

Coupling
Flexible rotary
Type KD

AB-E 33-22
 2001-08-27

Replaces: Issue 2000-01-27

1 Description

Flexible rotary coupling are used to compensate for radial, angular and axial misalignment of the shafts which are to be coupled.

Operating temperature: -40 °C to +90 °C.

The KD drive couplings are designed for use with AC motors. For drives subject to rotary oscillations caused, for example, by pressure change velocities > 4000 bar/s, e.g. in the press industry or with diesel engine drives, please consult us.

At temperatures below -30 °C, the coupling must not be subjected to the maximum torque loading's until the elasticity module of the gear ring has been reduced by internal warming.



2 Material

Coupling halves:	Grey cast iron
Clampable coupling halves:	Steel
Standard gear ring:	92 Shore A (colour: yellow or white)

3 Compatibility

Resistance to Ozone, mineral oil HLP to DIN 51 524, triglyzeride (rape seed oil) HETG, synthetic ester HEES to VDMA 24 568.

Not resistant to Continuous contact with water and HFA, HFC, phosphate ester HFD-R, organic ester HFD-U to VDMA 24 317 and polyglycole HEPG to VDMA 24 568

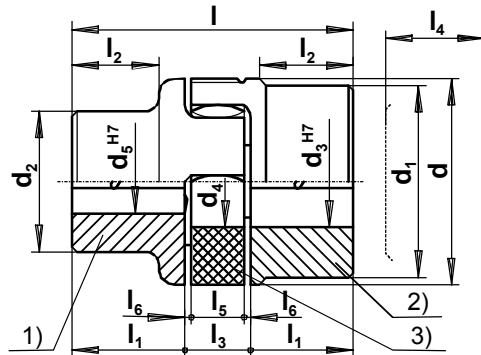
4 Torque/angle of torque for standard gear rings, 92 Shore A

Table 1

Coupling KD	Nom. torque coupling Nm	Coupling KD	Nom. torque coupling Nm
19	10	55	410
24	35	65	625
28	95	75	975
38	190	90	2400
42	265	100	3300
48	310	110	4000

Angle of torque at nominal torque 3.2°
 For the values for special gear rings see page 12.

5 Dimensions



- 1) Small coupling half
- 2) Large coupling half
- 3) Flexible gear ring

Table 2

Type	Small coupling half d ₅ 4)		Large coupling half d ₃ 4)		Dimensions												8) Weight Kg.	
	Pilot bore	Finished bore		Pilot bore	Finished bore		d	d ₁	d ₂	d ₄	5) l	7) l ₁	l ₂	5) l ₃	6) l ₄	l ₅		l ₆
		min.	max.		min.	max.												
19		6	19		6	24	40	40	40	18	66	25/37		16	13	12	2	0,328
24		8	24	6	8	28	55	48	40	27	78	30	24	18	15	14	2	0,660
28		10	28	8	10	38	65	65	48	30	90	35	28	20	16	15	2,5	1,160
38	10	12	38	36	38	45	80	77	66	38	114	45	37	24	19	18	3	2,270
42	12	14	42	40	42	55	95	94	75	46	126	50	40	26	21	20	3	2,570
48	13	15	48	46	48	60	105	102	85	51	140	56	45	28	22	21	3,5	4,800
55	18	20	55	52	55	70	120	120	98	60	160	65	52	30	23	22	4	7,370
65	20	22	65	63	65	75	135	135	115	68	185	75	61	35	27	26	4,5	10,890
75	28	30	75	73	75	90	160	160	135	80	210	85	69	40	31	30	5	17,730
90	38	40	90	85	90	100	200	180	160	100	245	100	81	45	35	34	5,5	29,600
100	48	50	100	95	100	110	225	200	180	113	270	110	89	50	39	38	6	41,000
110	58	60	110	105	110	125	255	230	200	127	295	120	96	55	43	42	6,5	58,600

- 4) Finished bore to ISO fit H7.
Key way to DIN 6885 sheet 1; fit JS9.
- 5) In order to prevent end loading in the gear ring, with an axial displacement, the dimensions "l" or "l₃" should be taken as minimum length. The values for axial movement (see installation instructions) should be added to dimension "l".
- 6) "l₄" is the minimum dimension that a component must be moved back to enable a pump or motor to be vertically removed.
- 7) Coupling half length 37 mm for coupling half AB-E 33-22/KD 19-19x37 Material No. 011322;
- 8) The weights stated are for couplings with their maximum finished bores, without key way.

