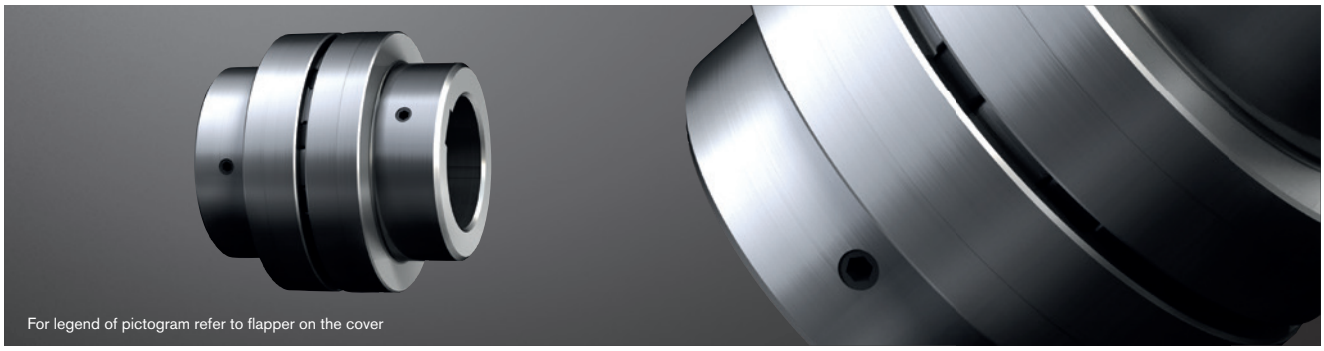
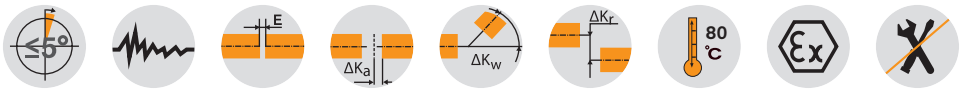
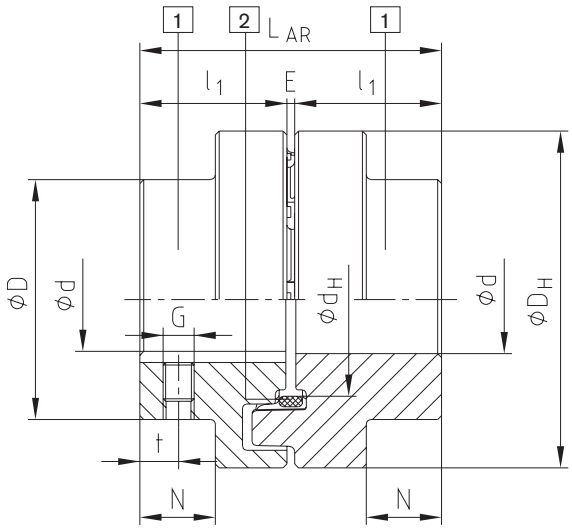
POLY-NORM® AR
Flexible couplings

