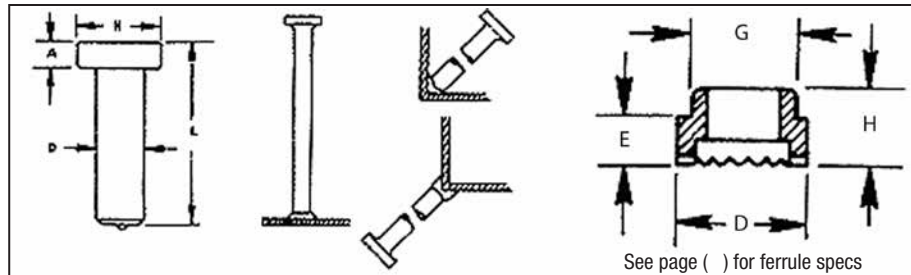


# HCA HEADED CONCRETE ANCHOR

## HEADED CONCRETE ANCHOR – FULL WELD BASE

TYPE HCA STUD  
 TYPE FHD FERRULE SUPPLIED  
 Head Diameter (H) – 1/2" for all 1/4" Headed Concrete Anchors.  
 Head Height (A) – 3/16" for all 1/4" Headed Concrete Anchors.



See page ( ) for ferrule specs

WELD STUD SPECIFICATIONS			WELD STUD PACKAGING			WELD STUD WEIGHTS		
D Diameter	L Length	SWP Part#	Pieces Per Box	Boxes Per Pallet	Pieces Per Pallet	Box Weight	Pallet Weight	1,000 Piece Weight
1/4	1-1/8	HCA 14 118	2,000	27	54,000	48 lbs.	1,296 lbs.	22 lbs.
1/4	2-11/16	HCA 14 21116	1,000	27	27,000	45 lbs.	1,215 lbs.	43 lbs.
1/4	3-1/8	HCA 14 318	1,000	27	27,000	51 lbs.	1,377 lbs.	50 lbs.
1/4	4-1/8	HCA 14 418	600	27	16,200	38 lbs.	1,026 lbs.	63 lbs.

**Concrete Anchors** are used in all types of concrete connections. They can be welded to a flat surface, or to the inside or outside of an angle.

**Length:** Length is listed before weld. Stud diameters 1/4" will be approx. 1/8" shorter after welding. Stud Welding Products concrete anchors can be made in any length above the standard minimum.

**Material:** Low carbon steel, ASTM A29, 1010-1020. HCA Studs are also available in weldable stainless steel. \*All headed anchors meet AWS specifications D1.1 and D1.5. Test reports available upon request. Type 302 is the most commonly used. Other grades of stainless steel (except Type 303) are available when required.

### Mechanical Property Requirements

	Type A	Type B
Tensile Strength	61,000 psi min.	65,000 psi min.
Yield Strength	49,000 psi min.	51,000 psi min.
Elongation (% in 2 in.)	17% min.	20% min.
Elongation (% in 5x dia.)	14% min.	15% min.
Reduction of Area	50% min.	50% min.

Type A Studs are general purpose studs.

Type B Studs are headed, bent, or of other configuration that are used as an essential component in composite beam design and construction.

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# HCA HEADED CONCRETE ANCHOR

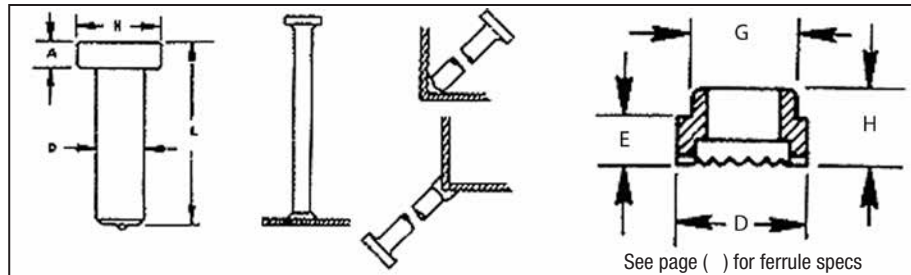
## HEADED CONCRETE ANCHOR – FULL WELD BASE

### TYPE HCA STUD

TYPE FHD FERRULE SUPPLIED

Head Diameter (H) – 3/4" for all 3/8" Headed Concrete Anchors.

Head Height (A) – 9/32" for all 3/8" Headed Concrete Anchors.



See page ( ) for ferrule specs

WELD STUD SPECIFICATIONS			WELD STUD PACKAGING			WELD STUD WEIGHTS		
D Diameter	L Length	SWP Part#	Pieces Per Box	Boxes Per Pallet	Pieces Per Pallet	Box Weight	Pallet Weight	1,000 Piece Weight
3/8	1-3/8	HCA 38 138	1,000	27	27,000	70 lbs.	1,890 lbs.	68 lbs.
3/8	1-5/8	HCA 38 158	1,000	27	27,000	79 lbs.	2,133 lbs.	77 lbs.
3/8	2-1/8	HCA 38 218	700	27	18,900	67 lbs.	1,809 lbs.	92 lbs.
3/8	2-5/8	HCA 38 258	600	27	16,200	66 lbs.	1,782 lbs.	111 lbs.
3/8	3-1/8	HCA 38 318	500	27	13,500	62 lbs.	1,674 lbs.	124 lbs.
3/8	4-1/8	HCA 38 418	350	27	9,450	55 lbs.	1,485 lbs.	154 lbs.
3/8	5-1/8	HCA 38 518	300	27	8,100	56 lbs.	1,512 lbs.	185 lbs.
3/8	6-1/8	HCA 38 618	200	27	5,400	44 lbs.	1,188 lbs.	212 lbs.
3/8	8-1/8	HCA 38 818	250	9	2,250	69 lbs.	1,863 lbs.	274 lbs.

