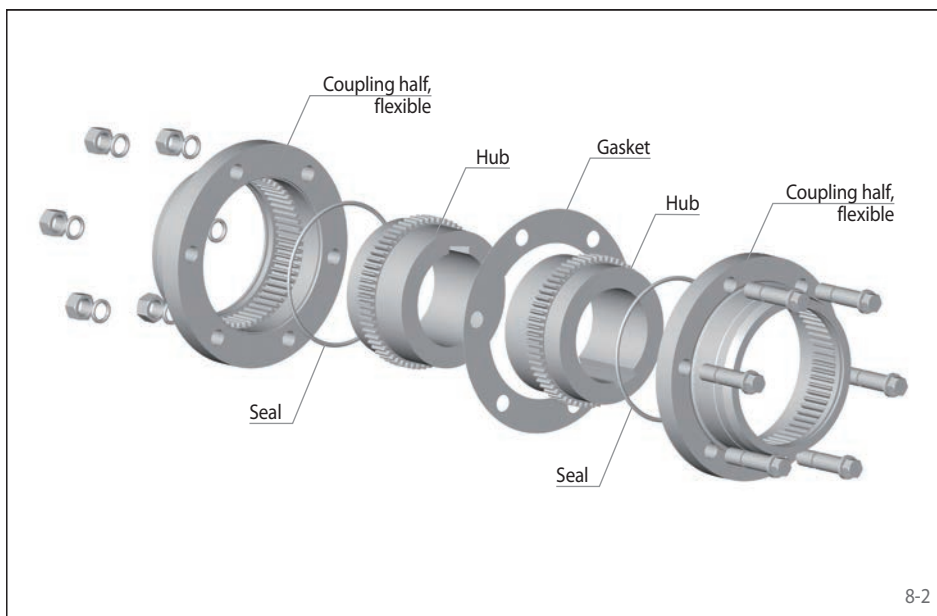


# Gear Couplings RDZ ... DTO

torsionally rigid  
double engagement gearing – lubricated



8-1



8-2

## Features

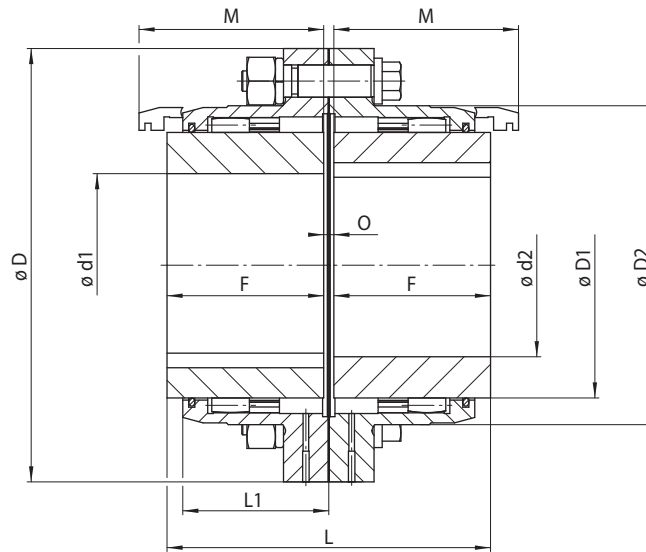
- High nominal torques up to 391 500 Nm
- High misalignment capability
- Compensation of axial, radial and angular misalignments
- Double engagement allows smooth torque transmission
- Compact design due to inside turned hubs
- Complies with the AGMA standard (American Gear Manufacturer Association) up to coupling size 0090
- High power to weight ratio
- Typical application: Roll drives in the steel and paper industry, pumps, conveyors, fans and blowers

## Order example

Order example	Code
Coupling design	RDZ
Coupling size	0010
Type	DTO
Material of the hub: • Steel	STA
Hub 1, type: • 0, standard	0
Hub 1, design: • finish bored with keyway • roughbored	FB VA
Bore diameter d1	020
Hub 2, type: • 0, standard	0
Hub 2, design: • finish bored with keyway • roughbored	FB VA
Bore diameter d2	025

