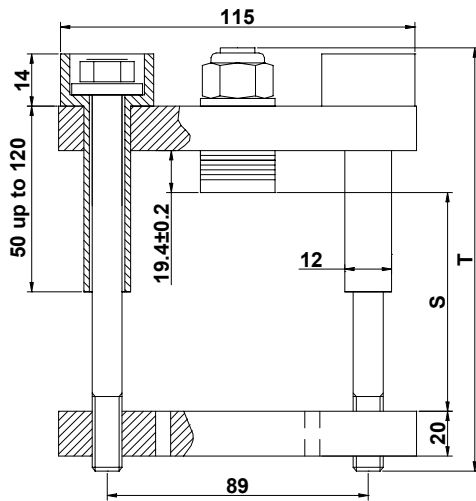


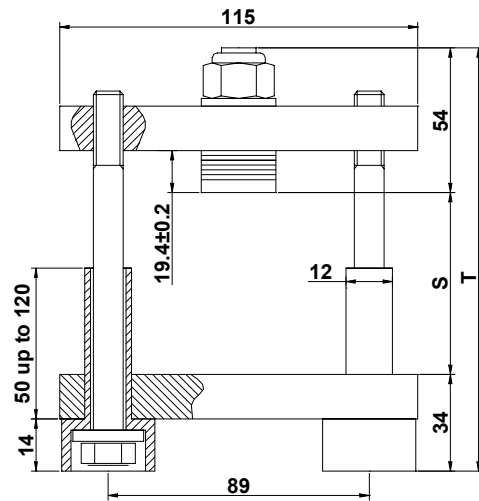
# GC89...F

## BAR CLAMP FOR HOCKEY PUKS

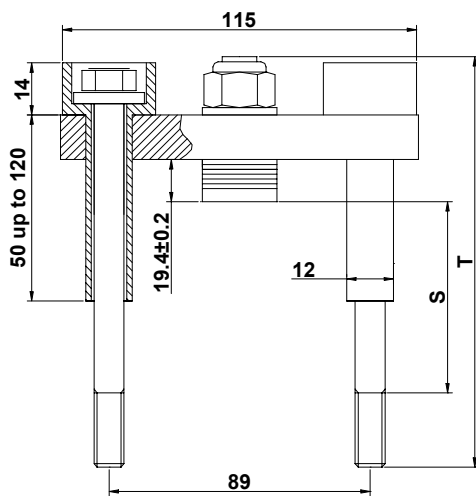
- Various lengths of bolts and insulators
- Pre-loaded to the specific clamping force
- Flat clamping head for minimum clamping head height
- Four clamps styles
- Gold iridite plating
- User friendly clamping force indicator
- UL94 certified insulation material



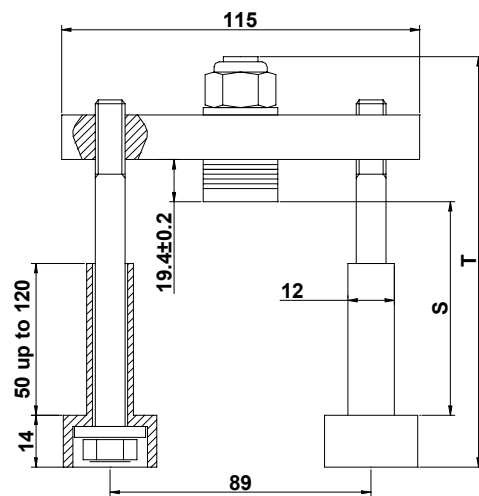
**GC89BN...F**



**GC89BR...F**




**GC89SN...F**



**GC89SR...F**

Dimensions in millimeters

T: Max total height (see table)  
S: Clearance allowed ( see table)

Parameter	Unit	Types/Testing conditions/Notes	Values	
			Min	Max
Weight	g	GC89S...F	590	720
		GC89B...F	980	1150
Clamping Force*	kN	GC89...08F	8	
		GC89...10F	10	
		GC89...12F	12	
		GC89...15F	15	
		GC89...20F	20	
Insulation Voltage	V <sub>RMS</sub>	1 min	3000	
Insulating Material		UL File: E121562		Noryl ®
Max. working temperature	°C		110	
Min. working temperature	°C		-30	
Storage temp.	°C		-40/110	

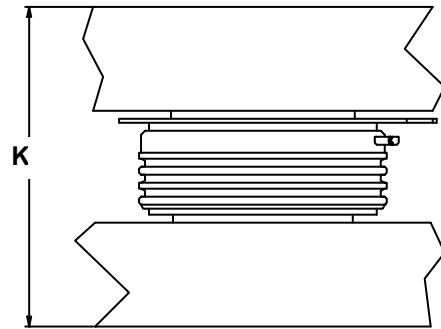
\* Other clamping forces available: contact factory

