

# Type GW

## Screw Terminal Capacitors

### ELECTROLYTIC CAPACITORS

105°C



#### FEATURES & BENEFITS:

- All contacts welded
- High ripple current
- Thermal conducting pad
- Best suited for heatsink mounting
- Screw terminals
- High Performance
- Ultra Low
- Heat sink mounting!
- Very high ripple current

#### APPLICATIONS:

- Inverter/drives
- Traction
- Industrial
- Welding

#### APPROVALS:

- RoHS compliant
- REACH compliant

Technical Data Overview	
Rated capacitance range $C_R$	1.000 ... 22.000 $\mu\text{F}$
Capacitance tolerance	$\pm 20\%$
Rated voltage range $U$	40 ... 450 V
Surge voltage $U_S$	$U_R \leq 315 \text{ V}: U_S = 1,15 U_R$ ; $U_R > 315 \text{ V}: U_S = 1,10 U_R$
Max. reverse voltage	2 V / 13 nH
Category temperature range	- 40°C ... + 105 °C
Leakage current $I_L$ after 5 min @ $U_R$	$\leq 0,008 * C_R [\mu\text{F}] * U_R [\text{V}] + 6 \mu\text{A} [\mu\text{A}]$
Useful life 5000 h @ 105 °C; $U_R$ ; $I_R$	Requirements $\Delta C/C \leq 30\%$ of initial value ; ESR $\leq 300\%$ of specified ; limit $I_L \leq$ specified limit
Endurance test 2000 h @ 105 °C, $U_R$	Requirements $\Delta C/C \leq 20\%$ of initial value ; ESR $\leq 130\%$ of specified ; limit $I_L \leq$ specified limit
Climatic category IEC 60068	40/105/56
Voltage proof of the external insulation	$\geq 2500 \text{ V AC}$
Sectional specification	IEC 60384-4

*Different voltages and capacitance combinations are available on request.  
Also in small lots.*

**DRAWINGS FOR SERIES GW**

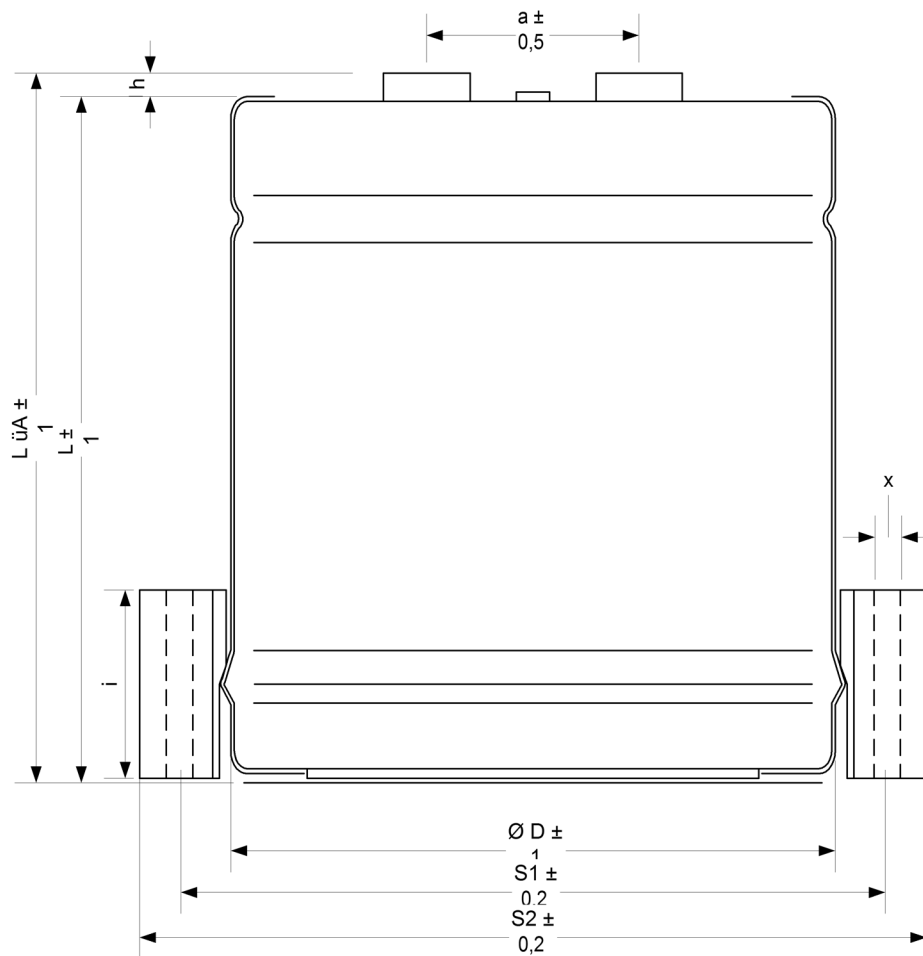


Fig1: Version GW for ring clamp mounting

**DIMENSIONS AND MECHANICAL DATA**

D [mm]	h [mm]	a [mm]	x [mm]	i [mm]	Thread	Max. torque [Nm]	S <sub>1</sub>	S <sub>2</sub>
50	5	22	4,5	20	M5	2,0	63	75
75	5	31,7	4,5	20	M5 ; M6	2,0 ; 2,5	90	101
90	5	31,7	4,5	20	M5	2,0	105	116

