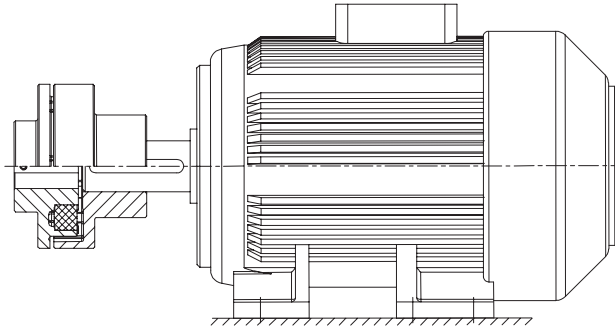


Selection of standard IEC motors



POLY-POLY couplings for standard IEC motors, protection IP 54/IP 55													
A. C. motor 50 Hz		Motor output n= 3000 rpm 2 poles		POLY coupling size	Motor output n= 1500 rpm 4 poles		POLY coupling size	Motor output n= 1000 rpm 6 poles		POLY coupling size	Motor output n= 750 rpm 8 poles		POLY coupling size
Size	Shaft end d x l [mm]		Output P [kW]		Torque T [Nm]	Output P [kW]		Torque T [Nm]	Output P [kW]		Torque T [Nm]	Output P [kW]	
	2 poles	4, 6, 8 poles											
56	9 x 20		0,09	0,32		0,06	0,43		0,037	0,43			
			0,12	0,41		0,09	0,64		0,045	0,52			
63	11 x 23		0,18	0,62	8	0,12	0,88	8	0,06	0,7	8		
			0,25	0,86		0,18	1,3		0,09	1,1			
71	14 x 30		0,37	1,3	8	0,25	1,8	8	0,18	2	8	0,09	1,4
			0,55	1,9		0,37	2,5		0,25	2,8		0,12	1,8
80	19 x 40		0,75	2,5	8	0,55	3,7	8	0,37	3,9	8	0,18	2,5
			1,1	3,7		0,75	5,1		0,55	5,8		0,25	3,5
90S	24 x 50		1,5	5	8	1,1	7,5	8	0,75	8	8	0,37	5,3
90L			2,2	7,4		1,5	10		1,1	12		0,55	7,9
100L	28 x 60		3	9,8	9	2,2	15	9	1,5	15	9	0,75	11
						3	20		1,5	15		1,1	16
112M			4	13	9	4	27	9	2,2	22	9	1,5	21
132S	38 x 80		5,5	18		5,5	36		3	30		2,2	30
			7,5	25	7,5	49	4	40	3	40	5,5	55	
132M													
160M	42 x 110		11	36	12	11	72	12	7,5	75	14	4	54
			15	49		15	98		11	109		5,5	74
160L			18,5	60	12	18,5	121	14	15	148	14	7,5	100
180M	48 x 110		22	71		22	144		15	148		11	145
180L													
200L	55 x 110		30	97	15	30	196	15	18,5	181	15	15	198
			37	120		30	196		22	215		15	198
225S	55 x 110	60 x 140			15	37	240	17			19	18,5	244
225M			45	145		45	292		30	293		22	290
250M	60 x 140	65 x 140	55	177	17	55	356	19	37	361	19	30	392
280S	75 x 140		75	241	19*	75	484	20	45	438	20	37	483
280M			90	289		90	581		55	535		45	587
315S	80 x 170		110	353	20*	110	707	22	75	727	22	55	712
315M			132	423		132	849		90	873		75	971
315L	85 x 170		160	513	20*	160	1030	25	110	1070	25	90	1170
			200	641		200	1290		132	1280		110	1420
315	85 x 170		250	802	22*	250	1600	28	160	1550	28	132	1710
			315	1010		315	2020		200	1930		160	2070
355	95 x 170		355	1140	30	355	2280	30	250	2410	30	200	2580
			400	1280		400	2570		315	3040		250	3220
400	110 x 210		500	1600	35	500	3210	35	400	3850	35	315	4060
			560	1790		560	3580		450	4330		355	4570
450	120 x 210		630	2020	40	630	4030	40	500	4810	40	400	5150
			710	2270		710	4540		560	5390		450	5790
450	120 x 210		800	2560	40	800	5120	40	630	6060	40	500	6420
			900	2880		900	5760						
			1000	3200		1000	6400						

The coupling selection is based on an ambient temperature up to + 30 °C. The coupling was selected for normal operation. The respective couplings have a minimum operating factor of $f_{min} = 1,35$. Drives with periodical torque courses must be selected according to DIN 740 part 2. If requested, KTR will perform the selection.

