

GC70_F

BAR CLAMP FOR HOCKEY PUK DEVICES

- Clamping total thickness of assembly from 17.5mm to 143.5mm
- Pre-loaded to the specific clamping force ($F = 5 \div 12$ kN)
- Maximum device diameter: $L = 57$ mm
- Surface passivation to provide extra protection
- Various lengths of bolts and insulating cups
- Flat 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	GC70S...F		340		460
			GC70B...F		430		570
F	Clamping Force*	kN	GC70...05F			05	
			GC70...08F			08	
			GC70...10F			10	
			GC70...12F			12	
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		130
			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

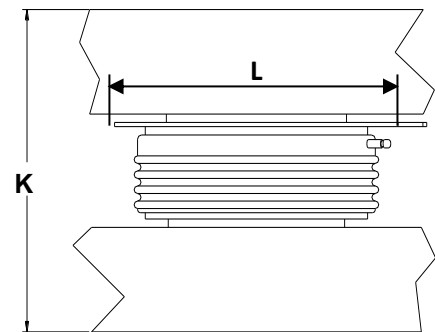
**** Comparative Tracking Index

ORDERING INFORMATION TABLE

Use this part numbering system to order

GC70	B	N	B	A	20	F	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):	12÷24, 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)



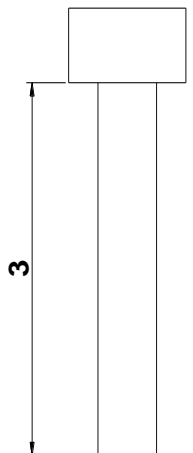
K: Total thickness of the assembly to be clamped
L: Max inner diameter allowable

(*) 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

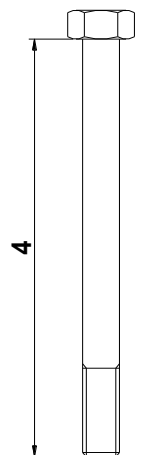
Type GC70BN...F: suggested insulator/bolt types

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]
17.5	31.5	Z	34	U	70	92
22.5	36.5	Z	34	V	75	97
27.5	41.5	A	50	W	80	102
37.5	51.5	A	50	Y	90	112
47.5	61.5	B	70	Z	100	122
57.5	71.5	B	70	A	110	132
67.5	81.5	B	70	B	120	142
71.5	91.5	C	95	C	130	158
81.5	101.5	C	95	D	140	168
91.5	111.5	C	95	E	150	178
101.5	121.5	D	120	F	160	188
111.5	131.5	D	120	G	170	198



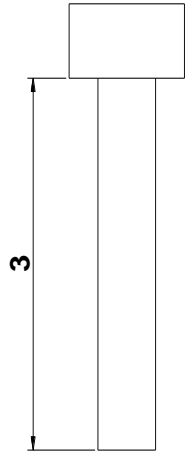
Type GC70BR...F: suggested insulator/bolt types

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]
17.5	31.5	Z	34	U	70	96
22.5	36.5	Z	34	V	75	101
27.5	41.5	A	50	W	80	106
37.5	51.5	A	50	Y	90	116
47.5	61.5	B	70	Z	100	126
57.5	71.5	B	70	A	110	136
67.5	81.5	B	70	B	120	146
71.5	91.5	C	95	C	130	156
81.5	101.5	C	95	D	140	166
91.5	111.5	C	95	E	150	176
101.5	121.5	D	120	F	160	186
111.5	131.5	D	120	G	170	196



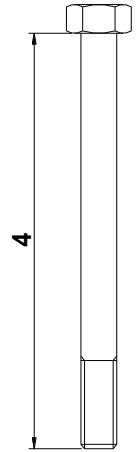
Type GC70SN...: suggested insulator/bolt types

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]
17.5	31.5	Z	34	U	70	78
22.5	36.5	Z	34	V	75	83
27.5	41.5	A	50	W	80	88
37.5	51.5	A	50	Y	90	98
47.5	61.5	B	70	Z	100	108
57.5	71.5	B	70	A	110	118
67.5	81.5	B	70	B	120	128
71.5	91.5	C	95	C	130	138
81.5	101.5	C	95	D	140	148
91.5	111.5	C	95	E	150	158
101.5	121.5	D	120	F	160	168
111.5	131.5	D	120	G	170	178

