

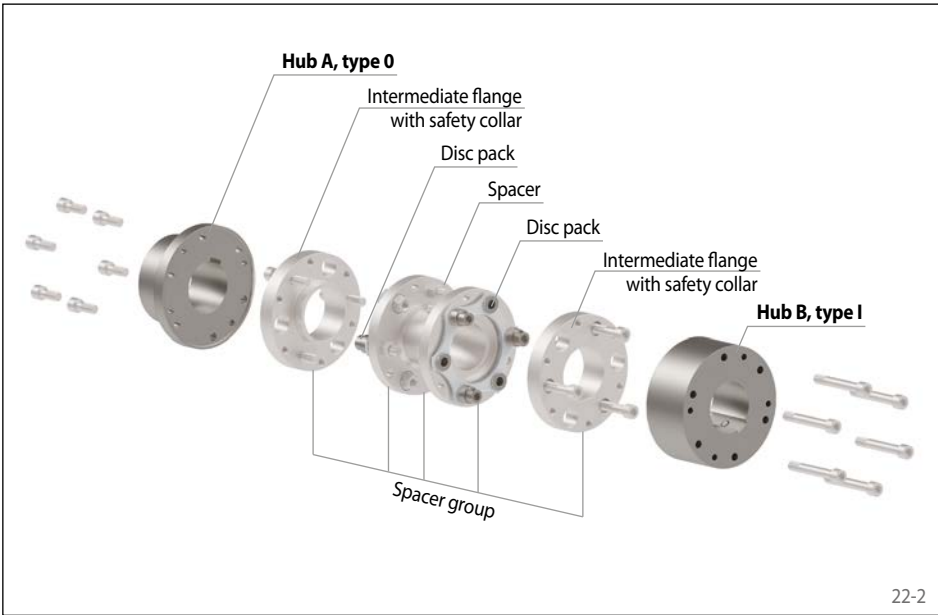
Disc Couplings RDL ... DSA

torsionally rigid
double disc packs, design according to API 610



Features

- Nominal torques up to 18 700 Nm
- High torque capacity
- Backlash-free
- Compensation of axial, radial and angular misalignments
- Double disc pack allows smooth torque transmission
- High torsional rigidity with low axial rigidity
- Temperature range -20 °C to +280 °C
- Complies with ATEX 2014/34/EU
- Typical applications: Centrifugal pumps, screw pumps, turbo compressors, rotary piston fans



Additional features

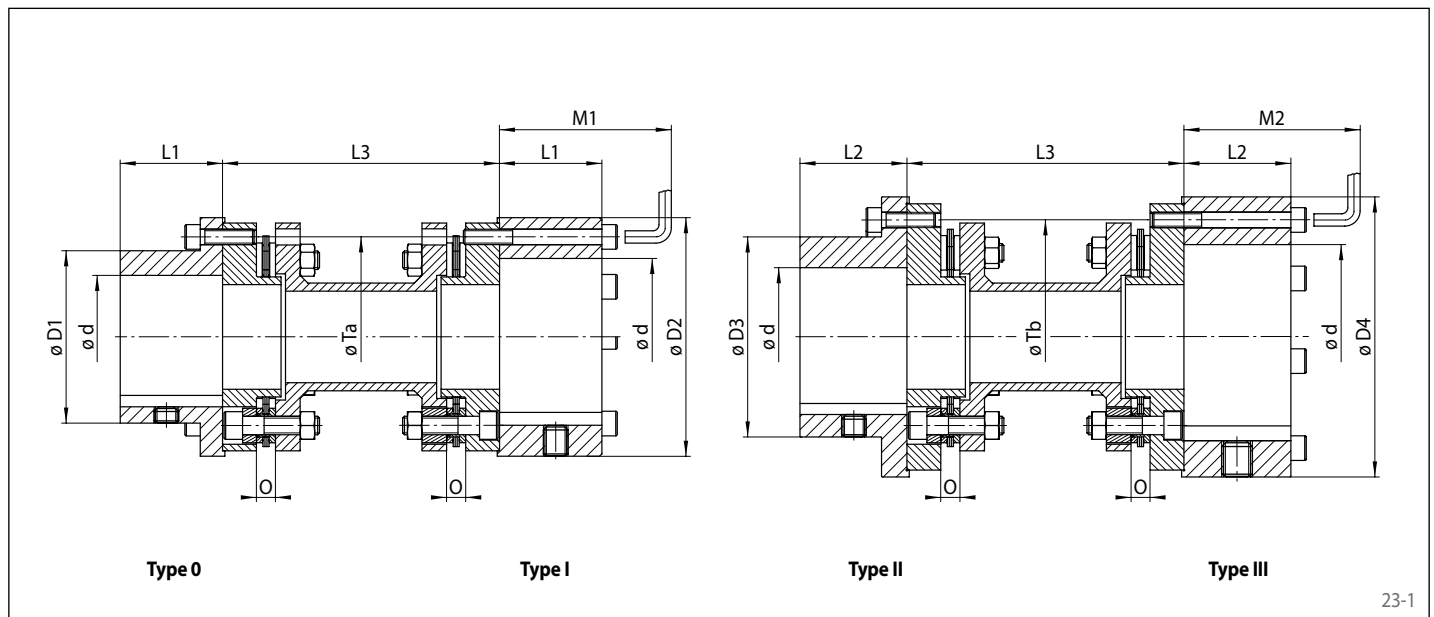
- No wear with optimal alignment, no lubrication necessary
- Corresponds to the provisions in accordance with API 610 and optionally, upon request, with the requirements in accordance with API 671