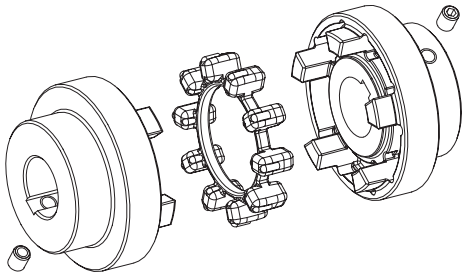
Two-part



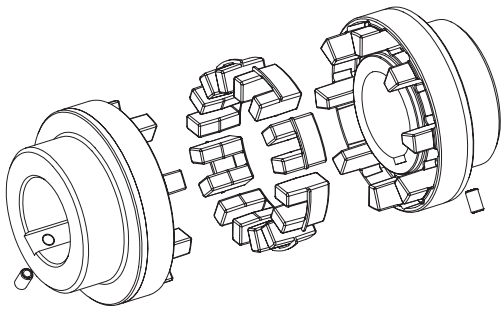


Components





Size 28 - 125



Size 140 - 280

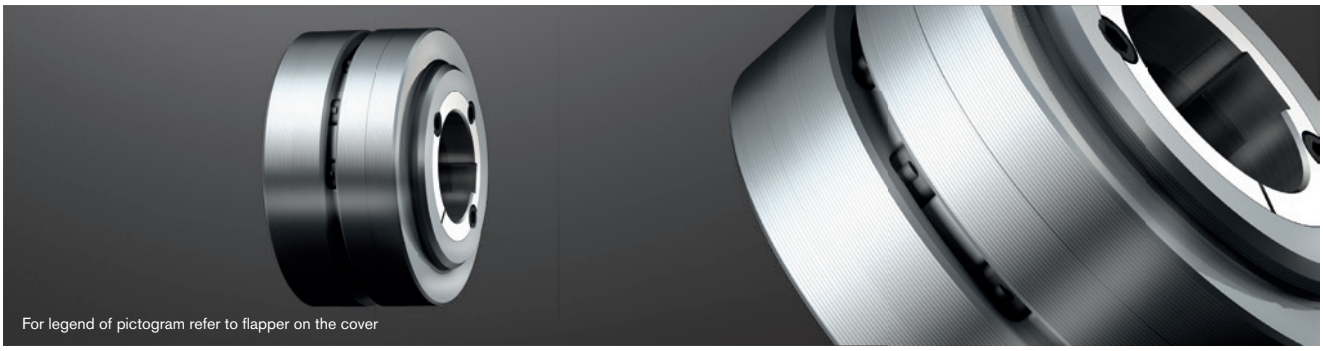
Components of type AR:
1 = Standard hub (GJL)
2 = Elastomer ring (up to size 180: NBR 78 ShA; from size 200: T-PUR® 84 ShA)

POLY-NORM® Type AR

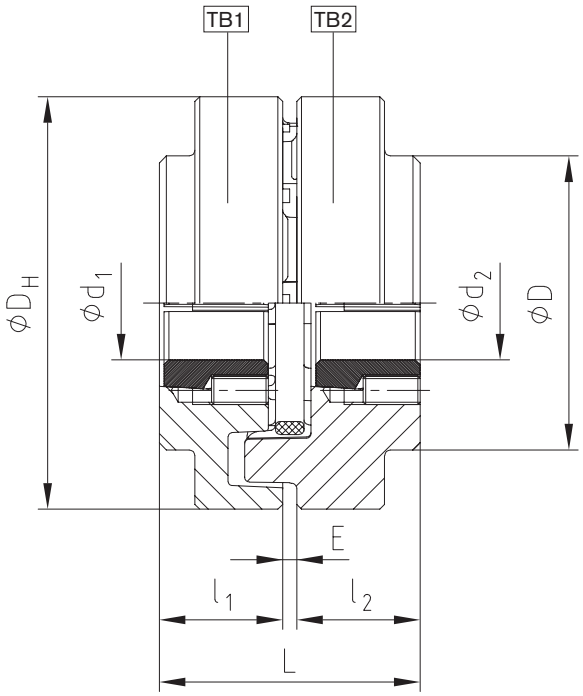
Size	Elastomer ring [1] component [2] Torque [Nm]		Max. finish bore d [2]	Dimensions [mm]									Mass moment of inertia [3] [kgm²]	Weight [3] [kg]
				General							Setscrew [2]			
	T_{KN}	$T_{K\,max}$		L_{AR}	l1	E	DH	D	d_H	N	G	t		
28	40	80	12-30	59	28	3	69	46	36.5	12	M5	7	0.0004	0.9
32	60	120	12-35	68	32	4	78	53	41.5	14	M8	7	0.0008	1.4
38	90	180	19-40	80	38	4	87	62	50	19.5	M8	10	0.0016	2.0
42	150	300	19-45	88	42	4	96	69	55.5	20	M8	10	0.0026	2.7
48	220	440	19-50	101	48	5	106	78	64	24	M8	15	0.0042	3.7
55	300	600	19-60	115	55	5	118	90	73	29	M8	14	0.0070	5.5
60	410	820	19-65	125	60	5	129	97	81	33	M8	15	0.0112	6.9
65	550	1100	19-70	135	65	5	140	105	86	36	M10	20	0.0174	8.8
75	850	1700	32-80	155	75	5	158	123	100	42.5	M10	20	0.028	13.5
85	1350	2700	32-90	175	85	5	182	139	116	48.5	M10	25	0.052	19.5
90	2000	4000	32-95	185	90	5	200	148	128	49	M12	25	0.090	23.2
100	2900	5800	42-110	206	100	6	224	165	143	55	M12	25	0.160	31.9
110	3900	7800	50-120	226	110	6	250	185	158	60	M16	30	0.317	38.0
125	5500	11000	55-140	256	125	6	280	210	178	70	M16	35	0.570	55.2
140	7200	14400	65-155	286	140	6	315	235	216	76.5	M20	35	1.030	92.6
160	10000	20000	75-175	326	160	6	350	265	246	94.5	M20	45	1.746	126.9
180	13400	26800	75-200	366	180	6	400	300	290	111.5	M20	50	3.239	181.8
200	19000	38000	85-200	408	200	8	450	335	-	126	M24	50	5.728	263.7
220	30000	60000	95-220	448	220	8	500	370	-	140	M24	50	9.489	355.9
240	43000	86000	105-240	488	240	8	550	405	-	154	M24	50	14.963	466.3
260	55000	110000	115-260	530	260	10	650	440	-	158	M24	60	29.504	672.2
280	67000	134000	125-280	570	280	10	700	475	-	172	M24	60	42.451	836.6

