



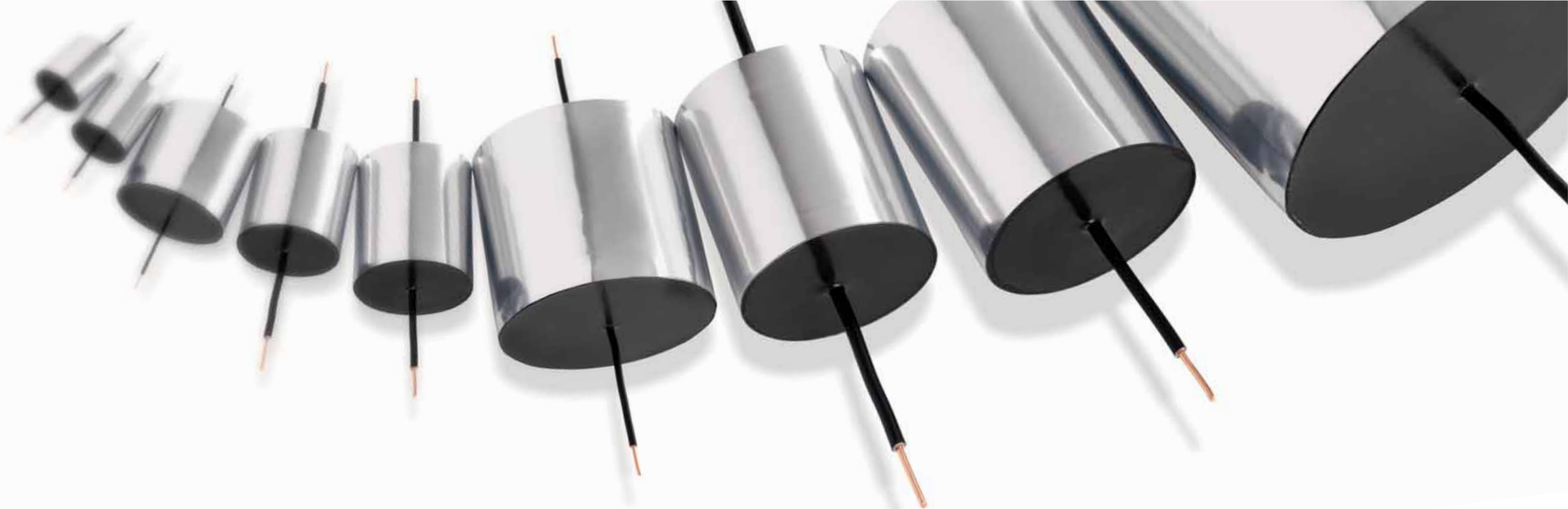
# ESA

The ESA range of components exploits the knowledge gained during the extensive research programme recently undertaken by ClarityCap.

The research programme looked into ways of reducing mechanical resonances inherent in a wound capacitor to hitherto unachievable levels.

ESA capacitors are designed to offer a mid way house between the highly regarded SA range and the new no compromise MR range.

Manufactured from polypropylene film the component is supplied in the familiar wrap and end seal style, wrapped in a polyester tape and encapsulated in an epoxy resin.



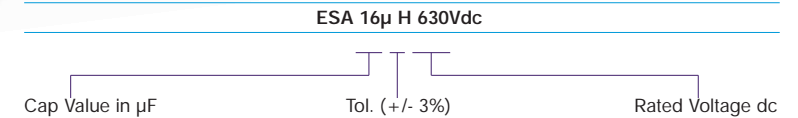
## Technical details

Capacitance range	See table
Tolerance	±3% standard. Others by request
Dissipation factor	≤ 0.001 @ 1KHz & 20±3°C
Insulation resistance	≥ 10 <sup>10</sup> MΩ·μF @ rated voltage & 20±3°C
Rated voltage	250Vdc, 630Vdc
Dielectric absorption	≤ 0.1% @ 20±3°C
Temperature range	-40 to +70°C
Environmental category	55/100/56 to EN 60068 - 1 (IEC 68 - 1)
Proof voltage test	1.5 x rated voltage for 30s. Not to be repeated
Vibration	EN 60068 - 2 - 6 (EIC 68 - 2 - 6) Test Fc 100 to 500 Hz 0.75mm or 98m/s <sup>2</sup>
Bump	EN 60068 - 2 - 29 (EIC 68 - 2 - 29) Test Eb 400m/s <sup>2</sup> 1000±10 bumps

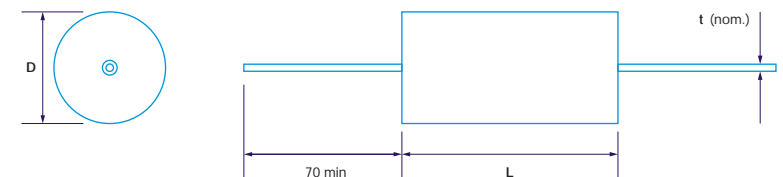
## Size chart

CAP(μF)	250Vdc		630Vdc	
	L	D	L	D
100n			20	30
150n			20	21
220n			20	24
330n			20	29
470n	20	13	28	22
680n	20	16	28	25
820n			38	19
1μ0	28	16	39	22
1μ2	28	18	39	24
1μ3			39	25
1μ5	28	19	39	27
1μ8			39	29
2μ2	28	21	39	31
2μ7	28	23	39	33
3μ0	28	24	39	34
3μ3	28	24	39	35
3μ9	33	25	39	39
4μ7	33	25	46	35
5μ6	33	28	46	38
6μ2			46	40
6μ8	33	31	46	42
8μ2	33	34	46	45
10μ0	45	31	46	49
12μ6			66	45
15μ0	45	37	66	49
16μ0			66	50
18μ0	45	40	66	53
22μ0	45	45	66	58
27μ0	45	50	66	64
33μ0	60	47	66	70
39μ0	60	52	66	76
47μ0	60	56	66	82
50μ0				
68μ0	60	67		
100μ	60	78		
155μ0	60	90		

## Ordering details



## Outline dimensions (maximum) in mm



Terminations are tinned copper wire. Conductor diameter is 1mm.  
Uninsulated silver wire and other options are available upon request.  
Specifications are subject to change without notice.

