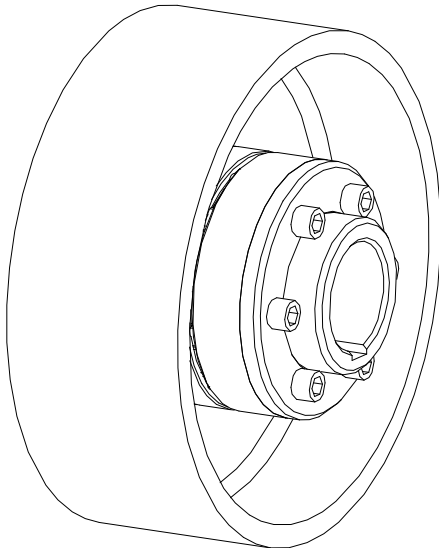




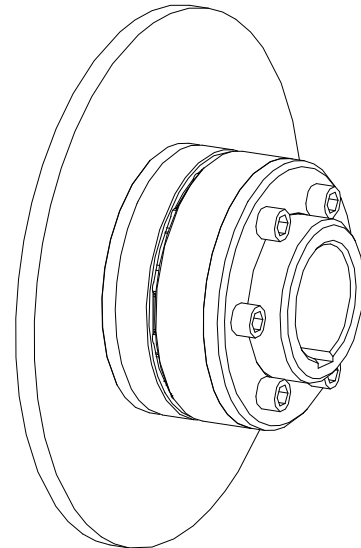
POLY-NORM®

Flexible jaw-type couplings of series
ADR-BTA, AR-BTA, ADR-BT and AR-BT
ADR-SBA, AR-SBA, ADR-SB and AR-SB

for finish bored, pilot bored and unbored couplings



POLY-NORM®
ADR-BTA, AR-BTA, ADR-BT and AR-BT



POLY-NORM®
ADR-SBA, AR-SBA, ADR-SB, and AR-SB

POLY-NORM® BTA / BT / SBA / SB is a fail-safe, torsionally flexible jaw coupling with brake drum or brake disk, respectively. It is able to compensate for offset of shafts, e. g. caused by manufacturing inaccuracies, thermal expansion etc.

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Please note protection mark ISO 16016.	Drawn: 24.11.11 Pz/Bru	Replaced for: ---
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1 Technical Data

