

EAGT

Endurance 2.500h at 150°C

Rated voltage range: 6,3V to 63V, Nominal capacitance range: 47µF to 8.200µF

Size range: Ø 14,0 x 25,5 and Ø 14,0 x 30,5mm

RoHS compliant

Special types on request



Specifications

| | Characteristics | | | | | | | | |
|---|---|--|-------|-------|-------|------|-------|-------|------------------|
| Temperature range | - 55°C to +150°C | | | | | | | | |
| Rated voltage range | 6,3V to 63V | | | | | | | | |
| Capacitance tolerance | ±20%, other on request (at 20°C, 100Hz) | | | | | | | | |
| Leakage current I_{ra} | I _{ra} =0,001·C _R ·V _R + 2µA or 5µA, whichever is greater, (I _{ra} [µA], C _R : Rated capacitance [µF], V _R : Rated voltage [V]) (at 20°C, after 5 minutes) | | | | | | | | |
| Dissipation factor tan δ (D.F.) | Rated voltage (V _R) | 6,3V | 10V | 16V | 25V | 40V | 50V | 63V | (at 20°C, 100Hz) |
| | tan δ _{max} | 0,12 | 0,12 | 0,11 | 0,10 | 0,10 | 0,09 | 0,08 | |
| When nominal capacitance exceeds 1.000µF, add 0,02 to the value above for each 1.000µF increase | | | | | | | | | |
| Low temperature characteristics Z_{max}-factor | Rated voltage (V _R) | 6,3V | 10V | 16V | 25V | 40V | 50V | 63V | (100Hz) |
| | Z(-40°C)/(20°C) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| Endurance | The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 2.500 at 150°C. | | | | | | | | |
| | Capacitance change | ΔC/C0 ≤ ±30% | | | | | | | |
| | D.F. (tan δ) | Δtan δ ≤ +200% | | | | | | | |
| | Leakage current (I _{ra}) | I _{ra} ≤ the initial specified value | | | | | | | |
| Shelf life | The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 96 hours at 150°C without voltage applied. | | | | | | | | |
| | Capacitance change | ΔC/C0 ≤ ±30% | | | | | | | |
| | D.F. (tan δ) | Δtan δ ≤ +200% | | | | | | | |
| | Leakage current (I _{ra}) | I _{ra} ≤ +200% of the initial specification value | | | | | | | |
| Surge voltage test | The capacitors shall be subjected to 1.000 cycles each consisting of charging with the specified surge voltage for 30±5 seconds through a protective resistor (R=0,1/C _R) and open-circuiting for 330 seconds at 150°C. The following specifications shall be satisfied when the capacitors are restored to 20°C. | | | | | | | | |
| | Rated voltage (V _R) | 6,3V | 10V | 16V | 25V | 40V | 50V | 63V | |
| | Surge voltage (V _s) | 7,2V | 11,5V | 18,4V | 28,8V | 46V | 57,5V | 72,5V | |
| | Appearance | No significant damage | | | | | | | |
| | Capacitance change | ΔC/C0 ≤ ±10% | | | | | | | |
| | D.F. (tan δ) | Δtan δ ≤ the initial specified value | | | | | | | |
| | Leakage current (I _{ra}) | I _{ra} ≤ the initial specified value | | | | | | | |

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Aluminum electrolytic capacitors, low voltage, axial, pulse proof, polarized
Endurance at least 2.500h at +150°C

EAGT

Generic specification:
DIN EN 60384-1

Sectional specification:
DIN 45910 part 126
without quality assessment

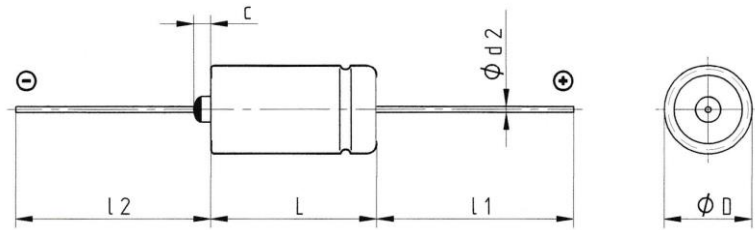
Operating temperature range:
- 55°C to +150°C

Climatic category:
55/150/56

Capacitance range:
±20%
(other on request)

Surge voltage V_S :
 $V_S = 1,15 \cdot V_R$

Leakage current I_{ra} :
measured at V_R at +20°C
 $I_{ra} \leq 0,001 \cdot C_R \cdot V_R + 2\mu A$
or 5µA,
whichever is greater
(after 5 minutes)



