

Dipl.-Ing. Herwarth Reich GmbH

D2C
Designed to Customer

ArcuDent

Toothcoupling



Your strength is our drive, your drive is our motivation



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D2C – Designed to Customer



The principle of Designed to Customer describes the recipe for success of REICH-KUPPLUNGEN: Utilizing our product knowledge, our customers are supplied with couplings which are developed and tailor-made to their specific requirements. The designs are mainly based on modular components to provide effective and efficient customer solutions. The unique form of close cooperation with our partners includes consultation, design, calculation, manufacture and integration into existing environments. Adapting our manufacturing to customer-specific production and utilizing global logistics concepts provides better after sales service - worldwide. This customer-oriented concept applies to both standard products and production in small batch sizes.

The company policy of REICH-KUPPLUNGEN embraces, first and foremost, principles such as customer satisfaction, flexibility, quality, prompt delivery and adaptability to the requirements of our customers.

REICH-KUPPLUNGEN supplies not only a coupling, but a solution: Designed to Customer.

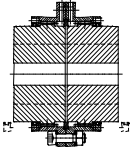

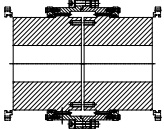

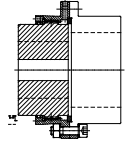
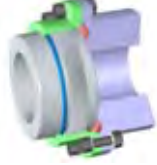
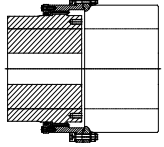
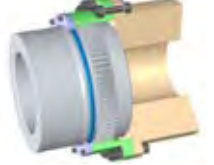
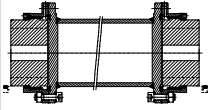

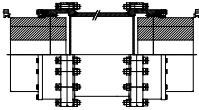
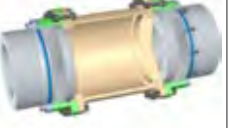
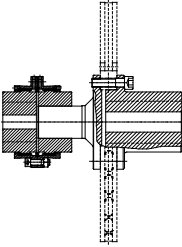
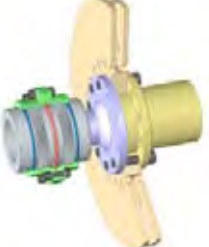
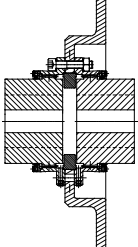
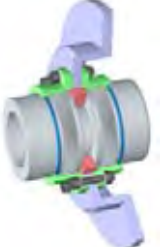
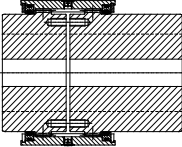

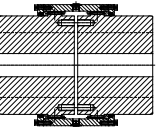
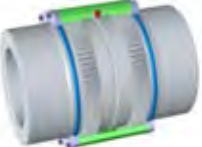
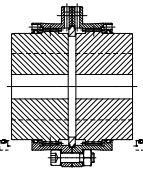

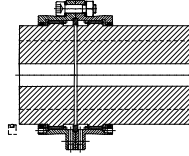

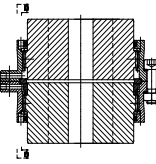

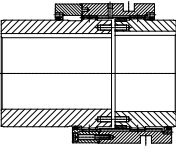

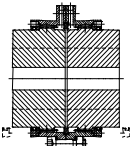

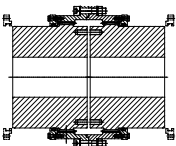

Edition March 2013

Proprietary notice pursuant to ISO 16016 to be observed:

*The present ArcuDent edition renders parts of the previous ArcuDent catalogues obsolete.
All dimensions in millimetres - unless otherwise noted.
We reserve the right to change dimensions
and / or design details without prior notice.*

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Standard types for general applications according to catalogue

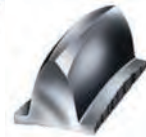
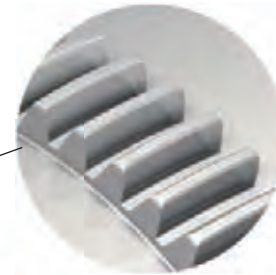
	<p>Type AD-S Page 6 Nominal torque: 1200 up to 190 000 Nm max bore: 50 up to 280 mm</p>			<p>Type AD-S Page 7 Nominal torque: 255 000 up to 4 950 000 Nm max bore: 310 up to 800 mm</p>	
	<p>Type AD-PA Page 8 Nominal torque: 1200 up to 190 000 Nm max bore: 50 up to 280 mm</p>			<p>Type AD-PA Page 9 Nominal torque: 255 000 up to 4 950 000 Nm max bore: 310 up to 800 mm</p>	
	<p>Type AD-E Page 10 Nominal torque: 1200 up to 190 000 Nm max bore: 50 up to 280 mm</p>			<p>Type AD-E Page 11 Nominal torque: 255 000 up to 4 950 000 Nm max bore: 310 up to 800 mm</p>	
	<p>Type AD-DF Page 12 Application for brake disc Nominal torque: 3000 up to 43 000 Nm max bore: 68 up to 170 mm</p>			<p>Type AD-DFC Page 13 Application for brake disc elbow Nominal torque: 1200 up to 190 000 Nm max bore: 50 up to 280 mm</p>	
	<p>Type AD-BM Page 14 Solid cover Nominal torque: 1200 up to 190 000 Nm max bore: 50 up to 280 mm</p>			<p>Type AD-BM Page 15 Solid cover Nominal torque: 255 000 up to 4 950 000 Nm max bore: 310 up to 800 mm</p>	
	<p>Type AD-JL Page 16 Limited end float Nominal torque: 1200 up to 190 000 Nm max bore: 50 up to 280 mm</p>			<p>Type AD-ML/AD-ML2 Page 17 Long hub Nominal torque: 1200 up to 138 000 Nm max bore: 50 up to 250 mm</p>	
	<p>Type AD-V Page 18 Vertical mounting Nominal torque: 1200 up to 190 000 Nm max bore: 50 up to 280 mm</p>			<p>Type AD-DB Page 19 Clutch System Nominal torque: 1200 up to 138 000 Nm max bore: 50 à 250 mm</p>	
	<p>Type AD-R Page 20 Reinforced Coupling Nominal torque: 1855 up to 302 450 Nm max bore: 50 up to 280 mm</p>			<p>Type AD-R Page 21 Reinforced Coupling Nominal torque: 400 000 up to 7 780 000 Nm max bore: 310 up to 800 mm</p>	

The ArcuDent coupling - general technical description

Fasteners class 12.9 allow torque transmission by friction

Special gear teeth realized in order to **increase** the contact surface and to **limit** the superficial pressure

Tightness with standard o-rings that guarantee the long life of couplings

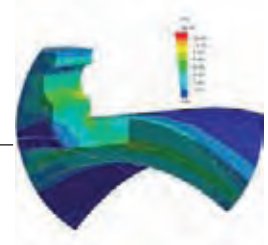


Special Shape of tooth in order to limit noise and vibrations interferences

Gear Hub:
Bore hub capacity up to 800 mm optimization by finite elements



Ring Gear:
Gear Teeth optimized by finite elements



ISO 9001



Available according to ATEX-Standards



High misalignment 1°30' for sizes 50 to 280
Misalignment 1° for sizes 310 up to 800



- 20 °C
+ 100 °C

Working Temperature from -20 °C to +100 °C



Torque from 1 200 to 7 780 000 Nm.

Sizing of your ArcuDent – Coupling

A) Calculation of Corrected Torque

$$\text{Corrected Torque} = \text{Absorbed Torque} \times \text{SF} = \frac{9550 \times \text{drive capacity P Abs (kW)} \times \text{SF}}{\text{Speed (rpm)}}$$

(Choice of the Service Factor SF – See following Data),
P Abs: Absorbed Power

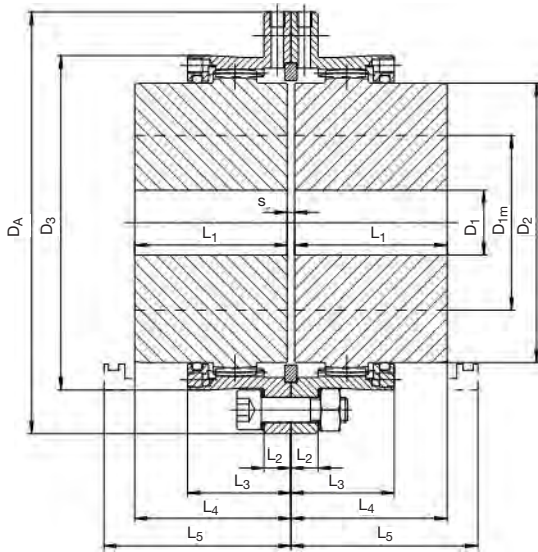
- B) Selection** Choose the coupling size that has a nominal torque equal or superior to the corrected Torque
- C) Checking** Check the maximum boring and speed capacities

Service Factors Table	SF Δ	SF □	SF O
Uniform load, no shocks T max < 1,5 T. Few start-up. - Generators; centrifugal pumps and compressors; small fans...	1	1.12	2) 1.25
Uniform load, light shocks. T max < 1,8 T. Light and short overload. - Agitators and mixers for liquid or semi liquid; light textile machinery; rotary machines tools; light duty conveyors...	1.12	1.25	2) 1.40
Non uniform load, moderate shocks. T max < 2,2 T. Short time quite heavy overload. - Agitators or mixers for liquid and solid; elevators, overhead cranes; cranes in machining shops; cranes winches; card machine; dry can; loom; cloth finishing machine; extruder; hammer mill; tumbling mill; auxiliary drives for rolling mills; wire drawing machines...	1.25	1.40	2) 1.60
Non uniform load, heavy shocks frequently. T max < 3 T. High overload, reverse motion. - Compressors with flywheel; reciprocating; draw bench; cold mill ban; bury mixers; mixing mills; tire building machine; washers; barking drums; chippers; generators...; welder load....	1.60	1.80	2) 2
Non uniform load, very heavy shocks, very frequently. T max from 3 to 3,5 T. Very high overload. Reverse motion - hot mill application; conveyors; live roll; shaker and reciprocating; gang raw (reciprocating); vibrating screen...	2	2.25	3) 2.5

Main engine Δ : Drive per motor Electric or turbine
 □ : Drive per motor Hydraul
 O : Drive per motor multi cylinders internal combustion

- 2) Torsional analysis advised
 3) Torsional analysis necessary

Type AD-S – Horizontal working position



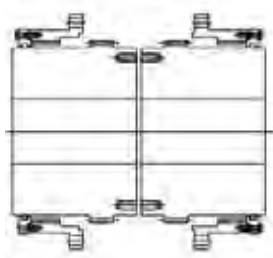
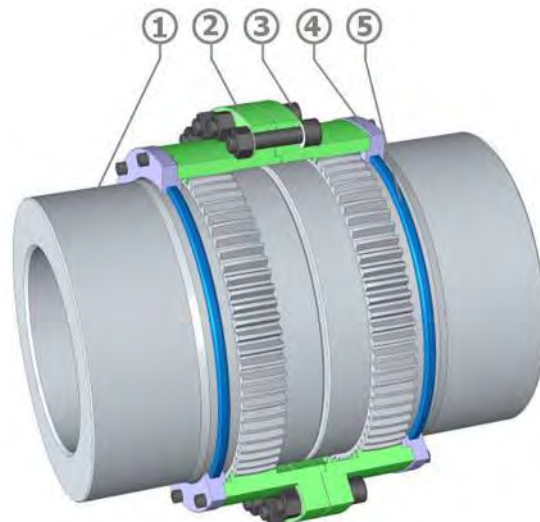
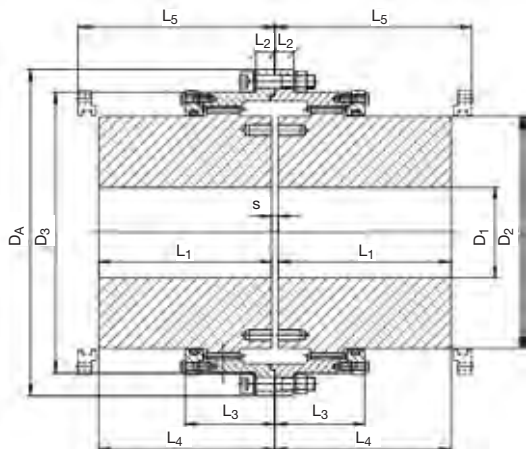
Item	Example of designation
1	Gear Hub
2	Half Cover
3	Screws and Bolts
4	Centering ring
5	Seal

Example of designation: AD 80.S ArcuDent Coupling Size 80.

