]**
Shaft			
Hub			

Recommended tolerances and surface roughness

>	≤	FS_{max} mm	Clea Shaft/ Hub	Rz µm
9	18	0,022	H6/h6	10
18	30	0,026	H6/h6	10
30	50	0,032	H6/h6	10
50	80	0,049	H7/h6	10
80	120	0,057	H7/h6	16
120	150	0,065	H7/h6	16
150	180	0,079	H7/g6	16
180	250	0,090	H7/g6	16
250	315	0,101	H7/g6	16
315	400	0,111	H7/g6	16
400	500	0,123	H7/g6	25
500	630	0,136	H7/g6	25
630	800	0,154	H7/g6	25
800	1000	0,172	H7/g6	25

Comments: (coatings, environmental conditions, number of tensions, special requests, etc. ...)