ComInTec®
Safety in Power Transmission

FLOHR
INDUSTRIETECHNIK GMBH

RIGID COUPLING

up to 1,420 Nm and 50 mm bore diameters

ED. 07/2021 Rev.01

- Download catalog
- Download instruction sheets
- Download 3D and 2D cad model

GRI

GRI - rigid coupling: introduction

- Made in steel fully turned with phosphating treatment.
- Extremely rigid connection.
- High torque possible.
- Wear and maintenance free.
- Compact dimensions.
- Finished bore with ISO H8 tolerance and Ra=1.6 mm roughness.

ON REQUEST

- Different customized bore.
- Single split clamp hub with keyway (type B1) and two piece clamp hub with keyway (type C1) or without keyway (type C).
- Version in full stainless steel possible (GRI-SS).
- Anti-corrosive surface treatments for specific needs possible.

GRI rigid couplings have been designed and manufactured to connect two shafts of the same diameter but without allowing any relevant misalignment.
The coupling is manufactured in one element for the single split version. A two piece unit is available on request allowing simple and fast mounting and dismounting.

DIMENSIONING

The nominal torque of the coupling must be higher than the maximum torque of the motor's side, according to the generic formula on page 6.
The indicated torque values have been calculated based on a friction coefficient for shaft-coupling of 0.15 µm.

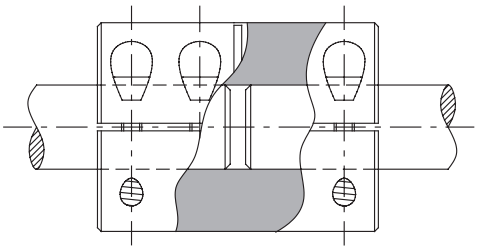
FITTING

It is advised to machine the connecting shafts with:

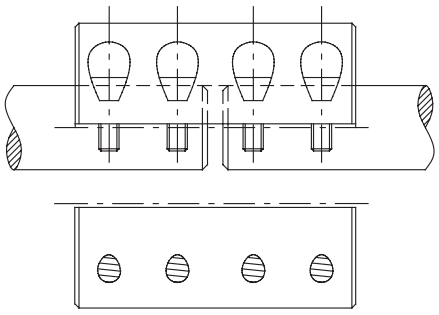
- Surface finish with Ra=1.6 µm.
- Nominal tolerance h6.
- Perfectly aligned shafts.

Tighten the locking screws in steel class 12.9 with a torque wrench, in accordance to the tightening torque indicated in the catalogue.

APPLICATION EXAMPLE

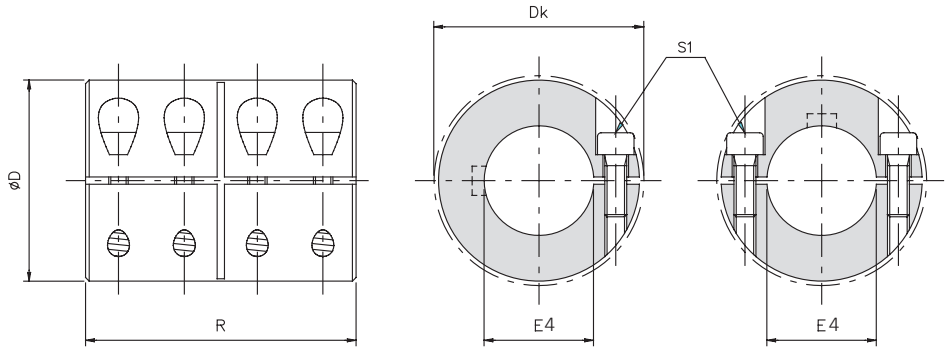


Locking type B



Locking type C

GRI - rigid coupling: technical data



FOR TECHNICAL DATA CONSULT THE DEDICATED BROCHURE

DIMENSIONS

Size	D	Dk	E4 H8	R
10	32	33	10	45
15	40		15	50
20	45	47	20	65
25	50	52	25	70
30	55	57	30	75
35	65	70	35	85
40	70	74	40	90
45	80	83	45	100
50	90	95	50	110

TECHNICAL CHARACTERISTICS

Size	Max torque *[Nm]*		Weight *[Kg]*	Inertia *[Kgm²]*	Max speed *[Rpm]*	Screws S1		
	Locking type B	Locking type C				Locking type B	Locking type C	Tightening torque *[Nm]*
10	65	50	0,25	0,000028	5500	n°4 x M4	n°8 x M4	5,2
15	140	125	0,42	0,000080	4200	n°4 x M5	n°8 x M5	10,5
20	250	230	0,65	0,000172	3800	n°4 x M6	n°8 x M6	17
25	295	285	0,87	0,000305	3500	n°4 x M6	n°8 x M6	17
30	350	345	1,11	0,000503	3200	n°4 x M6	n°8 x M6	17
35	800	760	1,75	0,001098	2700	n°4 x M8	n°8 x M8	43
40	880	870	2,13	0,001615	2500	n°4 x M8	n°8 x M8	43
45	990	980	2,96	0,002896	2200	n°4 x M8	n°8 x M8	43
50	1420	1360	4,31	0,005284	1900	n°4 x M10	n°8 x M10	64

ORDER EXAMPLE

RIGID COUPLING				
Model	Size	● Bore 1	● Bore 2	Hub connection bore 1 & 2
GRI	**20**	**d_1=20 H8**	**d_2=20 H8**	**B**

Size
From 10 to 50

Hub connection
See hub connection type list at page 4

Model	
GRI	Rigid coupling
GRI-SS	Stainless steel version

● MODEL AVAILABLE WITH FINISHED BORE ONLY. (*)

NOTES

- (*) **Different bores to those shown available on request (minimum quantities may apply)**
- **Choice and availability of different hub connection types see pages 4 and 5.**