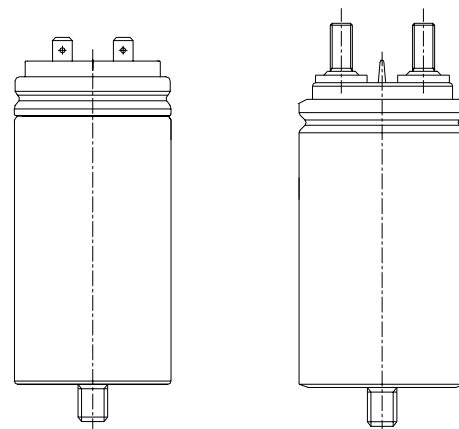




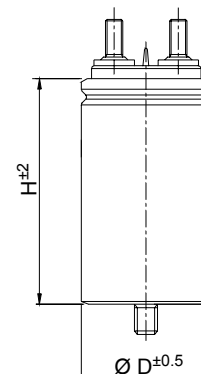
## TECHNICAL DATA

|                                                                           |                                                                                                                  |
|---------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| General technical data                                                    | VDE 0560 , IEC 071 , EN 61071                                                                                    |
| Application class ( DIN 40040 )                                           | GPD / LS                                                                                                         |
| Temperature range ( Case )                                                | -40 to + 85 °C                                                                                                   |
| Max permissible ambient temperature                                       | +70 °C                                                                                                           |
| Capacitance tolerance code ( 15 <sup>th</sup> digit )                     | J = ± 5% ; K = ± 10%                                                                                             |
| Test voltage terminal to case U <sub>TT</sub>                             | 1.5 U <sub>RMS</sub> for 60 seconds                                                                              |
| Test voltage terminal to case U <sub>TC</sub>                             | 3kV - 50Hz for 60 seconds                                                                                        |
| Rated insulation voltage U <sub>i</sub>                                   | 700 V - 50 Hz - Insulation group B ( VDE 0110 part 1 )                                                           |
| Permissible relative humidity                                             | Annual average ≤ 95% on 30 days / year, continuously 100% on other days occasionally 100%. Dewing not admissible |
| IEC climatic category                                                     | 40 / 85 / 21                                                                                                     |
| Degree of protection                                                      | IP00                                                                                                             |
| Capacitance deviation in the operating temperature range of -40 to +85 °C | ±1.5% max on capacitance value measured at +20 °C                                                                |
| Change of capacitance versus operating time                               | -3% after 30.000 hours at U <sub>RMS</sub> or after 100.000 hours at U <sub>n</sub>                              |
| Case components                                                           | Aluminium case plus plastic insulating deck flame retardant execution ( UL class 94 V1 ) .                       |
| Terminals                                                                 | Tinned brass fastons or screws ( See figure on top )                                                             |
| Installation                                                              | Whatever Position                                                                                                |
| Life Expectancy                                                           | ≥ 30.000 hours at U <sub>RMS</sub> ; ≥ 100.000 hours at U <sub>n</sub>                                           |
| Failure quota                                                             | 300 / 10 <sup>9</sup> components hour                                                                            |

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**PEAK VOLTAGE TABLE**

| Un<br>Vdc | U <sub>PK</sub><br>Vdc | U <sub>RMS</sub><br>Vac |
|-----------|------------------------|-------------------------|
| 400       | 600                    | 250                     |
| 600       | 800                    | 330                     |

