

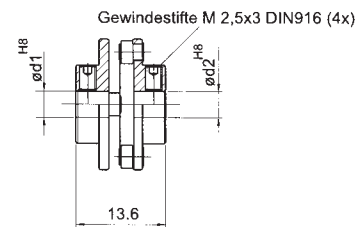
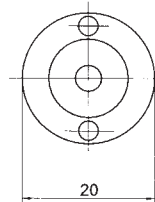
Disc spring couplings

General

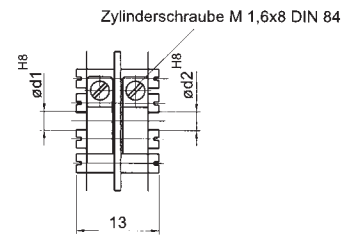
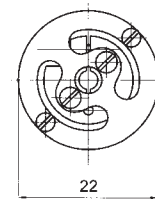
Disc spring couplings provide backlash-free, angularly synchronous transmission of rotary motion

- very high torsional stiffness, low restoring forces
- extremely robust spring membranes made of stainless steel
- good compensation of all alignment errors*, vibration-damping
- suitable for measuring transducers, suitable for very high speeds
- proven transmission element, even in critical applications

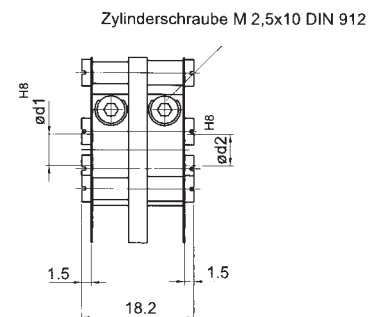
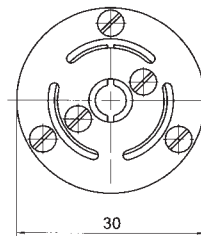
Order no.	Bore $\varnothing d_1 / d_2$
FSXS20140202	2 / 2
FSXS20140204	2 / 4
FSXS20140404	4 / 4
FSXS20140606	6 / 6



Order no.	Bore $\varnothing d_1 / d_2$
FSXK22130202	2 / 2
FSXK22130203	2 / 3
FSXK22130303	3 / 3
FSXK22130404	4 / 4



Order no.	Bore $\varnothing d_1 / d_2$
FSXK30190303	3 / 3
FSXK30190404	4 / 4
FSXK30190506	5 / 6
FSXK30190606	6 / 6
FSXK30190608	6 / 8
FSXK30190810	8 / 10



Versions with inch bores on request

Technical data

Type		FSXS2014*	FSXK2213	FSXK3019
Max. speed	min ⁻¹	10,000	10,000	12,000
Max. torque	Ncm	50	20	80
Max. shaft misalignment				
radial	mm	—	±0.3	±0.4
axial	mm	±0.3	±0.3	±0.4
angular	deg.	±2.5	±2	±3
Torsional stiffness	Nm/rad	100	14	150
Radial stiffness	N/mm	—	3	6
Moment of inertia	gcm ²	2.6	3.2	19
Max. screw torque	Ncm	60	20	80
Weight approx.	g	5	9.5	16
Material:				
Flange		Aluminium chromated	Steel black-oxide finished	Aluminium anodised
Spring disc		stainless steel	stainless steel	stainless steel

* with FSXS2014, radial misalignment is only compensated by two couplings connected in series

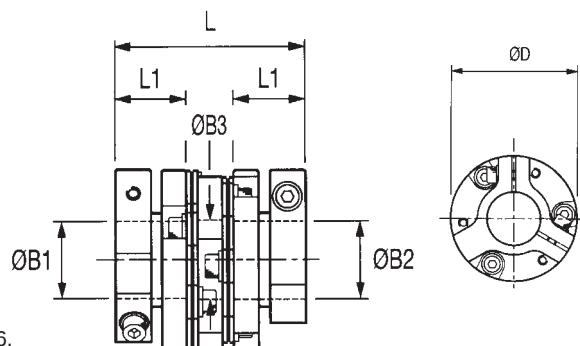
Disc spring couplings

[for aligned shafts]

Order no.	$\varnothing B_1 + B_2^*$		$\varnothing B_3$	$\varnothing D$	L	L ₁
	min.	max.				
666.41	6.35	16.00	16.8	41.5	47.9	17.1
666.52	8.00	20.00	22.0	52.0	60.8	22.9
666.66	12.00	28.00	28.7	66.0	69.6	26.0

*Please state B₁ + B₂ according to the table when ordering

Type 666. __

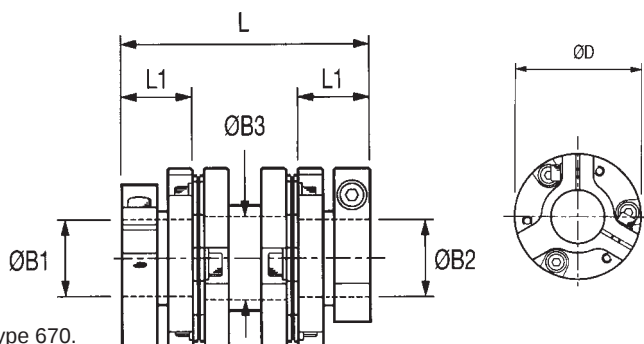


[for larger radial shaft misalignment,
lower bearing load]

Order no.	$\varnothing B_1 + B_2^*$		$\varnothing B_3$	$\varnothing D$	L	L ₁
	min.	max.				
670.41	6.35	16.00	17.5	41.5	59.7	17.1
670.52	8.00	20.00	22.0	52.0	78.1	22.9
670.66	12.00	28.00	30.2	66.0	90.7	26.0

*Please state B₁ + B₂ according to the table when ordering

Type 670. __



*Standard bores $\varnothing B_1, \varnothing B_2 +0.03 / -0.00$ up to 28 mm diameter

Size	$\varnothing B_1 \quad \varnothing B_2$															
	6.35	8.00	9.00	9.525	10.00	11.00	12.00	12.70	14.00	15.00	15.875	16.00	18.00	19.00	19.05	20.00
41	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
52	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
66	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

Ø If required, B₁ + B₂ can be reduced using bore bushes [reducing bushes page 42].

