TECHNICAL DATASHEET

flexible couplings

Rotary encoders must be protected against mechanical overstressing that always occurs when there are angular, radial or axial displacements between the machine and the encoder shaft. Our flexible couplings can do this within certain limits balance.

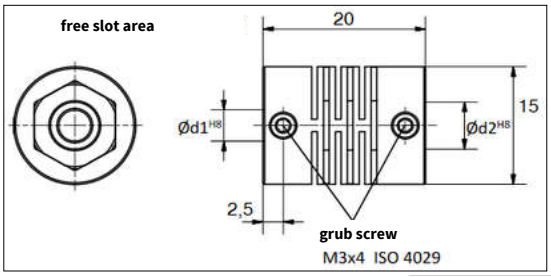
CROSS SLOTTED COUPLING



hub diameter	Part number
5/5 mm	3 520 034
5/6 mm	3 520 033
6/6 mm	1 761 026
Suitable for rotary encoder type RI32, RI41, RI42 for simple Applications	

speed max.		12.000 min $^{-1}$
torque max.		30 Ncm
moment of inertia		2 gcm^2
torsion spring stiffness		12 Nm/rad
radial spring stiffness		45 N/mm
max. offset off shafts	angular	±2,5°
max. offset off shafts	radial axial	±0,3 mm ±0,2 mm
max. clamping torque		70 Ncm
material	middle section hub	polyamid 6.6 Fibreglass reinforced brass
weight appr.		6 g
temperature range		-10°C ... +80°C

DRAWING

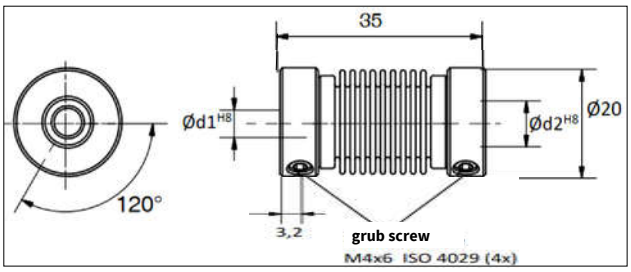


BELLOW COUPLING



hub diameter	Part number
12/12 mm	0 070 666
10/10 mm	3 520 037
9,53/9,53 mm	3 520 038
6/6 mm	3 520 068
8/8 mm	3 520 077
Suitable for rotary encoder type RI 58, AC58	

speed max.		10.000 min $^{-1}$
torque max.		100 Ncm
moment of inertia		9 gcm^2
torsion spring stiffness		140 Nm/rad
radial spring stiffness		10 N/mm
max. offset off shafts	angular	±4,0°
max. offset off shafts	radial axial	±0,3 mm ±0,5mm
max. clamping torque		150 Ncm
material	flange bellow	aluminum anodized stainless steel
weight appr.		16g
temperature range		-30°C ... +120°C



Errors and changes excepted

TECHNICAL DATASHEET

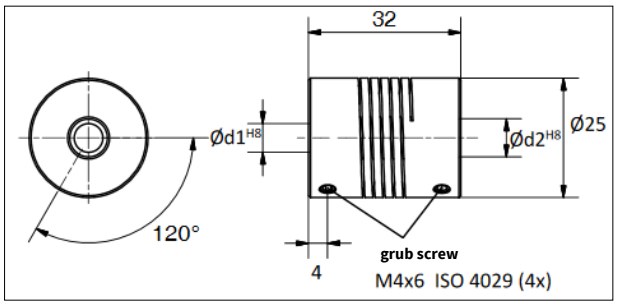
flexible couplings

HELIX COUPLING



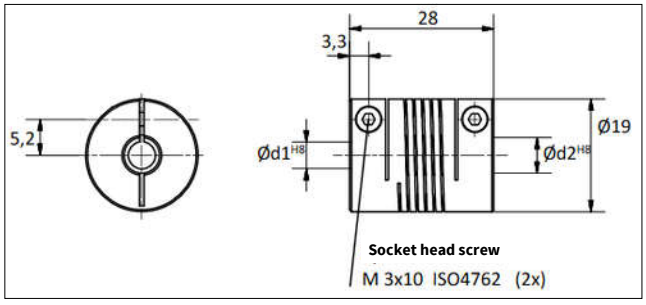
hub diameter	Part number
6/9,53 mm	3 520 052
6/10 mm	3 520 066
10/12 mm	3 520 065
10/10 mm	3 520 074
Suitable for rotary encoder type RI 58, AC58	

speed max.		6.000 min $^{-1}$
torque max.		100 Ncm
moment of inertia		29 gcm^2
torsion spring stiffness		16 Nm/rad
radial spring stiffness		45 N/mm
max. offset off shafts	angular	±4,0°
max. offset off shafts	radial axial	±0,35 mm ±0,5mm
max. clamping torque		150 Ncm
material	flange	aluminum, anodized
weight appr.		34 g
temperature range		-30°C… +150°C



hub diameter	Part number
5/5 mm	3 520 036
5/6 mm	3 520 035
6/6 mm	0 070 653
6,35/6,35 mm	3 520 057
Suitable for rotary encoder type RI30, RI32, RI36, RI41, RI42, RI58, AC58	

speed max.		6.000 min $^{-1}$
torque max.		80 Ncm
moment of inertia		8,7 gcm^2
torsion spring stiffness		8 Nm/rad
radial spring stiffness		36 N/mm
max. offset off shafts	angular	±4,0°
max. offset off shafts	radial axial	±0,25 mm ±0,4mm
max. clamping torque		120 Ncm
material	flange	aluminum anodized
weight appr.		16 g
temperature range		-30°C ... +150°C