**Concrete Anchors** are used in all types of concrete connections. They can be welded to a flat surface, or to the inside or outside of an angle.

**Length:** Length is listed before weld. Stud diameters 3/8" will be approx. 1/8" shorter after welding. Stud Welding Products concrete anchors can be made in any length above the standard minimum.

**Material:** Low carbon steel, ASTM A29, 1010-1020. HCA Studs are also available in weldable stainless steel. \*All headed anchors meet AWS specifications D1.1 and D1.5. Test reports available upon request. Type 302 is the most commonly used. Other grades of stainless steel (except Type 303) are available when required.

### Mechanical Property Requirements

	Type A	Type B
Tensile Strength	61,000 psi min.	65,000 psi min.
Yield Strength	49,000 psi min.	51,000 psi min.
Elongation (% in 2 in.)	17% min.	20% min.
Elongation (% in 5x dia.)	14% min.	15% min.
Reduction of Area	50% min.	50% min.

Type A Studs are general purpose studs.

Type B Studs are headed, bent, or of other configuration that are used as an essential component in composite beam design and construction.

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# HCA HEADED CONCRETE ANCHOR

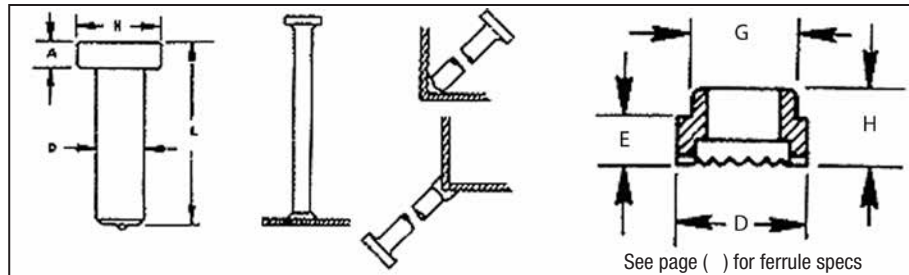
## HEADED CONCRETE ANCHOR – FULL WELD BASE

### TYPE HCA STUD

TYPE FHD FERRULE SUPPLIED

Head Diameter (H) – 1" for all 1/2" Headed Concrete Anchors.

Head Height (A) – 5/16" for all 1/2" Headed Concrete Anchors.



See page ( ) for ferrule specs

WELD STUD SPECIFICATIONS			WELD STUD PACKAGING			WELD STUD WEIGHTS		
D Diameter	L Length	SWP Part#	Pieces Per Box	Boxes Per Pallet	Pieces Per Pallet	Box Weight	Pallet Weight	1,000 Piece Weight
1/2	1-1/8	HCA 12 118	600	27	16,200	68 lbs.	1,836 lbs.	112 lbs.
1/2	1-5/8	HCA 12 158	450	27	12,150	64 lbs.	1,728 lbs.	138 lbs.
1/2	2-1/8	HCA 12 218	400	27	10,800	67 lbs.	1,809 lbs.	166 lbs.
1/2	2-5/8	HCA 12 258	350	27	9,450	71 lbs.	1,917 lbs.	198 lbs.
1/2	3-1/8	HCA 12 318	300	27	8,100	68 lbs.	1,836 lbs.	223 lbs.
1/2	4-1/8	HCA 12 418	200	27	5,400	56 lbs.	1,512 lbs.	277 lbs.
1/2	5-5/16	HCA 12 5516	150	27	4,050	52 lbs.	1,404 lbs.	339 lbs.
1/2	6-1/8	HCA 12 618	125	27	3,375	49 lbs.	1,323 lbs.	388 lbs.
1/2	8-1/8	HCA 12 818	100	27	2,700	50 lbs.	1,350 lbs.	495 lbs.
1/2	10-1/8	HCA 12 1018	75	27	2,025	51 lbs.	1,377 lbs.	680 lbs.
1/2	12-1/8	HCA 12 1218	2000	1	2,000	1,434 lbs.	1,434 lbs.	717 lbs.

**Concrete Anchors** are used in all types of concrete connections. They can be welded to a flat surface, or to the inside or outside of an angle.

**Length:** Length is listed before weld. Stud diameters 1/2" will be approx. 1/8" shorter after welding. Stud Welding Products concrete anchors can be made in any length above the standard minimum.

**Material:** Low carbon steel, ASTM A29, 1010-1020. HCA Studs are also available in weldable stainless steel. \*All headed anchors meet AWS specifications D1.1 and D1.5. Test reports available upon request. Type 302 is the most commonly used. Other grades of stainless steel (except Type 303) are available when required.

### Mechanical Property Requirements

	Type A	Type B
Tensile Strength	61,000 psi min.	65,000 psi min.
Yield Strength	49,000 psi min.	51,000 psi min.
Elongation (% in 2 in.)	17% min.	20% min.
Elongation (% in 5x dia.)	14% min.	15% min.
Reduction of Area	50% min.	50% min.

Type A Studs are general purpose studs.

Type B Studs are headed, bent, or of other configuration that are used as an essential component in composite beam design and construction.

