

GC118..45R

BAR CLAMP FOR HOCKEY PUK DEVICES

- Clamping total thickness of assembly from 0mm to 127mm
- Pre-loaded to the specific clamping force ($F = 35 \div 50$ kN)
- Maximum device diameter: $L = 102$ mm
- Surface passivation to provide extra protection
- Various lengths of bolts and insulating cups
- Round shaped clamping head for even clamping force application
- Four styles available
- User friendly clamping force indicator
- UL94 certified insulation material
- RoHS compliant

Characteristic		Unit	Types	Testing conditions	Values		
					Min	Typ	Max
m	Mass	g	GC118S...R		1980		2050
			GC118B...R		1980		2050
F	Clamping Force*	kN	GC118...35R			35	
			GC118...40R			40	
			GC118...45R			45	
ΔF	Clamping Force tolerance						$\pm 10\%$
V_{INS}	Insulation Voltage	V		50 Hz, RMS, 60 s		3000	
	Insulating Material				PPO** or PPS***		
	UL Files		PPO		E121562		
			PPS		E95746		
T	Operating temperature range	°C	PPO		-30		110
			PPS		-30		230
T_{stg}	Storage temperature range	°C	PPO		-20		135
			PPS		-40		210
D_s	Surface creepage distance	mm				28	
D_a	Air strike distance	mm				20.3	
CTI	Comparative Tracking Index	V	PPO	According to UL746		225.0	
			PPS	According to IEC112/3rd		250.0	
	Flammability	mm	PPO	UL94 V-1 Flame class rating		1.5	
				UL94 V-0 Flame class rating		6.0	
			PPS	UL94 V-0 Flame class rating		1.6	

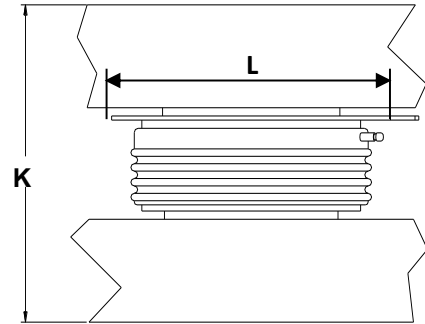
* Polyphenylene Oxide
 *** Polyphenylene Sulfide
 **** Comparative Tracking Index

ORDERING INFORMATION TABLE

Use this part numbering system to order

GC118	B	N	B	A	20	R	S	H	X	L
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	

(1) Construction type:	B = with reaction bar S = without reaction bar
(2) Insulator position:	N = on load bar R = on reaction bar
(3) Insulator code:	_ = no insulating cup other : see table below
(4) Bolt code:	_ = no bolt other : see table below
(5) Clamping force (in kN):	35+50, with step of 1 kN
(6) Special accessories	blank = no accessories S = extra bar spacer (*) D = pressure disc in place of distribution bar
(7) Insulating cup material	0 = standart PPO insulating cup H high temperature PPS insulating cup
(8) Bolt steel type	0 = standard 8.8 steel bolts X = A2 stainless steel bolts (**)
(9) Bar thickness	0 = standart bar thickness (20mm) L = low profile bars (15mm)



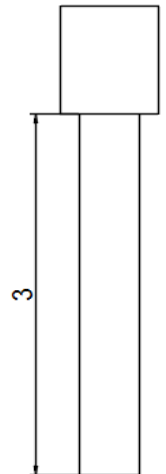
K: Total thickness of the assembly to be clamped
L: Max inner diameter allowable

 (*) Needed to reduce S_{Min} if a lower allowed clearance is required

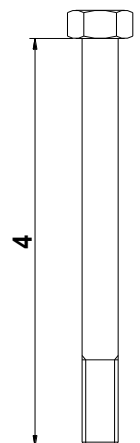
(**) Suggested for high current applications, magnetic sensitive applications or any application working in very high E.M. fields

Type GC118BN...R: suggested insulator/bolt types

Allowed clearance S		Insulator choice		Bolt choice		Max height
S_{Min} [mm]	S_{Max} [mm]	(3)	Ins. Length [mm]	(4)	Bolt Length [mm]	T [mm]
0	12	B	70	B	120	151
2	22	B	70	C	130	161
12	32	C	95	D	140	171
22	42	C	95	E	150	181
32	52	C	95	F	160	191
42	62	D	120	G	170	201
52	72	D	120	H	180	211
62	82	D	120	I	190	221
72	92	E	150	J	200	231
82	102	E	150	K	210	241
92	112	E	150	L	220	251
102	122	E	150	M	230	261

