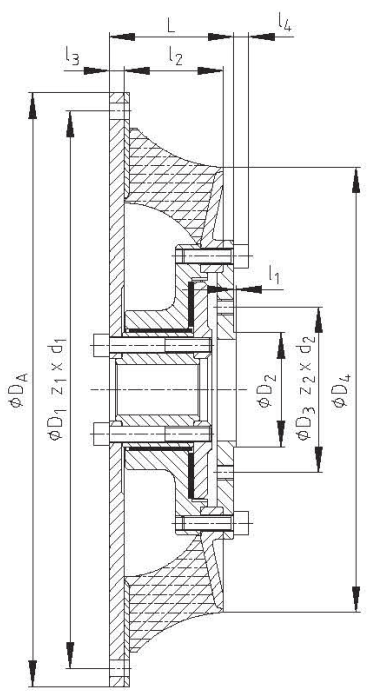
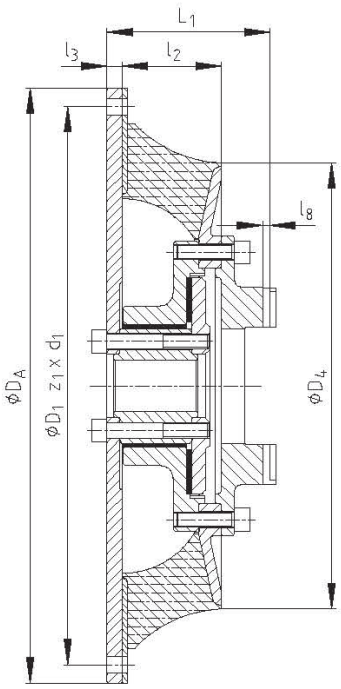
# Cardan shaft auxiliary coupling

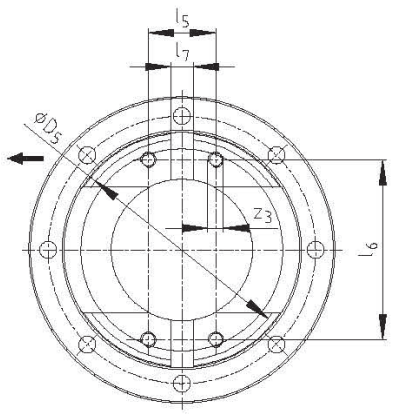
≤ 45° | ΔKa | ΔKw | 90 °C

Type HEG1




Type HEG2




## BoWex-ELASTIC® Type HEG1 and Type HEG2

| Size | Flywheel connection to SAE-J 620 | | | | | Metric flange connection HEG1 dimensions [mm] | | | | | | | | | | MECHANICS cardan shaft connection HEG2 dimensions [mm] | | | | | | | | Dimensions [mm] | | | Weight [kg] | Mass moment of inertia | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 8" | 10" | 11 ½" | 14" | 16" | 58 | 65 | 75 | 90 | 100 | 120 | 150 | 180 | $l_4$ | L | 2 C | 4 C | 5 C | 6 C | 7 C | 8,5 C | 8 C | $L_1$ | $D_4$ | $l_2$ | $l_3$ | | JA [kgm²] | JL [kgm²] |
| 48 | ● | | | | | ● | ● | ● | | | | | | 8 | 58,5 | | | | | | | | | 163 | 43,5 | 8 | 7 | 0,03 | 0,006 |
| | | ● | | | | ● | ● | ● | | | | | | | | | | | | | | | | | | | 8 | 0,06 | 0,006 |
| G 65 | | ● | | | | | | ● | ● | ● | | | | 8 | 66 | ● | ● | ● | | | | | 71 | 205 | 48,0 | 10 | 12 | 0,07 | 0,02 |
| | | | ● | | | | | ● | ● | ● | | | | | | ● | ● | ● | | | | | | | | | 14 | 0,10 | 0,02 |
| 80 | | ● | | | | | | ● | ● | ● | ● | | | 10 | 88,5 | | ● | ● | ● | | | | 104 | 265 | 68,5 | 23 | 21 | 0,11 | 0,06 |
| | | | ● | | | | | ● | ● | ● | ● | | | | | | ● | ● | ● | | | | | | | | 12 | 23 | 0,17 | 0,06 |
| G 80 | | | ● | | | | | | ● | ● | ● | ● | | 10 | 96 | | | ● | ● | ● | | | 110 | 302 | 74,0 | 23 | 26 | 0,18 | 0,09 |
| | | | | ● | | | | | ● | ● | ● | ● | | | | | | ● | ● | ● | | | | | | 12 | 33 | 0,48 | 0,09 |
| 100 | | | | ● | | | | | | ● | ● | ● | ● | 12 | 98 | | | | | ● | ● | | 128 | 350 | 78,0 | 16 | 41 | 0,63 | 0,19 |
| 125 | | | | ● | | | | | | ● | ● | ● | ● | 12 | 111 | | | | | | ● | ● | 135 | 416 | 96,0 | 18 | 56 | 0,74 | 0,42 |
| | | | | | ● | | | | | ● | ● | ● | ● | | | | | | | | ● | ● | | | | 12 | 59 | 0,97 | 0,42 |

