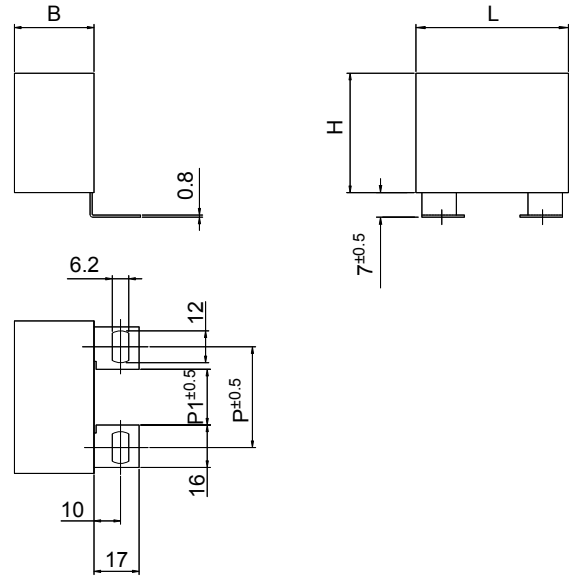


General characteristics

- Self-Healing
- Low losses
- High ripple current
- High contact reliability
- Suitable for high frequency applications



TECHNICAL DATA

| | |
|---|--|
| General technical data | VDE 0560 - IEC61071 - EN61071 |
| Application class (DIN 40040) | GPD / LS |
| Temperature range (Case) | -40 to + 85 °C |
| Max permissible ambient temperature | +70 °C |
| Capacitance tolerance code (15 th digit) | J = ± 5 % ; K = ± 10% |
| Peak non-repetitive max current | $I_{PKR} \times 1.5$ |
| Test voltage terminal to terminal U_{TT} | 2 U_n for 10 seconds |
| Test voltage terminal to case U_{TC} | 3kV - 50Hz for 60 seconds |
| Dissipation factor (tgδ) | $\leq 5 \times 10^{-4}$ at 1 kHz and 20 °C |
| Permissible relative humidity | Annual average $\leq 95\%$ on 30 days / year, continuously 100% on other days occasionally 100%. Dewing not admissible |
| IEC climatic category | 40 / 85 / 56 according to IEC 68-1 |
| Capacitance deviation in the operating temperature range of -40 to +85 °C | $\pm 1.5\%$ max on capacitance value measured at +20 °C |
| Change of capacitance versus operating time | -3% after 30.000 hours at U_{RMS} or after 100.000 hours at U_n |
| Case components | Solvent resistant plastic case with epoxy resin sealing. Flame retardant execution (UL class 94 V0). |
| Terminals | Tinned brass lugs |
| Installation | Whatever Position |
| Life Expectancy | ≥ 30.000 hours at U_{RMS} ; ≥ 100.000 hours at U_n |
| Failure quota | 300 / 10 ⁹ components hour |

PEAK VOLTAGE TABLE

| | | | | | |
|------------------|--------|--------|--------|--------|--------|
| Un | 850 V | 1000 V | 1200 V | 2000 V | 3000 V |
| U _{MAX} | 1200 V | 1300 V | 1600 V | 2400 V | 3500 V |

