

**DC Link / Filtering Capacitor**

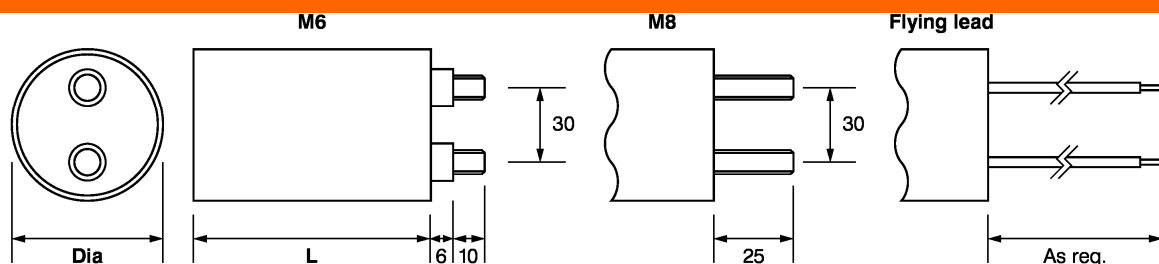
**PCS Range**

The PCS range of capacitors has been designed to offer electronic circuit designers of dc filtering applications an alternative to electrolytic capacitors. Manufactured from a special metallised polypropylene film, the component offers a very high volumetric efficiency along with very low losses and high current handling capability. The capacitors are housed in aluminium cans, with screw terminals or flying leads. Base mounting studs are available if required.

**Technical Details**

|                                      |   |
|--------------------------------------|---|
| <b>Capacitance Range:</b>            | 15 - 1040 $\mu$ F   |
| <b>Tolerance:</b>                    | $\pm$ 10%   |
| <b>Dissipation Factor:</b>           | $\leq$ 0.001 at 1kHz & 20 $\pm$ 3 $^{\circ}$ C  |
| <b>Insulation Resistance:</b>        | $\geq$ 10,000 M $\Omega$ - $\mu$ F @ 400 Vdc & 20 $\pm$ 3 $^{\circ}$ C                                  |
| <b>Rated Voltage:</b>                | 1100 - 1800 Vdc (see graph below for expected lifetime)   |
| <b>Temperature Range:</b>            | -55 to + 85 $^{\circ}$ C  |
| <b>Environmental Category:</b>       | 55/85/56 to EN60068-1 (IEC68-1)   |
| <b>Proof Test Voltage:</b>           | 1.25 x rated voltage for 30s. Not to be repeated.   |
| <b>RMS Current Rating:</b>           | Dependant on operating conditions, typically 20-80A. Please contact us for assistance with calculations |
| <b>Recommended Tightening Torque</b> | M6 - 8Nm<br>M8 - 10Nm   |

**Component Outline**



Outline dimensions in mm  $\pm$ 0.3

| Can Size | Diameter ( $\pm$ 0.1) | L ( $\pm$ 1) | Can Size | Diameter ( $\pm$ 0.1) | L ( $\pm$ 1) |
|----------|-----------------------|--------------|----------|-----------------------|--------------|
| A        | 50                    | 70           | K        | 76                    | 165          |
| B        | 63.5                  | 70           | L        | 84.4                  | 165          |
| C        | 76                    | 70           | M        | 90                    | 165          |
| D        | 50                    | 110          | N        | 76                    | 185          |
| E        | 63.5                  | 110          | O        | 84.4                  | 185          |
| F        | 76                    | 110          | P        | 90                    | 185          |
| G        | 50                    | 145          | Q        | 76                    | 235          |
| H        | 63.5                  | 145          | R        | 84.4                  | 235          |
| I        | 76                    | 145          | S        | 90                    | 235          |
| J        | 84.4                  | 145          |          |                       |              |

**Components**

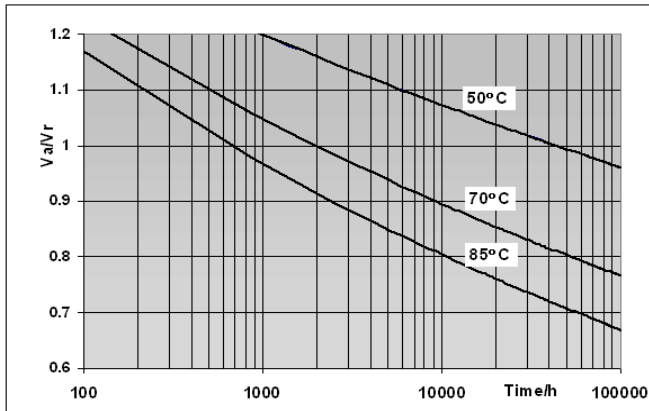
| Can | CAPACITANCE VALUES IN $\mu$ F      |     |      |      |      |
|-----|------------------------------------|-----|------|------|------|
|     | Rated operating voltage Vr / (Vdc) |     |      |      |      |
|     | 700                                | 900 | 1100 | 1400 | 1800 |
| A   | 42                                 | 28  | 15   |      |      |
| B   | 73                                 | 47  | 30   |      |      |
| C   | 110                                | 70  | 50   | 25   | 15   |
| D   | 84                                 | 56  | 35   | 20   | 10   |
| E   | 146                                | 94  | 60   | 35   | 25   |
| F   | 220                                | 140 | 100  | 55   | 35   |
| G   | 130                                | 84  | 50   | 30   | 20   |
| H   | 220                                | 144 | 95   | 55   | 35   |
| I   | 330                                | 220 | 150  | 80   | 55   |
| J   | 424                                | 270 | 190  | 110  | 70   |
| K   | 430                                | 280 | 190  | 110  | 70   |
| L   | 540                                | 350 | 240  | 140  | 90   |
| M   | 620                                | 400 | 280  | 160  | 105  |
| N   | 520                                | 340 | 240  | 140  | 90   |
| O   | 660                                | 430 | 310  | 175  | 115  |
| P   | 760                                | 500 | 360  | 205  | 135  |
| Q   | 720                                | 460 | 300  | 170  | 115  |
| R   | 900                                | 580 | 385  | 220  | 145  |
| S   | 1040                               | 680 | 445  | 255  | 170  |

**Ordering Details**

PCS 55u K 1400V - A

PCS Type 55u Capacitance in  $\mu$ F  
 K Tolerance 1400V Rated dc voltage  
 H Can size  
 8 Terminal size (6=M6, 8=M8, F=Flying lead)  
 S Base Mounting stud (S=M8x10, blank = None)

## Life Expectancy



### Quality and useful life

The specification of quality data – which always refers to a fairly large number of components – does not constitute a guarantee of characteristics or properties in the legal sense. However, agreement on the specifications does not mean that the customer may not claim for replacement of individual defective components within the terms of delivery. We cannot, however, assume any further liability beyond the replacement of defective components. This applies in particular to any further consequences of component failure.

Furthermore, it must be taken into consideration that the figures stated for useful life and failure rate refer to the average production status and are therefore to be understood as mean values (statistical expectations) for a large number of delivery lots of identical capacitors. These figures are based on application experience and data obtained from preceding tests under normal conditions, or – for purposes of accelerated aging – more severe conditions.