6 Couplings with a cylindrical or conical pump coupling half

6.1 Type code

Example: **Kupplung** **AB33-22 / KD 24 - B17 x 38 / 19**

AB standard							
Flexible rotary coupling							
Desig. of the gear ring dep. on the power to be transmitted							
Pump coupling half							
Conical Ø 16,85						= B17	
Conical Ø 19,85						= C20	
Cylindrical, e. g. Ø 12						= 12	
Length mm (only for coupling halves with special lengths)							
Motor side coupling half							
Gear ring							
92 Sh A							= No design.
95/98 Sh A							= 98SHA
64 Sh D-F							= 64SHD-F

6.2 Selection table for standard gear rings 92° Sh A

Table 3

Pump type			Nominal size									
G2 Series 40 shaft A						3-38						
G3 Series 30 shaft A						3-38						
G2 Series 40 shaft C					4-22							20-38
G3 Series 30 shaft C												
PGH						6-8					11-16	
PGF			1,5-4,1								6,3-22	
V7											10	
R4				mini								
A2FO			5								10/12	
A10VSO						10/18			10/18			
Electric motor			Shaft diameter									
Frame size	Power in kW at		Shaft dia.	12	14	17 cone 1:5	18	19	19,05	20	20 cone 1:5	
	n=1500 U/min	n=1000 U/min		Designation: Kupplung AB33-22/KD Mat. no.								
71	0,25 0,37	0,25	14	19-12/14 028647	19-14/14 028649	24-B17/14 028648	19-18/14 030776	19-19/14	19-A/14	19-20/14		
80	0,55 0,75	0,37 0,55	19	19-12/ 19x37 028639	19-14/ 19x37 541504	24- B17x38/19 323103	19-18/ 19x37 321062	19-19/ 19x37 321063	19-A/19	19-20/ 19x37 326051		
90	1,1 1,5	0,75 1,5	24	19-12/24 028640	19-14/24 541505	24-B17/24 323104	19-18/24 321064	19-19/24 321065	19-A/24	19-20/24 325768	28-C20/24 987533	
100 112	2,2 3 4	1,5 2,2	28	24-12/28 050057	24-14/28 864046	24- B17/28x50 070694	24-18/28 321070	24-19/28 321071	24-A/28	24-20/28 325769	28- C20/28x60	
132	5,5 7,5	3 4 5,5	38			28- B17/38x60 070696	28-18/38 321076	28-19/38 321077	28-A/38	28-20/38 541507	28- C20/38x60	
160	11 15	7,5 11	42			38- B17x45/42 070318	38-18/42 321082	38-19/42 321083		38-20/42 028660	38- C20x55/42 991350	
180	18,5 22	15	48			42- B17x50/48 323606	42-18/48 028650	42-19/48		42-20/48 028661	42- C20x50/48	
200	30	18,5 22	55							42-20/55	42- C20x50/55 241064	

When selecting a coupling, the maximum and minimum finished bore sizes, see point 5, should be taken into account.