GENERAL CHARACTERISTICS

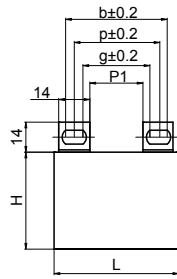
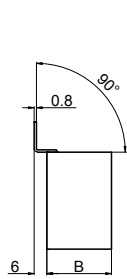
| Code | C μF | Un Vdc | U _{RMS} Vac | dV/dt V/μs | I _{PKR} A | ESR max @ 100 kHz mΩ | ESL nH | I _{RMS} 100 kHz @ 70°C A | DIMENSIONS mm | | |
|----------------|---------|-----------|-------------------------|---------------|-----------------------|----------------------------|-----------|---|------------------|----|------|
| | | | | | | | | | B | H | L |
| C4BSMBX3470ZEE | 0.47 | 850 | 550 | 1232 | 579 | 4.2 | 36 | 20 | 18 | 33 | 32 |
| C4BSMBX3470Z_F | 0.47 | 850 | 550 | 758 | 356 | 8.2 | 41 | 16 | 20 | 40 | 41.5 |
| C4BSMBX3680Z_F | 0.68 | 850 | 550 | 758 | 516 | 5.7 | 41 | 19 | 20 | 40 | 41.5 |
| C4BSMBX4100Z_F | 1 | 850 | 550 | 758 | 758 | 4.0 | 41 | 22 | 20 | 40 | 41.5 |
| C4BSMBX4150Z_J | 1.5 | 850 | 550 | 758 | 1138 | 2.7 | 36 | 29 | 28 | 37 | 42.5 |
| C4BSMBX4200Z_L | 2 | 850 | 550 | 758 | 1517 | 2.1 | 43 | 36 | 30 | 45 | 42 |
| C4BSMBX4220Z_L | 2.2 | 850 | 550 | 758 | 1668 | 1.9 | 43 | 37 | 30 | 45 | 42 |
| C4BSMBX4250Z_M | 2.5 | 850 | 550 | 469 | 1174 | 1.7 | 45 | 39 | 30 | 45 | 57.5 |
| C4BSMBX4300Z_M | 3 | 850 | 550 | 469 | 1408 | 3.0 | 45 | 32 | 30 | 45 | 57.5 |
| C4BSMBX4330Z_M | 3.3 | 850 | 550 | 469 | 1549 | 2.8 | 45 | 33 | 30 | 45 | 57.5 |
| C4BSMBX4400Z_N | 4 | 850 | 550 | 469 | 1878 | 2.3 | 48 | 36 | 35 | 50 | 57.5 |
| C4BSMBX4500Z_N | 5 | 850 | 550 | 469 | 2347 | 1.9 | 48 | 42 | 35 | 50 | 57.5 |
| C4BSNBX3470ZEE | 0.47 | 1000 | 600 | 1344 | 632 | 3.9 | 36 | 20 | 18 | 33 | 32 |
| C4BSNBX3470Z_F | 0.47 | 1000 | 600 | 827 | 389 | 7.6 | 41 | 16 | 20 | 40 | 41.5 |
| C4BSNBX3680Z_F | 0.68 | 1000 | 600 | 827 | 563 | 5.3 | 41 | 20 | 20 | 40 | 41.5 |
| C4BSNBX4100Z_F | 1 | 1000 | 600 | 827 | 827 | 3.7 | 41 | 23 | 20 | 40 | 41.5 |
| C4BSNBX4150Z_J | 1.5 | 1000 | 600 | 827 | 1241 | 2.5 | 36 | 30 | 28 | 37 | 42.5 |
| C4BSNBX4200Z_L | 2 | 1000 | 600 | 827 | 1655 | 2.0 | 43 | 36 | 30 | 45 | 42 |
| C4BSNBX4220Z_M | 2.2 | 1000 | 600 | 512 | 1127 | 3.8 | 45 | 29 | 30 | 45 | 57.5 |
| C4BSNBX4250Z_M | 2.5 | 1000 | 600 | 512 | 1280 | 3.3 | 45 | 30 | 30 | 45 | 57.5 |
| C4BSNBX4300Z_M | 3 | 1000 | 600 | 512 | 1536 | 2.8 | 45 | 33 | 30 | 45 | 57.5 |
| C4BSNBX4330Z_M | 3.3 | 1000 | 600 | 512 | 1690 | 2.6 | 45 | 34 | 30 | 45 | 57.5 |
| C4BSNBX4400Z_N | 4 | 1000 | 600 | 512 | 2049 | 2.2 | 48 | 40 | 35 | 50 | 57.5 |
| C4BSPBX3330ZEE | 0.33 | 1200 | 630 | 1568 | 518 | 5.0 | 36 | 19 | 18 | 33 | 32 |
| C4BSPBX3330Z_F | 0.33 | 1200 | 630 | 965 | 319 | 9.5 | 41 | 15 | 20 | 40 | 41.5 |
| C4BSPBX3470Z_F | 0.47 | 1200 | 630 | 965 | 454 | 6.7 | 41 | 18 | 20 | 40 | 41.5 |
