

| Code  | Type      | Material       |        | Surface Treatment | Accessories               | Operating Temperature |
|-------|-----------|----------------|--------|-------------------|---------------------------|-----------------------|
|       |           | Main Body      | Spacer |                   |                           |                       |
| DER01 | Set Screw | Aluminum       | POM    | Anodize           | Hex Socket Set Screw      | -20°C ~ 80°C          |
| DER11 | Clamping  | Aluminum Alloy | POM    | Anodize           | Hex Socket Head Cap Screw |                       |

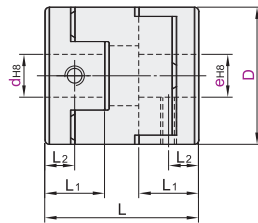


## Features

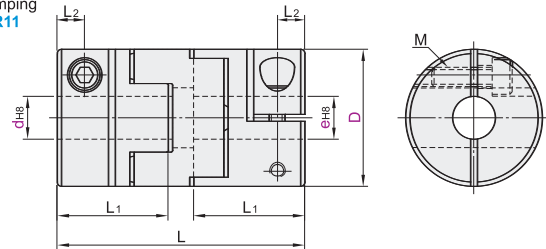
- The spacer ring has oil resistance and electrical insulation.
- Large radial and angular deviation is allowed.
- Simple structure and convenient assembly.

① The surface treatment of some products is pearl nickel plating, please consult our staff for details.

## Set Screw DER01

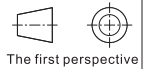


## Clamping DER11



① Due to the manufacturing process, there may be traces on the surface.

② When eccentricity, deflection angle and axial displacement are occurred simultaneously, The allowable value will be reduced.



