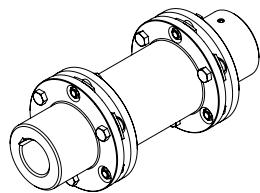
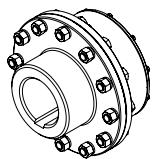


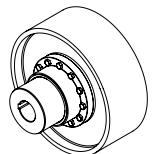
### ■ A6-1 GENERAL INFORMATION



### ■ A6-4 AMB STEEL MEMBRANE COUPLINGS

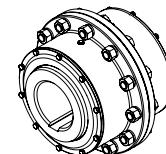


### ■ A6-7 SPJ SINGLE SIDED GEAR COUPLINGS

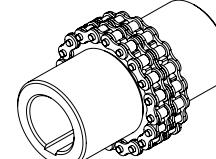


### ■ A6-8 SPJ (series ESCO) SINGLE SIDED GEAR COUPLINGS

### ■ A6-9 SPJ-SBH (series ESCO) BRAKE DRUM GEAR COUPLINGS



### ■ A6-10 SPD DOUBLE SIDED GEAR COUPLINGS



### ■ A6-13 AFL CHAIN COUPLINGS

**Self-adjusting couplings are characterized by:**

- ability to operate in high temperatures and in harmful environment (totally made of metal),
- transferring high torques with small dimensions and high rotational speed,
- compensation of deviations of joined shaft ends position,
- lack of torsional susceptibility (precision of positioning),
- service free (AMB),
- possibility of membrane replacement without the necessity of drawing the joined shaft ends aside (AMB).

**APPLICATIONS:** machinery for chemical, paper, steel, food and pumps industry, blowers, compressors, stirrers, conveyors, crushers, fans and other machinery and equipment.

**MATERIAL:** steel.

A6-1

**WORKING CONDITIONS:** work at temperature: **AMB** up to 250°C, **SPD, SPJ** of -20°C up to +80°C.

**OPERATION IN THE AREAS WITH THE DANGER OF EXPLOSIONS:**

"Ex" couplings (see method of marking) are intended for operation in the areas with the danger of explosion (groups: I M2, II2D, II2G). couplings of this construction are made with set screws.

**METHOD OF MARKING:**

[ name ] - [ M<sub>n</sub> ] - [ d<sub>1</sub> ] / [ l<sub>1</sub> ] - [ d<sub>2</sub> ] / [ l<sub>2</sub> ] - [ size ][ type ] - [ variant ] - [ version\* ]

\* only when it concerns a given type, where:

**name** e.g. steel membrane coupling

**M<sub>n</sub>** nominal torque [Nm]

**d<sub>1</sub>, d<sub>2</sub> (d<sub>11</sub>, d<sub>12</sub>)** diameters of the holes [mm] (for the couplings with brake drum or disc  
d1 – transmission side) in the case of ordering the coupling without holes for shaft  
ends "0" should be placed; in the case of lead hole according to the catalogue – "ow"  
marking, and in the case of pilot bores other than in the catalogue, the diameter of  
the hole should be added after the "ow" marking (e.g. "ow25")

**l<sub>1</sub>, l<sub>2</sub>** the length of the holes in the hubs [mm]

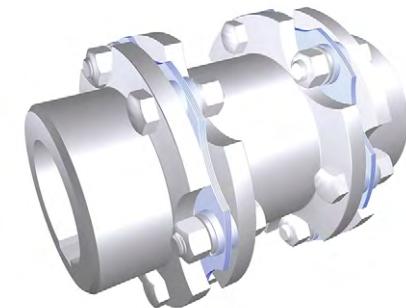
**size** e.g. 75

**type** e.g. AMB

**variant** e.g. A

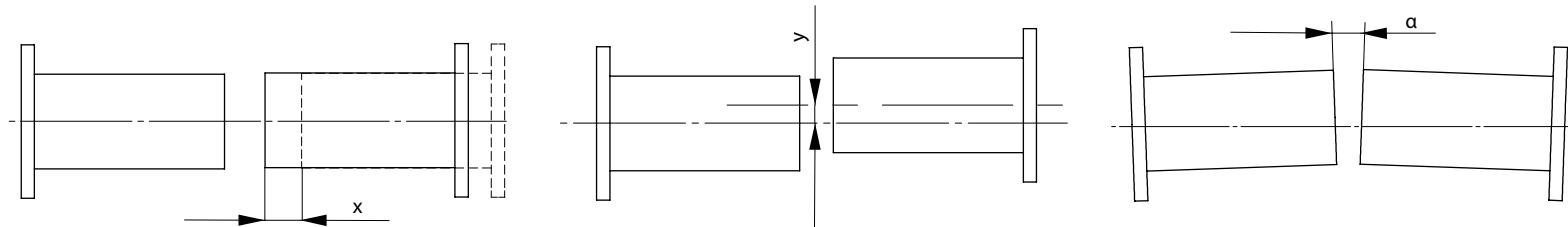
**version** Ex – for operation in the areas with the danger of explosion

WS... – special (individual arrangements)



**BALANCING:** couplings are normally balanced statically (some sizes of the couplings with bigger brake drums or discs are normally balanced dynamically-check remarks in the catalogue). After the arrangement there is a possibility of dynamic balancing of each coupling.

**MAXIMUM DEVIATIONS:** Given values of maximum deviations ("x" – axial, "y" – radial, „ $\alpha$ " – angular) cannot appear at the same time.



Type	AMB – variant A															
Coupling size	120	125	135	138	142	150	160	170	180	185	190	205	215	235	236	256
x [mm]	0,6	0,8	1	1,2	1,4	1,6	1	1,1	1,3	1,3	1	1,2	1,4	1,75	1,85	2,1
y [mm]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$\alpha$ [ $^{\circ}$ ]	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0,7	0,7

Type	AMB – variant B, C														
Coupling size	120	125	135	138	142	150	160	170	180	185	190	205	215	235	
x [mm]	1,2	1,6	2,0	2,4	2,8	3,2	2,0	2,2	2,6	2,6	2,0	2,4	2,8	3,5	
y [mm]	0,2	0,2	0,3	0,3	0,4	0,4	0,8	0,4	1,2	1,2	1,1	1,4	1,5	0	
$\alpha$ [ $^{\circ}$ ]	2	2	2	2	2	2	2	2	2	2	2	2	2	2	

The recommended deviation values should be up to 50% of the maximum deviation value.