Technical data

Type		666.41	666.52	666.66	670.41	670.52	670.66
Max. speed	min ⁻¹	25,000	25,000	25,000	25,000	25,000	25,000
Max. torque	Ncm	1130	3000	6000	1130	3000	6000
Max. radial misalignment	mm	±0.2	±0.2	±0.2	±0.4	±0.4	±0.4
Max. angular error	deg.	±2.0	±2.0	±2.0	±2.0	±2.0	±2.0
Max. axial misalignment	mm	±0.2	±0.2	±0.2	±0.2	±0.2	±0.2
Torsional spring constant	Nm/rad	2800	4800	1200	2600	4800	1200
Moment of inertia	g cm ²	201	747	1930	225	887	2432
Clamping screw thread	mm	M 4	M 5	M 5	M 4	M 5	M 5
Max. tightening torque of clamping screw	Ncm	566	1140	1140	566	1140	1140
Weight approx.	g	101	208	357	112	247	444
Material:	Flange	Aluminium alloy, clear anodised					
	Spring disc	stainless spring steel					
	Screws	Heat-treated steel, black-oxide finished					

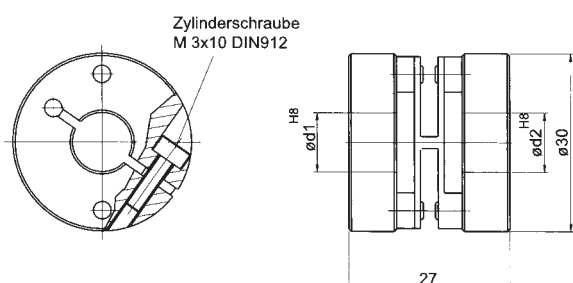
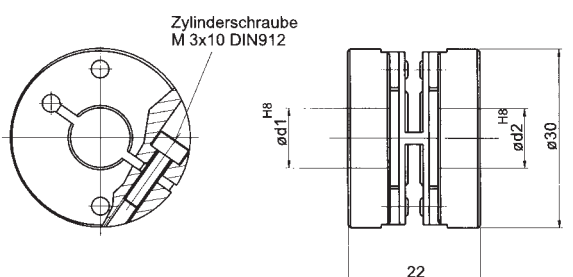
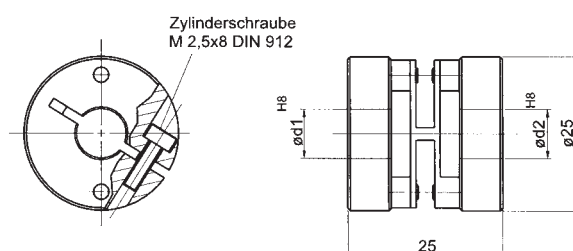
Disc spring couplings

pluggable, with clamping flange

General

Disc spring couplings with plastic membranes provide backlash-free, angularly synchronous transmission of rotary motion

- very high torsional stiffness, medium restoring forces
- electrically insulating, pluggable, stackable centre section
- suitable for measuring transducers, suitable for very high speeds
- good compensation of all alignment errors, vibration-damping



Order no.	Bore Ø d ₁ / d ₂
FSKK25250606	6 / 6
FSKK25250610	6 / 10
FSKK25250808	8 / 8
FSKK25251010	10 / 10
FSKK25251012	10 / 12
FSKK25251212	12 / 12
FSKK25251414	14 / 14
FSKK25251616	16 / 16

Order no.	Bore Ø d ₁ / d ₂
FSKK30220606	6 / 6
FSKK30220610	6 / 10
FSKK30221010	10 / 10
FSKK30221012	10 / 12
FSKK30221212	12 / 12
FSKK30221414	14 / 14
FSKK30221616	16 / 16

Order no.	Bore Ø d ₁ / d ₂
FSKK30270606	6 / 6
FSKK30270610	6 / 10
FSKK30271010	10 / 10
FSKK30271012	10 / 12
FSKK30271212	12 / 12
FSKK30271414	14 / 14
FSKK30271616	16 / 16

Technical data

Type		FSKK2525	FSKK3022	FSKK3027
Max. speed	min ⁻¹	12,000	12,000	12,000
Max. torque	Ncm	40	60	60
Max. shaft misalignment				
radial	mm	±0.25	±0.3	±0.3
axial	mm	±0.4	±0.4	±0.4
angular	deg.	±2.5	±2.5	±2.5
Torsional stiffness	Nm/rad	22	30	30
Radial stiffness	N/mm	60	40	40
Moment of inertia	gcm ²	15	35	37
Max. screw torque	Ncm	65	80	80
Weight approx.	g	18	30	32
Material:	Flange	Anodised aluminium		
	Membrane	Glass-fibre reinforced polyamide 6.6		