Errors and changes excepted

TECHNICAL DATASHEET

flexible couplings

HELIX COUPLING STAINLESS STEEL

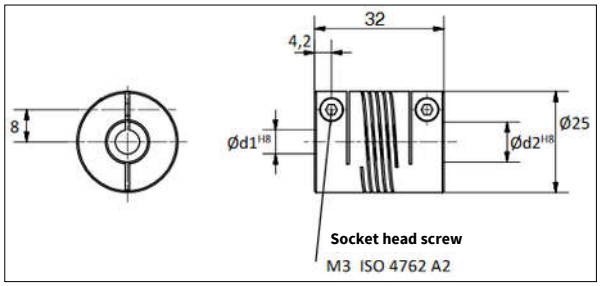


hub diameter	Part number
[1]10/10 mm	3 520 090
10/12 mm	3 520 241
Suitable for rotary encoder type RI59, AC58, AC61, RX71, AX71, AR63, HD20, HD25	

[1]others on request

speed max.	6.000 min $^{-1}$
torque max.	200 Ncm
moment of inertia	84 gcm^2
torsion spring stiffness	29 Nm/rad
radial spring stiffness	150 N/mm
max. offset off shafts angular	±4°
max. offset off shafts radial axial	±0,35 mm ±0,5 mm
max. clamping torque	150 Ncm
material	stainless steel 1.4104
weight appr.	88 g
temperature range	-30°C ... +180 °C

DRAWING



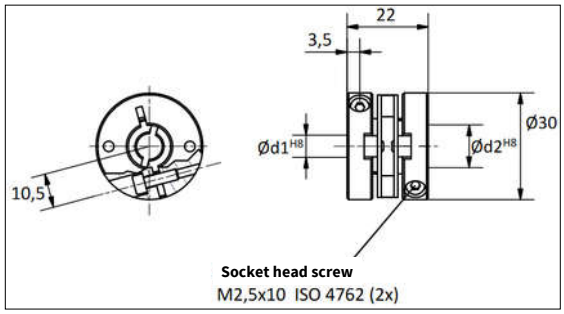
SPRING DISC COUPLING



hub diameter	Part number
5/6mm	3 520 080
6/6 mm	3 520 081
6/10 mm	3 520 082
6/9,53 mm	3 520 084
7/7 mm	3 520 086
10/10 mm	3 520 088
Suitable for rotary encoder type RI30, RI32, RI36, RI41, RI42, RI58, AC58	

speed max.	12.000 min $^{-1}$
torque max.	60 Ncm
moment of inertia	35 gcm^2
max. offset off shaft angular	±2,5°
max. offset off shafts radial axial	±0,3 mm ±0,4 mm
torsion spring stiffness	30 Nm/rad
radial spring stiffness	40 N/mm
material flange membran	aluminum anodized polyamid 6.6, fiberglass reinforced
max. clamping torque	120 Ncm
temperature range	-10°C ... +80°C
weight appr.	30 g

DRAWING



Errors and changes excepted

TECHNICAL DATASHEET

flexible couplings

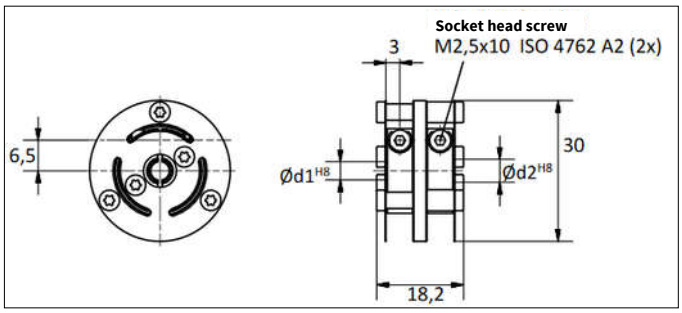
SPRING DISC COUPLING



hub diameter	Part number
d1 6/6H8 d2	0 070 663
d1 10/10 d2	3 520 092
Suitable for rotary encoder type RI36, RI 58, AC58	

speed max.	12.000 min $^{-1}$
torque max.	80 Ncm
moment of inertia	19 gcm^2
torsion spring stiffness	150 Nm/rad
radial spring stiffness	6 N/mm
max. offset off shafts angular	±3,0°
max. offset off shafts radial axial	±0,4mm ±0,4 mm
max. clamping torque	80 Ncm
material flange spring disc	aluminum, anodized stainless steel
weight appr.	16 g
temperature range	-30°C ... +120°C

DRAWING



Errors and changes excepted