[1] Standard material Perbunan [NBR] 78 Shore A, size 140 - 280 double tooth elastomers, for selection see page 14 et seqq.
[2] Bores H7 with keyway to DIN 6885 sheet 1 [JS9] and setscrew on the keyway
[3] Referring to medium bore

For taper clamping sleeve



Components



POLY-NORM® for taper clamping sleeve

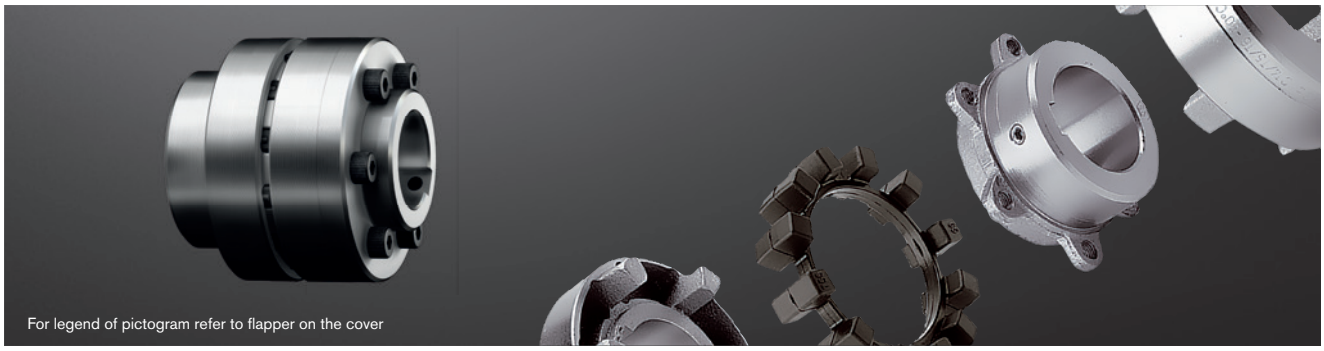
Size	Taper clamping sleeve	Dimensions [mm]		Fastening screws [1] for taper clamping sleeve				Size	Taper clamping sleeve	Dimensions [mm]		Fastening screws [1] for taper clamping sleeve			
		Max. d_1, d_2	l_1, l_2	Size [Inch]	Length [mm]	SW [mm]	T_A [Nm]			Max. d_1, d_2	l_1, l_2	Size [Inch]	Length [mm]	SW [mm]	T_A [Nm]
32	1108	25	25.5	1/4"	13	3	5.7	75	2517	60	52.5	1/2"	25	6	49
42	1210	32	31.0	3/8"	16	5	20	85	2517	60	46.5	1/2"	25	6	49
48	1610	40	30.0	3/16"	16	5	20		3030	75	82	5/8"	32	8	90
	1615	40	42.5	3/8"	16	5	20	90	3020	75	52.0	5/8"	32	8	92
60	2012	50	38.5	7/16"	22	6	31	100	3535	90	98.0	1/2"	38	10	115
65	2517	60	62.5	1/2"	25	6	49	125	4040	100	111.5	5/8"	45	12	172

[1] Each 2 fastening screws, with 3535/4040 3-off
For coupling type TB1 screw connection on cam side - TB2 screw connection on collar side
Combination possible! Please order our separate dimension sheet (M407045).

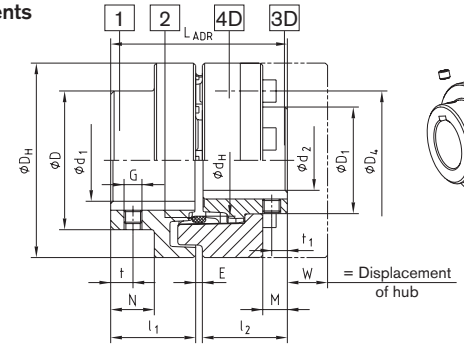
Ordering example:	POLY-NORM® 32 AR TB1 / TB1	AR	Ø38	Ø30
	Coupling size	Type	Finish bore	Finish bore

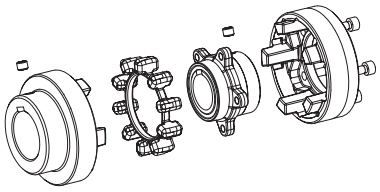
POLY-NORM® ADR
Flexible couplings

Three-part

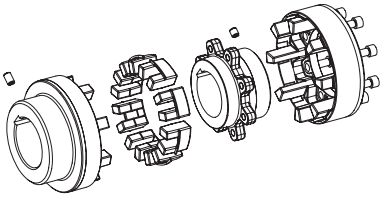


Components





Size 38 - 125



Size 140 - 280

Components of type ADR (three-part):
1 = Standard hub* (GJL)
2 = Elastomer ring (up to size 180: NBR 78 ShA; from size 200: T-PUR® 84 ShA)
3D = Flange hub (GJS); 4D = Cam ring (GJL)
* To be preferably used on driving side