Types ADR-BTA and ADR-SBA

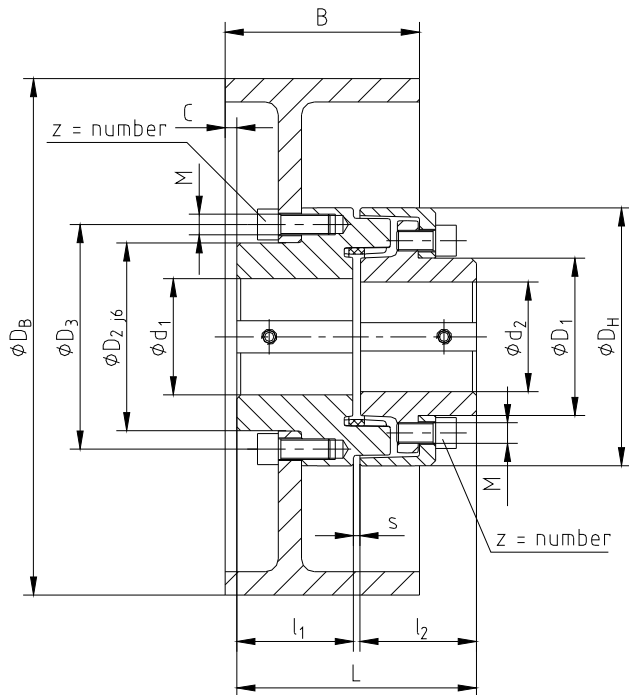


Illustration 1: POLY-NORM® ADR-BTA

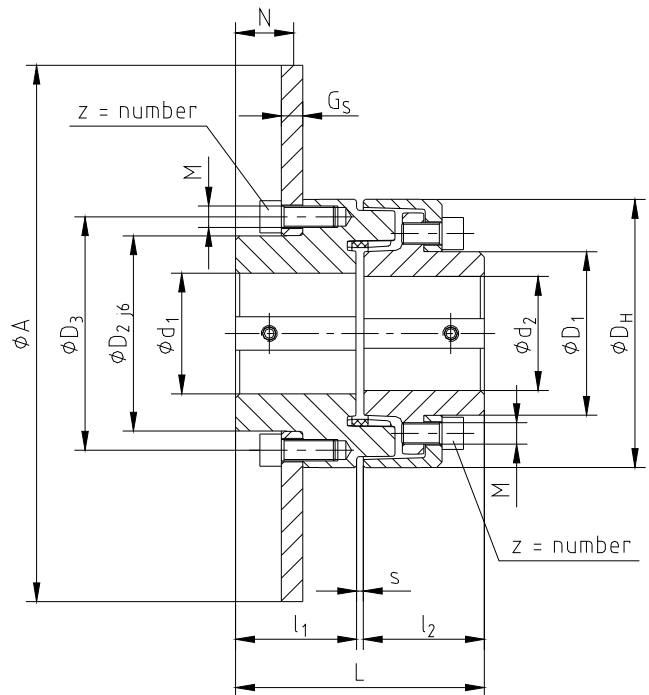


Illustration 2: POLY-NORM® ADR-SBA

Table 1: dimensions of the types ADR-BTA and ADR-SBA

Size	Elastomer ring torque ¹⁾ [Nm]		Dimensions ³⁾ [mm]										Cylinder head screw DIN EN ISO 4762 - 12.9		
			Max. finish bore ²⁾		General								z	M	T _A [Nm]
					L	l ₁ ; l ₂	s	D _H	D ₁	D ₂	D ₃				
T _{KN}	T _{Kmax.}	d ₁	d ₂												
38	90	180	40	34	80	38	4	87	48	61	75	5	M6	10	
42	150	300	45	38	88	42	4	96	54	68	82	5	M8	25	
48	220	440	50	44	101	48	5	106	62	77	92	6	M8	25	
55	300	600	60	50	115	55	5	118	72	88	104	6	M8	25	
60	410	820	65	56	125	60	5	129	80	96	114	6	M8	25	
65	550	1100	70	60	135	65	5	140	86	104	122	6	M10	49	
75	850	1700	80	68	155	75	5	158	98	121	140	6	M10	49	
85	1350	2700	90	78	175	85	5	182	112	137	160	6	M12	86	
90	2000	4000	95	85	185	90	5	200	122	146	174	6	M16	210	
100	2900	5800	110	95	206	100	6	224	136	164	195	6	M16	210	
110	3900	7800	120	105	226	110	6	250	150	184	218	8	M16	210	
125	5500	11000	140	115	256	125	6	280	168	208	245	8	M20	410	
140	7200	14400	140	55 - 135	286	140	6	315	195	233	276	8	M20	410	
160	10000	20000	160	65 - 155	326	160	6	350	225	263	308	9	M20	410	
180	13400	26800	180	65 - 175	366	180	6	400	255	298	349	10	M20	410	

¹⁾ Standard material Buna N [NBR] 78 Shore A
²⁾ Bore tolerance H7 with keyway DIN 6885 sheet 1 [JS9] and setscrew
³⁾ Dimensions of brake drum (BTA) and brake disk (SBA) see table 3 and 4.

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1 Technical Data

Types AR-BTA and AR-SBA

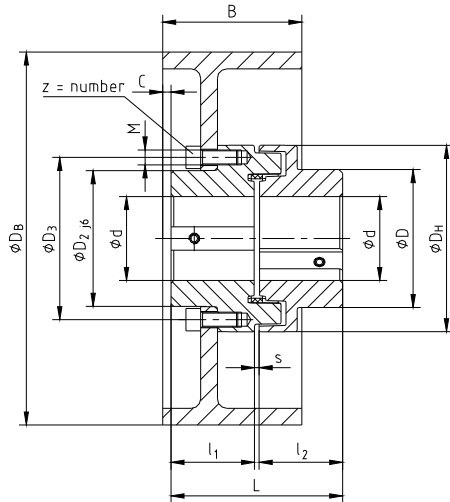


Illustration 3: POLY-NORM® AR-BTA

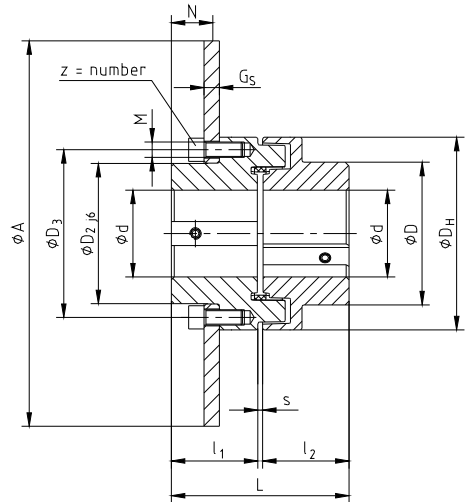


Illustration 4: POLY-NORM® AR-SBA

Table 2: dimensions of the types AR-BTA and AR-SBA

Size	Elastomer ring torque ¹⁾ [Nm]		Max. finish bore ²⁾	Dimensions [mm]							Cylinder head screw DIN EN ISO 4762 - 12.9		
				General							z	M	T _A [Nm]
				L	l ₁ ; l ₂	s	D _H	D	D ₂	D ₃			
38	90	180	40	80	38	4	87	62	61	75	5	M6	10
42	150	300	45	88	42	4	96	69	68	82	5	M8	25
48	220	440	50	101	48	5	106	78	77	92	6	M8	25
55	300	600	60	115	55	5	118	90	88	104	6	M8	25
60	410	820	65	125	60	5	129	97	96	114	6	M8	25
65	550	1100	70	135	65	5	140	105	104	122	6	M10	49
75	850	1700	80	155	75	5	158	123	121	140	6	M10	49
85	1350	2700	90	175	85	5	182	139	137	160	6	M12	86
90	2000	4000	95	185	90	5	200	148	146	174	6	M16	210
100	2900	5800	110	206	100	6	224	165	164	195	6	M16	210
110	3900	7800	120	226	110	6	250	185	184	218	8	M16	210
125	5500	11000	140	256	125	6	280	210	208	245	8	M20	410
140	7200	14400	140	286	140	6	315	235	233	276	8	M20	410
160	10000	20000	160	326	160	6	350	265	263	308	9	M20	410
180	13400	26800	180	366	180	6	400	300	298	349	10	M20	410

¹⁾ Standard material Buna N [NBR] 78 Shore A

²⁾ Bore tolerance H7 with keyway DIN 6885 sheet 1 [JS9] and setscrew

Table 3: dimensions BTA

Coupling size	38	42	48	55	60	65	75	85	90	100	110	125	140	160	180
Dimension C at brake drum φD _B x B	160 x 60	4													
	200 x 75	9	8	4											
	250 x 95	17	16	20	7	3	0								
	315 x 118		25	21	16	12	9	2,5	-3,5						
	400 x 150			34	28	25	22	15,5	9,5	9	3				
	500 x 190										18	12	-2		
	630 x 236											20	13	-4	
	710 x 265												24	7	-11

Table 4: dimensions SBA

Coupling size	38	42	48	55	60	65	75	85	90	100	110	125	140	160	180	
Dimension N at brake disk φA x G _s	200 x 12,5	13,75														
	250 x 12,5	13,75	14,75	18,75												
	315 x 16		13	17	22	26	29	35,5								
	400 x 16			17	22	26	29	35,5	41,5	42	48					
	500 x 16				22	26	29	35,5	41,5	42	48	54	64			
	630 x 20										46	52	62	69	86	
	710 x 20										46	52	62	69	86	104
	800 x 25										43,5	49,5	59,5	66,5	83,5	101,5
	900 x 25										49,5	59,5	66,5	83,5	101,5	