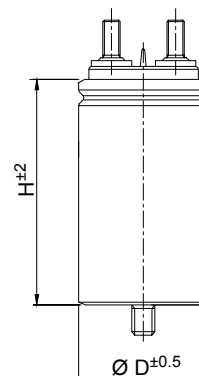

**GENERAL CHARACTERISTICS**

| Code            | C   | Un  | K    | Tgδ x 10 <sup>-4</sup> |      | ESR<br>Typ. | dv/dt | I <sub>RMS</sub> | I <sub>PKR</sub> | Case |     | Approx<br>Weight<br>g |
|-----------------|-----|-----|------|------------------------|------|-------------|-------|------------------|------------------|------|-----|-----------------------|
|                 | μF  | Vdc | °C/W | Max                    | Typ. | mΩ          | V/μs  | A                | A                | D    | H   |                       |
| C44AFP5150ZA0J  | 15  | 400 | 7.8  | 10                     | 5    | 5           | 30    | 16               | 450              | 45   | 80  | 135                   |
| C44AFP5200ZE0J  | 20  | 400 | 6.2  | 10                     | 5    | 5           | 30    | 18               | 600              | 45   | 80  | 135                   |
| C44AFP5220ZA0J  | 22  | 400 | 6.2  | 12                     | 6    | 5           | 30    | 18               | 660              | 45   | 80  | 135                   |
| C44AFP5250ZA0J  | 25  | 400 | 6.2  | 12                     | 7    | 5           | 30    | 18               | 750              | 45   | 80  | 135                   |
| C44AFP5300ZA0J  | 30  | 400 | 3.5  | 20                     | 15   | 6           | 20    | 22               | 600              | 50   | 101 | 200                   |
| C44AFP5400ZA0J  | 40  | 400 | 2.7  | 20                     | 15   | 6           | 20    | 25               | 800              | 50   | 101 | 200                   |
| C44AFP5500ZE0J  | 50  | 400 | 2.6  | 20                     | 15   | 6           | 20    | 25               | 1000             | 50   | 101 | 200                   |
| C44AFGP5600ZA0J | 60  | 400 | 2.6  | 25                     | 15   | 6           | 20    | 25               | 1200             | 60   | 101 | 240                   |
| C44AFGP5750ZA0J | 75  | 400 | 3.2  | 30                     | 20   | 5           | 20    | 30               | 1500             | 60   | 101 | 240                   |
| C44AFGP6100ZG0J | 100 | 400 | 4.0  | 30                     | 20   | 4           | 15    | 32               | 1500             | 60   | 138 | 315                   |
| C44AFGP6130ZA0J | 130 | 400 | 4.0  | 30                     | 20   | 4           | 15    | 32               | 2000             | 65   | 138 | 360                   |
| C44AFGP6150ZA0J | 150 | 400 | 4.0  | 40                     | 30   | 4           | 15    | 32               | 2250             | 70   | 138 | 530                   |
| C44AFGP6200ZE0J | 200 | 400 | 4.0  | 40                     | 30   | 4           | 10    | 32               | 2000             | 76   | 138 | 740                   |
| C44AFGR6250ZA0J | 250 | 400 | 4.0  | 40                     | 30   | 4           | 10    | 32               | 2500             | 85   | 150 | 900                   |
| C44AFGR6300ZA0J | 300 | 400 | 1.25 | 50                     | 40   | 5           | 20    | 50               | 6000             | 85   | 185 | 1080                  |
| C44AFGR6330ZA0J | 330 | 400 | 1.25 | 50                     | 40   | 5           | 20    | 50               | 6000             | 85   | 185 | 1150                  |
| C44AHFP5100ZA0J | 10  | 600 | 7.8  | 10                     | 5    | 5           | 40    | 16               | 400              | 45   | 80  | 135                   |
| C44AHFP5150ZA0J | 15  | 600 | 7.7  | 10                     | 5    | 4           | 40    | 18               | 600              | 45   | 105 | 160                   |
| C44AHFP5200ZB0J | 20  | 600 | 5.2  | 15                     | 6    | 4           | 30    | 22               | 600              | 45   | 101 | 160                   |
| C44AHFP5220ZA0J | 22  | 600 | 5.3  | 15                     | 6    | 3           | 30    | 25               | 660              | 50   | 101 | 200                   |
| C44AHFP5250ZB0J | 25  | 600 | 3.5  | 20                     | 15   | 6           | 20    | 22               | 600              | 50   | 101 | 200                   |
| C44AHFP5300ZC0J | 30  | 600 | 10.3 | 15                     | 7    | 2           | 30    | 25               | 900              | 50   | 101 | 200                   |
| C44AHGP5330ZA0J | 33  | 600 | 8.0  | 15                     | 7    | 2           | 30    | 25               | 990              | 55   | 101 | 235                   |
| C44AHGP5400ZB0J | 40  | 600 | 8.0  | 10                     | 6    | 2           | 30    | 25               | 1200             | 60   | 101 | 240                   |
| C44AHGP5500ZG0J | 50  | 600 | 3.2  | 15                     | 10   | 5           | 20    | 25               | 1000             | 55   | 138 | 300                   |
| C44AHGP5600ZB0J | 60  | 600 | 3.1  | 15                     | 8    | 5           | 20    | 32               | 1200             | 60   | 138 | 315                   |
| C44AHGP5700ZA0J | 70  | 600 | 3.2  | 25                     | 15   | 5           | 20    | 32               | 1400             | 65   | 138 | 360                   |
| C44AHGP5750ZA0J | 75  | 600 | 3.2  | 25                     | 15   | 5           | 20    | 32               | 1500             | 65   | 138 | 360                   |
| C44AHGP5800ZA0J | 80  | 600 | 3.2  | 25                     | 15   | 5           | 20    | 32               | 1600             | 65   | 135 | 530                   |
| C44AHGP6100ZA0J | 100 | 600 | 3.2  | 25                     | 15   | 5           | 20    | 32               | 2000             | 76   | 135 | 625                   |
| C44AHGR6100ZB0J | 100 | 600 | 1.25 | 15                     | 10   | 5           | 30    | 50               | 3000             | 85   | 138 | 770                   |

