# *TOOTH ELECTROMAGNETIC CLUTCHES*

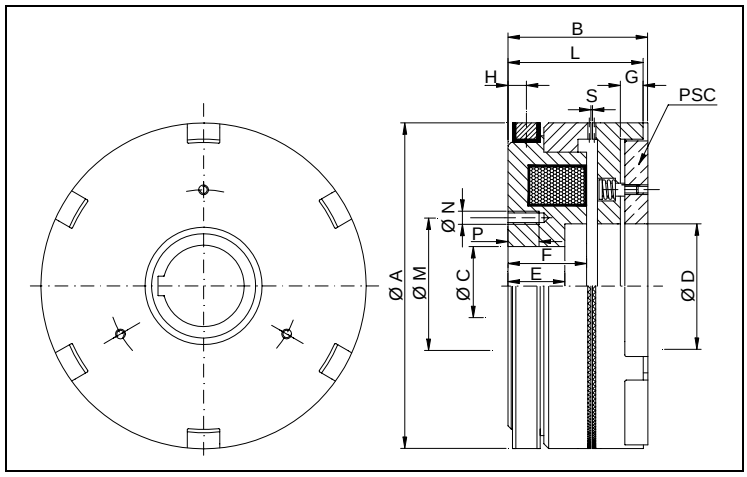
***Characteristics***
*These groups are suitable when the torques to be transmitted are high or when there is important to have small dimensions and low inertia of the rotating parts. As they allow no sliding and can be produced with stationary engagement points, they can be used for positioniers or precision control applications. Conversely, they allow engagement in motion only with low rpm. The unit is operated by creating a magnetic field induced by a coil housed inside the unit body. It attracts the sliding disc and leads it to engage its rotor toothed into the armature toothed ring.*

***Teeth***
*For our standard production we manufacture trapezoidal teeth with clearance. This allow the engagement of the unit at rest or at low revolving speed.*
*Upon request, we can supply triangular teeth without gap (which require engagement at rest), serrations (which allow only clock or anticlock-wise engagements but no disengagement under load) and teeth with one or several fixed engagement points.*

***Assembling***
*These units can be assembled both horizontally and vertically. Make sure that the magnetic flux has no leakages to surrounding metal masses interfering with other electromagnetic units. In such a casa, a proper insulation with non-magnetic materiel should be provided.*

***Lubrication***
*These units can work either dry or wet. As they create non heat due to friction, a particular cooling system is not needed. Oil must be of best quality, resistant to electrolysis and with a viscosity not higher than 3°E/50°C.*

***Feeding***
*For our standard production, voltage is 24 VDC. Brakes and clutches without slip ring are feed through a small pipelines or cables or upon request, a connector. For such clutches, an ant revolving lock is necessary for block the static body under the friction of bearing balls. For clutches with slip ring, feeding occurs through the sliding contact of a brush (see chapter of "Brush holders"). Although clutches without slip ring are more expensive, they can be assembled more easily, cause no flashings or contact losses and reach higher speeds.*




***TOOTH ELECTROMAGNETIC CLUTCH WITH SLIP RING***
***Model ERZ***

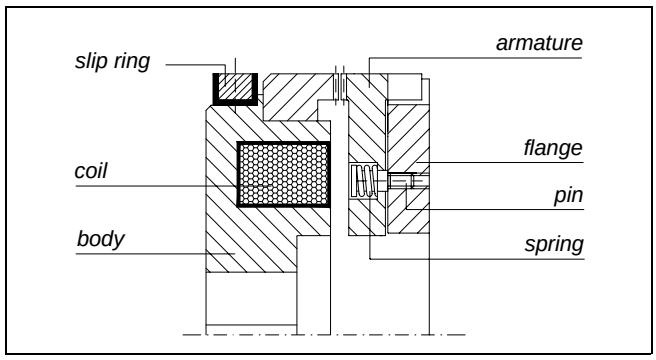
### *PERFORMANCES (24VDC)*

| *size* | *torque* (Nm) | *power* (W) | *RPM* *dry* | *wet* | *engagement time* (ms) | *disengagement time* (ms) | *weight* (kg) |
|---|---|---|---|---|---|---|---|
| ERZ 060 | 20 | 7,5 | 5500 | 2500 | 15 | 50 | 0,45 |
| ERZ 070 | 40 | 12 | 5500 | 2500 | 20 | 70 | 0,5 |
| ERZ 082 | 100 | 24 | 5000 | 2500 | 25 | 70 | 0,9 |
| ERZ 095 | 200 | 33 | 4000 | 2000 | 25 | 80 | 1,15 |
| ERZ 114 | 350 | 40 | 3500 | 2000 | 30 | 100 | 2 |
| ERZ 134 | 600 | 51 | 3000 | 1500 | 45 | 145 | 3 |
| ERZ 166 | 1.200 | 76 | 2500 | 1000 | 70 | 240 | 6 |
| ERZ 195 | 2.200 | 83 | 2000 | 1000 | 70 | 480 | 9,5 |
| ERZ 210 | 3.000 | 98 | 1500 | 1000 | 85 | 700 | 11,5 |
| ERZ 240 | 4.000 | 102 | 1500 | 1000 | 85 | 980 | 20 |
| ERZ 258 | 6.000 | 128 | 1500 | 1000 | 95 | 1.100 | 25 |