Size		50	68	80	100	115	135	150	170	190	215	230	250	280
Nominal torque	Nm	1200	3000	5200	9000	13700	21300	29200	43000	60700	88200	105000	138000	190000
max Bore	D _{1m} ¹⁾	50	68	80	100	115	135	150	170	190	215	230	250	280
	D _{1m} ²⁾	46	63	75	92	106	125	140	160	175	200	210	230	250
Rough Bore	D ₁	18	18	26	35	35	58	68	83	98	108	118	128	128
	L ₁	43	50	62	76	90	105	120	135	150	175	190	220	310
	L ₂	10	10	11	11	14	18	20	20	24	24	30	30	30
	D _A	105	140	169	200	228	266	298	330	368	410	440	473	498
	D ₃	83.6	112.6	134	164	188	219	245	277	309	351	374	407	432
	D ₂	69.4	95	112	138	159	188	209	238	263	302	319	349	374
	L ₃	30.5	36	42	52	63.5	74	82	91	100	110.5	122	135,5	139
	s	3	3	3	5	5	6	6	8	8	8	8	10	10
	L ₅	55	63	75	93	112	130	145	163	180	205	220	253	343
	L ₄	44.5	51.5	63.5	78.5	92.5	108	123	139	154	179	194	225	315
	Weight ³⁾	Kg	3.7	7.7	13.2	23.5	36.7	59	84	119	164	243	300	406
Moment of Inertia J ³⁾	Kgm ²	0.004	0.012	0.030	0.079	0.166	0.368	0.649	1.141	1.962	3.63	5,08	8,08	13,07
max speed	rpm	5400	4000	3400	2700	2400	2000	1800	1600	1500	1300	1200	1100	1000
max speed n ⁴⁾	rpm	14000	10500	8900	7200	6300	5400	4800	4200	3800	3300	3100	2900	2700
Weight of grease ⁵⁾	Kg	0.04	0.08	0.12	0.26	0.38	0.6	0.8	1	1.7	2.2	2,9	3,8	4

1) Bore with keyway according to DIN 6885/1 standard
 2) Shrink fitting
 3) Solid hubs
 4) Dynamically balanced
 5) Per Coupling

Type AD-S – Horizontal working position



Inspection of the gear teeth is possible without having to remove the covers

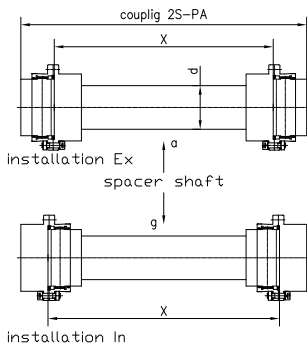
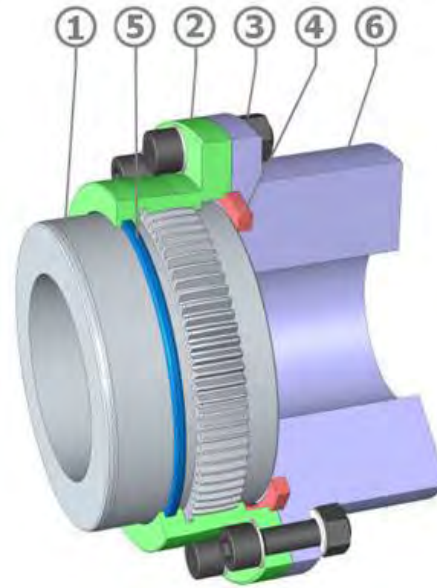
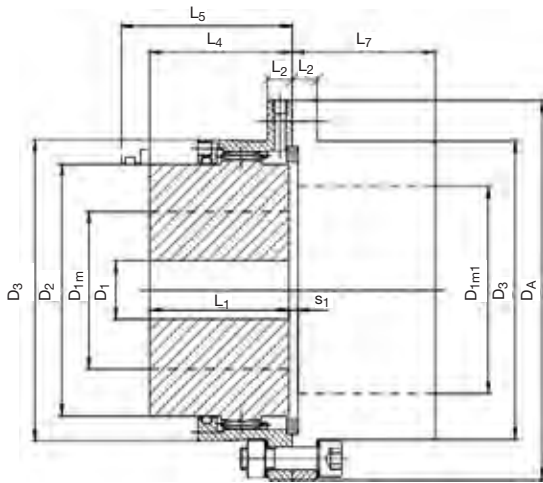
Item	Example of designation
1	Gear Hub
2	Half Cover
3	Screws and Bolts
4	Cover
5	Seal

Example of designation: AD 310.S
ArcuDent Coupling Size 310.

Size		310	330	370	400	430	475	510	550	610	650	710	750	800
Nominal torque	Nm	255000	320000	410000	525000	670000	850000	1100000	1400000	1800000	2400000	3200000	3750000	4950000
max Bore	D _{1m} ¹⁾	310	330	370	400	430	475	510	550	610	650	710	750	800
	D _{1m} ²⁾	310	330	370	400	430	475	510	550	610	650	710	750	800
Rough Bore	D ₁	163	176	191	240	257	279	304	329	358	394	434	457	501
	L ₁	310	330	350	370	430	480	505	515	535	575	610	650	700
	L ₂	34	34	39	43	47	56	56	55	65	70	70	70	75
	D _A	575	608	676	735	793	940	990	1100	1225	1285	1395	1450	1555
	D ₃	494	518	576	637	695	785	840	910	1000	1060	1170	1225	1295
	D ₂	411	438	492	535	581	645	700	770	835	890	975	1030	1095
	L ₃	155	166	166	190.5	204	212	250	250	270	305	335	345	385
	s	12	12	12	15	15	16	20	20	25	25	30	30	30
	L ₅	350	370	395	420	478	550	570	575	600	640	680	720	770
	L ₄	316	336	356	377.5	437.5	488	515	525	547.5	587.5	625	665	715
Weight ³⁾	Kg	805	957	1261	1613	2191	3091	3825	4676	5833	7101	9025	10522	12927
Moment of Inertia J ³⁾	Kgm ²	21.9	29.07	47.6	74.1	116.9	215.3	307.4	449.9	687.4	936	1419.4	1795.7	2512.1
max speed	rpm	903	857	760	696	643	573	542	495	446	418	377	358	341
max speed n ⁴⁾	rpm	2409	2285	2026	1857	1714	1528	1445	1320	1188	1114	1005	955	909
Weight of grease ⁵⁾	Kg	6.2	6.6	7.9	11	13.5	18.2	22.3	23.8	30.5	37.1	48.5	62.2	73.5

- 1) Bore with keyway according to DIN 6885/1 standard
- 2) Shrink fitting
- 3) Solid hubs
- 4) Dynamically balanced
- 5) Per Coupling

Type AD-PA – Horizontal working position



Inspection of the gear teeth is possible without having to remove the covers.

Item	Example of designation
1	Gear Hub
2	Half Cover
3	Screws and Bolts
4	Centering ring
5	Seal
6	Solid hub

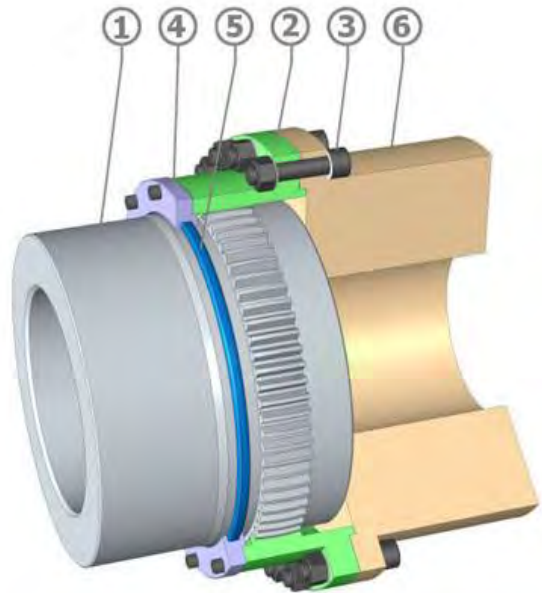
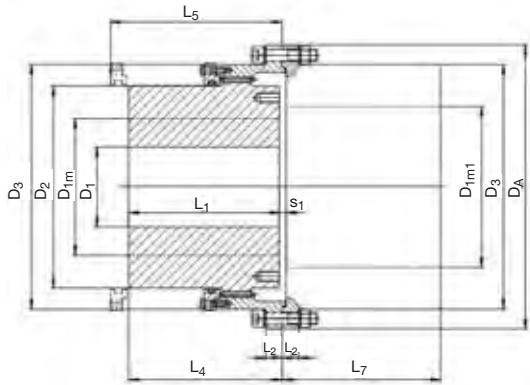
Example of designation: AD 80.PA.1000.In

ArcuDent Coupling Size 80 made of two half couplings S80 P joined by a spacer shaft for X = 1000 mm and a “In Mounting” (rigid hubs set up at the ends). Ex Mounting (gear hubs set up at the ends)

Size		50	68	80	100	115	135	150	170	190	215	230	250	280
Nominal torque	Nm	1200	3000	5200	9000	13700	21300	29200	43000	60700	88200	105000	138000	190000
max Bore	D _{1m1} ¹⁾	50	68	80	100	115	135	150	170	190	215	230	250	280
	D _{1m2} ²⁾	46	63	75	92	106	125	140	160	175	200	210	230	250
Rough Bore	D _{1m1} ¹⁾	660	80	95	115	135	155	175	190	220	250	265	290	310
	D _{1m2} ²⁾	55	75	85	110	125	145	160	180	205	230	250	270	280
Rough Bore	D ₁	18	18	26	35	35	58	68	83	98	108	118	128	128
	L ₁	43	50	62	76	90	105	120	135	150	175	190	220	310
	L ₂	10	10	11	11	14	18	20	20	24	24	30	30	30
	D _A	105	140	169	200	228	266	298	330	368	410	440	473	498
	D ₃	83.6	112.6	134	164	188	219	245	277	309	351	374	407	432
	D ₂	69.4	95	112	138	159	188	209	238	263	302	319	349	374
	s ₁	3.5	4	4	5	6	7	8	9	10	10	11.5	12.5	12.5
	L ₅	55	63	75	93	112	130	145	163	180	205	220	253	343
	L ₄	44.5	51.5	63.5	78.5	92.5	108	123	139	154	179	194	225	315
L ₇	45	52.5	64.5	78.5	93.5	109	125	140	156	181	197.5	227.5	317.5	
Weight ³⁾	Kg	4.5	9.1	15.6	27.6	43.5	70	99	139	193	281	352	472	712
Moment of Inertia J ³⁾	Kgm ²	0.005	0.017	0.041	0.106	0.220	0.484	0.861	1.493	2.6	4.74	6.85	10.6	17.16
max speed	rpm	5400	4000	3400	2700	2400	2000	1800	1600	1500	1300	1200	1100	1000
max speed n ⁴⁾	rpm	14000	10500	8900	7200	6300	5400	4800	4200	3800	3300	3100	2900	2700
Weight of grease ⁵⁾	Kg	0.028	0.058	0.085	0.17	0.26	0.41	0.57	0.73	1.15	1.50	2.10	2.60	3

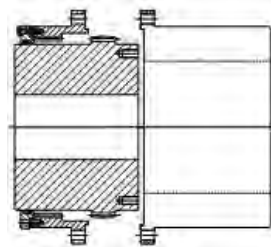
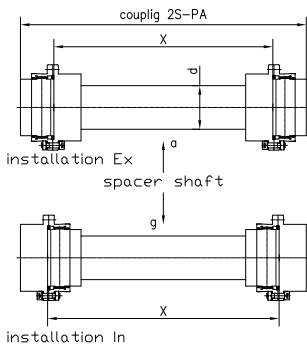
1) Bore with keyway according to DIN 6885/1 standard
 2) Shrink fitting
 3) Solid hubs
 4) Dynamically balanced
 5) Per Coupling

Type AD-PA – Horizontal working position



X: Distance between end shafts
X and d are defined according to the needs

Inspection of the gear teeth is possible without having to remove the covers.