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**PEAK VOLTAGE TABLE**

| Un<br>Vdc | U <sub>PK</sub><br>Vdc | U <sub>RMS</sub><br>Vac |
|-----------|------------------------|-------------------------|
| 700       | 900                    | 400                     |
| 850       | 1000                   | 450                     |

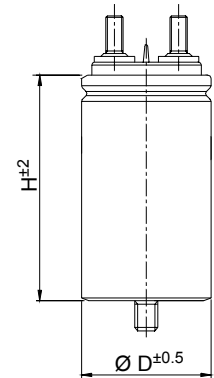

**GENERAL CHARACTERISTICS**

| Code            | C<br>μF | Un<br>Vdc | K<br>°C/W | Tgδ x 10 <sup>-4</sup> |      | ESR<br>Typ.<br>mΩ | dv/dt<br>V/μs | I <sub>RMS</sub><br>A | I <sub>PKR</sub><br>A | Case |     | Approx<br>Weight<br>g |
|-----------------|---------|-----------|-----------|------------------------|------|-------------------|---------------|-----------------------|-----------------------|------|-----|-----------------------|
|                 |         |           |           | Max                    | Typ. |                   |               |                       |                       | D    | H   |                       |
| C44AJFP4500ZA0J | 5       | 700       | 13.0      | 8                      | 2    | 3                 | 50            | 16                    | 250                   | 45   | 80  | 135                   |
| C44AJFP4600ZA0J | 6       | 700       | 13.0      | 8                      | 2    | 3                 | 50            | 16                    | 300                   | 45   | 80  | 135                   |
| C44AJFP4750ZA0J | 7.5     | 700       | 10.3      | 10                     | 3    | 3                 | 50            | 18                    | 375                   | 45   | 80  | 135                   |
| C44AJFP5100ZA0J | 10      | 700       | 10.0      | 10                     | 3    | 3                 | 50            | 18                    | 500                   | 50   | 101 | 200                   |
| C44AJFP5150ZB0J | 15      | 700       | 5.3       | 15                     | 6    | 3                 | 40            | 25                    | 600                   | 50   | 101 | 200                   |
| C44AJFP5200ZD0J | 20      | 700       | 5.3       | 15                     | 10   | 3                 | 40            | 25                    | 800                   | 50   | 101 | 200                   |
| C44AJGP5220ZA0J | 22      | 700       | 5.3       | 15                     | 10   | 3                 | 40            | 25                    | 880                   | 55   | 101 | 235                   |
| C44AJGP5250ZA0J | 25      | 700       | 5.3       | 15                     | 10   | 3                 | 40            | 25                    | 1000                  | 60   | 101 | 240                   |
| C44AJGP5300ZB0J | 30      | 700       | 5.3       | 15                     | 12   | 3                 | 30            | 25                    | 900                   | 60   | 138 | 310                   |
| C44AJGP5330ZA0J | 33      | 700       | 5.3       | 15                     | 10   | 3                 | 35            | 25                    | 990                   | 60   | 138 | 310                   |
| C44AJGP5400ZA0J | 40      | 700       | 4.0       | 25                     | 15   | 4                 | 35            | 32                    | 1200                  | 65   | 138 | 360                   |
| C44AJGP5500ZA0J | 50      | 700       | 4.0       | 25                     | 15   | 4                 | 35            | 32                    | 1500                  | 65   | 138 | 360                   |
| C44AJGP5600ZA0J | 60      | 700       | 4.0       | 25                     | 15   | 4                 | 30            | 32                    | 1800                  | 76   | 138 | 625                   |
| C44AJGP5700ZA0J | 70      | 700       | 4.0       | 25                     | 15   | 4                 | 30            | 32                    | 2100                  | 76   | 138 | 625                   |