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1 Technical Data

Types ADR-BT and ADR-SB

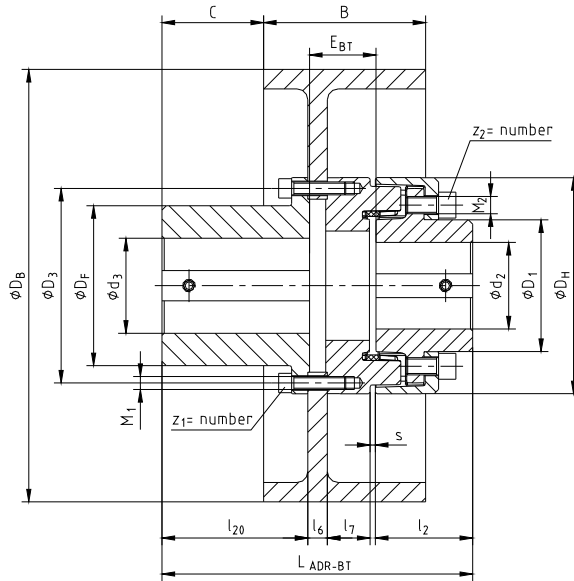


Illustration 5: POLY-NORM® ADR-BT

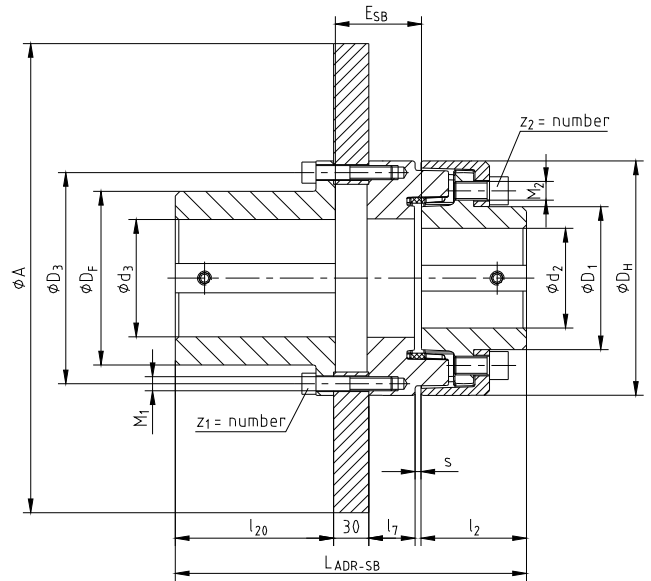


Illustration 6: POLY-NORM® ADR-SB

Table 5: dimensions of the types ADR-BT and ADR-SB

Size	Elastomer ring torque ¹⁾ [Nm]		Dimensions [mm]										
			Max. finish bore ²⁾		General								
					d ₂	d ₃	L _{ADR-SB}	l ₂	l ₇	l ₂₀	s	D _H	D ₁
55	300	600	50	60	249,0	55	24,0	135	5	118	72	103	88
60	410	820	56	65	255,0	60	25,0	135	5	129	80	114	97
65	550	1100	60	70	261,5	65	26,5	135	5	140	86	124	105
75	850	1700	68	80	276,5	75	31,5	135	5	158	98	141	123
85	1350	2700	78	90	290,0	85	35,0	135	5	182	112	160	139
90	2000	4000	85	100	299,5	90	39,5	135	5	200	122	180	148
100	2900	5800	95	110	354,0	100	43,0	175	6	224	136	200	165
110	3900	7800	105	120	369,0	110	48,0	175	6	250	150	220	185
125	5500	11000	115	140	394,0	125	53,0	180	6	280	168	250	210
140	7200	14400	135	160	416,5	140	60,5	180	6	315	195	278	235
160	10000	20000	155	180	438,5	160	62,5	180	6	350	225	312	265

Size	Dimensions [mm]								Cylinder head screw DIN EN ISO 4762 - 12.9			Cylinder head screw DIN EN ISO 4762 - 12.9		
	L _{ADR-BT}	D _B	l ₆	E _{BT}	B	C	A	E _{SB}	M ₁	z ₁	T _A [Nm]	M ₂	z ₂	T _A [Nm]
55	-	-	-	-	-	-	250 - 450	57,8	M8	6	35	M8	6	25
60	-	-	-	-	-	-	250 - 500	59,3	M8	6	35	M8	6	25
65	-	-	-	-	-	-	315 - 500	61,3	M8	6	35	M10	6	49
75	-	-	-	-	-	-	315 - 560	66,0	M10	6	69	M10	6	49
85	272,0	250	12	50,8	95	110	355 - 560	68,8	M10	6	69	M12	6	86
	274,0	315	14	52,8	118	103								
90	287,5	400	18	61,5	150	94	400 - 710	73,5	M12	6	120	M16	6	210
100	342,0	400	18	65,5	150	134	400 - 800	81,5	M12	6	120	M16	6	210
110	-	-	-	-	-	-	450 - 900	86,5	M16	8	295	M16	8	210
125	-	-	-	-	-	-	450 - 900	91,5	M16	8	295	M20	8	410
140	-	-	-	-	-	-	500 - 900	104,5	M20	8	410	M20	8	410
160	-	-	-	-	-	-	560 - 900	106,5	M20	9	410	M20	9	410

¹⁾ Standard material Buna N [NBR] 78 Shore A
²⁾ Bore tolerance H7 with keyway DIN 6885 sheet 1 [JS9] and setscrew

