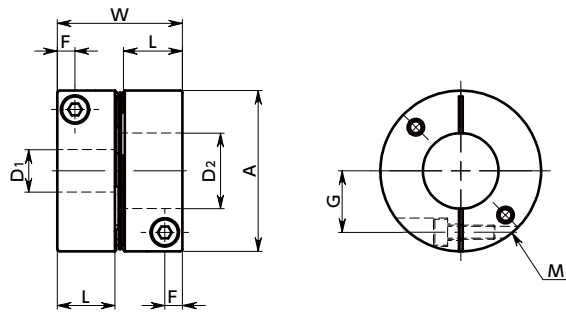
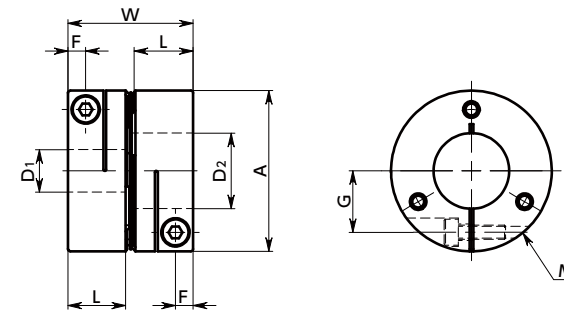


XHS-C Flexible Couplings - Single - Disk Type

Zero Backlash High torque High Rigidity

XHS-C

Outside diameter $\phi 15$ Outside diameter $\phi 19 - \phi 98$

Dimensions

Unit : mm

| Part Number | A | L | W | F | G | M | Screw Tightening Torque (N·m) |
|-------------|----|------|------|------|-------|------|-------------------------------|
| XHS-15C | 15 | 7.8 | 16.5 | 2.3 | 5 | M2 | 0.45 |
| XHS-19C | 19 | 9.2 | 19.3 | 2.6 | 7 | M2 | 0.5 |
| XHS-25C | 25 | 11 | 23.1 | 3.3 | 9.25 | M2.5 | 1 |
| XHS-27C | 27 | 11 | 23.1 | 3.3 | 10.25 | M2.5 | 1 |
| XHS-34C | 34 | 12.5 | 26.4 | 3.75 | 13 | M3 | 1.5 |
| XHS-39C | 39 | 15.5 | 32.8 | 4.5 | 14.5 | M4 | 3.5 |
| XHS-44C | 44 | 15.5 | 32.8 | 4.5 | 17 | M4 | 3.5 |
| XHS-56C | 56 | 20.5 | 43.5 | 6 | 21 | M5 | 8 |
| XHS-64C | 64 | 24 | 51.2 | 7 | 24 | M6 | 13 |
| XHS-79C | 79 | 30 | 63.6 | 8.75 | 29 | M8 | 28 |
| XHS-98C | 98 | 32 | 69 | 8.7 | 38 | M8 | 28 |

| Part Number | Standard Bore Diameter | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|------------------------|---|---|---|---|------|---|-------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | D1/D2 | 3 | 4 | 5 | 6 | 6.35 | 8 | 9.525 | 10 | 11 | 12 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 22 | 24 | 25 | 28 | 30 | 32 |
| XHS-15C | | ● | ● | ● | ● | | | | | | | | | | | | | | | | | | | |
| XHS-19C | | ● | ● | ● | ● | ● | ● | | | | | | | | | | | | | | | | | |
| XHS-25C | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | | | | | | | | | | |
| XHS-27C | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | | | | | | | | |
| XHS-34C | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | | | | | | | |
| XHS-39C | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | | | |
| XHS-44C | | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | | |
| XHS-56C | | | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | |
| XHS-64C | | | | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | |
| XHS-79C | | | | | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| XHS-98C | | | | | | | | | | | | | | | | | | | | ● | ● | ● | ● | ● |

- All products are provided with hex socket head cap screw.
- Recommended tolerance for shaft diameters is h6 and h7. (Recommended tolerance for shaft diameter $\phi 35$ only is -0.025 to $+0.010$.)
- For the shaft insertion amount to the coupling, see Mounting/maintenance.

⚠ Precautions for Use

- In case of mounting on D-cut shaft, be careful about the position of the D-cut surface of the shaft. → P.xxxx
- There are sizes where the hex socket head bolt exceeds the outer diameter of the coupling and the rotating diameter is larger than the outer diameter. Please be careful of the interference of coupling. → P.xxxx

Additional Keyway at Shaft Hole → P.xxxx Cleanroom Wash & Packaging → P.xxxx Change to Stainless Steel Screw → P.xxxx
Available / Add'l charge Please feel free to contact us Available / Add'l charge

Performance

| Part Number | Max. Bore Diameter (mm) | Rated *1 Torque (N·m) | Max. Rotational Frequency (min ⁻¹) | Moment*2 of Inertia (kg·m ²) | Static Torsional Stiffness (N·m/rad) | Max. Lateral Misalignment (mm) | Max. Angular Misalignment (°) | Max. Axial Misalignment (mm) | Mass *2 (g) |
|-------------|-------------------------|-----------------------|--|--|--------------------------------------|--------------------------------|-------------------------------|------------------------------|-------------|
| XHS-15C | 6 | 0.6 | 42000 | 2.2×10^{-7} | 110 | 0.01 | 0.7 | ± 0.1 | 6.8 |
| XHS-19C | 8 | 1.5 | 33000 | 6.3×10^{-7} | 330 | 0.02 | 1 | ± 0.1 | 13 |
| XHS-25C | 12 | 3 | 25000 | 2.3×10^{-6} | 1200 | 0.02 | 1 | ± 0.15 | 25 |
| XHS-27C | 14 | 3.3 | 23000 | 3.1×10^{-6} | 1800 | 0.02 | 1 | ± 0.2 | 27 |
| XHS-34C | 16 | 6.3 | 18000 | 9.2×10^{-6} | 3900 | 0.02 | 1 | ± 0.25 | 52 |
| XHS-39C | 20 | 12 | 16000 | 2.0×10^{-5} | 6000 | 0.02 | 1 | ± 0.25 | 84 |
| XHS-44C | 22 | 15 | 14000 | 3.3×10^{-5} | 7900 | 0.02 | 1 | ± 0.3 | 107 |
| XHS-56C | 28 | 37.5 | 11000 | 1.1×10^{-4} | 14000 | 0.02 | 1 | ± 0.35 | 233 |
| XHS-64C | 35 | 50 | 9800 | 2.2×10^{-4} | 16000 | 0.02 | 1 | ± 0.45 | 328 |
| XHS-79C | 42 | 100 | 7900 | 6.7×10^{-4} | 23000 | 0.02 | 1 | ± 0.55 | 748 |
| XHS-98C | 50 | 280 | 6400 | 1.7×10^{-3} | 52000 | 0.02 | 1 | ± 0.65 | 1120 |

