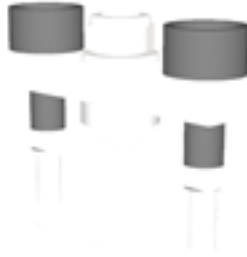
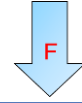


# GC70\_R

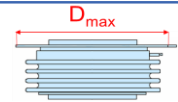
## BAR CLAMP FOR HOCKEY PUK DEVICES



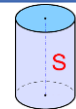
$$F = 5 \text{ kN} \div 12 \text{ kN}$$



$$D_{max} = 57 \text{ mm}$$



$$S = 1.5 \div 136.5 \text{ mm}$$



$$T_{op} = -30 \div 230 \text{ }^{\circ}\text{C}$$



Scan this QR code to download this datasheet

To display 3D images correctly, please use the last version of Acrobat PDF Reader <https://get.adobe.com/it/reader/>  
 (Once the application has started, click the Options button and then select: "Trust this document one time only",  
 then click on the 3D image and wait until the upload is complete)

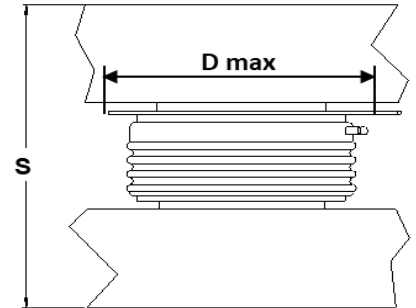
Characteristic	Unit	Types	Testing conditions	Values		
				Min	Typ	Max
F	Clamping Force	kN		5		12
$\Delta F$	Clamping Force tolerance	%				$\pm 10\%$
$V_{INS}$	Insulation Voltage	V	50 Hz, RMS, 60 s		3000	
$D_s$	Surface creepage distance	mm			28	
$D_a$	Air strike distance	mm			20,3	
m	Mass	g	GC70S...R	420		520
			GC70B...R	590		730
	Insulating Material		Polyphenylene Oxide			PPO
			Polyphenylene Sulfide			PPS
	UL Files		PPO			E121562
			PPS			E95746
$T_{op}$	Operating temperature range	$^{\circ}\text{C}$	PPO	-30		110
			PPS	-30		230
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	

**ORDERING INFORMATION TABLE**

Use this part numbering system to order

<b>GC70</b>	<b>B</b>	<b>N</b>	<b>B</b>	<b>A</b>	<b>12</b>	<b>R</b>	<b>S</b>	<b>H</b>	<b>X</b>	<b>L</b>
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	

<b>(1) Construction type:</b>	<b>B</b> = with reaction bar <b>S</b> = without reaction bar
<b>(2) Insulator position:</b>	<b>N</b> = on load bar <b>R</b> = on reaction bar
<b>(3) Insulator code:</b>	_ = no insulating cup <b>other</b> : see table below
<b>(4) Bolt code:</b>	_ = no bolt <b>1</b> = only D8 special washers, no bolts <b>other</b> : see table below
<b>(5) Clamping force (in kN):</b>	<b>5 kN ÷ 12 kN</b> , with step of 1 kN
<b>(6) Special accessories</b>	<b>blank</b> = no accessories <b>S</b> = extra bar spacer (*)
<b>(7) Insulating cup material</b>	<b>0</b> = standart PPO insulating cup <b>H</b> high temperature PPS insulating cup
<b>(8) Bolt steel type</b>	<b>0</b> = standard 8.8 steel bolts <b>X</b> = A2 stainless steel bolts (**)
<b>(9) Bars thickness</b>	<b>0</b> = standart bars thickness (12 mm) <b>L</b> = low profile bars thickness ( 10 mm)



**S**: Total thickness of the assembly to be clamped  
**D max**: Max inner diameter allowable

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

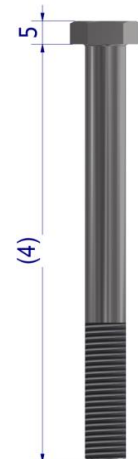
(\*\*) Suggested for high current applications, magnetic sensitive applications or any application working in very high E.M. fields

**Type GC70BN...R: suggested insulator/bolt types**

Allowed clearance <b>S</b>		Insulator choice		Bolt choice		Max height
$S_{min}$ [mm]	$S_{max}$ [mm]	(3)	Ins. Length [mm]	(4)	Bolt Length [mm]	T [mm]
1,5	15,5	Z	34	U	70	92
6,5	20,5	Z	34	V	75	97
11,5	25,5	A	50	W	80	102
21,5	35,5	A	50	Y	90	112
31,5	45,5	B	70	Z	100	122
41,5	55,5	B	70	A	110	132
51,5	65,5	B	70	B	120	142
55,5	75,5	C	95	C	130	158
65,5	85,5	C	95	D	140	168
75,5	95,5	C	95	E	150	178
85,5	105,5	D	120	F	160	188
95,5	115,5	D	120	G	170	198