RDZ 0010 DTO-STA-0FB020-0FB025

torsionally rigid  
double engagement gearing – lubricated



9-1

Coupling size	Nominal torque $T_{KN}$ Nm	Nominal power at 100 min <sup>-1</sup> $P_{K100}$ kW	Max. speed $n_{max}$ min <sup>-1</sup>	Moment of inertia with max. bore $J_k$ kgm <sup>2</sup>	Permissible misalignments		
					Axial mm	Radial mm	Angular °
0010	1330	14	8000	0,0052	±0,5	0,5	1,5
0015	2860	30	6500	0,0192	±0,5	0,8	
0020	5000	53	5600	0,0410	±0,5	1,0	
0025	10000	105	5000	0,1050	±0,5	1,2	
0030	16000	168	4400	0,1950	±0,5	1,4	
0035	22000	231	3900	0,4540	±1	1,7	
0040	32000	336	3600	0,8600	±1	2,0	
0045	45000	472	3200	1,3900	±1	2,1	
0050	62000	650	2900	2,5300	±1	2,6	
0055	84000	880	2650	3,8300	±1	2,9	
0060	115000	1205	2450	5,2100	±2	3,2	
0070	174000	1823	2150	11,0000	±2	3,7	
0080	252000	2639	1750	20,7200	±2	4,2	
0090	290000	3037	1550	34,9500	±2	4,8	
0100	391500	4100	1450	55,9500	±3	5,5	

Coupling size	Bore d1 / d2		D mm	D1 mm	D2 mm	F mm	L mm	L1 mm	M* mm	O mm	Weight with max. bore kg
	min. mm	max. mm									
0010	14	52	116	69	84	43	89	39	51	3	4,4
0015	22	65	152	86	105	50	103	48	61	3	9
0020	27	80	178	105	127	62	127	60	76	3	15
0025	32	98	213	131	155	77	159	72	92	5	27
0030	42	115	240	152	181	91	187	84	106	5	40
0035	47	135	279	178	211	107	220	98	130	6	65
0040	47	160	318	210	250	121	248	111	145	6	96
0045	52	180	346	235	274	135	278	123	165	8	131
0050	72	195	389	254	306	153	314	141	183	8	186
0055	72	215	425	279	334	168	344	158	203	8	247
0060	77	235	457	305	366	188	384	169	228	8	299
0070	92	280	527	356	425	221	451	196	266	9	473
0080	95	285	590	385	485	249	508	243	300	10	682
0090	100	300	660	420	535	276	565	265	325	13	898
0100	120	330	711	470	595	305	623	294	355	13	1242

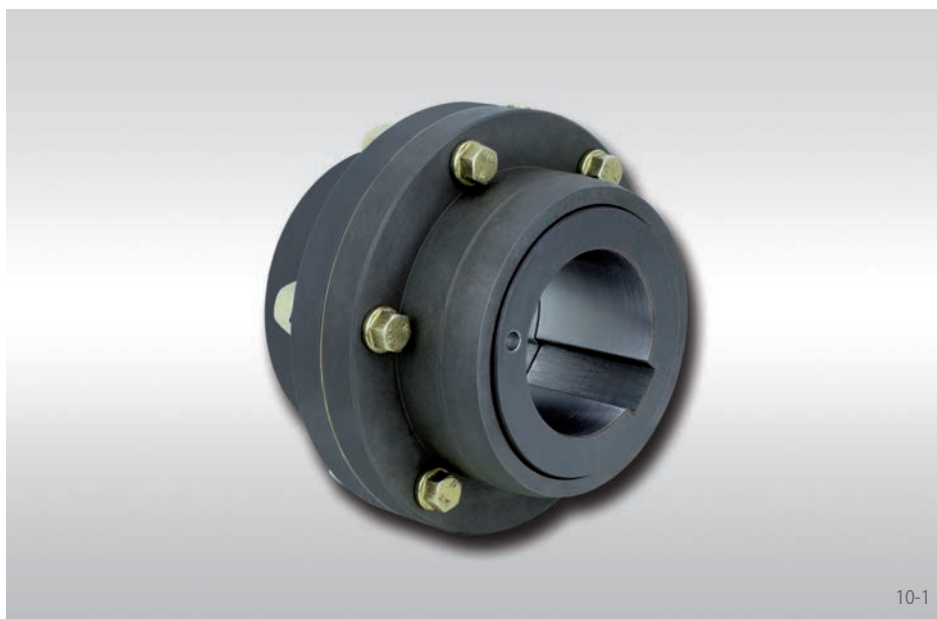
For finish bores, please specify diameter d1 and d2. Tolerance of finish bores H7. Keyways in accordance with DIN 6885, sheet 1.