Item	Example of designation
1	Gear Hub
2	Half Cover
3	Screws and Bolts
4	Cover
5	Seal
6	Solid hub

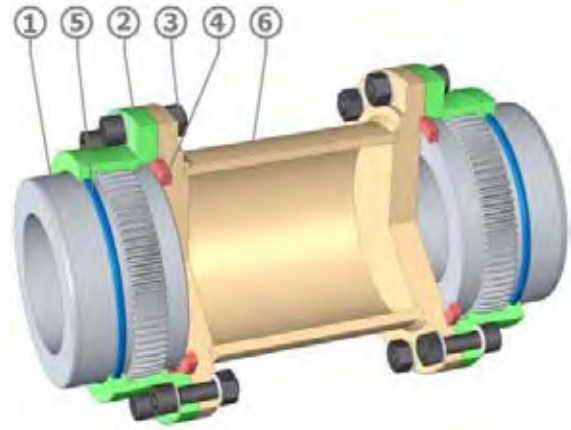
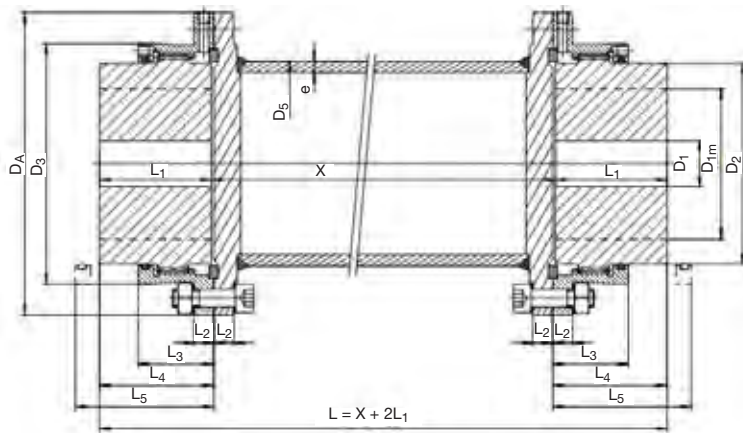
Example of designation: AD 310.PA.1000.In

ArcuDent Coupling Size 310, made of two half couplings S310 P joined by a spacer shaft for X = 1000 and a “In Mounting”. In Mounting (rigid hubs set up at the ends). Ex Mounting (gear hubs set up at the ends).

Size		310	330	370	400	430	475	510	550	610	650	710	750	800
Nominal torque	Nm	255000	320000	410000	525000	670000	850000	1100000	1400000	1800000	2400000	3200000	3750000	4950000
max Bore	D _{1m1} ¹⁾	310	330	370	400	430	475	510	550	610	650	710	750	800
	D _{1m2} ²⁾	310	330	370	400	430	475	510	550	610	650	710	750	800
	D _{1m1} ¹⁾	Rückfragen bitte an REICH-KUPPLUNGEN												
Rough Bore	D ₁	163	176	191	240	257	279	304	329	358	394	434	457	501
	L ₁	310	330	350	370	430	480	505	515	535	575	610	650	700
	L ₂	34	34	39	43	47	56	56	55	65	70	70	70	75
	D _A	575	608	676	735	793	940	990	1100	1225	1285	1395	1450	1555
	D ₃	494	518	576	637	695	785	840	910	1000	1060	1170	1225	1295
	D ₂	411	438	492	535	581	645	700	770	835	890	975	1030	1095
	s ₁	16	16	16	20	20	20	24	28	30	30	32	32	32
	L ₅	350	370	395	420	478	550	570	575	600	640	680	720	770
	L ₄	316	336	356	377.5	437.5	488	515	525	547.5	587.5	625	665	715
	L ₇	320	340	360	382	442	492	519	531	552	592	628	668	718
Weight ³⁾	Kg	891.5	1049	1381.1	1774.4	2428.7	3476.1	4223.5	5118.7	6442.7	7794.4	9954.4	11582.7	14105.5
Moment of Inertia J ³⁾	Kgm ²	26.46	34.5	56.4	88.2	141.6	265.4	367.7	530.6	819	1106.4	1693.7	2142.2	2947.8
max speed	rpm	903	857	760	696	643	573	542	495	446	418	377	358	341
max speed n ⁴⁾	rpm	2409	2285	2026	1857	1714	1528	1445	1320	1188	1114	1005	955	909
Weight of grease ⁵⁾	Kg	3.1	3.31	3.95	5.5	6.75	9.1	11.15	11.9	15.25	18.55	24.25	31	36.75

1) Bore with keyway according to DIN 6885/1 standard
 2) Shrink fitting
 3) Solid hubs
 4) Dynamically balanced
 5) Per Coupling

Type AD-E – Horizontal working position



Item	Example of designation
1	Gear Hub
2	Half Cover
3	Screws and Bolts
4	Centering ring
5	Seal
6	Spacer

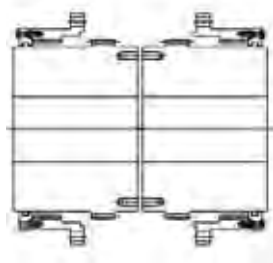
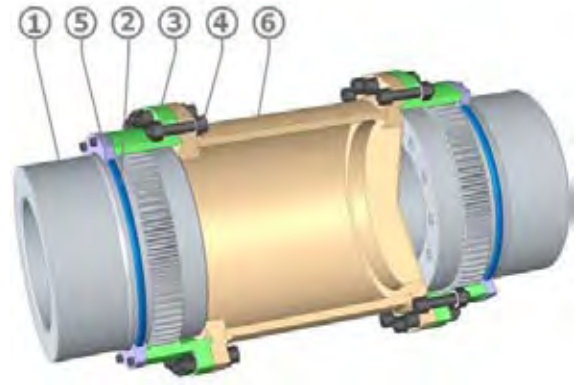
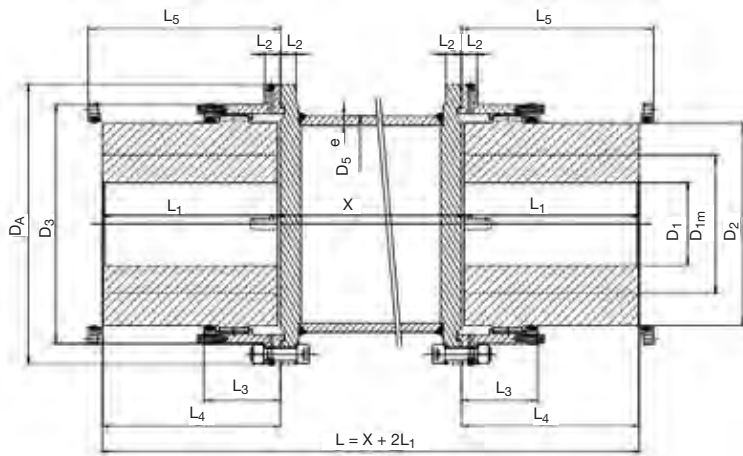
Example of designation: AD 80.E.1000

ArcuDent Coupling Size 80 , made of two half couplings S80 joined by a tubular spacer with distance between end shafts $X = 1000$ mm.

Size		50	68	80	100	115	135	150	170	190	215	230	250	280
Nominal torque	Nm	1200	3000	5200	9000	13700	21300	29200	43000	60700	88200	105000	138000	190000
max Bore	$D_{1m}^{1)}$	50	68	80	100	115	135	150	170	190	215	230	250	280
	$D_{1m}^{2)}$	46	63	75	92	106	125	140	160	175	200	210	230	250
Rough Bore	D_1	18	18	26	35	35	58	68	83	98	108	118	128	128
	L_1	43	50	62	76	90	105	120	135	150	175	190	220	310
	L_2	10	10	11	11	14	18	20	20	24	24	30	30	30
	D_A	105	140	169	200	228	266	298	330	368	410	440	473	498
	D_3	83.6	112.6	134	164	188	219	245	277	309	351	374	407	432
	D_2	69.4	95	112	138	159	188	209	238	263	302	319	349	374
	L_3	30.5	36	42	52	63.5	74	82	91	100	101.5	122	135.5	139
	D_5	70	101.6	114.3	139.7	168.3	193.7	203	244.5	273	323.9	355.6	368	406.4
	e	4	5	6.3	8	7.1	10	12.5	12.5	12.5	12.5	12.5	16	16
	L_5	55	63	75	93	112	130	145	163	180	205	220	253	343
	L_4	44.5	51.5	63.5	78.5	92.5	108	123	139	154	179	194	225	315
Weight ³⁾	Kg	11.6	22.1	34	55	75	121	165	218	285	390	480	628	870
Moment of Inertia J ³⁾	Kgm²	0.013	0.045	0.093	0.218	0.407	0.883	1.42	2.45	4	7	10	15.6	21.8
Weight ³⁾	Kg	0.65	1.19	1.67	2.59	2.81	4.5	5.9	7.1	8	9.6	10.5	13.8	15.3
J ³⁾	Kgm²	0.0007	0.0028	0.005	0.0113	0.0183	0.0383	0.0533	0.096	0.136	0.232	0.31	0.43	0.59
Weight of grease ⁵⁾	Kg	0.04	0.08	0.12	0.26	0.38	0.6	0.8	1	1.70	2.20	2.90	3.80	4

1) Bore with keyway according to DIN 6885/1 standard
 2) Shrink fitting
 3) Solid hubs
 4) Correction for variation $X=100$ mm
 5) Per Coupling

Type AD-E – Horizontal working position



Inspection of the gear teeth is possible without having to remove the covers.

Item	Example of designation
1	Gear Hub
2	Seal
3	Half Cover
4	Screws and Bolts
5	Cover
6	Spacer

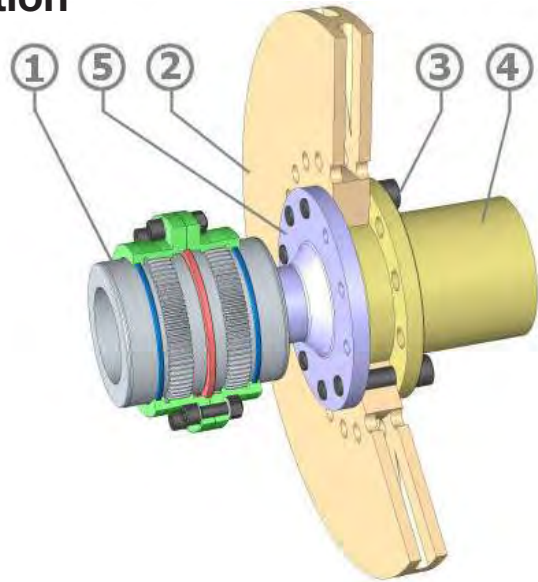
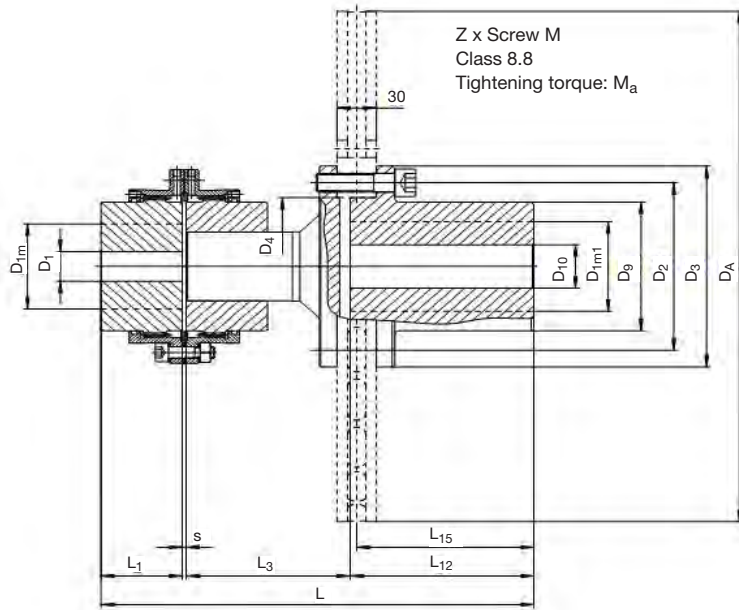
Example of designation: AD 310.E.1000

ArcuDent Coupling Size 310 made of two half couplings S310 joined by a tubular spacer with distance between end shafts $X = 1000$ mm.

