

NELSON STUD WELDING

SPECIFICATION: SBA Threaded Aluminum Shoulder Stud

SBA

Nelson SBA shoulder studs have a weld base diameter larger than the threaded extension diameter. They are available in weld base diameters 1/4" through 1/2", with threaded extension sizes up to 7/16-14.

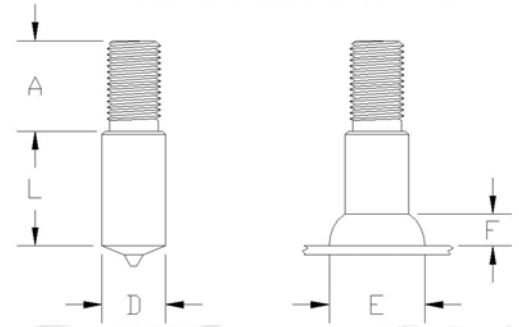
The Nelson SBL studs are used as mountings for panels and hardware where a standoff shoulder is needed. SBA studs are similar to CKA aluminum collar studs, but the larger weld base provides improved bend resistance.

Both chuck size and part number are determined by the thread size, C. Please refer to the Nelson HBA stud specification sheet to find the appropriate chuck size and number.

Nelson SBA studs are welded using ceramic ferrules in conjunction with argon as a shielding gas. The shielding gas is introduced through a gas foot assembly, #751020000, which is used for all diameters of SBA studs. Gas hose #515001001 and a gas regulator #514001001 are needed to deliver and control the gas flow from a pressurized cylinder.

An aluminum Tranquil-Arc® plunge dampener kit is also needed as an accessory on the gun to control the rate of the stud's return to the molten weld metal at the end of the weld cycle.

For similar function aluminum studs, please refer to Nelson [CKA Threaded Aluminum Collar studs](#), [HBA Threaded Full Base studs](#), and [TBL Internally Threaded studs](#).



When ordering, specify Type, Base Diameter, Base Length, Extension Thread Size, Extension Length, Material, Quantity, and Part Number

Example: SBA 1/2 x 1; 3/8-16 x 3/4"; Aluminum; 10,000 pieces; #101093660

Major Diameter D	Maximum Thread Diameter C	Standard Maximum Length A	Minimum Length L	Weld Fillet Dimensions		Required Standard Accessories		
				E	F	Ferrule	Grip	Foot
1/4	#10-24	0.468	0.312	0.406	0.125	100101047	501001007	500001007
5/16	1/4-20	0.635	0.343	0.468	0.156	100101048	501001006	500001009
3/8	5/16-18	0.781	0.390	0.603	0.187	100101049	501001009	500001011
7/16	3/8-16	0.937	0.468	0.656	0.218	100101050	501001008	500001012
1/2	7/16-14	0.937	0.500	0.750	0.250	100101151	501001011	500001014

MATERIALS: Studs are available in 5356 Aluminum. Material selection is dependent on anticipated service temperature range. For specific grade information and physical and chemical properties, conforming standards, and information on heat treating, please see [General Material Specifications](#).

THREADS: Standard external threads are UNC-2A.

Visit our website www.NelsonStudWelding.com for a list of our standard stock products.