

► 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.

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

$\varnothing R$	swing diameter (mm)
H	disc thickness (mm)
L	coupling length (mm)
X	mounting space (mm)
W	coupling basis (mm)
$\varnothing P$	hub diameter (mm)
K	total hub length (mm)
$\varnothing d$	bore diameter (mm)
$\varnothing F$	bolt circle diameter (mm)
Skg	number of counter bores x bolt size