| C4BSPBX3680Z_F | 0.68 | 1200 | 630 | 965 | 656 | 4.7 | 41 | 21 | 20 | 40 | 41.5 |
| C4BSPBX4100Z_J | 1 | 1200 | 630 | 965 | 965 | 3.3 | 36 | 27 | 28 | 37 | 42.5 |
| C4BSPBX4120Z_J | 1.2 | 1200 | 630 | 965 | 1158 | 2.8 | 36 | 29 | 28 | 37 | 42.5 |
| C4BSPBX4150Z_L | 1.5 | 1200 | 630 | 965 | 1448 | 2.3 | 43 | 34 | 30 | 45 | 42 |
| C4BSPBX4200Z_M | 2 | 1200 | 630 | 598 | 1195 | 3.6 | 45 | 29 | 30 | 45 | 57.5 |
| C4BSPBX4220Z_M | 2.2 | 1200 | 630 | 598 | 1315 | 3.3 | 45 | 30 | 30 | 45 | 57.5 |
| C4BSPBX4250Z_M | 2.5 | 1200 | 630 | 598 | 1494 | 2.9 | 45 | 32 | 30 | 45 | 57.5 |
| C4BSPBX4300Z_N | 3 | 1200 | 630 | 598 | 1793 | 2.5 | 48 | 37 | 35 | 50 | 57.5 |
| C4BSPBX4330Z_N | 3.3 | 1200 | 630 | 598 | 1972 | 2.3 | 48 | 39 | 35 | 50 | 57.5 |
| C4BSWBX3100ZEE | 0.1 | 2000 | 700 | 2241 | 224 | 12.9 | 36 | 12 | 18 | 33 | 32 |
| C4BSWBX3100Z_F | 0.1 | 2000 | 700 | 1379 | 138 | 23.3 | 41 | 10 | 20 | 40 | 41.5 |
| C4BSWBX3150ZEE | 0.15 | 2000 | 700 | 2241 | 336 | 8.6 | 36 | 15 | 18 | 33 | 32 |
| C4BSWBX3150Z_F | 0.15 | 2000 | 700 | 1379 | 207 | 15.6 | 41 | 12 | 20 | 40 | 41.5 |
| C4BSWBX3220Z_F | 0.22 | 2000 | 700 | 1379 | 303 | 10.7 | 41 | 14 | 20 | 40 | 41.5 |
| C4BSWBX3330Z_F | 0.33 | 2000 | 700 | 1379 | 455 | 7.2 | 41 | 17 | 20 | 40 | 41.5 |
| C4BSWBX3470Z_F | 0.47 | 2000 | 700 | 1379 | 648 | 5.1 | 41 | 20 | 20 | 40 | 41.5 |
| C4BSWBX3680Z_H | 0.68 | 2000 | 700 | 1379 | 938 | 3.6 | 43 | 26 | 24 | 44 | 41.5 |
| C4BSWBX3820Z_L | 0.82 | 2000 | 700 | 1379 | 1131 | 3.0 | 43 | 30 | 30 | 45 | 42 |
| C4BSWBX4100Z_M | 1 | 2000 | 700 | 854 | 854 | 5.1 | 45 | 24 | 30 | 45 | 57.5 |
| C4BSWBX4120Z_M | 1.2 | 2000 | 700 | 854 | 1024 | 4.3 | 45 | 26 | 30 | 45 | 57.5 |
| C4BSWBX4150Z_N | 1.5 | 2000 | 700 | 854 | 1280 | 3.5 | 48 | 31 | 35 | 50 | 57.5 |
| C4BSYBX2470ZEE | 0.047 | 3000 | 750 | 3361 | 158 | 21.9 | 36 | 10 | 18 | 33 | 32 |
| C4BSYBX2470Z_F | 0.047 | 3000 | 750 | 2068 | 97 | 36.6 | 41 | 8 | 20 | 40 | 41.5 |
| C4BSYBX2680ZEE | 0.068 | 3000 | 750 | 3361 | 229 | 15.2 | 36 | 12 | 18 | 33 | 32 |
| C4BSYBX2680Z_F | 0.068 | 3000 | 750 | 2068 | 141 | 25.4 | 41 | 10 | 20 | 40 | 41.5 |
| C4BSYBX3100Z_F | 0.1 | 3000 | 750 | 2068 | 207 | 17.3 | 41 | 12 | 20 | 40 | 41.5 |
| C4BSYBX3220Z_F | 0.22 | 3000 | 750 | 2068 | 455 | 8.0 | 41 | 17 | 20 | 40 | 41.5 |
| C4BSYBX3330Z_L | 0.33 | 3000 | 750 | 2068 | 683 | 5.4 | 43 | 24 | 30 | 45 | 42 |
| C4BSYBX3470Z_M | 0.47 | 3000 | 750 | 1280 | 602 | 7.5 | 45 | 20 | 30 | 45 | 57.5 |
| C4BSYBX3680Z_N | 0.68 | 3000 | 750 | 1280 | 871 | 5.3 | 48 | 23 | 35 | 50 | 57.5 |
| C4BSYBX3820Z_N | 0.82 | 3000 | 750 | 1280 | 1050 | 4.4 | 48 | 28 | 35 | 50 | 57.5 |