| C44AJGR5750ZA0J | 75      | 700       | 4.0       | 25                     | 15   | 4                 | 30            | 32                    | 2250                  | 85   | 137 | 770                   |
| C44AJGR6100ZA0J | 100     | 700       | 2.0       | 15                     | 10   | 3                 | 40            | 50                    | 4000                  | 85   | 185 | 1150                  |
| C44AMFP4300ZA0J | 3       | 850       | 7.8       | 10                     | 5    | 5                 | 60            | 16                    | 180                   | 45   | 80  | 135                   |
| C44AMFP4500ZA0J | 5       | 850       | 7.8       | 10                     | 5    | 5                 | 60            | 16                    | 300                   | 45   | 80  | 135                   |
| C44AMFP4600ZA0J | 6       | 850       | 6.2       | 10                     | 5    | 5                 | 60            | 18                    | 360                   | 45   | 80  | 135                   |
| C44AMFP4800ZA0J | 8       | 850       | 4.1       | 10                     | 6    | 5                 | 50            | 22                    | 400                   | 45   | 105 | 200                   |
| C44AMFP5100ZD0J | 10      | 850       | 3.2       | 10                     | 6    | 5                 | 50            | 25                    | 500                   | 50   | 101 | 200                   |
| C44AMGP5150ZA0J | 15      | 850       | 2.0       | 10                     | 7    | 8                 | 50            | 25                    | 750                   | 60   | 101 | 240                   |
| C44AMGP5200ZA0J | 20      | 850       | 2.6       | 10                     | 7    | 6                 | 50            | 25                    | 1000                  | 65   | 101 | 310                   |
| C44AMGP5220ZA0J | 22      | 850       | 1.5       | 12                     | 5    | 4                 | 40            | 25                    | 880                   | 55   | 138 | 300                   |
| C44AMGP5250ZA0J | 25      | 850       | 3.2       | 15                     | 7    | 5                 | 40            | 25                    | 1000                  | 55   | 138 | 300                   |
| C44AMGP5300ZA0J | 30      | 850       | 3.2       | 15                     | 8    | 5                 | 40            | 32                    | 1200                  | 65   | 138 | 380                   |
| C44AMGP5330ZA0J | 33      | 850       | 3.2       | 15                     | 8    | 5                 | 40            | 32                    | 1320                  | 65   | 138 | 360                   |
| C44AMGP5350ZA0J | 35      | 850       | 3.2       | 15                     | 10   | 5                 | 40            | 32                    | 1400                  | 65   | 138 | 360                   |
| C44AMGP5400ZB0J | 40      | 850       | 3.2       | 15                     | 10   | 5                 | 40            | 32                    | 1600                  | 76   | 138 | 580                   |
| C44AMGP5500ZA0J | 50      | 850       | 3.2       | 20                     | 10   | 5                 | 40            | 32                    | 2000                  | 76   | 138 | 625                   |
| C44AMGR5600ZA0J | 60      | 850       | 3.2       | 20                     | 10   | 5                 | 40            | 32                    | 2400                  | 85   | 137 | 770                   |

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**PEAK VOLTAGE TABLE**

| Un<br>Vdc | U <sub>PK</sub><br>Vdc | U <sub>RMS</sub><br>Vac |
|-----------|------------------------|-------------------------|
| 1200      | 1600                   | 500                     |
| 1500      | 2000                   | 630                     |