POLY-NORM® Type ADR

Size	Elastomer ring [1] (component 2) Torque [Nm]		Dimensions [mm]															
			Max. finish bore [2]		General										Setscrew			
	T_{KN}	$T_{K\,max}$	d_1	d_2	L_{ADR}	l_1, l_2	E	DH	D	D_1	d_H	N	M	W	G	t	t1	T_A [Nm]
38	90	180	40	34	80	38	4	87	62	48	50	19.5	11.0	12	M8	10	7	10
42	150	300	45	38	88	42	4	96	69	54	55.5	20	12.0	16	M8	10	7	10
48	220	440	50	44	101	48	5	106	78	62	64	24	13.7	16	M8	15	7	10
55	300	600	60	50	115	55	5	118	90	72	73	29	18.7	15	M8	14	14	10
60	410	820	65	56	125	60	5	129	97	80	81	33	22.2	14	M8	15	15	10
65	550	1100	70	60	135	65	5	140	105	86	86	36	26.7	11	M10	20	20	17
75	850	1700	80	68	155	75	5	158	123	98	100	42.5	27.8	16	M10	20	20	17
85	1350	2700	90	78	175	85	5	182	139	112	116	48.5	33.7	18	M10	25	25	17
90	2000	4000	95	85	185	90	5	200	148	122	128	49	31.5	26	M12	25	25	40
100	2900	5800	110	95	206	100	6	224	165	136	143	55	37.5	28	M12	25	25	40
110	3900	7800	50-120	105	226	110	6	250	185	150	158	60	39.5	30	M16	30	30	80
125	5500	11000	55-140	115	256	125	6	280	210	168	178	70	48.0	35	M16	35	35	80
140	7200	14400	65-155	55-135	286	140	6	315	235	195	216	76.5	47.0	59	M20	35	35	140
160	10000	20000	75-175	65-155	326	160	6	350	265	225	246	94.5	65.0	43	M20	45	45	140
180	13400	26800	75-200	65-175	366	180	6	400	300	255	290	111.5	79.0	33	M20	50	50	140
200	19000	38000	85-200	73-200	408	200	8	450	335	290	320	126	95	7	M24	50	50	240
220	30000	60000	95-220	83-220	448	220	8	500	370	320	354	140	103	8	M24	50	50	240
240	43000	86000	105-240	93-240	488	240	8	550	405	350	388	154	119	1	M24	50	50	240
260	55000	110000	115-260	103-260	530	260	10	650	440	380	445	158	109	34	M24	60	60	240
280	67000	134000	125-280	113-280	570	280	10	700	475	410	478	172	109	29	M24	60	60	240

Selection of cap screws DIN EN ISO 4762 - 12.9

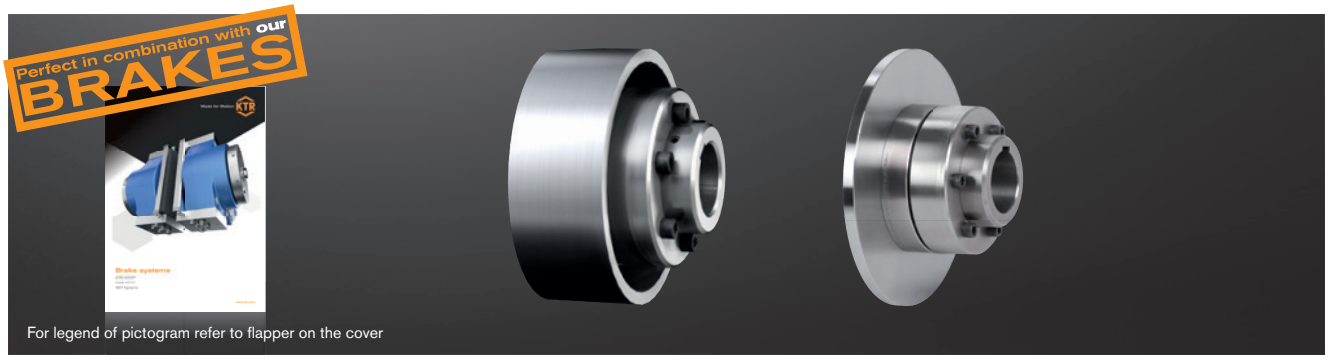
Size	M x l [mm]	z = number	Pitch z x angle	D_4 [mm]	T_A [Nm] [3]	Size	M x l [mm]	z = number	Pitch z x angle	D_4 [mm]	T_A [Nm] [3]
38	M6x16	5	5x72	62	10	110	M16x40	8	8x45	183	210
42	M8x16	5	5x72	69	25	125	M20x40	8	8x45	202	410
48	M8x20	6	6x60	78	25	140	M20x50	8	8x45	237	410
55	M8x20	6	6x60	88	25	160	M20x55	9	9x40	267	410
60	M8x20	6	6x60	98	25	180	M20x60	10	10x36	304	410
65	M10x20	6	6x60	104	49	200	M20x60	10	10x36	342	580
75	M10x25	6	6x60	120	49	220	M24x70	10	10x36	378	1000
85	M12x25	6	6x60	138	86	240	M27x70	10	10x36	416	1500
90	M16x30	6	6x60	149	210	260	M30x90	10	10x36	480	2000
100	M16x30	6	6x60	163	210	280	M30x90	10	10x36	520	2000