PEAK VOLTAGE TABLE

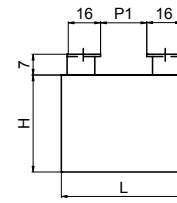
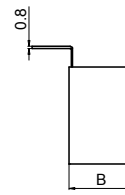
| | | | | | |
|------------------|-------|-------|-------|--------|-------|
| Un | 250 V | 400 V | 600 V | 700 V | 850 V |
| U _{MAX} | 400 V | 600 V | 800 V | 1000 V | 1200V |

GENERAL CHARACTERISTICS

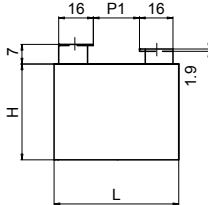
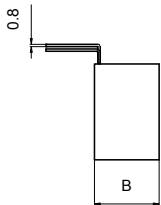
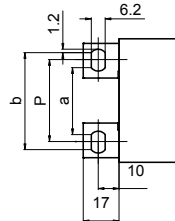
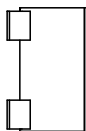
| Code | C μF | Un Vdc | U _{RMS} Vac | dv/dt V/μs | I _{PKR} A | ESR max @ 100 kHz | | ESL nH | I _{RMS} 100 kHz @ 70°C A | DIMENSIONS mm | | |
|-----------------|---------|-----------|-------------------------|---------------|-----------------------|----------------------|--|-----------|---|------------------|----|------|
| | | | | | | mΩ | | | | B | H | L |
| C4BTDBX4470ZEE_ | 4.7 | 250 | 160 | 59 | 279 | 2.6 | | 36 | 22 | 18 | 33 | 32 |
| C4BTDBX4680ZEE_ | 6.8 | 250 | 160 | 59 | 403 | 1.9 | | 36 | 26 | 18 | 33 | 32 |
| C4BTDBX5100Z_F_ | 10 | 250 | 160 | 40 | 402 | 2.6 | | 41 | 27 | 20 | 40 | 41.5 |
| C4BTDBX5150Z_F_ | 15 | 250 | 160 | 40 | 602 | 1.8 | | 41 | 32 | 20 | 40 | 41.5 |
| C4BTDBX5200Z_J_ | 20 | 250 | 160 | 40 | 803 | 1.4 | | 36 | 39 | 28 | 37 | 42.5 |
| C4BTDBX5250Z_H_ | 25 | 250 | 160 | 40 | 1004 | 1.2 | | 43 | 43 | 24 | 44 | 42 |
| C4BTDBX5300Z_L_ | 30 | 250 | 160 | 40 | 1205 | 1.0 | | 43 | 50 | 30 | 45 | 42 |
| C4BTDBX5400Z_M_ | 40 | 250 | 160 | 27 | 1082 | 1.5 | | 45 | 46 | 30 | 45 | 57.5 |
| C4BTDBX5500Z_N_ | 50 | 250 | 160 | 27 | 1353 | 1.2 | | 48 | 54 | 35 | 50 | 57.5 |
| C4BTDBX5600Z_N_ | 60 | 250 | 160 | 27 | 1624 | 1.1 | | 48 | 58 | 35 | 50 | 57.5 |
| C4BTFBX4330ZEE_ | 3.3 | 400 | 250 | 74 | 245 | 3.0 | | 36 | 21 | 18 | 33 | 32 |
| C4BTFBX4400ZEE_ | 4 | 400 | 250 | 74 | 296 | 2.5 | | 36 | 23 | 18 | 33 | 32 |
