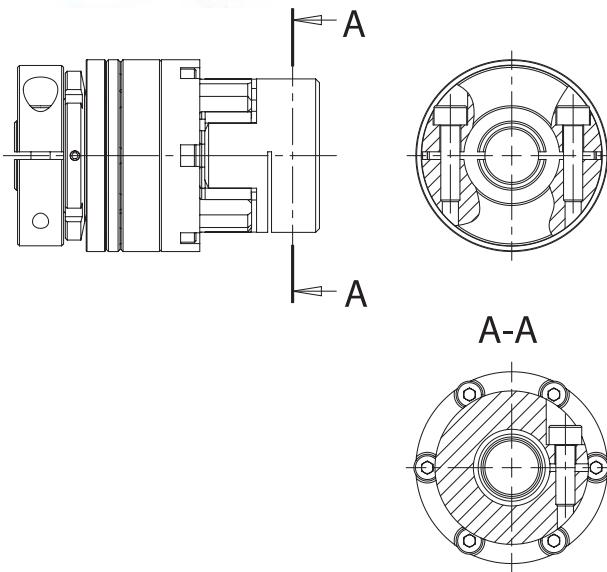


# Sicherheitskupplungen für direkte Antriebe

## Safety couplings for direct drives

# Sicherheitskupplung FHW-F-SBK mit Elastomerkupplung und Klemm(nabe) Ring

## Safety coupling FHW-F-SBK with elastomer coupling and clamping (hub) Ring



**Der Einstellbereich der Sicherheitskupplung wird durch verschiedene Tellerfederpakete erreicht.**

**The adjustment range of the coupling is realized with different springs.**

## Merkmale

- Exakt einstellbares Ausrückmoment
  - Ausgleich von Fluchtungsfehlern
  - Sehr geringes Restmoment
  - Spielfrei
  - Hohe Wiederholungsgenauigkeit
  - Wartungsfrei
  - Funktionsteile gehärtet
  - Selbstständiges Wiedereinrücken nach 360°
  - Optimales dynamisches Ausrückverhalten
  - Sehr geringes Massenträgheitsmoment
  - Diverse Optionen und Spezialausführungen auf Anfrage möglich!

HA-CO Sicherheitskupplungen -> mit Sicherheit Qualität!

### **Bestellbezeichnung / Beispiel:**

FHW-F-SBK-60 - 26H7 - 30H7 - 45Nm

**Typ+Größe** Bohrung D1 Bohrung D2 Ausrastmoment

## Characteristics

- Adjustable disengagement torque
  - Compensation of alignment mistakes
  - Very low residual moment
  - Backlash-free
  - High repetition accuracy
  - Maintenance-free
  - All working parts hardened
  - Automatic re-engagement after 360°
  - Reliable (positive) and fast disengagement
  - Very low mass moment of inertia
  - Various options and special versions on request!

**HA-CO safety couplings -> secureness guaranteed!**

## Order description / example:

FHW-F-SBK-60 - 26H7 - 30H7 - 45Nm

Type+Size      Bore D1      Bore D2      Disengagement torque

## Standard Optionen / Standardized options

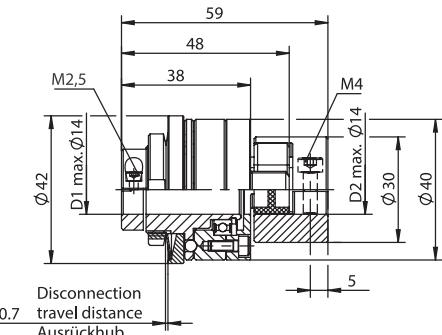


\* Zusätzliche Passfedernut nicht bei D. max wählbar

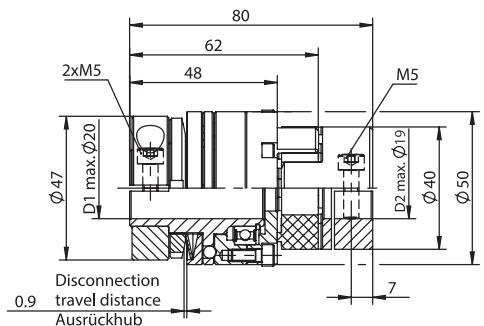
\*additional keyway  
not at D=max, selectable

Gewünschte Optionen müssen im Bestelltext angegeben werden (Legende Symbole S. 7).  
Desired options have to be mentioned in the order text (key symbols p. 7).