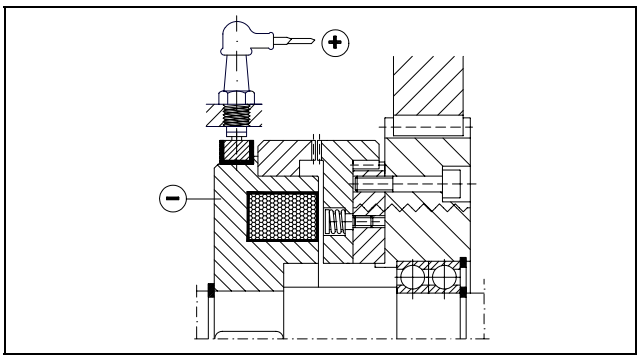
### *DIMENSIONS (mm)*

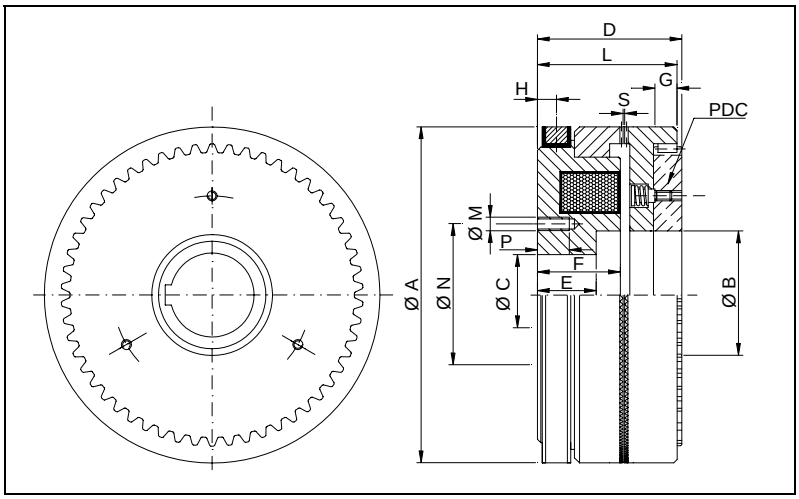
| size | A | B | C max | D | E | F | G | H | L | M | N | P | S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ERZ 060 | 60 | 30,5 | 22 | 23 | 15,5 | 15,5 | 3,5 | 3,5 | 25 | 28 | 3 x M3 | 8 | 0,25 |
| ERZ 070 | 70 | 32,5 | 25 | 26 | 17 | 17 | 4 | 3,5 | 27,5 | 32 | 3 x M4 | 8 | 0,25 |
| ERZ 082 | 82 | 40 | 34 | 35 | 23 | 23 | 6 | 5,5 | 37 | 41 | 3 x M4 | 15 | 0,30 |
| ERZ 095 | 95 | 41,5 | 36 | 45 | 20 | 23 | 6 | 5,5 | 38,5 | 50 | 3 x M6 | 13 | 0,40 |
| ERZ 114 | 114 | 46 | 46 | 53 | 23 | 26 | 7 | 6 | 43 | 60 | 3 x M6 | 15 | 0,40 |
| ERZ 134 | 134 | 53 | 52 | 63 | 26 | 29 | 8 | 7 | 50 | 72 | 4 x M8 | 15 | 0,45 |
| ERZ 166 | 166 | 63,5 | 72 | 80 | 30 | 35 | 9,5 | 7 | 60 | 92 | 5 x M10 | 15 | 0,50 |
| ERZ 195 | 195 | 71 | 82 | 89 | 33,5 | 38,5 | 12 | 7 | 68 | 110 | 5 x M10 | 15 | 0,50 |
| ERZ 210 | 210 | 75 | 92 | 100 | 35 | 38 | 14 | 8,5 | 73 | 120 | 5 x M12 | 20 | 0,55 |
| ERZ 240 | 240 | 83,5 | 102 | 112 | 37 | 42 | 14,5 | 8,5 | 81 | 140 | 5 x M12 | 18 | 0,55 |
| ERZ 258 | 258 | 86,5 | 122 | 133 | 42 | 46 | 16,5 | 8,5 | 84 | 150 | 5 x M12 | 18 | 0,60 |

### *PARTS NAME*




### *MOUNTING EXAMPLE*






***TOOTH ELECTROMAGNETIC CLUTCH WITH SLIP RING***
***Model EDZ***

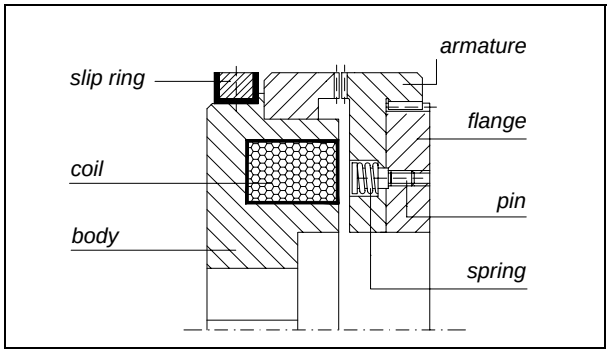
### *PERFORMANCES (24VDC)*

| *size* | *torque* (Nm) | *power* (W) | *RPM* *dry* | *wet* | *engagement time* (ms) | *disengagement time* (ms) | *weight* (kg) |
|---|---|---|---|---|---|---|---|
| EDZ 060 | 20 | 7,5 | 5500 | 2500 | 15 | 50 | 0,45 |
| EDZ 070 | 40 | 12 | 5500 | 2500 | 20 | 70 | 0,5 |
| EDZ 082 | 100 | 24 | 5000 | 2500 | 25 | 70 | 0,9 |
| EDZ 095 | 200 | 31 | 4000 | 2000 | 25 | 80 | 1,2 |
| EDZ 114 | 350 | 40 | 3500 | 2000 | 30 | 100 | 2 |
| EDZ 134 | 600 | 51 | 3000 | 1500 | 45 | 145 | 3 |
| EDZ 166 | 1.200 | 76 | 2500 | 1000 | 70 | 240 | 6 |
| EDZ 195 | 2.200 | 83 | 2000 | 1000 | 70 | 480 | 9,5 |
| EDZ 210 | 3.000 | 98 | 1500 | 1000 | 85 | 700 | 11,5 |
| EDZ 240 | 4.000 | 102 | 1500 | 1000 | 85 | 980 | 20 |
| EDZ 258 | 6.000 | 128 | 1500 | 1000 | 95 | 1.100 | 25 |