| Part Number        |    | d-e |                                                    |                                                  |                                             |                                           |                                         |                                       |                                       |                                    |                                 |                              |                            |                         |                         |    |  |
|--------------------|----|-----|----------------------------------------------------|--------------------------------------------------|---------------------------------------------|-------------------------------------------|-----------------------------------------|---------------------------------------|---------------------------------------|------------------------------------|---------------------------------|------------------------------|----------------------------|-------------------------|-------------------------|----|--|
| Code               | D  |     |                                                    |                                                  |                                             |                                           |                                         |                                       |                                       |                                    |                                 |                              |                            |                         |                         |    |  |
| Set Screw<br>DER01 | 16 | d   | 3                                                  | 4                                                | 5                                           | 6                                         | 6.35                                    | 7                                     | 8                                     |                                    |                                 |                              |                            |                         |                         |    |  |
|                    |    | e   | 3 4 5 6 6.35 7 8                                   | 4 5 6 6.35 7 8                                   | 5 6 6.35 7 8                                | 6 6.35 7 8                                | 6.35 7 8                                | 7 8                                   | 8                                     |                                    |                                 |                              |                            |                         |                         |    |  |
|                    | 20 | d   | 4                                                  | 5                                                | 6                                           | 6.35                                      | 7                                       | 8                                     | 9                                     | 9.525                              | 10                              |                              |                            |                         |                         |    |  |
|                    |    | e   | 4 5 6 6.35 7 8<br>9 9.525 10                       | 5 6 6.35 7 8<br>9 9.525 10                       | 6 6.35 7 8<br>9 9.525 10                    | 6.35 7 8 9<br>9.525 10                    | 7 8 9<br>9.525 10                       | 8 9 9.525<br>10                       | 9 9.525<br>10                         | 9.525<br>10                        | 10                              | 12.7                         | 13                         | 14                      | 15                      | 16 |  |
|                    | 25 | d   | 5                                                  | 6                                                | 6.35                                        | 7                                         | 8                                       | 9                                     | 9.525                                 | 10                                 | 11                              | 12                           |                            |                         |                         |    |  |
|                    |    | e   | 5 6 6.35 7 8 9<br>9.525 10 11 12                   | 6 6.35 7 8 9<br>9.525 10 11 12                   | 6.35 7 8 9 9.525<br>10 11 12                | 7 8 9 9.525<br>10 11 12                   | 8 9 9.525<br>10 11 12                   | 9 9.525<br>10 11 12                   | 9.525<br>10 11 12                     | 10<br>11 12                        | 11<br>12                        | 12                           | 13                         | 14                      | 15                      | 16 |  |
|                    | 32 | d   | 6                                                  | 6.35                                             | 7                                           | 8                                         | 9                                       | 9.525                                 | 10                                    | 11                                 | 12                              | 12.7                         | 13                         | 14                      | 15                      | 16 |  |