Mat. No. (bold, cursive) = Preferred types

Table 4

Pump type			Nominal size									
PGF			28	45	20-40	23-56	40-63	56-80	71	28	32	35
PGH					20-100							
PVV1/PVV2					8-250							
PVV4/PVV5					100-280							
V7					16-25							
R4					1,60-20							
A2FO					10-28							
A4VSO, A4FSO, A4VSG					40							
A10VSO					45							
Electric motor					Shaft diameter							
Frame size	Power in kW at		Shaft Dia.	22	22, 23	25	28	30	31, 75	32	35	
	n=1500 U/min	n=1000 U/min		Designation: Kupplung AB33-22/KD Mat. no.								
80	0,55 0,75	0,37 0,55	19		24- G (22,23)/19 215173	24- 25/19 321066	24- 28/19 321067					
90	1,1 1,5	0,75 1,5	24	24- 22/24 079253	24- G (22,23)/24 214084	24- 25/24 321068	24- 28/24 321069	28- 30/24		28- 32/24 020917	28- 35/24	
100 112	2,2 3 4	1,5 2,2	28	24- 22/28 541506	24- G (22,23)/28 214351	24- 25/28 321072	24- 28/28 321073	28- 30/28	28- K (31,75)/28 215174	28- 32/28 321074	28- 35/28	
132	5,5 7,5	3 4 5,5	38	28- 22/38 323108	28- G (22,23)/38 214352	28- 25/38 321078	28- 28/38 321079	28- 30/38 541481	28- K (31,75)/38	28- 32/38 321080	28- 35/38	28- 541482
160	11 15	7,5 11	42	38- 22/42 323109	38- G (22,23)/42	38- 25/42 321084	38- 28/42 321085	38- 30/42 541483	38- K (31,75)/42 214347	38- 32/42 321086	38- 35/42 541492	
180	18,5 22	15	48	42- 22/48 323110	42- G (22,23)/48 214354	42- 25/48 321088	42- 28/48 079246	42- 30/48 541493	42- K (31,75)/48 214346	42- 32/48 321089	42- 35/48	42- 541494
200	30	18,5 22	55	42- 22/55 323111	42- G (22,23)/55 214355	42- 25/55 321091	42- 28/55	42- 30/55 541495	42- K (31,75)/55 214338	42- 32/55 321092	42- 35/55	42- 541516
225	37 45	30	60	48- 22/60 053993	48- G (22,23)/60 214356	48- 25/60 028652	48- 28/60	48- 30/60 541517	48- K (31,75)/60 214343	48- 32/60 028651	48- 35/60	48- 541518
250	55	37	65	55- 22/65 032299	55- G (22,23)/65	55- 25/65 028675	55- 28/65 028664	55- 30/65 028668	55- K (31,75)/65 214344	55- 32/65 028662	55- 35/65	55- 541519
280	75 90	45 55	75			65- 25/75 214535		65- 30/75	65- K (31,75)/75 214345	65- 32/75 026163	65- 35/75	65- 026164

When selecting a coupling, the maximum and minimum finished bore sizes, see point 5, should be taken into account.

Mat. No. (bold, cursive) = Preferred types

Table 5

Pump type			Nominal size														
PGH				63-250													
V7				100													
A10VSO				100										140			
A2FO				80-107										107-160		160/180/250	
A4VSO, A4FSO, A4VSG			71				125/180		250		355		500		750		
Electric motor			Shaft Dia.	Shaft diameter													
Frame size	Power in kW at			38	40	45	50	60	70	80	90						
		n=1500 U/min	n=1000 U/min	Designation: Kupplung AB33-22/KD													
			Mat. no.														
100/112	2,2 3 4	1,5 2,2	28	28-38/28 321075	38-40/28 022441	38-45/28 077846	42-50/28										
132	5,5 7,5	3 4 5,5	38	28-38/38 321081	38-40/38 541500	38-45/38	42-50/38 031269										
160	11 15	7,5 11	42	38-38/42 321087	38-40/42 541501	38-45/42 541502	42-50/42 031314										
180	18,5 22	15	48	42-38/48 321090	42-40/48 541503	42-45/48 541496	42-50/48 541497										
200	30	18,5 22	55	42-38/55 321093	42-40/55 541498	42-45/55 541499	42-50/55 541508										
225	37 45	30	60	48-38/60 028655	48-40/60 541509	48-45/60 541510	48-50/60 541511	48-60/60 541512									
250	55	37	65	55-38/65 028666	55-40/65 541513	55-45/65 541514	55-50/65 541515	55-60/65 541525									
280	75 90	45 55	75	65-38/75 057499	65-40/75 026165	65-45/75 026166	65-50/75 026167	65-60/75 026168	65-70/75 026169	75-80/75 026170							
315S	110	75	80		75-40/80 028663	75-45/80 541523	75-50/80 541540	75-60/80 541541	75-70/80 541542	75-80/80 541543	75-90/80 541544						
315M	132	90			90-40/80 028665	90-45/80 203270	90-50/80 541545	90-60/80 541546	90-70/80 541547	90-80/80 541536	90-90/80 541537						
1) 315L	160 200	110 132 160			90-40/85	90-45/85	90-50/85 034042	90-60/85 061472	90-70/85 029287	90-80/85 081944	90-90/85 081938						
1) 315	250 315	200	85			100-50/85	100-60/85 081942	100-70/85 081939	100-80/85 081945	100-90/85 081943							
1) 355	355 400		95				100-50/95	100-60/95 028671	100-70/95 541535	100-80/95 541528	100-90/95 541529						
	500	315					110-50/95	110-60/95	110-70/95	110-80/95 084629	110-90/95 084628						