**ORDERING INFORMATION TABLE**

Clamps can be ordered using the following part numbering system



<b>(1) Construction type:</b>	B = with double bar
	S = with single bar
<b>(2) Insulator position:</b>	N = upper side
	R = lower side
<b>(3) Insulator code:</b>	see table below
<b>(4) Bolt code:</b>	see table below
<b>(5) Clamping force (in kN):</b>	08
	10
	12
	15
	20
<b>(6) Special accessories</b>	blank = no accessories
	S = extra metal spacer



K: Total thickness of the assembly to be clamped

For thicknesses  $S'_{Min} < K < S_{Min}$  an additional 4 mm thick metal spacer is needed ( see list of special accessories)

**Type GC89BN...F: suggested insulator/bolt types**

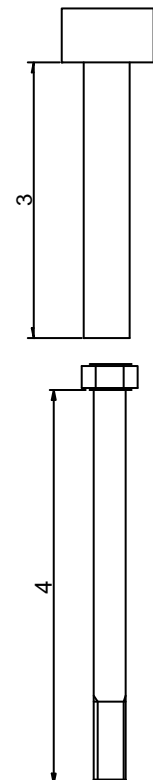
Allowed clearance S			Insulator choice		Bolt choice		Max height
S' Min [mm]**	S Min [mm]	SMax [mm]	(3)	Ins. Lenght [mm]	(4)	Bolt Lenght [mm]	T [mm]
39	43	50	A/B	50/70	A	110	127
49	53	60	B	70	B	120	137
59	63	70	B/C	70/95	C	130	147
69	73	80	C	95	D	140	157
79	83	90	C/D	95/120	E	150	167
89	93	100	D	120	F	160	177

\*\* with additional metal spacer only

**Type GC89BR...F: suggested insulator/bolt types**

Allowed clearance S			Insulator choice		Bolt choice		Max height
S' Min [mm]**	S Min [mm]	SMax [mm]	(3)	Ins. Lenght [mm]	(4)	Bolt Lenght [mm]	T [mm]
39	43	50	A/B	50/70	A	110	139
49	53	60	B	70	B	120	149
59	63	70	B/C	70/95	C	130	159
69	73	80	C	95	D	140	169
79	83	90	C/D	95/120	E	150	179

\*\* with additional metal spacer only

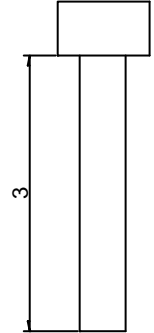


In the interest of product improvement Green Power Semiconductors reserves the right to change any specification given in this data sheet without notice.

**Type GC89SN...F: suggested insulator/bolt types**

Allowed clearance S			Insulator choice		Bolt choice		Max height
S' Min[mm]**	S Min [mm]	SMax [mm]	(3)	Ins. Lenght [mm]	(4)	Bolt Lenght [mm]	T [mm]
39	43	49	A/B	50/70	A	110	120
49	53	59	B	70	B	120	130
59	63	69	B/C	70/95	C	130	140
69	73	79	C	95	D	140	150
79	83	89	C/D	95/120	E	150	160
89	93	99	D	120	F	160	170

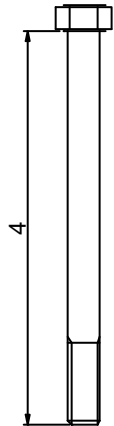
\*\* with additional metal spacer only



**Type GC89SR...F: suggested insulator/bolt types**

Allowed clearance S			Insulator choice		Bolt choice		Max height
S' Min[mm]**	S Min [mm]	SMax [mm]	(3)	Ins. Lenght [mm]	(4)	Bolt Lenght [mm]	T [mm]
59	63	69	A/B	50/70	A	110	139
69	73	79	B	70	B	120	149
79	83	89	B/C	70/95	C	130	159
89	93	99	B/C	70/95	D	140	169
99	103	109	C/D	95/120	E	150	179
109	113	119	D	120	F	160	189

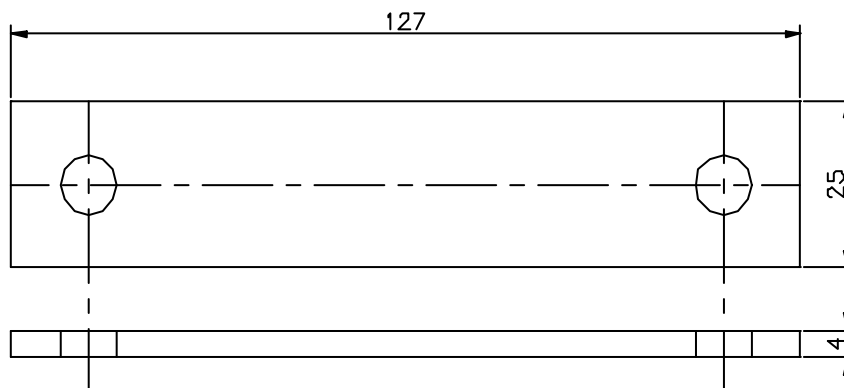
\*\* with additional metal spacer only



**SPECIAL ACCESSORIES**

The following special accessories are available

**Metal spacer**



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