|                    |    | e   | 6 6.35 7 8 9 9.525<br>10 11 12 12.7 13<br>14 15 16 | 6.35 7 8 9 9.525<br>10 11 12 12.7<br>13 14 15 16 | 7 8 9 9.525<br>10 11 12 12.7<br>13 14 15 16 | 8 9 9.525 10<br>11 12 12.7<br>13 14 15 16 | 9 9.525 10<br>11 12 12.7<br>13 14 15 16 | 9.525 10 11<br>12 12.7 13<br>14 15 16 | 10 11 12 12.7<br>13 14 15<br>16 17 18 | 11 12 12.7<br>13 14 15<br>16 17 18 | 12 12.7<br>13 14 15<br>16 17 18 | 12.7 13<br>14 15<br>16 17 18 | 13 14<br>15 16<br>17 18 19 | 14 15<br>16 17<br>18 19 | 15 16<br>17 18<br>19 20 | 16 |  |
|                    | 40 | d   | 8                                                  | 9                                                | 9.525                                       | 10                                        | 11                                      | 12                                    | 12.7                                  | 13                                 | 14                              | 15                           | 16                         | 17                      | 18                      | 19 |  |
|                    |    | e   | 8 9 9.525 10 11<br>12 12.7 13 14<br>15 16 17 18 19 | 9 9.525 10 11<br>12 12.7 13 14<br>15 16 17 18 19 | 9.525 10 11 12<br>13 14 15 16<br>17 18 19   | 10 11 12 12.7<br>13 14 15 16<br>17 18 19  | 11 12 12.7<br>13 14 15 16<br>17 18 19   | 12 12.7 13<br>14 15 16<br>17 18 19    | 12.7 13 14<br>15 16 17<br>18 19       | 13 14 15<br>16 17 18<br>19         | 14 15 16<br>17 18<br>19         | 15 16 17<br>18 19            | 16 17 18<br>19             | 17 18<br>19             | 18 19                   | 19 |  |
|                    | 50 | d   | 10                                                 | 11                                               | 12                                          | 12.7                                      | 13                                      | 14                                    | 15                                    | 16                                 | 17                              | 18                           | 19                         | 20                      |                         |    |  |
|                    |    | e   | 10 11 12 12.7 13 14<br>15 16 17 18 19 20           | 11 12 12.7 13 14<br>15 16 17 18 19 20            | 12 12.7 13 14 15<br>16 17 18 19 20          | 12.7 13 14 15<br>16 17 18 19 20           | 13 14 15 16<br>17 18 19 20              | 14 15 16 17<br>18 19 20               | 15 16 17 18<br>19 20                  | 16 17 18<br>19 20                  | 17 18<br>19 20                  | 18 19<br>20                  | 19                         | 20                      |                         |    |  |
|                    | 63 | d   | 12                                                 | 12.7                                             | 13                                          | 14                                        | 15                                      | 16                                    | 17                                    | 18                                 | 19                              | 20                           | 22                         | 24                      | 25                      |    |  |
|                    |    | e   | 12 12.7 13 14<br>15 16 17 18 19<br>20 22 24 25     | 12.7 13 14 15<br>16 17 18 19<br>20 22 24 25      | 13 14 15 16<br>17 18 19 20<br>22 24 25      | 14 15 16 17<br>18 19 20 22<br>24 25       | 15 16 17 18<br>19 20 22<br>24 25        | 16 17 18<br>19 20 22<br>24 25         | 17 18 19<br>20 22 24<br>25            | 18 19 20<br>22 24<br>25            | 19 20 22<br>24 25               | 20 22 24<br>25               | 22 24<br>25                | 24 25                   | 25                      |    |  |
| Clamping<br>DER11  | 16 | d   | 3                                                  | 4                                                | 5                                           | 6                                         |                                         |                                       |                                       |                                    |                                 |                              |                            |                         |                         |    |  |
|                    |    | e   | 3 4 5 6                                            | 4 5 6                                            | 5 6                                         | 6                                         |                                         |                                       |                                       |                                    |                                 |                              |                            |                         |                         |    |  |
|                    | 20 | d   | 4                                                  | 5                                                | 6                                           | 6.35                                      | 7                                       | 8                                     |                                       |                                    |                                 |                              |                            |                         |                         |    |  |
|                    |    | e   | 4 5 6 6.35 7 8                                     | 5 6 6.35 7 8                                     | 6 6.35 7 8                                  | 6.35 7 8                                  | 7 8                                     | 8                                     |                                       |                                    |                                 |                              |                            |                         |                         |    |  |