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1 Technical Data

Types AR-BT and AR-SB

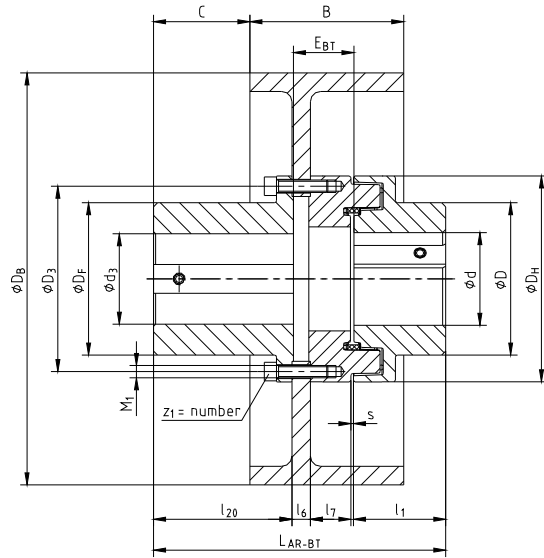


Illustration 7: POLY-NORM® AR-BT

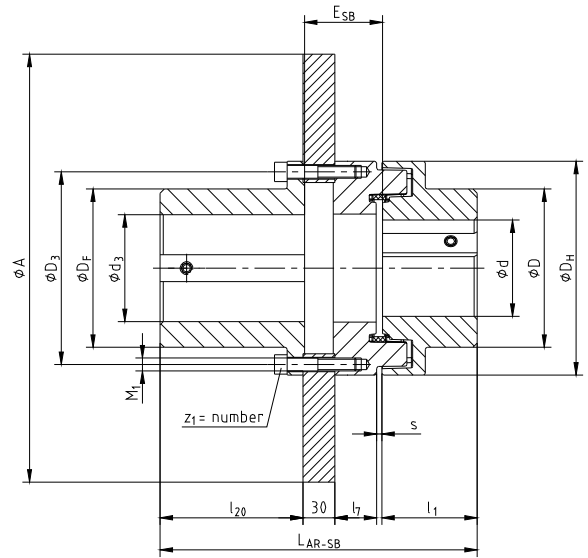


Illustration 8: POLY-NORM® AR-SB

Table 6: dimensions of the types AR-BT and AR-SB

Size	Elastomer ring torque ¹⁾ [Nm]		Dimensions [mm]									
			Max. finish bore ²⁾		General							
			d	d ₃	L _{AR-SB}	l ₁	l ₇	l ₂₀	s	D _H	D ₃	D _F
55	300	600	60	60	249,0	55	24,0	135	5	118	103	88
60	410	820	65	65	255,0	60	25,0	135	5	129	114	97
65	550	1100	70	70	261,5	65	26,5	135	5	140	124	105
75	850	1700	80	80	276,5	75	31,5	135	5	158	141	123
85	1350	2700	90	90	290,0	85	35,0	135	5	182	160	139
90	2000	4000	95	100	299,5	90	39,5	135	5	200	180	148
100	2900	5800	110	110	354,0	100	43,0	175	6	224	200	165
110	3900	7800	120	120	369,0	110	48,0	175	6	250	220	185
125	5500	11000	140	140	394,0	125	53,0	180	6	280	250	210
140	7200	14400	140	160	416,5	140	60,5	180	6	315	278	235
160	10000	20000	160	180	438,5	160	62,5	180	6	350	312	265

Size	Dimensions [mm]								Cylinder head screw DIN EN ISO 4762 - 12.9		
	L _{AR-BT}	D _B	l ₆	E _{BT}	B	C	A	E _{SB}	M ₁	z ₁	T _A [Nm]
55	-	-	-	-	-	-	250 - 450	57,8	M8	6	35
60	-	-	-	-	-	-	250 - 500	59,3	M8	6	35
65	-	-	-	-	-	-	315 - 500	61,3	M8	6	35
75	-	-	-	-	-	-	315 - 560	66,0	M10	6	69
85	272,0	250	12	50,8	95	110	355 - 560	68,8	M10	6	69
	274,0	315	14	52,8	118	103					
90	287,5	400	18	61,5	150	94	400 - 710	73,5	M12	6	120
100	342,0	400	18	65,5	150	134	400 - 800	81,5	M12	6	120
110	-	-	-	-	-	-	450 - 900	86,5	M16	8	295
125	-	-	-	-	-	-	450 - 900	91,5	M16	8	295
140	-	-	-	-	-	-	500 - 900	104,5	M20	8	410
160	-	-	-	-	-	-	560 - 900	106,5	M20	9	410

¹⁾ Standard material Buna N [NBR] 78 Shore A

²⁾ Bore tolerance H7 with keyway DIN 6885 sheet 1 [JS9] and setscrew



POLY-NORM® couplings with such components that are in a position to produce heat, sparks and static charge (e. g. in combination with brake drums/disks, overload systems like torque limiters, fans, etc.) are not permitted for the use in hazardous locations. A separate test has to be performed.

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2 Hints

2.1 Coupling Selection



CAUTION!

For a continuous and troublefree operation of the coupling it must be designed according to the selection instructions (according to DIN 740 part 2) for the particular application (see POLY-NORM® catalogue).

If the operating conditions (performance, speed, changes on engine and machine) change, the coupling selection must be checked again.

Please note that the technical details regarding the torque refer to the elastomer part only.

The transmittable torque of the shaft-hub-connection has to be verified by the customer and is subject to his responsibility.

For drives with dangerous torsional vibrations (drives with periodical torsional vibration load) it is necessary for a selection ensuring a safe operation to perform a torsional vibration calculation. Typical drives subject to dangerous torsional vibrations are, as an example, drives with diesel engines, piston pumps, piston compressors, etc. If requested, KTR will perform the coupling selection and torsional vibration calculation.

2.2 General Hints

Please read through these mounting instructions carefully before you set the coupling into operation.

Please pay special attention to the safety instructions!

The mounting instructions are part of your product. Please keep them carefully and close to the coupling.

The copyright for these mounting instructions remains with KTR Kupplungstechnik GmbH.

2.3 Safety and Advice Hints



DANGER!

Danger of injury to persons.



CAUTION!

Damages on the machine possible.



ATTENTION!

Pointing to important items.



PRECAUTION!

Hints concerning explosion protection.



2 Hints

2.4 General Hints of Danger



DANGER!

With assembly, operation and maintenance of the coupling it has to be made sure that the entire drive train is protected against unintentional engagement. You can be seriously hurt by rotating parts. Please make absolutely sure to read through and observe the following safety instructions.

- All operations on and with the coupling have to be performed taking into account "safety first".
- Please make sure to disengage the power pack before you perform your work.
- Protect the power pack against unintentional engagement, e. g. by providing hints at the place of engagement or removing the fuse for current supply.
- Do not touch the operation area of the coupling as long as it is in operation.
- Please protect the coupling against unintentional touch. Please provide for the necessary protection devices and caps.

2.5 Proper Use

You may only assemble, operate and maintain the coupling if you

- have carefully read through the mounting instructions and understood them
- had technical training
- are authorized to do so by your company

The coupling may only be used in accordance with the technical data (see table 1 to 6 in chapter 1).