AFL			
Coupling size	Angular deviation $\alpha$ [ $^{\circ}$ ]	Axial deviation x [mm]	Radial deviation y [mm]
80	0,5	0,5	0,2
105			
125			
150			
180			
210		1	0,3
230			
250			
300			
320			
350	2	0,5	0,5
370			
400			
500			
600	4	0,6	0,8



A6-3

Type	SPJ								
Coupling size	001	002	003	004	005	006	007	008	009
x [mm]	1	1	1	2	2	2	3	3	3
y [mm]	0	0	0	0	0	0	0	0	0
$\alpha$ [°] revolutions [1/min]									
0–500	0,5								
500–1000	0,3								
1000–2000	0,2								
2000–3000	0,1								

Type	SPD								
Coupling size	001	002	003	004	005	006	007	008	009
x [mm]	2	2	2	4	4	4	6	6	6
y [mm] revolutions [1/min]									
0–500	0,5	0,7	0,9	1,2	1,3	1,5	1,8	2,1	2,4
500–1000	0,3	0,4	0,5	0,7	0,8	0,9	1,1	1,3	1,4
1000–2000	0,2	0,3	0,4	0,5	0,5	0,6	0,7	0,8	1,0
2000–3000	0,1	0,1	0,2	0,2	0,3	–	–	–	–
$\alpha$ [°] revolutions [1/min]									
0–500	1								
500–1000	0,6								
1000–2000	0,4								
2000–3000	0,2								

Recommended deviation values for couplings SPD (series E), SPJ (series E) and SPJ-SBH (series E): up to 30% of the value of the maximum deviation.

Angular deviation $\alpha$ [°]	Coupling size SPJ (series E)
0,75	45
0,75	60
0,75	75
0,75	95
0,75	110
0,75	130
0,75	155
0,75	175
0,75	195
0,75	215
0,75	240
0,75	275
0,75	280
0,75	320
0,75	360N
0,75	400N
0,75	450N
0,75	500
0,75	530
0,75	560
0,75	600
0,75	660
0,75	730
0,75	830
0,75	900
0,75	1000
0,75	1060
0,75	1130

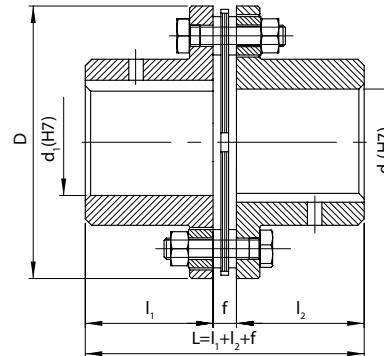
Radial deviation y [mm]	Angular deviation $\alpha$ [°]	Coupling size SPD (series E)
0,35	1,5	45
0,4	1,5	60
0,5	1,5	75
0,6	1,5	95
0,7	1,5	110
0,9	1,5	130
1,0	1,5	155
1,1	1,5	175
1,2	1,5	195
1,4	1,5	215
1,5	1,5	240
1,7	1,5	275
2,0	1,5	280
2,1	1,5	320
2,3	1,5	360N
2,5	1,5	400N
2,7	1,5	450N
2,8	1,5	500
3,0	1,5	530
3,2	1,5	560
3,4	1,5	600
3,6	1,5	660
3,7	1,5	730
4,0	1,5	830
4,4	1,5	900
4,8	1,5	1000
5,2	1,5	1060
5,4	1,5	1130

**Example of designation** of the AMB type coupling with the nominal torque of  $M_n=60$  Nm, hub hole diameters of  $d_1=28$  mm,  $d_2=35$  mm, hub hole lengths of  $l_1=30$  mm,  $l_2=40$  mm, size of 135 in the A version: (marking see page A6-1):

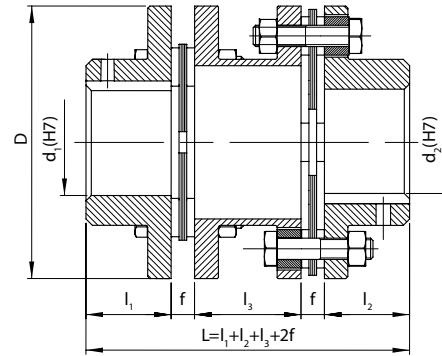
## 60-28/30-35/40-135 AMB-A Steel membrane coupling