|                    | 25 | d   | 5                                                  | 6                                                | 6.35                                        | 7                                         | 8                                       | 9                                     | 9.525                                 | 10                                 |                                 |                              |                            |                         |                         |    |  |
|                    |    | e   | 5 6 6.35 7 8<br>9 9.525 10                         | 6 6.35 7 8<br>9 9.525 10                         | 6.35 7 8 9<br>9.525 10                      | 7 8 9<br>9.525 10                         | 8 9 9.525<br>10                         | 9 9.525<br>10                         | 9.525<br>10                           | 10                                 |                                 |                              |                            |                         |                         |    |  |
|                    | 32 | d   | 6                                                  | 6.35                                             | 7                                           | 8                                         | 9                                       | 9.525                                 | 10                                    | 11                                 | 12                              | 12.7                         | 13                         | 14                      | 15                      | 16 |  |
|                    |    | e   | 6 6.35 7 8 9 9.525<br>10 11 12 12.7 13<br>14       | 6.35 7 8 9 9.525 10<br>11 12 12.7 13<br>14       | 7 8 9 9.525 10<br>11 12 12.7 13<br>14       | 8 9 9.525 10 11<br>12 12.7 13<br>14       | 9 9.525 10 11<br>12 12.7 13<br>14       | 9.525 10 11 12<br>12.7 13<br>14       | 10 11 12<br>12.7 13<br>14             | 11 12 12.7<br>13 14<br>15          | 12 12.7<br>13 14<br>15          | 12.7 13<br>14 15<br>16       | 13 14<br>15 16             | 14 15<br>16             | 15 16                   | 16 |  |
|                    | 40 | d   | 8                                                  | 9                                                | 9.525                                       | 10                                        | 11                                      | 12                                    | 12.7                                  | 13                                 | 14                              | 15                           | 16                         | 17                      | 18                      | 19 |  |
|                    |    | e   | 8 9 9.525 10 11 12<br>12.7 13 14 15 16             | 9 9.525 10 11 12<br>12.7 13 14 15 16             | 9.525 10 11 12<br>13 14 15 16               | 10 11 12 12.7<br>13 14 15 16              | 11 12 12.7<br>13 14 15 16               | 12 12.7 13<br>14 15 16                | 12.7 13 14<br>15 16                   | 13 14 15<br>16 17 18               | 14 15 16<br>17 18               | 15 16 17<br>18 19            | 16 17 18<br>19             | 17 18<br>19             | 18 19                   | 19 |  |
|                    | 50 | d   | 10                                                 | 11                                               | 12                                          | 12.7                                      | 13                                      | 14                                    | 15                                    | 16                                 | 17                              | 18                           | 19                         | 20                      |                         |    |  |
|                    |    | e   | 10 11 12 12.7 13 14<br>15 16 17 18 19 20           | 11 12 12.7 13 14<br>15 16 17 18 19 20            | 12 12.7 13 14 15<br>16 17 18 19 20          | 12.7 13 14 15<br>16 17 18 19 20           | 13 14 15 16<br>17 18 19 20              | 14 15 16 17<br>18 19 20               | 15 16 17 18<br>19 20                  | 16 17 18<br>19 20                  | 17 18<br>19 20                  | 18 19<br>20                  | 19                         | 20                      |                         |    |  |
|                    | 63 | d   | 12                                                 | 12.7                                             | 13                                          | 14                                        | 15                                      | 16                                    | 17                                    | 18                                 | 19                              | 20                           | 22                         | 24                      | 25                      |    |  |
|                    |    | e   | 12 12.7 13 14<br>15 16 17 18 19<br>20 22 24 25     | 12.7 13 14 15<br>16 17 18 19<br>20 22 24 25      | 13 14 15 16<br>17 18 19 20<br>22 24 25      | 14 15 16 17<br>18 19 20 22<br>24 25       | 15 16 17 18<br>19 20 22<br>24 25        | 16 17 18<br>19 20 22<br>24 25         | 17 18 19<br>20 22 24<br>25            | 18 19 20<br>22 24<br>25            | 19 20 22<br>24 25               | 20 22 24<br>25               | 22 24<br>25                | 24 25                   | 25                      |    |  |