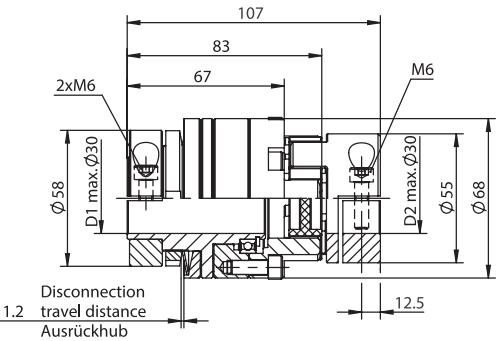
FHW-F-SBK-3



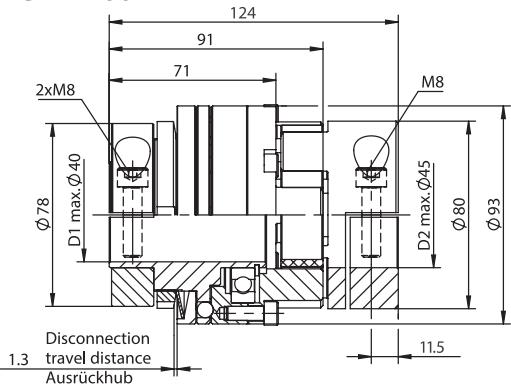
|  |  |
|--|--|
| Ausrastmomente*<br>Disengagement torque*   | 0.7-3<br>M <sub>AR</sub> [Nm]                |
| Trägheitsmoment<br>Inertia torque  | 0.04<br>[10 <sup>-3</sup> kgm <sup>2</sup> ] |
| Stat. Federsteife<br>Stat. spring stiffness  | 172<br>[Nm/rad]                              |
| Dyn. Federsteife<br>Dyn. spring stiffness  | 2250<br>[Nm/rad]                             |
| Laterale Federsteife<br>Lateral spring stiffness   | 605<br>[N/mm]                                |
| Max. axialer Wellenversatz<br>Max. axial shaft misalignment  | 1<br>[mm]                                    |
| Max. lateraler Wellenversatz<br>Max. lateral shaft misalignment  | 0.09<br>[mm]                                 |
| Max. angularer Wellenversatz<br>Max. angular shaft misalignment  | ±1 [Grad]<br>[Degree]                        |
| Anzugsm. der Schrauben (M2.5/M4 Schrauben, DIN 912-12.9)<br>Tightening torque of screws (M2.5/M4 screws, DIN 912-12.9) | 1.6/4.5<br>M <sub>A</sub> [Nm]               |

**FHW-F-SBK-25**


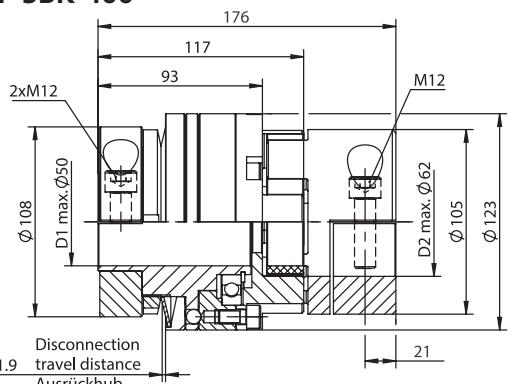
|   |                                     |
|---|-------------------------------------|
| Ausrastmomente*                                       | 3-25                                |
| Disengagement torque*                                 | M <sub>AR</sub> [Nm]                |
| Trägheitsmoment                                       | 0.14                                |
| Inertia torque  | [10 <sup>3</sup> kgm <sup>2</sup> ] |
| Stat. Federsteife                                     | 860                                 |
| Stat. spring stiffness                                | [Nm/rad]                            |
| Dyn. Federsteife                                      | 2850                                |
| Dyn. spring stiffness                                 | [Nm/rad]                            |
| Laterale Federsteife                                  | 2010                                |
| Lateral spring stiffness                              | [N/mm]                              |
| Max. axieller Wellenversatz                           | 1.20                                |
| Max. axial shaft misalignment                         | [mm]                                |
| Max. lateraler Wellenversatz                          | 0.06                                |
| Max. lateral shaft misalignment                       | [mm]                                |
| Max. angulärer Wellenversatz                          | ±1 [Grad]                           |
| Max. angular shaft misalignment                       | [Degree]                            |
| Anzugsm. der Schrauben (M5 Schrauben, DIN 912-12.9)   | 10                                  |
| Tightening torque of screws (M5 screws, DIN 912-12.9) | M <sub>A</sub> [Nm]                 |

