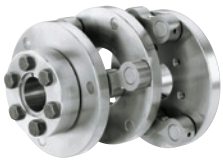
Schmidt-Kupplung® Standard

Symbiosis of performance, compact design and generous offset capacity

The Schmidt-Kupplung® series



Standard S series

Symbiosis of performance, compact design and generous offset capacity

Bore diameter up to 80 mm

Torque (T_{KN}) 44 Nm to 2.875 Nm

Power Plus P series

More torque transmission while retaining compact design

Bore diameter up to 95 mm

Torque (T_{KN}) 44 Nm to 6.610 Nm

Offset Plus V series

Extreme parallel shaft offset while retaining compact design

Bore diameter up to 80 mm

Torque (T_{KN}) 44 Nm to 3.830 Nm

Schmidt-Kupplung®

Our classic for extreme parallel offset:

The Schmidt-Kupplung® compensates variable parallel shaft offset without side loads in a very compact envelope. The Schmidt-Kupplung® is the ideal precision component for small envelopes and a better alternative to long cardan shafts.

Standard Serie S

A symbiosis of performance, compact design and generous misalignment capacity.

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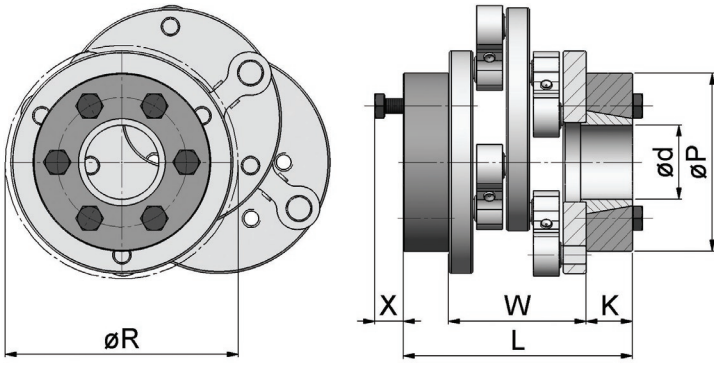
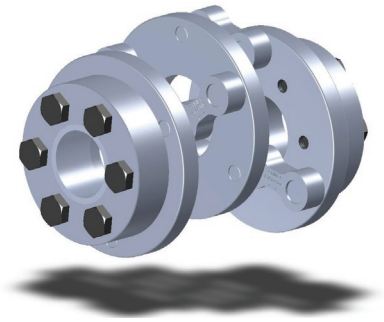
Schmidt-Kupplung® Standard

Symbiosis of performance, compact design and generous offset capacity





Hub version 3: locking-assembly

	T_{KN} (Nm)	$T_{K\,max}$ (Nm)	n_{max} (1/min)	ΔK_v (mm)	$\Delta K_{r\,min}$ (mm)	ΔK_r (mm)	ΔK_a (mm)	ΔK_w (°)	C_T (kNm/rad)	J (kg cm²)	m (kg)	ØR (mm)	L (mm)	X (mm)	W (mm)	K (mm)	ØP (mm)	standard bore diameters (mm)
S 35	35	65	3.100	45	6	23	1	0,8	7	2,1	0,7	52	74	9	44	15	41	15, 16
S 40	45	85	1.900	95	13	50	1	0,8	10	4,1	1	62	74	9	44	15	47	19, 20
S 45	45	85	2.800	45	6	23	1	0,8	10	4	0,9	62	74	9	44	15	47	19, 20
S 115	110	210	3.500	64	9	34	1	0,8	24	13	2,2	74	108	14	74	17	60	16, 18, 20
S 150	150	290	2.200	126	17	66	1	0,8	33	29,1	2,9	94	116	15	74	21	76	25, 28, 30
S 155	150	290	3.100	64	9	34	1	0,8	33	34,8	3,3	94	116	15	74	21	76	25, 28, 30
S 210	210	410	1.900	126	17	66	1	0,8	47	105,5	5,9	124	124	17	74	25	96	30, 32, 35, 40
S 215	210	410	2.700	64	9	34	1	0,8	47	102,6	5,8	124	124	17	74	25	96	30, 32, 35, 40
S 285	280	550	2.500	100	14	53	1	0,5	63	84	6,2	100	151	17	101	25	96	30, 32, 35, 40
S 360	360	710	1.800	162	22	85	1	0,5	81	141	7,7	120	151	17	101	25	96	30, 32, 35, 40
S 365	360	710	2.300	100	14	53	1	0,5	81	135	7,4	120	151	17	101	25	96	30, 32, 35, 40
S 440	440	865	1.700	162	22	85	1	0,5	99	225	9,4	140	151	17	101	25	96	30, 32, 35, 40
S 445	440	865	2.100	100	14	53	1	0,5	99	216	9,1	140	151	17	101	25	96	30, 32, 35, 40
S 630	630	1.240	1.500	162	22	85	1	0,5	142	370	14,5	143	194	23	134	30	112	45, 50
S 635	630	1.240	1.700	122	17	64	1	0,5	142	365	14,5	143	194	23	134	30	112	45, 50
S 760	760	1.485	1.400	162	22	85	1	0,5	170	495	16	163	184	17	134	25	96	30, 32, 35, 40
S 765	760	1.485	1.600	122	17	64	1	0,5	170	535	17	163	184	17	134	25	96	30, 32, 35, 40
S 950	950	1.820	1.300	162	22	85	1	0,5	209	1.020	22,5	190	202	24	134	34	120	50, 55, 60
S 955	950	1.820	1.500	122	17	64	1	0,5	209	1.010	22,5	190	202	24	134	34	120	50, 55, 60
S 1130	1.130	2.200	1.200	180	25	95	1	0,5	252	620	19,5	164	209	20	155	30	115	30, 35, 40
S 1135	1.130	2.200	1.500	129	18	68	1	0,5	252	590	19	164	209	20	155	30	115	30, 35, 40
S 1320	1.320	2.580	1.200	180	25	95	1	0,5	296	1.040	25	184	223	24	155	34	120	50, 55, 60

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Hub version 3: locking-assembly

	T_{KN} (Nm)	$T_{K\,max}$ (Nm)	n_{max} (1/min)	ΔK_v (mm)	$\Delta K_{r\,min}$ (mm)	ΔK_r (mm)	ΔK_a (mm)	ΔK_w (°)	C_T (kNm/rad)	J (kg cm²)	m (kg)	ØR (mm)	L (mm)	X (mm)	W (mm)	K (mm)	ØP (mm)	standard bore diameters (mm)
S 1325	1.320	2.580	1.400	129	18	68	1	0,5	296	1.010	24,5	184	223	24	155	34	120	50, 55, 60
S 1520	1.520	2.965	1.100	180	25	95	1	0,5	340	1.490	29	204	235	30	155	40	155	60, 65, 70
S 1525	1.520	2.965	1.300	129	18	68	1	0,5	340	1.630	32	204	235	30	155	40	155	60, 65, 70
S 2160	2.160	4.220	1.000	219	30	115	2	0,3	484	1.825	35	200	264	24	196	34	120	50, 55, 60
S 2165	2.160	4.220	1.200	162	22	85	2	0,3	484	1.725	34	200	264	24	196	34	120	50, 55, 60
S 2870	2.875	5.625	900	219	30	115	2	0,3	645	4.400	55	250	284	31	196	44	170	70, 75, 80
S 2875	2.875	5.625	1.000	162	22	85	2	0,3	645	4.250	54	250	284	31	196	44	170	70, 75, 80

Order Example 1: S 210.33 Ø30 Ø40 Order Example 2: S 445.33 Ø32 Ø40

S 445	33	Ø32 Ø40
Type Schmidt-Kupplung® Standard S 445	both sides locking-assembly	bore diameters

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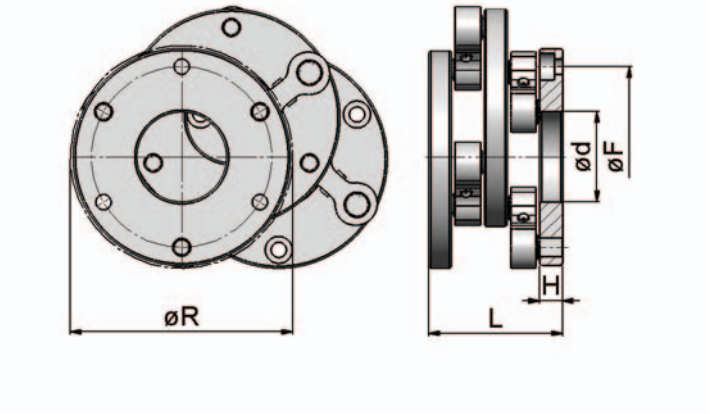
Schmidt-Kupplung® Standard