Upon request, couplings larger than frame size 0100 also available.

\* Minimum necessary space to align the shafts.

# Gear Couplings RDZ ... DFO

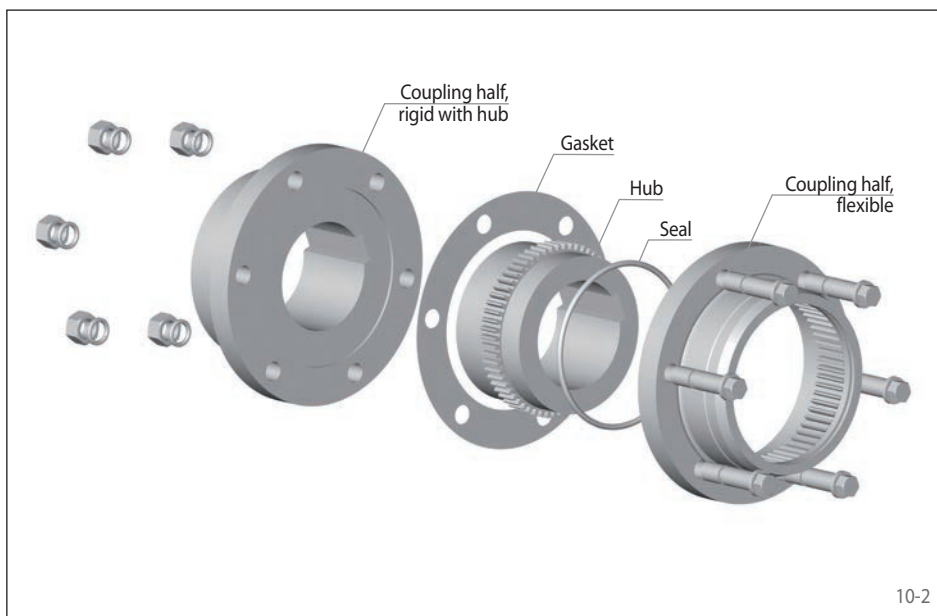
torsionally rigid  
single engagement gearing – lubricated



10-1

## Features

- High nominal torques up to 391 500 Nm
- Compensation of axial and angular misalignments
- Compact design due to inside turned hubs
- High power to weight ratio
- Typical application: Roll drives in the steel and paper industry, pumps, conveyors, fans and blowers