Unauthorized modifications on the coupling design are not admissible. We do not take any warranty for resulting damages. To further develop the product we reserve the right for technical modifications.

The **POLY-NORM®** described in here corresponds to the technical status at the time of printing of these mounting instructions.

3 Storage

The coupling hubs are supplied in preserved condition and can be stored at a dry and roofed place for 6 - 9 months.

The features of the elastomer rings/ double tooth elastomers remain unchanged for up to 5 years in case of favourable stock conditions.



CAUTION!

The storage rooms may not include any ozone-generating devices, like e. g. fluorescent light sources, mercury-vapour lamps or electrical high-voltage appliances.

Humid storage rooms are not suitable.

Please make sure that there is no condensation. The best relative air humidity is less than 65%.

Please note protection mark ISO 16016.	Drawn:	24.11.11 Pz/Bru	Replaced for:	---
	Verified:	29.11.11 Pz	Replaced by:	



4 Assembly

Basically the coupling is supplied in individual parts. Before assembly the coupling has to be inspected for completeness.

4.1 Components of the Couplings

Components of POLY-NORM®, types ADR-BTA and ADR-SBA

Component	Quantity	Designation	Component	Quantity	Designation
1Nd	1	FN hub	5	see table 1	Cylinder head screw DIN EN ISO 4762
2	1	Elastomer ring / Double tooth elastomers ¹⁾	6	1	Setscrew DIN EN ISO 4029
3D	1	Flange hub	7N	1	Brake drum
4D	1	Cam ring	15N	1	Brake disk

¹⁾ Elastomer ring from size 38 to size 125 and double-tooth elastomers from size 140 to size 180.

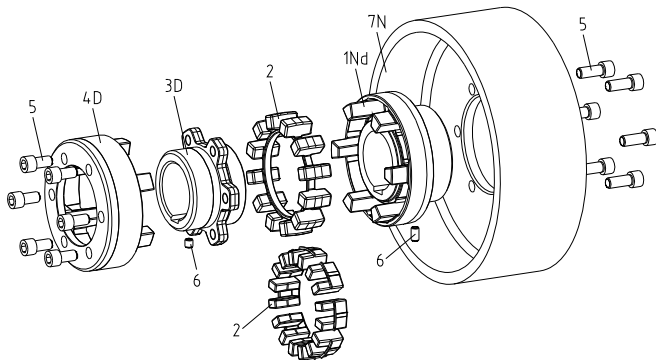


Illustration 9: POLY-NORM® ADR-BTA

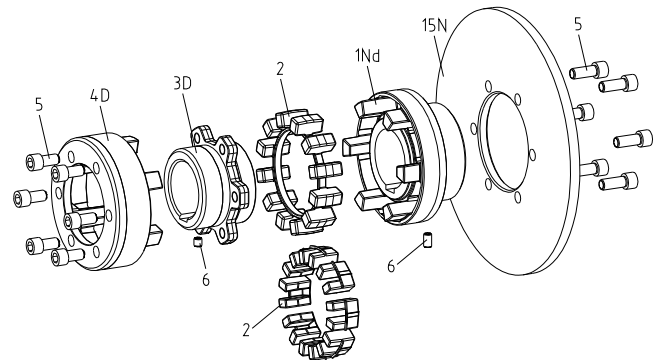


Illustration 10: POLY-NORM® ADR-SBA

Components of POLY-NORM®, types AR-BTA and AR-SBA

Component	Quantity	Designation	Component	Quantity	Designation
1	1	Standard hub	6	1	Setscrew DIN EN ISO 4029
1Nd	1	FN hub	7N	1	Brake drum
2	1	Elastomer ring / Double tooth elastomers ¹⁾	15N	1	Brake disk
5	see table 2	Cylinder head screw DIN EN ISO 4762			

¹⁾ Elastomer ring from size 38 to size 125 and double-tooth elastomers from size 140 to size 180.

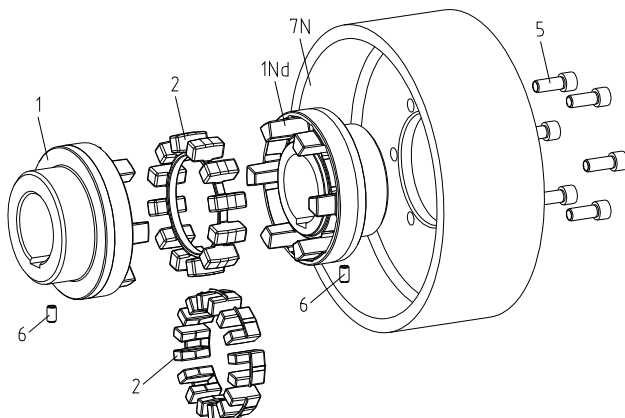


Illustration 11: POLY-NORM® AR-BTA

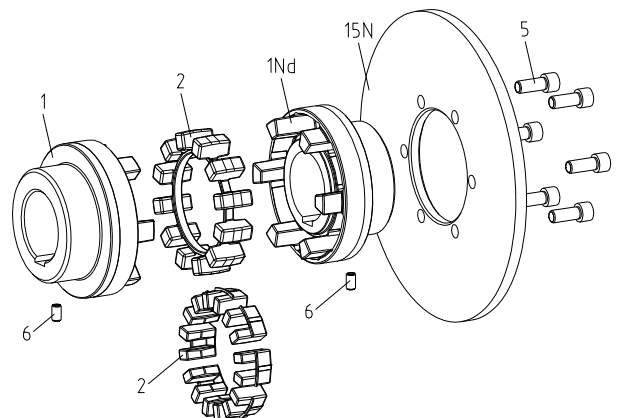


Illustration 12: POLY-NORM® AR-SBA



4 Assembly

4.1 Components of the Couplings

Components of POLY-NORM®, types ADR-BT and ADR-SB

Component	Quantity	Designation	Component	Quantity	Designation
2	1	Elastomer ring / Double tooth elastomers ¹⁾	5	see table 5	Cylinder head screw DIN EN ISO 4762
3D	1	Flange hub	6	1	Setscrew DIN EN ISO 4029
3N	1	Driving flange	7Nx	1	Brake drum
4D	1	Cam ring	15Nx	1	Brake disk
4Nx	1	Coupling flange			

¹⁾ Elastomer ring from size 28 to size 125 and double-tooth elastomers from size 140 to size 180.