Order example

	Code
Coupling design	RDL
Coupling size	0048
Type	DSA
Material of the hub: • Steel	STA
Hub A, type: • 0, standard • I, increased max. bore; pitch diameter Ta	0 1
• II, extended • III, extended, increased max. bore; pitch diameter Tb	2 3
Hub A, design: • finish bored with keyway • roughbored	FB VA
Bore diameter hub A	045
Hub B, type: • 0, standard • I, increased max. bore; pitch diameter Ta	0 1
• II, extended • III, extended, increased max. bore; pitch diameter Tb	2 3
Hub B, design: • finish bored with keyway • roughbored	FB VA
Bore diameter hub B	060
DBSE L3	0180

RDL 0048 DSA-STA-0FB045-1FB060-0180

torsionally rigid
double disc packs, design according to API 610



23-1

Coupling size	Nominal torque T_{KN}	Nominal power at 100 min^{-1} P_{K100}	Max. speed* n_{max}	Torsional stiffness C_T	Moment of inertia J_K with DBSE L3		Permissible misalignments		
					with shortest standard	per additional meter to the standard	Axial	Radial	Angular
	Nm	kW	min^{-1}	MNm/rad	kgm^2	kgm^2	mm	mm	°
0024	96	1,0	7 500	0,018	0,0012	0,0002	±2	L3 x 0,013	1,5
0038	232	2,4	7 000	0,043	0,0039	0,0006			
0048	620	6,5	6 000	0,100	0,0094	0,0011			
0065	1 200	12,6	5 200	0,232	0,0283	0,0034			
0075	1 910	20,0	4 800	0,395	0,0604	0,0088			
0100	3 460	36,3	4 400	0,749	0,1410	0,0213			
0110	5 600	58,5	4 200	1,239	0,3650	0,0561			
0125	7 100	74,2	4 000	1,649	0,4181	0,0561	±4	L3 x 0,013	1,5
0140	10 400	108,7	3 800	2,179	0,7067	0,0670			
0150	14 500	152,2	3 700	3,350	1,1340	0,1666			
0160	18 700	196,0	3 600	4,271	1,7740	0,1666			

Torsional stiffness and moment of inertia refer to a combination of hub type 0 and hub type I with max. possible bore diameter respectively and shortest standard DBSE L3.

* Higher speeds on request.

Coupling size	Pilot bore d^*	Min. bore d^*		Max. bore d^*				D1	D2	D3	D4	L1	L2	DBSE L3		M1**	M2**	Gap O	Weight with DBSE L3	
		Hub type 0 / I	Hub type II / III	Hub type 0	Hub type I	Hub type II	Hub type III							shortest possible	Standard				with shortest standard	per additional meter to the standard
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	kg
0024	6	8	10	24	42	38	48	40	69	55	90	30	40	80	100 140 180 250	80	90	7,5	2	1,32
0038	8	10	15	38	48	48	72	55	90	70	108	40	45	89	140 180 250	90	105	7,5	4	2,29
0048	13	15	20	48	72	65	92	70	108	86	135	45	55	103	140 180 250	105	120	8,5	9	3,19
0065	18	20	25	65	92	80	102	86	135	108	152	55	60	128	140 180 250	120	125	9,2	16	4,47
0075	23	25	30	80	102	90	120	108	152	130	182	60	70	148	140 180 250	125	135	12,4	22	8,38
0100	28	30	45	90	120	108	140	130	182	158	197	70	90	161	180 250	135	155	10,6	33	13,08
0110	43	45	55	108	140	127	155	158	197	181	225	90	95	175	180 250	155	160	13,9	49	21,72
0125	53	55	65	127	155	140	178	181	225	206	250	95	105	180	180 250	160	170	14,5	61	21,72
0140	63	65	70	140	178	155	192	206	250	223	275	105	115	194	250	170	190	15,9	83	27,06
0150	68	70	75	155	192	170	212	223	275	248	300	115	130	213	250	190	215	17,4	105	42,79
0160	73	75	80	170	212	190	255	248	300	280	375	130	145	225	250	215	245	18,3	136	42,79

For finish bores, please specify bore diameter hub A and hub B. Tolerance of finish bores H7. Keyways in accordance with DIN 6885, sheet 1. Keyway tolerance JS9, different bore and keyway tolerances on request.

The weight refers to a combination of hub type 0 and hub type I with max. possible bore diameter respectively and shortest standard DBSE L3.

When ordering please specify hub type. Possible hub combinations: Type 0 / 0; 0 / I; I / I; II / II; II / III or III / III; Pitch diameter T_a and T_b are not identical.

Upon request: Varying DBSEs L3; Design in accordance with ATEX 2014/34/EU; Designs with taper bushes; Couplings larger than frame size 0160

For vertical installation, please contact RINGSPANN.

* Bores also available in inch size, see page 73. • ** Distance M1 and M2 is required to tighten and loosen the screws for hub type I and type III.