

**Ordering code:** PAM 170-40.0 cv5 (K)  
**Applications:** AC/DC capacitor for general use in power electronics  
 also for nonsinusoidal voltages and currents  
**Standard:** acc. to IEC 61071:2007

#### Characteristics

Rated capacitance	<b>C<sub>N</sub></b>	40 µF ±10%
Rated d.c. voltage	<b>U<sub>N DC</sub></b>	2800 V d.c.
Rated a.c. voltage	<b>U<sub>N AC</sub></b>	1700 V a.c.
Max. rms voltage (sinusoidal)	<b>U<sub>rms</sub></b>	1200 V
Non-recurrent surge voltage	<b>u<sub>s</sub></b>	4200 V
Rated energy	<b>W<sub>N</sub></b>	156.8 Ws
Maximum current	<b>I<sub>max</sub></b>	80 A
Maximum peak current	<b>I<sub>̂</sub></b>	3.9 kA
Maximum surge current	<b>I<sub>s</sub></b>	11.7 kA
Series resistance	<b>R<sub>s</sub></b>	0.65 mΩ
dielectric dissipation factor	<b>tanδ<sub>o</sub></b>	2 x 10 <sup>-4</sup>
insulation strength	<b>C x R<sub>is</sub></b>	5000 s
Self inductance	<b>L<sub>e</sub></b>	160 nH

#### thermal characteristics

lower category temperature	<b>Θ<sub>min</sub></b>	-25 °C
upper category temperature	<b>Θ<sub>max</sub></b>	85 °C
thermal resistance	<b>R<sub>th</sub></b>	2.2 K/W
storing temperature	<b>Θ<sub>storage</sub></b>	-40...+85 °C

#### test parameters

test voltage between terminals	<b>U<sub>TT</sub></b>	4200 V DC/10s
A.C. voltage test terminals/case	<b>U<sub>TC</sub></b>	5000 V AC/10s

#### Statistical lifetime

**Failure rate** >200000 h  
 < 100 FIT\*  
 at Θ<sub>hotspot</sub> ≤70 °C

\* See FIT-RATE diagram on pg.4

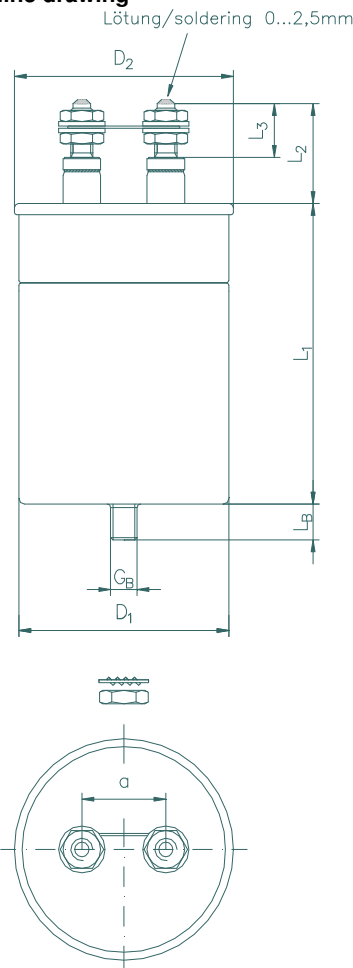
#### Dimensions

Rated diameter	<b>D<sub>1</sub></b>	116 (±1)	mm
Maximum diameter	<b>D<sub>2</sub></b>	120 (±0.5)	mm
Length of the case	<b>L<sub>1</sub></b>	176 (±2)	mm
Length of the terminals	<b>L<sub>2</sub></b>	25 (+5)	mm
Length of the terminals	<b>L<sub>4</sub></b>	-	mm
distance terminals	<b>b</b>	-	mm
Terminal		M10 x20	mm
base mounting stud	<b>G<sub>B</sub>xL<sub>B</sub></b>	M12x16 (+1)	mm
Clearance in air	<b>L</b>	17	mm
Creepage distance	<b>K</b>	20	mm
<b>Approx weight</b>		2	kg

#### Mechanical characteristics

Dielectric	metallized polypropylene capacitor, selfhealing
Construction	aluminium can, flanged copper (folded edge)
Protection	without internal fuse, to be used only in uncritical environment
Terminals	Screw terminals on ceramic insulators M10
Impregnant	no liquid impregnants, filled with solidified PUR resin, non PCB
Fire load	80MJ

#### outline drawing



#### permitted power losses during continuous operation