| C4BTFBX4400Z_F_ | 4 | 400 | 250 | 50 | 201 | 4.9 | | 41 | 19 | 20 | 40 | 41.5 |
| C4BTFBX4500ZEE_ | 5 | 400 | 250 | 74 | 370 | 2.0 | | 36 | 25 | 18 | 33 | 32 |
| C4BTFBX4500Z_F_ | 5 | 400 | 250 | 50 | 251 | 4.0 | | 41 | 22 | 20 | 40 | 41.5 |
| C4BTFBX4680Z_F_ | 6.8 | 400 | 250 | 50 | 341 | 3.0 | | 41 | 25 | 20 | 40 | 41.5 |
| C4BTFBX5100Z_F_ | 10 | 400 | 250 | 50 | 502 | 2.1 | | 41 | 30 | 20 | 40 | 41.5 |
| C4BTFBX5125Z_J_ | 12.5 | 400 | 250 | 50 | 627 | 1.7 | | 36 | 35 | 28 | 37 | 42.5 |
| C4BTFBX5150Z_J_ | 15 | 400 | 250 | 50 | 753 | 1.5 | | 36 | 38 | 28 | 37 | 42.5 |
| C4BTFBX5200Z_L_ | 20 | 400 | 250 | 50 | 1004 | 1.2 | | 43 | 46 | 30 | 45 | 42 |
| C4BTFBX5250Z_M_ | 25 | 400 | 250 | 34 | 846 | 1.8 | | 45 | 41 | 30 | 45 | 57.5 |
| C4BTFBX5300Z_M_ | 30 | 400 | 250 | 34 | 1015 | 1.6 | | 45 | 45 | 30 | 45 | 57.5 |
| C4BTFBX5350Z_N_ | 35 | 400 | 250 | 34 | 1184 | 1.4 | | 48 | 52 | 35 | 50 | 57.5 |
| C4BTFBX5400Z_N_ | 40 | 400 | 250 | 34 | 1353 | 1.2 | | 48 | 54 | 35 | 50 | 57.5 |
| C4BTHBX4250ZEE_ | 2.5 | 600 | 330 | 104 | 259 | 2.9 | | 36 | 21 | 18 | 33 | 32 |
| C4BTHBX4250Z_F_ | 2.5 | 600 | 330 | 70 | 176 | 5.7 | | 41 | 18 | 20 | 40 | 41.5 |
| C4BTHBX4300Z_F_ | 3 | 600 | 330 | 70 | 211 | 4.8 | | 41 | 20 | 20 | 40 | 41.5 |
| C4BTHBX4400Z_F_ | 4 | 600 | 330 | 70 | 281 | 3.6 | | 41 | 23 | 20 | 40 | 41.5 |
| C4BTHBX4500Z_F_ | 5 | 600 | 330 | 70 | 351 | 2.9 | | 41 | 25 | 20 | 40 | 41.5 |
| C4BTHBX4680Z_J_ | 6.8 | 600 | 330 | 70 | 478 | 2.2 | | 41 | 31 | 28 | 37 | 42.5 |
| C4BTHBX4800Z_H_ | 8 | 600 | 330 | 70 | 562 | 1.9 | | 43 | 34 | 24 | 44 | 42 |
| C4BTHBX5100Z_L_ | 10 | 600 | 330 | 70 | 703 | 1.6 | | 43 | 40 | 30 | 45 | 42 |
| C4BTHBX5125Z_M_ | 12.5 | 600 | 330 | 47 | 592 | 2.5 | | 45 | 35 | 30 | 45 | 57.5 |