Size		310	330	370	400	430	475	510	550	610	650	710	750	800
Nominal torque	Nm	255000	320000	410000	525000	670000	850000	1100000	1400000	1800000	2400000	3200000	3750000	4950000
max Bore	$D_{1m}^{1)}$	310	330	370	400	430	475	510	550	610	650	710	750	800
	$D_{1m}^{2)}$	310	330	370	400	430	475	510	550	610	650	710	750	800
Rough Bore	D_1	163	176	191	240	257	279	304	329	358	394	434	457	501
	L_1	310	330	350	370	430	480	505	515	535	575	610	650	700
	L_2	34	34	39	43	47	56	56	55	65	70	70	70	75
	D_A	575	608	676	735	793	940	990	1100	1225	1285	1395	1450	1555
	D_3	494	518	576	637	695	785	840	910	1000	1060	1170	1225	1295
	D_2	411	438	492	535	581	645	700	770	835	890	975	1030	1095
	D_5	470	470	559	610	665	760	815	880	990	1030	1130	1185	1255
	e	20	20	20	20	25	25	25	30	30	40	45	45	55
	L_3	155	166	166	190.5	204	212	250	250	270	305	335	345	385
	L_5	350	370	395	420	478	550	570	575	600	640	680	720	770
L_4	316	336	356	377.5	437.5	488	515	525	547.5	587.5	625	665	715	
Weight ³⁾	Kg	1185	1348	1770	2223	2983	4180	5017	6176	7841	9588	12001	13723	16841
Moment of Inertia $J^{3)}$	Kgm ²	38.26	46.76	78.47	117.5	183.14	337.78	457.43	676.75	1059.44	1437.35	2131.3	2626.1	3667.77
Weight ³⁾	Kg	22.1	22.1	26.5	29	39	49.4	57.7	62.1	69.8	86.7	107.7	127.9	151.3
Moment of Inertia $J^{3)}$	Kgm ²	1.1	1.1	1.9	2.5	3.9	5.6	8.9	11.1	15.7	22.0	32.4	42.9	57.5
Weight of grease ⁵⁾	Kg	6.2	6.6	7.9	11	13.5	18.2	22.3	23.8	30.5	37.1	48.5	62.2	73.5

1) Bore with keyway according to DIN 6885/1 standard
 2) Shrink fitting
 3) Solid hubs
 4) Correction for variation $X=100$ mm
 5) Per Coupling

Type AD-DF – Horizontal working position



DISC AND SOLID HUB													
DA	n rpm	A1	D1m1 ¹⁾	D1m1 ²⁾	L6	D3	D2	D9	D4	Z	M	MA Nm	L15
315	3000	/	55	50	107	124	105	82	85	9	M10	49	102
355	2700	/	70	60	107	145	125	100	105	9	M12	86	102
395	2400	/	75	70	107	165	140	112	115	9	M14	135	102
445	2100	/	80	70	140	175	146	112	120	12	M16	210	135
495	1900	30	110	100	140	218	190	155	160	12	M18	290	135
550	1800	30	110	100	140	218	190	155	160	12	M18	290	135
625	1500	30	120	105	140	238	205	168	170	12	M20	410	135
705	1300	30	135	120	140	268	230	190	195	12	M22	550	135
795	1200	30	150	135	140	300	260	216	220	12	M24	710	135

Item	Example of designation
1	Coupling ArcuDent
2	Brake disk
3	Screws and Bolts
4	Solid hub
5	Spacer

max speed allowed by the disc according to the manufacturer. For higher speed, please consult us.

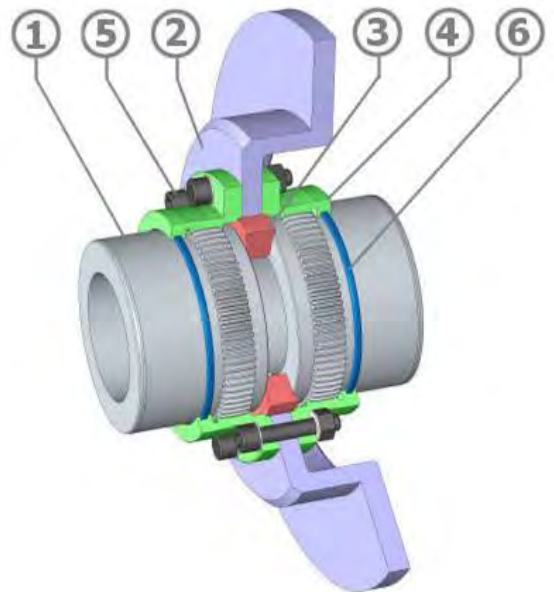
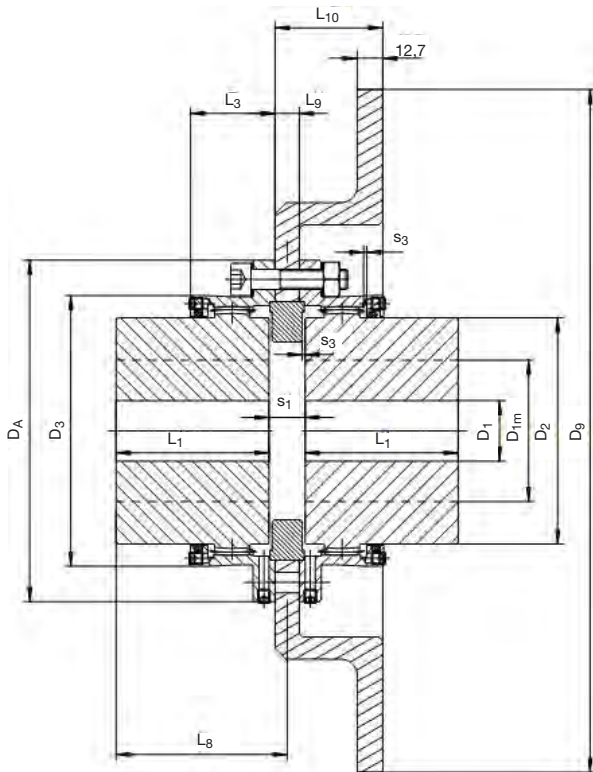
Example of designation: AD 80.DF.550
ArcuDent Coupling Size 80 with a 550 diameter brake disc.

Size		68				80				100				115				135			150			170			
Disk diameter		315	355	395	445	395	445	495	550	445	495	550	625	495	550	625	705	625	705	795	625	705	795	705	795	705	795
Peak torque max	Nm	1500	2200	2200	2200	2200	3800	3800	3800	6000	6000	6000	6000	9400	9400	9400	9400	13800	13800	13800	20700	25300	25300	29200	36700		
Rough Bore	D ₁	18				26				35				35				58			68			83			
max Bore	D _{1m1} ¹⁾	68				80				100				115				135			150			170			
	D _{1m2} ²⁾	63				75				92				106				125			140			160			
	L ₁	50				62				76				90				105			120			135			
	s	3				3				5				5				6			6			8			
	L ₃	117	117	117	117	117	130	145	145	145	164	164	164	180	180	180	180	196	196	196	223	223	223	238	238	238	238
	L	274	274	274	307	286	332	347	347	361	380	380	380	410	410	410	410	441	441	441	483	483	483	513	513	513	513
Weight ³⁾	Kg	15	18	20.5	24	26	30	45	45	40	56	56	63	71	71	77	87	99	110	123	127	137	150	173	185		
Moment of Inertia J ³⁾	Kgm ²	0.02	0.03	0.04	0.05	0.06	0.07	0.16	0.16	0.12	0.21	0.21	0.27	0.3	0.3	0.36	0.48	0.559	0.68	0.862	0.846	0.965	1.148	1.463	1.642		
Weight of grease ⁵⁾	Kg	0.08				0.12				0.26				0.38				0.60			0.080			1			

1) Bore with keyway according to DIN 6885/1 standard
 2) Shrink fitting
 3) Solid hubs
 4) Per Coupling

Please check that the max peak torque of the coupling is higher than the peak torque of the installation!

Type AD-DFC – Horizontal working position



Item	Example of designation
1	Gear Hub
2	Elbow shape brake disc
3	Centering ring
4	Half Cover
5	Screws and bolts
6	Seal

Brake disc dimension										
D9	250	305	355	406	457	515	610	711	812	914
L9	6	13	16	13	16	16	16	19	25	25
L10	36	41	54							
Weight (Kg)	4	7.3	10.9	14.1	19.1	22.7	33	52.3	85.5	110.9

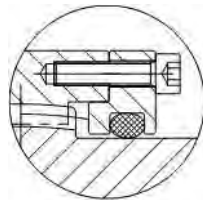
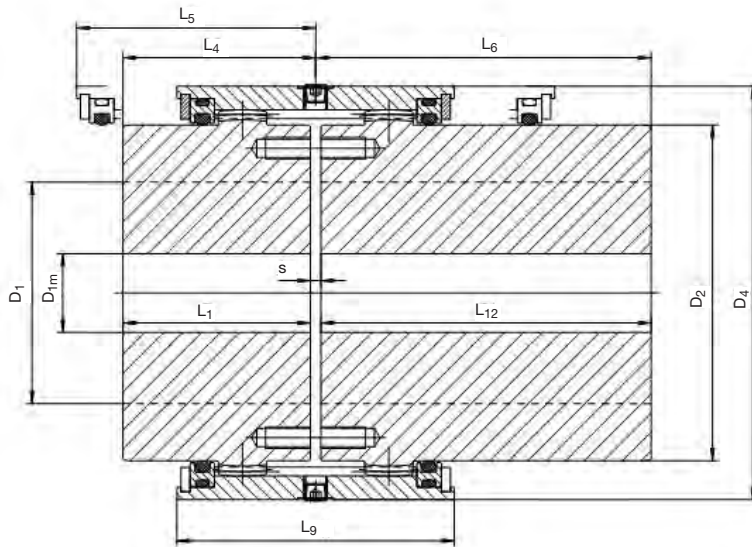
		ArcuDent												
		AD 50	AD 68	AD 80	AD 100	AD 115	AD 135	AD 150	AD 170	AD 190	AD 215	AD 230	AD 250	AD 280
Brake disk	250													
	305													
	355													
	406													
	457													
	515													
	610													
	711													
	812													
	914													

Example of designation: AD 80.DFC.305
ArcuDent Size 80
 Diameter Brake disc 305 mm