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# HCA HEADED CONCRETE ANCHOR

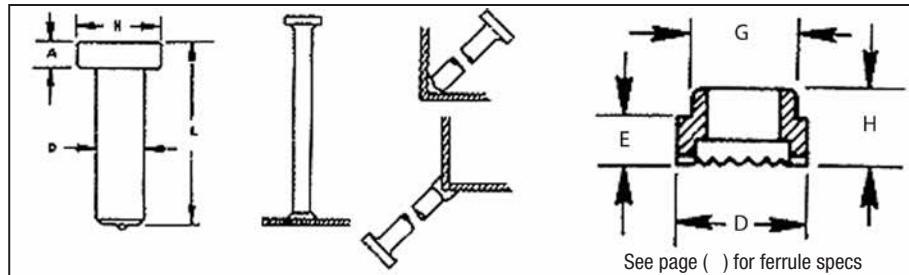
## HEADED CONCRETE ANCHOR – FULL WELD BASE

TYPE HCA STUD

TYPE FHD FERRULE SUPPLIED

Head Diameter (H) – 1-1/4" for all 5/8" Headed Concrete Anchors.

Head Height (A) – 5/16" for all 5/8" Headed Concrete Anchors.



See page ( ) for ferrule specs

WELD STUD SPECIFICATIONS			WELD STUD PACKAGING			WELD STUD WEIGHTS		
D Diameter	L Length	SWP Part#	Pieces Per Box	Boxes Per Pallet	Pieces Per Pallet	Box Weight	Pallet Weight	1,000 Piece Weight
5/8	1-7/16	HCA 58 1716	400	27	10,800	85 lbs.	2,295 lbs.	208 lbs.
5/8	1-11/16	HCA 58 11116	325	27	8,775	77 lbs.	2,079 lbs.	227 lbs.
5/8	2-3/16	HCA 58 2316	250	27	6,750	71 lbs.	1,917 lbs.	270 lbs.
5/8	2-11/16	HCA 58 21116	250	27	6,750	81 lbs.	2,187 lbs.	319 lbs.
5/8	3-3/16	HCA 58 3316	200	27	5,400	75 lbs.	2,025 lbs.	363 lbs.
5/8	3-11/16	HCA 58 31116	150	27	4,050	75 lbs.	1,674 lbs.	398 lbs.
5/8	4-3/16	HCA 58 4316	150	27	4,050	62 lbs.	1,863 lbs.	444 lbs.
5/8	4-11/16	HCA 58 41116	125	27	3,375	69 lbs.	1,701 lbs.	487 lbs.
5/8	5-3/16	HCA 58 5316	100	27	2,700	55 lbs.	1,485 lbs.	528 lbs.
5/8	6-9/16	HCA 58 6916	90	27	2,430	55 lbs.	1,485 lbs.	604 lbs.
5/8	8-3/16	HCA 58 8316	80	27	2,160	52 lbs.	1,404 lbs.	646 lbs.
5/8	9-3/16	HCA 58 9316	150	9	1,350	117 lbs.	1,053 lbs.	781 lbs.
5/8	10-3/16	HCA 58 10316	100	9	900	98 lbs.	882 lbs.	949 lbs.

**Concrete Anchors** are used in all types of concrete connections. They can be welded to a flat surface, or to the inside or outside of an angle.

**Length:** Length is listed before weld. Stud diameters 5/8" will be approx. 3/16" shorter after welding. Stud Welding Products concrete anchors can be made in any length above the standard minimum.

**Material:** Low carbon steel, ASTM A29, 1010-1020. HCA Studs are also available in weldable stainless steel. \*All headed anchors meet AWS specifications D1.1 and D1.5. Test reports available upon request. Type 302 is the most commonly used. Other grades of stainless steel (except Type 303) are available when required.

### Mechanical Property Requirements

	Type A	Type B
Tensile Strength	61,000 psi min.	65,000 psi min.
Yield Strength	49,000 psi min.	51,000 psi min.
Elongation (% in 2 in.)	17% min.	20% min.
Elongation (% in 5x dia.)	14% min.	15% min.
Reduction of Area	50% min.	50% min.

Type A Studs are general purpose studs.

Type B Studs are headed, bent, or of other configuration that are used as an essential component in composite beam design and construction.

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# HSC HEADED SHEAR CONNECTOR

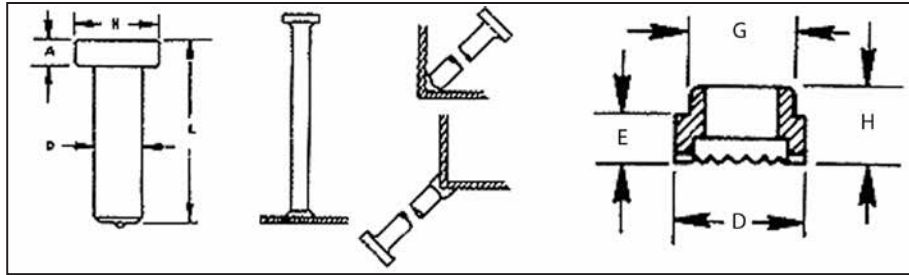
## SHEAR CONNECTOR – FULL WELD BASE

TYPE HSC STUD

TYPE F FERRULE SUPPLIED

Head Diameter (H) – 1-1/4" for all 3/4" headed Shear Connectors.

Head Height (A) – 3/8" for all 3/4" headed Shear Connectors.