Symbiosis of performance, compact design and generous offset capacity



Hub version 5: flange-mounting

	T_{KN} (Nm)	$T_{K\ max}$ (Nm)	n_{max} (1/min)	K_v (mm)	$\Delta K_{r\ min}$ (mm)	ΔK_r (mm)	ΔK_a (mm)	ΔK_w (°)	C_T (kNm/rad)	J (kg cm²)	m (kg)	ØR (mm)	H (mm)	L (mm)	Ød (mm)	ØF (mm)	Skg
S 35	35	65	3.100	45	6	23	1	0,8	7	1,5	0,4	52	8	44	22	35	3xM6
S 40	45	85	1.900	95	13	50	1	0,8	10	3,1	0,6	62	8	44	25	45	3xM6
S 45	45	85	2.800	45	6	23	1	0,8	10	2,8	0,5	62	8	44	25	45	3xM6
S 115	110	210	3.500	64	9	34	1	0,8	24	7,5	1,1	74	12,5	74	25	48	3xM8
S 150	150	290	2.200	126	17	66	1	0,8	33	24	1,9	94	12,5	74	45	70	3xM8
S 155	150	290	3.100	64	9	34	1	0,8	33	21,5	1,7	94	12,5	74	45	70	3xM8
S 210	210	410	1.900	126	17	66	1	0,8	47	61	2,9	124	12,5	74	50	100	5xM8
S 215	210	410	2.700	64	9	34	1	0,8	47	60	2,8	124	12,5	74	50	100	3xM8
S 285	280	550	2.500	100	14	53	1	0,5	63	52	3,6	100	17	101	40	70	3xM12
S 360	360	710	1.800	162	22	85	1	0,5	81	107	5,1	120	17	101	50	90	3xM12
S 365	360	710	2.300	100	14	53	1	0,5	81	95	4,5	120	17	101	50	90	3xM12
S 440	440	865	1.700	162	22	85	1	0,5	99	175	6,3	140	17	101	50	110	3xM12
S 445	440	865	2.100	100	14	53	1	0,5	99	160	5,8	140	17	101	50	110	3xM12
S 630	630	1.240	1.500	162	22	85	1	0,5	142	285	10	143	26	134	55	100	3xM16
S 635	630	1.240	1.700	122	17	64	1	0,5	142	275	9,8	143	26	134	55	100	3xM10
S 760	760	1.485	1.400	162	22	85	1	0,5	170	460	12,5	163	26	134	60	120	3xM16
S 765	760	1.485	1.600	122	17	64	1	0,5	170	450	12,4	163	26	134	60	120	3xM16
S 950	950	1.820	1.300	162	22	85	1	0,5	209	865	17	190	26	134	70	150	3xM16
S 955	950	1.820	1.500	122	17	64	1	0,5	209	855	16,5	190	26	134	70	150	3xM16
S 1130	1.130	2.200	1.200	180	25	95	1	0,5	252	585	16	164	31	155	60	115	6xM16
S 1135	1.130	2.200	1.500	129	18	68	1	0,5	252	550	15	164	31	155	60	115	6xM16
S 1320	1.320	2.580	1.200	180	25	95	1	0,5	296	885	19	184	31	155	70	135	6xM16
S 1325	1.320	2.580	1.400	129	18	68	1	0,5	296	850	18	184	31	155	70	135	6xM16

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Hub version 5: flange-mounting

	T_{KN} (Nm)	$T_{K\,max}$ (Nm)	n_{max} (1/min)	K_v (mm)	$\Delta K_{r\,min}$ (mm)	ΔK_r (mm)	ΔK_a (mm)	ΔK_w (°)	C_T (kNm/rad)	J (kg cm²)	m (kg)	ØR (mm)	H (mm)	L (mm)	Ød (mm)	ØF (mm)	Skg
S 1520	1.520	2.965	1.100	180	25	95	1	0,5	340	1.310	22,5	204	31	155	80	155	6xM16
S 1525	1.520	2.965	1.300	129	18	68	1	0,5	340	1.265	22	204	31	155	80	155	6xM16
S 2160	2.160	4.220	1.000	219	30	115	2	0,3	484	1.700	30	200	33	196	80	150	6xM20
S 2165	2.160	4.220	1.200	162	22	85	2	0,3	484	1.500	26	200	33	196	80	150	6xM20
S 2870	2.875	5.625	900	219	30	115	2	0,3	645	3.500	38	250	33	196	100	200	6xM20
S 2875	2.875	5.625	1.000	162	22	85	2	0,3	645	3.400	37	250	33	196	100	200	6xM20

Order Example 1: S 210.55 Order Example 2: S 445.55

S 445	55
Type Schmidt-Kupplung® Standard S 445	both sides flange-mounting

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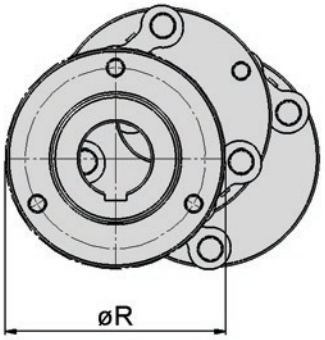

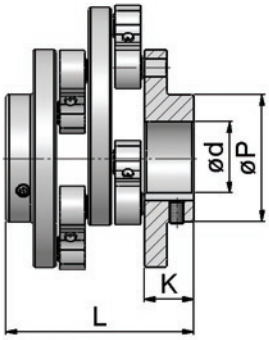

Hub version 6: standard hub

	T_{KN} (Nm)	$T_{K\,max}$ (Nm)	n_{max} (1/min)	ΔK_v (mm)	$\Delta K_{r\,min}$ (mm)	ΔK_r (mm)	ΔK_a (mm)	ΔK_w (°)	C_T (kNm/rad)	J (kg cm²)	m (kg)	ØR (mm)	K (mm)	L (mm)	ØP (mm)	Ød $_{max}$ (mm)
S 35	35	65	3.100	45	6	23	1	0,8	7	2,2	0,6	52	16	60	50	25
S 40	45	85	1.900	95	13	50	1	0,8	10	4,2	0,8	62	16	60	60	36
S 45	45	85	2.800	45	6	23	1	0,8	10	4,4	0,9	62	16	60	60	25
S 115	110	210	3.500	64	9	34	1	0,8	24	13	1,9	74	22,5	94	70	30
S 150	150	290	2.200	126	17	66	1	0,8	33	27,3	2,4	94	27,5	104	56	36
S 155	150	290	3.100	64	9	34	1	0,8	33	25,9	2,3	94	27,5	104	56	36
S 210	210	410	1.900	126	17	66	1	0,8	47	77,9	4,1	124	27,5	104	70	40
S 215	210	410	2.700	64	9	34	1	0,8	47	75	4	124	27,5	104	70	40
S 285	280	550	2.500	100	14	53	1	0,5	63	54	4,2	100	38	143	53	36
S 360	360	710	1.800	162	22	85	1	0,5	81	115	6	120	38	143	70	45
S 365	360	710	2.300	100	14	53	1	0,5	81	109	5,7	120	38	143	70	45
S 440	440	865	1.700	162	22	85	1	0,5	99	205	8,4	140	38	143	80	50
S 445	440	865	2.100	100	14	53	1	0,5	99	194	7,5	140	38	143	80	50
S 630	630	1.240	1.500	162	22	85	1	0,5	142	295	11,5	143	40	162	77	50
S 635	630	1.240	1.700	122	17	64	1	0,5	142	290	10	143	40	162	77	50
S 760	760	1.485	1.400	162	22	85	1	0,5	170	475	14	163	44	170	90	60
S 765	760	1.485	1.600	122	17	64	1	0,5	170	465	13,5	163	44	170	90	60
S 950	950	1.820	1.300	162	22	85	1	0,5	209	970	20	190	55	792	110	70
S 955	950	1.820	1.500	122	17	64	1	0,5	209	955	20	190	55	192	110	70
S 1130	1.130	2.200	1.200	180	25	95	1	0,5	252	590	17,5	164	46	185	80	50
S 1135	1.130	2.200	1.500	129	18	68	1	0,5	252	570	17	164	46	185	80	50
S 1320	1.320	2.580	1.200	180	25	95	1	0,5	296	950	21,5	184	51	195	90	60
S 1325	1.320	2.580	1.400	129	18	68	1	0,5	296	920	21	184	51	195	90	60

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Hub version 6: standard hub

	T_{KN} (Nm)	$T_{K\,max}$ (Nm)	n_{max} (1/min)	ΔK_v (mm)	$\Delta K_{r\,min}$ (mm)	ΔK_r (mm)	ΔK_a (mm)	ΔK_w (°)	C_T (kNm/rad)	J (kg cm²)	m (kg)	ØR (mm)	K (mm)	L (mm)	ØP (mm)	$Ød_{max}$ (mm)
S 1520	1.520	2.965	1.100	180	25	95	1	0,5	340	1.440	27	204	61	215	110	70
S 1525	1.520	2.965	1.300	129	18	68	1	0,5	340	1.400	26	204	61	215	110	70
S 2160	2.160	4.220	1.000	219	30	115	2	0,3	484	1.750	32	200	53	236	110	70
S 2165	2.160	4.220	1.200	162	22	85	2	0,3	484	1.675	31	200	53	236	110	70
S 2870	2.875	5.625	900	219	30	115	2	0,3	645	3.950	46	250	68	266	120	80
S 2875	2.875	5.625	1.000	162	22	85	2	0,3	645	3.800	45	250	68	266	120	80

Order Example 1: S 210.66 Ø35 Ø35 Order Example 2: S 445.66 Ø45 Ø45

S 445	66	Ø45 Ø45
Type Schmidt-Kupplung® Standard S 445	both sides standard hub	bore diameters

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1. Calculation of the design torque. Please multiply your continuos torque by the required performance factor (table 1) and the required service factor (table 2) to get the design torque.
   An alternative:
   simply use under www.schmidt-kupplung.com the TD Calculator of the column Schmidt-Kupplung®

Table 1: performance factor

speed range 1/min	service life (h)	performance factor
0-500	5.000	1,8
0-500	10.000	2,3
0-500	20.000	2,8
500-1.000	5.000	2,3
500-1.000	10.000	2,8
500-1.000	20.000	3,5
1.000-2.000	5.000	2,8
1.000-2.000	10.000	3,6
1.000-2.000	20.000	4,4
2.000-3.000	5.000	3,2
2.000-3.000	10.000	4
2.000-3.000	20.000	4,8

Table 2: service factor

uniform	1
light shocks	1,5
medium shocks	2
heavy shocks	2,5

2. Select a coupling size that has a continuos torque rating grater than your calculated design torque.
3. Make sure that the peak torque of the application does not exceed the maximum torque rating of the coupling.
4. Please check the coupling maximum speed to be sure it is within the rated maximum speed.
5. Make sure that the misalignment capability is sufficient. There is a trade-off between the radial, axial and angular misalignment capabilities. Be certain that the combined percentages of each do not exceed 100%.