1) The couplings shown in table 5 are laid out for Siemens Motors.

For motors from other manufacturers the shaft diameters should be checked.

When selecting a coupling, the maximum and minimum finished bore sizes, see point 5, should be taken into account.

Mat No. (bold, cursive) = Preferred types

7 Couplings with a splined clampable pump coupling half

7.1 Type code

Example: Kupplung **AB33-22 / KD 38 - KN 25 x 1,25 x 30 x 18 / 42**

AB standard

Flexible rotary coupling

Desig. of the gear ring dep. on the power to be transmitted

Bore of the pump clampable half (with splines to DIN 5480)

Motor side coupling half bore

Gear ring

92 Sh A

95/98 Sh A

64 Sh D-F

= no. design.

= 98SHA

= 64SHD-F

7.2 Selection table for a standard gear ring 92 Sh A

Table 6

Pump type			Nominal size					
A4VG shaft Z			28 1)	40/56 1)		71/90 1)	125 1)	180 1)
A4VSO shaft Z					40		71	125/180
A2FO Br.61 shaft A			10 - 16	23 - 32	45	56/63	80/90	160 - 250 3)
Electric motor		Shaft Dia.	Shaft diameter					
Frame size	Power in kW at n=1500 U/min n=1000 U/min		25	30	32	35	40	50
			Designation: Kupplung AB33-22/ Mat. no.					
132	5,5 7,5	3 4 5,5	38	KD28-KN25x 1,25x30x18/38				
160	11 15	7,5 11	42	KD38-KN25x 1,25x30x18/42 026044	KD38-KN30x 2,00x30x14/42 026045		KD38-KN35x 2,00x30x16/42 079249	
180	18,5 22	15	48	KD42-KN25x 1,25x30x18/48 026046	KD42-KN30x 2,00x30x14/48 026047	KD42-KN32x 2,00x30x14/48	KD42-KN35x 2,00x30x16/48 026048	
200	30	18,5 22	55	KD42-KN25x 1,25x30x18/55 026049	KD42-KN30x 2,00x30x14/55 026050	KD42-KN32x 2,00x30x14/55	KD42-KN35x 2,00x30x16/55 026051	
225	37 45	30	60	KD48-KN25x 1,25x30x18/60 073794	KD48-KN30x 2,00x30x14/60 026052	KD48-KN32x 2,00x30x14/60	KD48-KN35x 2,00x30x16/60 026053	KD48-KN40x 2,00x30x18/60 026054
250	55	37	65		KD55-KN30x 2,00x30x14/65 026056	KD55-KN32x 2,00x30x14/65	KD55-KN35x 2,00x30x16/65 026057	KD55-KN40x 2,00x30x18/65 026058
280	75 90	45 55	75		KD65-KN30x 2,00x30x14/75 026060	KD65-KN32x 2,00x30x14/75	KD65-KN35x 2,00x30x16/75 026061	KD65-KN40x 2,00x30x18/75 026062
315S	110	75	80			KD75-KN32x 2,00x30x14/80	KD75-KN35x 2,00x30x16/80 026064	KD75-KN40x 2,00x30x18/80 026065
315M	132	90						
2) 315L	160 200	110 132 160	85					KD90-KN50x 2,00x30x24/80 026068
2) 315	250 315	200						