| C4BTHBX5150Z_M_ | 15 | 600 | 330 | 47 | 710 | 2.1 | | 45 | 38 | 30 | 45 | 57.5 |
| C4BTHBX5200Z_N_ | 20 | 600 | 330 | 47 | 947 | 1.7 | | 48 | 47 | 35 | 50 | 57.5 |
| C4BTJBX4150ZEE_ | 1.5 | 700 | 400 | 119 | 178 | 4.2 | | 36 | 18 | 18 | 33 | 32 |
| C4BTJBX4150Z_F_ | 1.5 | 700 | 400 | 80 | 120 | 8.2 | | 41 | 15 | 20 | 40 | 41.5 |
| C4BTJBX4200ZEE_ | 2 | 700 | 400 | 119 | 237 | 3.2 | | 36 | 20 | 18 | 33 | 32 |
| C4BTJBX4200Z_F_ | 2 | 700 | 400 | 80 | 161 | 6.2 | | 41 | 17 | 20 | 40 | 41.5 |
| C4BTJBX4220Z_F_ | 2.2 | 700 | 400 | 80 | 177 | 5.7 | | 41 | 18 | 20 | 40 | 41.5 |
| C4BTJBX4300Z_F_ | 3 | 700 | 400 | 80 | 241 | 4.2 | | 41 | 21 | 20 | 40 | 41.5 |
| C4BTJBX4400Z_F_ | 4 | 700 | 400 | 80 | 321 | 3.2 | | 41 | 24 | 20 | 40 | 41.5 |
| C4BTJBX4500Z_J_ | 5 | 700 | 400 | 80 | 402 | 2.6 | | 36 | 29 | 28 | 37 | 42 |
| C4BTJBX4800Z_L_ | 8 | 700 | 400 | 80 | 642 | 1.7 | | 43 | 38 | 30 | 45 | 42 |
| C4BTJBX5100Z_M_ | 10 | 700 | 400 | 54 | 541 | 2.7 | | 45 | 34 | 30 | 45 | 57.5 |
| C4BTJBX5150Z_N_ | 15 | 700 | 400 | 54 | 812 | 1.9 | | 48 | 44 | 35 | 50 | 57.5 |
| C4BTMBX4100ZEE_ | 1 | 850 | 450 | 148 | 148 | 5.1 | | 36 | 16 | 18 | 33 | 32 |
| C4BTMBX4100Z_F_ | 1 | 850 | 450 | 100 | 100 | 9.9 | | 41 | 14 | 20 | 40 | 41.5 |
| C4BTMBX4150Z_F_ | 1.5 | 850 | 450 | 100 | 151 | 6.7 | | 41 | 17 | 20 | 40 | 41.5 |
| C4BTMBX4200Z_F_ | 2 | 850 | 450 | 100 | 201 | 5.1 | | 41 | 19 | 20 | 40 | 41.5 |
| C4BTMBX4300Z_F_ | 3 | 850 | 450 | 100 | 301 | 3.4 | | 41 | 23 | 20 | 40 | 41.5 |
| C4BTMBX4400Z_H_ | 4 | 850 | 450 | 100 | 402 | 2.6 | | 43 | 29 | 24 | 44 | 42 |
| C4BTMBX4500Z_L_ | 5 | 850 | 450 | 100 | 502 | 2.2 | | 43 | 34 | 30 | 45 | 42 |
| C4BTMBX4800Z_N_ | 8 | 850 | 450 | 68 | 541 | 2.8 | | 48 | 37 | 35 | 50 | 57.5 |
| C4BTMBX5100Z_N_ | 10 | 850 | 450 | 68 | 677 | 2.3 | | 48 | 40 | 35 | 50 | 57.5 |