WELD STUD SPECIFICATIONS			WELD STUD PACKAGING			WELD STUD WEIGHTS		
D Diameter	L Length	SWP Part#	Pieces Per Box	Boxes Per Pallet	Pieces Per Pallet	Box Weight	Pallet Weight	1,000 Piece Weight
3/4	2.2	HSC 34 2.20	200	48	9600	71 lbs	3408 lbs	340 lbs
3/4	3-3/16	HSC 34 3316	125	48	6,000	60 lbs.	2,880 lbs.	478 lbs.
3/4	3-3/8	HSC 34 338	125	48	6,000	62 lbs.	2,976 lbs.	500 lbs.
3/4	3-11/16	HSC 34 31116	100	48	4,800	55 lbs.	2,640 lbs.	548 lbs.
3/4	3-7/8	HSC 34 378	100	48	4,800	58 lbs.	2,784 lbs.	567 lbs.
3/4	4-3/16	HSC 34 4316	100	48	4,800	63 lbs.	3,024 lbs.	600 lbs.
3/4	4-3/8	HSC 34 438	100	48	4,800	62 lbs.	2,976 lbs.	634 lbs.
3/4	4-11/16	HSC 34 41116	75	27	2,025	51 lbs.	1,377 lbs.	672 lbs.
3/4	4-7/8	HSC 34 478	75	48	3,600	51 lbs.	2,448 lbs.	701 lbs.
3/4	5-3/16	HSC 34 5316	60	48	2,880	43 lbs.	2,064 lbs.	735 lbs.
3/4	5-3/8	HSC 34 538	60	48	2,880	45 lbs.	2,160 lbs.	754 lbs.
3/4	5-11/16	HSC 34 51116	60	48	2,880	47 lbs.	2,256 lbs.	783 lbs.
3/4	5-7/8	HSC 34 578	60	48	2,880	49 lbs.	2,352 lbs.	810 lbs.
3/4	6-3/16	HSC 34 6316	60	48	2,880	51 lbs.	2,448 lbs.	852 lbs.
3/4	6-3/8	HSC 34 638	60	48	2,880	53 lbs.	2,544 lbs.	883 lbs.
3/4	6-11/16	HSC 34 61116	70	27	2,160	75 lbs.	2,025 lbs.	938 lbs.
3/4	7-3/16	HSC 34 7316	60	27	1,620	59 lbs.	1,593 lbs.	968 lbs.
3/4	8-3/16	HSC 34 8316	50	27	1,350	56 lbs.	1,512 lbs.	1,105 lbs.
3/4	9-3/16	HSC 34 9316	100	9	900	123 lbs.	1,107 lbs.	1,222 lbs.
3/4	10-3/16	HSC 34 10316	100	9	900	137 lbs.	1,233 lbs.	1,339 lbs.
3/4	12-3/16	HSC 34 12316	1,100	1	1,100	1,760 lbs.	1,760 lbs.	1,599 lbs.
3/4	16-3/16	HSC 34 16316	1,000	1	1,000	2,000 lbs.	2,000 lbs.	2,000 lbs.

**Shear Connectors** are used in all types of concrete connections. They can be welded to a flat surface, or to the inside or outside of an angle.

**Length:** Length is listed before weld. Stud diameters 3/4" will be approx. 3/16" shorter after welding. Stud Welding Products shear connectors can be made in any length above the standard minimum.

**Material:** Low carbon steel, ASTM A29, 1010 1020. HSC Studs are also available in weldable stainless steel. \*All headed anchors meet AWS specifications D1.1 and 1.5. Test reports available upon request. Type 302 is the most commonly used. Other grades of stainless steel (except Type 303) are available when required.

Mechanical Property Requirements		
	Type A	Type B
Tensile Strength	61,000 psi min.	65,000 psi min.
Yield Strength	49,000 psi min.	51,000 psi min.
Elongation (% in 2 in.)	17% min.	20% min.
Elongation (% in 5x dia.)	14% min.	15% min.
Reduction of Area	50% min.	50% min.

Type A Studs are general purpose studs.

Type B Studs are headed, bent, or of other configuration that are used as an essential component in composite beam design and construction.

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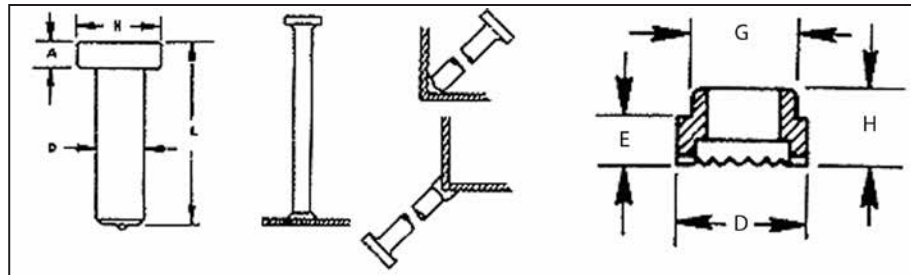
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# HSC HEADED SHEAR CONNECTOR

## SHEAR CONNECTOR – FULL WELD BASE

TYPE HSC STUD  
 TYPE F FERRULE SUPPLIED  
 Head Diameter (H) – 1-3/8" for all 7/8" Shear Connectors.  
 Head Height (A) – 3/8" for all 7/8" Shear Connectors.