Legend

Performance

T_{KN}	continuous torque rating of the coupling (Nm)
$T_{K\ max}$	maximum torque capacity of the coupling (Nm)
n_{max}	maximum speed of the coupling (1/min)
ΔK_V	maximum linear range of the coupling (mm)
ΔK_r	maximum radial offset capacity (mm)
$\Delta K_{r\ min}$	minimum radial offset capacity (mm)
ΔK_a	maximum axial misalignment capacity (mm)
ΔK_w	maximum angular misalignment capacity (°)
C_T	torsional stiffness (kNm/rad)
J	moment of inertia (kg cm²)
m	Gewicht (kg)

Dimension

ØR	swing diameter (mm)
H	disc thickness (mm)
L	coupling length (mm)
X	mounting space (mm)
W	coupling basis (mm)
ØP	hub diameter (mm)
K	total hub length (mm)
Ød	bore diameter (mm)
ØF	bolt circle diameter (mm)
Skg	number of counter bores x bolt size

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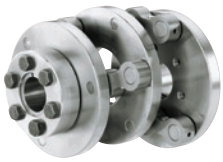
Schmidt-Kupplung® Power Plus

More torque transmission while retaining compact design

The Schmidt-Kupplung® series



Standard S series

Symbiosis of performance, compact design and generous offset capacity

Bore diameter up to 80 mm

Torque (T_{KN}) 44 Nm to 2.875 Nm

Power Plus P series

More torque transmission while retaining compact design

Bore diameter up to 95 mm

Torque (T_{KN}) 44 Nm to 6.610 Nm

Offset Plus V series

Extreme parallel shaft offset while retaining compact design

Bore diameter up to 80 mm

Torque (T_{KN}) 44 Nm to 3.830 Nm

Schmidt-Kupplung®

Our classic for extreme parallel offset:

The Schmidt-Kupplung® compensates variable parallel shaft offset without side loads in a very compact envelope. The Schmidt-Kupplung® is the ideal precision component for small envelopes and a better alternative to long cardan shafts.

Power Plus P series

Offers more torque transmission in a compact design when space is limited.

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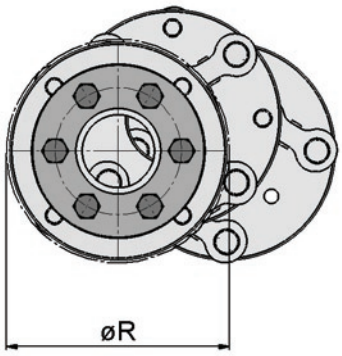

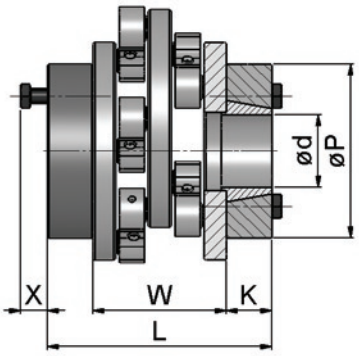

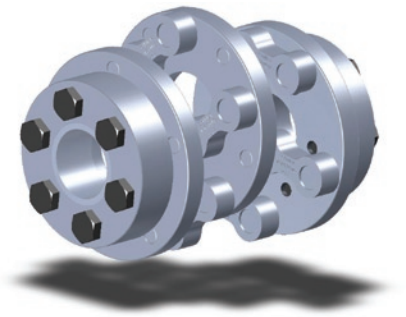

Hub version 3: locking-assembly

	T_{KN} (Nm)	$T_{K\,max}$ (Nm)	n_{max} (1/min)	ΔK_v (mm)	$\Delta K_{r\,min}$ (mm)	ΔK_r (mm)	ΔK_a (mm)	ΔK_w (°)	C_T (kNm/rad)	J (kg cm²)	m (kg)	ØR (mm)	L (mm)	X (mm)	W (mm)	K (mm)	ØP (mm)	standard bore diameters (mm)
P 45	45	90	3.100	45	6	23	1	0,5	10	2,7	0,8	52	74	9	44	15	47	15, 16
P 60	60	115	2.800	45	6	23	1	0,5	13	4,2	1,0	62	74	9	44	15	47	15, 16
P 110	110	210	1.600	95	13	50	1	0,5	24	29,2	1,6	84	82	10	44	19	50	24, 25
P 115	110	210	2.400	45	6	23	1	0,5	24	28,9	1,5	84	82	10	44	19	50	24, 25
P 200	200	385	3.100	64	9	34	1	0,5	44	36,7	3,5	94	116	15	74	21	76	25, 28, 30
P 250	250	490	3.100	64	9	34	1	0,5	56	33,9	3,3	95	112	17	74	19	66	24, 25
P 280	280	550	1.900	126	17	66	1	0,5	63	110,2	6,1	124	124	17	74	25	96	30, 32, 35, 40
P 285	280	550	2.700	64	9	34	1	0,5	63	106,4	5,9	124	124	17	74	25	96	30, 32, 35, 40
P 350	350	690	1.900	126	17	66	1	0,5	79	115,8	6,3	124	124	17	74	25	96	30, 32, 35, 40
P 355	350	690	2.700	64	9	34	1	0,5	79	110,9	6,1	124	124	17	74	25	96	30, 32, 35, 40
P 590	590	1.155	1.700	162	22	85	1	0,5	132	239	9,8	140	151	17	101	25	96	35, 40
P 595	590	1.155	2.100	100	14	53	1	0,5	132	227	9,5	140	151	17	101	25	96	35, 40
P 700	700	1.365	1.600	162	22	85	1	0,5	156	415	13,2	160	161	23	101	30	115	42, 45, 50
P 705	700	1.365	2.000	100	14	53	1	0,5	156	399	12,8	160	161	23	101	30	115	42, 45, 50
P 1010	1.010	1.980	1.400	162	22	85	1	0,5	227	570	18	164	194	23	134	30	112	42, 45, 50
P 1015	1.010	1.980	1.600	122	17	64	1	0,5	227	560	17,5	164	194	23	134	30	112	42, 45, 50
P 1580	1.580	3.095	1.300	162	22	85	1	0,5	355	1.120	24,5	193	202	24	134	34	120	55, 60
P 1585	1.580	3.095	1.500	122	17	64	1	0,5	355	1.100	24	193	202	24	134	34	120	55, 60
P 2880	2.880	5.620	1.200	162	22	85	2	0,3	644	2.050	40	200	276	30	196	40	155	60, 70
P 3830	3.830	7.500	900	219	30	115	2	0,3	860	4.700	58	250	276	30	196	40	155	60, 70
P 3835	3.830	7.500	1.000	162	22	85	2	0,3	860	4.250	53	250	276	30	196	40	155	60, 70

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Hub version 3: locking-assembly

	T_{KN} (Nm)	$T_{K\,max}$ (Nm)	n_{max} (1/min)	ΔK_v (mm)	$\Delta K_{r\,min}$ (mm)	ΔK_r (mm)	ΔK_a (mm)	ΔK_w (°)	C_T (kNm/rad)	J (kg cm²)	m (kg)	ØR (mm)	L (mm)	X (mm)	W (mm)	K (mm)	ØP (mm)	standard bore diameters (mm)
P 4800	4.800	9.380	900	219	30	115	2	0,3	1.075	5.000	61	250	284	31	196	44	170	70, 75, 80
P 4805	4.800	9.380	1.000	162	22	85	2	0,3	1.075	4.500	55	250	284	31	196	44	170	70, 75, 80
P 6610	6.610	12.940	800	219	30	115	2	0,2	1.483	7.575	73	280	296	30	196	50	185	85, 90
P 6615	6.610	12.940	1.000	162	22	85	2	0,2	1.483	7.500	73	280	296	30	196	50	185	85, 90

Order Example 1: P 350.33 Ø30 Ø40 Order Example 2: P 595.33 Ø35 Ø40

P 595	33	Ø35 Ø40
Type Schmidt-Kupplung® Power Plus P 595	both sides locking-assembly	bore diameters

To ensure the correct selection of the Schmidt-Kupplung® please use the TD Calculator of the column Schmidt-Kupplung® or please use our selection procedure and legend area to download the required information.

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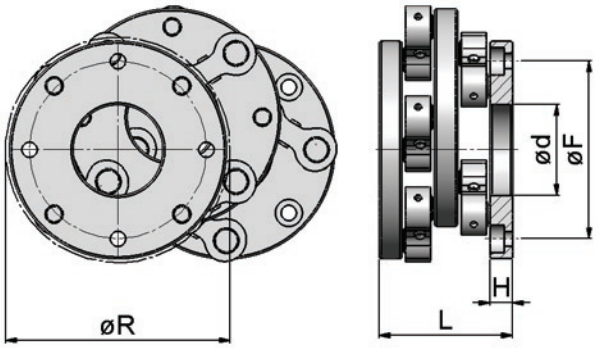

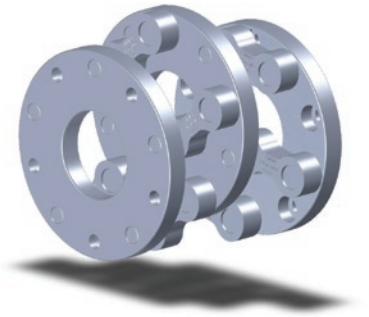

Hub version 5: flange-mounting

	T_{KN} (Nm)	$T_{K\,max}$ (Nm)	n_{max} (1/min)	ΔK_v (mm)	$\Delta K_{r\,min}$ (mm)	ΔK_r (mm)	ΔK_a (mm)	ΔK_w (°)	C_T (kNm/rad)	J (kg cm²)	m (kg)	ØR (mm)	H (mm)	L (mm)	Ød (mm)	ØF (mm)	Skg
P 45	45	90	3.100	45	6	23	1	0,5	10	1,8	0,4	52	8	44	22	35	4xM6
P 60	60	115	2.800	45	6	23	1	0,5	13	3,1	0,6	62	8	44	25	45	4xM6
P 110	110	210	1.600	95	13	50	1	0,5	24	9,1	1,3	84	8	44	40	67	5xM6
P 115	110	210	2.400	45	6	23	1	0,5	24	8,8	0,9	84	8	44	40	67	5xM6
P 200	200	385	3.100	64	9	34	1	0,5	44	23	1,8	94	12,5	74	45	70	4xM8
P 250	250	490	3.100	64	9	34	1	0,5	56	25	2	95	12,5	74	45	71	5xM8
P 280	280	550	1.900	126	17	66	1	0,5	63	63	3	124	12,5	74	50	98	4xM8
P 285	280	550	2.700	64	9	34	1	0,5	63	61	2,9	124	12,5	74	50	98	4xM8
P 350	350	690	1.900	126	17	66	1	0,5	79	65	3,2	124	12,5	74	50	100	5xM8
P 355	350	690	2.700	64	9	34	1	0,5	79	63	3	124	12,5	74	50	100	5xM8
P 480	480	945	2.300	100	14	53	1	0,5	108	105	5	120	17	101	50	90	4xM12
P 590	590	1.155	1.700	162	22	85	1	0,5	132	187	6,8	140	17	101	50	110	4xM12
P 595	590	1.155	2.100	100	14	53	1	0,5	132	175	6,3	140	17	101	50	110	4xM12
P 700	700	1.365	1.600	162	22	85	1	0,5	156	304	8	160	17	101	60	130	4xM12
P 705	700	1.365	2.000	100	14	53	1	0,5	156	295	7,4	160	17	101	60	130	4xM12
P 1010	1.010	1.980	1.400	162	22	85	1	0,5	227	480	13,2	164	26	134	60	120	4xM16
P 1015	1.010	1.980	1.600	122	17	64	1	0,5	227	475	13	164	26	134	60	120	4xM12
P 1580	1.580	3.095	1.300	162	22	85	1	0,5	355	920	18	193	26	134	70	150	5xM16
P 1585	1.580	3.095	1.500	122	17	64	1	0,5	355	910	17,5	193	26	134	70	150	5xM16
P 2880	2.880	5.620	1.200	162	22	85	2	0,3	644	1.600	28	200	33	196	80	150	4xM20
P 3830	3.830	7.500	900	219	30	115	2	0,3	860	3.750	41	250	33	196	100	200	8xM20
P 3835	3.830	7.500	1.000	162	22	85	2	0,3	860	3.700	41	250	33	196	100	200	8xM20