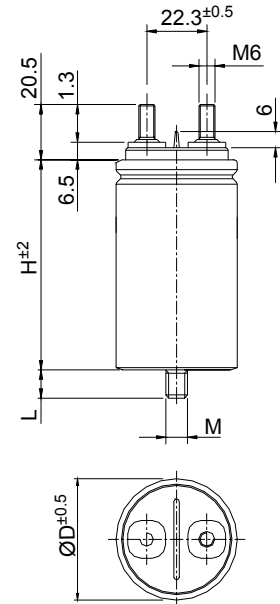

**GENERAL CHARACTERISTICS**

| Codes           | C    | Un   | K    | Tgδ x 10 <sup>-4</sup> |      | ESR<br>Typ. | dv/dt | I <sub>RMS</sub> | I <sub>PKR</sub> | Case |     | Approx<br>Weight |
|-----------------|------|------|------|------------------------|------|-------------|-------|------------------|------------------|------|-----|------------------|
|                 | μF   | Vdc  | °C/W | Max.                   | Typ. | mΩ          | V/μs  | A                | A                | D    | H   | g                |
| C44APFP4100ZA0J | 1    | 1200 | 17.7 | 5                      | 2.5  | 2.5         | 300   | 15               | 300              | 45   | 80  | 135              |
| C44APFP4150ZA0J | 1.5  | 1200 | 17.7 | 5                      | 2.5  | 2.5         | 300   | 15               | 450              | 45   | 80  | 135              |
| C44APFP4200ZD0J | 2    | 1200 | 17.7 | 5                      | 2.5  | 2.5         | 300   | 15               | 600              | 45   | 80  | 135              |
| C44APFP4220ZA0J | 2.2  | 1200 | 19.5 | 5                      | 2.5  | 2           | 300   | 16               | 660              | 45   | 80  | 135              |
| C44APFP4250ZA0J | 2.5  | 1200 | 15.4 | 5                      | 2.5  | 2           | 300   | 18               | 750              | 45   | 80  | 135              |
| C44APFP4300ZB0J | 3    | 1200 | 12.5 | 5                      | 2.5  | 2           | 300   | 20               | 900              | 50   | 76  | 150              |
| C44APFP4400ZA0J | 4    | 1200 | 12.5 | 5                      | 2.5  | 2           | 300   | 20               | 1200             | 50   | 101 | 200              |
| C44APFP4500ZB0J | 5    | 1200 | 10.3 | 5                      | 2.5  | 2           | 300   | 22               | 1500             | 50   | 101 | 200              |
| C44APFP4500ZA0J | 5    | 1200 | 3.3  | 5                      | 2.5  | 2           | 400   | 40               | 2000             | 50   | 138 | 280              |
| C44APGP4600ZB0J | 6    | 1200 | 8.0  | 5                      | 2.5  | 2           | 300   | 25               | 1800             | 55   | 101 | 235              |
| C44APGP4680ZB0J | 6.8  | 1200 | 8.0  | 5                      | 2.5  | 2           | 300   | 25               | 2040             | 60   | 101 | 240              |
| C44APGP4750ZF0J | 7.5  | 1200 | 10.6 | 5                      | 2.8  | 1.5         | 300   | 25               | 2250             | 50   | 138 | 280              |
| C44APGP4800ZE0J | 8    | 1200 | 4.5  | 5                      | 2.8  | 3.5         | 250   | 25               | 2000             | 55   | 138 | 300              |
| C44APGP5100ZE0J | 10   | 1200 | 5.3  | 5                      | 2.8  | 3           | 250   | 25               | 2500             | 55   | 138 | 300              |
| C44APGP5100ZF0J | 10   | 1200 | 3.2  | 5                      | 2.5  | 2           | 300   | 50               | 3000             | 60   | 138 | 310              |
| C44APGP5100ZH0J | 10   | 1200 | 1.4  | 5                      | 2.5  | 2           | 350   | 60               | 3500             | 65   | 158 | 350              |
| C44APGP5125ZA0J | 12.5 | 1200 | 3.2  | 5                      | 2.5  | 2           | 300   | 50               | 3750             | 76   | 138 | 625              |
| C44APGP5150ZB0J | 15   | 1200 | 6.4  | 5                      | 2.8  | 2.5         | 250   | 32               | 3750             | 76   | 138 | 625              |
| C44APGR5200ZB0J | 20   | 1200 | 6.4  | 5                      | 2.8  | 2.5         | 250   | 32               | 5000             | 85   | 137 | 770              |
| C44APGR5220ZA0J | 22   | 1200 | 1.1  | 5                      | 2.5  | 2.5         | 300   | 50               | 6600             | 76   | 200 | 940              |
| C44ASFP4100ZA0J | 1    | 1500 | 17.7 | 5                      | 2.5  | 2.5         | 400   | 15               | 700              | 45   | 80  | 135              |
| C44ASFP4200ZB0J | 2    | 1500 | 15.6 | 5                      | 2.8  | 2.5         | 400   | 16               | 800              | 50   | 76  | 150              |
| C44ASFP4300ZA0J | 3    | 1500 | 10.3 | 5                      | 2.8  | 2           | 400   | 22               | 1200             | 50   | 101 | 200              |
| C44ASGP4400ZA0J | 4    | 1500 | 8.0  | 5                      | 2.8  | 2           | 400   | 25               | 1600             | 60   | 101 | 265              |
| C44ASGP4500ZB0J | 5    | 1500 | 8.0  | 5                      | 2.8  | 2           | 400   | 25               | 2000             | 65   | 101 | 350              |
| C44ASGP4750ZA0J | 7.5  | 1500 | 5.3  | 5                      | 2.8  | 3           | 300   | 25               | 2250             | 65   | 138 | 380              |
| C44ASGP5100ZA0J | 10   | 1500 | 5.3  | 5                      | 2.8  | 3           | 300   | 32               | 3000             | 70   | 138 | 530              |
| C44ASGR5120ZA0J | 12   | 1500 | 5.3  | 5                      | 2.8  | 3           | 300   | 32               | 3600             | 85   | 137 | 770              |
| C44ASGR5150ZA0J | 15   | 1500 | 5.3  | 5                      | 2.8  | 3           | 300   | 32               | 4500             | 85   | 137 | 770              |