WELD STUD SPECIFICATIONS			WELD STUD PACKAGING			WELD STUD WEIGHTS		
D Diameter	L Length	SWP Part#	Pieces Per Box	Boxes Per Pallet	Pieces Per Pallet	Box Weight	Pallet Weight	1,000 Piece Weight
7/8	3-3/16	HSC 78 3316	100	27	2,700	66 lbs.	1,782 lbs.	660 lbs.
7/8	3-11/16	HSC 78 3116	100	27	2,700	74 lbs.	1,998 lbs.	709 lbs.
7/8	4-3/16	HSC 78 4316	100	27	2,700	80 lbs.	2,160 lbs.	796 lbs.
7/8	5-3/16	HSC 78 5316	75	27	2,025	73 lbs.	1,971 lbs.	961 lbs.
7/8	6-3/16	HSC 78 6316	50	27	1,350	57 lbs.	1,539 lbs.	1,137 lbs.
7/8	7-3/16	HSC 78 7316	45	27	1,215	59 lbs.	1,593 lbs.	1,306 lbs.
7/8	8-3/16	HSC 78 8316	40	27	1,080	59 lbs.	1,593 lbs.	1,496 lbs.
7/8	9-3/16	HSC 78 9316	75	9	675	125 lbs.	1,125 lbs.	1,666 lbs.
7/8	10-3/16	HSC 78 10316	75	9	675	135 lbs.	1,215 lbs.	1,836 lbs.
7/8	12-3/16	HSC 78 12316	825	1	825	1,793 lbs.	1,793 lbs.	2,193 lbs.

**Shear Connectors** are used in all types of concrete connections. They can be welded to a flat surface, or to the inside or outside of an angle.

**Length:** Length is listed before weld. Stud diameters 7/8" will be approx. 3/16" shorter after welding. Stud Welding Products shear connectors can be made in any length above the standard minimum.

**Material:** Low carbon steel, ASTM A29, 1010 1020. HSC Studs are also available in weldable stainless steel. \*All headed anchors meet AWS specifications D1.1 and 1.5. Test reports available upon request. Type 302 is the most commonly used. Other grades of stainless steel (except Type 303) are available when required.

### Mechanical Property Requirements

	Type A	Type B
Tensile Strength	61,000 psi min.	65,000 psi min.
Yield Strength	49,000 psi min.	51,000 psi min.
Elongation (% in 2 in.)	17% min.	20% min.
Elongation (% in 5x dia.)	14% min.	15% min.
Reduction of Area	50% min.	50% min.

Type A Studs are general purpose studs.

Type B Studs are headed, bent, or of other configuration that are used as an essential component in composite beam design and construction.

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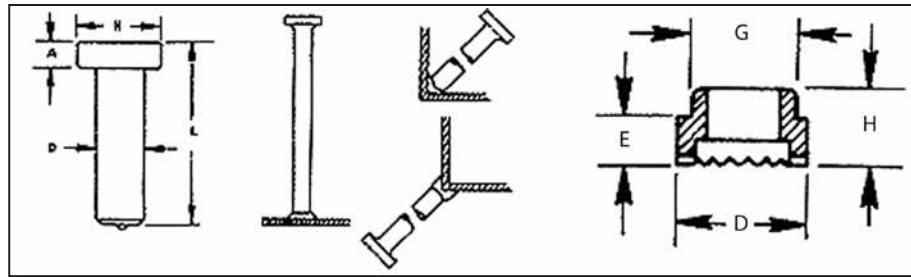
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# HSC HEADED SHEAR CONNECTOR

## SHEAR CONNECTOR – FULL WELD BASE

TYPE HSC STUD  
 TYPE F FERRULE SUPPLIED  
 Head Diameter (H) – 1-5/8" for all 1" Shear Connectors.  
 Head Height (A) – 1/2" for all 1" Shear Connectors.



WELD STUD SPECIFICATIONS			WELD STUD PACKAGING			WELD STUD WEIGHTS		
D Diameter	L Length	SWP Part#	Pieces Per Box	Boxes Per Pallet	Pieces Per Pallet	Box Weight	Pallet Weight	1,000 Piece Weight
1"	3-1/4	HSC 1 314	75	27	2,025	70 lbs.	1,890 lbs.	894 lbs.
1"	4-1/4	HSC 1 414	50	27	1,350	57 lbs.	1,539 lbs.	1,079 lbs.
1"	5-1/4	HSC 1 514	50	27	1,350	70 lbs.	1,890 lbs.	1,302 lbs.
1"	6-1/4	HSC 1 614	40	27	1,080	63 lbs.	1,701 lbs.	1,514 lbs.
1"	7-1/4	HSC 1 714	85	9	765	154 lbs.	1,386 lbs.	1,737 lbs.
1"	8-1/4	HSC 1 814	85	9	765	173 lbs.	1,557 lbs.	1,978 lbs.
1"	9-1/4	HSC 1 914	80	9	720	180 lbs.	1,620 lbs.	2,193 lbs.

**Shear Connectors** are used in all types of concrete connections. They can be welded to a flat surface, or to the inside or outside of an angle.

**Length:** Length is listed before weld. Stud diameters 1" will be approx. 1/4" shorter after welding. Stud Welding Products shear connectors can be made in any length above the standard minimum.

**Material:** Low carbon steel, ASTM A29, 1010 1020. HSC Studs are also available in weldable stainless steel. \*All headed anchors meet AWS specifications D1.1 and 1.5. Test reports available upon request. Type 302 is the most commonly used. Other grades of stainless steel (except Type 303) are available when required.