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Hub version 5: flange-mounting

	T_{KN} (Nm)	$T_{K\,max}$ (Nm)	n_{max} (1/min)	ΔK_v (mm)	$\Delta K_{r\,min}$ (mm)	ΔK_r (mm)	ΔK_a (mm)	ΔK_w (°)	C_T (kNm/rad)	J (kg cm²)	m (kg)	ØR (mm)	H (mm)	L (mm)	Ød (mm)	ØF (mm)	Skg
P 4800	4.800	9.380	900	219	30	115	2	0,3	1.075	4.080	45	250	33	196	100	200	10xM20
P 4805	4.800	9.380	1.000	162	22	85	2	0,3	1.075	4.000	43	250	33	196	100	200	10xM20
P 6610	6.610	12.940	800	219	30	115	2	0,2	1.483	8.700	52	280	33	196	150	230	12xM20
P 6615	6.610	12.940	1.000	162	22	85	2	0,2	1.483	5.600	43	280	33	196	150	230	12xM20

Order Example 1: P 350.55 Order Example 2: P 595.55

P 595	55
Type Schmidt-Kupplung® Power Plus P 595	both sides flange-mounting

To ensure the correct selection of the Schmidt-Kupplung® please use the TD Calculator of the column Schmidt-Kupplung® or please use our selection procedure and legend area to download the required information.

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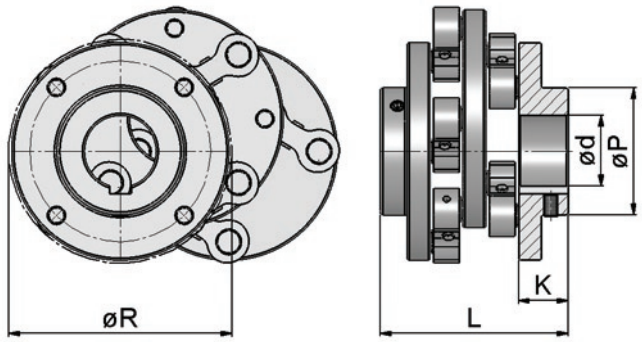

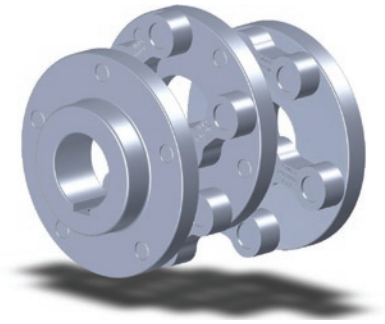

Hub version 6: standard hub

	T_{KN} (Nm)	$T_{K\,max}$ (Nm)	n_{max} (1/min)	ΔK_v (mm)	$\Delta K_{r\,min}$ (mm)	ΔK_r (mm)	ΔK_a (mm)	ΔK_w (°)	C_t (kNm/rad)	J (kg cm²)	m (kg)	ØR (mm)	L (mm)	ØP (mm)	K (mm)	$Ød_{max}$ (mm)
P 45	45	90	3.100	45	6	23	1	0,5	10	2,3	0,6	52	60	50	16	25
P 60	60	115	2.800	45	6	23	1	0,5	13	4,3	0,8	62	60	60	16	36
P 110	110	210	1.600	95	13	50	1	0,5	24	12,3	1,6	84	78	50	25	30
P 115	110	210	2.400	45	6	23	1	0,5	24	11,7	1,4	84	78	50	25	30
P 200	200	385	3.100	64	9	34	1	0,5	44	31,5	3,2	94	104	56	27,5	36
P 250	250	490	3.100	64	9	34	1	0,5	56	29,9	2,6	95	104	56	27,5	36
P 280	280	550	1.900	126	17	66	1	0,5	63	82,6	4,3	124	104	70	27,5	40
P 285	280	550	2.700	64	9	34	1	0,5	63	78,8	4,1	124	104	70	27,5	40
P 350	350	690	1.900	126	17	66	1	0,5	79	88,2	4,5	124	104	70	27,5	40
P 355	350	690	2.700	64	9	34	1	0,5	79	83,3	4,3	124	104	70	27,5	40
P 480	480	945	2.300	100	14	53	1	0,5	108	117	6,1	120	143	70	38	45
P 590	590	1.155	1.700	162	22	85	1	0,5	132	217	8,3	140	143	80	38	50
P 595	590	1.155	2.100	100	14	53	1	0,5	132	205	7,9	140	143	80	38	50
P 700	700	1,4	1.600	162	22	85	1	0,5	156	348	10,2	160	151	80	42	50
P 705	700	1.365	2.000	100	14	53	1	0,5	156	331	9,9	160	143	80	38	50
P 1010	1.010	1.980	1.400	162	22	85	1	0,5	227	505	14,5	164	170	90	44	60
P 1015	1.010	1.980	1.600	122	17	64	1	0,5	227	495	14	164	170	90	44	60
P 1580	1.580	3.095	1.300	162	22	85	1	0,5	355	1.065	22	193	192	110	55	70
P 1585	1.580	3.095	1.500	122	17	64	1	0,5	355	1.045	21,5	193	192	110	55	70
P 2880	2.880	5.620	1.200	162	22	85	2	0,3	644	1.800	33	200	236	110	53	70
P 3830	3.830	7.500	900	219	30	115	2	0,3	860	4.250	49	250	266	120	68	80
P 3835	3.830	7.500	1.000	162	22	85	2	0,3	860	4.050	47	250	266	120	68	80

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Hub version 6: standard hub

	T_{KN} (Nm)	$T_{K\,max}$ (Nm)	n_{max} (1/min)	ΔK_v (mm)	$\Delta K_{r\,min}$ (mm)	ΔK_r (mm)	ΔK_a (mm)	ΔK_w (°)	C_T (kNm/rad)	J (kg cm²)	m (kg)	ØR (mm)	L (mm)	ØP (mm)	K (mm)	Ød $_{max}$ (mm)
P 4800	4.800	9.380	900	219	30	115	2	0,3	1.075	4.550	52	250	276	120	73	80
P 4805	4.800	9.380	1.000	162	22	85	2	0,3	1.075	4.325	50	250	276	120	73	80
P 6610	6.610	12.940	800	219	30	115	2	0,2	1.483	7.425	70	280	322	150	96	95
P 6615	6.610	12.940	1.000	162	22	85	2	0,2	1.483	7.025	67	280	322	150	96	95

Order Example 1: P 350.66 Ø35 Ø35 Order Example 2: P 595.66 Ø45 Ø45

P 595	66	Ø45 Ø45
Type Schmidt-Kupplung® Power Plus P 595	both sides standard hub	bore diameters

To ensure the correct selection of the Schmidt-Kupplung® please use the TD Calculator of the column Schmidt-Kupplung® or please use our selection procedure and legend area to download the required information.

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1. Calculation of the design torque. Please multiply your continuos torque by the required performance factor (table 1) and the required service factor (table 2) to get the design torque.
   An alternative:
   simply use under www.schmidt-kupplung.com the TD Calculator of the column Schmidt-Kupplung®

Table 1: performance factor

speed range 1/min	service life (h)	performance factor
0-500	5.000	1,8
0-500	10.000	2,3
0-500	20.000	2,8
500-1.000	5.000	2,3
500-1.000	10.000	2,8
500-1.000	20.000	3,5
1.000-2.000	5.000	2,8
1.000-2.000	10.000	3,6
1.000-2.000	20.000	4,4
2.000-3.000	5.000	3,2
2.000-3.000	10.000	4
2.000-3.000	20.000	4,8

Table 2: service factor

uniform	1
light shocks	1,5
medium shocks	2
heavy shocks	2,5

2. Select a coupling size that has a continuos torque rating grater than your calculated design torque.
3. Make sure that the peak torque of the application does not exceed the maximum torque rating of the coupling.
4. Please check the coupling maximum speed to be sure it is within the rated maximum speed.
5. Make sure that the misalignment capability is sufficient. There is a trade-off between the radial, axial and angular misalignment capabilities. Be certain that the combined percentages of each do not exceed 100%.