### Flywheel connection to SAE-J 620 [mm]

| Size | $D_A$ | $D_1$ | $z_1$ | $d_1$ |
|---|---|---|---|---|
| 8" | 263,52 | 244,47 | 6 | 11 |
| 10" | 314,32 | 295,27 | 8 | 11 |
| 11 ½" | 352,42 | 333,37 | 8 | 11 |
| 14" | 466,72 | 438,15 | 8 | 14 |
| 16" | 517,50 | 489,00 | 8 | 14 |

### Metric flange connection HEG1 [mm]

| Size | $D_2$ | $l_1$ | $D_3$ | $z_2$ | $d_2$ |
|---|---|---|---|---|---|
| 58 | 30 | 1,0 | 47,0 | 4 | M5 |
| 65 | 35 | 1,0 | 52,0 | 4 | M6 |
| 75 | 42 | 1,5 | 62,0 | 6 | M6 |
| 90 | 47 | 2,0 | 74,5 | 4 | M8 |
| 100 | 57 | 2,0 | 84,0 | 6 | M8 |
| 120 | 75 | 2,0 | 101,5 | 8 | M10 |
| 150 | 90 | 2,5 | 130,0 | 8 | M12 |
| 180 | 110 | 2,5 | 155,5 | 8 | M14 |

### MECHANICS cardan shaft connection HEG 2 [mm]

| Size | $D_5$ | $l_5$ | $l_6$ | $l_7$ | $l_8$ | $z_3$ |
|---|---|---|---|---|---|---|
| 2 C | 79,35 | 33,3 | 59,5 | 9,50 | 3,8 | M8 |
| 4 C | 107,92 | 36,5 | 87,3 | 9,50 | 3,8 | M8 |
| 5 C | 115,06 | 42,9 | 88,9 | 14,26 | 5,1 | M10 |
| 6 C | 140,46 | 42,9 | 114,3 | 14,26 | 5,1 | M10 |
| 7 C | 148,39 | 49,2 | 117,5 | 15,85 | 6,0 | M12 |
| 8,5 C | 165,08 | 71,4 | 123,8 | 15,85 | 6,0 | M12 |
| 8 C | 206,32 | 49,2 | 174,6 | 15,85 | 6,0 | M12 |

BoWex-ELASTIC® type HEG has a maintenance-free plain bearing compensating for the radial loads generated by the cardan shaft. Moreover, the coupling has a friction disk which is axially prestressed by the elastomer part. The elastomer part is made of natural rubber via vulcanizing.

The permanent friction provides the coupling with excellent damping properties reducing the high vibratory torques arising in the coupling during the starting process and running through resonance considerably.