### Mechanical Property Requirements

	Type A	Type B
Tensile Strength	61,000 psi min.	65,000 psi min.
Yield Strength	49,000 psi min.	51,000 psi min.
Elongation (% in 2 in.)	17% min.	20% min.
Elongation (% in 5x dia.)	14% min.	15% min.
Reduction of Area	50% min.	50% min.

Type A Studs are general purpose studs.

Type B Studs are headed, bent, or of other configuration that are used as an essential component in composite beam design and construction.

**STUD WELDING PRODUCTS, INC.**

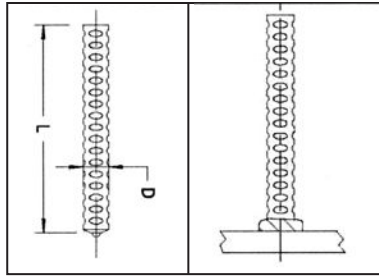
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# DBA DEFORMED BAR ANCHORS

## DEFORMED BAR ANCHORS

TYPE DBA STUD  
NO THREAD – FULL WELD BASE  
TYPE F FERRULE SUPPLIED



WELD STUD SPECIFICATIONS			WELD STUD PACKAGING			WELD STUD WEIGHTS		
D Diameter	L Length	SWP Part#	Pieces Per Box	Boxes Per Pallet	Pieces Per Pallet	Box Weight	Pallet Weight	1,000 Piece Weight
3/8	10-1/8	DBA 38 1018	150	18	2,700	46 lbs.	828 lbs.	288 lbs.
3/8	12-1/8	DBA 38 1218	150	18	2,700	55 lbs.	990 lbs.	344 lbs.
3/8	18-1/8	DBA 38 1818	150	12	1,800	80 lbs.	960 lbs.	515 lbs.
3/8	24-1/8	DBA 38 2418	150	8	1,200	108 lbs.	864 lbs.	685 lbs.
3/8	30-1/8	DBA 38 3018	150	7	1,050	130 lbs.	910 lbs.	897 lbs.
3/8	36-1/8	DBA 38 3618	150	6	900	156 lbs.	936 lbs.	1,029 lbs.
3/8	48-1/8	DBA 38 4818	150	6	900	208 lbs.	1,248 lbs.	1,394 lbs.

**Deformed Bar Anchors** are designed for weld and bearing plates in concrete connections.

**Length:** Length is before weld. Stud diameters (D) 1/2" and below will be approximately 1/8" shorter after welding. 5/8" and larger will be approximately 3/16" shorter after welding.

**Material:** Low carbon steel, ASTM A496

### Mechanical Property Requirements

	Type C
Tensile Strength	80,000 psi min. (552 MPa)
Yield Strength (0.5% offset)	70,000 psi min. (485 MPa)

Type "C" Studs are cold worked deformed steel bars manufactured in accordance with specification ASTM A496 having nominal diameter equivalent to the diameter of a plain wire having the same weight per foot as the deformed wire. ASTM A496 specifies a maximum diameter of 0.628 in. (16mm). Any bar supplied above that diameter must have the same physical characteristics regarding deformations as required by ASTM A496.

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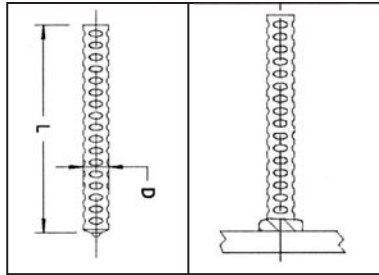
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# DBA DEFORMED BAR ANCHORS

## DEFORMED BAR ANCHORS

TYPE DBA STUD  
NO THREAD – FULL WELD BASE  
TYPE F FERRULE SUPPLIED



WELD STUD SPECIFICATIONS			WELD STUD PACKAGING			WELD STUD WEIGHTS		
D Diameter	L Length	SWP Part#	Pieces Per Box	Boxes Per Pallet	Pieces Per Pallet	Box Weight	Pallet Weight	1,000 Piece Weight
1/2	8-1/8	DBA 12 818	100	18	1,800	44 lbs.	792 lbs.	451 lbs.
1/2	10-1/8	DBA 12 1018	100	18	1,800	54 lbs.	972 lbs.	529 lbs.
1/2	12-1/8	DBA 12 1218	100	18	1,800	67 lbs.	1,206 lbs.	680 lbs.
1/2	18-1/8	DBA 12 1818	100	12	1,200	98 lbs.	1,176 lbs.	972 lbs.
1/2	24-1/8	DBA 12 2418	100	8	800	128 lbs.	1,024 lbs.	1,292 lbs.
1/2	30-1/8	DBA 12 3018	100	7	700	160 lbs.	1,120 lbs.	1,560 lbs.
1/2	36-1/8	DBA 12 3618	100	6	600	192 lbs.	1,152 lbs.	1,879 lbs.
1/2	42-1/8	DBA 12 4218	100	6	600	222 lbs.	1,332 lbs.	2,174 lbs.
1/2	48-1/8	DBA 12 4818	100	6	600	256 lbs.	1,536 lbs.	2,502 lbs.
1/2	60-1/8	DBA 12 6018	100	1	100	314 lbs.	314 lbs.	3,140 lbs.

**Deformed Bar Anchors** are designed for weld and bearing plates in concrete connections.

**Length:** Length is before weld. Stud diameters (D) 1/2" and below will be approximately 1/8" shorter after welding. 5/8" and larger will be approximately 3/16" shorter after welding.