- 1) The couplings are laid out for drive shaft type Z (standard for single pumps).
For combination pumps the drives shafts as detailed in RE 92003 must be taken into account.
- 2) The couplings shown in table 6 are laid out for Siemens Motors.
For motors from other manufacturers the shaft diameters should be checked.
- 3) Shaft type Z at A2FO 250

Table 7

Pump type			Nominal size						
A4VG shaft Z			250						
A4VSO shaft Z				250	355	500	750	1000	
A2FO Br.61 shaft Z				355	500		710/1000		
Electric motor			Shaft Dia.	Shaft diameter					
Frame size	Power in kW at			55	60	70	80	90	100
		n=1500 U/min	n=1000 U/min	Designation: Kupplung AB33-22/ Mat. no.					
225	37 45	30	60						
250	55	37	65						
280	75 90	45 55	75	KD65-KN55x 2,00x30x26/75 075429	KD65-KN60x 2,00x30x28/75 714636				
315S	110	75	80	KD75-KN55x 2,00x30x26/80 026067	KD75-KN60x 2,00x30x28/80	KD75-KN70x 3,00x30x22/80			
315M	132	90							
1) 315L	160 200	110 132 160			KD90-KN55x 2,00x30x26/80 026069	KD90-KN60x 2,00x30x28/80	KD90-KN70x 3,00x30x22/80	KD90-KN80x 3,00x30x25/80	
1) 315	250 315	200	85			KD90-KN70x 3,00x30x22/85	KD90-KN80x 3,00x30x25/85	KD90-KN90x 3,00x30x28/85	KD90-KN100x 3,00x30x32/85
		250					KD100-KN80x 3,00x30x25/85	KD100-KN90x 3,00x30x28/85	KD100-KN100x 3,00x30x32/85

- 1) The couplings shown in table 7 are laid out for Siemens Motors.
For motors from other manufacturers the shaft diameters should be checked.

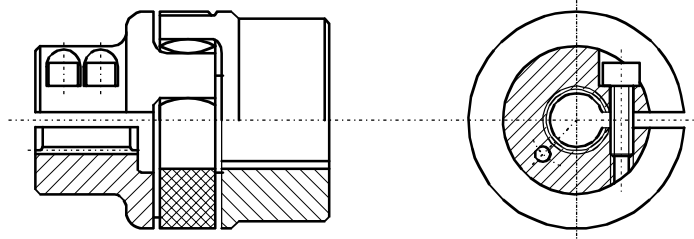


Table 8

Coupling	S.C.H.S. 10.9 DIN 912		
	Dim.	Qty.	Tight. torque (Nm)
KD 28	M 6x20	1	11
KD 38	M 8x25		25
KD 42	M10x30		49
KD 48	M10x25	2	69
KD 55	M10x30		120
KD 65	M12x40		295
KD 75	M16x45		580
KD 90	M20x50		

8 Couplings with an SAE splined pump coupling half

8.1 Type code

Example	Kupplung	AB33-22	/	KD	38	-	KN SAE 5/8-9	/	42
AB standard									
Flexible rotary coupling									
Desig. of the gear ring dep. on the power to be transmitted									
Bore of the pump clampable coupling half (with splines to SAE / no. of teeth)									
Motor side coupling half bore									
Gear ring									
92 Sh A									= no. design.
95/98 Sh A									= 98SHA
64 Sh D-F									= 64SHD-F