# Economy Type Oldham Couplings

- Set Screw
- Clamping
- Aluminum Alloy

| Part Number        |    | L  | L <sub>1</sub> | L <sub>2</sub> | M    | Tightening Torque (N·m) | Rated Torque (N·m) | Max. Torque (N·m) | Max. Rotational Speed (r/min) | Moment of Inertia (kg·m <sup>2</sup> ) | Static Torsional Rigidity (N·m/rad) | Allowable Mounting Deviation |             |            | Weight (g) |
|--------------------|----|----|----------------|----------------|------|-------------------------|--------------------|-------------------|-------------------------------|----------------------------------------|-------------------------------------|------------------------------|-------------|------------|------------|
| Code               | D  |    |                |                |      |                         |                    |                   |                               |                                        |                                     | Radial (mm)                  | Angular (°) | Axial (mm) |            |
| Set Screw<br>DER01 | 16 | 18 | 7              | 3.5            | M3   | 0.7                     | 0.7                | 1.4               | 9000                          | $3.0 \times 10^{-7}$                   | 29                                  | 1.0                          |             | 0.1        | 6          |
|                    | 20 | 23 | 9              | 4.5            | M4   | 1.7                     | 1.6                | 3.2               | 8000                          | $9.0 \times 10^{-7}$                   | 58                                  | 1.4                          |             |            | 11         |
|                    | 25 | 28 | 11             | 5.5            |      | 4.0                     | 3                  | 6                 | 6000                          | $2.8 \times 10^{-6}$                   | 125                                 | 1.9                          |             |            | 22         |
|                    | 32 | 33 | 13             | 6.5            | M5   | 7.0                     | 5.5                | 11                | 5000                          | $8.9 \times 10^{-6}$                   | 260                                 | 2.4                          |             | 0.2        | 40         |
|                    | 40 | 33 | 14             | 7.0            | M6   | 10.0                    | 9                  | 18                | 4000                          | $2.1 \times 10^{-5}$                   | 505                                 | 2.8                          |             |            | 70         |
|                    | 50 | 38 | 17             | 8.5            | M8   | 15.0                    | 19                 | 38                | 3000                          | $6.0 \times 10^{-5}$                   | 780                                 | 3.3                          |             | 0.3        | 144        |
| Clamping<br>DER11  | 63 | 47 | 21             | 10.5           | M10  | 30.0                    | 33                 | 66                | 2500                          | $2.1 \times 10^{-4}$                   | 1200                                | 3.8                          |             |            | 318        |
|                    | 16 | 30 | 13             | 3.0            | M2.5 | 0.7                     | 0.7                | 1.4               | 9000                          | $5.0 \times 10^{-7}$                   | 29                                  | 1.0                          | 3           | 0.1        | 11         |
|                    | 20 | 33 | 14             |                |      | 0.7                     | 1.6                | 3.2               | 8000                          | $1.4 \times 10^{-6}$                   | 58                                  | 1.4                          |             |            | 19         |
|                    | 25 | 39 | 17             | 3.8            | M3   | 1.5                     | 3                  | 6                 | 6000                          | $4.1 \times 10^{-6}$                   | 125                                 | 1.9                          |             | 0.2        | 36         |
|                    | 32 | 45 | 19             | 4.5            | M4   | 3.4                     | 5.5                | 11                | 5000                          | $1.2 \times 10^{-5}$                   | 260                                 | 2.4                          |             |            | 65         |
|                    | 40 | 50 | 23             | 7.0            | M5   | 7.0                     | 9                  | 18                | 4000                          | $3.8 \times 10^{-5}$                   | 505                                 | 2.8                          |             |            | 128        |
|                    | 50 | 58 | 27             | 8.0            | M6   | 14.0                    | 19                 | 38                | 3000                          | $1.0 \times 10^{-4}$                   | 780                                 | 3.3                          |             | 0.3        | 206        |
|                    | 63 | 71 | 33             | 10             | M8   | 30.0                    | 33                 | 66                | 2500                          | $3.5 \times 10^{-4}$                   | 1200                                | 3.8                          |             |            | 454        |

