

Tie Down Information

Load capacities are based upon static tensile pull testing under controlled laboratory conditions at room temperature and when the product is new. Unusual conditions such as extreme high and low temperatures, chemical exposure, constant exposure to salt water, placement along sharp edges, etc. need to be considered in product selection and may necessitate a reduction of rated load capacities.

Ultimate Breaking Strength (UBS), also known as Minimum Breaking Strength (MBS), Minimum Breaking Load (MBL), Breaking Load Capacity (BLC), Breaking Strength Capacity (BSC) or Rated Load Capacity (RLC), is the load a complete assembly can withstand before failure. Do not use Ultimate Breaking Strength (UBS) as a criterion for service or design purposes. Refer to the Working Load Limit (WLL).

Working Load Limit (WLL) is the maximum load which should ever be applied to a product under normal usage. Safety factor is the ratio between the Ultimate Breaking Strength (UBS) and the Working Load Limit (WLL). The minimum acceptable safety factor for any application is 3 [Working Load Limit (WLL) 1/3 of the Ultimate Breaking Strength (UBS)] but can often be 4 or greater depending on the circumstances. Ratings are generally established and/or regulated by local, state, federal, industrial, and/or trade association legislative standards and may vary from industry to industry (ex: DOT, CVSA/FHWA, CHP, Federal Motor Carrier Safety Regulations 49CFR39.102).

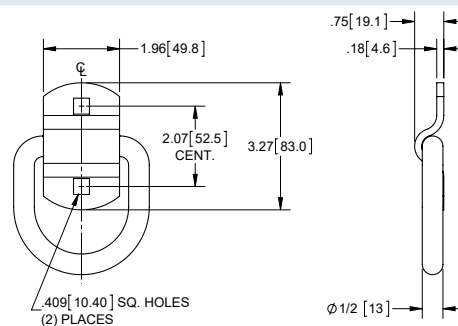
Tie downs are not designed to be used as a lifting device. A tie down system is only as strong as its weakest link. For adequate safety protection, components attached to the product must be of equal or greater strength. The mounting location must be capable of supporting at least 15% more than the Ultimate Breaking Strength (UBS) of the rated component. Unless otherwise specified, avoid side loading. Load should be applied uniformly as a straight line pull only. Load direction other than straight may result in a significant reduction in rated load capacities.

It is the user's responsibility to determine suitability of a product for any particular use (including but not limited to amount, type, capacity, and location of tie down assemblies) with the information that is provided in this catalog. Alterations, age, wear, and/or damage to any tie down system can reduce its capacity rating. All products should be inspected on a regular basis. Any worn, deformed, mis-used or overloaded products should be replaced immediately.

Forged Tie Downs

Part Number	Material	Finish	WLL (lbs.)	UBS (lbs.)
866	forged steel	mill	4,000	12,000
866ZN	forged steel	zinc plated	4,000	12,000

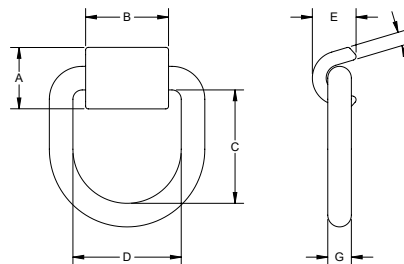
▶ parts shipped unassembled inside a sealed polybag



Forged Tie Downs

Part Number	A	B	C	D	E	F	Ø G	Material	Finish	WLL (lbs.)	UBS (lbs.)
866-10	1.3 [34]	1.8 [46]	3.5 [89]	3.4 [86]	.95 [24]	.30 [8]	1/2 [13]	forged steel	mill	4,000	12,000
867	1.6 [41]	2.5 [63]	4.3 [110]	4.3 [110]	1.15 [29]	.37 [9.5]	5/8 [16]				
868	1.8 [46]	2.5 [63]	4.5 [114]	4.5 [114]	1.26 [32]	.37 [9.5]	3/4 [19]			9,000	26,500
869	1.97 [50.0]	2.5 [63]	5.0 [127]	5.0 [127]	1.46 [37]	.37 [9.5]	1 [25]			15,600	47,000
870	1.97 [50.0]	2.5 [63]	6.0 [151]	5.0 [127]	1.46 [37]	.37 [9.5]	1 [25]			15,600	46,800

▶ parts shipped unassembled inside a sealed polybag



Stainless Steel Tie Down

Part Number	Material	Finish	WLL (lbs.)	UBS (lbs.)
864SS	stainless steel	mill	1,700	5,100

▶ shipped unassembled inside a sealed polybag