8.2 Selection table for standard gear rings 92° Sh A

Table 9

Pump type			Nominal size								
G2 series 40 shaft R			04-22								
G3 series 30 shaft D				20-45							
PGF shaft J			06-22	20-50							
PVV shaft J				BG1-2			BG4-5				
PGH shaft R			06-16			20-100		63-250			
A4VG shaft S						28 1)	40/56/71 1)		90/125/180 1)	180	
A10VSO shaft S				28	10/18	45	71	100	140		
Electric motor			SAE shaft and no. of teeth								
Frame size	Power in kW at		Shaft dia-meter	Designation: Kupplung AB 33-22/KD							
	n=1500 U/min	n=1000 U/min		5/8-9	7/8-13	3/4-11	1-15	1 1/4-14	1 1/2- 17	1 3/4-13	2 1/4-17
				Mat. no.							
100 112	2,2 3 4	1,5 2,2	28	24-KN SAE 5/8- 9/28 994487	24-KN SAE 7/8- 13/28 205152		24-KN SAE 1- 15/28 231351				
132	5,5 7,5	3 4 5,5	38	28-KN SAE 5/8- 9/38	28-KN SAE 7/8- 13/38	28-KN SAE 3/4- 11/38x60 704699	28-KN SAE 1- 15/38				
160	11 15	7,5 11	42	38-KN SAE 5/8- 9/42	38-KN SAE 7/8- 13/42 991864	38-KN SAE 3/4- 11/42 726977	38-KN SAE 1- 15/42 994283	38-KN SAE 1 1/4- 14/42 228413			
180	18,5 22	15	48		42-KN SAE 7/8- 13/48 032918	42-KN SAE 3/4- 11/48	42-KN SAE 1- 15/48 062159	42-KN SAE 1 1/4- 14/48	42-KN SAE 1 1/2- 17/48	42-KN SAE 1 3/4- 13/48	
200	30	18,5 22	55		42-KN SAE 7/8- 13/55	42-KN SAE 3/4- 11/55	42-KN SAE 1- 15/55	42-KN SAE 1 1/4- 14/55 993808	42-KN SAE 1 1/2- 17/55	42-KN SAE 1 3/4- 13/55 988158	42-KN SAE 2 1/4- 17/55
225	37 45	30	60		48-KN SAE 7/8- 13/60		48-KN SAE 1- 15/60	48-KN SAE 1 1/4- 14/60 228375	48-KN SAE 1 1/2- 17/60	48-KN SAE 1 3/4- 13/60 988121	48-KN SAE 2 1/4- 17/60
250	55	37	65				55-KN SAE 1- 15/65	55-KN SAE 1 1/4- 14/65 986404	55-KN SAE 1 1/2- 17/65	55-KN SAE 1 3/4- 13/65 708084	55-KN SAE 2 1/4- 17/65
280	75 90	45 55	75					65-KN SAE 1 1/4- 14/75	65-KN SAE 1 1/2- 14/75	65-KN SAE 1 3/4- 13/75	65-KN SAE 2 1/4- 17/75

Pump type			Nominal size								
G2 series 40	shaft R	04-22									
G3 series 30	shaft D		20-45								
PGF	shaft J	06-22	20-50								
PVV	shaft J		BG1-2			BG4-5					
PGH	shaft R	06-16			20-100		63-250				
A4VG	shaft S				28 1)	40/56/71 1)		90/125/180 1)	180		
A10VSO		10/18		10/18							
Electric motor			SAE shaft and no. of teeth								
Frame size	Power in kW at		Shaft Dia.	5/8-9	7/8-13	3/4-11	1-15	1 1/4-14	1 1/2 - 17	1 3/4-13	2 1/4-17
	n=1500 U/min	n=1000 U/min		Designation: Kupplung AB 33-22/KD Mat. no.							
315S	110	75	80						75-KN SAE 1 1/2- 14/80	75-KN SAE 1 3/4- 13/80	75-KN SAE 2 1/4- 17/80
315M	132	90									
2) 315L	160 200	110 132 160								90-KN SAE 1 3/4- 13/80	90-KN SAE 2 1/4- 17/80

- 1) The couplings are laid out for drive shaft type S (standard for single pumps).
For combination pumps the drive shafts as detailed in RE 92003 must be taken into account.
- 2) The couplings shown in table 9 are laid out for Siemens Motors.
For motors from other manufacturers the shaft diameters should be checked.