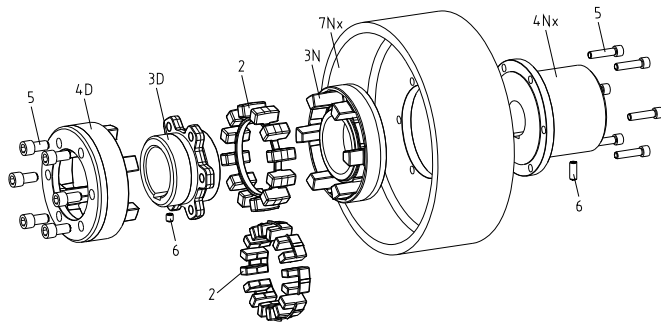


Illustration 13: POLY-NORM® ADR-BT

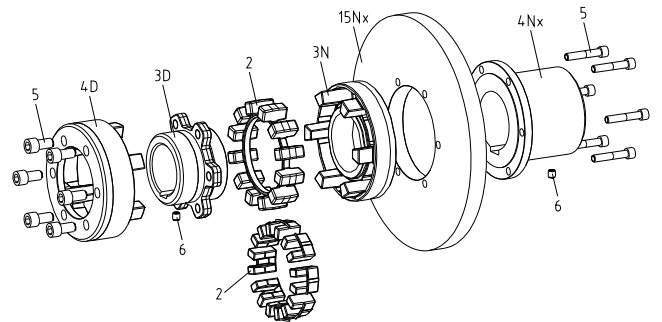


Illustration 14: POLY-NORM® ADR-SB

Components of POLY-NORM®, types AR-BT and AR-SB

Component	Quantity	Designation	Component	Quantity	Designation
1	1	Standard hub	5	see table 6	Cylinder head screw DIN EN ISO 4762
2	1	Elastomer ring / Double tooth elastomers ¹⁾	6	1	Setscrew DIN EN ISO 4029
3N	1	Driving flange	7Nx	1	Brake drum
4Nx	1	Coupling flange	15Nx	1	Brake disk

¹⁾ Elastomer ring from size 28 to size 125 and double-tooth elastomers from size 140 to size 180.

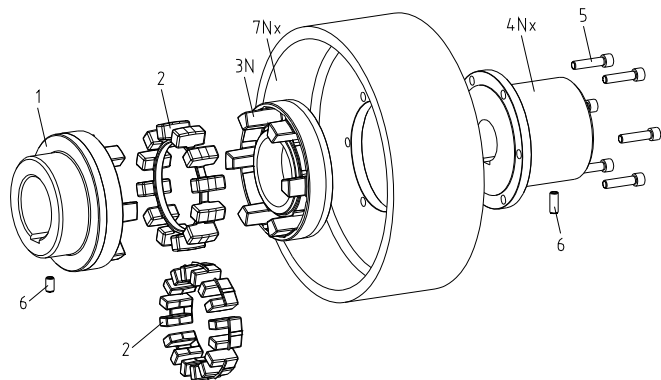


Illustration 15: POLY-NORM® AR-BT

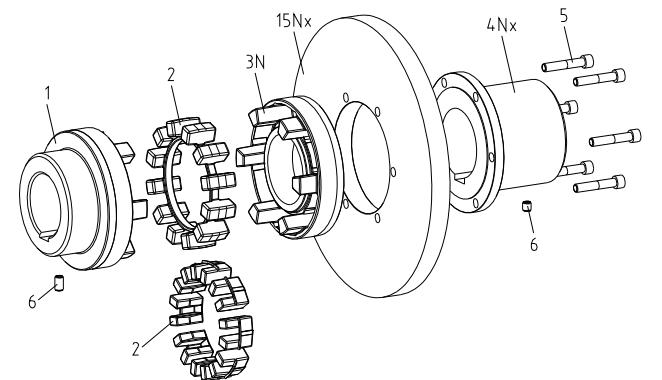


Illustration 16: POLY-NORM® AR-SB



4 Assembly

4.2 Hint Regarding the Finish Bore



CAUTION!

The customer is responsible for all machining processes performed subsequently on all unbored or pilot bored as well as finish machined coupling parts and spare parts by the customer. KTR does not take any warranty for any improper remachining processes.



ATTENTION!


KTR supplies the coupling parts and spare parts in an unbored or pilot bored design only on request of the customer. Such parts are marked additionally with the symbol .

Table 7: Recommended combinations of fit acc. to DIN 748/1

Bore [mm]		Shaft tolerance	Bore tolerance
above	to		
	50	k6	H7
50		m6	(KTR-Standard)

If a feather key is intended to be used in the hub, it should correspond to the tolerance ISO JS9 (KTR-Standard) with normal operating conditions or ISO P9 with heavy operating conditions (frequently alternating torsional direction, shock loads, etc.). Preferably the keyway should be positioned between the cams. For the axial fastening of the set screw the tapping should be made on the keyway.

The transmissible torque of the shaft/hub connection must be checked by the orderer, and he is responsible for the same.

4.3 Assembly of the Coupling



ATTENTION!

We recommend to check bores, shaft, keyway and feather key for dimensional accuracy before assembly.

Heating the hubs, flange hubs or coupling flanges slightly (approx. 80 °C) allows for an easier installation onto the shaft.



DANGER!

Touching the heated hubs causes burns.
We would recommend to wear safety gloves.



CAUTION!

During the assembly please make sure that the s or L dimension (see table 1, 2, 5 and 6) is observed, so that the hubs do not contact each other during operation. Disregarding this hint may cause damage on the coupling.



ATTENTION!

Setscrews for fixing of hubs as well as all screw connections have to be locked additionally against self-loosening, e. g. glueing with Loctite (medium-tight).

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4 Assembly

4.3 Assembly of the Coupling

- Please plug the flange hub (component 3D) and the cam ring (component 4D) of the types ADR together (see illustration 17).
- Screw the parts hand-tight for the time being. Afterwards tighten the screws at the tightening torque T_A mentioned in table 1 or 5.
- Mount the FN hub or the driving and coupling flange to the brake drum/disk (see illustration 18 and 19).
- Screw the parts hand-tight for the time being. Afterwards tighten the screws at the tightening torque T_A mentioned in table 1, 2, 5 or 6.