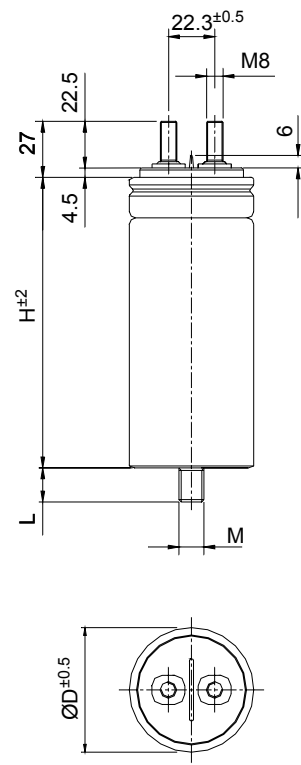
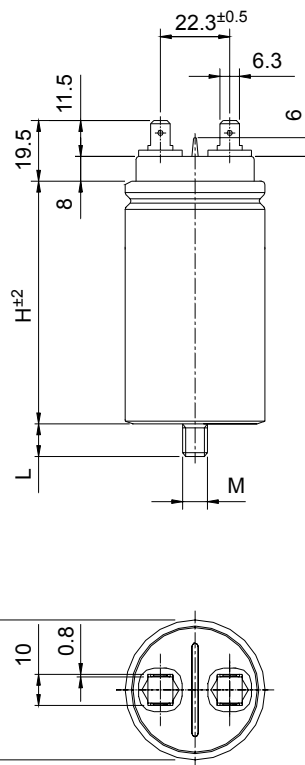
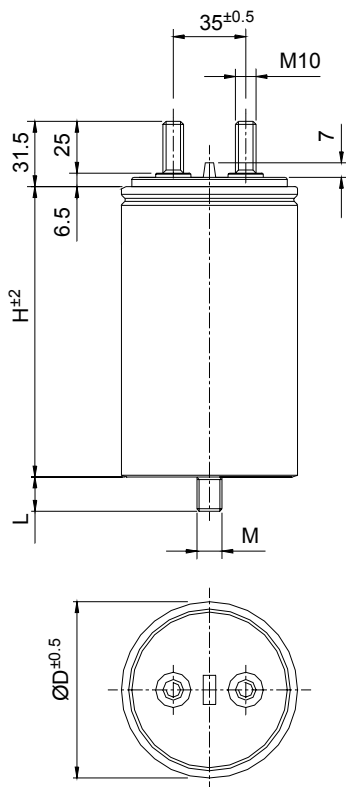
## DRAWINGS

### MECHANICAL CHARACTERISTICS

| Case | Brass screw terminals |                   |                  | Bolt |      |                   |
|------|-----------------------|-------------------|------------------|------|------|-------------------|
| D    | Driving Torque Nm     | Creepage Distance | Clearance In air | M    | H    | Driving Torque Nm |
| 45   | 4                     | 14                | 10               | M 8  | 10   | 6                 |
| 50   | 4                     | 14                | 10               | M 8  | 10   | 6                 |
| 55   | 4                     | 16                | 10               | M 12 | 12.5 | 10                |
| 60   | 4                     | 18                | 10               | M 12 | 12.5 | 10                |
| 65   | 4                     | 20                | 10               | M 12 | 12.5 | 10                |
| 70   | 4                     | 22                | 10               | M 12 | 12.5 | 10                |
| 85   | 7                     | 22                | 10               | M 12 | 12.5 | 10                |



### TERMINATIONS



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