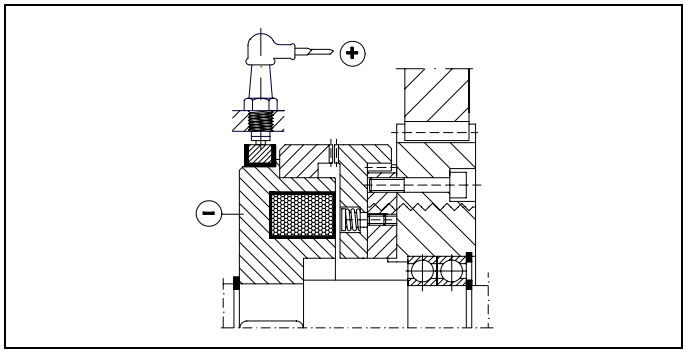
### *DIMENSIONS (mm)*

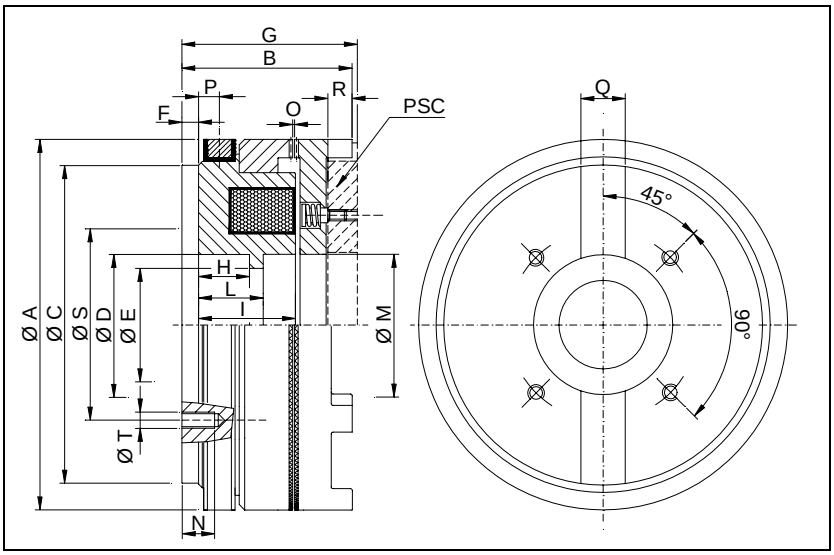
| *size* | A | B | C max | D | E | F | G | H | L | M | N | P | S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDZ 060 | 60 | 23 | 22 | 30,5 | 15,5 | 15,5 | 3,5 | 3,5 | 25 | 3 x M3 | 28 | 8 | 0,25 |
| EDZ 070 | 70 | 26 | 25 | 32,5 | 17 | 17 | 4 | 3,5 | 27,5 | 3 x M4 | 32 | 8 | 0,25 |
| EDZ 082 | 82 | 35 | 34 | 40 | 23 | 23 | 6 | 5,5 | 37 | 3 x M4 | 41 | 15 | 0,30 |
| EDZ 095 | 95 | 45 | 36 | 41 | 20 | 23 | 6 | 5,5 | 38 | 3 x M6 | 50 | 13 | 0,35 |
| EDZ 114 | 114 | 53 | 46 | 46 | 23 | 26 | 7 | 6 | 43 | 3 x M6 | 60 | 15 | 0,40 |
| EDZ 134 | 134 | 63 | 52 | 53 | 26 | 29 | 8 | 7 | 50 | 3 x M8 | 72 | 15 | 0,45 |
| EDZ 166 | 166 | 80 | 72 | 63,5 | 30 | 35 | 9,5 | 7 | 60 | 5 x M10 | 92 | 15 | 0,50 |
| EDZ 195 | 195 | 89 | 82 | 71 | 33,5 | 38,5 | 12 | 7 | 68 | 5 x M10 | 110 | 15 | 0,50 |
| EDZ 210 | 210 | 100 | 92 | 75 | 35 | 38 | 14 | 8,5 | 73 | 5 x M12 | 120 | 20 | 0,55 |
| EDZ 240 | 240 | 112 | 102 | 83,5 | 37 | 42 | 14,5 | 8,5 | 81 | 5 x M12 | 140 | 18 | 0,55 |
| EDZ 258 | 258 | 133 | 122 | 86,5 | 42 | 46 | 16,5 | 8,5 | 84 | 5 x M12 | 150 | 18 | 0,60 |

### *PARTS NAME*




### *MOUNTING EXAMPLE*






***TOOTH ELECTROMAGNETIC CLUTCH WITH SLIP RING***
***Model ECZ***

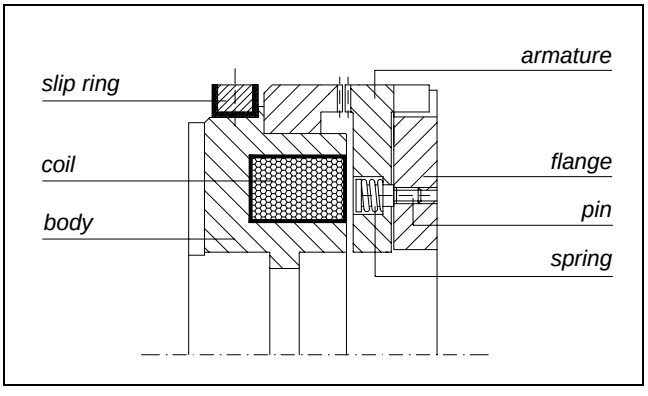
## *PERFORMANCES (24VDC)*

| *size* | torque (Nm) | power (W) | *RPM* | | *engagement time* (ms) | *disengagement time* (ms) | *weight* (kg) |
|---|---|---|---|---|---|---|---|
| | | | *dry* | *wet* | | | |
| ECZ 082 | 100 | 24 | 5.000 | 2.500 | 25 | 70 | 1 |
| ECZ 095 | 200 | 31 | 4.000 | 2.000 | 25 | 80 | 1,2 |
| ECZ 114 | 350 | 40 | 3.500 | 2.000 | 30 | 100 | 2 |
| ECZ 140 | 600 | 51 | 3.000 | 1.500 | 45 | 145 | 3,5 |
| ECZ 166 | 1.200 | 76 | 2.500 | 1.000 | 70 | 240 | 6 |
| ECZ 195 | 2.200 | 83 | 2.000 | 1.000 | 70 | 480 | 8 |
| ECZ 210 | 3.000 | 98 | 1.500 | 1.000 | 85 | 700 | 11 |
| ECZ 240 | 4.000 | 102 | 1.500 | 1.000 | 85 | 980 | 16 |
| ECZ 258 | 6.000 | 128 | 1.500 | 1.000 | 95 | 1.100 | 19 |