- with pilot bores – 60-ow/30-ow/40-135 AMB-A Steel membrane coupling

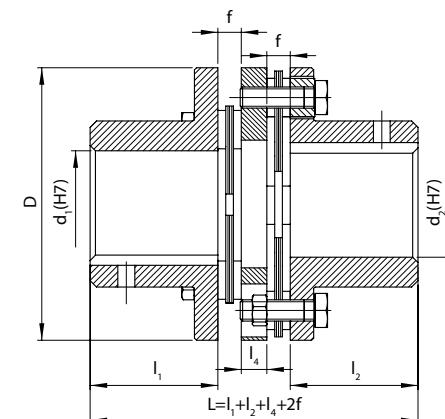
variant A



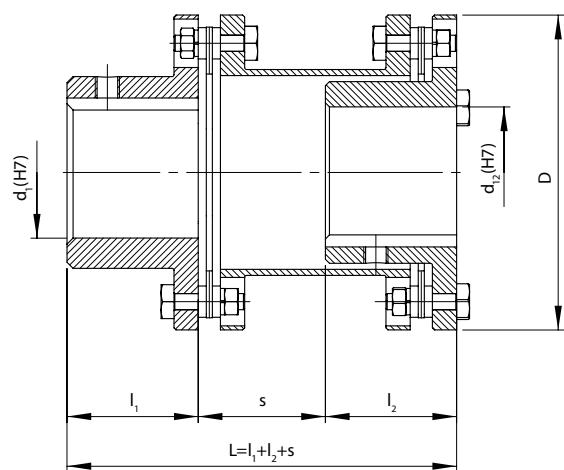
variant B



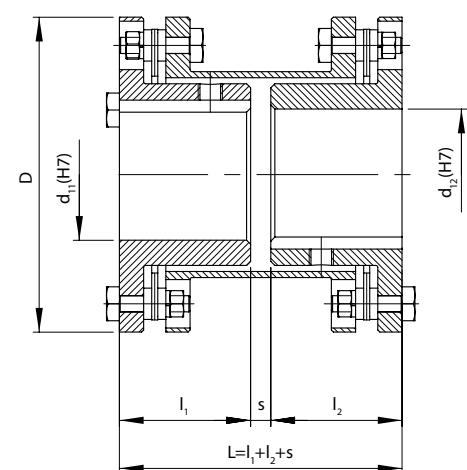
variant C



variant By

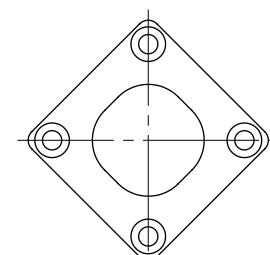


variant Bz

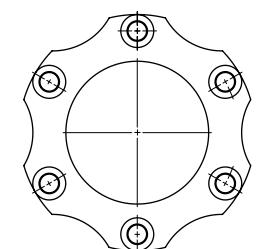


A6-4

membrane  
package  
120÷150 AMB



membrane  
package  
160÷256 AMB





A6-5

Nominal torque M <sub>n</sub>	d <sub>1</sub> , d <sub>2</sub>		d <sub>11</sub> , d <sub>12</sub>		l <sub>1</sub> , l <sub>2</sub> <sup>1)</sup>		l <sub>3</sub> <sup>1)</sup>		l <sub>4</sub> <sup>1)</sup>		f	s	D	Max rotational speed n <sub>max</sub>	Moment of inertia <sup>2)</sup> I	Weight <sup>2)</sup> m	Coupling size and type	Variant
	pilot	max	max	max	nomin.		-		-									
Nm	mm											1/min	kgm <sup>2</sup>	kg	-	-	-	
15	4	20	-	20	-	-	5	-	56	20000	20000	0,00011	0,3	120 AMB	A	A	B	C
			-		50	-		-				0,000204	0,6					
			-		-	8		-				0,000166	0,4					
30	4	25	-	25	-	-	6	-	68	16000	16000	0,00028	0,6	125 AMB	A	A	B	C
			-		48	-		-				0,000522	0,9					
			-		-	8		-				0,000414	1,6					
60	6	35	-	40	-	-	6	-	82	13000	13000	0,00094	1,2	135 AMB	A	A	B	C
			-		58	-		-				0,00158	1,9					
			-		-	10		-				0,00129	1,6					
120	6	38	-	45	-	-	8	-	94	12000	12000	0,0017	1,8	138 AMB	A	A	B	C
			-		64	-		-				0,00303	2,8					
			-		-	12		-				0,00247	2,4					
180	6	42	-	45	-	-	10	-	104	10000	10000	0,0029	2,4	142 AMB	A	A	B	C
			-		60	-		-				0,00482	3,6					
			-		-	14		-				0,00409	3,1					
330	8	50	-	55	-	-	11	-	126	8000	8000	0,0068	4,0	150 AMB	A	A	B	C
			-		74	-		-				0,0118	6,2					
			-		-	12		-				0,00932	5,1					
690	8	60	-	55	-	-	11	-	138	6700	6700	0,0087	4,2	160 AMB	A	A	B	C
			-		74	-		-				0,0141	6,0					
			-		-	12		-				0,0120	5,3					
			-		-	-		50				0,0141	6,0					
			-		-	-		4				0,0253	8,6					
1100	8	70	-	65	-	-	11	-	156	5900	5900	0,016	6,0	170 AMB	A	A	B	C
			-		94	-		-				0,0253	8,6					
			-		-	14		-				0,0214	7,5					
			-		-	-		60				0,0253	8,6					
			-		-	-		4				0,0253	8,6					

► The table continues on the next page

◀ Continuation of the table from the previous page

Nominal torque M <sub>n</sub>	d <sub>1</sub> , d <sub>2</sub>		d <sub>11</sub> , d <sub>12</sub>		l <sub>1</sub> , l <sub>2</sub> <sup>1)</sup>		l <sub>3</sub> <sup>1)</sup>		l <sub>4</sub> <sup>1)</sup>		f	s	D	Max rotational speed n <sub>max</sub>	Moment of inertia I	Weight m	Coupling size and type	Variant	
	pilot	max	max	max	nomin.														
Nm	mm												1/min	kgm <sup>2</sup>	kg	-	-		
1500	10	80	-	75	-	-	14	-	179	5100	0,031	9,0	180 AMB	A	B	By	Bz		
			-		108	-		-											
			-		-	-		70											
			75		-	-		4											
2400	10	85	-	80	-	-	15	-	191	4750	0,046	11,2	185 AMB	A	B	By	Bz		
			-		110	-		-											
			-		-	-		72											
			80		-	-		4											
4500	10	90	-	80	-	-	15	-	210	4300	0,073	14,7	190 AMB	A	B	By	Bz		
			-		110	-		-											
			-		-	-		73											
			85		-	-		6											
5100	12	105	-	90	-	-	20	-	225	4000	0,101	17,4	205 AMB	A	B	By	Bz		
			-		120	-		-											
			-		-	-		83											
			90		-	-		6											
9000	12	115	-	100	-	-	23	-	265	3400	0,223	27,9	215 AMB	A	B	By	Bz		
			-		124	-		-											
			-		-	-		88											
			100		-	-		6											
12 000	12	135	-	135	-	-	27	-	305	3000	0,478	45,1	235 AMB	A	B	By	Bz		
			-		196	-		-											
17 500	12	135	-	135	-	-	23	-	300	3800	0,419	41,4	236 AMB	A					
25 000	14	150	-	150	-	-	27	-	325	3500	0,634	52,2	256 AMB	A					

We produce keyways as recommended, normally acc. to PN-70/M-85005, with the Js9 tolerance.