Legend

Performance

T_{KN}	continuous torque rating of the coupling (Nm)
$T_{K\ max}$	maximum torque capacity of the coupling (Nm)
n_{max}	maximum speed of the coupling (1/min)
ΔK_V	maximum linear range of the coupling (mm)
ΔK_r	maximum radial offset capacity (mm)
$\Delta K_{r\ min}$	minimum radial offset capacity (mm)
ΔK_a	maximum axial misalignment capacity (mm)
ΔK_w	maximum angular misalignment capacity (°)
C_T	torsional stiffness (kNm/rad)
J	moment of inertia (kg cm²)
m	Gewicht (kg)

Dimension

ØR	swing diameter (mm)
H	disc thickness (mm)
L	coupling length (mm)
X	mounting space (mm)
W	coupling basis (mm)
ØP	hub diameter (mm)
K	total hub length (mm)
Ød	bore diameter (mm)
ØF	bolt circle diameter (mm)
Skg	number of counter bores x bolt size

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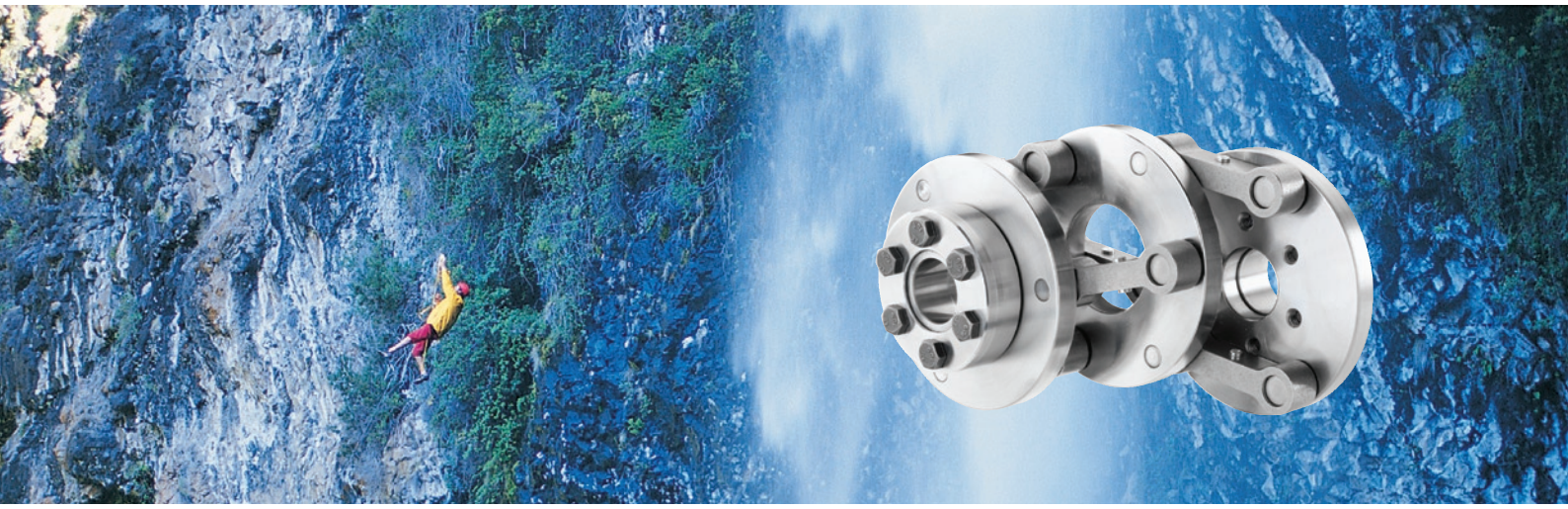
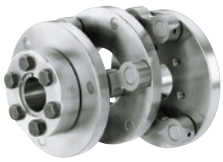
Schmidt-Kupplung® Offset Plus

Extreme parallel shaft offset while retaining compact design



The Schmidt-Kupplung® series



Standard S series

Symbiosis of performance, compact design and generous offset capacity

Bore diameter up to 80 mm

Torque (T_{KN}) 44 Nm to 2.875 Nm

Power Plus P series

More torque transmission while retaining compact design

Bore diameter up to 95 mm

Torque (T_{KN}) 44 Nm to 6.610 Nm

Offset Plus V series

Extreme parallel shaft offset while retaining compact design

Bore diameter up to 80 mm

Torque (T_{KN}) 44 Nm to 3.830 Nm

Schmidt-Kupplung®

Our classic for extreme parallel offset:

The Schmidt-Kupplung® compensates variable parallel shaft offset without side loads in a very compact envelope. The Schmidt-Kupplung® is the ideal precision component for small envelopes and a better alternative to long cardan shafts.

Offset Plus V series

Offers extreme parallel shaft offset while retaining compact design.

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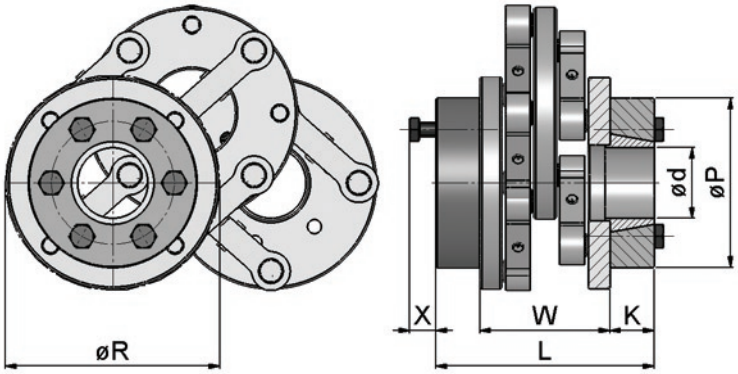
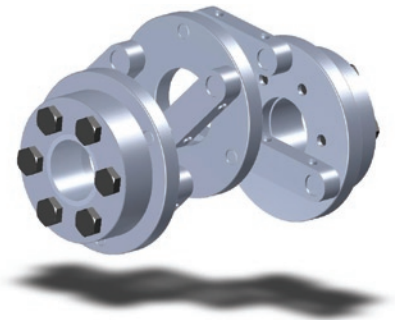
Schmidt-Kupplung® Offset Plus

Extreme parallel shaft offset while retaining compact design





Hub version 3: locking-assembly

	T_{KN} (Nm)	$T_{K\,max}$ (Nm)	n_{max} (1/min)	ΔK_v (mm)	$\Delta K_{r\,min}$ (mm)	ΔK_r (mm)	ΔK_a (mm)	ΔK_w (°)	C_T (kNm/rad)	J (kg cm²)	m (kg)	ØR (mm)	L (mm)	X (mm)	W (mm)	K (mm)	ØP (mm)	standard bore diameters (mm)
V 65	65	126	1.300	151	21	79	1	0,5	14	30,2	1,7	84	82	11	44	19	50	24, 25
V 210	210	410	1.500	216	30	114	1	0,5	47	92	5,2	124	116	15	74	21	76	25, 28, 30
V 290	290	620	1.000	360	50	190	1	0,5	71	570,8	12,6	170	124	17	74	25	96	30, 32, 35, 40
V 440	440	865	1.500	216	30	114	1	0,5	99	237	9,8	140	151	17	101	25	96	30, 32, 35, 40
V 680	680	1.340	900	396	55	209	1	0,3	154	1.110	20	200	151	17	101	25	96	30, 32, 35, 40
V 700	700	1.365	1.400	216	30	114	1	0,5	156	391	12,2	160	151	17	101	25	96	30, 32, 35, 40
V 760	760	1.485	1.200	216	30	114	1	0,5	170	550	17,5	163	194	23	134	30	115	42, 45, 50
V 950	950	1.820	1.000	270	37	142	1	0,5	209	945	21,5	190	194	23	134	30	115	42, 45, 50
V 955	950	1.820	1.100	216	30	114	1	0,5	209	1.015	22,5	190	194	23	134	30	115	42, 45, 50
V 1200	1.200	2.350	700	432	60	228	1	0,3	269	2.240	32,5	230	194	23	134	30	115	42, 45, 50
V 1320	1.320	2.580	1.000	234	32	123	1	0,5	296	1.080	26	184	223	24	155	34	120	50, 55, 60
V 1520	1.520	2.965	800	320	44	169	1	0,5	340	1.610	31	204	223	24	155	34	120	50, 55, 60
V 1525	1.520	2.965	1.000	234	32	123	1	0,5	340	1.540	30	204	223	24	155	34	120	50, 55, 60
V 2100	2.100	4.110	600	504	70	266	1	0,3	471	3.910	53	264	235	30	155	40	155	60, 65, 70
V 2160	2.160	4.220	900	270	37	142	2	0,3	484	2.075	40	200	276	30	196	40	155	60, 65, 70
V 2875	2.875	5.625	800	270	37	142	2	0,3	645	4.525	56	250	284	31	196	44	170	70, 75, 80
V 3300	3.300	6.470	500	522	72	275	2	0,2	742	7.550	74	280	284	31	196	44	170	70, 75, 80
V 3840	3.830	7.500	800	270	37	142	2	0,3	860	4.450	53	250	276	30	196	40	155	60, 65, 70

Order Example 1: V 290.33 Ø30 Ø40 Order Example 2: V 440.33 Ø32 Ø40

V 440	33	Ø32 Ø40
Type Schmidt-Kupplung® Offset Plus V 440	both sides locking-assembly	bore diameters

To ensure the correct selection of the Schmidt-Kupplung® please use the TD Calculator of the column Schmidt-Kupplung® or please use our selection procedure and legend area to download the required information.

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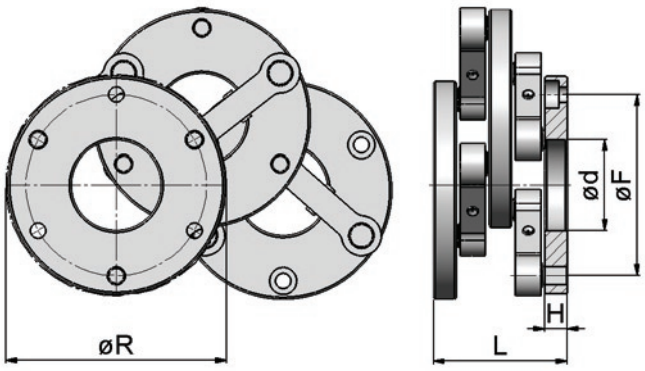
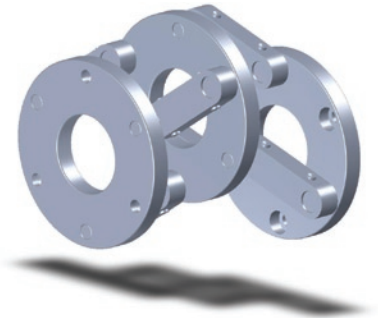
Schmidt-Kupplung® Offset Plus