Torque T = rated torque according to Siemens catalogue M 11 · 1994/95..

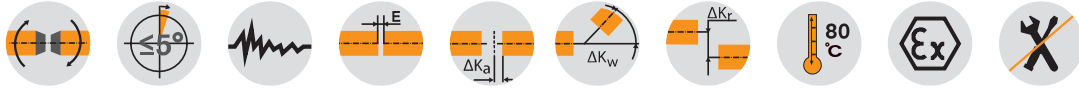
* Dynamic balancing is necessary.

POLY PKZ and PKD Flexible couplings

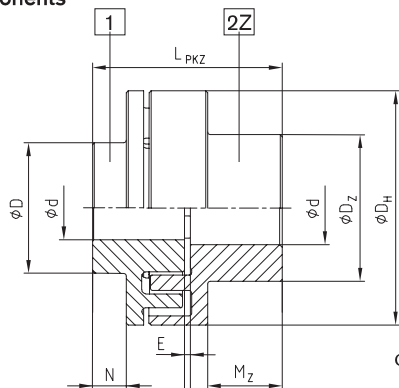
PKZ (two-part) and PKD (three-part)



For legend of pictogram please refer to flapper on the cover

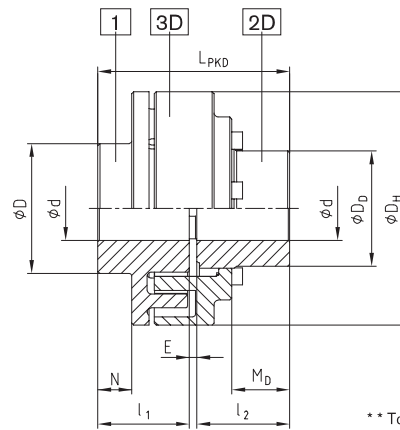


Components



Type PKZ (Z) – (Size 8 to 30)

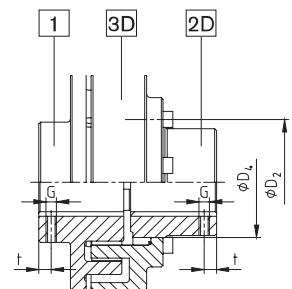
Components: Type PKZ (Z)
1 = Cam section * (GJL)
2Z = Pocket section * (GJL)
* To be used preferably on driving side



Type PKD (D) – (Size 15 to 35)

Components type PKD (D)
1 = Cam section * (GJL)
2D = Flange hub (steel)
3D = Cam ring (GJL)
** To be used preferably on driving side

