

# Series CO motion transmission devices

Mod. COE: elastomer coupling with clamps

Mod. COS: elastomer coupling with expansion shaft

Mod. COT: self-centering locking-set



**The motion transmission devices are necessary for a proper connection of electromechanical axes and cylinders with motors or gearboxes.**

Mod. COE couplings are composed of two hubs with a high concentricity clamp and an elastomeric element.

Mod. COS couplings are composed of one hub with a high concentricity clamp, a hub with expansion shaft and an elastomeric element.

The torque transmission is performed without angular play or vibrations. Both couplings are without angular play thanks to the pretensioning of the elastomer between the two semi-couplings.

Mod. COT locking-sets are composed by an internal and an external conical ring connected with each other by means of several screws. Through the tightening of the screws, an axial force is generated that enables the torque transmission from the shaft to the hub.

**AVAILABLE STANDARD DIAMETERS**

|      |      |   |    |    |    |      |    |    |    |    |    |    |    |    |    |
|------|------|---|----|----|----|------|----|----|----|----|----|----|----|----|----|
| Size | 6.35 | 8 | 10 | 11 | 12 | 12.7 | 14 | 15 | 16 | 19 | 20 | 22 | 24 | 25 | 32 |
| 5    |      |   |    |    |    |      |    |    |    |    |    |    |    |    |    |
| 10   |      |   |    |    |    |      |    |    |    |    |    |    |    |    |    |
| 20   |      |   |    |    |    |      |    |    |    |    |    |    |    |    |    |
| 60   |      |   |    |    |    |      |    |    |    |    |    |    |    |    |    |

**MOD. COE CODING EXAMPLE**

|            |   |           |   |             |   |             |   |          |
|------------|---|-----------|---|-------------|---|-------------|---|----------|
| <b>COE</b> | - | <b>10</b> | - | <b>1200</b> | - | <b>1400</b> | - | <b>A</b> |
|------------|---|-----------|---|-------------|---|-------------|---|----------|

|             |  |   |
|-------------|--|---|
| <b>COE</b>  | SERIES MODEL   |   |
| <b>10</b>   | SIZE:<br>05<br>10<br>20<br>60  |   |
| <b>1200</b> | <p><b>HOLE DIAMETER 1:</b><br/>         0635 = 6,35 mm (for sizes 5 and 10 only)<br/>         0800 = 8,00 mm (for sizes 5 and 10 only)<br/>         1000 = 10,00 mm (for sizes 5 and 10 only)<br/>         1100 = 11,00 mm (for size 5 only)<br/>         1200 = 12,00 mm (for sizes 10 and 20 only)<br/>         1400 = 14,00 mm (for sizes 10, 20 and 60 only)<br/>         1500 = 15,00 mm (for sizes 10 and 20 only)</p> | <p>1600 = 16,00 mm (for sizes 10, 20 and 60 only)<br/>         1900 = 19,00 mm (for sizes 20 and 60 only)<br/>         2000 = 20,00 mm (for sizes 20 and 60 only)<br/>         2400 = 24,00 mm (for sizes 20 and 60 only)<br/>         2500 = 25,00 mm (for size 60 only)<br/>         3200 = 32,00 mm (for size 60 only)</p> |
| <b>1400</b> | <p><b>HOLE DIAMETER 2:</b><br/>         0635 = 6.35mm (for sizes 5 and 10 only)<br/>         0800 = 8.00mm (for sizes 5 and 10 only)<br/>         1000 = 10.00mm (for sizes 5 and 10 only)<br/>         1100 = 11.00mm (for size 5 only)<br/>         1200 = 12.00mm (for sizes 10 and 20 only)<br/>         1400 = 14.00mm (for sizes 10, 20 and 60 only)<br/>         1500 = 15.00mm (for sizes 10 and 20 only)</p>        | <p>1600 = 16.00mm (for sizes 10, 20 and 60 only)<br/>         1900 = 19.00mm (for sizes 20 and 60 only)<br/>         2000 = 20.00mm (for sizes 20 and 60 only)<br/>         2400 = 24.00mm (for sizes 20 and 60 only)<br/>         2500 = 25.00mm (for size 60 only)<br/>         3200 = 32.00mm (for size 60 only)</p>       |
| <b>A</b>    | <p><b>ELASTOMER HARDNESS:</b><br/>         A = 98 Sh A<br/>         B = 64 Sh D (for sizes 10 and 20 only)</p>   |   |