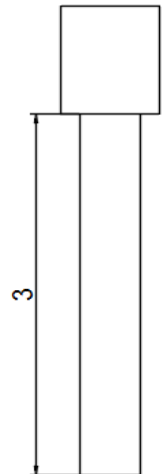

Type GC118BR...R: suggested insulator/bolt types

Allowed clearance S		Insulator choice		Bolt choice		Max height
S_{Min} [mm]	S_{Max} [mm]	(3)	Ins. Length [mm]	(4)	Bolt Length [mm]	T [mm]
0	12	B	70	B	120	151
2	22	B	70	C	130	161
12	32	C	95	D	140	171
22	42	C	95	E	150	181
32	52	C	95	F	160	191
42	62	D	120	G	170	201
52	72	D	120	H	180	211
62	82	D	120	I	190	221
72	92	E	150	J	200	231
82	102	E	150	K	210	241
92	112	E	150	L	220	251
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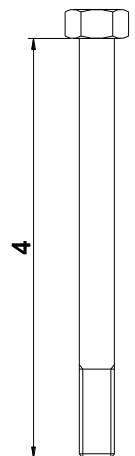
Type GC118SN...R: suggested insulator/bolt types

Allowed clearance S		Insulator choice		Bolt choice		Max height
S _{Min} [mm]	S _{Max} [mm]	(3)	Ins. Length [mm]	(4)	Bolt Length [mm]	T [mm]
3	17	A	50	Z	100	131
13	27	B	70	A	110	141
23	37	B	70	B	120	151
27	47	C	95	C	130	161
37	57	C	95	D	140	171
47	67	C	95	E	150	181
57	77	D	120	F	160	191
67	87	D	120	G	170	201
77	97	D	120	H	180	211
87	107	E	150	I	190	221
97	117	E	150	J	200	231
107	127	E	150	K	210	241