The identification of polarity is carried out by the stamp image.
Taping specifications on request

| Dimensions (mm) | | | |
|---------------------|-------------|-------------|------------|
| D x L | 14,0 x 25,5 | 14,0 x 30,5 | tolerance |
| D | 14,0 | 14,0 | +0,5 |
| L | 25,5 | 30,5 | +1,5 |
| c | 1,5 | 1,5 | ±0,3 |
| d 2 | 0,8(*) | 0,8(*) | ±0,05 |
| l 1 | 38,0 | 38,0 | ±3,0 |
| l 2 | 45,0 | 45,0 | ±3,0 |
| Endurance at least | | | |
| Ambient temperature | | | Ø 14,0 mm |
| ≤ +40°C | | | 5.120.000h |
| +150°C | | | 2.500h |

(*) 1,0 mm on request

| Dimensions Overview D x L | | | | | | | |
|---------------------------------|-------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Rated Capacitance C_R [µF] | Rated voltage V_R [V] | | | | | | |
| | 6,3 | 10 | 16 | 25 | 40 | 50 | 63 |
| 47 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 |
| 100 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 |
| 150 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 |
| 220 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 |
| 330 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 |
| 390 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 30,5 |
| 470 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 30,5 | 14,0 x 30,5 |
| 560 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 30,5 | 14,0 x 30,5 |
| 820 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 30,5 | 14,0 x 30,5 | |
| 1 000 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 30,5 | | |
| 1 200 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 30,5 | | |
| 1 500 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 30,5 | | | |
| 1 800 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 30,5 | | | |
| 2 200 | 14,0 x 25,5 | 14,0 x 25,5 | 14,0 x 30,5 | 14,0 x 30,5 | | | |
| 3 300 | 14,0 x 25,5 | 14,0 x 30,5 | 14,0 x 30,5 | | | | |
| 4 700 | 14,0 x 25,5 | 14,0 x 30,5 | 14,0 x 30,5 | | | | |
| 5 600 | 14,0 x 30,5 | 14,0 x 30,5 | | | | | |
| 6 800 | 14,0 x 30,5 | 14,0 x 30,5 | | | | | |
| 8 200 | 14,0 x 30,5 | | | | | | |