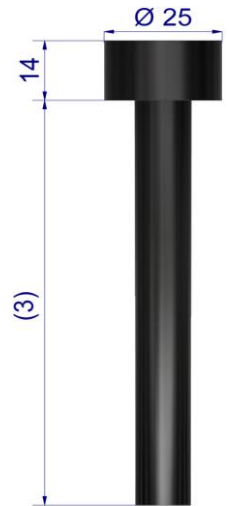

**Type GC70BR...R: suggested insulator/bolt types**

Allowed clearance <b>S</b>		Insulator choice		Bolt choice		Max height
$S_{min}$ [mm]	$S_{max}$ [mm]	(3)	Ins. Length [mm]	(4)	Bolt Length [mm]	T [mm]
1,5	15,5	Z	34	U	70	96
6,5	20,5	Z	34	V	75	101
11,5	25,5	A	50	W	80	106
21,5	35,5	A	50	Y	90	116
31,5	45,5	B	70	Z	100	126
41,5	55,5	B	70	A	110	136
51,5	65,5	B	70	B	120	146
55,5	75,5	C	95	C	130	156
65,5	85,5	C	95	D	140	166
75,5	95,5	C	95	E	150	176
85,5	105,5	D	120	F	160	186
95,5	115,5	D	120	G	170	196



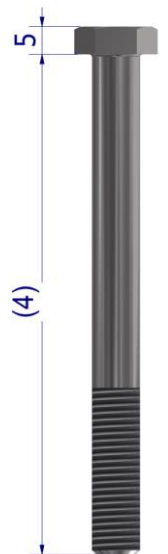
Type GC70SN...R: suggested insulator/bolt types

Allowed clearance S		Insulator choice		Bolt choice		Max height
S <sub>Min</sub> [mm]	S <sub>Max</sub> [mm]	(3)	Ins. Length [mm]	(4)	Bolt Length [mm]	T [mm]
10,5	24,5	Z	34	U	70	78
15,5	29,5	Z	34	V	75	83
20,5	34,5	A	50	W	80	88
30,5	44,5	A	50	Y	90	98
40,5	54,5	B	70	Z	100	108
50,5	64,5	B	70	A	110	118
60,5	74,5	B	70	B	120	128
64,5	84,5	C	95	C	130	138
74,5	94,5	C	95	D	140	148
84,5	104,5	C	95	E	150	158
94,5	114,5	D	120	F	160	168
104,5	124,5	D	120	G	170	178

