

# RIGID COUPLING

Up to 860 Nm of torque and 50 mm bore

## GRI



**ComInTec**<sup>®</sup>  
Technology for Safety

## 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 low roughness.

### ON REQUEST

- Different customized bore.
- Single split clamp hub with keyway (type B1).
- Two piece clamp hub with keyway (type C1) or without keyway (type C).
- 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  $\mu\text{m}$ .

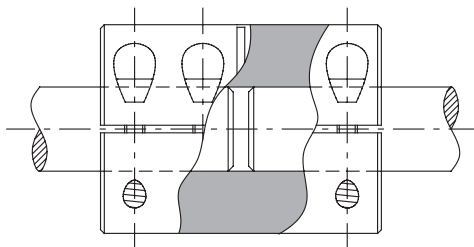
### ■ FITTING

It is advised to machine the connecting shafts with:

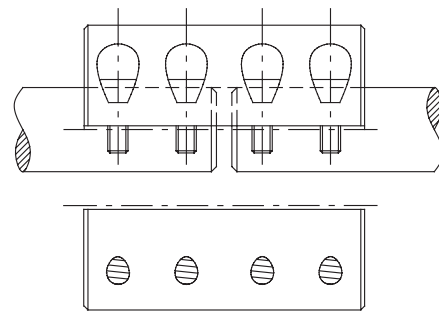
- Surface finish with  $R_a=1.6 \mu\text{m}$ .
- Nominal tolerance h6.
- Perfectly aligned shafts.

Tighten the locking screws in steel class 8.8 with a torque wrench, in accordance to the tightening torque indicated in the catalogue.

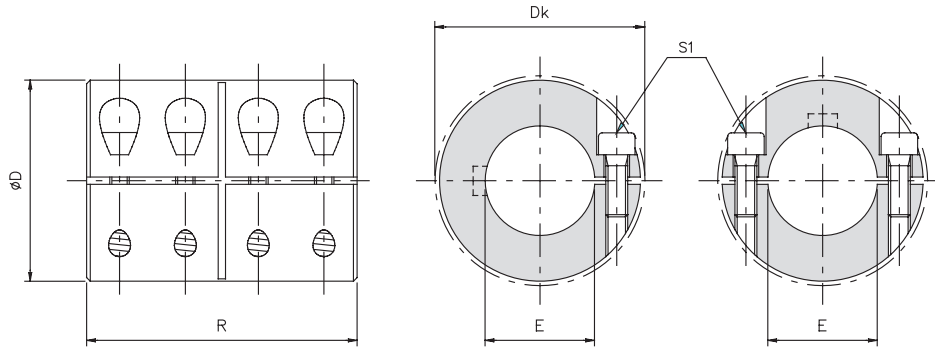
### ■ APPLICATION EXAMPLE



Locking type B



Locking type C



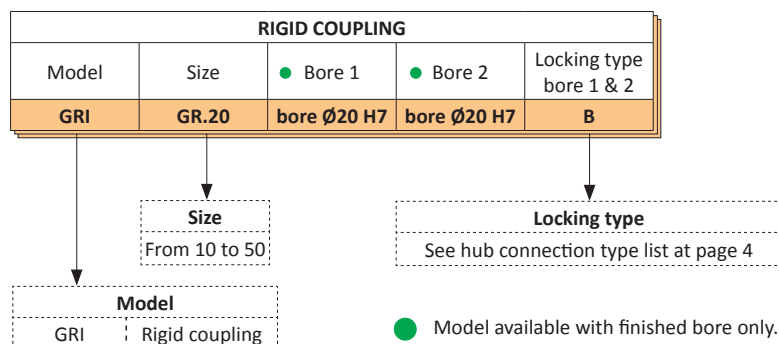
## DIMENSIONS

Size	D	Dk	E 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 [Kgm <sup>2</sup> ]	Max speed [Rpm]	Screws S1		
	Locking type B	Locking type C				Locking type B	Locking type C	Tightening torque [Nm]
10	44	38	0,25	0,000028	5500	n°4 x M4	n°8 x M4	5,2
15	99	94	0,42	0,000080	4200	n°4 x M5	n°8 x M5	10,5
20	141	141	0,65	0,000172	3800	n°4 x M6	n°8 x M6	17,0
25	171	177	0,87	0,000305	3500	n°4 x M6	n°8 x M6	17,0
30	195	212	1,11	0,000503	3200	n°4 x M6	n°8 x M6	17,0
35	353	380	1,75	0,001098	2700	n°4 x M8	n°8 x M8	43,0
40	386	434	2,13	0,001615	2500	n°4 x M8	n°8 x M8	43,0
45	436	488	2,96	0,002896	2200	n°4 x M8	n°8 x M8	43,0
50	790	860	4,31	0,005284	1900	n°4 x M10	n°8 x M10	84,0

## ORDER EXAMPLE



▲ On request

## NOTES

- Choice and availability of different hub connection types see pages 4 and 5.