Extreme parallel shaft offset while retaining compact design





Hub version 5: flange-mounting

	T_{KN} (Nm)	$T_{K\,max}$ (Nm)	n_{max} (1/min)	ΔK_v mm	$\Delta K_{r\,min}$ mm	ΔK_r (mm)	ΔK_a (mm)	ΔK_w (°)	C_T (kNm/rad)	J (kg cm²)	m (kg)	ØR (mm)	H (mm)	L (mm)	Ød (mm)	ØF (mm)	Skg
V 65	65	126	1.300	151	21	79	1	0,5	14	8,9	1,1	84	8	48	40	67	3xM6
V 210	210	410	1.500	216	30	114	1	0,5	47	78	3,7	124	12,5	74	50	100	3xM8
V 290	290	620	1.000	360	50	190	1	0,5	71	285	7	170	12,5	74	60	148	3xM8
V 440	440	865	1.500	216	30	114	1	0,5	99	187	6,8	140	17	101	50	110	3xM12
V 680	680	1.340	900	396	55	209	1	0,3	154	790	13	200	17	101	80	170	3xM12
V 700	700	1.365	1.400	216	30	114	1	0,5	156	313	8,6	160	17	101	60	130	4xM12
V 760	760	1.485	1.200	216	30	114	1	0,5	170	465	12,7	163	26	134	60	120	3xM16
V 950	950	1.820	1.000	270	37	142	1	0,5	209	930	18	190	26	134	70	150	3xM16
V 955	950	1.820	1.100	216	30	114	1	0,5	209	875	17	190	26	134	70	150	3xM16
V 1200	1.200	2.350	700	432	60	228	1	0,3	269	2.040	26	230	26	134	100	190	3xM16
V 1320	1.320	2.580	1.000	234	32	123	1	0,5	296	910	20	184	31	155	70	135	6xM16
V 1520	1.520	2.965	800	320	44	169	1	0,5	340	1.540	26	204	31	155	80	130	6xM16
V 1525	1.520	2.965	1.000	234	32	123	1	0,5	340	1.355	23	204	31	155	80	155	6xM16
V 2100	2.100	4.110	600	504	70	266	1	0,3	471	4.070	44	264	31	155	80	130	6xM16
V 2160	2.160	4.220	900	270	37	142	2	0,3	484	1.850	32	200	33	196	80	150	6xM20
V 2875	2.875	5.625	800	270	37	142	2	0,3	645	3.650	40	250	33	196	100	200	6xM20
V 3300	3.300	6.470	500	522	72	275	2	0,2	742	6.800	59	280	33	196	100	230	6xM20
V 3840	3.830	7.500	800	270	37	142	2	0,3	860	4.100	44	250	33	196	100	200	8xM20

Order Example 1: V 210.55 Order Example 2: V 680.55

V 680	55
Type Schmidt-Kupplung® Offset Plus V 680	both sides flange-mounting

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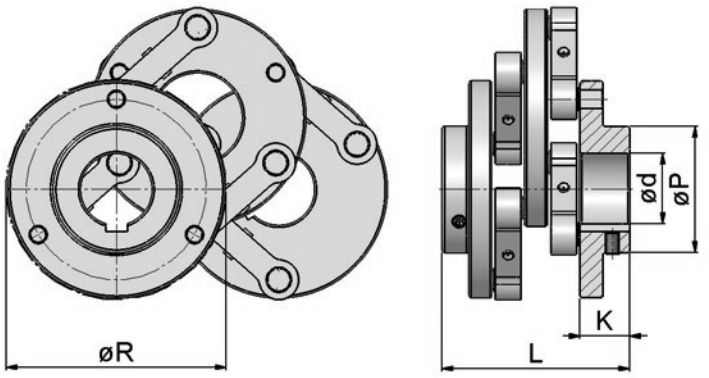

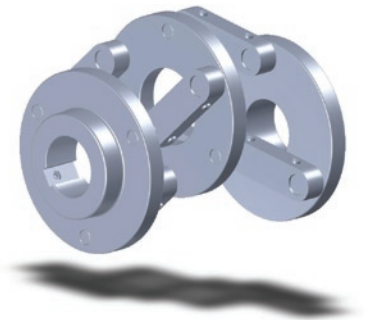

Hub version 6: standard hub

	T_{KN} (Nm)	$T_{K\,max}$ (Nm)	n_{max} (1/min)	ΔK_v mm	$\Delta K_{r\,min}$ mm	ΔK_r (mm)	ΔK_a (mm)	ΔK_w (°)	C_T (kNm/rad)	J (kg cm²)	m (kg)	ØR (mm)	L (mm)	ØP (mm)	K (mm)	Ød$_{max}$ (mm)
V 65	65	126	1.300	151	21	79	1	0,5	14	12,6	1,4	84	72	50	20	30
V 210	210	410	1.500	216	30	114	1	0,5	47	86	4,4	124	104	70	27,5	40
V 290	290	620	1.000	360	50	190	1	0,5	71	339,3	9,2	170	124	90	37,5	50
V 440	440	865	1.500	216	30	114	1	0,5	99	215	8,2	140	143	80	38	50
V 680	680	1.340	900	396	55	209	1	0,3	154	1.090	19	200	151	80	42	50
V 700	700	1.365	1.400	216	30	114	1	0,5	156	371	10,8	160	151	80	42	50
V 760	760	1.485	1.200	216	30	114	1	0,5	170	485	14	163	170	90	44	60
V 950	950	1.820	1.000	270	37	142	1	0,5	209	985	20,5	190	192	110	55	70
V 955	950	1.820	1.100	216	30	114	1	0,5	209	915	19	190	192	110	55	70
V 1200	1.200	2.350	700	432	60	228	1	0,3	269	2.235	30,5	230	202	120	60	80
V 1320	1.320	2.580	1.000	234	32	123	1	0,5	296	990	22,5	184	195	90	51	60
V 1520	1.520	2.965	800	320	44	169	1	0,5	340	1.560	29	204	215	110	61	70
V 1525	1.520	2.965	1.000	234	32	123	1	0,5	340	1.490	27,5	204	215	110	61	70
V 2100	2.100	4.110	600	504	70	266	1	0,3	471	3.690	47	264	215	120	61	80
V 2160	2.160	4.220	900	270	37	142	2	0,3	484	1.825	33	200	236	110	53	70
V 2875	2.875	5.625	800	270	37	142	2	0,3	645	4.075	47	250	266	120	68	80
V 3300	3.300	6.470	500	522	72	275	2	0,2	742	7.100	65	280	266	120	68	80
V 3840	3.830	7.500	800	270	37	142	2	0,3	860	4.425	51	250	266	120	68	80

Order Example 1: V 210.66 Ø35 Ø35 Order Example 2: V 680.66 Ø40 Ø40

V 680	66	Ø40 Ø40
Type Schmidt-Kupplung® Offset Plus V 680	both sides standard hub	bore diameters

To ensure the correct selection of the Schmidt-Kupplung® please use the TD Calculator of the column Schmidt-Kupplung® or please use our selection procedure and legend area to download the required information.

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1. Calculation of the design torque. Please multiply your continuos torque by the required performance factor (table 1) and the required service factor (table 2) to get the design torque.
   An alternative:
   simply use under www.schmidt-kupplung.com the TD Calculator of the column Schmidt-Kupplung®

Table 1: performance factor

speed range 1/min	service life (h)	performance factor
0-500	5.000	1,8
0-500	10.000	2,3
0-500	20.000	2,8
500-1.000	5.000	2,3
500-1.000	10.000	2,8
500-1.000	20.000	3,5
1.000-2.000	5.000	2,8
1.000-2.000	10.000	3,6
1.000-2.000	20.000	4,4
2.000-3.000	5.000	3,2
2.000-3.000	10.000	4
2.000-3.000	20.000	4,8

Table 2: service factor

uniform	1
light shocks	1,5
medium shocks	2
heavy shocks	2,5

2. Select a coupling size that has a continuos torque rating grater than your calculated design torque.
3. Make sure that the peak torque of the application does not exceed the maximum torque rating of the coupling.
4. Please check the coupling maximum speed to be sure it is within the rated maximum speed.
5. Make sure that the misalignment capability is sufficient. There is a trade-off between the radial, axial and angular misalignment capabilities. Be certain that the combined percentages of each do not exceed 100%.

Legend

Performance

T_{KN}	continuous torque rating of the coupling (Nm)
$T_{K\ max}$	maximum torque capacity of the coupling (Nm)
n_{max}	maximum speed of the coupling (1/min)
ΔK_V	maximum linear range of the coupling (mm)
ΔK_r	maximum radial offset capacity (mm)
$\Delta K_{r\ min}$	minimum radial offset capacity (mm)
ΔK_a	maximum axial misalignment capacity (mm)
ΔK_w	maximum angular misalignment capacity (°)
C_T	torsional stiffness (kNm/rad)
J	moment of inertia (kg cm²)
m	Gewicht (kg)

Dimension

ØR	swing diameter (mm)
H	disc thickness (mm)
L	coupling length (mm)
X	mounting space (mm)
W	coupling basis (mm)
ØP	hub diameter (mm)
K	total hub length (mm)
Ød	bore diameter (mm)
ØF	bolt circle diameter (mm)
Skg	number of counter bores x bolt size

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SCHMIDT ***L200 & 300 SERIES*** OFFSET COUPLINGS

How To Select L200 & L300 Schmidt Offset Couplings

Example:

Step 1. List the performance requirements

a) Horsepower H=55 (HP)

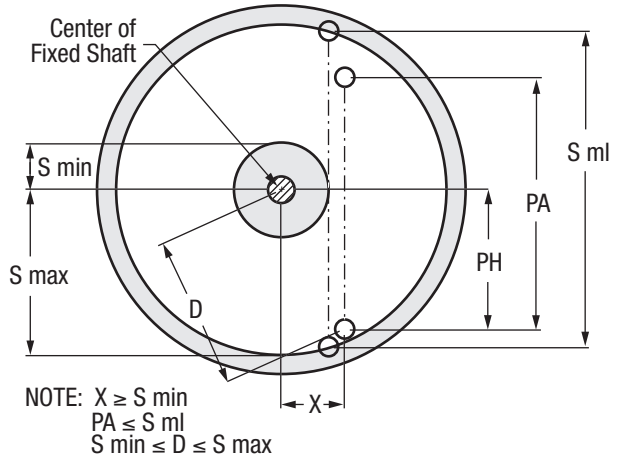
b) Shaft Speed N=1000 (RPM)

c) B-10 Bearing Lifetime B-10=25000(HRS)

d) Offset From Fixed Shaft PH=2 (INCH)

e) Variable Offset (if required) PA=5 (INCH)

Step 2. Select a coupling with the required offset characteristics. All offset couplings have a minimum offset (Smin), a maximum offset (Smax) and a maximum linear range of shaft displacement (Sml). For applications where the offset distance between shafts remains FIXED, simply select a coupling with an offset larger than Smin and smaller than Smax. For applications where the shaft offset distance VARIES during operation, select a coupling where the linear range of displacement is less than the Sml. Note: At no time can the shafts be separated by more than Smax nor less than Smin. To use all of Sml, X (see diagram below) must be equal to Smin and PH must equal PA/2. Consult dimension chart on page 6.