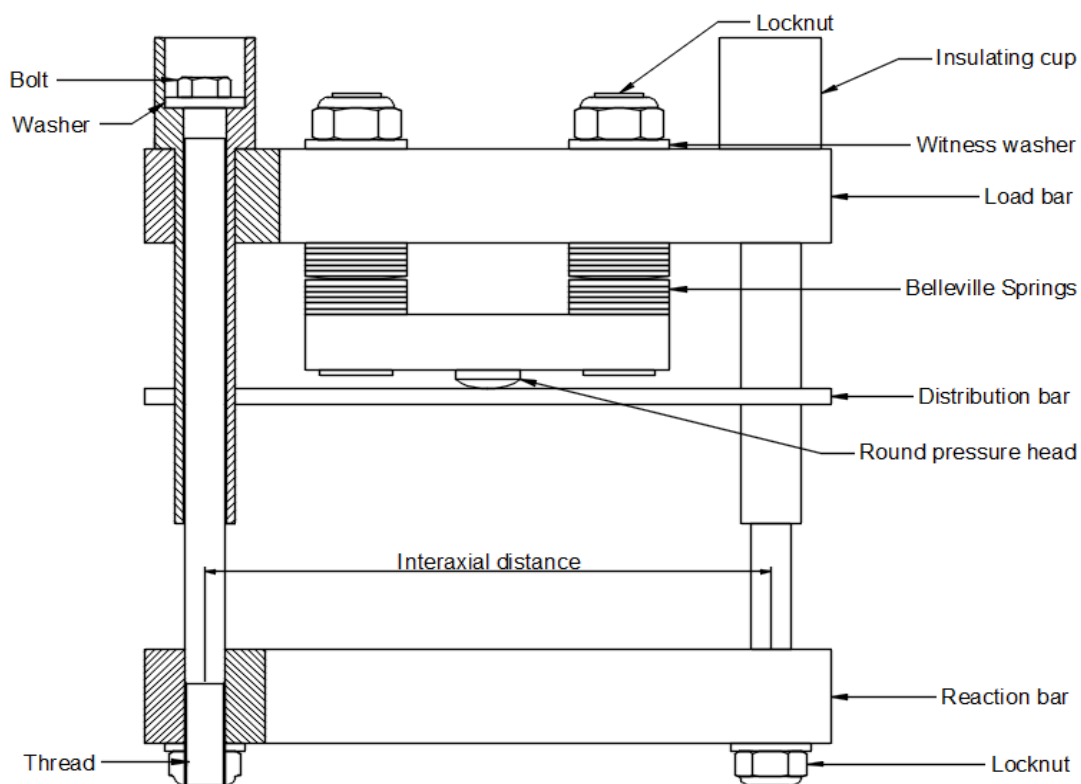


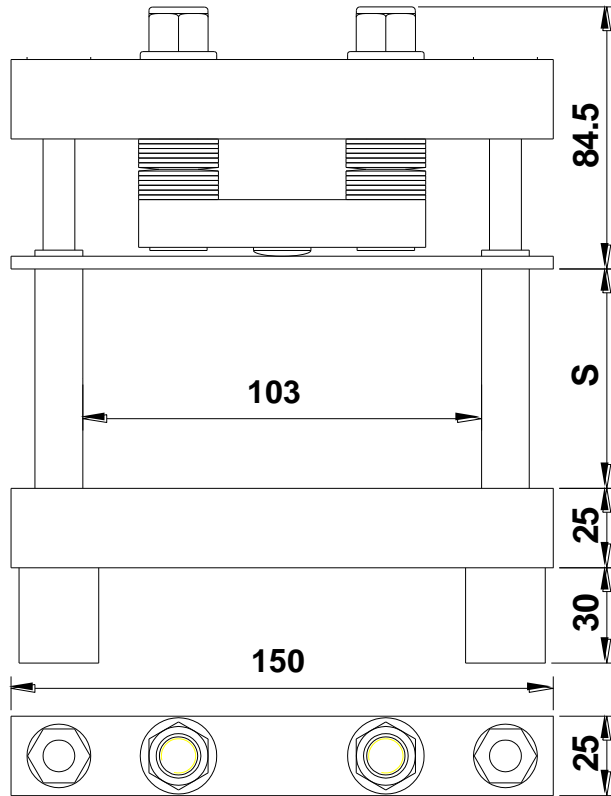
Type GC118SR...R: suggested insulator/bolt types

Allowed clearance S		Insulator choice		Bolt choice		Max height
S _{Min} [mm]	S _{Max} [mm]	(3)	Ins. Length [mm]	(4)	Bolt Length [mm]	T [mm]
3	17	A	50	Z	100	131
13	27	B	70	A	110	141
23	37	B	70	B	120	151
33	47	C	95	C	130	161
37	57	C	95	D	140	171
47	67	C	95	E	150	181
57	77	C	95	F	160	191
67	87	D	120	G	170	201
77	97	D	120	H	180	211
87	107	D	120	I	190	221
97	117	E	150	J	200	231
107	127	E	150	K	210	241