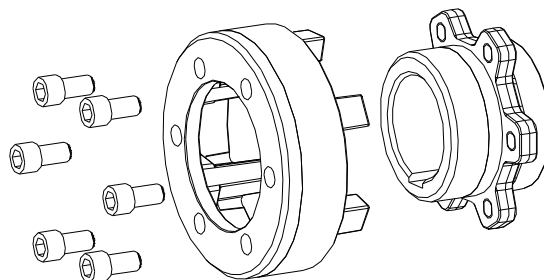


Illustration 17: assembly of the ADR hub

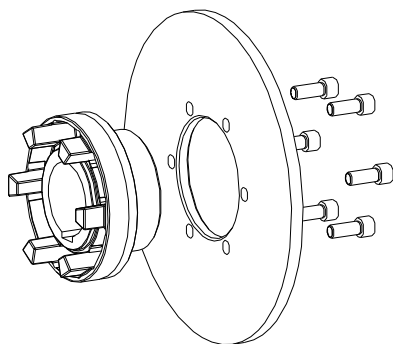


Illustration 18: assembly of the Brake disk (types SBA and BTA)

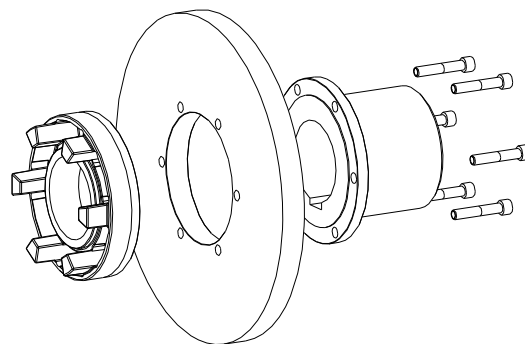


Illustration 19: assembly of the Brake disk (types SB and BT)

- Mount the standard hub or flange hub and FN hub or coupling flange with the brake drum/disk on the shaft of the driving and driven side. The FN hub or coupling flange has to be installed on the shaft end on which the bigger mass moment of inertia becomes effective (see illustration 20). The maximum braking torque must not exceed the maximum torque ($T_{K\max.}$) of the coupling.
- Lock the standard hub or flange hub and FN hub or coupling flange by tightening the setscrews DIN EN ISO 4029 by means of a cup point (dimension G; for tightening torque see table 8) or by means of an end plate.

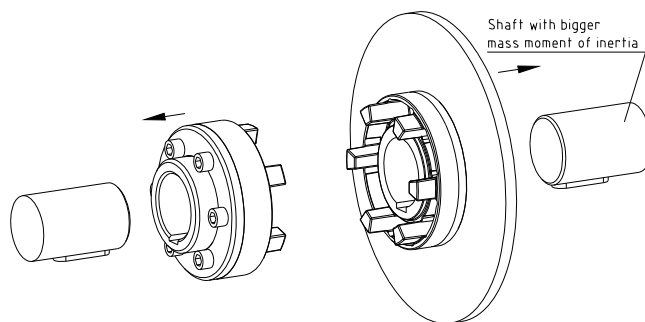


Illustration 20

Table 8: setscrews DIN EN ISO 4029

Size	38	42	48	55	60	65	75	85	90	100	110	125	140	160	180
G	M8	M8	M8	M8	M8	M10	M10	M10	M12	M12	M16	M16	M20	M20	M20
T_A [Nm]	10	10	10	10	10	17	17	17	40	40	80	80	140	140	140



4 Assembly

4.3 Assembly of the Coupling

- Insert the elastomer ring or double-tooth elastomers in the cam area of the standard hub or flange hub (see illustration 21).



CAUTION!

For the easier assembly of the elastomer ring, if the power packs have already been assembled, we would recommend to separate the elastomer ring up to size 65 at one position between the dampers (see illustration 22).

From size 75 on we would recommend to separate the elastomer ring between every second damper for an easier assembly (see illustration 23).

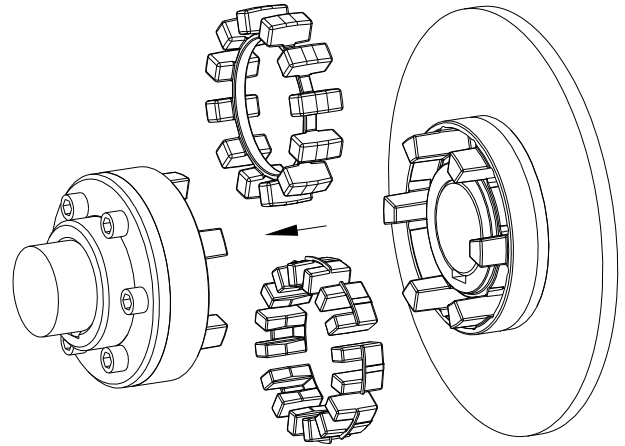


Illustration 21

- Move the power packs in axial direction until the dimension s is achieved.
- If the power packs are already firmly assembled, axial movement of the standard hub or flange hub and FN hub or coupling flange on the shafts allows for adjusting the dimension s.

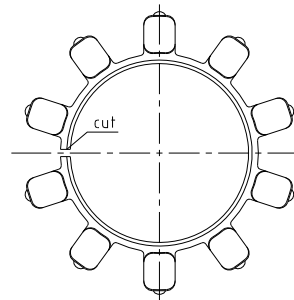


Illustration 22: assembly help of the elastomer ring up to size 65

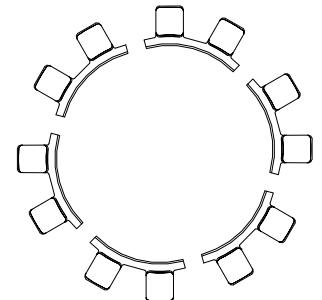


Illustration 23: assembly help of the elastomer ring from size 75 on



CAUTION!

After start-up of the coupling the tightening torque of the screws and the amount of wear of the elastomer ring or double-tooth elastomers has to be inspected in regular intervals and replaced, if necessary.