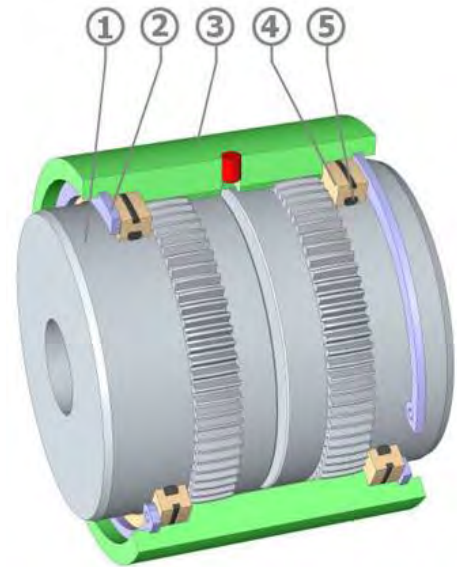
Size		50	68	80	100	115	135	150	170	190	215	230	250	280
Nominal torque	Nm	1200	3000	5200	9000	13700	21300	29200	43000	60700	88200	105000	138000	190000
max Bore	D _{1m} ¹⁾	50	68	80	100	115	135	150	170	190	215	230	250	280
	D _{1m} ²⁾	46	63	75	92	106	125	140	160	175	200	210	230	250
Rough Bore	D ₁	18	18	26	35	35	58	68	83	98	108	118	128	128
	L ₁	43	50	62	76	90	105	120	135	150	175	190	220	310
	D _A	105	140	169	200	228	266	298	330	368	410	440	473	498
	D ₃	83.6	112.6	134	164	188	219	245	277	309	351	374	407	432
	D ₂	69.4	95	112	138	159	188	209	238	263	302	319	349	374
	L ₃	30.5	36	42	52	63.5	74	82	91	100	101.5	122	135.5	139
	s ₁	$s_1 = L_9 + 2 \cdot s_2$												
s ₃	1.3	1.5	2	2.5	2.8	3.2	3.5	4	4.5	5	5	5.8	7.3	
L ₈	$L_8 = L_1 + (s_1 : 2)$													
Weight ³⁾	Kg	3.7	7.7	13.2	23.5	36.7	59	84	119	164	243	300	406	616
Moment of Inertia J ³⁾	Kgm ²	0.004	0.012	0.030	0.079	0.166	0.368	0.649	1.141	1.962	3.63	5.08	8.08	13.07
max speed	rpm	5400	4000	3400	2700	2400	2000	1800	1600	1500	1300	1200	1100	1000
max speed n ⁴⁾	rpm	14000	10500	8900	7200	6300	5400	4800	4200	3800	3300	3100	2900	2700
Weight of grease ⁵⁾	Kg	0.04	0.08	0.12	0.26	0.38	0.6	0.8	1	1.7	2.2	2.9	3.8	4

- 1) Bore with keyway according to DIN 6885/1 standard
- 2) Shrink fitting
- 3) Solid hubs
- 4) Dynamically balanced
- 5) Per Coupling

Type AD-BM – Horizontal working position



Size from 215 up to 280



Item	Example of designation
1	Gear Hub
2	Stop ring
3	Solid gear cover
4	Flange
5	Seal

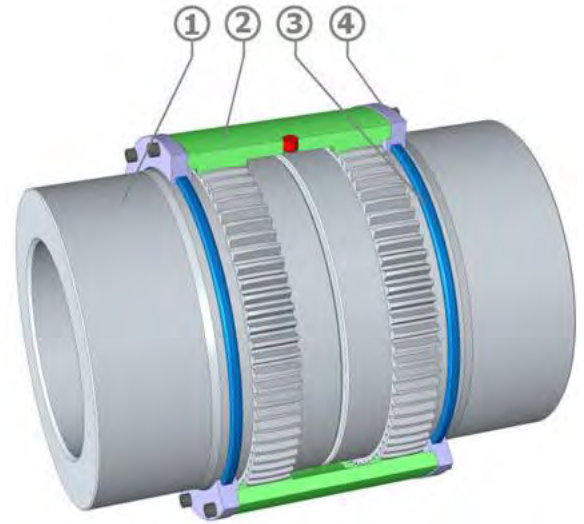
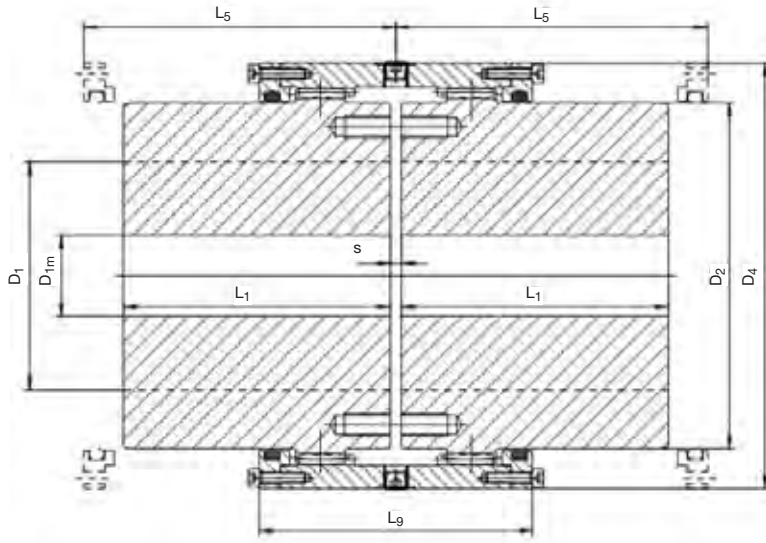
Example of designation: AD 80.BM.

ArcuDent Coupling Size 80
with solid gear cover

Size		50	68	80	100	115	135	150	170	190	215	230	250	280	
Nominal torque	Nm	1200	3000	5200	9000	13700	21300	29200	43000	60700	88200	105000	138000	190000	
max Bore	D _{1m} ¹⁾	50	68	80	100	115	135	150	170	190	215	230	250	280	
	D _{1m} ²⁾	46	63	75	92	106	125	140	160	175	200	210	230	250	
Rough Bore	D ₁	18	18	26	35	35	58	68	83	98	108	118	128	128	
	L ₁	43	50	62	76	90	105	120	135	150	175	190	220	310	
	L ₆	105	115	130	150	170	185	215	245	295	300	305	350	-	
	D ₂	69.4	95	112	138	159	188	209	238	263	302	319	349	374	
	D ₄	95	125	144	177	204	246	265	292	324	360	383	417	442	
	L ₄	44.5	51.5	63.5	78.5	92.5	108	123	139	154	179	194	225	-	
	L ₁₂	106.5	116.5	131.5	152.5	172.5	188	218	249	299	304	309	355	-	
	s	3	3	3	5	5	6	6	8	8	8	8	10	10	
	L ₅	63	72	86	104	122	145	161	177	193	199	219	252	342	
	L ₉	78	92	106	128	152	181	198	216	234	195	218	245	252	
Weight Kg ³⁾	AD-BM	Kg	3.9	8.3	13.6	24.9	39.5	67	88.5	122.5	165	237.6	287.7	394.3	605.3
	AD-BML	Kg	5.8	11.9	18.9	33.5	51.8	84.2	114	160.6	226.6	307.4	359.5	491.6	-
	AD-BML2	Kg	7.6	15.5	24.1	42.2	64.1	101.5	139.5	198.7	288.2	377.1	431.4	588.8	-
Moment of Inertia J ³⁾	AD-BM	Kgm ²	0.004	0.015	0.032	0.09	0.19	0.47	0.71	1.18	1.95	2.85	3.86	6.31	10.94
	AD-BML	Kgm ²	0.075	0.12	0.16	0.26	0.41	0.78	1.15	1.86	3.03	4.54	5.87	9.49	-
	AD-BML2	Kgm ²	0.15	0.22	0.28	0.43	0.63	1.10	1.59	2.54	4.1	6.22	7.87	12.66	-
max speed	rpm	5400	4000	3400	2700	2400	2000	1800	1600	1500	1300	1200	1100	1000	
max speed n ⁴⁾	rpm	14000	10500	8900	7200	6300	5400	4800	4200	3800	3300	3100	2900	2700	
Weight of grease ⁵⁾	Kg	0.04	0.08	0.12	0.26	0.38	0.6	0.8	1	1.7	2.2	2.9	3.8	4	

1) Bore with keyway according to DIN 6885/1 standard
 2) Shrink fitting
 3) Solid hubs
 4) Dynamically balanced
 5) Per Coupling

Type AD-BM – Horizontal working position



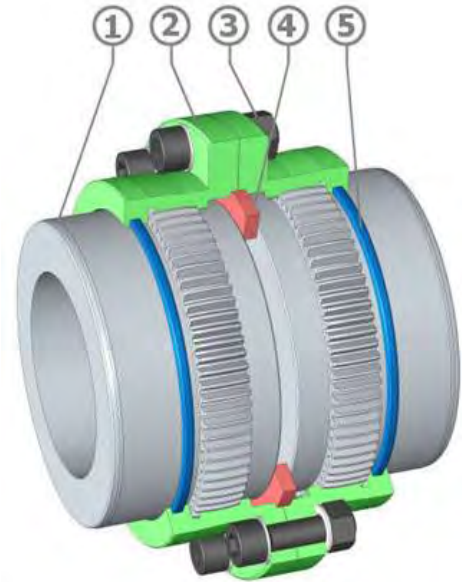
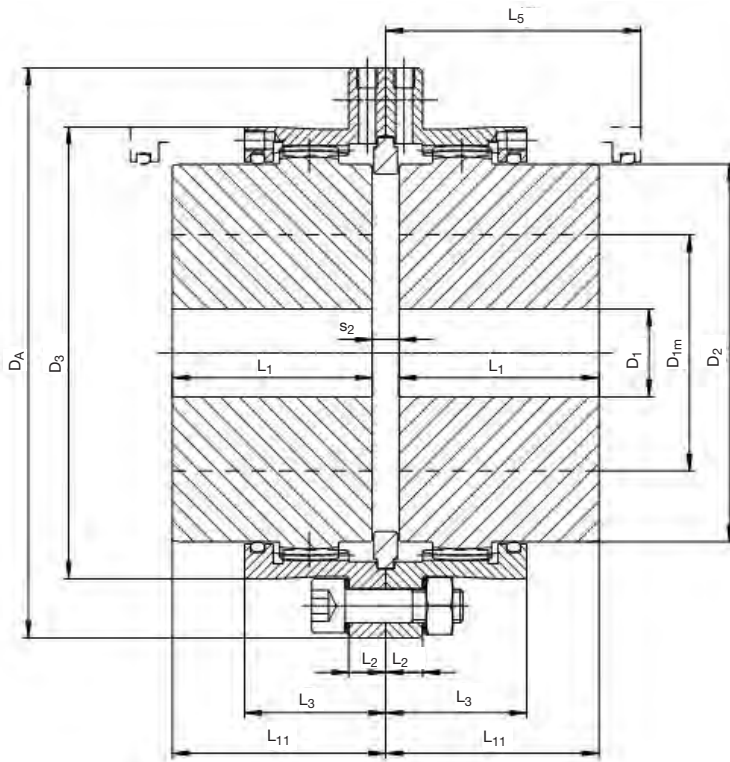
Item	Example of designation
1	Gear Hub
2	Half cover
3	Seal
4	Cover

Example of designation: AD 80.BM.
ArcuDent Coupling Size 310
 mit Monoblock Gehäuse

Size		310	330	370	400	430	475	510	550	610	650	710	750	800
Nominal torque	Nm	255000	320000	410000	525000	670000	850000	1100000	1400000	1800000	2400000	3200000	3750000	4950000
max Bore,	D _{1m} ¹⁾	310	330	370	400	430	475	510	550	610	650	710	750	800
	D _{1m} ²⁾	310	330	370	400	430	475	510	550	610	650	710	750	800
Rough Bore	D ₁	163	176	191	240	257	279	304	329	358	394	434	457	501
	L ₁	310	330	350	370	430	480	505	515	535	575	610	650	700
	D ₂	411	438	492	535	581	645	700	770	835	890	975	1030	1095
	D ₄	494	518	576	637	695	785	840	910	1000	1060	1170	1225	1295
	s	12	12	12	15	15	16	20	20	25	25	30	30	30
	L ₅	350	370	395	420	478	550	570	575	600	640	680	720	770
	L ₉	310	332	332	381	408	424	500	500	540	610	670	690	770
Weight ³⁾	Kg	761	908	1190	1531	2083	2882	3605	4372	5374	6559	8411	9867	12056
Moment of Inertia J ³⁾	Kgm ²	18	24	39.3	60.8	97.1	167.3	244.1	353.9	520.3	719.5	1117.3	1447.5	1983.5
max speed	rpm	903	857	760	696	643	573	542	495	446	418	377	358	341
max speed n ⁴⁾	rpm	2409	2285	2026	1857	1714	1528	1445	1320	1188	1114	1005	955	909
Weight of grease ⁵⁾	Kg	6.2	6.62	7.9	11	13.5	18.2	22.3	23.8	30.5	37.1	48.5	62.15	73.5

1) Bore with keyway according to DIN 6885/1 standard
 2) Shrink fitting
 3) Solid hubs
 4) Dynamically balanced
 5) Per Coupling

Type AD-JL – Horizontal working position - Limited end float model



Item	Example of designation
1	Gear Hub
2	Half Cover
3	Screws and Bolts
4	Specific Centering ring
5	Seal

Example of designation: AD 80.JL.