*1 : Correction of rated torque due to load fluctuation is not required.

※ The shaft's slip torque may be smaller than the coupling's rated torque depending on the shaft bore. → P.xxxx

*2 : These are values with max. bore diameter.

- Part number specification

XHS-27C-8-10

1

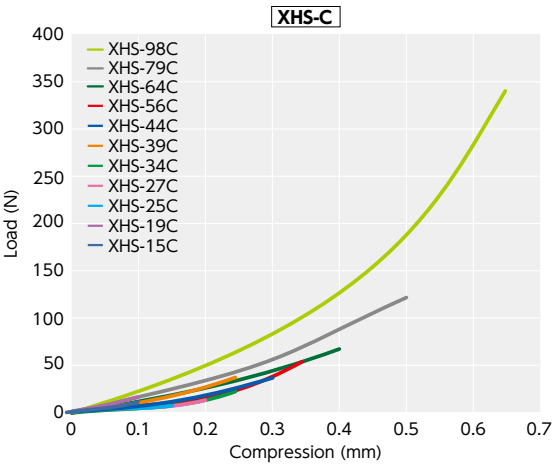
2

XHS-C Flexible Couplings - Single - Disk Type

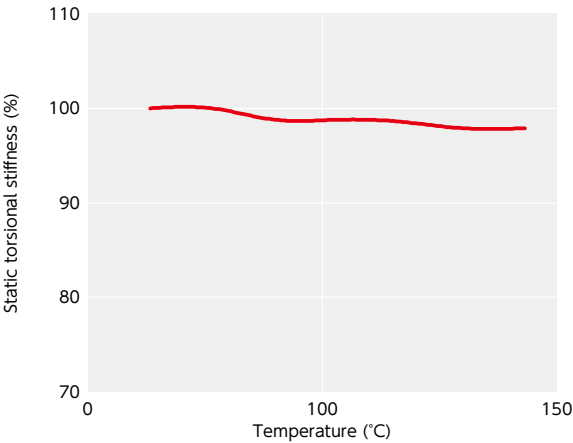
Zero Backlash High torque High Rigidity

Technical Information

Thrust Reaction Force



Change in static torsional stiffness due to temperature



This is a value under the condition where the static torsional stiffness at 20°C is 100%. The change of XHS-C in torsional stiffness due to temperature is small and the change in responsiveness is extremely small. If the unit is used under higher temperature, be careful about misalignment due to elongation or deflection of the shaft associated with thermal expansion.

Slip Torque

As in the table below, the clamping type XHS-C has different slip torque according to the bore diameter. Take care during selection.

| Outside Diameter | Bore Diameter (mm) | | | | | | | | | | | | | | | | | | | | | |
|------------------|--------------------|-----|-----|-----|------|-----|-------|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 3 | 4 | 5 | 6 | 6.35 | 8 | 9.525 | 10 | 11 | 12 | 14 | 15 | 16 | 25 | 28 | 30 | 32 | 35 | 38 | 40 | 42 | 45 |
| 15 | 0.7 | | | | | | | | | | | | | | | | | | | | | |
| 19 | 0.7 | 1.7 | 3 | | | | | | | | | | | | | | | | | | | |
| 25 | | 2.5 | 3.6 | 4.7 | 5 | | | | | | | | | | | | | | | | | |
| 27 | | 2 | 2.9 | 4 | 4.2 | 5.8 | | | | | | | | | | | | | | | | |
| 34 | | | 3.5 | 4.9 | 5.5 | 7.9 | 10 | 11 | 12 | | | | | | | | | | | | | |
| 39 | | | | 6 | 8 | 13 | 18 | 19 | 23 | | | | | | | | | | | | | |
| 44 | | | | | | 8 | 13 | 15 | 20 | 26 | | | | | | | | | | | | |
| 56 | | | | | | 22 | 34 | 37 | 45 | 55 | 66 | | | | | | | | | | | |
| 64 | | | | | | | | 23 | 42 | 60 | 88 | | | | | | | | | | | |
| 79 | | | | | | | | | | | 140 | 150 | 180 | | | | | | | | | |
| 98 | | | | | | | | | | | | | | 120 | 140 | 150 | 170 | 190 | 210 | 220 | 240 | 260 |

- These are test values based on the conditions of shaft dimensional allowance: h7, hardness: 34 - 40 HRC, and screw tightening torque of the values described in XHS-C dimension tables. They are not guaranteed values.
- Slip torque changes with usage conditions. Carry out tests under conditions similar to actual conditions in advance.

Comparison of static torsional stiffness (single disk-type)

XHS-C has high static torsional stiffness and responsiveness.

Optimal for high-speed and precision positioning for servomotors, etc.