**Material:** Low carbon steel, ASTM A496

### Mechanical Property Requirements

	Type C
Tensile Strength	80,000 psi min. (552 MPa)
Yield Strength (0.5% offset)	70,000 psi min. (485 MPa)

Type "C" Studs are cold worked deformed steel bars manufactured in accordance with specification ASTM A496 having nominal diameter equivalent to the diameter of a plain wire having the same weight per foot as the deformed wire. ASTM A496 specifies a maximum diameter of 0.628 in. (16mm). Any bar supplied above that diameter must have the same physical characteristics regarding deformations as required by ASTM A496.

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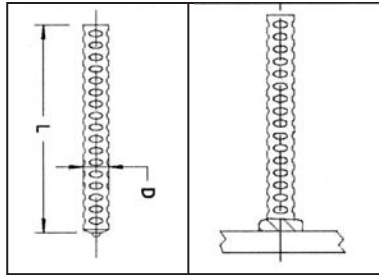
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# DBA DEFORMED BAR ANCHORS

## DEFORMED BAR ANCHORS

TYPE DBA STUD  
NO THREAD – FULL WELD BASE  
TYPE F FERRULE SUPPLIED



WELD STUD SPECIFICATIONS			WELD STUD PACKAGING			WELD STUD WEIGHTS		
D Diameter	L Length	SWP Part#	Pieces Per Box	Boxes Per Pallet	Pieces Per Pallet	Box Weight	Pallet Weight	1,000 Piece Weight
5/8	12-3/16	DBA 58 12316	50	18	900	51 lbs.	918 lbs.	997 lbs.
5/8	18-3/16	DBA 58 18316	50	12	600	76 lbs.	912 lbs.	1,633 lbs.
5/8	24-3/16	DBA 58 24316	50	8	400	102 lbs.	816 lbs.	2,136 lbs.
5/8	30-3/16	DBA 58 30316	50	7	350	126 lbs.	882 lbs.	2,666 lbs.
5/8	36-3/16	DBA 58 36316	50	6	300	151 lbs.	906 lbs.	3,196 lbs.
5/8	42-3/16	DBA 58 42316	50	8	400	176 lbs.	1,408 lbs.	3,482 lbs.
5/8	48-3/16	DBA 58 48316	50	6	300	197 lbs.	1,182 lbs.	3,962 lbs.

**Deformed Bar Anchors** are designed for weld and bearing plates in concrete connections.

**Length:** Length is before weld. Stud diameters (D) 1/2" and below will be approximately 1/8" shorter after welding. 5/8" and larger will be approximately 3/16" shorter after welding.

**Material:** Low carbon steel, ASTM A496

### Mechanical Property Requirements

	Type C
Tensile Strength	80,000 psi min. (552 MPa)
Yield Strength (0.5% offset)	70,000 psi min. (485 MPa)

Type "C" Studs are cold worked deformed steel bars manufactured in accordance with specification ASTM A496 having nominal diameter equivalent to the diameter of a plain wire having the same weight per foot as the deformed wire. ASTM A496 specifies a maximum diameter of 0.628 in. (16mm). Any bar supplied above that diameter must have the same physical characteristics regarding deformations as required by ASTM A496.

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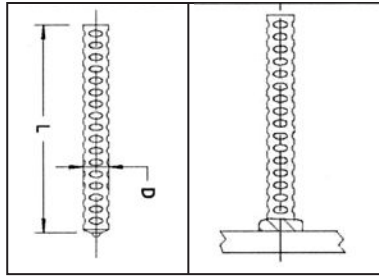
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# DBA DEFORMED BAR ANCHORS

## DEFORMED BAR ANCHORS

TYPE DBA STUD  
NO THREAD – FULL WELD BASE  
TYPE F FERRULE SUPPLIED



WELD STUD SPECIFICATIONS			WELD STUD PACKAGING			WELD STUD WEIGHTS		
D Diameter	L Length	SWP Part#	Pieces Per Box	Boxes Per Pallet	Pieces Per Pallet	Box Weight	Pallet Weight	1,000 Piece Weight
3/4	12-3/16	DBA 34 12316	40	18	720	60 lbs.	1,080 lbs.	1,525 lbs.
3/4	18-3/16	DBA 34 18316	40	12	480	87 lbs.	1,044 lbs.	2,276 lbs.
3/4	24-3/16	DBA 34 24316	40	8	320	115 lbs.	920 lbs.	3,027 lbs.
3/4	30-3/16	DBA 34 30316	40	6	240	142 lbs.	852 lbs.	3,778 lbs.
3/4	36-3/16	DBA 34 36316	40	6	240	175 lbs.	1,050 lbs.	4,529 lbs.
3/4	42-3/16	DBA 34 42316	40	6	240	205 lbs.	1,230 lbs.	5,125 lbs.
3/4	48-3/16	DBA 34 48316	40	6	240	226 lbs.	1,356 lbs.	5,650 lbs.

**Deformed Bar Anchors** are designed for weld and bearing plates in concrete connections.

**Length:** Length is before weld. Stud diameters (D) 1/2" and below will be approximately 1/8" shorter after welding. 5/8" and larger will be approximately 3/16" shorter after welding.