ArcuDent Coupling Size 80, whose axial clearance is reduced by a specific centering ring between the two hubs. The misalignment capacities are reduced..

Size		50	68	80	100	115	135	150	170	190	215	230	250	280
Nominal torque	Nm	1200	3000	5200	9000	13700	21300	29200	43000	60700	88200	105000	138000	190000
max Bore	D _{1m} ¹⁾	50	68	80	100	115	135	150	170	190	215	230	250	280
	D _{1m} ²⁾	46	63	75	92	106	125	140	160	175	200	210	230	250
Rough Bore	D ₁	18	18	26	35	35	58	68	83	98	108	118	128	128
	L ₁	43	50	62	76	90	105	120	135	150	175	190	220	310
	L ₂	10	10	11	11	14	18	20	20	24	24	30	30	30
	D _A	105	140	169	200	228	266	298	330	368	410	440	473	498
	D ₃	83.6	112.6	134	164	188	219	245	277	309	351	374	407	432
	D ₂	69.4	95	112	138	159	188	209	238	263	302	319	349	374
	L ₃	30.5	36	42	52	63.5	74	82	91	100	110.5	122	135.5	139
	s ₂	4.6	5.4	6	9	9.6	11.4	12	14	15	16	16.6	19.6	22.6
GAP axial	+/-	1	1	1	1	1	1	1	2	2	2	2	2	2
	L ₅	57	65	78	97	117	135	150	170	190	215	230	263	355
	L ₁₁	45.3	52.7	65	80.5	94.8	110.7	126	142	157.5	183	198.3	229.8	321.3
Weight Kg ³⁾	Kg	3.7	7.7	13.2	23.6	37	60	85	120	165	244	302	408	619
Moment of Inertia J ³⁾	Kgm ²	0.004	0.012	0.030	0.080	0.167	0.371	0.655	1.151	1.978	3.66	5.22	8.14	13.16
max speed	rpm	5400	4000	3400	2700	2400	2000	1800	1600	1500	1300	1200	1100	1000
max speed n ⁴⁾	rpm	14000	10500	8900	7200	6300	5400	4800	4200	3800	3300	3100	2900	2700
Weight of grease ⁵⁾	Kg	0.04	0.09	0.14	0.30	0.46	0.73	1	1.20	2	2.70	3.50	4.60	5

1) Bore with keyway according to DIN 6885/1 standard

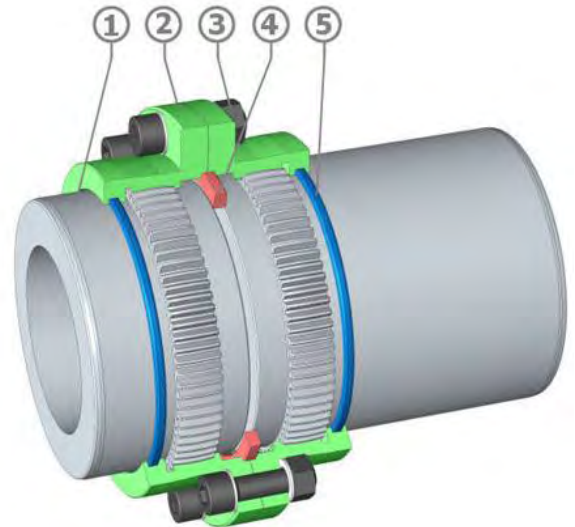
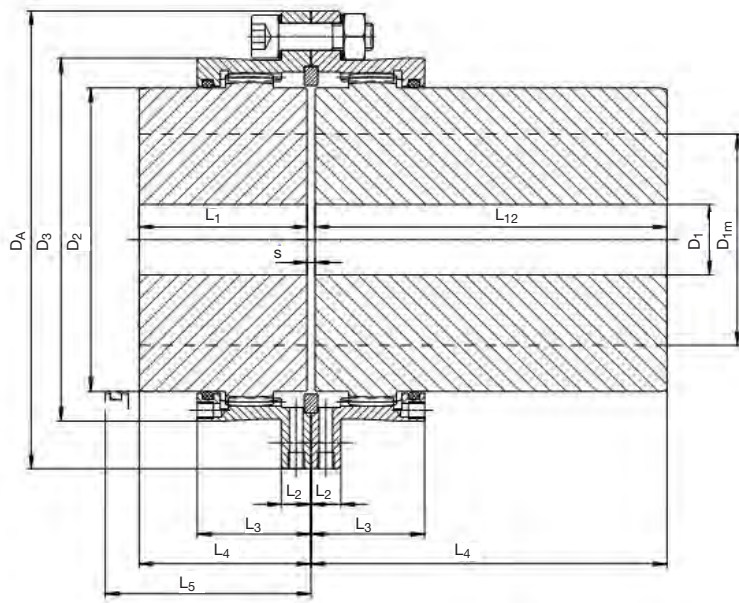
2) Shrink fitting

3) Solid hubs

4) Dynamically balanced

5) Per Coupling

Type AD-ML / AD-ML2 – Horizontal working position



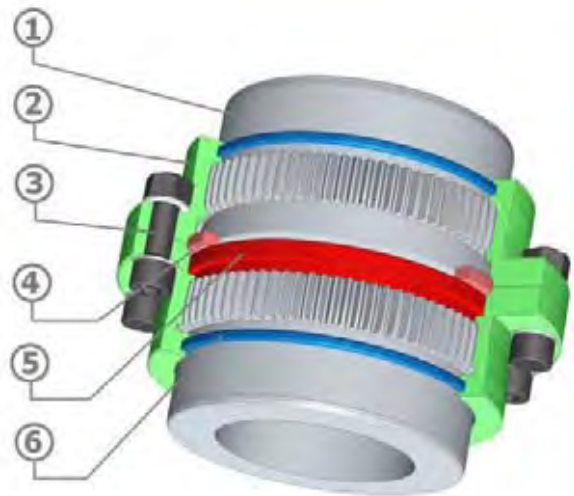
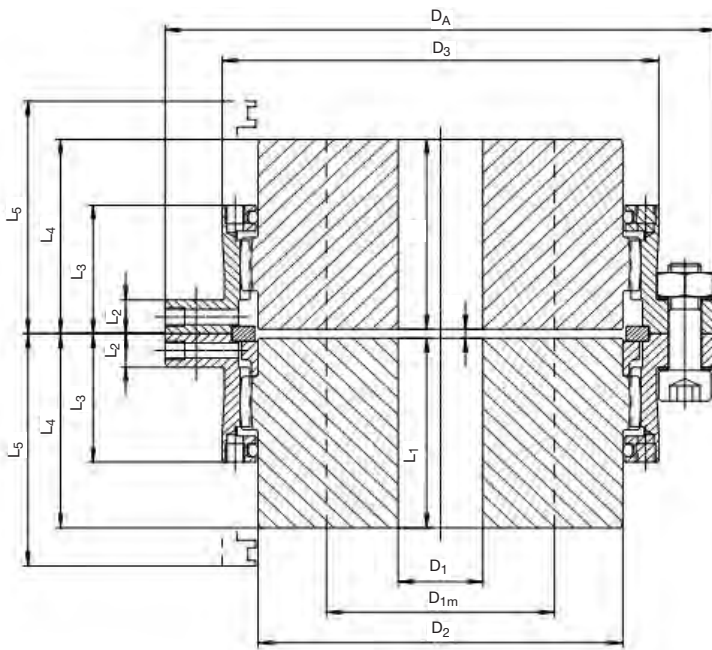
Item	Example of designation
1	Gear Hub
2	Half Cover
3	Screws and Bolts
4	Centering ring
5	Seal

Example of designation: AD 80.ML.
ArcuDent Coupling Size 80 with long hub.

Size		50	68	80	100	115	135	150	170	190	215	230	250
Nominal torque	Nm	1200	3000	5200	9000	13700	21300	29200	43000	60700	88200	105000	138000
max Bore	D _{1m} ¹⁾	50	68	80	100	115	135	150	170	190	215	230	250
	D _{1m} ²⁾	46	63	75	92	106	125	140	160	175	200	210	230
Rough Bore	D ₁	18	18	26	35	35	58	68	83	98	108	118	128
	L ₁	43	50	62	76	90	105	120	135	150	175	190	220
	L ₁₂	105	115	130	150	170	185	215	245	295	300	305	350
	L ₂	10	10	11	11	14	18	20	20	24	24	30	30
	D _A	105	140	169	200	228	266	298	330	368	410	440	473
	D ₃	83.6	112.6	134	164	188	219	245	277	309	351	374	407
	D ₂	69.4	95	112	138	159	188	209	238	263	302	319	349
	L ₃	30.5	36	42	52	63.5	74	82	91	100	110.5	122	135.5
	s	3	3	3	5	5	6	6	8	8	8	8	10
	L ₅	55	63	75	93	112	130	145	163	180	205	220	253
	L ₄	44.5	51.5	63.5	78.5	92.5	108	123	139	154	179	194	225
	L ₅	117	128	143	167	192	210	240	273	325	330	335	383
	Weight ³⁾	AD-ML	Kg	5.5	11.2	18.4	32	49	77	110	157	226	313
AD-ML2		Kg	7.3	14.7	23.6	40.5	61.3	95	136	195	288	446	600
Moment of Inertia J ³⁾	AD-ML	Kgm ²	0.005	0.016	0.038	0.099	0.204	0.443	0.785	1.407	2.485	4.42	9.54
	AD-ML2	Kgm ²	0.006	0.020	0.046	0.119	0.242	0.518	0.921	1.673	3.008	5.21	11
max speed	rpm	5400	4000	3400	2700	2400	2000	1800	1600	1500	1300	1200	1100
max speed n ⁴⁾	rpm	14000	10500	8900	7200	6300	5400	4800	4200	3800	3300	3100	2900
Weight of grease ⁵⁾	Kg	0.04	0.08	0.12	0.26	0.38	0.60	0.80	1	1.70	2.20	2.90	3.80

1) Bore with keyway according to DIN 6885/1 standard
 2) Shrink fitting
 3) Solid hubs
 4) Dynamically balanced
 5) Per Coupling

Type AD-V – Vertical working position



Item	Example of designation
1	Gear Hub
2	Half Cover
3	Screws and Bolts
4	Centering ring
5	Vertical ring
6	Seal

Example of designation: AD 80.V.

ArcuDent Coupling Size 80, which includes a vertical ring to maintain the position of the hub in vertical running. This ring is available for all the models.

Example: AD80 E.1000.V. ; AD80 MLV. ; AD80 PA.1000.in V.