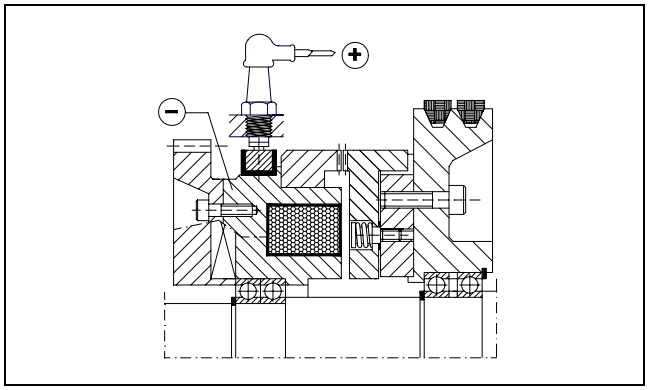
## *DIMENSIONS (mm)*

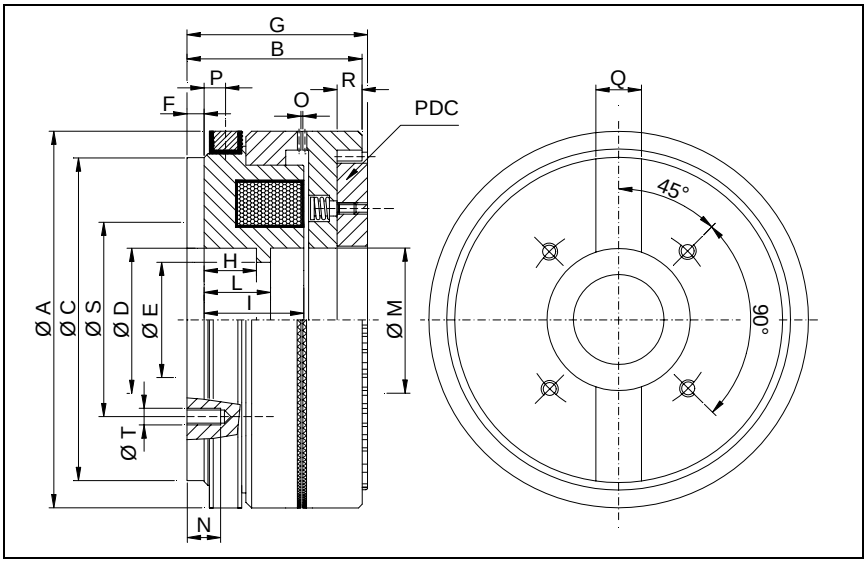
| size | A | B | C | D k6 | E | F | G | H | I | L | M | N | O | P | Q H7 | R | S | T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ECZ 082 | 82 | 39 | 67 | 35 | 31 | 2,5 | 42 | 20 | 25 | 22,5 | 35 | 7 | 0,30 | 7,5 | 12 | 6 | 50 | M5 |
| ECZ 095 | 95 | 40 | 78 | 42 | 37 | 2,5 | 43 | 20 | 25 | 22 | 45 | 8 | 0,40 | 7,5 | 12 | 6 | 56 | M6 |
| ECZ 114 | 114 | 47 | 95 | 55 | 45 | 5 | 50 | 22 | 30 | 25 | 53 | 10 | 0,40 | 11 | 14 | 7 | 75 | M8 |
| ECZ 140 | 140 | 54 | 120 | 68 | 60 | 5 | 57 | 22 | 33 | 28 | 70 | 12 | 0,40 | 11 | 16 | 8 | 90 | M8 |
| ECZ 166 | 166 | 60 | 142 | 75 | 65 | 6 | 63,5 | 25 | 35 | 30 | 80 | 11 | 0,40 | 13 | 20 | 9,5 | 100 | M10 |
| ECZ 195 | 195 | 68,5 | 170 | 90 | 80 | 6 | 71,5 | 28 | 39 | 34 | 89 | 15 | 0,40 | 13 | 20 | 12 | 116 | M10 |
| ECZ 210 | 210 | 77 | 184 | 100 | 90 | 6 | 79 | 31 | 42 | 39 | 100 | 16 | 0,40 | 14,5 | 20 | 14 | 130 | M12 |
| ECZ 240 | 240 | 84 | 216 | 110 | 100 | 6 | 86,5 | 32 | 45 | 40 | 112 | 16 | 0,45 | 14,5 | 25 | 14,5 | 145 | M12 |
| ECZ 258 | 258 | 90 | 234 | 140 | 130 | 8 | 92,5 | 33 | 52 | 41 | 133 | 16 | 0,45 | 16,5 | 25 | 16,5 | 200 | M12 |

## *PARTS NAME*




## *MOUNTING EXAMPLE*






# *TOOTH ELECTROMAGNETIC CLUTCH WITH SLIP RING Model ETZ*

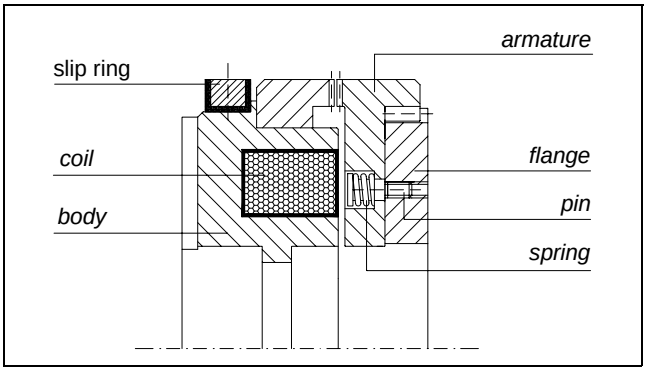
## *PERFORMANCES (24VDC)*

| *size* | *torque* (Nm) | *power* (W) | *RPM* *dry* | *wet* | *engagement time* (ms) | *disengagement time* (ms) | *weight* (kg) |
|---|---|---|---|---|---|---|---|
| ETZ 082 | 100 | 24 | 5000 | 2500 | 25 | 70 | 1 |
| ETZ 095 | 200 | 31 | 4000 | 2000 | 25 | 80 | 1,2 |
| ETZ 114 | 350 | 40 | 3500 | 2000 | 30 | 100 | 2 |
| ETZ 140 | 600 | 51 | 3000 | 1500 | 45 | 145 | 3,5 |
| ETZ 166 | 1.200 | 76 | 2500 | 1000 | 70 | 240 | 6 |
| ETZ 195 | 2.200 | 83 | 2000 | 1000 | 70 | 480 | 8 |
| ETZ 210 | 3.000 | 98 | 1500 | 1000 | 85 | 700 | 11 |
| ETZ 240 | 4.000 | 102 | 1500 | 1000 | 85 | 980 | 16 |
| ETZ 258 | 6.000 | 128 | 1500 | 1000 | 95 | 1.100 | 19 |