Step 3. Select the lifetime speed factor "L" from chart to the right. For N=1000 (RPM) and B10=(25000) (HRS) L=6.034

Step 4. Calculate the required performance factor P_r=H/L=55/6.034=9.115

Step 5. Compare the required performance factor "Pr" with the coupling performance factor "P" listed on the performance data table on page 6. Select a coupling size which has an equal or higher "P" factor as "Pr". The coupling size L280C meets these requirements.

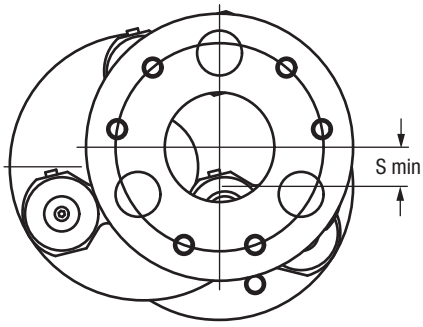
Step 6. Compare the practical speed limit (see performance data table on page 6). The data shows that the coupling size L280C can operate at 1500 RPM.

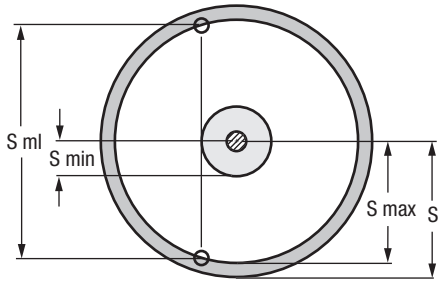
Step 7. Select hubs (if required) from chart on page 11.

Lifetime-Speed Factor "L"						
Shaft Speed N (rpm)	B-10 Lifetime (Hours)					
	1,000	2,500	5,000	10,000	25,000	50,000
10	0.631	0.479	0.389	0.316	0.240	0.195
25	1.198	0.910	0.739	0.601	0.456	0.371
50	1.947	1.479	1.201	0.976	0.741	0.601
100	3.162	2.402	1.951	1.585	1.204	0.978
150	4.200	3.191	2.502	2.105	1.599	1.299
200	5.137	3.902	3.170	2.575	1.956	1.589
250	6.011	4.562	3.706	3.010	2.287	1.857
300	6.823	5.183	4.210	3.420	2.598	2.110
400	8.345	6.340	5.149	4.182	3.177	2.581
500	9.756	7.411	6.020	4.889	3.714	3.017
600	11.08	8.420	6.839	5.555	4.220	3.428
700	12.34	9.379	7.618	6.188	4.700	3.818
800	13.56	10.30	8.365	6.795	5.161	4.192
900	14.72	11.18	9.084	7.378	5.605	4.553
1,000	15.85	12.04	9.779	7.943	6.034	4.901
1,100	16.94	12.87	10.45	8.491	6.450	5.391
1,200	18.01	13.68	11.11	9.025	6.856	5.568
1,300	19.04	14.47	11.75	9.545	7.250	5.889
1,400	20.06	15.24	12.38	10.05	7.636	6.203
1,500	21.05	15.99	12.99	10.55	8.015	6.510
1,600	22.02	16.73	13.59	11.04	8.385	6.810
1,700	22.98	17.45	14.18	11.52	8.748	7.106
1,800	23.92	18.17	14.76	11.99	9.105	7.396
1,900	24.84	18.87	15.33	12.45	9.456	7.681
2,000	25.75	19.56	15.89	12.90	9.803	7.962
2,100	26.64	20.24	16.44	13.35	10.14	8.238
2,200	27.52	20.91	16.98	13.79	10.48	8.511
2,300	28.39	21.57	17.52	14.23	10.81	8.780
2,400	29.25	22.22	18.05	14.66	11.14	9.046
2,500	30.10	22.86	18.57	15.08	11.46	9.308

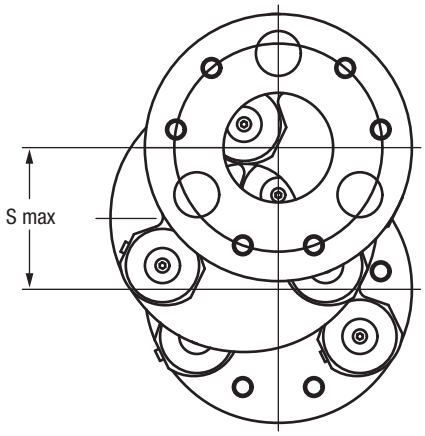
The L200 & L300 Series couplings use needle bearings. The B-10 lifetime on the bearing is considered the life of the coupling, assuming that the bearing is the weakest part in the coupling. The lifetime-speed factor accounts for the B-10 lifetime and shaft speed.

Performance Data





Recommended operational
area for shaft displacement

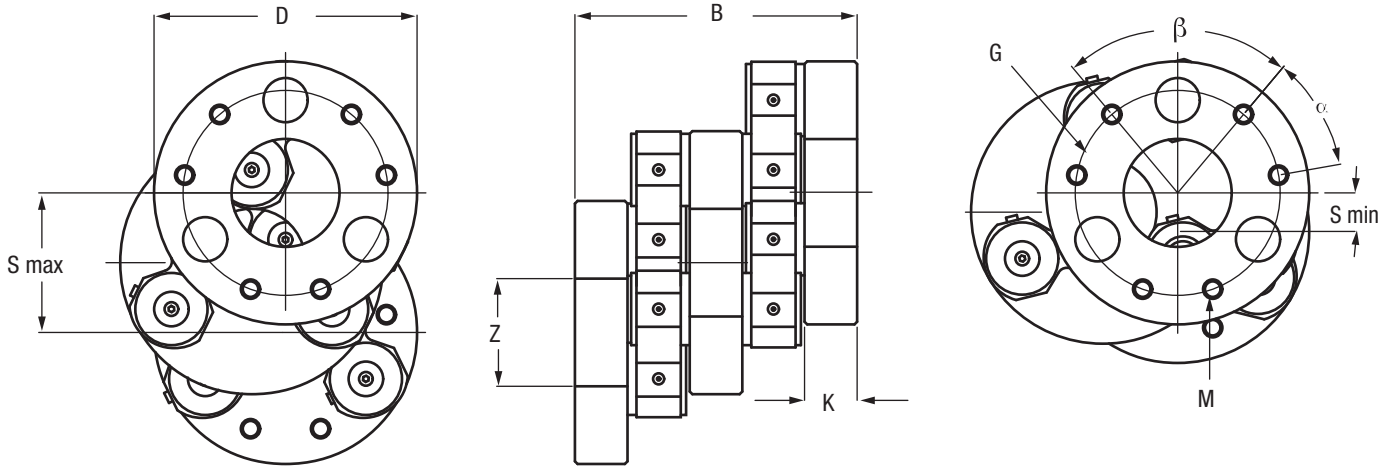


Coupling Designation	Performance Data									
Part No.	Shaft Displacements					Performance Factor P	Max. Torque Capacity (In-Lbs)*	Practical Speed Limit (rpm)**	Coupling Weight (Lb)	Inertia Wk2 (Lb-In²)
	S (In)	S min (In)	S max (In)	S ml (In)	Angular (In)*					
L230C	1.75	0.437	1.575	3.026	0.020	0.186	637	2,500	2	2
L234C	2.00	0.50	1.80	3.46	0.025	0.878	3,000	2,000	6	9
L239C						1.465	5,000	2,000	7	17
L246C						2.285	7,800	2,000	9	31
L253C						3.222	11,000	2,000	11	50
L259C	3.50	0.87	3.15	6.05	0.025	5.272	18,000	1,750	30	155
L270C						8.787	30,000	1,750	39	297
L280C						13.035	44,500	1,500	47	496
L290C						18.160	62,000	1,250	55	770
L281C	4.50	1.12	4.05	7.78	0.025	10.691	36,500	1,250	65	608
L289C						16.549	56,500	1,250	77	948
L210C						24.605	84,000	1,000	96	616
L211C						34.856	119,000	1,000	112	2,594
L214C						60.633	207,000	1,000	171	6,049
L217C						93.732	320,000	1,000	223	11,917
L220C						134.446	459,000	750	273	20,913
L350C	4.00	1.00	3.60	6.92	0.025	1.465	5,000	2,500	10	36
L355C						2.255	7,700	2,500	12	55
L360C	6.00	1.50	5.40	10.37		1.845	6,300	2,000	12	70
L375C	5.00	1.25	4.50	8.64	0.025	6.883	23,500	1,750	45	360
L385C	7.00	1.75	6.30	12.10		8.143	27,800	1,750	57	583
L310C	7.00	1.75	6.30	12.10	0.025	13.767	47,000	1,250	95	1,368
L312C	10.00	2.50	9.00	17.29		17.135	58,500	1,000	129	2,594

*The torque capacity of the Schmidt Coupling is primarily a function of the bearing size, the number of bearings and the torque radius of the coupling. These design parameters are expressed by the performance factor P.

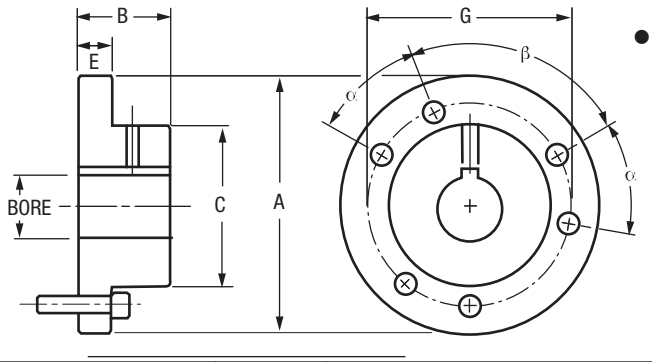
**If shaft speed requirement is higher than the practical speed limit consult our engineering department.

