

The Schmidt-Kupplung® series

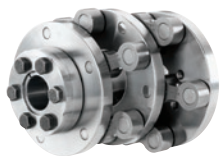


Standard S series

Symbiosis of performance, compact design and generous offset capacity

Bore diameter up to 80 mm

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

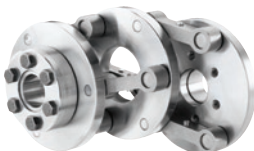


Power Plus P series

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

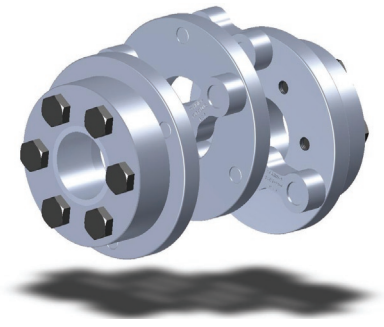
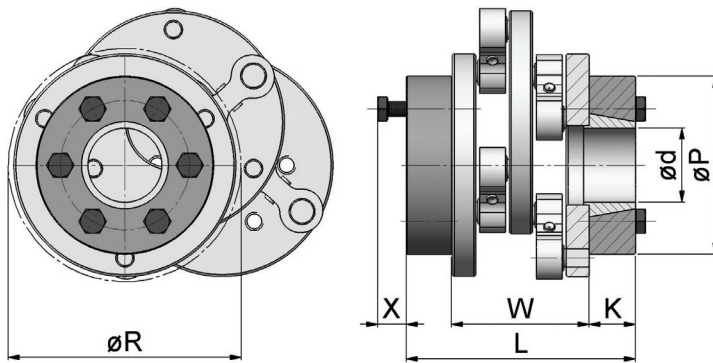
Schmidt-Kupplung®

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.



Hub version 3: locking-assembly

	T_{KN} (Nm)	T_{Kmax} (Nm)	n_{max} (1/min)	ΔK_v (mm)	ΔK_{rmin} (mm)	ΔK_r (mm)	ΔK_a (mm)	ΔK_w (°)	C_T (kNm/rad)	J (kg cm ²)	m (kg)	$\varnothing R$ (mm)	L (mm)	X (mm)	W (mm)	K (mm)	$\varnothing P$ (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

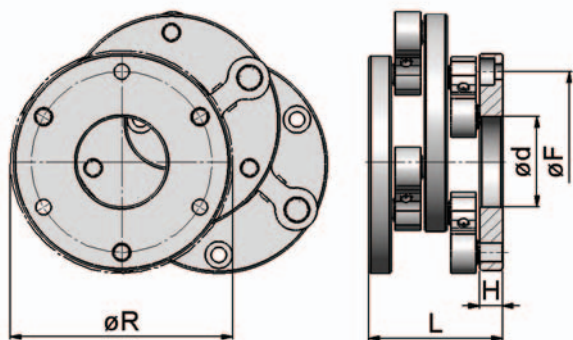
Hub version 3: locking-assembly

	T_{KN} (Nm)	T_{Kmax} (Nm)	n_{max} (1/min)	ΔK_v (mm)	ΔK_{rmin} (mm)	ΔK_r (mm)	ΔK_a (mm)	ΔK_w (°)	C_T (kNm/rad)	J (kg cm ²)	m (kg)	$\emptyset R$ (mm)	L (mm)	X (mm)	W (mm)	K (mm)	$\emptyset P$ (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

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.



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_r (kNm/rad)	J (kg cm ²)	m (kg)	$\varnothing R$ (mm)	H (mm)	L (mm)	$\varnothing d$ (mm)	$\varnothing F$ (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	3xM16
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

Hub version 5: flange-mounting

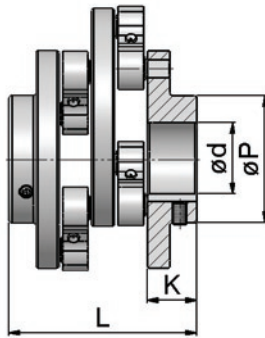
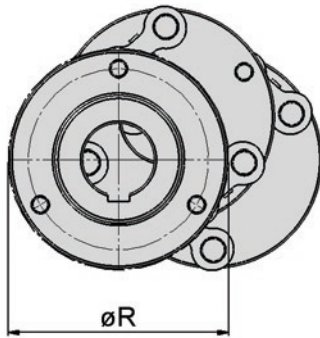
	T_{KN} (Nm)	T_{Kmax} (Nm)	n_{max} (1/min)	K_v (mm)	ΔK_{rmin} (mm)	ΔK_{rmax} (mm)	ΔK_a (mm)	ΔK_w (°)	C_t (kNm/rad)	J (kg cm ²)	m (kg)	$\varnothing R$ (mm)	H (mm)	L (mm)	$\varnothing d$ (mm)	$\varnothing F$ (mm)	SkG
S 1520	1.520	2.965	1.100	180	25	95	1	0,5	340	1.310	22,5	204	31	155	80	155	6xM16
S 1525	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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► **Schmidt-Kupplung®** ► **Standard**
 Symbiosis of performance, compact design
 and generous offset capacity



Hub version 6: standard hub

	T_{KN} (Nm)	T_{Kmax} (Nm)	n_{max} (1/min)	ΔK_v (mm)	ΔK_{rmin} (mm)	ΔK_r (mm)	ΔK_s (mm)	ΔK_w (°)	C_T (kNm/rad)	J (kg cm ²)	m (kg)	$\varnothing R$ (mm)	K (mm)	L (mm)	$\varnothing P$ (mm)	$\varnothing d_{max}$ (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	192	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

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_1 (kNm/rad)	J (kg cm ²)	m (kg)	$\varnothing R$ (mm)	K (mm)	L (mm)	$\varnothing P$ (mm)	$\varnothing d_{max}$ (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

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.

1. Calculation of the design torque. Please multiply your continuous 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 continuous torque rating greater 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 cm ²)
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