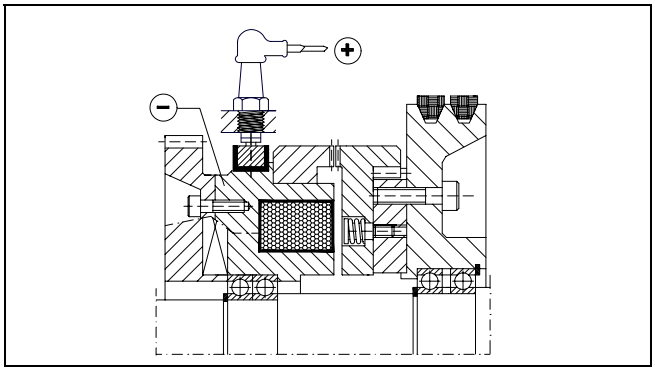
## *DIMENSIONS (mm)*

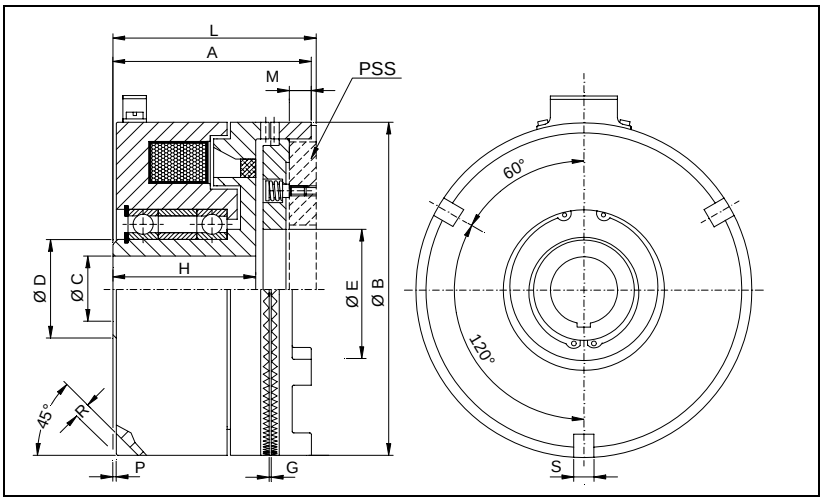
| *size* | A | B | C | D k6 | E | F | G | H | I | L | M | N | O | P | Q H7 | R | S | T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ETZ 082 | 82 | 39 | 67 | 35 | 31 | 2,5 | 42 | 20 | 25 | 22,5 | 35 | 7 | 0,30 | 7,5 | 12 | 6 | 50 | M5 |
| ETZ 095 | 95 | 40 | 78 | 42 | 37 | 2,5 | 43 | 20 | 25 | 22 | 45 | 8 | 0,40 | 7,5 | 12 | 6 | 56 | M6 |
| ETZ 114 | 114 | 47 | 95 | 55 | 45 | 5 | 50 | 22 | 30 | 25 | 53 | 10 | 0,40 | 11 | 14 | 7 | 75 | M8 |
| ETZ 140 | 140 | 54 | 120 | 68 | 60 | 5 | 57 | 22 | 33 | 28 | 70 | 12 | 0,40 | 11 | 16 | 8 | 90 | M8 |
| ETZ 166 | 166 | 60 | 142 | 75 | 65 | 6 | 63,5 | 25 | 35 | 30 | 80 | 11 | 0,40 | 13 | 20 | 9,5 | 100 | M10 |
| ETZ 195 | 195 | 68,5 | 170 | 90 | 80 | 6 | 71,5 | 28 | 39 | 34 | 89 | 15 | 0,40 | 13 | 20 | 12 | 116 | M10 |
| ETZ 210 | 210 | 77 | 184 | 100 | 90 | 6 | 79 | 31 | 42 | 39 | 100 | 16 | 0,40 | 14,5 | 20 | 14 | 130 | M12 |
| ETZ 240 | 240 | 84 | 216 | 110 | 100 | 6 | 86,5 | 32 | 45 | 40 | 112 | 16 | 0,45 | 14,5 | 25 | 14,5 | 145 | M12 |
| ETZ 258 | 258 | 90 | 234 | 140 | 130 | 8 | 92,5 | 33 | 52 | 41 | 133 | 16 | 0,45 | 16,5 | 25 | 16,5 | 200 | M12 |

## *PARTS NAME*




## *MOUNTING EXAMPLE*






***TOOTH ELECTROMAGNETIC CLUTCH WITHOUT SLIP RING***
***Model ESZ***

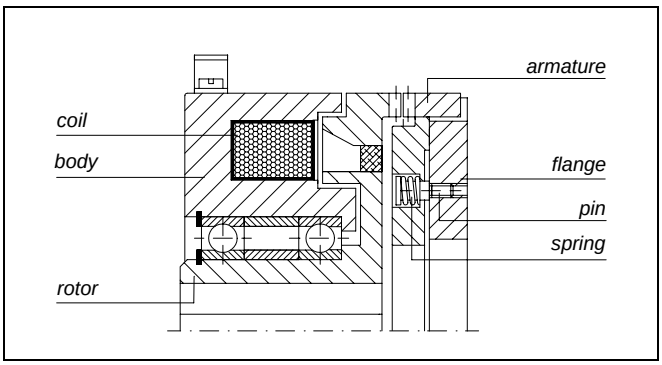
### *PERFORMANCES (24VDC)*

| *size* | *torque* (Nm) | *power* (W) | *RPM* *dry* | *wet* | *engagement time* (ms) | *disengagement time* (ms) | *weight* (kg) |
|---|---|---|---|---|---|---|---|
| ESZ 070 | 20 | 27 | 2.200 | 4.500 | 18 | 50 | 1,2 |
| ESZ 082 | 100 | 40 | 2.200 | 4.500 | 20 | 60 | 1,5 |
| ESZ 095 | 200 | 53 | 2.000 | 4.000 | 30 | 70 | 2 |
| ESZ 114 | 350 | 65 | 2.000 | 3.800 | 40 | 100 | 3,5 |
| ESZ 134 | 600 | 90 | 2.000 | 3.800 | 60 | 160 | 6 |
| ESZ 166 | 1.400 | 115 | 1.800 | 3.500 | 70 | 255 | 10 |
| ESZ 195 | 2.000 | 140 | 1.800 | 3.500 | 90 | 400 | 16 |
| ESZ 210 | 3.000 | 170 | 1.500 | 3.000 | 100 | 500 | 20.5 |
| ESZ 240 | 4.000 | 210 | 1.500 | 3.000 | 120 | 700 | 30 |
| ESZ 258 | 6.000 | 240 | 1.500 | 3.000 | 140 | 1.000 | 38 |

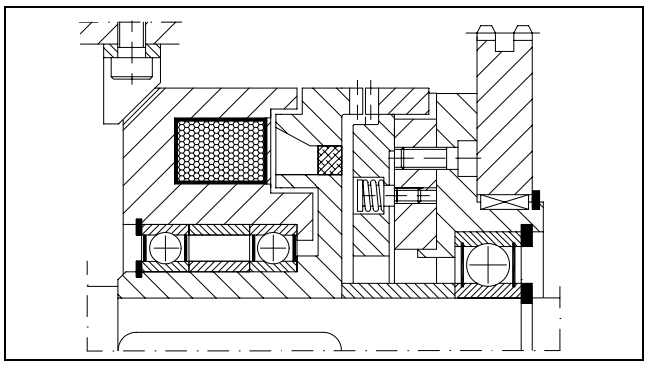
### *DIMENSIONS* (mm)