GW: connecting screws M5 or M6

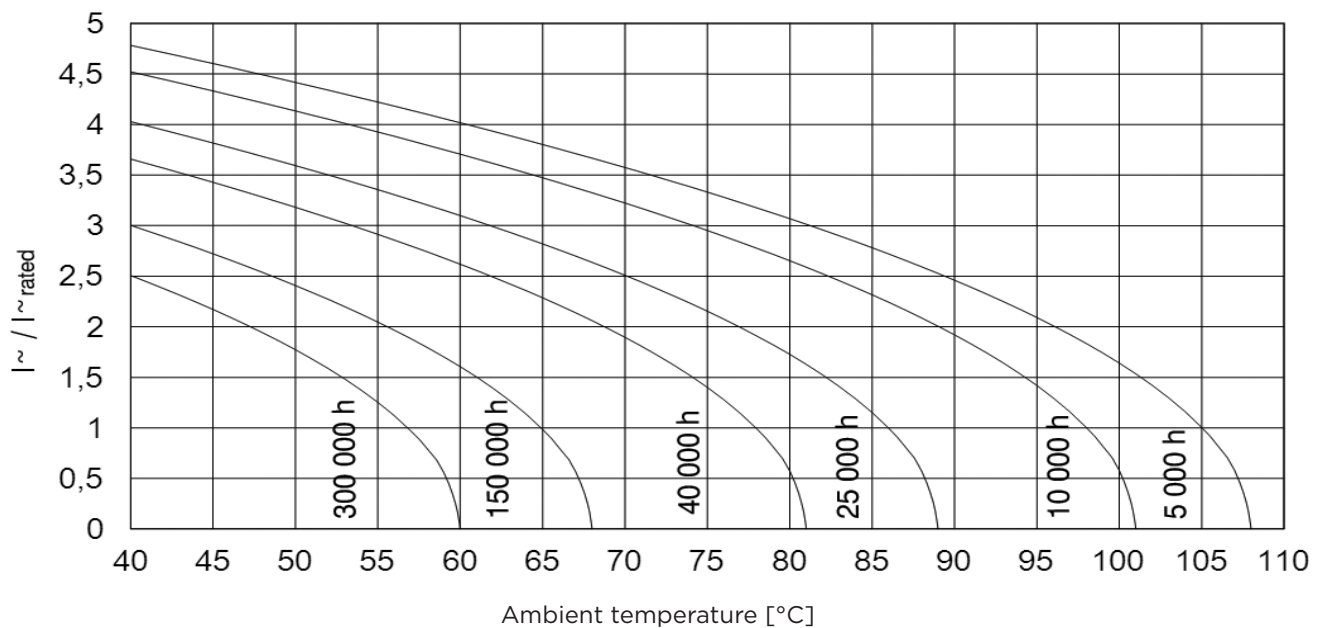
Remarks: Further mounting accessoires like clamps, nylon cup nuts and insulation disks on request, see "accessory equipment".

**ELECTRICAL DATA AND ORDERING CODE FOR SERIES GG**

Rated voltage $U_R$ [V]	Rated cap. $C_R$ [μF]	Case size D x L [mm]	Typ. ESR 100 Hz, 20°C [mΩ]	Ripple current $I_R$ ~ 100 Hz, 125°C [A]	Order code
					Plain base: GGA...
					Stud mounting: GGB...
40	56000	50x80	7	12,3	56304050080
	100000	75x69	5	16,2	10404075069
	180000	75x100	3	22,9	18404075100
	150000	90x69	4	20,8	15404090069
	220000	90x98	3	28,3	22404090098
63	27000	50x80	8	11,4	27306350080
	47000	75x69	5	16,3	47306375069
	82000	75x100	4	20,4	82306375100
	82000	90x69	4	20,4	82306390069
100	12000	50x80	13	9,0	12310050080
	22000	75x69	7	13,2	22310075069
	39000	75x100	4	19,9	39310075100
	39000	90x69	4	19,9	39310090069
	47000	90x98	3	26,7	47310090098
	56000	90x98	3	26,7	56310090098
160	4700	50x80	27	6,3	47216050080
	8200	75x69	16	9,0	82216075069
	15000	75x100	8	13,8	15316075100
	15000	90x69	8	13,8	15316090069
	22000	90x98	6	18,7	22316090098

Rated voltage $U_R$ [V]	Rated cap. $C_R$ [μF]	Case size D x L [mm]	Typ. ESR 100 Hz, 20°C [mΩ]	Ripple current $I_R$ ~ 100 Hz, 125°C [A]	Order code
					Plain base: GGA...
					Stud mounting: GGB...
250	3300	50x80	34	8,0	33225050080
	5600	75x69	20	11,2	56225075069
	8200	90x69	14	15,4	82225090069
	10000	75x100	11	17,1	10325075100
	15000	90x98	7	23,3	15325090098
350	1500	50x80	74	5,4	15235050080
	2700	75x69	41	7,8	27235075069
	3900	90x69	29	10,6	39235090069
	4700	75x100	24	11,7	47235075100
400	6800	90x98	16	15,7	68235090098
	1000	50x80	111	4,4	10240050080
	1800	75x69	62	6,4	18240075069
	3300	75x100	34	9,8	33240075100
	3300	90x69	34	9,8	33240090069
	4700	90x98	24	13,1	47240090098
450	1000	50x80	111	4,4	10245050080
	1500	75x69	74	5,8	15245075069
	2200	90x69	51	8,0	22245090069
	3300	75x100	34	9,8	33245075100
	3300	90x98	34	10,9	33245090098
4700	90x98	20	14,2	47245090098	

**USEFUL LIFE AS A FUNCTION OF AMBIENT TEMPERATURE  
AND ACTUAL RIPPLE CURRENT**



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