



OLDHAM-FLEX CLAMP

LATERAL SLIPPAGE COUPLINGS

- High absorption capacity of radial misalignment
- Elimination of loads on shaft
- Mechanical protection against excessive torque
- Replaceable disc
- Electrical insulation
- Easy assembly

OLDHAM-FLEX couplings are based on the use of a disc that can move radially with respect to the two shafts, which permits the compensation of large misalignment errors between them. The drums are machined from hardened aluminium alloy. The discs are manufactured from acetal with excellent mechanical properties and low friction coefficient. Due to wear, the coupling may show free-play above 10⁷ revolutions under normal misalignment conditions, which can be corrected by replacing the disc. Because the OLDHAM-FLEX couplings are fitted with securing drums with drilled holes, the discs can be installed and replaced without any need to

disassemble the machines in order to separate the shafts. Radial misalignment does not produce any appreciable kinematic errors in transmission. However, angular misalignment can lead to small errors in a similar fashion to "Cardan" types of universal joints. They are suitable for positioning shaft slow drives, spindles and valves, etc. They must never be employed with cantilever or paired shafts.

TECHNICAL SPECIFICATIONS

| | Torque max. (*) | Clamping torque max. | Max. Speed | Admissible max. misalignment | | Static torsional stiffness | Weight (**) | Temperature range | Inertia |
|-----------------|--------------------|----------------------------|------------|---------------------------------|--------|-------------------------------|----------------|----------------------|------------------|
| | | | | Angular | Radial | | | | |
| | Ncm | Ncm | rpm | degree | mm | Nm/rad | gr | °C | gcm ² |
| OFA 4546 | 60 | 4 | 14000 | ±3 | ±3 | 2400 | 110 | -20 to 80 | 320 |
| OFA 5557 | 90 | 8 | 11000 | ±3 | ±4 | 4100 | 230 | -20 to 80 | 3300 |
| OFA 6877 | 160 | 16 | 9000 | ±3 | ±4,5 | 6400 | 440 | -20 to 80 | 1000 |

(*) If ambient temperature exceeds 30°C, be sure to correct the rated torque and max. torque with temperature correction factor shown in the following table:

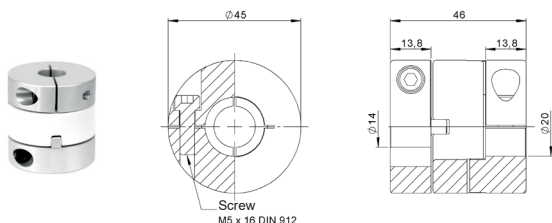
| Ambient Temperature | -20°C to 30°C | 30°C to 40°C | 40°C to 60°C | 60°C to 80°C |
|-------------------------------|---------------|--------------|--------------|--------------|
| Temperature Correction Factor | 1.00 | 0.80 | 0.70 | 0.55 |

(**) Weight for the maximum diameter of each coupling

OFA 4546

Ordering code example: OFA 4546 14/20

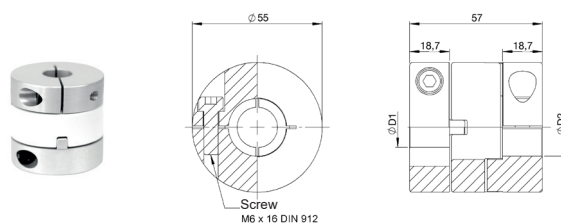
Ø Min. 12
Ø Max. 20



OFA 5557

Ordering code example: OFA 5557 25/20

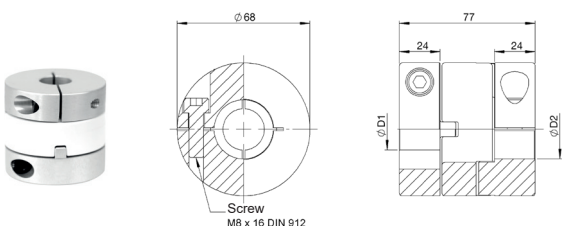
Ø Min. 15
Ø Max. 25



OFA 6877

Ordering code example: OFA 6877 20/20

Ø Min. 20
Ø Max. 35



Recommended tolerance for shaft diameters is h6 and h7

