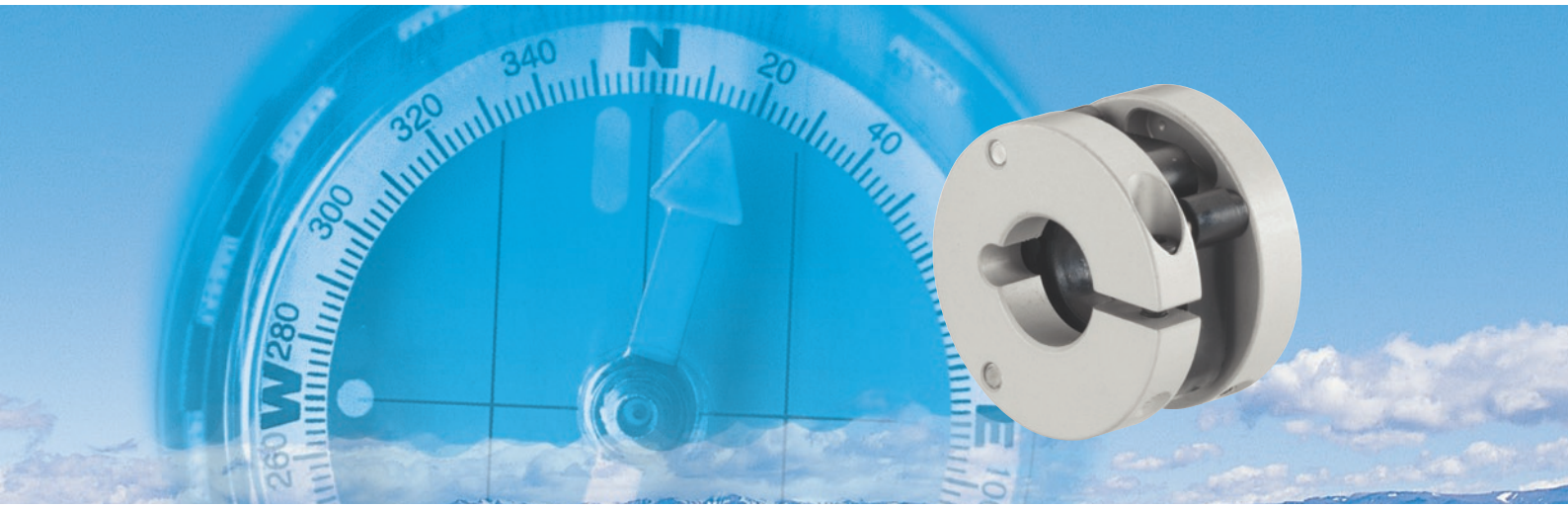
Controlflex® Compact

The very short design



The Controlflex® series

Standard
For all standard encoders

Impuls Plus
For encoders with maximum accuracy

Compact
The very short design

Industry
For robust industrial encoders

Controlflex®

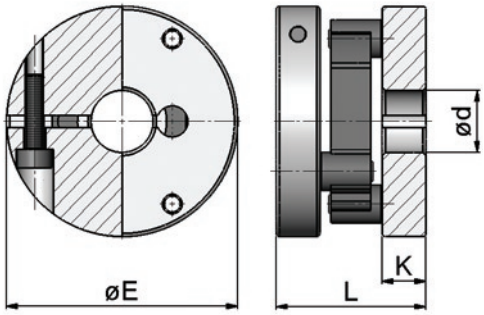
Controlflex® is the ideal coupling for encoders. Controlflex® is a compact, electrically-insulating, precise shaft coupling with excellent kinematic properties. Modular construction makes it possible to realize all possible bore combinations from stock.

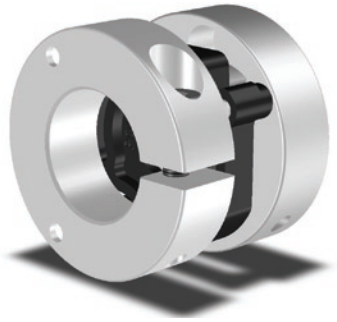
Compact

The very short design, especially designed for encoder applications where the coupling is integrated into a very tight axial space. As an example where the coupling is mounted in a fixed housing.

SCHMIDT-KUPPLUNG GmbH

Fon +49 5331 9552-500 · Fax +49 5331 9552-552
www.schmidt-kupplung.com · info@schmidt-kupplung.com





	ØE (mm)	L (mm)	$Ød_{max}$ (mm)	$Ød_{min}$ (mm)	K (mm)	m (kg)	J (kg cm²)	T_{KN} (Nm)	$T_{K\ max}$ (Nm)	ΔK_r (mm)	ΔK_w (°)	ΔK_a (mm)	n_{max} (1/min)	C_R (N)
CPS 9.1	25	20,5	12	4	7	0,02	0,02	0,7	1	0,4	1,5	0,5	22.000	3,4
CPS 14.1	37	24	22	5	7	0,04	0,1	2	3	1	1,5	0,7	15.000	4,4

Order Example 1: CPS 9.1 Ø10 Ø10 Order Example 2: CPS 14.1 Ø10 Ø10

CPS 14.1	Ø10 Ø10
Type Controlflex® Compact CPS 14.1	bore diameters

To ensure the correct selection of the Controlflex®
please use our selection procedure and legend area to
download the required information.

SCHMIDT-KUPPLUNG GmbH
Fon +49 5331 9552-500 · Fax +49 5331 9552-552
www.schmidt-kupplung.com · info@schmidt-kupplung.com

1. Calculation of the design torque. Please multiply your continuos torque by the required service factor to get the design torque.

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_r	maximum radial misalignment capacity (mm)
ΔK_a	maximum axial misalignment capacity (mm)
ΔK_w	maximum angular misalignment capacity (°)
C_R	restoring forces at 0,2 mm radial misalignment (N)
J	moment of inertia (kg cm²)

Dimension

ØE	coupling diameter (mm)
L	coupling length (mm)
K	clamp hub length (mm)
$Ød_{max}$	maximum bore diameter (mm)
$Ød_{min}$	minimum bore diameter (mm)
m	weight of the coupling (kg)

SCHMIDT-KUPPLUNG GmbH
Fon +49 5331 9552-500 · Fax +49 5331 9552-552
www.schmidt-kupplung.com · info@schmidt-kupplung.com