<sup>1)</sup> On request, we produce couplings with the lengths of hubs or intermediate elements different from the nominal lengths given in the table.

<sup>2)</sup> The weight and the moment of inertia have been determined for the coupling with the maximum holes and nominal lengths of the hubs.

**Example of designation** of the SPJ coupling with the nominal torque of  $M_n = 3150 \text{ Nm}$ , hub hole diameters of  $d_1 = 50 \text{ mm}$ ,  $d_2 = 60 \text{ mm}$ , hub hole lengths of  $l_1 = 80 \text{ mm}$ ,  $l_2 = 140 \text{ mm}$ , size of 003  
(marking see page A6-1):

### 3150-50/80-60/140-003 SPJ Single-sided gear coupling

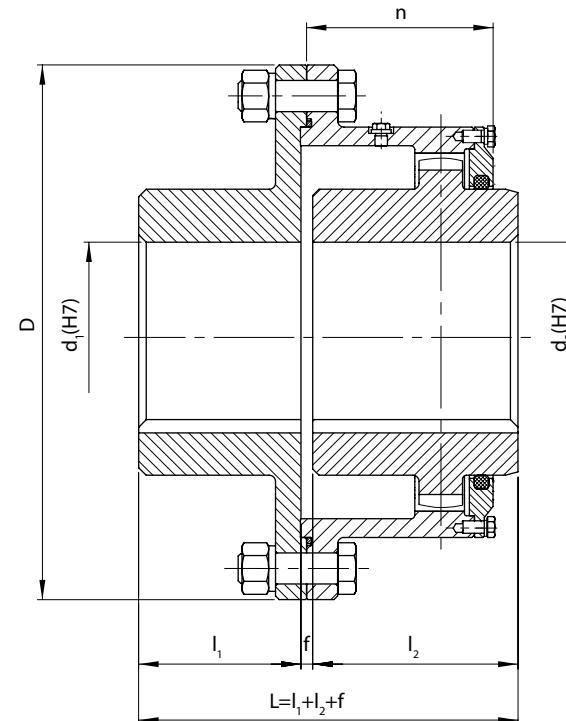
- with pilot bores – 3150-**ow**/80-**ow**/140-003 SPJ Single-sided gear coupling

**Single-sided gear couplings are used in pairs with a spacer shaft. In cases where journal misalignment is excluded, a single SPJ coupling may be used.**

**Screw-tightened covers are used from sizes 005 to 009.**

**Sizes 004 and smaller are manufactured with non-removable covers.**

A6-7



We produce keyways as recommended, normally acc. to PN-70/M-85005, with the Js9 tolerance.

- On request, we produce couplings with the lengths of hubs different from the nominal and extended lengths given in the table.
- The weight and the moment of inertia have been determined for the coupling with the maximum holes and nominal lengths of the hubs.

Nominal torque $M_n$	$d_1, d_2$		$l_1, l_2$ <sup>1)</sup>		$f$	$D$	$n$	Max rotational speed $n_{max}$	Moment of inertia <sup>2)</sup> $I$	Weight <sup>2)</sup> $m$	Coupling size and type
	pilot	max	nomin.	extend.							
Nm	mm							1/min	kgm <sup>2</sup>	kg	-
710	20	40	50	110	5	160	47	3000	0,03	7,2	001 SPJ
1400	30	50	80	110	5	185	62		0,052	13,3	002 SPJ
3150	45	65	80	140	5	220	77		0,105	23,6	003 SPJ
5600	50	80	110	170	5	250	98		0,212	37,6	004 SPJ
11 800	65	100	120	210	10	330	115	2500	0,70	76,0	005 SPJ
19 000	80	125	140	210	10	360	130		1,15	108,3	006 SPJ
30 000	100	160	170	300	10	430	150	1500	3,55	167,7	007 SPJ
50 000	120	190	170	350	10	500	162,5		7,10	250,1	008 SPJ
71 000	140	220	200	350	10	550	182,5	1250	13,7	336,5	009 SPJ

**Example of designation** of the SPJ coupling with the nominal torque of  $M_n = 22000 \text{ Nm}$ , hub hole diameters of  $d_1 = 60 \text{ mm}$ ,  $d_2 = 80 \text{ mm}$ , hub hole lengths of  $l_1 = 105 \text{ mm}$ ,  $l_2 = 105 \text{ mm}$ , size of 130 (marking see page A6-1):

**22000-60/105-80/105-130 SPJ Single-sided gear coupling**

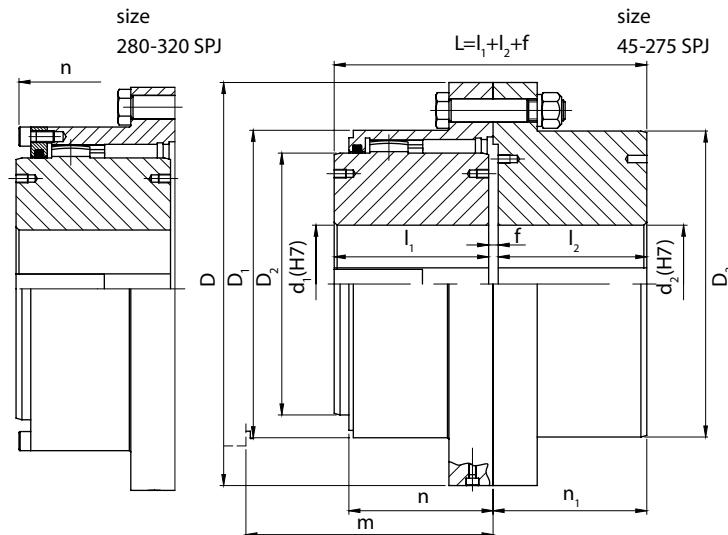
**Single-sided gear couplings are used in pairs with a spacer shaft.**

In cases where journal misalignment is excluded, a single SPJ coupling may be used.