[1] Standard material Perbunan [NBR] 78 Shore A, size 140 - 280 double tooth elastomers, for selection see page 14 et seqq.
[2] Bores H7 with keyway to DIN 6885 sheet 1 [JS9] and setscrew [3] Screw tightening torques acc. to 8.8

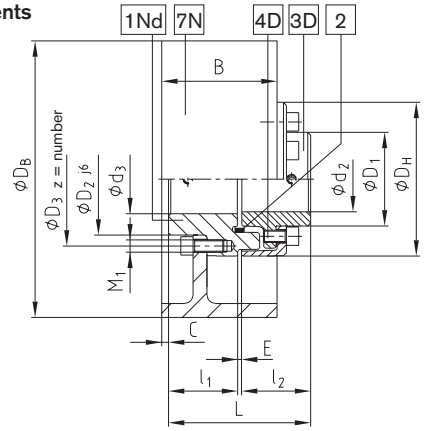
Ordering example:

POLY-NORM® 65	ADR	d_1 = Ø55	d_2 = Ø60
Coupling size	Type	Finish bore	Finish bore

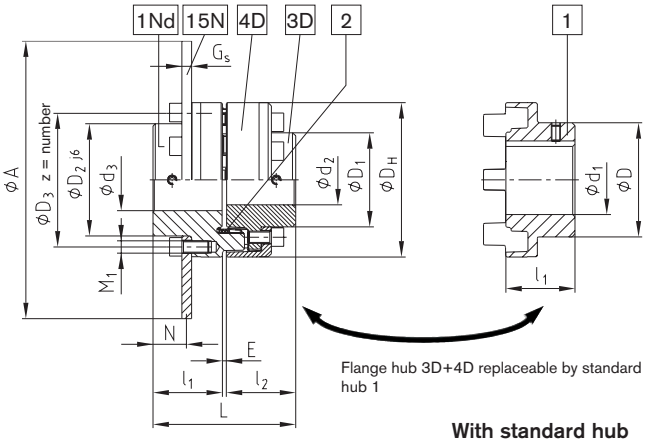
With brake drum/brake disk for brake stop



Components



Brake drum type ADR-BTA



Brake disk type ADR-SBA

With standard hub type AR-BTA or AR-SBA

POLY-NORM® Type AR-BTA, AR-SBA, ADR-BTA and ADR-SBA

Size	Elastomer ring [1] (component 2) Torque [Nm]		Dimensions [mm]											
			D, D1	Max. finish bore			DH	D2	D3	z	M1	l1, l2	E	L
	TKN	TK max		d1	d2	d3								
38	90	180	For dimensions D, D1 refer to our company catalogue on page 67 and 69	40	34	38	87	61	75	5 x 72°	M6	38	4	80
42	150	300		45	38	42	96	68	82	5 x 72°	M8	42	4	90
48	220	440		50	44	48	106	77	92	6 x 60°	M8	48	5	101
55	300	600		60	50	55	118	88	104	6 x 60°	M8	55	5	115
60	410	820		65	56	60	129	96	114	6 x 60°	M8	60	5	125
65	550	1100		70	60	65	140	104	122	6 x 60°	M10	65	5	135
75	850	1700		80	68	75	158	121	140	6 x 60°	M10	75	5	155
85	1350	2700		90	78	85	182	137	160	6 x 60°	M12	85	5	175
90	2000	4000		95	85	90	200	146	174	6 x 60°	M16	90	5	185
100	2900	5800		110	95	100	224	164	195	6 x 60°	M16	100	6	206
110	3900	7800		50-120	105	50-110	250	184	218	8 x 45°	M16	110	6	226
125	5500	11000		55-140	115	55-125	280	208	245	8 x 45°	M20	125	6	256
140	7200	14400		65-155	55-135	65-140	315	233	276	8 x 45°	M20	140	6	286
160	10000	20000		75-175	65-155	75-160	350	263	308	9 x 40°	M20	160	6	326
180	13400	26800		75-200	65-175	75-180	400	298	349	10 x 36°	M20	180	6	366