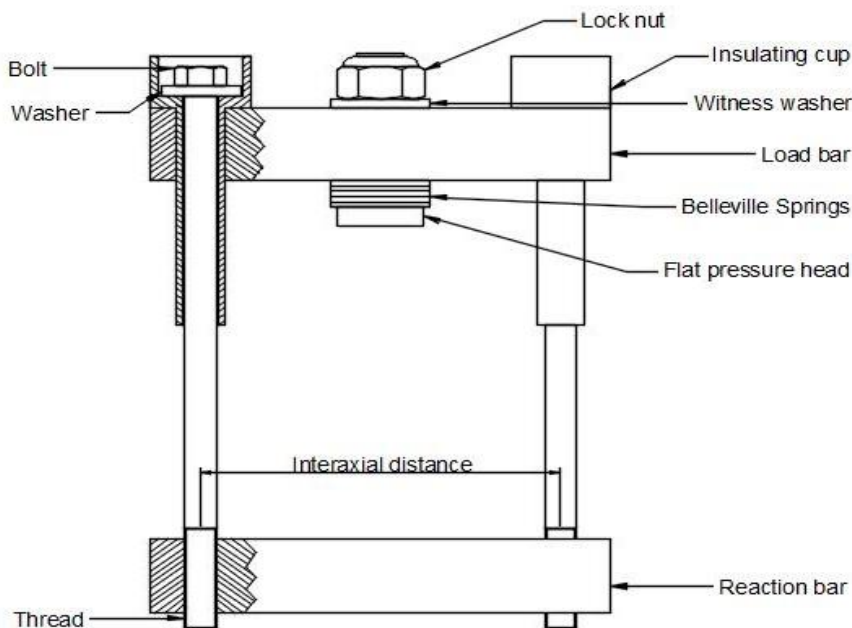


Type GC70SR...F: suggested insulator/bolt types

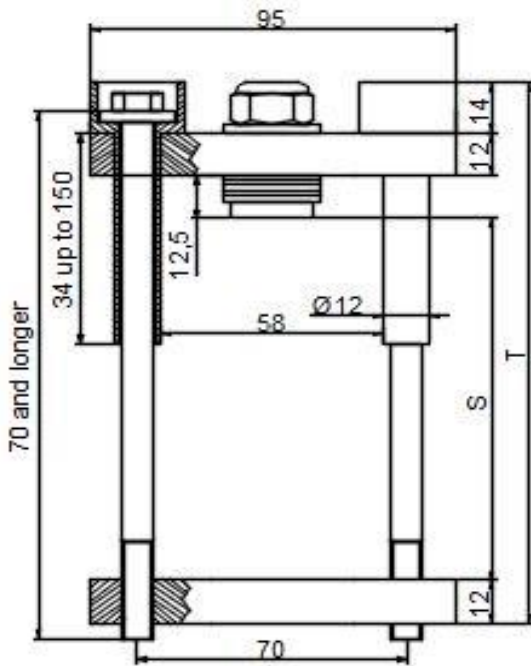
Allowed clearance S		Insulator choice		Bolt choice		Max height
S _{Min} [mm]	S _{Max} [mm]	(3)	Ins. Length [mm]	(4)	Bolt Length [mm]	T [mm]
29.5	43.5	Z	34	U	70	96
34.5	48.5	Z	34	V	75	101
39.5	53.5	A	50	W	80	106
49.5	63.5	A	50	Y	90	116
59.5	73.5	B	70	Z	100	126
69.5	83.5	B	70	A	110	136
79.5	93.5	B	70	B	120	146
83.5	103.5	C	95	C	130	156
93.5	113.5	C	95	D	140	166
103.5	123.5	C	95	E	150	176
113.5	133.5	D	120	F	160	186
123.5	143.5	D	120	G	170	196