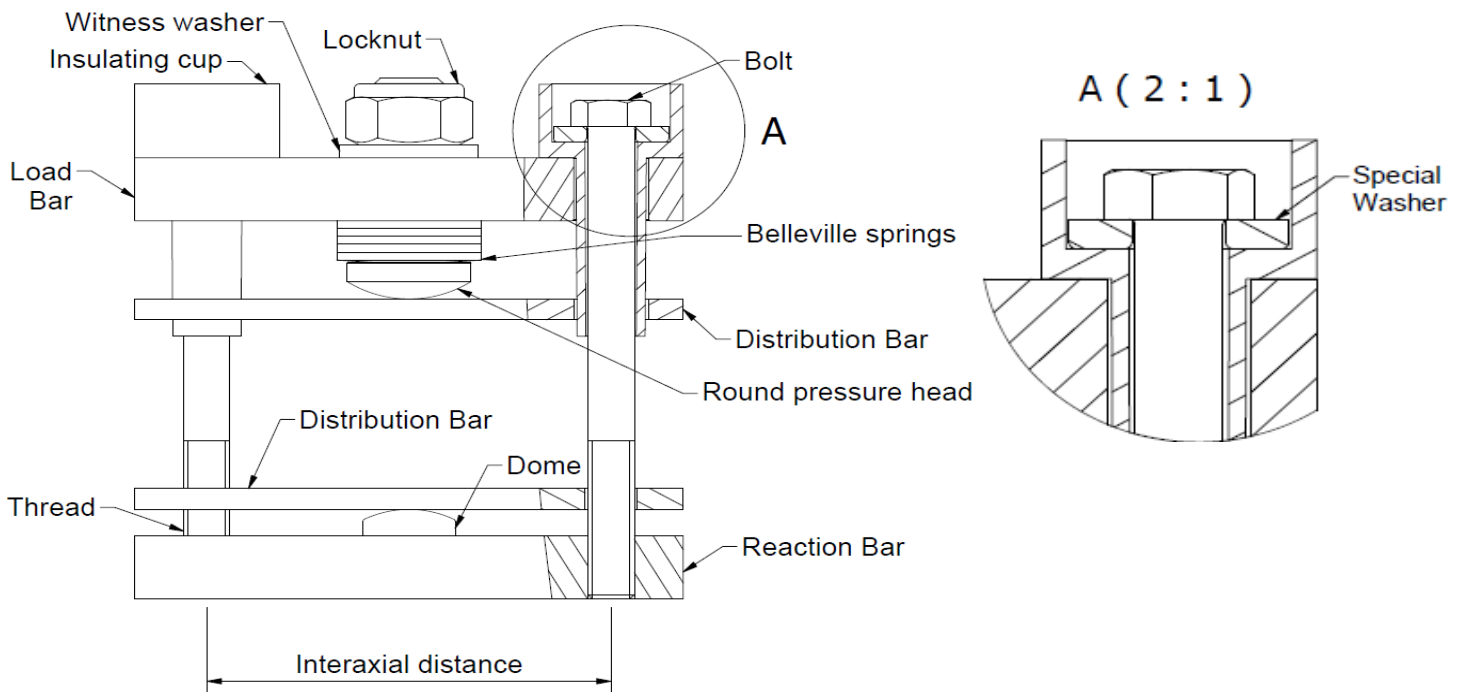


Type GC70SR...R: suggested insulator/bolt types

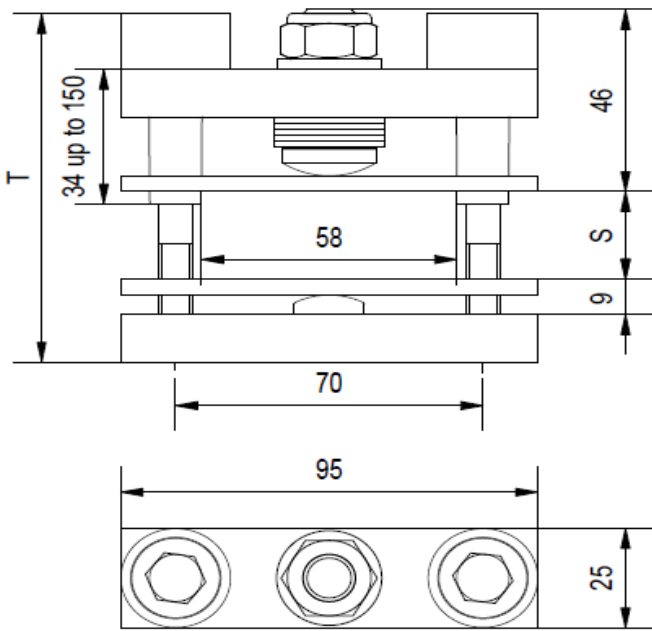
Allowed clearance S		Insulator choice		Bolt choice		Max height
S <sub>Min</sub> [mm]	S <sub>Max</sub> [mm]	(3)	Ins. Length [mm]	(4)	Bolt Length [mm]	T [mm]
22,5	36,5	Z	34	U	70	106
27,5	41,5	Z	34	V	75	111
32,5	46,5	A	50	W	80	116
42,5	56,5	A	50	Y	90	126
52,5	66,5	B	70	Z	100	136
62,5	76,5	B	70	A	110	146
72,5	86,5	B	70	B	120	156
76,5	96,5	C	95	C	130	172
86,5	106,5	C	95	D	140	182
96,5	116,5	C	95	E	150	192
106,5	126,5	D	120	F	160	202
116,5	136,5	D	120	G	170	212