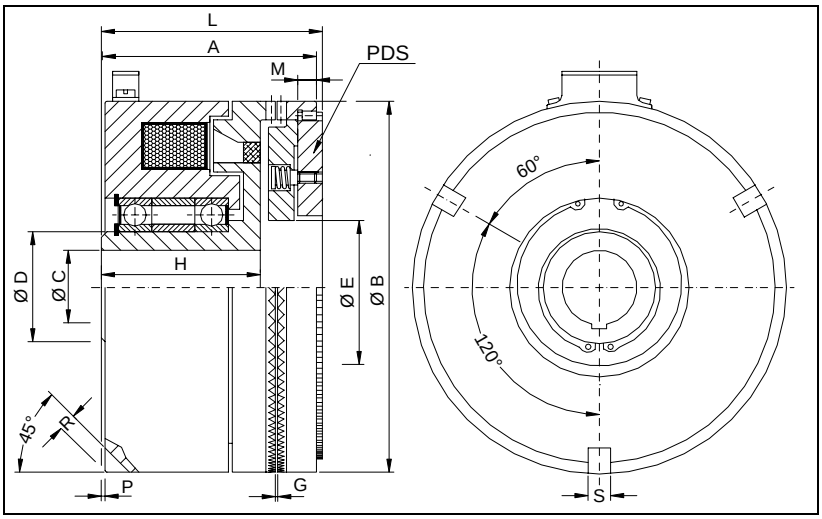
| *size* | A | B | C max | D k6 | E | G | H | L | M | P | R | S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ESZ 070 | 45 | 70 | 20 | 30 | 25 | 0,3 | 32 | 47,5 | 4,5 | 0,5 | 6 | 5 |
| ESZ 082 | 54 | 82 | 25 | 35 | 38 | 0,3 | 37 | 56,3 | 6 | 1 | 7 | 6 |
| ESZ 095 | 59 | 95 | 35 | 45 | 46 | 0,4 | 41 | 62 | 6 | 1 | 6 | 6 |
| ESZ 114 | 66 | 114 | 38 | 50 | 56 | 0,4 | 44 | 69 | 7 | 1 | 6 | 8 |
| ESZ 134 | 80 | 134 | 46 | 60 | 62 | 0,4 | 54 | 83 | 8 | 1 | 7 | 8 |
| ESZ 166 | 90 | 166 | 60 | 75 | 79 | 0,4 | 61 | 93,5 | 9,5 | 1 | 8 | 8 |
| ESZ 195 | 96 | 195 | 65 | 80 | 100 | 0,4 | 65 | 99 | 12 | 2 | 11 | 12 |
| ESZ 210 | 111 | 210 | 68 | 85 | 105 | 0,4 | 74 | 113 | 14 | 2 | 11 | 12 |
| ESZ 240 | 119 | 240 | 78 | 95 | 115 | 0,4 | 77 | 121,5 | 14,5 | 2 | 13 | 12 |
| ESZ 258 | 126 | 258 | 85 | 105 | 130 | 0,4 | 85 | 128,5 | 16,5 | 2 | 13 | 12 |

### *PARTS NAME*




### *MOUNTING EXAMPLE*






***TOOTH ELECTROMAGNETIC CLUTCH WITHOUT SLIP RING***
***Model EPZ***

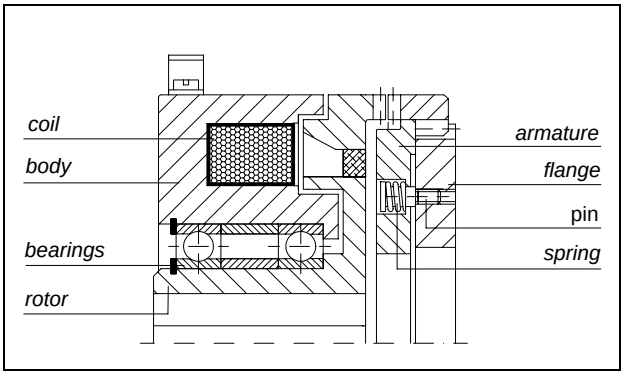
### *PERFORMANCES (24VDC)*

| *size* | *torque* (Nm) | *power* (W) | *RPM* dry | *RPM* wet | *engagement time* (ms) | *disengagement time* (ms) | *weight* (kg) |
|---|---|---|---|---|---|---|---|
| EPZ 070 | 20 | 27 | 2.200 | 4.500 | 18 | 50 | 1,2 |
| EPZ 082 | 100 | 40 | 2.200 | 4.500 | 20 | 60 | 1,5 |
| EPZ 095 | 200 | 53 | 2.000 | 4.000 | 30 | 70 | 2 |
| EPZ 114 | 350 | 65 | 2.000 | 3.800 | 40 | 100 | 3,5 |
| EPZ 134 | 600 | 90 | 2.000 | 3.800 | 60 | 160 | 6 |
| EPZ 166 | 1.400 | 115 | 1.800 | 3.500 | 70 | 255 | 10 |
| EPZ 195 | 2.000 | 140 | 1.800 | 3.500 | 90 | 400 | 16 |
| EPZ 210 | 3.000 | 170 | 1.500 | 3.000 | 100 | 500 | 20.5 |
| EPZ 240 | 4.000 | 210 | 1.500 | 3.000 | 120 | 700 | 30 |
| EPZ 258 | 6.000 | 240 | 1.500 | 3.000 | 140 | 1.000 | 38 |

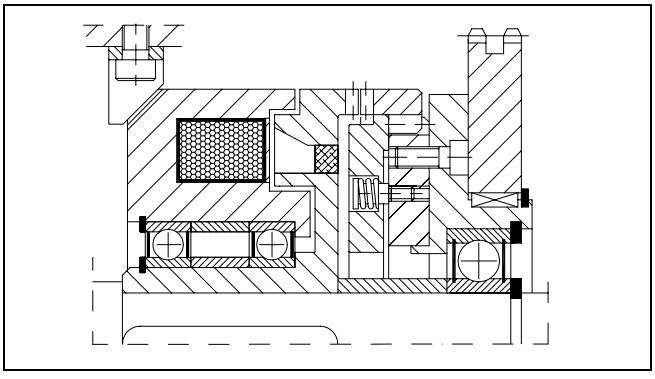
### *DIMENSIONS* (mm)

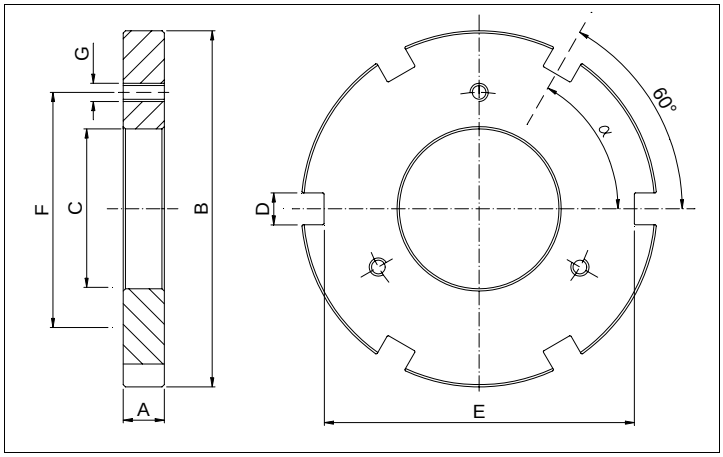
| *size* | A | B | C max | D k6 | E | G | H | L | M | P | R | S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EPZ 070 | 45 | 70 | 20 | 30 | 25 | 0,3 | 32 | 47,5 | 4,5 | 0,5 | 6 | 5 |
| EPZ 082 | 54 | 82 | 25 | 35 | 38 | 0,3 | 37 | 56,3 | 6 | 1 | 7 | 6 |
| EPZ 095 | 59 | 95 | 35 | 45 | 46 | 0,4 | 41 | 62 | 6 | 1 | 6 | 6 |
| EPZ 114 | 66 | 114 | 38 | 50 | 56 | 0,4 | 44 | 69 | 7 | 1 | 6 | 8 |
| EPZ 134 | 80 | 134 | 46 | 60 | 62 | 0,4 | 54 | 83 | 8 | 1 | 7 | 8 |
| EPZ 166 | 90 | 166 | 60 | 75 | 79 | 0,4 | 61 | 93,5 | 9,5 | 1 | 8 | 8 |
| EPZ 195 | 96 | 195 | 65 | 80 | 100 | 0,4 | 65 | 99 | 12 | 2 | 11 | 12 |
| EPZ 210 | 111 | 210 | 68 | 85 | 105 | 0,4 | 74 | 113 | 14 | 2 | 11 | 12 |
| EPZ 240 | 119 | 240 | 78 | 95 | 115 | 0,4 | 77 | 121,5 | 14,5 | 2 | 13 | 12 |
| EPZ 258 | 126 | 258 | 85 | 105 | 130 | 0,4 | 85 | 128,5 | 16,5 | 2 | 13 | 12 |