We also offer special designs according to the individual wishes of the customer.

We produce keyways as recommended, normally acc. to PN-70/M-85005, with the Js9 tolerance.

- 1) Dimension which defines the offset of the cage in order to check the position of the hubs and the state of meshing.
- 2) Higher rotational speeds are possible after consultation.
- 3) The moment of inertia have been determined for the coupling with no holes.
- 4) The weight have been determined for the coupling with the pilot bores.
- 5) On request, we produce couplings with the lengths of hubs different from the nominal ( $l_2$ ) lengths given in the table.
- 6) Check whether the journal/hub connection will transfer the required torque.



A6-8

Nominal torque $M_n$ <sup>6)</sup>	$d_1, d_2$		$l_1$		$l_2$ <sup>5)</sup>		$f$	$D$	$D_1$	$D_2$	$D_3$	$n$	$n_1$	$m$ <sup>1)</sup>		Max rotational speed <sup>2)</sup> $n_{max}$	Moment of inertia <sup>3)</sup> $I$	Weight <sup>4)</sup> $m$	Coupling size and type
	max	nomin.	extend.	nomin.	nomin.	extend.								1/min	$\text{kgm}^2$				
Nm	mm																		
1300	45	43	80	40	5	111	80	67	80	41	43,5	73,5	81,5		5000	0,005	4,1	45 SPJ	
2800	60	50	114	47	5	141	103,5	87	103,5	47	50,5	83	115,5		4400	0,016	8,2	60 SPJ	
5000	75	62	130	58	5	171	129,5	106	126	58,5	61,5	106	131,5		4000	0,04	14,6	75 SPJ	
10 000	95	76	146	74	6	210	156	130	152	68,5	77,5	124,5	148,5		3600	0,107	26,5	95 SPJ	
16 000	110	90	165	87	6	234	181	151	178	82	90,5	147,5	167,5		3350	0,197	39,6	110 SPJ	
22 000	130	105	170	101	6,5	274	209	178	208	98	104,5	175	175		3100	0,446	60,3	130 SPJ	
32 000	155	120	190	113	6,5	312	247	213	245	108,5	116,5	196	196		2800	0,868	90,3	155 SPJ	
45 000	175	135	200	129	8	337	273	235	270	121	133	220	220		2700	1,362	119	175 SPJ	
62 000	195	150	220	150	8	380	307	263	305	132	154	242	242		2550	2,584	174,3	195 SPJ	
84 000	215	175	250	175	8	405	338	286	330	151,5	179	281	281		2450	3,9	231,1	215 SPJ	
115 000	240	190	280	190	10	444	368	316	362	165	196	308	308		2300	5,65	285,2	240 SPJ	
174 000	275	220	350	220	13	506	426	372	416	183,5	228	344	355		2150	11,446	429,3	275 SPJ	
244 000	280	280	410	280	13	591	472	394	—	225	288	316	447,5		1900	22,6	648	280 SPJ	
290 000	320	292	470	292	14,5	640	518	432	—	234	300	330	467,5		1800	34,5	822	320 SPJ	

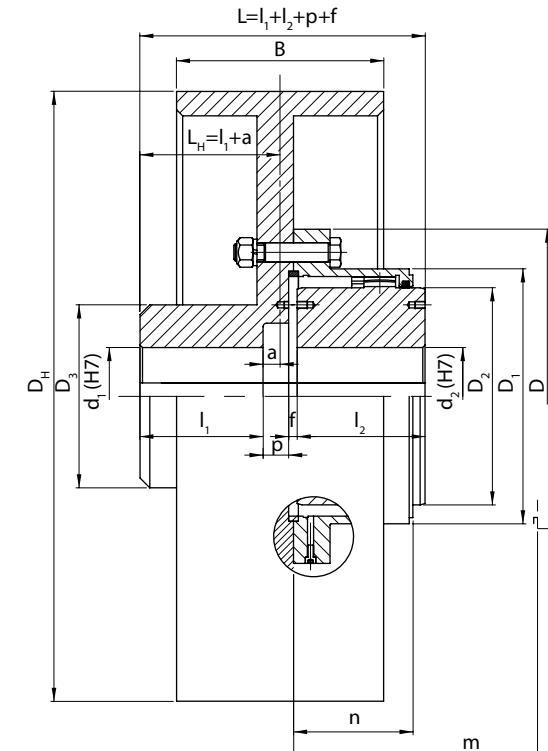
**Example of designation** of the SPJ-SBH coupling with the nominal torque of  $M_n=1300 \text{ Nm}$ , brake drum diameter of  $D_H=200 \text{ mm}$ , distance of the brake drum symmetry axis from the hub origin of  $L_H=87$ , hub holes diameters of  $d_1=40 \text{ mm}$ ,  $d_2=45 \text{ mm}$ , hub holes lengths of  $l_1=62 \text{ mm}$ ,  $l_2=82 \text{ mm}$ , size of 45 (marking see page A6-1):

**1300-200-87-40/62-45/82-45 SPJ-SBH Brake drum gear coupling**

**Single-sided gear couplings are used in pairs with a spacer shaft.**

**In cases where journal misalignment is excluded, a single SPJ (SPJ-SBH) coupling may be used.**

A6-9



**We also offer special designs according to the individual wishes of the customer.**

We produce keyways as recommended, normally acc. to PN-70/M-85005, with the Js9 tolerance.

- 1) Dimension which defines the offset of the cage in order to check the position of the hubs and the state of meshing.
- 2) The moment of inertia have been determined for the coupling with no holes.
- 3) The weight have been determined for the coupling with the pilot bores.
- 4) On request, we produce couplings with the brake drums size different than in the table.