4.4 Displacements - Alignment of the Couplings

The **POLY-NORM®** compensates for displacements produced by the shafts to be combined as shown in table 9. Excessive misalignment may be caused by inaccurate alignment, production tolerances, thermal expansion, shaft deflection, twisting of machine frames, etc.



CAUTION!

In order to ensure a long service life of the coupling, the shaft ends need to be accurately aligned. Please absolutely observe the displacement figures indicated (see table 9). If the figures are exceeded, the coupling is damaged.

The more accurately the coupling is aligned, the higher is its durability.

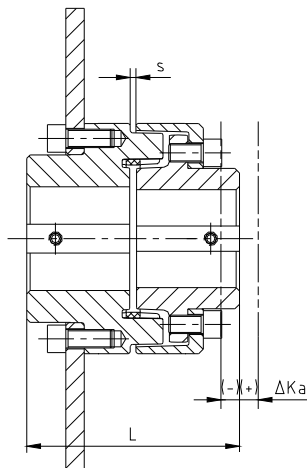


4 Assembly

4.4 Displacements - Alignment of the Couplings

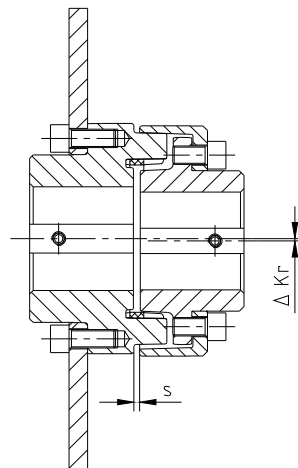
Please note:

- The displacement values mentioned in table 9 are maximum values which may not occur at the same time. If the radial and the angular displacement occur at the same time, the sum of the displacements may not exceed ΔK_r or ΔK_w .
- Please check with a dial gauge, ruler or feeler whether the permissible displacement figures of table 9 can be observed.

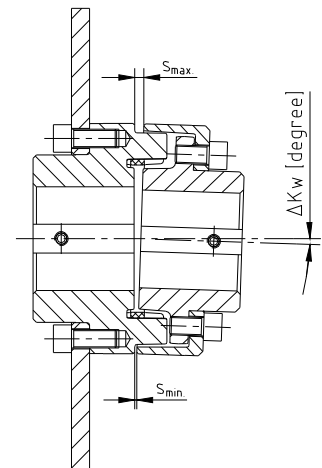


Axial displacements

$$L_{perm.} = L + \Delta K_a \text{ [mm]}$$



Radial displacements



Angular displacements

$$\Delta K_w = s_{max.} - s_{min.} \text{ [mm]}$$

Illustration 24: displacements

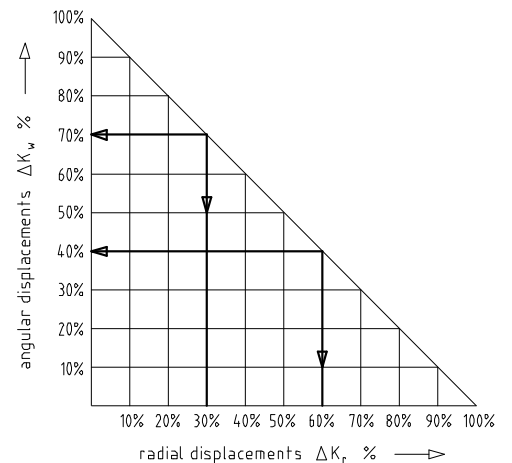
Example for the misalignment combinations given in picture 25:

Example 1:
 $\Delta K_r = 30\%$
 $\Delta K_w = 70\%$

Example 2:
 $\Delta K_r = 60\%$
 $\Delta K_w = 40\%$

$$\Delta K_{total} = \Delta K_r + \Delta K_w \leq 100 \%$$

Illustration 25:
combinations of displacement





4 Assembly

4.4 Displacements - Alignment of the Couplings

Table 9: displacement figures

Size	38	42	48	55	60	65	75	85
Max. axial displacement ΔK_a [mm]	±1	±1	±1,5	±1,5	±1,5	±1,5	±1,5	±1,5
Max. radial displacement with n = 1500 rpm ΔK_r [mm]	0,25	0,25	0,3	0,3	0,3	0,35	0,4	0,4
Max. radial displacement with n = 3000 rpm ΔK_r [mm]	0,18	0,18	0,22	0,22	0,22	0,26	0,3	0,3
Max. angular displacement (1°) with n = 1500 rpm ΔK_w [mm]	1,5	1,7	1,8	2,0	2,2	2,4	2,7	3,0
Max. angular displacement (0,5°) with n = 3000 rpm ΔK_w [mm]	0,7	0,8	0,9	1,0	1,1	1,2	1,3	1,5

Size	90	100	110	125	140	160	180	
Max. axial displacement ΔK_a [mm]	±1,5	±3	±3	±3	±3	±3	±3	
Max. radial displacement with n = 1500 rpm ΔK_r [mm]	0,5	0,5	0,6	0,6	0,6	0,65	0,65	
Max. radial displacement with n = 3000 rpm ΔK_r [mm]	0,33	0,37	0,42	0,48	0,45	0,49	0,49	
Max. angular displacement (1°) with n = 1500 rpm ΔK_w [mm]	3,4	3,9	4,3	4,8	5,5	6,1	6,0	
Max. angular displacement (0,5°) with n = 3000 rpm ΔK_w [mm]	1,7	1,9	2,1	2,4	2,7	3,0	3,0	

4.5 Spares Inventory, Customer Service Addresses

A basic requirement to guarantee the operational readiness of the coupling is a stock of the most important spare parts on site.

Contact addresses of the KTR partners for spare parts and orders can be obtained from the KTR homepage under www.ktr.com.



ATTENTION!

KTR does not assume any liabilities or guarantees regarding the use of spare parts and accessories which are not provided by KTR and for the damages resulting herefrom.

5 Remark for the use in explosive areas according to directive 94/9/EG (ATEX 95)

Before you provide for the **POLY-NORM®** coupling with attachments according to directive 94/9/EG for the applications, please contact KTR Kupplungstechnik. In addition to applications the assembly instructions according to KTR-N 49510 need to be considered.

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