

# Flexible Couplings

Shaft encoders must be protected against excessive mechanical stresses, which occur whenever there are angular, axial, or radial misalignments between the machine and shaft encoder shafts.

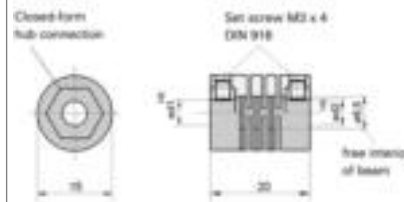
Our flexible couplings can compensate for this within limits.



## PLASTIC COUPLING

Max. speed	10 000 min <sup>-1</sup>
Torque max.	20 Ncm
Moment of inertia	1.1 gcm <sup>2</sup>
Torsional spring constant	12 Nm/rad
Max. angular misalignment	±2.5°
Max. shaft misalignment radial / axial	±0.3 mm / ±0.2 mm
Max tightening torque of set screws	70 Ncm
Material	polyamide 6.6 glass-fibre reinforced
Weight approx.	6 g

### Plastic coupling



Dimensions in mm

Hub diameter

5/5 mm	Ordering code <b>3 520 034</b>
5/6 mm	Ordering code <b>3 520 033</b>
6/6 mm	Ordering code <b>1 761 026</b>

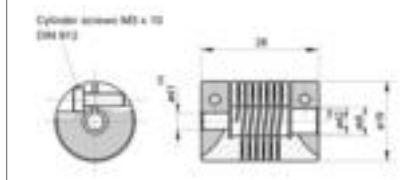
Suitable for encoder type RI 39  
RI 32, RI 41, RI 42 for simple applications



## HELICAL COUPLING

Max. speed	6 000 min <sup>-1</sup>
Torque max.	80 Ncm
Moment of inertia	8.7 gcm <sup>2</sup>
Torsional spring constant	14 Ncm/degree
Max. angular misalignment	±4°
Max. shaft misalignment radial/axial	±0.25 mm / ±0.4 mm
Max tightening torque of set screws	80 Ncm
Material	AlCuMgPb, chromed
Weight	16 g

### Helical coupling 19/28

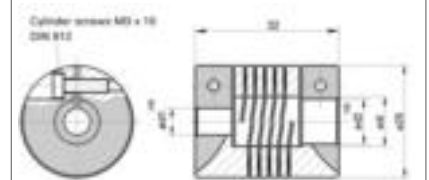


Dimensions in mm

Hub diameter	
5/5 mm	Ordering code <b>3 520 036</b>
5/6 mm	Ordering code <b>3 520 035</b>
6/6 mm	Ordering code <b>0 070 653</b>
6/6.35 mm	Ordering code <b>3 520 051</b>
6.35/6.35 mm	Ordering code <b>3 520 057</b>

Suitable for encoder type RI 30, RI 32,  
RI 36, RI 41, RI 42, RI 58, AC 58

### Helical coupling 25/32



Dimensions in mm

Hub diameter	
6/9.53 mm	Ordering code <b>3 520 052</b>
6/10 mm	Ordering code <b>3 520 066</b>
6.35/9.52 mm	Ordering code <b>3 520 062</b>
10/12 mm	Ordering code <b>3 520 065</b>
10/10 mm	Ordering code <b>3 520 074</b>

Suitable for encoder type RI 58, AC 58

# Flexible Couplings



## ISOLATED DISK COUPLING

Max. speed		12 000 min <sup>-1</sup>
Torque max.		60 Ncm
Max. shaft misalignment	radial	±0.3 mm
	axial	±0.4 mm
	angular	±2.5°
Torsional spring constant		30 Nm/rad
Material	Flanges	aluminium, anodized
	Spring disc	plastic, glass-fibre reinforced

### Hub diameter

5/6 mm	Ordering code <b>3 520 080</b>	Suitable for encoder type RI 30, RI 32, RI 36, RI 41, RI 42, RI 58, AC 58
6/6 mm	Ordering code <b>3 520 081</b>	
6/10 mm	Ordering code <b>3 520 082</b>	
6/6.35 mm	Ordering code <b>3 520 083</b>	
6/9.53 mm	Ordering code <b>3 520 084</b>	
6.35/6.35 mm	Ordering code <b>3 520 085</b>	
7/7 mm	Ordering code <b>3 520 086</b>	
10/6.35 mm	Ordering code <b>3 520 087</b>	
10/10 mm	Ordering code <b>3 520 088</b>	

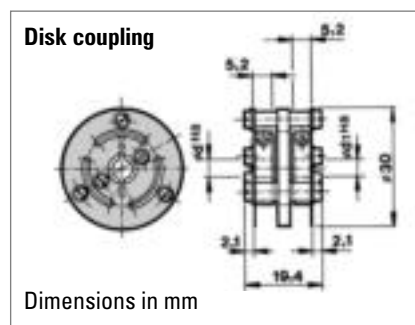
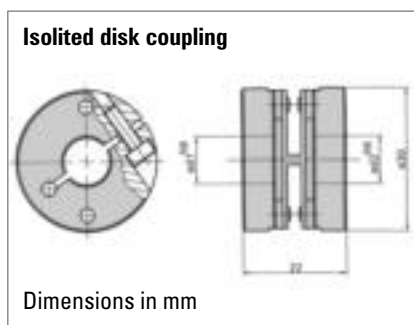


## DISK COUPLING

Max. speed		12 000 min <sup>-1</sup>
Torque max.		80 Ncm
Moment of inertia		19 gcm <sup>2</sup>
Torsional spring constant		150 Nm/rad
Max. angular misalignment		±3.0°
Max. shaft misalignment	radial	±0.4 mm
	axial	±0.4 mm
Max tightening torque of set screws		80 Ncm
Hub diameter d and d <sub>1</sub>		6 mm H 8
Material	coupling body, flange	AlCuMgPb, anodized
	preloaded disc	stainless steel
Weight approx.		14.5 g

Ordering code **0 070 663** suitable for encoder type RI 36, RI 58, AC 58

## DIMENSIONAL DRAWINGS



## Flexible Couplings



### BELLOWS COUPLING

Max. speed		8000 min <sup>-1</sup>
Torque max.		80 Ncm
Moment of inertia		9 gcm <sup>2</sup>
Torsional spring constant		140 Nm/rad
Max. angular misalignment		±4.0°
Max. shaft misalignment	radial	±0.3 mm
	axial	±0.5 mm
Max tightening torque of set screws		150 Ncm
Material	flange	aluminium
	bellows	stainless steel
Weight		16 g

#### Hub diameter

12/12 mm

Ordering code **0 070 666**

Suitable for type RI 58, AC 58

10/10 mm

Ordering code **3 520 037**

9.53/9.53 mm

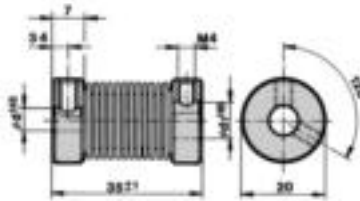
Ordering code **3 520 038**

6/6 mm

Ordering code **3 520 068**

### DIMENSIONAL DRAWING

#### Bellows coupling



Dimensions in mm