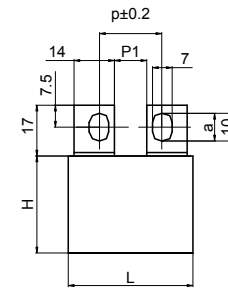
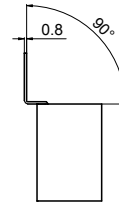
| Style | L | P | a | b | P1 |
|-------|------|------|------|------|------|
| A | 41.5 | 25.5 | 21.5 | 29.5 | 10.5 |
| A | 42 | 25.5 | 21.5 | 29.5 | 10.5 |
| A | 42.5 | 25.5 | 21.5 | 29.5 | 10.5 |
| A | 57.5 | 41 | 37 | 45 | 25 |



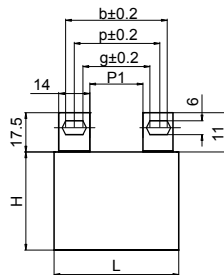
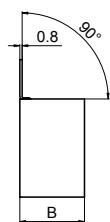
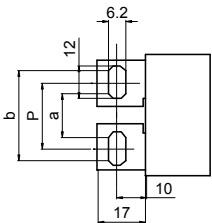
| Style | L | P | a | b | P1 |
|-------|------|----|----|----|----|
| B | 41.5 | 22 | 16 | 28 | 6 |
| B | 42 | 22 | 16 | 28 | 6 |
| B | 42.5 | 22 | 16 | 28 | 6 |
| B | 57.5 | 37 | 31 | 43 | 21 |



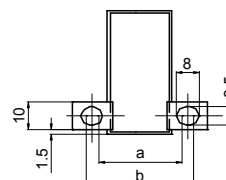
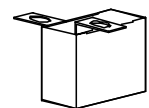
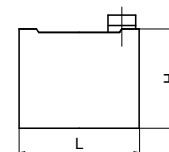
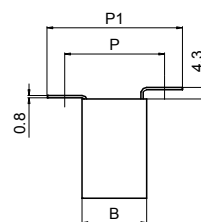
| Style | L | P | a | b | P1 |
|-------|------|----|----|----|----|
| F | 41.5 | 22 | 16 | 28 | 6 |
| F | 42 | 22 | 16 | 28 | 6 |
| F | 42.5 | 22 | 16 | 28 | 6 |
| F | 57.5 | 37 | 31 | 43 | 21 |



| Style | L | P | a | b | P1 |
|-------|------|----|---|---|------|
| G | 41.5 | 22 | 4 | / | 10.5 |
| G | 42 | 22 | 4 | / | 10.5 |
| G | 42.5 | 22 | 4 | / | 10.5 |
| G | 57.5 | 37 | 4 | / | 25 |



| Style | L | P | a | b | P1 |
|-------|------|------|------|------|------|
| H | 41.5 | 25.5 | 21.5 | 29.5 | 10.5 |
| H | 42 | 25.5 | 21.5 | 29.5 | 10.5 |
| H | 42.5 | 25.5 | 21.5 | 29.5 | 10.5 |
| H | 57.5 | 41 | 37 | 45 | 25 |



| Style | B | P | P1 | a | b |
|-------|----|----|----|----|----|
| E | 18 | 31 | 44 | 29 | 33 |
| E | 20 | 33 | 46 | 31 | 35 |
| E | 22 | 35 | 48 | 33 | 37 |
| E | 24 | 37 | 50 | 35 | 39 |
| E | 28 | 41 | 54 | 39 | 43 |
| E | 30 | 43 | 56 | 41 | 45 |

SINGLE PACKAGE UNIT

| Box dimensions | N° of pieces | Weight kgr | Box dimensions | N° of pieces | Weight kgr |
|----------------|--------------|------------|----------------|--------------|------------|
| 20x40x41.5 | 54 | 3.0 | 30x45x42 | 36 | 3.4 |
| 28x37x42.5 | 36 | 2.7 | 30x45x57.5 | 27 | 3.2 |
| 24x44x41.5 | 42 | 3.2 | 35x50x57.5 | 23 | 3.5 |