Nominal torque $M_n$	$d_1, d_2$		$l_1$		$l_2$		$p$	$f$	$D$	$D_1$	$D_2$	$D_3$	$D_H^{4)}$	$B^{4)}$	$a$	$n$	$m^1)$		Max rotation-al speed $n_{max}$	Moment of inertia <sup>2)</sup> $I$	Weight <sup>3)</sup> $m$	Coupling size and type
	max	nomin.	extend.	nomin.	extend.	nomin.	extend.															
Nm																	1/min	kgm <sup>2</sup>	kg	-		
1300	45	62	82	43	80	31	5	111	80	67	80	200	75	25	41	73,5	81,5	3000	0,0585	13,1	45 SPJ-SBH	
		82	112			28	5				75	250	90	23				0,1525	17,1			
2800	60	82	112	50	114	31	5	141	103,5	87	90	250	90	25	47	83	115,5		0,1575	19,0	60 SPJ-SBH	
		112	142			34	5				90	320	110	25			0,5275	38,0				
5000	75	112	142	62	130	34	5	171	129,5	106	112	320	110	23	58,5	106	131,5		0,5400	41,3	75 SPJ-SBH	
		112	142			34	5				112	400	135	23			1,3300	62,3				
10000	95	142	172	76	146	33	6	210	156	130	142	400	135	23	68,5	124,5	148,5		1,3625	68,1	95 SPJ-SBH	
		142	174			33	6				142	500	170	23			3,6525	118,1				

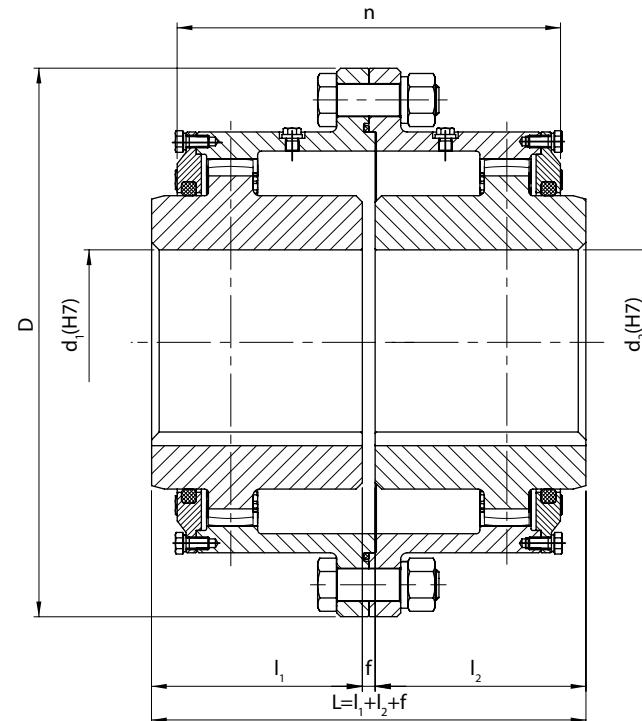
**Example of designation** of the SPD type coupling with the nominal torque of  $M_n = 3150 \text{ Nm}$ , hub hole diameters of  $d_1 = 50 \text{ mm}$ ,  $d_2 = 60 \text{ mm}$ , hub hole lengths of  $l_1 = 80 \text{ mm}$ ,  $l_2 = 140 \text{ mm}$ , size of 003 (marking see page A6-1):

## 3150-50/80-60/140-003 SPD Double-sided gear coupling

- with pilot bores – 3150-**ow**/80-**ow**/140-003 SPD Double-sided gear coupling

Screw-tightened covers are used from sizes 005 to 009.

Sizes 004 and smaller are manufactured with non-removable covers.



We produce keyways as recommended, normally acc. to PN-70/M-85005, with the Js9 tolerance.

- On request, we produce couplings with the lengths of hubs different from the nominal and extended lengths given in the table.
- The weight and the moment of inertia have been determined for the coupling with the maximum holes and nominal lengths of the hubs.

A6-10

Nominal torque $M_n$	$d_1, d_2$		$l_1, l_2$ <sup>1)</sup>		$f$	$D$	$n$	Max rotational speed $n_{max}$	Moment of inertia <sup>2)</sup> $I$	Weight <sup>2)</sup> $m$	Coupling size and type
	pilot	max	min	extend.							
Nm	mm							1/min	kgm <sup>2</sup>	kg	-
710	20	40	50	110	5	160	94	3000	0,03	7,3	001 SPD
1400	30	50	80	110	5	185	124		0,052	14	002 SPD
3150	45	65	80	140	5	220	154		0,105	23	003 SPD
5600	50	80	110	170	5	250	196		0,212	37,7	004 SPD
11 800	65	100	120	210	10	330	230	2500	0,70	78,8	005 SPD
19 000	80	125	140	210	10	360	260		1,15	102,6	006 SPD
30 000	100	160	170	300	10	430	300	1500	3,55	165,3	007 SPD
50 000	120	190	170	350	10	500	325		7,0	260,5	008 SPD
71 000	140	220	200	350	10	550	365	1250	13,75	360,0	009 SPD



**Example of designation** of the SPD type coupling with the nominal torque of  $M_n = 22000 \text{ Nm}$ , hub hole diameters of  $d_1 = 60 \text{ mm}$ ,  $d_2 = 80 \text{ mm}$ , hub hole lengths of  $l_1 = 105 \text{ mm}$ ,  $l_2 = 105 \text{ mm}$ , size of 130 (marking see page A6-1):