POLY-NORM® Type BTA

POLY-NORM® size	38	42	48	55	60	65	75	85	90	100	110	125	140	160	180	Max. speed [rpm] with v = 60 m/s [3]
ØDBxB Brake drum [2]	Dimensions C [mm]															
160x60	4															7150
200x75	9	8	4													5725
250x95	17	16	20	7	3	0										4575
315x118		25	21	16	12	9	2.5	-3.5								3625
400x150			34	28	25	22	15.5	9.5	9	3						2850
500x190										18	12	-2				2275
630x236												20	13	-4		1800
710x265													24	7	-11	1600

POLY-NORM® Type SBA

POLY-NORM® size	38	42	48	55	60	65	75	85	90	100	110	125	140	160	180	Max. speed [rpm] with v = 60 m/s [3]
ØAxG Brake disk [2]	Dimensions N [mm]															
200x12.5	13.75															5725
250x12.5	13.75	14.75	18.75													4575
315x16		13	17	22	26	29	35.5									3625
400x16			17	22	26	29	35.5	41.5	42	48						2850
500x16				22	26	29	35.5	41.5	42	48	54	64				2275
630x20										46	52	62	69	86		1800
710x20										46	52	62	69	86	104	1600
800x25										43.5	49.5	59.5	66.5	83.5	101.5	1425
900x25											49.5	59.5	66.5	83.5	101.5	1250

[1] Standard material Perbunan [NBR], for selection see page 14 et seqq.
[2] Steel
[3] Dynamic balancing required

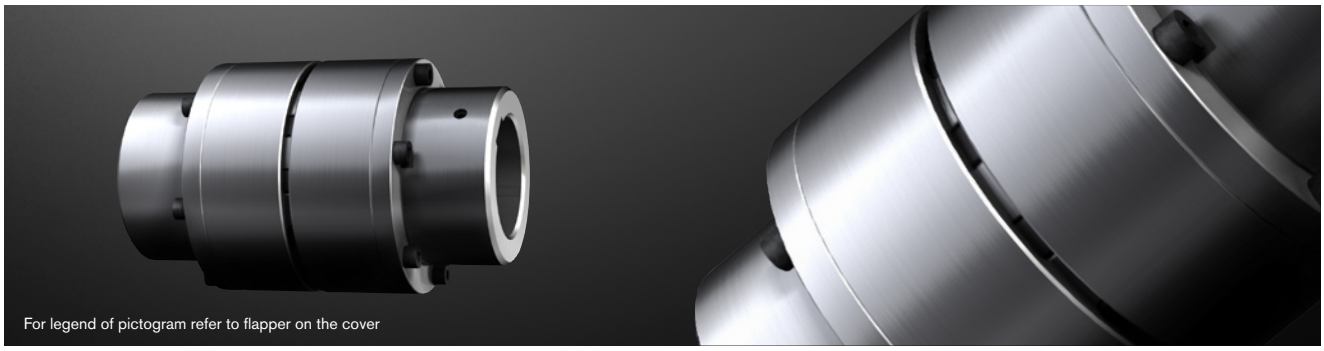
Other sizes on request

Ordering example:

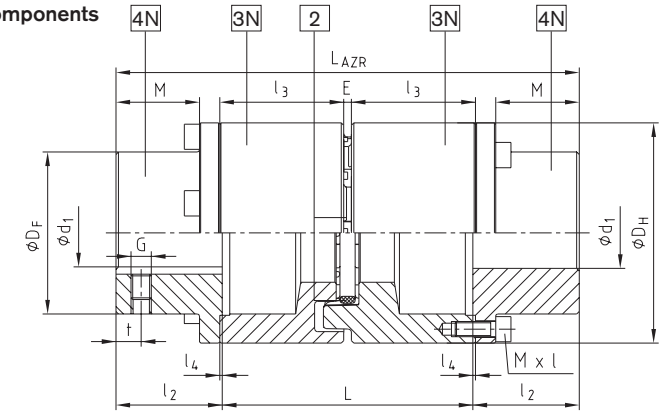
POLY-NORM® 38	ADR-BTA	Ø200 x 75	d2 = Ø32 NnD	d3 = Ø25 NnD
Coupling size	Type	Brake drum Ø	Component with finish bore	Component with finish bore

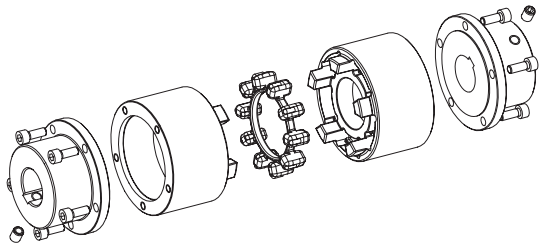
POLY-NORM® AZR
Flexible couplings

Standard drop-out center design coupling



Components





Components of type AZR:
2 = Elastomer ring (NBR 78 ShA)
3N = Driving flange (GJL)
4N= Coupling flange (steel)