### *PARTS NAME*




### *MOUNTING EXAMPLE*

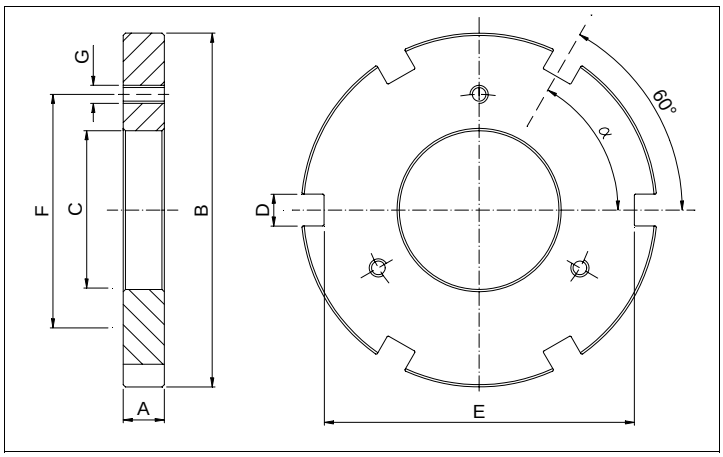





***SPLINED ASSEMBLING PLATE***
***FOR ESZ***
***Model PSS***

***DIMENSIONS (mm)***

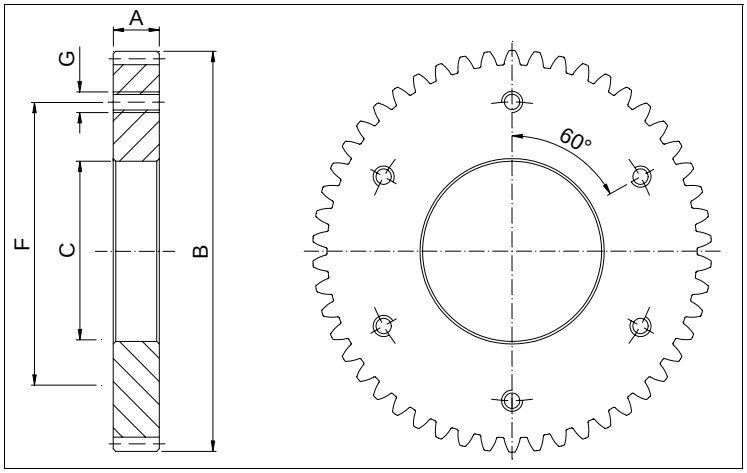
| *size* | A | B | C H7 | D | E | F H7 | G | α | weight (kg) |
|---|---|---|---|---|---|---|---|---|---|
| PSS 060 | 9 | 60 | 23 | 6 | 52 | 40 | 3xM3 | 120° | 0,16 |
| PSS 070 | 9 | 70 | 25 | 7 | 60 | 45 | 3xM3 | 120° | 0,25 |
| PSS 082 | 9 | 82 | 35 | 8 | 67 | 52 | 3xM4 | 120° | 0,30 |
| PSS 095 | 9 | 95 | 45 | 8 | 81 | 62 | 3xM4 | 120° | 0,40 |
| PSS 114 | 10 | 114 | 50 | 10 | 96 | 70 | 3xM4 | 120° | 0,65 |
| PSS 134 | 11 | 134 | 60 | 10 | 114 | 85 | 3xM5 | 120° | 0,95 |
| PSS 166 | 13 | 166 | 80 | 12 | 139 | 108 | 6xM6 | 60° | 1,70 |
| PSS 195 | 15 | 195 | 90 | 15 | 171 | 150 | 6xM6 | 60° | 2,80 |
| PSS 210 | 16 | 210 | 100 | 18 | 186 | 150 | 6xM6 | 60° | 3,30 |
| PSS 240 | 17 | 240 | 110 | 20 | 214 | 150 | 6xM6 | 60° | 4,80 |
| PSS 258 | 19 | 258 | 130 | 20 | 228 | 170 | 6xM6 | 60° | 5,80 |




***SPLINED ASSEMBLING PLATE***
***FOR ERZ - ECZ***
***Model PSC***

***DIMENSIONS (mm)***

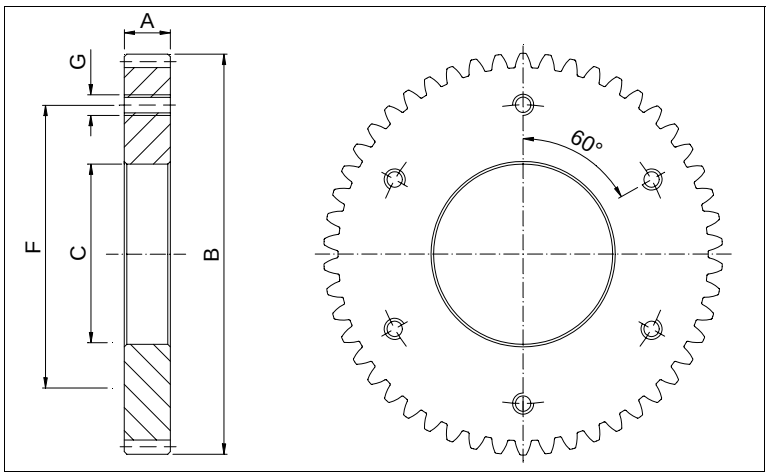
| size | A | B | C H7 | D | E | F H7 | G | α | weight (kg) |
|---|---|---|---|---|---|---|---|---|---|
| PSC 060 | 9 | 60 | 23 | 6 | 52 | 40 | 3xM3 | 120° | 0,16 |
| PSC 070 | 9 | 70 | 25 | 7 | 60 | 45 | 3xM3 | 120° | 0,23 |
| PSC 082 | 9 | 82 | 35 | 8 | 67 | 55 | 3xM4 | 120° | 0,30 |
| PSC 095 | 9 | 95 | 45 | 8 | 80 | 65 | 3xM4 | 120° | 0,40 |
| PSC 114 | 10 | 114 | 50 | 10 | 98 | 80 | 3xM4 | 120° | 0,65 |
| PSC 134 | 11 | 134 | 60 | 10 | 116 | 100 | 3xM5 | 120° | 0,95 |
| PSC 166 | 13 | 166 | 80 | 12 | 144 | 120 | 3xM6 | 120° | 1,70 |
| PSC 195 | 15 | 195 | 90 | 15 | 171 | 150 | 6xM6 | 60° | 2,80 |
| PSC 210 | 16 | 210 | 100 | 18 | 186 | 150 | 6xM6 | 60° | 3,30 |
| PSC 240 | 17 | 240 | 110 | 20 | 214 | 150 | 6xM6 | 60° | 4,80 |
| PSC 258 | 19 | 258 | 130 | 20 | 228 | 170 | 6xM6 | 60° | 5,80 |