**Elastomer coupling with clamps Mod. COE**



DC: hole 1 diameter  
 DM: hole 2 diameter  
 See the CODING EXAMPLE

| Size | DE | DB   | DI   | A  | C    | F    | G   | B1 [ ISO 4762 ] | Tightening torque (Nm) | Nominal torque with elastomer A (Nm) <sup>(A)</sup> | Nominal torque with elastomer A (Nm) <sup>(B)</sup> | Nominal torque with elastomer B (Nm) <sup>(A)</sup> | Nominal torque with elastomer B (Nm) <sup>(B)</sup> |
|------|----|------|------|----|------|------|-----|-----------------|------------------------|---|---|---|---|
| 05   | 25 | 25   | 10.2 | 26 | 8    | 8    | 4   | M3 (CH2.5)      | 2                      | 9   | 18  | -   | -   |
| 10   | 32 | 32   | 14.2 | 32 | 10.3 | 10.5 | 5   | M4 (CH3)        | 4                      | 12.5  | 25  | 16  | 32  |
| 20   | 42 | 44.5 | 19.2 | 50 | 17   | 15.5 | 8.5 | M5 (CH4)        | 8                      | 17  | 34  | 21  | 42  |
| 60   | 56 | 57   | 26.2 | 58 | 20   | 21   | 10  | M6 (CH5)        | 15                     | 60  | 120   | -   | -   |

<sup>(A)</sup> Continuously applicable torque, under ideal mounting and operating conditions. For further details, please contact service@camozzi.com

<sup>(B)</sup> Torque applicable for short intervals, under ideal mounting and operating conditions. For further details, please contact service@camozzi.com

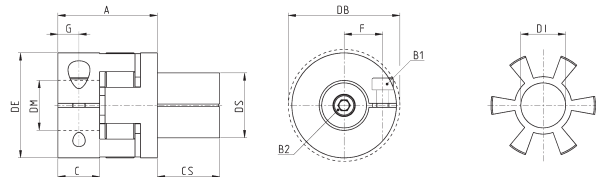
## MOD. COS CODING EXAMPLE

|             |  |           |          |             |          |             |          |          |
|-------------|--|-----------|----------|-------------|----------|-------------|----------|----------|
| <b>COS</b>  | <b>-</b>   | <b>10</b> | <b>-</b> | <b>2000</b> | <b>-</b> | <b>1400</b> | <b>-</b> | <b>A</b> |
| <b>COS</b>  | SERIES MODEL   |           |          |             |          |             |          |          |
| <b>10</b>   | SIZE:<br>10<br>20<br>60  |           |          |             |          |             |          |          |
| <b>2000</b> | SHAFT DIAMETER:<br>2000 = 20.00mm (for size 10 only)<br>2600 = 26.00mm (for size 20 only)<br>3800 = 38.00mm (for size 60 only)   |           |          |             |          |             |          |          |
| <b>1400</b> | HOLE DIAMETER:<br>0635 = 6.35mm (for size 10 only)<br>0800 = 8.00mm (for size 10 only)<br>1000 = 10.00mm (for size 10 only)<br>1200 = 12.00mm (for sizes 10 and 20 only)<br>1400 = 14.00mm (for sizes 10, 20 and 60 only)<br>1500 = 15.00mm (for sizes 10 and 20 only)<br>1600 = 16.00mm (for sizes 10, 20 and 60 only)<br>1900 = 19.00mm (for sizes 20 and 60 only)<br>2000 = 20.00mm (for sizes 20 and 60 only)<br>2400 = 24.00mm (for sizes 20 and 60 only)<br>2500 = 25.00mm (for size 60 only)<br>3200 = 32.00mm (for size 60 only) |           |          |             |          |             |          |          |
| <b>A</b>    | ELASTOMER HARDNESS:<br>A = 98 Sh A<br>B = 64 Sh D (for sizes 10 and 20 only)   |           |          |             |          |             |          |          |