**FHW-F-SBK-60**


|   |                                     |
|---|-------------------------------------|
| Ausrastmomente*                                       | 10-60                               |
| Disengagement torque*                                 | M <sub>AR</sub> [Nm]                |
| Trägheitsmoment                                       | 0.66                                |
| Inertia torque  | [10 <sup>3</sup> kgm <sup>2</sup> ] |
| Stat. Federsteife                                     | 2063                                |
| Stat. spring stiffness                                | [Nm/rad]                            |
| Dyn. Federsteife                                      | 6189                                |
| Dyn. spring stiffness                                 | [Nm/rad]                            |
| Laterale Federsteife                                  | 2560                                |
| Lateral spring stiffness                              | [N/mm]                              |
| Max. axieller Wellenversatz                           | 1.40                                |
| Max. axial shaft misalignment                         | [mm]                                |
| Max. lateraler Wellenversatz                          | 0.10                                |
| Max. lateral shaft misalignment                       | [mm]                                |
| Max. angulärer Wellenversatz                          | ±1 [Grad]                           |
| Max. angular shaft misalignment                       | [Degree]                            |
| Anzugsm. der Schrauben (M6 Schrauben, DIN 912-12.9)   | 14                                  |
| Tightening torque of screws (M6 screws, DIN 912-12.9) | M <sub>A</sub> [Nm]                 |

**FHW-F-SBK-160**


|   |                                     |
|---|-------------------------------------|
| Ausrastmomente*                                       | 40-160                              |
| Disengagement torque*                                 | M <sub>AR</sub> [Nm]                |
| Trägheitsmoment                                       | 2.70                                |
| Inertia torque  | [10 <sup>3</sup> kgm <sup>2</sup> ] |
| Stat. Federsteife                                     | 7160                                |
| Stat. spring stiffness                                | [Nm/rad]                            |
| Dyn. Federsteife                                      | 21486                               |
| Dyn. spring stiffness                                 | [Nm/rad]                            |
| Laterale Federsteife                                  | 4400                                |
| Lateral spring stiffness                              | [N/mm]                              |
| Max. axieller Wellenversatz                           | 1.80                                |
| Max. axial shaft misalignment                         | [mm]                                |
| Max. lateraler Wellenversatz                          | 0.12                                |
| Max. lateral shaft misalignment                       | [mm]                                |
| Max. angulärer Wellenversatz                          | ±1 [Grad]                           |
| Max. angular shaft misalignment                       | [Degree]                            |
| Anzugsm. der Schrauben (M8 Schrauben, DIN 912-12.9)   | 35                                  |
| Tightening torque of screws (M8 screws, DIN 912-12.9) | M <sub>A</sub> [Nm]                 |

**FHW-F-SBK-400**


|  |                                     |
|--|-------------------------------------|
| Ausrastmomente*  | 120-400                             |
| Disengagement torque*                                  | M <sub>AR</sub> [Nm]                |
| Trägheitsmoment  | 10.70                               |
| Inertia torque   | [10 <sup>3</sup> kgm <sup>2</sup> ] |
| Stat. Federsteife                                      | 20100                               |
| Stat. spring stiffness                                 | [Nm/rad]                            |
| Dyn. Federsteife                                       | 49500                               |
| Dyn. spring stiffness                                  | [Nm/rad]                            |
| Laterale Federsteife                                   | 5100                                |
| Lateral spring stiffness                               | [N/mm]                              |
| Max. axieller Wellenversatz                            | 2.10                                |
| Max. axial shaft misalignment                          | [mm]                                |
| Max. lateraler Wellenversatz                           | 0.36                                |
| Max. lateral shaft misalignment                        | [mm]                                |
| Max. angulärer Wellenversatz                           | ±1 [Grad]                           |
| Max. angular shaft misalignment                        | [Degree]                            |
| Anzugsm. der Schrauben (M12 Schrauben, DIN 912-12.9)   | 120                                 |
| Tightening torque of screws (M12 screws, DIN 912-12.9) | M <sub>A</sub> [Nm]                 |

\* &gt; Ausrastmomente auf Anfrage

\* &gt; Disengagement torque on request