Dimension Data



Coupling Designation	Dimension Data									
Part No.	Coupling		End Disc Assembly Data							
	D (In)	B ±.032 (In)	Z (In)	K (In)	G (In)	M (In)	Number of Bolts	α (°)	β (°)	Bolt Size (In)
L230C	3.00	2.75	1.280	0.380	2.187	8-32	6	40	80	8-32 Fl. Hd.
L234C	3.37	3.81	1.375	0.60	2.750	5/16-18	6	40	80	5/16-18x1
L239C	3.93		1.937		3.000		4	90	90	
L246C	4.62		2.625		3.750		5	72	72	
L253C	5.25		3.250		4.375		6	60	60	
L259C	5.94	6.37	2.437	1.19	4.625	7/16-14	6	40	80	7/16-14x1.75
L270C	7.00		3.500		5.625	5/8-11	4	90	90	5/8-11x2
L280C	8.00		4.500		6.625		5	72	72	
L290C	9.00		5.500		7.625		6	60	60	
L281C	8.00	7.62	3.500	1.44	6.500	5/8-11	6	40	80	5/8-11x2
L289C	8.90		4.375		7.375	3/4-10	4	90	90	3/4-10x2.25
L210C	10.20		5.500		8.500		5	72	72	
L211C	11.60		7.000		10.000		6	60	60	
L214C	14.41		9.500		12.625	1-8	8	45	45	1-8x2.25
L217C	17.31		12.000		15.500		10	36	36	
L220C	20.25		14.500		18.250		12	30	30	
L350C	5.00	3.81	1.375	0.60	2.750	5/16-18	6	40	80	5/16-18x1
L355C	5.56		1.625							
L360C	6.00		1.375							
L375C	7.50	6.37	2.437	1.19	4.625	7/16-14	6	40	80	7/16-14x2
L385C	8.50		2.437							
L310C	10.00	7.62	3.500	1.44	6.500	5/8-11	6	40	80	5/8-11x2
L312C	11.80		3.500							

SCHMIDT ***HUBS*** FOR ***200 – 500 SERIES*** COUPLINGS



- Standard Hub Data For Schmidt Couplings
- Typical shaft/hub configurations determined by amount of axial shaft separation.

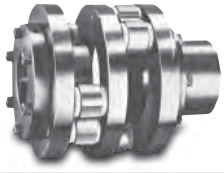
Used on Coupling		Hub Part No.	Hub Dimensions (Inch)									Wt. (Lbs)
L200	L300		A	B	C	E	Max Bore†	G	Number & Size of Fasteners	α	β	
L230C		S6025XX	2.812	1.000	1.750	0.500	1.125	2.188	(6) #8-32 x 3/4	40°	80°	1.2
L234C	L350C L355C L360C	S6027XX	3.375	1.250	2.000	0.687	1.250	2.750	(6) 5/16-18 x 1	40°	80°	2.2
L239C		S6030XX	3.938	1.500	2.250	0.687	1.500	3.000	(4) 5/16-18 x 1	90°	90°	3.2
L246C		S6031XX	4.625	1.750	3.000	0.687	2.000	3.750	(5) 5/16-18 x 1	72°	72°	5.3
L253C		S6032XX	5.250	1.875	3.625	0.687	2.500	4.375	(6) 5/16-18 x 1	60°	60°	7.6
L259C	L375C L385C	S6033XX	5.938	2.125	3.750	0.750	2.500	4.625	(6) 7/16-14 x 1-3/4	40°	80°	10.1
L270C		S6035XX	7.000	2.500	4.375	1.000	3.000	5.625	(4) 5/8-11 x 2	90°	90°	17.2
L280C		S6039XX	8.000	2.875	5.375	1.000	3.750	6.625	(5) 5/8-11 x 2	72°	72°	26.1
L290C		S6042XX	9.000	3.375	6.375	1.000	4.500	7.625	(6) 5/8-11 x 2	60°	60°	39.5
L281C	L375C L385C	S6038XX	8.000	3.250	5.250	1.000	3.500	6.500	(6) 5/8-11 x 2	40°	80°	28.0
L289C		S6040XX	8.900	3.500	6.000	1.250	4.125	7.375	(4) 3/4-10 x 2-1/4	90°	90°	39.8
L210C		S6043XX	10.000	4.000	7.125	1.250	5.250	8.500	(5) 3/4-10 x 2-1/4	72°	72°	58.6
L211C		S6044XX	11.600	4.500	8.625	1.250	6.375	10.000	(6) 3/4-10 x 2-1/4	60°	60°	90.4
L214C	Contact Factory											
L217C												
L220C												

†Please specify bore and keyway size.

Standard Hub Data for Inline and 5-D Couplings (Inch)											
Used on Coupling	Hub Part No.	A	B	C	E	Max Bore†	G	Number & Size of Fasteners	α	β	Hub Wts. Net Lbs.
L431C/D L442C/D	S6026XX	3.000	1.250	3.000	1.250	1.500	2.412	(3) 1/4-20 x 1	120°	120°	2.5
L436C/D L448C/D*	S6029XX	3.613	1.750	2.500	0.687	1.750	3.000	(6) 1/4-20 x 1-1/4	60°	60°	3.4
L463C/D L485C/D*	S6034XX	6.250	3.000	3.937	1.000	2.625	5.000	(6) 1/2-13 x 2	60°	60°	15.5
L481C/D L411C/D*	S6037XX	8.125	4.000	5.437	1.250	3.500	7.000	(8) 5/8-11 x 2-1/4	45°	45°	36.4
L536S	S6027XX	3.375	1.250	2.000	0.687	1.250	2.750	(6) 5/16-18 x 1	40°	80°	2.2
L558S L564S	S6032XX	5.250	1.875	3.625	0.687	2.500	4.375	(6) 5/16-18 x 1	60°	60°	7.6
L585S	S6033XX	5.938	2.125	3.750	0.750	2.500	4.625	(6) 7/16-14 x 1-3/4	40°	80°	10.1
L582S	S6039XX	8.000	2.875	5.375	1.000	3.750	6.625	(5) 5/8-11 x 2	72°	72°	26.1
L511S	S6038XX	8.000	3.250	5.250	1.000	3.500	6.500	(6) 5/8-11 x 2	40°	80°	28.0
L514S	S6044XX	11.600	4.500	8.625	1.250	6.375	10.000	(6) 3/4-10 x 2-1/4	60°	60°	90.4

†Please specify bore and keyway size.
*Only these sizes will accept an inverted hub configuration to reduce axial length.

Inverted-standard configuration



Standard configuration

Inverted configuration

SCHMIDT COUPLINGS ***REFERENCE DATA***

Standard Keyways - Inch Bore Hubs

Bore Size		Keyway	Bore Size		Keyway
Over	To		Over	To	
0.437	0.562	0.125x0.062	2.250	2.750	0.625x0.312
0.562	0.875	0.187x0.094	2.750	3.250	0.750x0.375
0.875	1.250	0.250x0.125	3.250	3.750	0.875x0.437
1.250	1.375	0.312x0.156	3.750	4.500	1.000x0.500
1.375	1.750	0.375x0.187	4.500	5.500	1.250x0.625
1.750	2.250	0.500x0.250	5.500	6.500	1.500x0.750

Standard Keyways - Metric Bore Hubs

Bore Size		Keyway	Bore Size		Keyway
Over	To		Over	To	
10	12	4x1.8	58	65	18x4.4
12	17	5x2.3	65	75	20x4.9
17	22	6x2.8	75	85	22x5.4
22	30	8x3.3	85	95	25x5.4
30	38	10x3.3	95	110	28x6.4
38	44	12x3.3	110	130	32x7.4
44	50	14x3.8	130	150	36x8.4
50	58	16x4.3	150	170	40x9.4

Note: Inch bore hubs will be supplied with inch size setscrews. Metric bore hubs will be supplied with metric size setscrews. Standard keyways are for square keys. Keyways for rectangular keys are available - consult factory.

Bore Tolerances

Nominal Shaft Diameter		Bore Tolerance			
		Class 1		Interference	
Over	To	Clearance Fit		Fit	
0.437	1.500	-0.000	+0.001	-0.001	-0.0005
1.500	2.000	-0.000	+0.001	-0.002	-0.001
2.000	3.000	-0.000	+0.0015	-0.002	-0.001
3.000	4.000	-0.000	+0.0015	-0.003	-0.0015
4.000	5.000	-0.000	+0.002	-0.0035	-0.002
5.000	6.000	-0.000	+0.002	-0.004	-0.0025

Based on nominal shaft diameter (AGMA Standard 511.02) Clearance Fit Standard. Metric hub bores will be supplied with H7 clearance fit as standard. S7 interference fit available.

How To Select An Inline or 5-D Coupling

Selection Formula

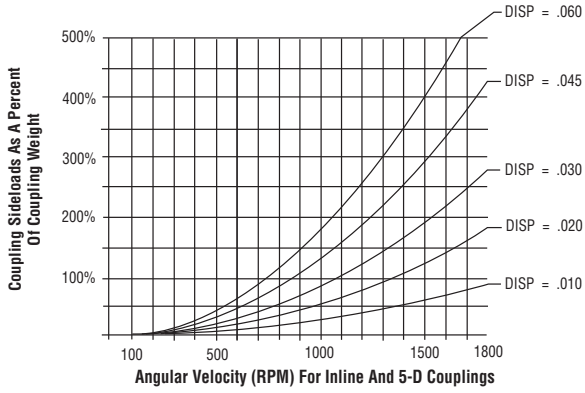
$$(HP/100\ RPM) = \frac{(Required\ HP) \times (Service\ Factor) \times 100}{RPM}$$

Selection Formula Example

Required HP = 100 at 1750 RPM and 1.5 Service Factor

$$(HP/100\ RPM) = \frac{100 \times 1.5 \times 100}{1750} = 8.57$$

Look for a coupling size which as a HP/100 RPM rating equal or greater than the required 8.57. For this example the coupling size L463C with a HP/100 RPM rating of 19.04 can be selected. If the backlash requirement is not critical the coupling L463D, which does not require any further lubrication, can be chosen.



The graph shows the InLine /5D coupling's reaction to parallel misalignment. Machinery sensitive to sideload forces generated by the coupling may require closer shaft alignment. Machinery not sensitive to sideload forces may allow for more misalignment than shown in the dimension and performance data tables.

Service Factor Guide

Uniform	1.0
Light Shock	1.5
Medium Shock	2.0
Heavy Shock	2.5

The service factors listed are intended only as a general guide. For typical service factors used in various applications, refer to "AGMA Standard-Lc classification and Service Factors For Flexible Couplings" (AGMA 514.02).

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