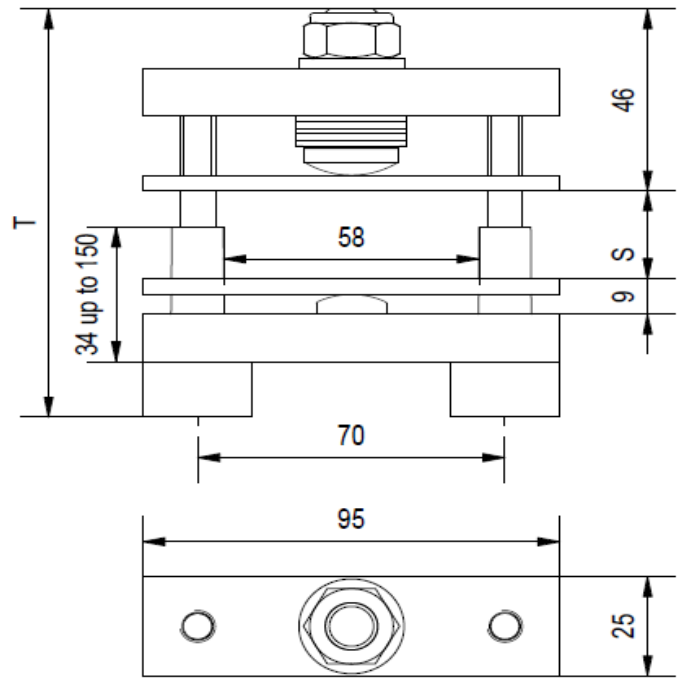
BAR CLAMP COMPONENTS LEGEND



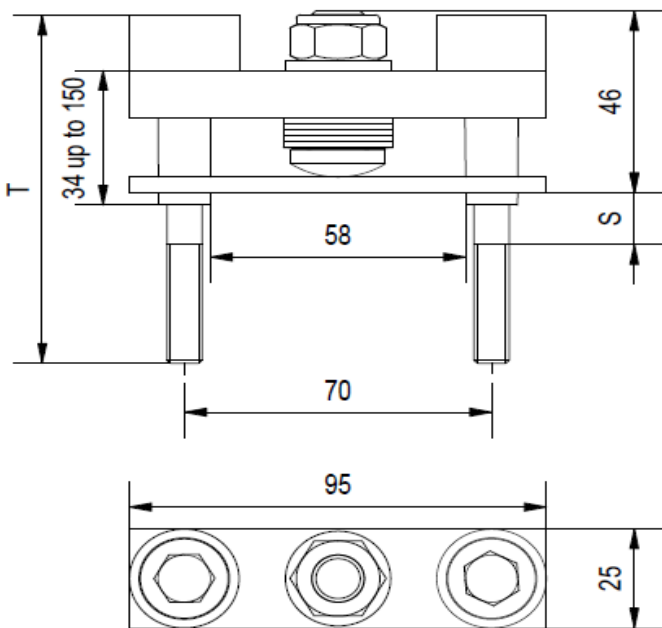
BAR CLAMP OUTLINES



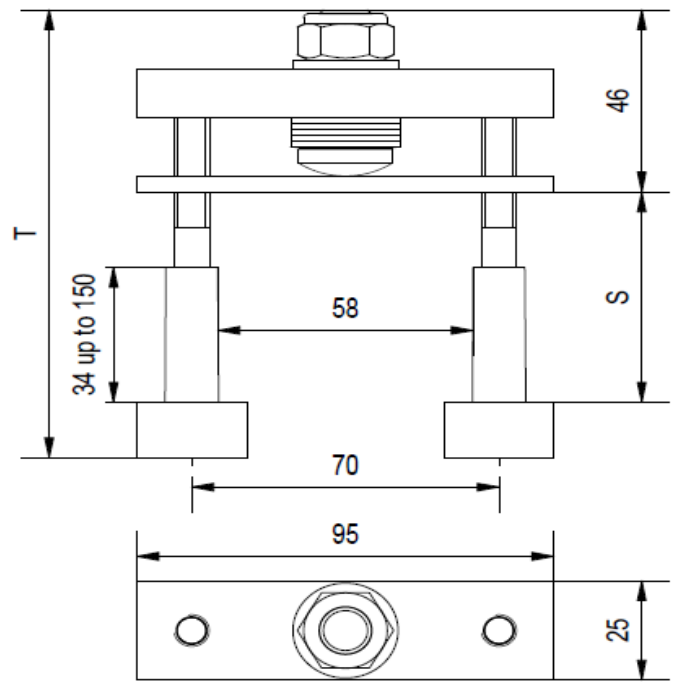
GC70BN...R



GC70BR...R



GC70SN...R



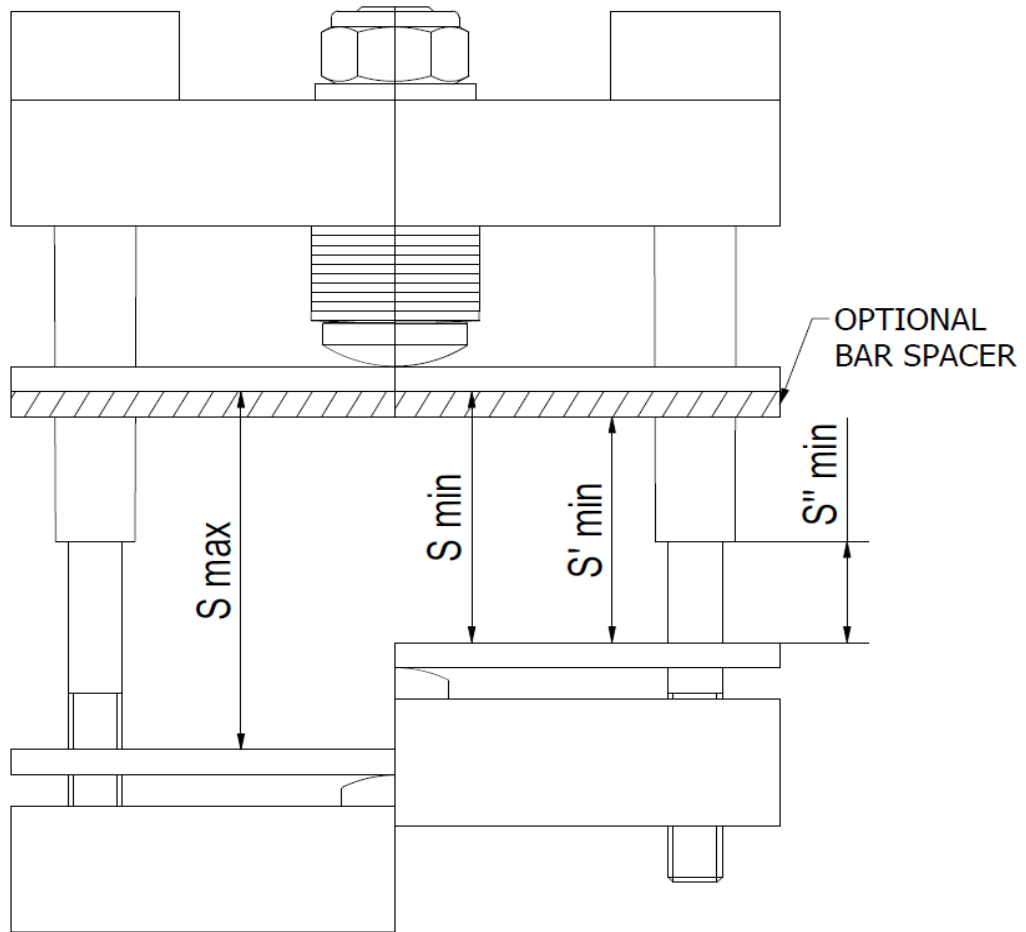
GC70SR...R

Dimensions in mm - Tolerances according to ISO 2768 MK