Size		50	68	80	100	115	135	150	170	190	215	230	250	280
Nominal torque	Nm	1200	3000	5200	9000	13700	21300	29200	43000	60700	88200	105000	138000	190000
max Bore	D _{1m} ¹⁾	50	68	80	100	115	135	150	170	190	215	230	250	280
	D _{1m} ²⁾	46	63	75	92	106	125	140	160	175	200	210	230	250
Rough Bore	D ₁	18	18	26	35	35	58	68	83	98	108	118	128	128
	L ₁	43	50	62	76	90	105	120	135	150	175	190	220	310
	L ₂	10	10	11	11	14	18	20	20	24	24	30	30	30
	D _A	105	140	169	200	228	266	298	330	368	410	440	473	498
	D ₃	83.6	112.6	134	164	188	219	245	277	309	351	374	407	432
	D ₂	69.4	95	112	138	159	188	209	238	263	302	319	349	374
	L ₃	30.5	36	42	52	63.5	74	82	91	100	110.5	122	135.5	139
	s	3	3	3	5	5	6	6	8	8	8	8	10	10
	L ₅	55	63	75	93	112	130	145	163	180	205	220	253	343
	L ₄	44.5	51.5	63.5	78.5	92.5	108	123	139	154	179	194	225	315
Weight ³⁾	Kg	3.7	7.7	13.3	23.7	37	60	85	121	166	245	304	410	621
Moment of Inertia J ³⁾	Kgm ²	0.004	0.012	0.030	0.08	0.169	0.374	0.659	1.161	1.997	3.69	5.28	8.23	13.26
max speed	rpm	5400	4000	3400	2700	2400	2000	1800	1600	1500	1300	1200	1100	1000
max speed n ⁴⁾	rpm	14000	10500	8900	7200	6300	5400	4800	4200	3800	3300	3100	2900	2700
Weight of grease ⁵⁾	Kg	0.03	0.07	0.10	0.22	0.34	0.50	0.70	0.90	1.40	1.90	2.50	3.20	3.4

1) Bore with keyway according to DIN 6885/1 standard

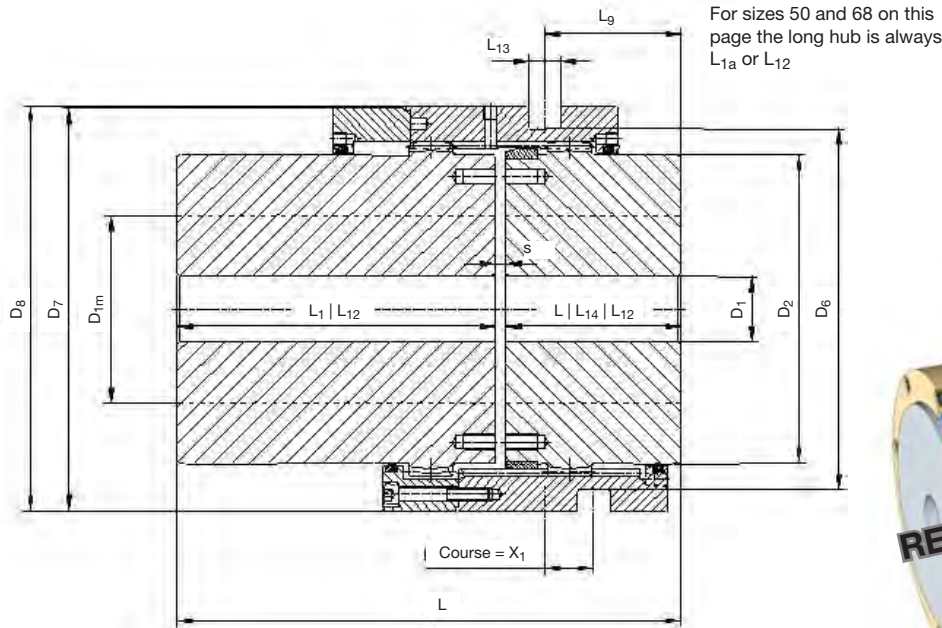
2) Shrink fitting

3) Solid hubs

4) Dynamically balanced

5) Per Coupling

Type AD-DB – Horizontal working position

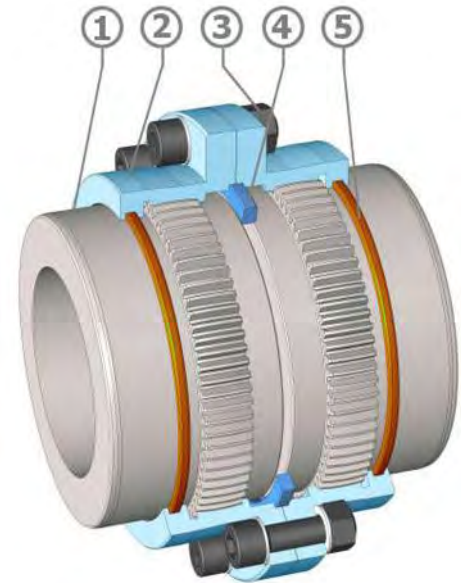
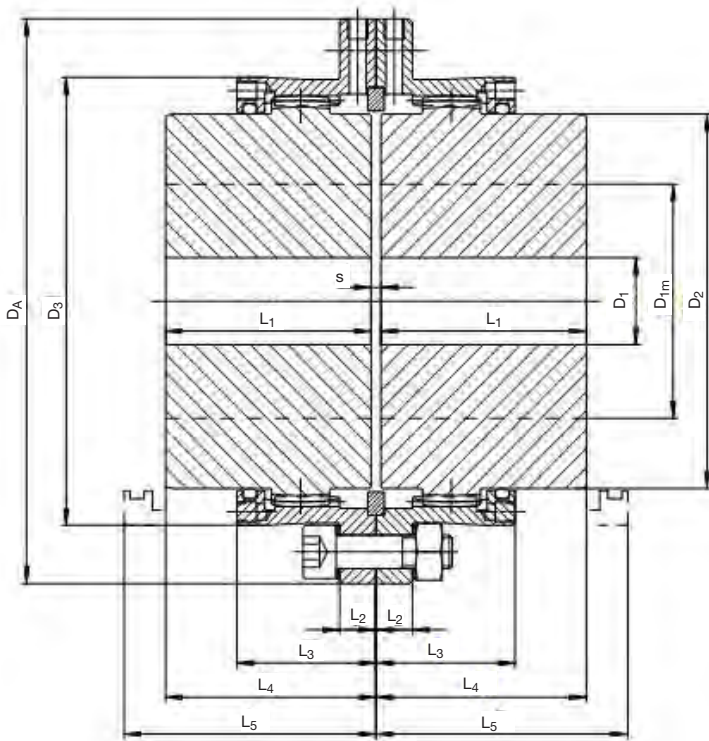


Example of designation: AD 80.MLDB
ArcuDent clutch coupling Size 80 with one long hub.

Size		Manual		With acting system										
		50	68	80	100	115	135	150	170	190	215	230	250	
Nominal torque	Nm	1200	3000	5200	9000	13700	21300	29200	43000	60700	88200	105000	138000	
max Bore	D _{1m} ¹⁾	50	68	80	100	115	135	150	170	190	215	230	250	
	D _{1m} ²⁾	46	63	75	92	106	125	140	160	175	200	210	230	
Rough Bore	D ₁	18	18	26	35	35	58	68	83	98	108	118	128	
	L ₁ L ₁₄	43 62	50 72	62	76	90	105	120	135	150	175	190	220	
	L ₁₂	105	115	130	150	170	185	215	245	295	300	305	350	
	D ₂	69.4	95	112	138	159	188	209	238	263	302	319	349	
	D ₆	/	/	132	164	189	222	246	278	312	353	376	406	
	D ₇	100	128	148	190	210	240	270	310	330	390	410	440	
	D ₈	102	130	148	188	213	246	280	312	346	397	420	450	
	L ₁₃	/	/	12	18	18	18	25	25	25	32	32	32	
	L ₉	/	/	50	60	70	82	90	105	115	135	145	170	
	s	3	3	3	5	5	6	6	8	8	8	8	10	
	X	11	14	19	22	25	29	32	38	40	48	50	55	
Example	AD-DB	L	108	125	127	157	185	216	246	278	308	358	388	450
	AD-MLDB	L	151 170	168 190	195	231	265	296	341	388	453	483	503	580
	AD-ML2DB	L	213	233	263	305	345	376	436	498	598	608	618	710
Weight ³⁾	AD-DB	Kg	-	-	14.4	26.1	43.5	68.1	97	138.7	185	Please contact REICH-KUPPLUNGEN		
	AD-MLDB	Kg	-	-	19.7	34.7	55.9	85.5	122.5	177	246.6			
	AD-ML2DB	Kg	-	-	25	43.8	68.3	102.9	148	215.6	308.2			
Moment of Inertia J ³⁾	AD-DB	Kgm ²	-	-	0.036	0.108	0.227	0.489	0.854	1.540	2.469	Please contact REICH-KUPPLUNGEN		
	AD-MLDB	Kgm ²	-	-	0.044	0.128	0.366	0.565	0.993	1.810	3.001			
	AD-ML2DB	Kgm ²	-	-	0.052	0.196	0.405	0.641	1.132	2.082	3.533			
max speed n ⁴⁾	rpm	2500	2000	1300	1100	890	780	680	610	550	480	450	420	
Weight of grease ⁵⁾	Kg	0.04	0.08	0.12	0.26	0.38	0.60	0.80	1	1.70	2.20	2.90	3.80	

1) Bore with keyway according to DIN 6885/1 standard
 2) Shrink fitting
 3) Solid hubs
 4) for higher speed, please consult us
 5) Per Coupling

Type AD-R – Horizontal working position



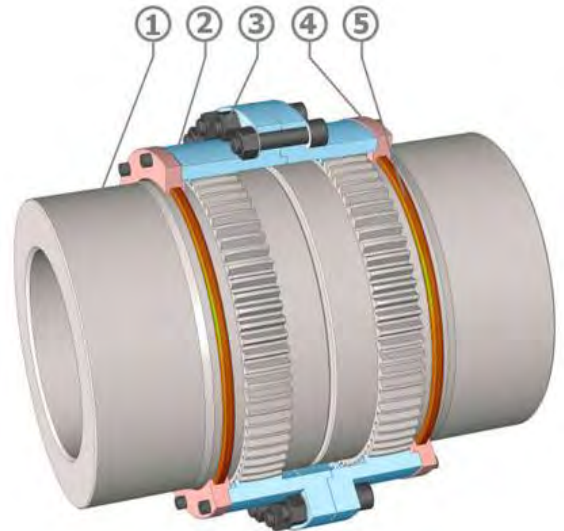
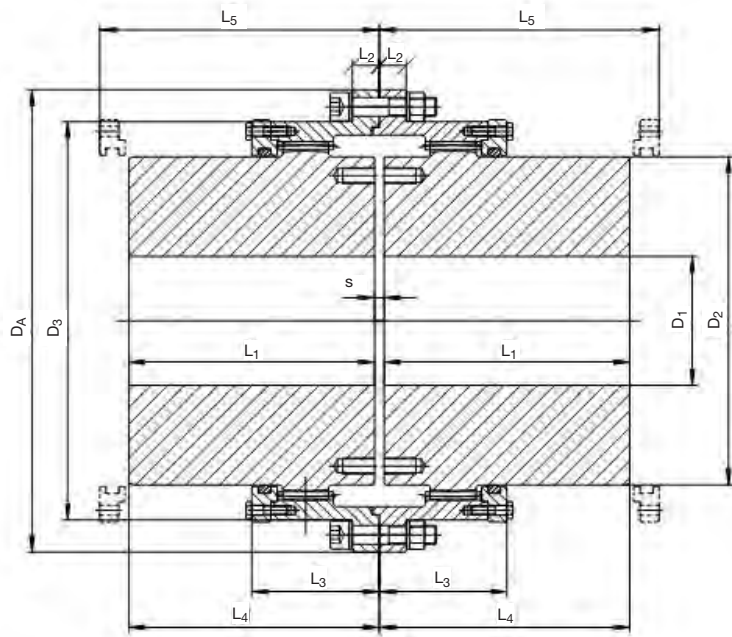
Item	Example of designation
1	Gear Hub
2	Half Cover
3	Screws and Bolts
4	Centering ring
5	Seal

Example of designation: AD 80.R.
ArcuDent Coupling reinforced (42 CrMo4) Size 80.