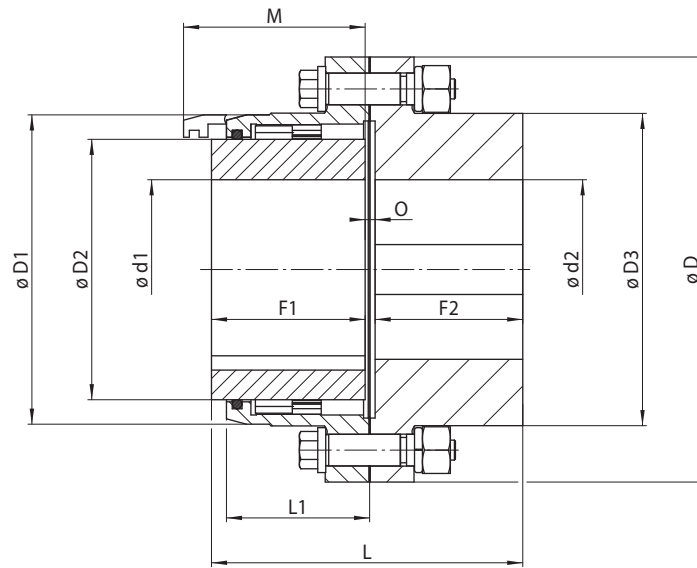
10-2

## Order example

	Code
Coupling design	RDZ
Coupling size	0010
Type	DFO
Material of the hub: • Steel	STA
Hub 2, type: • 0, standard	0
Hub 1, design: • finish bored with keyway • roughbored	FB VA
Bore diameter d1	020
Hub 2, type: • 1, coupling half, rigid with hub	1
Hub 2, design: • finish bored with keyway • roughbored	FB VA
Bore diameter d2	025

RDZ 0010 DFO-STA-0FB020-1FB025

torsionally rigid  
single engagement gearing – lubricated



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Coupling size	Nominal torque	Nominal power at 100 min <sup>-1</sup>	Max. speed	Moment of inertia with max. bore	Permissible misalignments	
	T <sub>KN</sub>				P <sub>K100</sub>	n <sub>max</sub>
	Nm	kW	min <sup>-1</sup>	kgm <sup>2</sup>	mm	°
0010	1330	14	8000	0,0055	± 0,25	0,75
0015	2860	30	6500	0,0204	± 0,25	
0020	5000	53	5600	0,0436	± 0,25	
0025	10000	105	5000	0,1110	± 0,25	
0030	16000	168	4400	0,2100	± 0,25	
0035	22000	231	3900	0,4770	± 0,5	
0040	32000	336	3600	0,9200	± 0,5	
0045	45000	472	3200	1,4680	± 0,5	
0050	62000	650	2900	2,7300	± 0,5	
0055	84000	880	2650	4,2000	± 0,5	
0060	115000	1205	2450	5,7000	± 1	
0070	174000	1823	2150	12,0500	± 1	
0080	252000	2639	1750	21,7700	± 1	
0090	290000	3037	1550	36,6000	± 1	
0100	391500	4100	1450	56,2700	± 1,5	

Coupling size	Min. bore		Max. bore		D	D1	D2	D3	F1	F2	L	L1	M*	O	Weight with max. bore
	d1 mm	d2 mm	d1 mm	d2 mm											
0010	14	18	52	60	116	84	69	84	43	40	87	39	51	4	4,5
0015	22	26	65	80	152	105	86	107	50	47	101	48	61	4	9,5
0020	27	30	80	90	178	127	105	130	62	59	125	60	76	4	15,5
0025	32	37	98	110	213	155	131	157	77	74	156	72	92	5	27,5
0030	42	44	115	130	240	181	152	182	91	88	184	84	106	5	41,5
0035	47	52	135	150	279	211	178	212	107	102	215	98	130	6	67,0
0040	47	52	160	180	318	250	210	250	121	116	245	111	145	8	100,0
0045	52	57	180	200	346	274	235	276	135	131	274	123	165	8	135,0
0050	72	77	195	220	389	306	254	309	153	148	310	141	183	9	195,0
0055	72	77	215	240	425	334	279	334	168	173	350	158	203	9	261,0
0060	77	82	235	260	457	366	305	366	188	185	384	169	228	10	316,0
0070	92	102	280	300	527	425	356	425	221	218	452	196	266	13	500,0
0080	95	105	285	335	590	485	385	470	249	249	511	243	300	13	715,0
0090	100	0	300	370	660	535	420	518	276	276	567	265	325	15	969,0
0100	120	0	330	405	711	595	470	572	305	305	626	294	355	16	1259,0

For finish bores, please specify diameter d1 and d2. Tolerance of finish bores H7. Keyways in accordance with DIN 6885, sheet 1.  
\* Minimum necessary space to align the shafts.