Step files of clamp structures may be downloaded at [www.gpsemi.it/stepfiles/GC70\\_R\(file step\).zip](http://www.gpsemi.it/stepfiles/GC70_R(file step).zip)

or using this QR



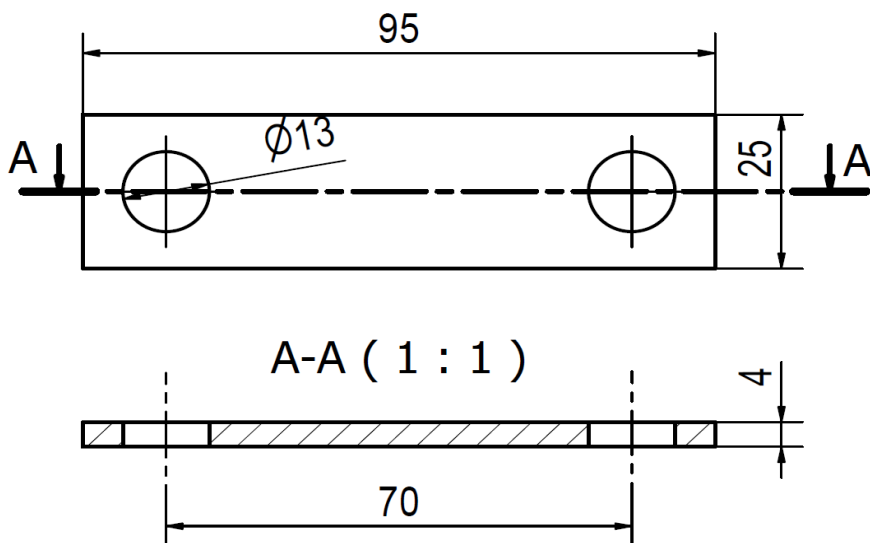


$S''_{min} = 1 \text{ mm}$  (minimum clearance between insulator and distribution bar)

**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.