## *TOOTHED ASSEMBLING PLATE FOR EDZ - ETZ Model PDC*

### *DIMENSIONS (mm)*

| | | | | | | Teeth | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| *size* | A | B h11 | C H7 | F H7 | G | DIN 5480 | Mod | z | α | weight (kg) |
| PDC 070 | 9 | 64,6 | 25 | 45 | 6xM3 | W 65X2X10e | 2 | 31 | 30° | 0,20 |
| PDC 082 | 9 | 74,6 | 35 | 55 | 6xM4 | W 75X2X10e | 2 | 36 | 30° | 0,25 |
| PDC 095 | 9 | 87,6 | 45 | 65 | 6xM4 | W 88X2X10e | 2 | 42 | 30° | 0,30 |
| PDC 114 | 10 | 104,6 | 50 | 80 | 6xM4 | W 105X2X10e | 2 | 51 | 30° | 0,50 |
| PDC 134 | 11 | 119,4 | 60 | 100 | 6xM5 | W 120X3X10e | 3 | 38 | 30° | 0,70 |
| PDC 166 | 13 | 149,4 | 80 | 120 | 6xM6 | W 150X3X10e | 3 | 48 | 30° | 1,50 |
| PDC 195 | 15 | 179 | 90 | 150 | 6xM6 | W 180X5X10e | 5 | 34 | 30° | 2,00 |
| PDC 210 | 16 | 189 | 100 | 150 | 6xM6 | W 190X5X10e | 5 | 36 | 30° | 2,50 |
| PDC 240 | 17 | 219 | 110 | 150 | 6xM6 | W 220X5X10e | 5 | 42 | 30° | 3,50 |
| PDC 258 | 19 | 239 | 130 | 170 | 6xM6 | W 240X5X10e | 5 | 46 | 30° | 4,50 |




## *TOOTHED ASSEMBLING PLATE FOR EPZ Model PDS*

### *DIMENSIONS (mm)*

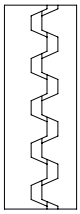
| | | | | | | Teeth | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| *size* | A | B h11 | C H7 | F H7 | G | DIN 5480 | Mod | z | α | weight (kg) |
| PDS 082 | 9 | 64,6 | 35 | 52 | 6xM4 | W 65X2X10e | 2 | 31 | 30° | 0,30 |
| PDS 095 | 9 | 74,6 | 45 | 62 | 6xM4 | W 75X2X10e | 2 | 36 | 30° | 0,30 |
| PDS 114 | 10 | 87,6 | 50 | 70 | 6xM4 | W 88X2X10e | 2 | 42 | 30° | 0,50 |
| PDS 134 | 11 | 104,6 | 60 | 85 | 6xM5 | W 105X2X10e | 2 | 51 | 30° | 0,70 |
| PDS 166 | 13 | 129,4 | 80 | 108 | 6xM6 | W 130X3X10e | 3 | 42 | 30° | 1,50 |
| PDS 195 | 15 | 169 | 90 | 150 | 6xM6 | W 170X5X10e | 5 | 32 | 30° | 2,00 |
| PDS 210 | 16 | 189 | 100 | 150 | 6xM6 | W 190X5X10e | 5 | 36 | 30° | 2,50 |
| PDS 240 | 17 | 219 | 110 | 150 | 6xM6 | W 220X5X10e | 5 | 42 | 30° | 3,50 |
| PDS 258 | 19 | 239 | 130 | 170 | 6xM6 | W 240X5X10e | 5 | 46 | 30° | 4,50 |

## *TOOTH PROFILES*

*The tooth electromagnetic clutches can be made with a design of toothing depending of the application requirements.*
*The standard toothing is trapezoidal in the positive clutches ; in the spring loaded clutches is triangular.*
*We can supply clutches or brakes with a special number of tooth ( ex. 360 every degree location ) except technical or structural objections.*

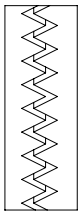
### *Trapezoidal toothing*

*This design allows a low clearance and the engagement in motion (50 ÷ 100 rpm).*
*The clutch can be released under load and in motion.*



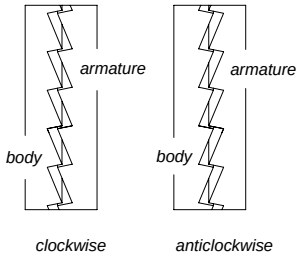
### *Triangular toothing*

*This design allow clearanceless.*
*The engagement in motion is possible only with a very low speed.*
*The clutch can be released under load and in motion.*



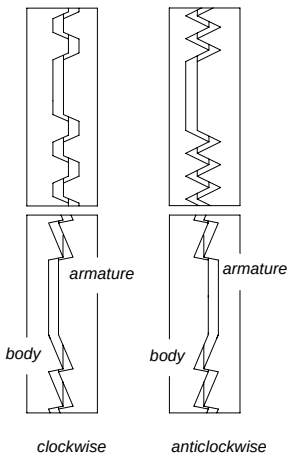
### *Saw toothing*

*This design allows high engagement speed and greater torques.*
*The clutch can be released under load.*
*This type of toothing , clockwise or anticlockwise , limit so much the work in opposite way that it's better to name unidirectional.*




### *Fixed point engagement toothing*

*This design allows to engage the clutch at one or more equidistant point inside the 360 degrees.*
*The toothed ring slides on the opposite toothed surface until reaches the allowed engagement position.*
*This design is executable with triangular, trapezoidal and saw toothing.*



## *Symbology*


*mechanically actuated*


*electromagnetically actuated*


*hydraulically actuated*


*pneumatically actuated*


*springs loaded*


*permanent magnet*


*with rotating magnet*


*with stationary magnet*


*with steel plates*


*with steel plates E*


*with sintered discs M*


*with linings*


*toothed*


*accessories*


*powder*