



2 Bore code

- B** Without keyway
- K** With keyway (from $d_1 = 20$)

Oldham couplings with inch-inch bore

Dimensions in: inches - *millimeters*

| 1 d_1 | 3 $d_2 - d_3 + 0.001$ Bore (in-in) Recommended shaft tolerance -0.001 | | | | | |
|-------------------|---|----------|---------|-----------|----------|---------|
| 0.79 20 | 1/4-1/4 | 1/4-5/16 | 1/4-3/8 | 5/16-5/16 | 5/16-3/8 | 3/8-3/8 |
| 1.18 30 | 3/8-3/8 | 3/8-1/2 | 1/2-1/2 | - | - | - |
| 1.50 38 | 1/2-1/2 | 1/2-5/8 | 1/2-3/4 | 5/8-5/8 | 5/8-3/4 | 3/4-3/4 |

Oldham couplings with metric-metric bore

Dimensions in: millimeters - *inches*

| 1 d_1 | 3 $d_2 - d_3$ H8 Bore (mm-mm) Recommended shaft tolerance h7 | | | | | |
|-------------------|--|-------|-------|-------|-------|-------|
| 8 0.31 | 2-2 | 2-3 | 3-3 | - | - | - |
| 12 0.47 | 4-4 | 4-5 | 5-5 | - | - | - |
| 15 0.59 | 4-4 | 4-5 | 4-6 | 5-5 | 5-6 | 6-6 |
| 20 0.79 | 6-6 | 6-8 | 6-10 | 8-8 | 8-10 | 10-10 |
| 30 1.18 | 8-8 | 8-10 | 8-12 | 10-10 | 10-12 | 12-12 |
| 38 1.50 | 12-12 | 12-15 | 12-20 | 15-15 | 15-20 | 20-20 |

Oldham couplings with metric-inch bore

Dimensions in: millimeters - *inches*

| 1 d_1 | 3 $d_2 - d_3$ H8 Bore (mm-in) Recommended shaft tolerance h7 | | | | | | | | |
|-------------------|--|--------|--------|--------|--------|--------|--------|---------|--------|
| 20 0.79 | 6-1/4 | 6-5/16 | 6-3/8 | 8-1/4 | 8-5/16 | 8-3/8 | 10-1/4 | 10-5/16 | 10-3/8 |
| 30 1.18 | 8-3/8 | 8-1/2 | 10-3/8 | 10-1/2 | 12-3/8 | 12-1/2 | - | - | - |
| 38 1.50 | 12-1/2 | 12-5/8 | 12-3/4 | 15-1/2 | 15-5/8 | 15-3/4 | 20-1/2 | 20-5/8 | 20-3/4 |

Dimensions in: millimeters - inches

| d ₁ | d ₄ Thread | d ₅ | l ₁ | l ₂ Recommended shaft insertion depth | l ₃ | Tightening torque of the screw in Nm ≈ |
|----------------|--------------------------|----------------|----------------|--|----------------|--|
| 8 0.31 | M 2 | 3.1 0.12 | 9.6 0.38 | 2.5 0.10 | 1.3 0.05 | 0.3 |
| 12 0.47 | M 3 | 5.2 0.20 | 14.2 0.56 | 3.9 0.15 | 2 0.08 | 0.7 |
| 15 0.59 | M 3 | 8.2 0.32 | 16 0.63 | 4.4 0.17 | 2.2 0.09 | 0.7 |
| 20 0.79 | M 4 | 12.2 0.48 | 21.4 0.84 | 5.8 0.23 | 2.9 0.11 | 1.7 |
| 30 1.18 | M 4 | 16.2 0.64 | 32.5 1.28 | 10 0.39 | 5 0.20 | 1.7 |
| 38 1.50 | M 5 | 20.3 0.80 | 40 1.57 | 12.1 0.48 | 6.1 0.24 | 4 |

| d ₁ | Rated torque in Nm* | Max. torque in Nm* | Max. speed (min ⁻¹) | Moment of inertia in kgm ² | Static torsional stiffness in Nm/rad | Max. shaft misalignment | |
|----------------|------------------------|-----------------------|------------------------------------|--|--|-------------------------|-----------------|
| | | | | | | Lateral | Angular in ° |
| 8 0.31 | 0.5 | 1 | 78,000 | 7.4 x 10 ⁻⁹ | 12 | 0.7 0.028 | 3 |
| 12 0.47 | 1 | 2 | 52,000 | 5.3 x 10 ⁻⁸ | 60 | 1 0.039 | 3 |
| 15 0.59 | 1.6 | 3.2 | 42,000 | 1.4 x 10 ⁻⁷ | 80 | 1 0.039 | 3 |
| 20 0.79 | 3.2 | 6.4 | 31,000 | 5.7 x 10 ⁻⁷ | 120 | 1.2 0.047 | 3 |
| 30 1.18 | 15 | 30 | 21,000 | 5.4 x 10 ⁻⁶ | 530 | 2 0.079 | 3 |
| 38 1.50 | 28 | 56 | 16,000 | 1.6 x 10 ⁻⁵ | 1500 | 2.5 0.098 | 3 |

*Load fluctuations are not taken into account

Specification

- Hub
Aluminum **AL**
Anodized finish, natural color
- Spacer
Plastic (Polyacetal POM) **KU**
Temperature resistant up to 176 °F (80 °C)
- Set screws
Steel, blackened finish
- For d₂ / d₃ ≤ 4, one set screw
- For d₂ / d₃ > 4, two set screws
- Temperature range from: -4 °F up to +176 °F
(-20 °C up to +80 °C)
- Keyways WN / DIN 6885 → page XYZ / QVX
- ISO Fundamental Tolerances → page QVX
- Plastic Characteristics → page QVX
- RoHS compliant

Information

Oldham couplings GN 2243 can compensate for large lateral shaft misalignments while transmitting high torques. As a result, they are used in applications with a focus on pure torque and power transmission associated with high lateral shaft misalignments.

The use of set screws for clamping and the simple plug-in installation make oldham couplings very easy to assemble. They are suitable for a diverse range of applications and are used in general machine construction in packaging machines and pumps.

With the bore code K, the keyway is always integrated into both bores d₂ and d₃.

see also...

- *Elastomer Jaw Couplings GN 2241 (Hub with Set Screw)* → page QVX
- *Oldham Couplings GN 2242 (with Clamping Hub)* → page QVX
- *Installation Information on Couplings* → page XYZ
- *Technical Information on Couplings* → page XYZ

| How to order | |
|--------------|-------------------------------------|
| 1 | Outside diameter d ₁ |
| 2 | Bore code |
| 3 | Bore d ₂ -d ₃ |
| 4 | Material (Hub) |
| 5 | Material (Spacer) |

1 2 3 4 5
GN 2243-38-B1/2-1/2-AL-KU

3.1
3.2
3.3
3.4
3.5
3.6
3.7
3.8
3.9
3.10