

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.

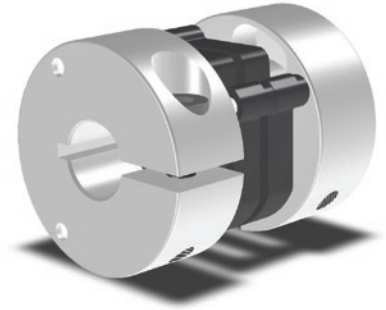
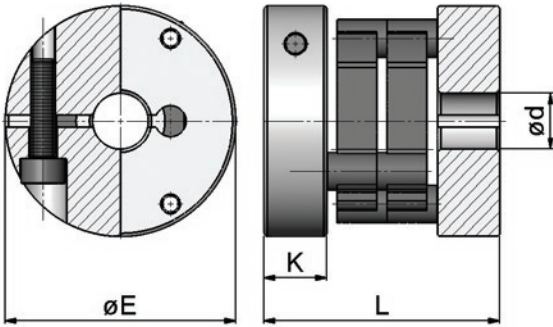
Controlflex® is a compact, electrically-insulating, precise shaft coupling with excellent kinematic properties.

Modular construction makes it possible to realize all possible bore combinations from stock.

Impuls Plus

The Controlflex® series for encoders with maximum accuracy. It is predestined for encoders using a graduated disk with increased line counts or with fine measuring signals.

▶ **Controlflex®** ▶ **Impuls Plus**
 For encoders with maximum accuracy



| | ØE (mm) | L (mm) | Ød _{max} (mm) | Ød _{min} (mm) | K (mm) | m (kg) | J (kg cm ²) | T _{KN} (Nm) | T _{K max} (Nm) | ΔK _r (mm) | ΔK _w (°) | ΔK _a (mm) | n _{max} (1/min) | C _R (N) |
|----------|---------|--------|------------------------|------------------------|--------|--------|-------------------------|----------------------|-------------------------|----------------------|---------------------|----------------------|--------------------------|--------------------|
| CPS 8.2 | 19 | 20 | 10 | 3 | 5,6 | 0,01 | 0,01 | 0,6 | 1,4 | 0,4 | 1 | 0,3 | 25.000 | 6 |
| CPS 10.2 | 25 | 31 | 12 | 4 | 9,5 | 0,03 | 0,02 | 1,4 | 2 | 0,7 | 1 | 0,5 | 22.000 | 6,8 |
| CPS 15.2 | 37 | 38 | 20 | 5 | 10 | 0,07 | 0,12 | 4 | 6 | 1 | 1 | 0,7 | 15.000 | 8,8 |

Order Example 1: CPS 15.2 Ø10 Ø10 Order Example 2: CPS 8.2 Ø10 Ø10

| | |
|---------------------------------------|----------------|
| CPS 8.2 | Ø10 Ø10 |
| Type Controlflex® Impuls Plus CPS 8.2 | bore diameters |

To ensure the correct selection of the Controlflex® 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 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 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_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 cm ²) |

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) |