**22000-60/105-80/105-130 SPD Double-sided gear coupling**

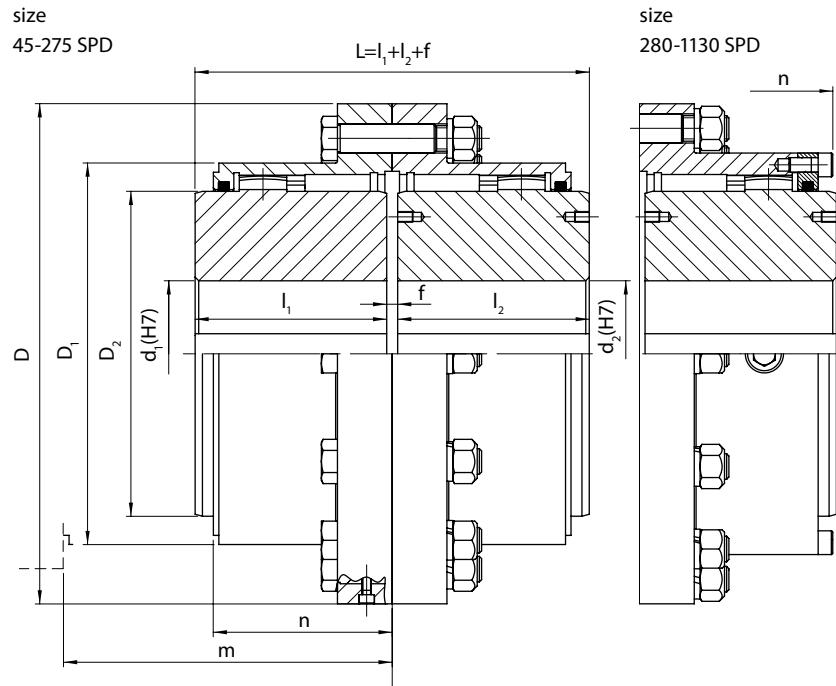
Nominal torque $M_n$ <sup>5)</sup>	$d_1, d_2$		$l_1, l_2$		$f$	$D$	$D_1$	$D_2$	$n$	$m$ <sup>1)</sup>		Max rotational speed <sup>2)</sup> $n_{max}$	Moment of inertia <sup>3)</sup> $I$	Weight <sup>4)</sup> $m$	Coupling size and type
	max	nomin.	extend.	extend.						nomin.	extend.				
Nm	mm										1/min	kgm <sup>2</sup>	kg	-	
1300	45	43	80	3	111	80	67	41	73,5	81,5	5000	0,005	4,1	45 SPD	
2800	60	50	114	3	141	103,5	87	47	83	115,5	4400	0,015	8,0	60 SPD	
5000	75	62	130	3	171	129,5	106	58,5	106	131,5	4000	0,040	14,6	75 SPD	
10 000	95	76	146	5	210	156	130	68,5	124,5	148,5	3600	0,105	26,1	95 SPD	
16 000	110	90	165	5	234	181	151	82	147,5	167,5	3350	0,191	38,8	110 SPD	
22 000	130	105	170	6	274	209	178	98	175	175	3100	0,430	59,2	130 SPD	
32 000	155	120	190	6	312	247	213	108,5	196	196	2800	0,842	89,4	155 SPD	
45 000	175	135	200	8	337	273	235	121	220	220	2700	1,320	117,5	175 SPD	
62 000	195	150	220	8	380	307	263	132	242	242	2550	2,448	167,1	195 SPD	
84 000	215	175	250	8	405	338	286	151,5	281	281	2450	3,716	222,4	215 SPD	
115 000	240	190	280	8	444	368	316	165	308	308	2300	5,384	275,0	240 SPD	
174 000	275	220	350	10	506	426	372	183,5	344	355	2150	10,872	413,6	275 SPD	
244 000	280	280	410	10	591	472	394	225	316	447,5	1900	20,1	591	280 SPD	
290 000	320	292	470	13	640	518	432	234	330	467,5	1800	31	760	320 SPD	
370 000	360	305	—	13	684	562	480	251	352,5	—	1500	45	932	360N SPD	
450 000	400	330	—	13	742	620	530	269	372,5	—	1400	68	1180	400N SPD	
560 000	450	350	—	13	804	682	594	283	385	—	1300	105	1532	450N SPD	
630 000	500	370	—	19	908	733	629	301	412,5	—	1150	164	1950	500 SPD	
750 000	530	395	—	19	965	787	673	318	435	—	1050	228	2330	530 SPD	
860 000	560	420	—	19	1029	841	724	333	450	—	900	313	2840	560 SPD	
1 020 000	600	440	—	25	1092	892	772	361	495	—	800	430	3370	600 SPD	
1 290 000	660	460	—	25	1200	997	870	375	510	—	550	685	4370	660 SPD	
2 020 000	730	540	—	25	1330	1130	965	408	565	—	450	1161	6110	730 SPD	
2 450 000	830	590	—	25	1440	1240	1062	448	605	—	380	1756	7810	830 SPD	
3 070 000	900	630	—	25	1545	1345	1156	483	645	—	325	2580	9730	900 SPD	
3 610 000	1000	670	—	25	1650	1450	1254	528	700	—	280	3690	11860	1000 SPD	
4 390 000	1060	690	—	25	1750	1550	1346	538	710	—	240	5090	14220	1060 SPD	
5 040 000	1130	700	—	25	1860	1660	1448	548	720	—	220	6730	16380	1130 SPD	

Coupling size	45	60	75	95	110	130	155	175	195	215	240	275	280	320	360N	400N	450N
<b>f</b>	3	3	3	5	5	6	6	8	8	8	8	10	10	13	13	13	13
<b>f<sub>1</sub></b>	12	9	17	17	19	23	24	29	32	39	46	43	30	33	48	53	61
<b>f<sub>2</sub></b>	21	15	31	29	33	40	42	50	56	70	84	76	50	53	83	93	109
<b>a</b>	55	59	79	93	109	128	144	164	182	214	236	263	310	325	353	383	411