POLY Type PKZ and PKD																					
Size	Rated torque-1) TKN	Max. speed 2) n [rpm]	Max. finish bore ϕd [mm]		Dimensions [mm]												Thread for setscrew			Weight 3) [kg]	
			Part 1	Part 2Z	Teil 2D	D _H	D	D _Z	D _D	l ₁ ; l ₂	M _Z	M _D	N	E	D ₂	D ₄ (H7/h7)	L _{PKZ} /L _{PKD}	G	t		T _A [Nm]
8 (Z)	42	5000	20	28	—	86	43	50	—	35	25	—	3	3	—	—	73	M5	18	2	1,7
9 (Z)	72	5000	28	38	—	97	55	65	—	41	30	—	7	3	—	—	85	M8	23	10	2,7
10 (Z)	100	5000	32	42	—	107	60	70	—	45	35	—	10	4	—	—	94	M8	27	10	3,5
12 (Z)	170	5000	38	48	—	131	70	80	—	55	43	—	12	4	—	—	114	M8	30	10	5,4
14 (Z)	210	4800	45	55	—	142	80	93	—	60	46	—	17	4	—	—	124	M8	10	10	7,6
15 (Z;D)	320	4300	50	60	50	157	90	100	74,5	65	52	33	21	4	90	75	134	M8	15	10	8,6
17 (Z;D)	400	3800	60	65	60	176	100	110	87	70	56	43,5	26	4	106	90	144	M8	15	10	12
19 (Z;D)	660	3500	75	75	70	195	125	125	106	75	64	48	27	4	126	107	154	M8	15	10	18
20 (Z;D)	820	3300	65	75	70	205	115	127	104	80	65	45	23	4	123	105	164	M8	15	10	20
22 (Z)	1100	3000	85	85	—	224	140	140	—	90	75	—	38	4	—	—	184	M10	20	17	25
25 (Z;D)	1600	2700	90	90	95	257	150	150	138	100	84	67	43	5	162	140	205	M12	20	40	35
28 (Z;D)	2500	2350	100	100	110	288	165	165	158	110	90	65	44	5	178	160	225	M12	20	40	53
30 (Z;D)	3950	2200	110	110	110	308	180	180	165	130	108	89	58	5	202	170	265	M16	20	80	66
35 (D)	6100	1850	130	—	145	373	210	—	209	160	—	102	70	5	240	210	325	M16	25	80	125



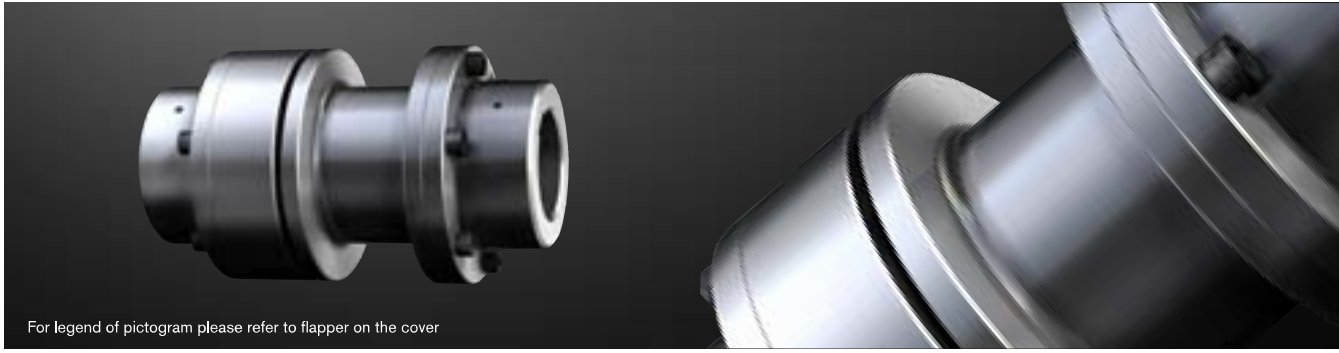
¹⁾ Maximum torque $T_{Kmax} = T_{KN} \times 2$; standard material of elastomer: Perbunan (NBR) 92 Shore-A; standard material of hub: GJL
²⁾ Speeds for $v = 30$ m/sec. For circumferential speeds exceeding $V = 30$ m/s, dyn. we recommend dynamic balancing
³⁾ Referring to average bore

Ordering example:	POLY	PKD	28	$d_1 \phi 90$	$d_2 \phi 80$
	Coupling type	Type	Size	Finish bore part 1	Finish bore part 2