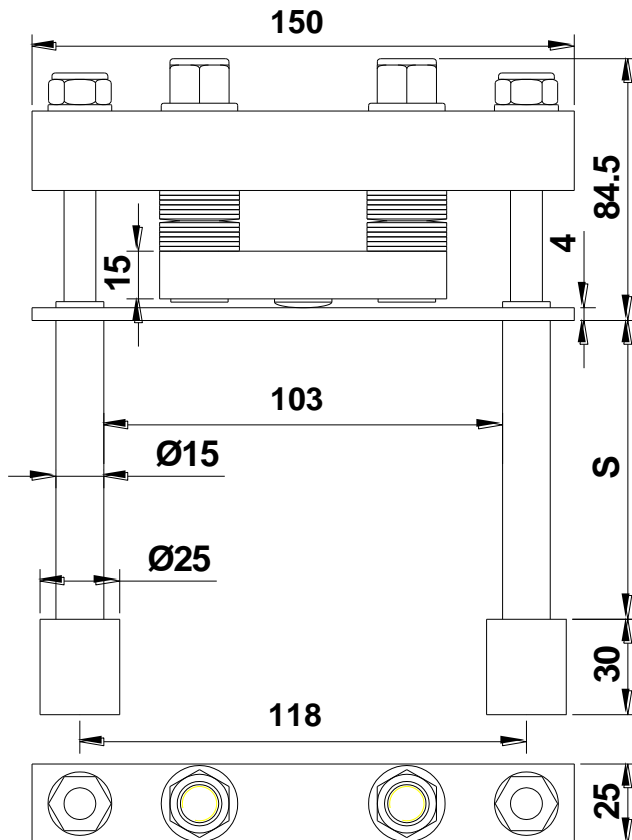


BAR CLAMP COMPONENTS LEGEND



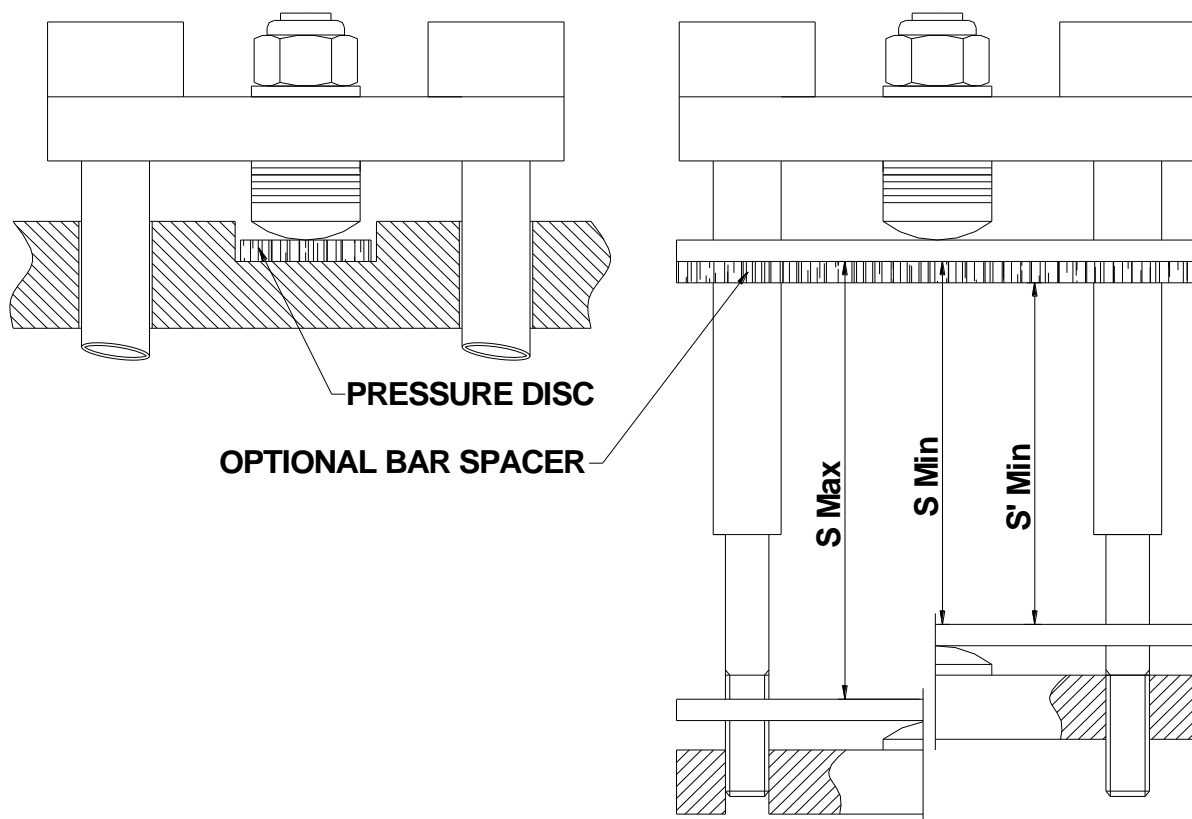


GC118BR...R



GC118SR...R

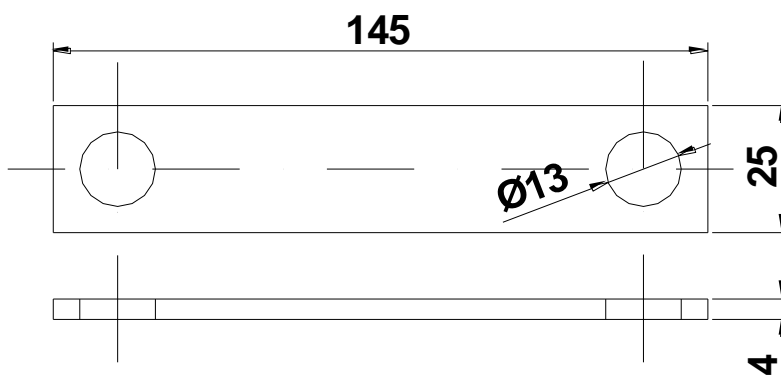
Dimensions in mm - Tolerances according to ISO 2768 MK



SPECIAL ACCESSORIES

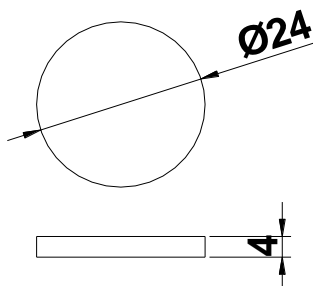
The following special accessories are available on request (see ordering information table)

Bar spacer



Pressure disc

Useful for grooved heatsink
Suggested groove diameter 27mm +/- 0.5



Dimensions in mm - Tolerances according to ISO 2768 MK

In the interest of product improvement Green Power Solutions reserves the right to change any specification given in this data sheet without notice.