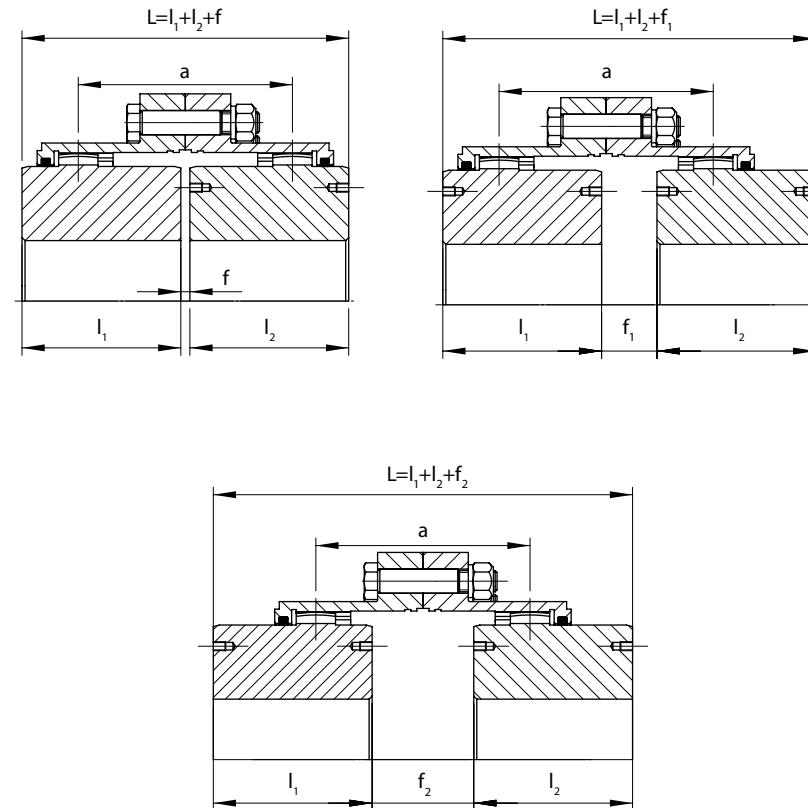
### We also offer special designs according to the individual wishes of the customer.

We produce keyways as recommended, normally acc. to PN-70/M-85005, with the Js9 tolerance.

- 1) Dimension which defines the offset of the cage in order to check the position of the hubs and the state of meshing.
- 2) Higher rotational speeds are possible after consultation.
- 3) The moment of inertia have been determined for the coupling with no holes.
- 4) The weight have been determined for the coupling with the pilot bores.
- 5) Check whether the journal/hub connection will transfer the required torque.



### Alignment of hubs with nominal lengths



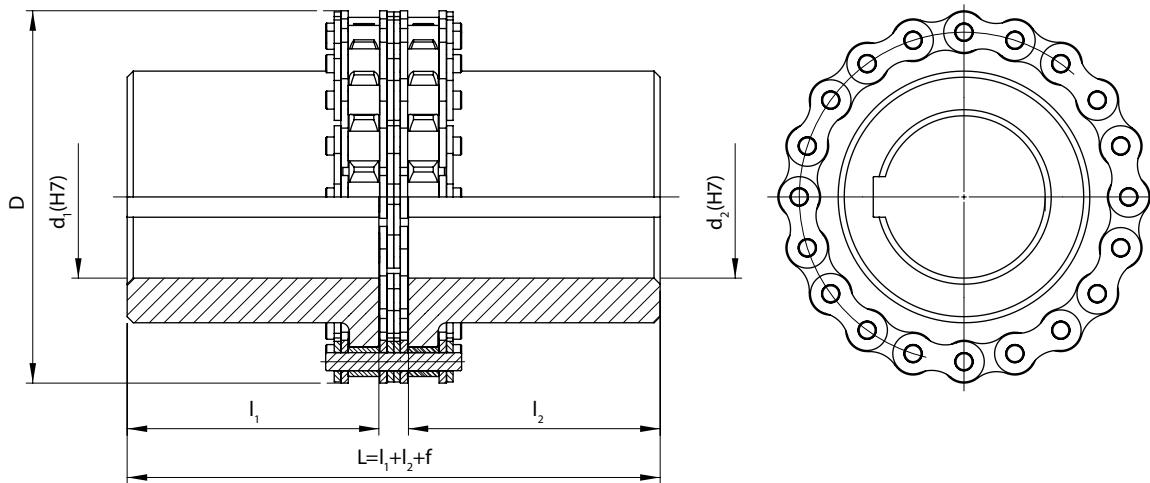
A6-12

**Example of designation** of the AFL chain coupling with the nominal torque of  $M_n = 11600 \text{ Nm}$ , hub holes diameters of  $d_1 = 80 \text{ mm}$ ,  $d_2 = 100 \text{ mm}$ , hub holes lengths of  $l_1 = 180 \text{ mm}$ ,  $l_2 = 180 \text{ mm}$ , size of 250 (marking see page A6-1):

**11600-80/180-100/180-250 AFL Chain coupling**

- the "WD" version –  
11600-80/180-100/180-250 AFL-**WD** Chain coupling
- with pilot bores –  
11600-**ow**/180-**ow**/180-250 AFL Chain coupling

A6-13



Nominal torque $M_n$	$d_1, d_2$		$l_1, l_2$ <sup>1)</sup>		$f$	D	Max rotational speed $n_{\max}$	Weight $m$	Coupling size and type
	pilot	max	nomin.	l <sub>1</sub>	l <sub>2</sub>				
Nm	mm						1/min	kg	–
390	10	30	60	6,7	77		5000	1,42	80 AFL
680	12	48	75	7,5	107		3600	3,36	105 AFL
1000	14	55	85	8,4	126		3000	5,62	125 AFL
1300	16	70	85	8,4	150		2500	8,60	150 AFL
3200	20	80	110	15,7	184		2000	17,1	180 AFL
5700	20	90	130	18	210		1800	26,1	210 AFL
6400	20	105	130	18	230		1800	32,3	230 AFL
11600	25	110	180	24,3	253		1500	47,0	250 AFL
14100	25	140	180	24,3	302		1200	74,0	300 AFL
18800	30	150	240	30,2	322		1200	103	320 AFL
20600	30	170	240	30,2	350		1000	126	350 AFL
26800	30	170	240	29,2	367		1000	137	370 AFL
29400	30	180	240	29,2	400		900	167	400 AFL
52300	40	220	280	36,1	500		750	288	500 AFL
98900	40	250	300	47,8	600		600	466	600 AFL

We also offer special designs according to the individual wishes of the customer.

We produce keyways as recommended, normally acc. to PN-70/M-85005, with the Js9 tolerance.

- <sup>1)</sup> On request, we produce couplings with the lengths of hubs different from the nominal lengths given in the table.
- <sup>2)</sup> The weight and the moment of inertia have been determined for the coupling with the maximum holes and nominal lengths of the hubs.