POLY-NORM® Type AZR

Size	Drop-out center design length* L [mm]	Elastomer ring [1] (component 2) Torque [Nm]		Max. finish bore d_1 [2]	Dimensions [mm]												Mass moment of inertia [3] [kgm²]	Weight [3] [kg]
					General										Setscrew			
		T_{KN}	$T_{K\,max}$		L_{AZR}	l2	l3	E	l4	DH	D_F	M	Mxl	T_A [Nm]	G	t		
28	100	40	80	32	170	35	49.5	3	1	69	46	26	M6x18	14	M5	7	0.0020	2.4
32	100	60	120	38	170	35	49	4	1	78	53	26	M6x18	14	M8	7	0.0042	3.2
	140				210		69										0.0062	3.9
38	100	90	180	45	184	42	49	4	1	87	62	33	M6x20	14	M8	10	0.0048	4.3
	140				224		69										0.0068	5.1
42	100	150	300	50	190	45	49	4	1	96	69	35	M6x20	14	M8	10	0.0094	5.1
	140				230		69										0.0128	6.0
48	100	220	440	55	204	52	49	5	1.5	106	78	41.5	M6x20	14	M8	15	0.0170	6.6
	140				244		69										0.0216	7.5
55	100	300	600	65	210	55	49	5	1.5	118	88	43.5	M8x25	35	M8	14	0.0188	9.4
	140				250		69										0.0240	10.8
	180				290		89										0.0232	12.2
60	100	410	820	70	220	60	49	5	1.5	129	97	47.5	M8x25	35	M8	15	0.0326	11.2
	140				260		69										0.0414	13.0
	180				300		89										0.0504	14.6
65	100	550	1100	75	230	65	49	5	1.5	140	105	51.5	M8x25	35	M10	20	0.0564	14.0
	140				270		69										0.0730	15.8
	180				310		89										0.0894	17.5
75	140	850	1700	90	290	75	69	5	1.5	158	123	60.5	M10x30	69	M10	20	0.0824	23.2
	180				330		89										0.1008	25.6
	250				400		124										0.1332	29.8
85	140	1350	2700	100	310	85	69	5	1.5	182	139	69.5	M10x30	69	M10	25	0.1570	32.1
	180				350		89										0.1658	35.2
	250				420		124										0.1812	40.7
90	140	2000	4000	110	320	90	69	5	1.5	200	148	73.5	M12x35	120	M12	25	0.2466	38.2
	180				360		89										0.2880	42.2
	250				430		124										0.3566	49.3
100	140	2900	5800	120	340	100	69	6	2	224	165	83	M12x35	120	M12	25	0.3988	50.0
	180				380		89										0.4450	54.8
	250				450		124										0.5465	63.2

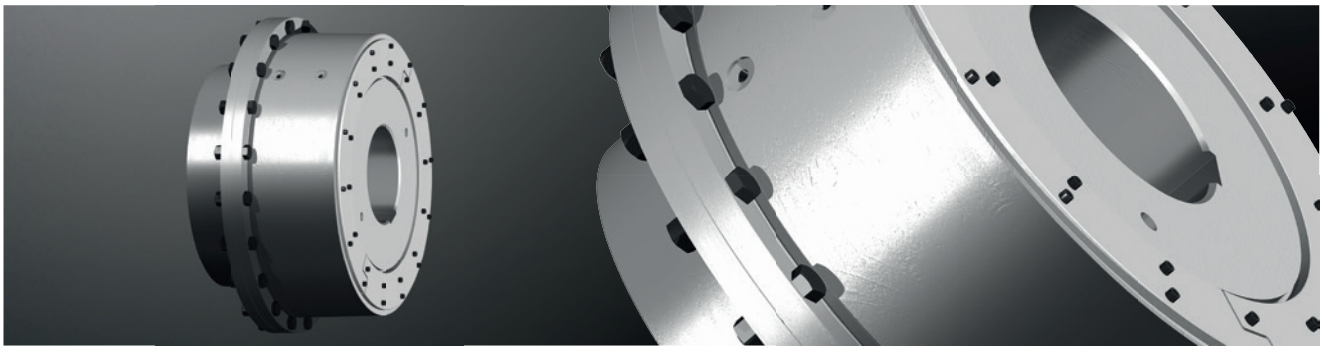
[1] Standard material Perbunan [NBR] 78 Shore A, for selection see page 14 et seqq.
[2] Bores H7 with keyway to DIN 6885 sheet 1 [JS9] and setscrew on the keyway
[3] Referring to medium bore
*For other extendable lengths (L = 120/160/195/215) it is possible to combine two driving flanges 3N with various lengths. As an example: driving flanges of POLY-NORM® 85 for extendable length 140 and 250 give an extendable length of 195 mm (140 mm + 250 mm = 390 mm; 390 mm/2 = 195 mm)

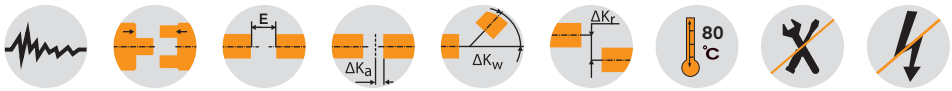
Ordering example:

POLY-NORM® 42	AZR	140	Ø38	Ø42
Coupling size	Type	Drop-out center design length L	Finish bore	Finish bore

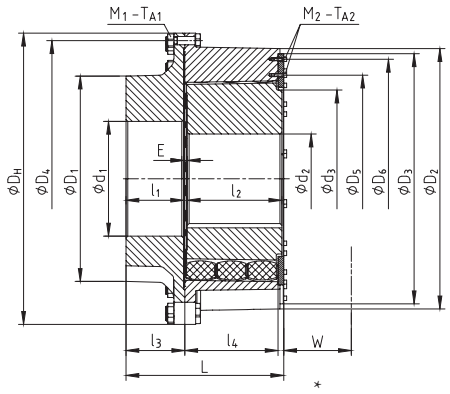
POLY-NORM®-M Type AFN
Flexible couplings

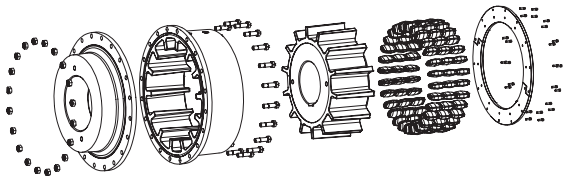
Three-part





Components



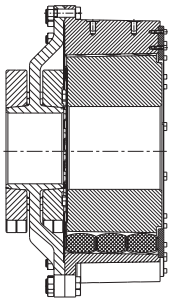


POLY-NORM®-M Type AFN																										
Size	Torque[1] [kNm]		Dimensions [mm]																	Dowel screw (10.9)			Screws DIN EN ISO 4762			Approx. weight[2] [kg]
			Max. finish bore Ød		General																					
	T_{KN}	$T_{Kmax.}$	d_1[3]	d_2	L[3]	l_1[3]	l2	l_3[3]	l4	DH	D_1	D_2	D_3	D_4	D_5	D_6	d_3	E[3]	W	z	M_1	T_{A1} [Nm]	z	M_2	T_{A2} [Nm]	
202	100	200	350	200	425	195	215	200	218	640	500	552	530	600	360	480	300	12	150	24	M24	970	16	M16	290	430
252	140	280	355	250	438	208	215	213	218	720	550	635	610	680	460	570	360	12	150	30	M24	970	18	M16	290	590
302	200	400	380	300	464	203	247	209	255	770	600	682	660	730	510	625	430	13	175	20	M24	970	24	M16	290	730
402	400	800	480	400	580	224	335	230	350	1000	760	885	860	945	650	800	530	14	250	18	M30	1950	20	M16	290	1750
502	650	1300	650	500	654	228	407	234	360	1200	1000	1080	1050	1140	830	990	700	19	250	24	M30	1950	24	M16	290	2240
503	950	1900	650	500	777	228	530	234	505	1200	1000	1075	1340	1140	830	990	700	19	415	24	M30	1950	24	M16	290	3090
703	1500	3000	700	700	845	309	507	315	500	1560	1100	1395	1340	1480	1110	1280	950	19	360	20	M42	3600	28	M16	290	5150
803	2400	4800	1000	800	1030	406	600	416	530	1800	1600	1630	1550	1720	1250	1450	110	24	390	24	M48	5450	28	M24	970	9300
903	3300	6600	1000	900	982	406	541	412	550	2060	1400	1865	1800	1975	1500	1730	1300	25	390	24	M48	5450	32	M24	970	9800
905	5500	11000	1000	900	1377	406	857	417	920	2060	1650	1865	1800	1975	1500	1730	1300	114	715	40	M48	5450	32	M24	970	14800

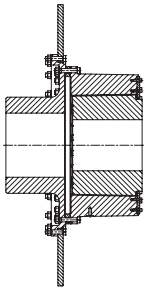
* Drop-out center design dimension required
[1] Standard material Perbunan [NBR] 80 Shore A, electrically insulating available on request, for selection see page 18 et seqq.
[2] Referring to max. bore
[3] Variable according to customer's request. Finish bore according to ISO fit H7, feather keyway according to DIN 6885, sheet 1 [JS9]. If requested, coupling is dynamically balanced (semi-key balancing G 6.3 with speed as specified by the customer). For circumferential speeds exceeding v = 20 m/s dyn. balancing is recommended.

Other types

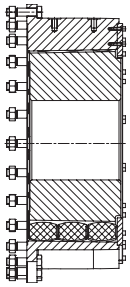
Type AFN with clamping ring hub



Type AFN with brake disk



Bauart A with flange connection



Ordering example:	POLY-NORM®-M	Type	d_1 Ø500	d_2 Ø450
	Coupling size	AFN	Finish bore	Finish bore