Technical specifications

| Rated capacitance C_R [μ F] | Rated voltage V_R [V] | Size D x L [mm] | $\tan \delta$ 100Hz +20°C (max) | ESR [Ω] 100Hz +20°C (max) | Z [Ω] 10kHz +20°C (max) | I_{\sim} [mA]* 100Hz +150°C (max) |
|---------------------------------------|----------------------------|--------------------|---------------------------------------|--|--|---|
| 47 | 6,3 | 14,0 x 25,5 | 0,12 | 0,50 | 1,65 | 455 |
| 100 | 6,3 | 14,0 x 25,5 | 0,12 | 0,50 | 1,31 | 455 |
| 150 | 6,3 | 14,0 x 25,5 | 0,12 | 0,50 | 0,98 | 455 |
| 220 | 6,3 | 14,0 x 25,5 | 0,12 | 0,50 | 0,76 | 455 |
| 330 | 6,3 | 14,0 x 25,5 | 0,12 | 0,50 | 0,60 | 455 |
| 390 | 6,3 | 14,0 x 25,5 | 0,12 | 0,49 | 0,53 | 459 |
| 470 | 6,3 | 14,0 x 25,5 | 0,12 | 0,41 | 0,49 | 504 |
| 560 | 6,3 | 14,0 x 25,5 | 0,12 | 0,34 | 0,45 | 550 |
| 820 | 6,3 | 14,0 x 25,5 | 0,12 | 0,23 | 0,40 | 666 |
| 1 000 | 6,3 | 14,0 x 25,5 | 0,14 | 0,22 | 0,40 | 681 |
| 1 200 | 6,3 | 14,0 x 25,5 | 0,14 | 0,19 | 0,36 | 746 |
| 1 500 | 6,3 | 14,0 x 25,5 | 0,14 | 0,15 | 0,36 | 834 |
| 1 800 | 6,3 | 14,0 x 25,5 | 0,14 | 0,12 | 0,31 | 914 |
| 2 200 | 6,3 | 14,0 x 25,5 | 0,16 | 0,12 | 0,29 | 945 |
| 3 300 | 6,3 | 14,0 x 25,5 | 0,18 | 0,09 | 0,27 | 1 091 |
| 4 700 | 6,3 | 14,0 x 25,5 | 0,20 | 0,07 | 0,24 | 1 235 |
| 5 600 | 6,3 | 14,0 x 30,5 | 0,22 | 0,06 | 0,22 | 1 417 |
| 6 800 | 6,3 | 14,0 x 30,5 | 0,24 | 0,06 | 0,20 | 1 495 |
| 8 200 | 6,3 | 14,0 x 30,5 | 0,28 | 0,05 | 0,15 | 1 520 |
| 47 | 10 | 14,0 x 25,5 | 0,12 | 0,50 | 1,64 | 455 |
| 100 | 10 | 14,0 x 25,5 | 0,12 | 0,50 | 1,50 | 455 |
| 150 | 10 | 14,0 x 25,5 | 0,12 | 0,50 | 1,15 | 455 |
| 220 | 10 | 14,0 x 25,5 | 0,12 | 0,50 | 0,88 | 455 |
| 330 | 10 | 14,0 x 25,5 | 0,12 | 0,50 | 0,67 | 455 |
| 390 | 10 | 14,0 x 25,5 | 0,12 | 0,49 | 0,48 | 459 |
| 470 | 10 | 14,0 x 25,5 | 0,12 | 0,41 | 0,38 | 504 |
| 560 | 10 | 14,0 x 25,5 | 0,12 | 0,34 | 0,37 | 550 |
| 820 | 10 | 14,0 x 25,5 | 0,12 | 0,23 | 0,36 | 666 |
| 1 000 | 10 | 14,0 x 25,5 | 0,14 | 0,22 | 0,35 | 681 |
| 1 200 | 10 | 14,0 x 25,5 | 0,14 | 0,19 | 0,35 | 746 |
| 1 500 | 10 | 14,0 x 25,5 | 0,14 | 0,15 | 0,34 | 834 |
| 1 800 | 10 | 14,0 x 25,5 | 0,14 | 0,12 | 0,34 | 914 |
| 2 200 | 10 | 14,0 x 25,5 | 0,16 | 0,12 | 0,29 | 945 |
| 3 300 | 10 | 14,0 x 30,5 | 0,18 | 0,09 | 0,27 | 1 203 |
| 4 700 | 10 | 14,0 x 30,5 | 0,20 | 0,07 | 0,25 | 1 362 |
| 5 600 | 10 | 14,0 x 30,5 | 0,22 | 0,06 | 0,22 | 1 417 |
| 6 800 | 10 | 14,0 x 30,5 | 0,24 | 0,06 | 0,20 | 1 495 |
| 47 | 16 | 14,0 x 25,5 | 0,11 | 0,50 | 1,53 | 455 |
| 100 | 16 | 14,0 x 25,5 | 0,11 | 0,50 | 1,45 | 455 |
| 150 | 16 | 14,0 x 25,5 | 0,11 | 0,50 | 1,00 | 455 |
| 220 | 16 | 14,0 x 25,5 | 0,11 | 0,50 | 0,66 | 455 |
| 330 | 16 | 14,0 x 25,5 | 0,11 | 0,50 | 0,44 | 455 |
| 390 | 16 | 14,0 x 25,5 | 0,11 | 0,45 | 0,39 | 480 |
| 470 | 16 | 14,0 x 25,5 | 0,11 | 0,37 | 0,31 | 527 |
| 560 | 16 | 14,0 x 25,5 | 0,11 | 0,31 | 0,30 | 575 |
| 820 | 16 | 14,0 x 25,5 | 0,11 | 0,21 | 0,29 | 696 |
| 1 000 | 16 | 14,0 x 25,5 | 0,13 | 0,21 | 0,28 | 707 |
| 1 200 | 16 | 14,0 x 25,5 | 0,13 | 0,17 | 0,27 | 774 |
| 1 500 | 16 | 14,0 x 25,5 | 0,13 | 0,14 | 0,26 | 865 |
| 1 800 | 16 | 14,0 x 25,5 | 0,13 | 0,11 | 0,25 | 948 |
| 2 200 | 16 | 14,0 x 30,5 | 0,15 | 0,11 | 0,24 | 1 076 |
| 3 300 | 16 | 14,0 x 30,5 | 0,17 | 0,08 | 0,23 | 1 238 |
| 4 700 | 16 | 14,0 x 30,5 | 0,19 | 0,06 | 0,21 | 1 397 |

* I_{\sim} (Rated ripple current) refers to an increase in temperature of 3K, special requirements or special types on request

