



**Universal**

Dimensions in: millimeters - inches

Size	F <sub>H</sub> Holding capacity	b <sub>1</sub>	b <sub>2</sub>	b <sub>3</sub>	h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>3</sub>	r	s
220	2200 N 495 lbf	20 0.79	6 0.24	13 0.51	68 2.68	24 0.94	17.5 0.69	57.5 2.26	24 0.94	29 1.14	50 1.97	6 0.24
440	4400 N 989 lbf	30 1.18	10 0.39	20 0.79	113 4.45	42 1.65	28 1.10	85.5 3.37	32 1.26	42.5 1.67	73 2.87	10 0.39
850	8500 N 1911 lbf	50 1.97	12 0.47	24 0.94	148 5.83	57 2.24	35 1.38	115 4.53	40.5 1.59	52 2.05	99 3.90	12 0.47
1540	15400 N 3462 lbf	60 2.36	16 0.63	32 1.26	183 7.20	66.5 2.62	40.5 1.59	147.5 5.81	55.5 2.19	68 2.68	127.5 5.02	16 0.63

**Specification**

- Lever arm  
Steel  
- Forged  
- Blackened finish
- Parts in sheet metal  
Case-hardened steel C10, blackened finish
- Bearing pins and rivets  
Steel, hardened and ground
- All moving parts  
Lubricated with special grease
- RoHS compliant

**Accessory**

- Handles, arm levers, bushings, clamping arm extenders, base plates → page QVX

**Information**

GN 810.13 knee lever modules have the same properties and attributes as the GN 810.10 and GN 810.11 toggle clamps. The clamping arms are die-forged, the remaining steel sheet parts have been reinforced, bearing pins and rivets are hardened and ground.

Therefore these knee lever modules are suitable for applications in which substantial forces occur and a long service life is required.

During extensive testing, with trouble free function and under load, the clamp has withstood over one million opening and closing cycles.

These knee lever modules permit the size and position of the lever and clamping arms to be adjusted to match the specific application. The actual module is welded on.

see also...

- General Information on Toggle Clamps → page QVX
- Vertical Acting Toggle Clamps GN 810.10 (with Horizontal Mounting Base) → page QVX
- Vertical Acting Toggle Clamps GN 810.11 (with Vertical Mounting Base) → page QVX
- Knee Lever Modules GN 810.12 (with Horizontal or Vertical Mounting Base) → page QVX

How to order	1	Size
<b>GN 810.13-220</b>		

1.1  
1.2  
1.3  
1.4  
2.1  
2.2  
2.3  
2.4