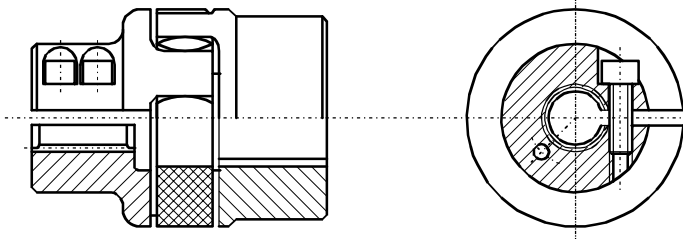
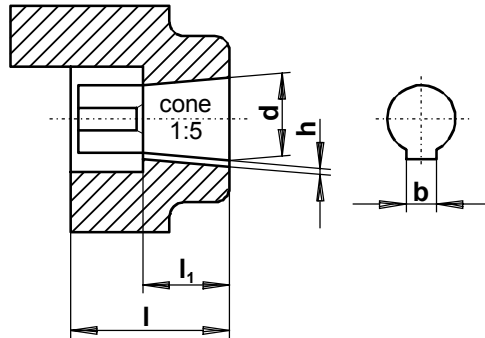


Table 10

Coupling	S.C.H.S. 10.9 DIN 912		
	Dim.	Qty.	Tight. torque (Nm)
KD 24	M 5x16	1	6
KD 28	M 6x20		11
KD 38	M 8x25		25
KD 42	M10x30		49
KD 48	M10x25		69
KD 55	M10x30	2	120
KD 65	M12x40		295
KD 75	M16x45		580
KD 90	M20x50		

9 Conical coupling halves

9.1 Conical coupling half



9.2 Dimensions

Table 11

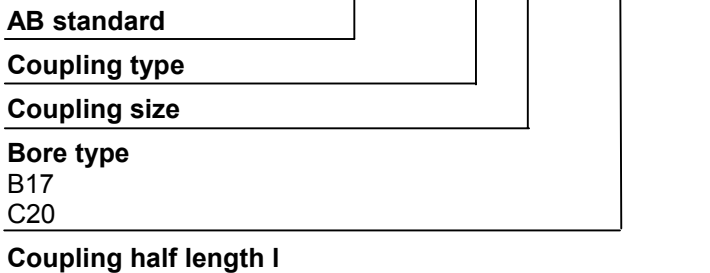
Conical bore B17						
Designation: Nabe AB33-22/	Mat. no.	Dimensions				
		b JS9	d ^{+0,05}	h ^{+0,1}	l	l ₁
KD 24-B17	014477	3	16,85	1,8	18,5	18,5
KD 24-B17x38	014476				38	
KD 28-B17x35	014478				35	
KD 38-B17x55	014479				55	
KD 42-B17x50	014723				50	
KD 48-B17					18,5	
KD 55-B17					18,5	

Table 12

Conical bore C20						
Designation: Nabe AB33-22/	Mat. no.	Dimensions				
		b JS9	d ^{+0,05}	h ^{+0,1}	l	l ₁
KD 28-C20		4	19,85	2,2	21,5	21,5
KD 38-C20x55	033927				55	
KD 42-C20x50	029128				50	
KD 48-C20	078546				21,5	
KD 55-C20					21,5	

9.3 Type code

Example: Nabe AB33-22 / KD 28 - C20 x 35



9.4 Ordering example/match code

Coupling half 24 with a $\varnothing 18$ H7 bore and a keyway to DIN 6885 part 1 for a size 24 coupling:
Nabe AB33-22/KD24-18 Material No. **011324**