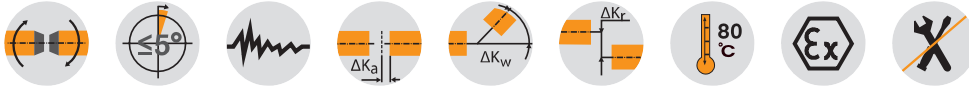
POLY PKA

Flexible couplings

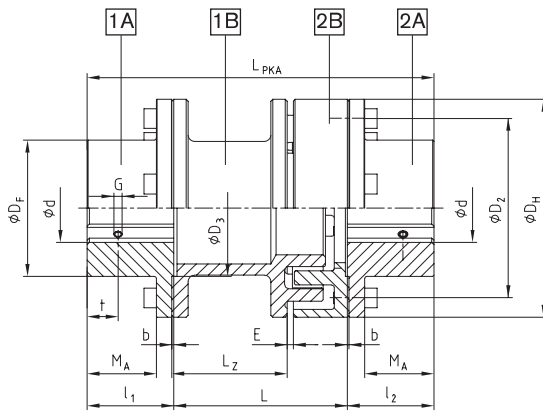
Drop-out center design coupling



For legend of pictogram please refer to flapper on the cover



Components



Components: Type PKA
 1.A/2A = Coupling flange (steel)
 1.B = Spacer (GJL)
 2B = Driving flange (GJL)
 1.A and 1.B to be preferably used drive-sided

POLY Type PKA

Size	Rated torque T_{KN} [Nm]	Max. speed n [rpm]	Max. finish bore d [mm] part 1A/2A	Dimensions [mm]											Thread for setscrew			Weight [kg]
				D_H	D_F	D_2	D_3	l_1, l_2	b	M_A	E	L	L_{PKA}	L_Z	G	t	TA [Nm]	
8	42	5000	38	86	55	70	60	35	1,5	25,5	3	100	170	66	M5	15	2	3,04
9	72	5000	45	97	70	85	70	41	1,5	30,5	3	100	182	63	M8	15	10	4,26
												140	222	103				
10	100	5000	50	107	78	93	80	46	1,5	35,5	4	100	192	61	M8	20	10	5,42
												140	232	101				
12	170	5000	60	131	95	113	90	55	1,5	43,0	4	100	210	55	M8	20	10	9,49
												140	250	95				
14	210	4800	70	142	105	125	100	60	1,5	48,0	4	100	220	54	M8	25	10	11,46
												140	260	94				
15	320	4300	70	157	110	135	110	65	1,5	49,5	4	140	270	93	M8	25	10	15,63
												180	310	133				
17	400	3800	80	176	125	150	110	70	1,5	54,5	4	100	240	53	M8	25	10	18,79
												140	280	93				
20	820	3300	100	205	150	175	130	80	2,0	61,0	4	180	320	133	M8	30	10	20,41
												140	300	81				
25	1600	2700	125	257	195	225	150	100	2,0	81,0	5	180	340	121	M12	40	40	56,50
												140	340	81				
												250	450	191				59,60

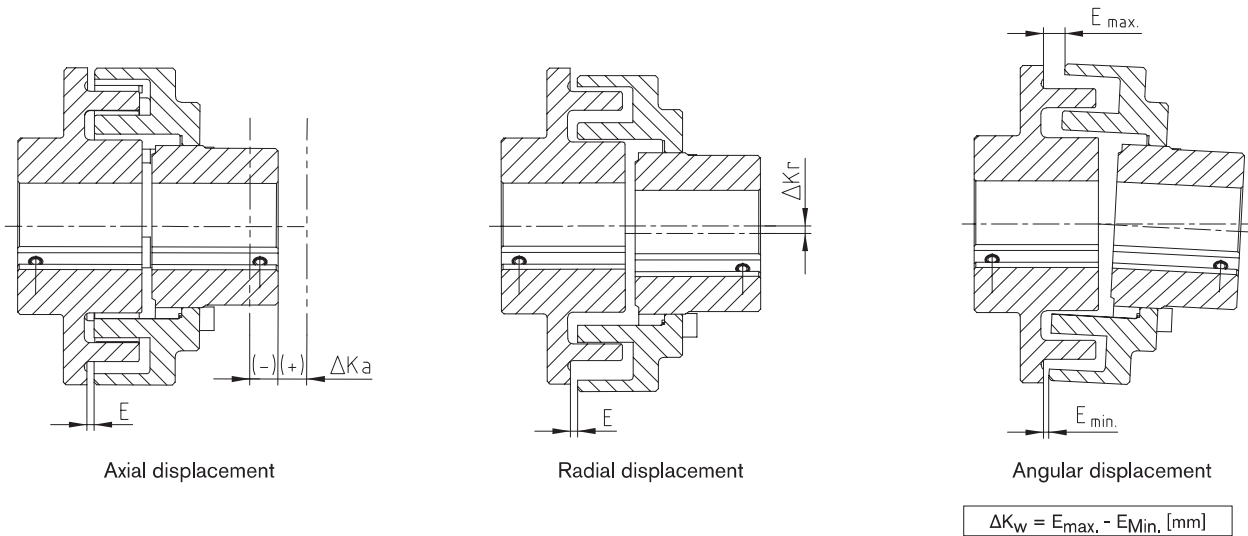
Ordering example:

POLY	PKA	15	140	$\phi 38$	$\phi 40$
Coupling type	Type	Size	Drop-out center length	Finish bore part 1A	Finish bore part 2A

POLY

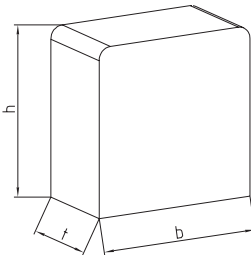
Flexible couplings

Displacements / elastomer sets / screws



Radial and angular displacements may occur simultaneously.
The combined sum $V = \Delta K_r + (E_{max.} - E_{min.})$ must not exceed the values listed in the table .

Displacements [mm]															
Coupling size		8	9	10	12	14	15	17	19	20	22	25	28	30	35
Max. axial displacement ΔK_a [mm]		± 1	± 1	± 1	± 2	± 2	± 2	± 2	± 2	± 2	± 2	± 2	± 2	± 2	± 3
Max. radial displacement ΔK_r	$n=750$ 1/min	0,8	0,8	0,8	0,8	0,8	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,2	1,2
or max. angular displacement	$n=1000$ 1/min	0,7	0,7	0,7	0,7	0,7	0,9	0,9	0,9	0,9	0,9	0,9	0,9	1,1	1,1
ΔK_w or sum V	$n=1500$ 1/min	0,5	0,5	0,5	0,5	0,5	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,7	0,9



Elastomer sets NBR (building block)															
Coupling size		8	9	10	12	14	15	17	19	20	22	25	28	30	35
Set size		1			2		3		3a	4	3b	4Ü	5	6Ü	7Ü
Number of sets		8	10	10	10	10	12	12	12	12	16	16	16	16	20
Dimensions of	b	18,4			24,9		27,2		27,7	34,9	29,6	35,1	40	43,3	45,7
elastomer sets	t	10			15,3		16,1		18,4	19,6	18,4	22,9	22,2	28,6	25,0
b x t x h [mm]	h	18,9			23,9		24,6		26,8	34,6	29,6	35	40,6	41,1	60,0

Type PKD — Dimensions of cyl. screws DIN EN ISO 4762															
Coupling size		8	9	10	12	14	15	17	19	20	22	25	28	30	35
Screw size	M	—	—	—	—	—	M8	M8	M8	M10	M8	M10	M10	M12	M12
	I	—	—	—	—	—	30	25	25	30	30	30	40	40	55
No. z		—	—	—	—	—	6	6	6	6	8	8	8	8	10
Tightening torque T_A [Nm]		—	—	—	—	—	25	25	25	25	25	49	49	86	86
Type PKA — Dimensions of cyl. screws DIN EN ISO 4762															
Screw size	M	M6	M6	M6	M8	M8	M10	M10	—	M10	—	M10	—	—	—
	I	16	18	18	20	20	25	25	—	30	—	30	—	—	—
No. z		4	5	5	5	5	6	6	—	6	—	8	—	—	—
Tightening torque T_A [Nm]		10	10	10	25	25	49	49	—	49	—	49	—	—	—

Standard bores H7 with feather keyway to DIN 6885 sheet 1 [JS9] and threads for setscrews.
Please see our detailed mounting instructions at our website www.ktr.com.