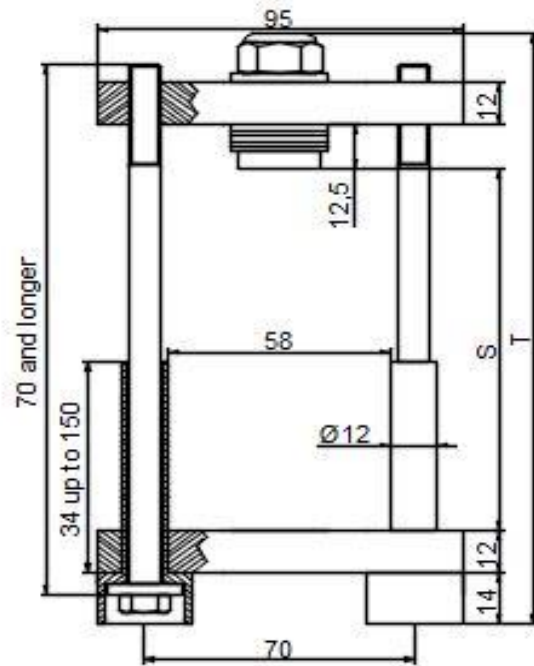
BAR CLAMP COMPONENTS LEGEND



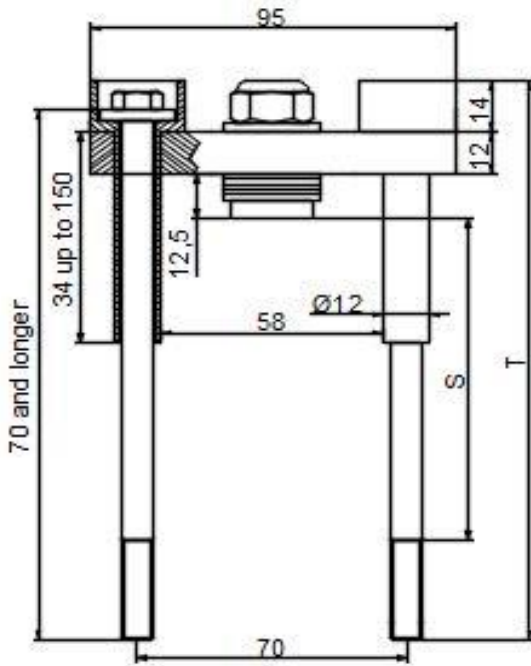
BAR CLAMP OUTLINES



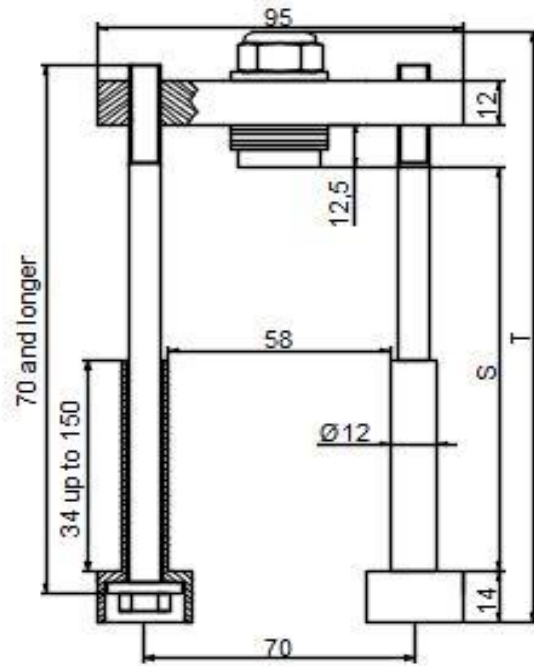
GC70BN...F



GC70BR...F

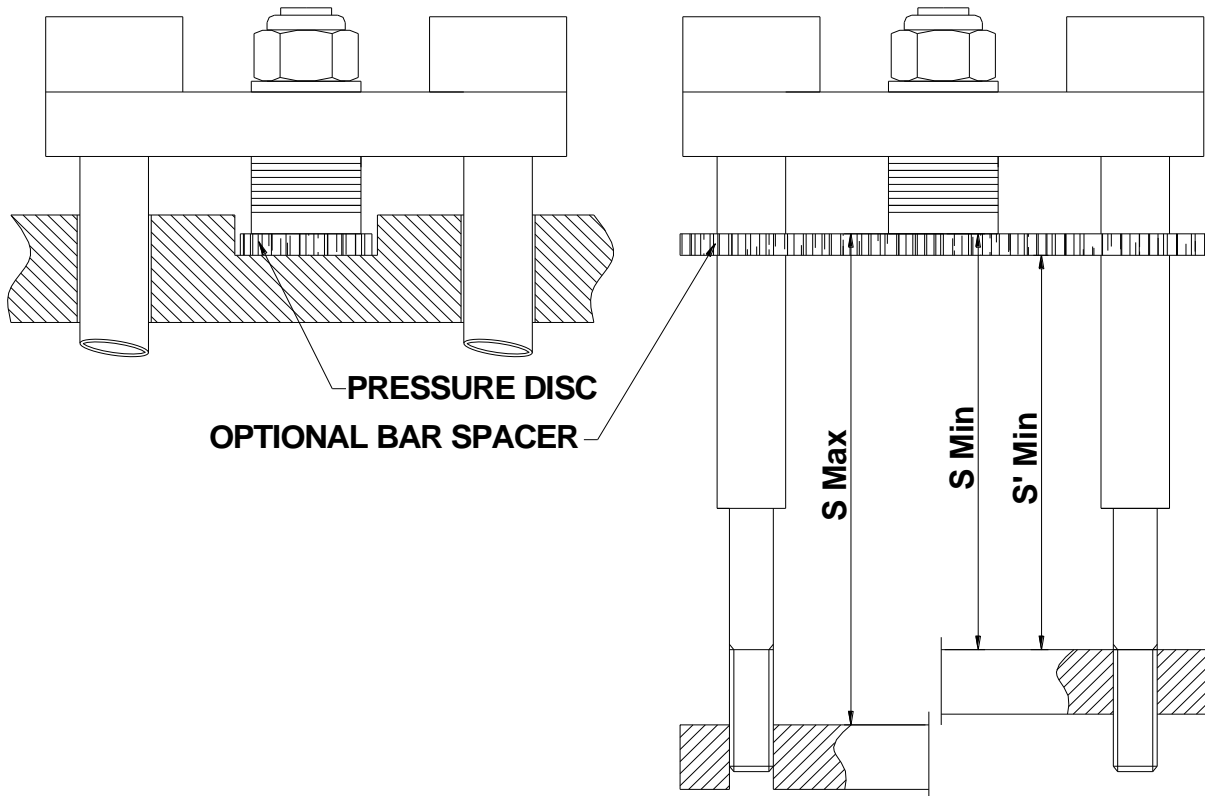


GC70SN...F