9.5 Coupling half short code for Nema motors

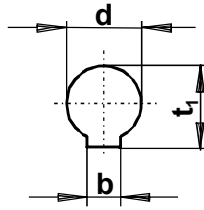


Table 13

Motor size	Dimensions				Motor coupling half short code	
	d (inch)	d (mm)	b ^{+0,05} (mm)	t ₁ ^{+0,10} (mm)		
143 T	0,875	22,225	4,763	24,7	Gd (22,225)	
145 T						
182 T	1,125	28,575	6,350	31,7	Sa (28,575)	
184 T						
213 T	1,375	34,925	7,938	38,7	Ma (34,925)	
215 T						
254 T	1,625	41,275	9,525	45,8	Nb (41,275)	
256 T						
284 TS						
284 T	1,875	47,625	12,700	53,5	Lu (47,625)	
286 TS	1,625	41,275	9,525	45,8	Nb (41,275)	
286 T	1,875	47,625	12,700	53,5	Lu (47,625)	
324 TS						
324 T	2,125	53,975		60,0	Pa (53,975)	
326 TS	1,875	47,625		53,5	Lu (47,625)	
326 T	2,125	53,975		60,0	Pa (53,975)	
364 TS	1,875	47,625		53,5	Lu (47,625)	
364 T	2,375	60,325		15,875	67,6	Ub (60,325)
365 TS	1,875	47,625		12,700	53,5	Lu (47,625)
365 T	2,375	60,325		15,875	67,6	Ub (60,325)
404 TS	2,125	53,975		12,700	60,0	Pa (53,975)
404 T	2,875	73,025	19,050	81,7	Wa (73,025)	
405 TS	2,125	53,975	12,700	60,0	Pa (53,975)	
405 T	2,875	73,025	19,050	81,7	Wa (73,025)	
444 TS	2,375	60,325	15,875	67,6	Ub (60,325)	
444 T	3,375	85,725	22,225	95,8	Wd (85,725)	
445 TS	2,375	60,375	15,875	67,6	Ub (60,375)	
445 T	3,375	85,725	22,225	95,8	Wd (85,725)	

10 Gear rings

10.1 Gear ring versions - materials, physical characteristics

Table 14

Gear ring designation hardness (Shore)	Identification colour	Material	Per. Temperature range (°C)		Typical areas of application
			Continuous temperature	max. temperature briefly	
92 Sh A	White or yellow	Polyurethane	-40 to + 90	-50 to +120	- All drive cases in the field of hydraulics Standard inserts, medium elasticity
95/98 Sh A	Red		-30 to + 90	-40 to +120	- high torque transmission with good damping
64 Sh D-F	Green or natural white with green tooth marking		-30 to +110	-30 to +130	- Combustion engines high humidity, Hydrolysis proof Displacing critical speeds

10.2 Type code

Example: **Zahnkranz AB33-22 / KD 28**

AB standard

Coupling type

Coupling size

Gear ring

92 Sh A = no. design.
 95/98 Sh A = 95/98SHA
 64 Sh D-F = 64SHD-F

10.3 Torque's/Angle of torque for special gear rings

Table 15

Coupling KD	Coupling nominal torque Nm		Coupling KD	Coupling nominal torque Nm	
	Gear ring			Gear ring	
	95/98 Sh A	64 Sh D-F		95/98 Sh A	64 Sh D-F
19	17	21	55	685	825
24	60	75	65	940	1175
28	160	200	75	1920	2400
38	325	405	90	3600	4500
42	450	560	100	4950	6185
48	525	655	110	7200	9000

10.4 Ordering example/match code

Polyurethane gear ring 92° Shore A for a coupling, e. g. 24-18/28:
Zahnkranz AB33-22/KD24 Material-No. **011316**

Table 16

Designation Zahnkranz	Material no.			Designation Zahnkranz	Material no.		
	92 Sh A	95/98 Sh A	64 ShD-F		92 Sh A	95/98 Sh A	64 ShD-F
AB33-22/KD 100	067082			AB33-22/KD 42	011319	087807	
AB33-22/KD 110	078611			AB33-22/KD 48	011320	087060	
AB33-22/KD 19	011315	219687		AB33-22/KD 55	028771	087087	
AB33-22/KD 24	011316	988877		AB33-22/KD 65	073466	991223	
AB33-22/KD 28	011317	217758	989530	AB33-22/KD 75	028069	211781	
AB33-22/KD 38	011318	057971		AB33-22/KD 90	028179	211780	

11 Reference to other standards

[AB-E 02-80.01](#) Coupling mounting
[AB-E 33-20](#) Coupling type KB