## Elastomer coupling with expansion shaft Mod. COS



DS: shaft diameter  
DM: hole diameter  
See the CODING EXAMPLE



| Size | $\varnothing_{DE}$ | $\varnothing_{DB}$ | $\varnothing_{DI}$ | A  | C    | CS | F    | G   | B1<br>[ISO4762] | Tightening<br>torque (Nm) | B2<br>[ISO4762] | Tightening<br>torque (Nm) | Nominal torque with<br>elastomer A (Nm) <sup>(A)</sup> | Nominal torque with<br>elastomer B (Nm) <sup>(A)</sup> | Nominal torque with<br>elastomer A (Nm) <sup>(B)</sup> | Nominal torque with<br>elastomer B (Nm) <sup>(B)</sup> |
|------|--------------------|--------------------|--------------------|----|------|----|------|-----|-----------------|---------------------------|-----------------|---------------------------|--|--|--|--|
| 10   | 32                 | 32                 | 14.2               | 28 | 10.3 | 20 | 10.5 | 5   | M4 (CH3)        | 4                         | M5 (CH4)        | 9                         | 12.5   | 16   | 25   | 32   |
| 20   | 42                 | 44.5               | 19.2               | 40 | 17   | 25 | 15.5 | 8.5 | M5 (CH4)        | 8                         | M6 (CH5)        | 12                        | 17   | 21   | 34   | 42   |
| 60   | 56                 | 57                 | 26.2               | 46 | 20   | 27 | 21   | 10  | M6 (CH5)        | 15                        | M8 (CH6)        | 32                        | 60   | -  | 120  | -  |

<sup>(A)</sup> Continuously applicable torque, under ideal mounting and operating conditions. For further details, please contact [service@camozzi.com](mailto:service@camozzi.com)

<sup>(B)</sup> Torque applicable for short intervals, under ideal mounting and operating conditions. For further details, please contact [service@camozzi.com](mailto:service@camozzi.com)

## Self-centering locking-set Mod. COT



| Mod.          | $\varnothing_{DS}$ | $\varnothing_{DM}$ | L  | E    | B1           | Torque force (Nm) | <sup>*(A)</sup> | Weight (g) |
|---------------|--------------------|--------------------|----|------|--------------|-------------------|-----------------|------------|
| COT-1800-0800 | 18                 | 8                  | 11 | 13,5 | M2.5 (CH2.5) | 1,2               | 8               | 16         |
| COT-2000-1000 | 20                 | 10                 | 13 | 15,5 | M2.5 (CH2.5) | 1,2               | 14              | 25         |
| COT-2200-1200 | 22                 | 12                 | 13 | 15,5 | M2.5 (CH2.5) | 1,2               | 15              | 27         |
| COT-2600-1400 | 26                 | 14                 | 17 | 20   | M3 (CH2.5)   | 2,1               | 30              | 50         |
| COT-2800-1500 | 28                 | 15                 | 17 | 20   | M3 (CH2.5)   | 2,1               | 32              | 58         |
| COT-3500-1900 | 35                 | 19                 | 21 | 25   | M4 (CH3)     | 4,9               | 70              | 113        |
| COT-3800-2000 | 38                 | 20                 | 21 | 26   | M5 (CH4)     | 4,9               | 125             | 140        |
| COT-4700-2400 | 47                 | 24                 | 26 | 32   | M6 (CH5)     | 17                | 210             | 200        |
| COT-4700-2500 | 47                 | 25                 | 26 | 32   | M6 (CH5)     | 17                | 215             | 200        |

<sup>(A)</sup> value refers to ideal mounting and operating conditions.  
For further details, please contact [service@camozzi.com](mailto:service@camozzi.com)