Size		50	68	80	100	115	135	150	170	190	215	230	250	280
Nominal torque	Nm	1855	4570	7910	13635	20740	32220	44000	65110	91865	133490	159160	207000	302450
max Bore	D _{1m} ¹⁾	50	68	80	100	115	135	150	170	190	215	230	250	280
	D _{1m} ²⁾	46	63	75	92	106	125	140	160	175	200	210	230	250
Rough Bore	D ₁	18	18	26	35	35	58	68	83	98	108	118	128	128
	L ₁	43	50	62	76	90	105	120	135	150	175	190	220	310
	L ₂	10	10	11	11	14	18	20	20	24	24	30	30	30
	D _A	105	140	169	200	228	266	298	330	368	410	440	473	498
	D ₃	83.6	112.6	134	164	188	219	245	277	309	351	374	407	432
	D ₂	69.4	95	112	138	159	188	209	238	263	302	319	349	374
	L ₃	30.5	36	42	52	63.5	74	82	91	100	101.5	122	135.5	139
	s	3	3	3	5	5	6	6	8	8	8	8	10	10
	L ₅	55	63	75	93	112	130	145	163	180	205	220	253	343
	L ₄	44.5	51.5	63.5	78.5	92.5	108	123	139	154	179	194	225	315
	Weight ³⁾	Kg	3.7	7.7	13.2	23.5	36.7	59	84	119	164	243	300	406
Moment of Inertia J ³⁾	Kgm ²	0.004	0.012	0.030	0.079	0.166	0.368	0.649	1.141	1.962	3.63	5.08	8.08	13.07
max speed	rpm	5400	4000	3400	2700	2400	2000	1800	1600	1500	1300	1200	1100	1000
max speed n ⁴⁾	rpm	14000	10500	8900	7200	6300	5400	4800	4200	3800	3300	3100	2900	2700
Weight of grease ⁵⁾	Kg	0.04	0.08	0.12	0.26	0.38	0.6	0.8	1	1.7	2.2	2.9	3.8	4

1) Bore with keyway according to DIN 6885/1 standard
 2) Shrink fitting
 3) Solid hubs
 4) Dynamically balanced
 5) Per Coupling

Type AD-R – Horizontal working position



Item	Example of designation
1	Gear Hub
2	Half Cover
3	Screws and Bolts
4	Cover
5	Seal

Example of designation: AD 310.R.
ArcuDent Coupling reinforced (42 CrMo4) Size 310.

Size		310	330	370	400	430	475	510	550	610	650	710	750	800
Nominal torque	Nm	400000	500850	637500	848540	1078000	1356400	1714000	2211000	2830000	3770000	5000100	5890000	7780000
max Bore	D _{1m} ¹⁾	310	330	370	400	430	475	510	550	610	650	710	750	800
	D _{1m} ²⁾	310	330	370	400	430	475	510	550	610	650	710	750	800
Rough Bore	D ₁	163	176	191	240	257	279	304	329	358	394	434	457	501
	L ₁	310	330	350	370	430	480	505	515	535	575	610	650	700
	L ₂	34	34	39	43	47	56	56	55	65	70	70	70	75
	D _A	575	608	676	735	793	940	990	1100	1225	1285	1395	1450	1555
	D ₃	494	518	576	637	695	785	840	910	1000	1060	1170	1225	1295
	D ₂	411	438	492	535	581	645	700	770	835	890	975	1030	1095
	L ₃	155	166	166	190.5	204	212	250	250	270	305	335	345	385
	s	12	12	12	15	15	16	20	20	25	25	30	30	30
	L ₅	350	370	395	420	478	550	570	575	600	640	680	720	770
	L ₄	316	336	356	377.5	437.5	488	515	525	547.5	587.5	625	665	715
	Weight ³⁾	Kg	805	957	1261	1613	2191	3091	3825	4676	5833	7101	9025	10522
Moment of Inertia J ³⁾	Kgm ²	21.9	29.07	47.6	74.1	116.9	215.3	307.4	449.9	687.4	936	1419.4	1795.7	2512.1
max speed	rpm	903	857	760	696	643	573	542	495	446	418	377	358	341
max speed n ⁴⁾	rpm	2409	2285	2026	1857	1714	1528	1445	1320	1188	1114	1005	955	909
Weight of grease ⁵⁾	Kg	6.2	6.62	7.9	11	13.5	18.2	22.3	23.8	30.5	37.1	48.5	62.15	73.5

1) Bore with keyway according to DIN 6885/1 standard
 2) Shrink fitting
 3) Solid hubs
 4) Dynamically balanced
 5) Per Coupling

4 Good reasons for your ArcuDent Coupling

Precision and High standards

ArcuDent is a 100% steel coupling, manufactured with accuracy by REICH-KUPPLUNGEN. Its components include two internally geared half covers, which are tightened together with a set of treated bolts. The half covers are then assembled onto two geared hubs. The teeth of the hubs and covers receive shape corrections, which are calculated and optimized by REICH-KUPPLUNGEN to obtain maximum contact surface under load, and to allow the highest misalignment capacity.

Reliability

ArcuDent couplings were designed by the REICH-KUPPLUNGEN engineering department. Their specification was checked by the most elaborate finite elements software, and was further validated by the REICH-KUPPLUNGEN running bench test.

Reactivity and short delivery time

The **ArcuDent** Couplings are manufactured in serial production. Spare parts are stocked in the REICH-KUPPLUNGEN warehouse, and in REICH-KUPPLUNGEN distributors warehouses which are present all over the world.

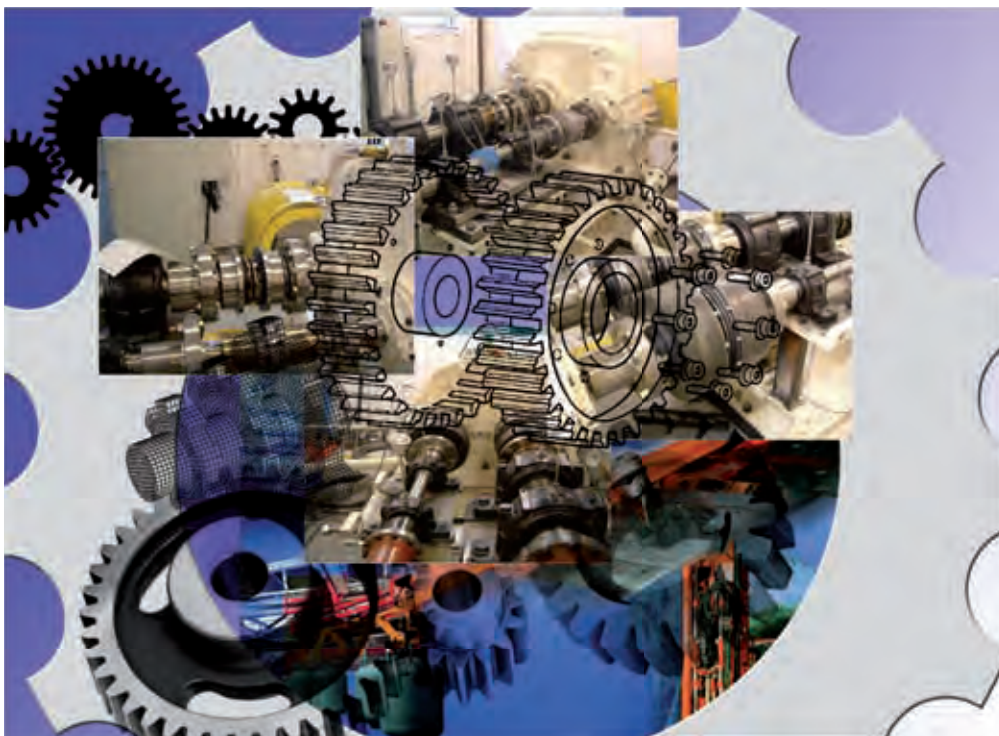
Quality of Service

REICH-KUPPLUNGEN has built an ISO 9001 organization inside the company, which reflects REICH-KUPPLUNGEN's will to answer all requests from the customer:

Technical: REICH-KUPPLUNGEN technicians and engineers can help you in selecting a standard REICH-KUPPLUNGEN coupling or designing a specific coupling for your application. Reich-Kupplungen design department is equipped with the latest CAD and finite elements software in order to validate new designs.

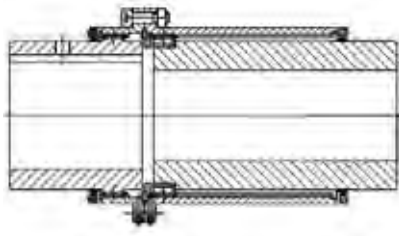
Validation: REICH-KUPPLUNGEN test bench allows to run and test the behaviour and reliability of existing couplings or new developments. It allows to apply different load and misalignment conditions to these couplings.

Sales: Our distributors hold a stock of couplings and can assist you in the selection of the proper one. They are further supported everyday by REICH-KUPPLUNGEN sales engineers.

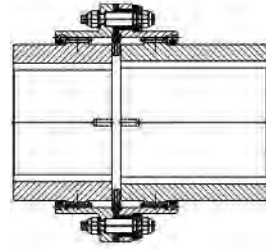


Special Types

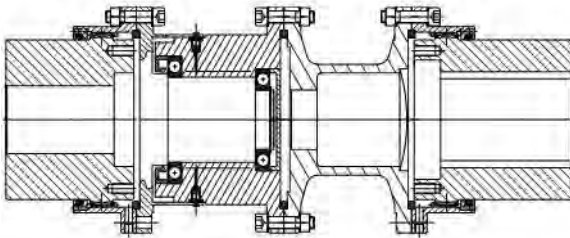
The REICH-KUPPLUNGEN Coupling department can also design or modify couplings dedicated to specific applications. We are at your disposal for any requests, technical studies... Here there are some examples:



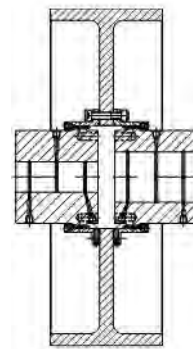
Coupling with sliding hub



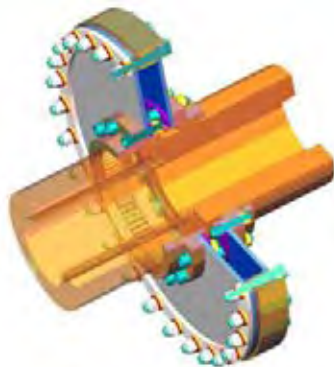
Coupling electrically insulated



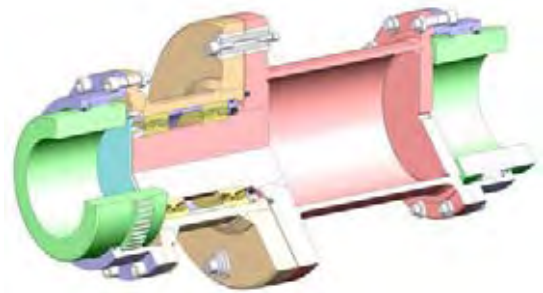
Coupling with safeset



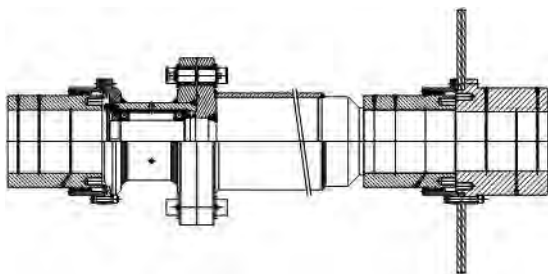
Coupling with pulley brake



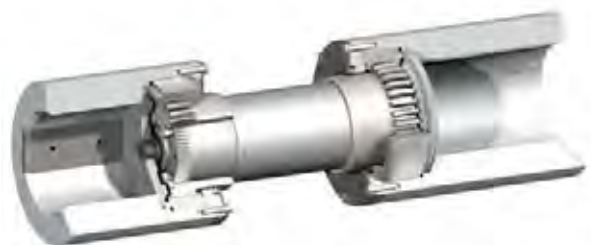
Coupling with high axial misalignment



Coupling with shear pins



Coupling with spacer and shear pins brake disc



Steel mill gear spindle

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