Technical specifications

| Rated capacitance C_R [μ F] | Rated voltage V_R [V] | Size D x L [mm] | $\tan \delta$ 100Hz +20°C (max) | ESR [Ω] 100Hz +20°C (max) | Z [Ω] 10kHz +20°C (max) | I_{\sim} [mA]* 100Hz +150°C (max) |
|---------------------------------------|----------------------------|--------------------|---------------------------------------|--|--|---|
| 47 | 25 | 14,0 x 25,5 | 0,10 | 0,50 | 1,79 | 455 |
| 100 | 25 | 14,0 x 25,5 | 0,10 | 0,50 | 1,42 | 455 |
| 150 | 25 | 14,0 x 25,5 | 0,10 | 0,50 | 1,13 | 455 |
| 220 | 25 | 14,0 x 25,5 | 0,10 | 0,50 | 1,00 | 455 |
| 330 | 25 | 14,0 x 25,5 | 0,10 | 0,50 | 0,66 | 455 |
| 390 | 25 | 14,0 x 25,5 | 0,10 | 0,50 | 0,45 | 455 |
| 470 | 25 | 14,0 x 25,5 | 0,10 | 0,47 | 0,40 | 552 |
| 560 | 25 | 14,0 x 25,5 | 0,10 | 0,40 | 0,35 | 603 |
| 820 | 25 | 14,0 x 25,5 | 0,10 | 0,27 | 0,30 | 730 |
| 1 000 | 25 | 14,0 x 25,5 | 0,12 | 0,25 | 0,25 | 735 |
| 1 200 | 25 | 14,0 x 25,5 | 0,12 | 0,21 | 0,19 | 806 |
| 1 500 | 25 | 14,0 x 30,5 | 0,12 | 0,17 | 0,15 | 993 |
| 1 800 | 25 | 14,0 x 30,5 | 0,12 | 0,14 | 0,12 | 1 088 |
| 2 200 | 25 | 14,0 x 30,5 | 0,14 | 0,13 | 0,10 | 1 114 |
| 47 | 40 | 14,0 x 25,5 | 0,10 | 0,50 | 1,60 | 455 |
| 100 | 40 | 14,0 x 25,5 | 0,10 | 0,50 | 0,75 | 455 |
| 150 | 40 | 14,0 x 25,5 | 0,10 | 0,50 | 0,60 | 455 |
| 220 | 40 | 14,0 x 25,5 | 0,10 | 0,50 | 0,34 | 455 |
| 330 | 40 | 14,0 x 25,5 | 0,10 | 0,50 | 0,30 | 455 |
| 390 | 40 | 14,0 x 25,5 | 0,10 | 0,50 | 0,26 | 455 |
| 470 | 40 | 14,0 x 25,5 | 0,10 | 0,47 | 0,24 | 552 |
| 560 | 40 | 14,0 x 25,5 | 0,10 | 0,40 | 0,18 | 603 |
| 820 | 40 | 14,0 x 30,5 | 0,10 | 0,27 | 0,13 | 804 |
| 1 000 | 40 | 14,0 x 30,5 | 0,12 | 0,25 | 0,08 | 811 |
| 1 200 | 40 | 14,0 x 30,5 | 0,12 | 0,21 | 0,06 | 888 |
| 47 | 50 | 14,0 x 25,5 | 0,09 | 0,50 | 1,38 | 455 |
| 100 | 50 | 14,0 x 25,5 | 0,09 | 0,50 | 0,65 | 455 |
| 150 | 50 | 14,0 x 25,5 | 0,09 | 0,50 | 0,55 | 455 |
| 220 | 50 | 14,0 x 25,5 | 0,09 | 0,50 | 0,29 | 455 |
| 330 | 50 | 14,0 x 25,5 | 0,09 | 0,50 | 0,26 | 455 |
| 390 | 50 | 14,0 x 25,5 | 0,09 | 0,45 | 0,22 | 530 |
| 470 | 50 | 14,0 x 30,5 | 0,11 | 0,44 | 0,20 | 581 |
| 560 | 50 | 14,0 x 30,5 | 0,11 | 0,37 | 0,17 | 634 |
| 820 | 50 | 14,0 x 30,5 | 0,11 | 0,25 | 0,11 | 767 |
| 47 | 63 | 14,0 x 25,5 | 0,08 | 0,50 | 1,28 | 455 |
| 100 | 63 | 14,0 x 25,5 | 0,08 | 0,50 | 0,60 | 455 |
| 150 | 63 | 14,0 x 25,5 | 0,08 | 0,50 | 0,53 | 455 |
| 220 | 63 | 14,0 x 25,5 | 0,08 | 0,50 | 0,25 | 455 |
| 330 | 63 | 14,0 x 25,5 | 0,08 | 0,39 | 0,22 | 517 |
| 390 | 63 | 14,0 x 30,5 | 0,10 | 0,41 | 0,19 | 555 |
| 470 | 63 | 14,0 x 30,5 | 0,10 | 0,34 | 0,17 | 609 |
| 560 | 63 | 14,0 x 30,5 | 0,10 | 0,28 | 0,15 | 665 |

* I_{\sim} (Rated ripple current) refers to an increase in temperature of 3K, special requirements or special types on request

Ordering information for FROLYT electrolytic capacitors

- Series
- Rated capacitance / Rated voltage
- Capacitance tolerance
- Dimensions (Diameter x Length)
- Additional requirements

Ordering example: EAGT 47 μ F 63V \pm 20%, 14,0 x 25,5mm

Special requirements or special types on request

All information provided in printed form requires a written confirmation in order to be legally binding within the meaning of §§463 and 480 II BGB (German Civil Code). Hence, the given data imply exclusively a product description and are not to be understood as assured qualities.