① The moment of inertia and weight are measured for the maximum bore diameter.



Optional Processing

| Alterations                                      | Change Shaft Bore Dia.(d/e)                                                       |                                                                  | Keyway Machining(d Side)(DC)                                                                                                                                                                                                                                                                                                      |                                                                  | Keyway Machining(e Side)(DD) |       |    |     |    |      |    |      |    |      |    |      |    |       |    |       |                                                                                   |  |                                                                                    |  |
|--------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|------------------------------|-------|----|-----|----|------|----|------|----|------|----|------|----|-------|----|-------|-----------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------|--|
| Code                                             | dh() eh()                                                                         |                                                                  | DER01                                                                                                                                                                                                                                                                                                                             | DER11                                                            | DER01                        | DER11 |    |     |    |      |    |      |    |      |    |      |    |       |    |       |                                                                                   |  |                                                                                    |  |
| Spec.                                            |  |                                                                  | <table border="1"><thead><tr><th>D</th><th>dh~eh</th></tr></thead><tbody><tr><td>16</td><td>3~8</td></tr><tr><td>20</td><td>4~10</td></tr><tr><td>25</td><td>5~12</td></tr><tr><td>32</td><td>6~16</td></tr><tr><td>40</td><td>8~19</td></tr><tr><td>50</td><td>10~20</td></tr><tr><td>63</td><td>12~25</td></tr></tbody></table> |                                                                  | D                            | dh~eh | 16 | 3~8 | 20 | 4~10 | 25 | 5~12 | 32 | 6~16 | 40 | 8~19 | 50 | 10~20 | 63 | 12~25 |  |  |  |  |
|                                                  | D                                                                                 | dh~eh                                                            |                                                                                                                                                                                                                                                                                                                                   |                                                                  |                              |       |    |     |    |      |    |      |    |      |    |      |    |       |    |       |                                                                                   |  |                                                                                    |  |
|                                                  | 16                                                                                | 3~8                                                              |                                                                                                                                                                                                                                                                                                                                   |                                                                  |                              |       |    |     |    |      |    |      |    |      |    |      |    |       |    |       |                                                                                   |  |                                                                                    |  |
|                                                  | 20                                                                                | 4~10                                                             |                                                                                                                                                                                                                                                                                                                                   |                                                                  |                              |       |    |     |    |      |    |      |    |      |    |      |    |       |    |       |                                                                                   |  |                                                                                    |  |
| 25                                               | 5~12                                                                              |                                                                  |                                                                                                                                                                                                                                                                                                                                   |                                                                  |                              |       |    |     |    |      |    |      |    |      |    |      |    |       |    |       |                                                                                   |  |                                                                                    |  |
| 32                                               | 6~16                                                                              |                                                                  |                                                                                                                                                                                                                                                                                                                                   |                                                                  |                              |       |    |     |    |      |    |      |    |      |    |      |    |       |    |       |                                                                                   |  |                                                                                    |  |
| 40                                               | 8~19                                                                              |                                                                  |                                                                                                                                                                                                                                                                                                                                   |                                                                  |                              |       |    |     |    |      |    |      |    |      |    |      |    |       |    |       |                                                                                   |  |                                                                                    |  |
| 50                                               | 10~20                                                                             |                                                                  |                                                                                                                                                                                                                                                                                                                                   |                                                                  |                              |       |    |     |    |      |    |      |    |      |    |      |    |       |    |       |                                                                                   |  |                                                                                    |  |
| 63                                               | 12~25                                                                             |                                                                  |                                                                                                                                                                                                                                                                                                                                   |                                                                  |                              |       |    |     |    |      |    |      |    |      |    |      |    |       |    |       |                                                                                   |  |                                                                                    |  |
| Ordering Code dh3.1 eh4.5                        |                                                                                   | Ordering Code DC                                                 |                                                                                                                                                                                                                                                                                                                                   | Ordering Code DD                                                 |                              |       |    |     |    |      |    |      |    |      |    |      |    |       |    |       |                                                                                   |  |                                                                                    |  |
| ① 0.1 mm Inc.                                    |                                                                                   | ① Cannot be combined with shaft bore change (dh,eh) alterations. |                                                                                                                                                                                                                                                                                                                                   | ① Cannot be combined with shaft bore change (dh,eh) alterations. |                              |       |    |     |    |      |    |      |    |      |    |      |    |       |    |       |                                                                                   |  |                                                                                    |  |
| ② dh<eh                                          |                                                                                   |                                                                  |                                                                                                                                                                                                                                                                                                                                   |                                                                  |                              |       |    |     |    |      |    |      |    |      |    |      |    |       |    |       |                                                                                   |  |                                                                                    |  |
| ③ In selection, (d,e) must be changed to dh(eh). |                                                                                   |                                                                  |                                                                                                                                                                                                                                                                                                                                   |                                                                  |                              |       |    |     |    |      |    |      |    |      |    |      |    |       |    |       |                                                                                   |  |                                                                                    |  |

① Keyway machining can be selected only when the hole diameter is ≥ 6.



Please order as shown

| Part Number                                                                             |    | d-e |                |
|-----------------------------------------------------------------------------------------|----|-----|----------------|
| Code                                                                                    | D  |     |                |
|  DER01 | 20 | d   | 4              |
|                                                                                         |    | e   | 4 5 6 6.35 7 8 |
|                                                                                         |    |     | 9 9.525 10     |

DER01—D20—d4—e7

## Optional Processing

| Part Number |    | d-e |                              | Optional Processing Code |
|-------------|----|-----|------------------------------|--------------------------|
| Code        | D  |     |                              |                          |
| DER01       | 20 | d   | 4                            | ① HT ② HT                |
|             |    | e   | 4 5 6 6.35 7 8<br>9 9.525 10 |                          |

DER01—D20—dh4.1—eh6.6



| Discount price |      |                      |
|----------------|------|----------------------|
| Per            | 1~4  | 5~                   |
| Price          | 100% | Additional quotation |



| Delivery |   |
|----------|---|
|          | 2 |