GC70SR...F

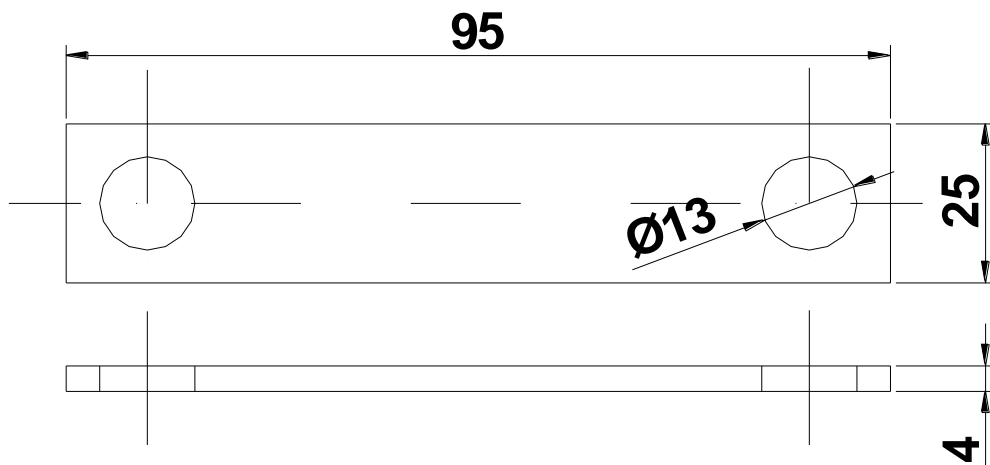
Dimensions in mm - Tolerances according to ISO 2768 MK



SPECIAL ACCESSORIES

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

Bar spacer



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.