**Material:** Low carbon steel, ASTM A496

### Mechanical Property Requirements

	Type C
Tensile Strength	80,000 psi min. (552 MPa)
Yield Strength (0.5% offset)	70,000 psi min. (485 MPa)

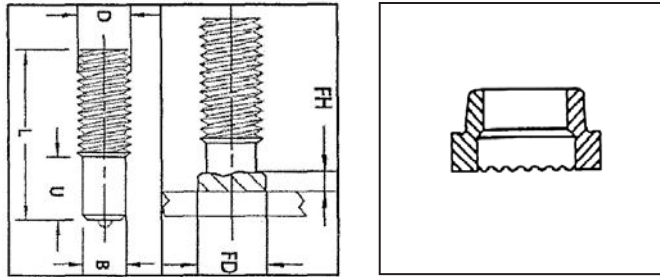
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# PCP PARTIAL THREAD STUDS



D Diameter	L Length	SWP Part#	B Base Diameter	U Minimum Base Length	FD Weld Fillet Diameter	FH Weld Fillet Height	Ferrule Part Number	1,000 Piece Weight
1/4-20	7/8	PCP 1420 78	.215	3/8	5/16	3/32	FER04-P	8.3 lbs.
1/4-20	1	PCP 1420 1	.215	3/8	5/16	3/32	FER04-P	11 lbs.
1/4-20	1-1/8	PCP 1420 118	.215	3/8	5/16	3/32	FER04-P	13.8 lbs.
1/4-20	1-1/4	PCP 1420 114	.215	3/8	5/16	3/32	FER04-P	13.8 lbs.
1/4-20	1-3/8	PCP 1420 138	.215	3/8	5/16	3/32	FER04-P	16.5 lbs.
1/4-20	1-1/2	PCP 1420 112	.215	3/8	5/16	3/32	FER04-P	16.5 lbs.
1/4-20	1-5/8	PCP 1420 158	.215	3/8	5/16	3/32	FER04-P	19.3 lbs.
1/4-20	1-3/4	PCP 1420 134	.215	3/8	5/16	3/32	FER04-P	19.3 lbs.
1/4-20	2	PCP 1420 2	.215	3/8	5/16	3/32	FER04-P	22 lbs.
1/4-20	2-1/8	PCP 1420 218	.215	3/8	5/16	3/32	FER04-P	24.8 lbs.
1/4-20	3-3/8	PCP 1420 338	.215	3/8	5/16	3/32	FER04-P	38.5 lbs.

\*Also available in metric. See ferrule spec sheet for ferrule specs.

**Partial Thread Studs** are used in all types of applications. They can be welded to a flat surface, or to the inside or outside of an angle.

**Length:** Length is listed before weld. Studs diameters 1/2" and below will be approx. 1/8" shorter after welding. 5/8" will be approx. 3/16" shorter after welding.

**Material:** Low carbon steel, ASTM A29, 1010 1020. PCP studs are also available in weld able stainless steel. Type 302 is the most commonly used, however other grades such as 302, 304, 316, 321, 310, and 430 are available when required.

Low Carbon Mechanical Property Requirements	
Tensile Strength	61,000 psi min.
Yield Strength	49,000 psi min.
Elongation (% in 2 in.)	17% min.
Elongation (% in 5x dia.)	14% min.
Reduction of Area	50% min.

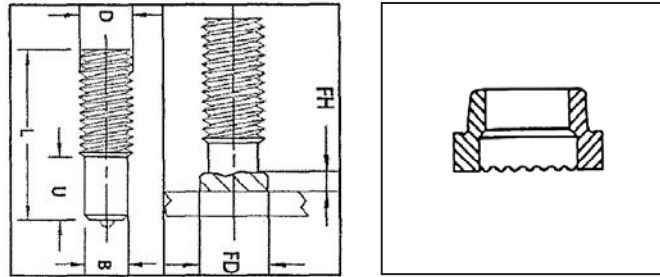
HOW TO ORDER
Specify diameter, thread size before weld (BW) length, type of material.
<b>EXAMPLE</b>
1/2-13 x 1-1/8" (BW) partial thread (PCP), mild steel
When ordering Stainless Steel, SS will be added to the part number. Example: Partial Thread Stainless Steel
1/4-20x1"= PCPSS 1420 1

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# PCP PARTIAL THREAD STUDS



D Diameter	L Length	SWP Part#	B Base Diameter	U Minimum Base Length	FD Weld Fillet Diameter	FH Weld Fillet Height	Ferrule Part Number	1,000 Piece Weight
5/16-18	7/8	PCP 51618 78	.275	3/8	13/32	7/64	FER05-P	17 lbs.
5/16-18	1	PCP 51618 1	.275	3/8	13/32	7/64	FER05-P	17 lbs.
5/16-18	1-1/8	PCP 51618 118	.275	3/8	13/32	7/64	FER05-P	21.3 lbs.
5/16-18	1-1/4	PCP 51618 114	.275	3/8	13/32	7/64	FER05-P	21.3 lbs.
5/16-18	1-3/8	PCP 51618 138	.275	3/8	13/32	7/64	FER05-P	25.5 lbs.
5/16-18	1-1/2	PCP 51618 112	.275	3/8	13/32	7/64	FER05-P	25.5 lbs.
5/16-18	1-5/8	PCP 51618 158	.275	3/8	13/32	7/64	FER05-P	29.8 lbs.
5/16-18	1-3/4	PCP 51618 134	.275	3/8	13/32	7/64	FER05-P	29.8 lbs.
5/16-18	2	PCP 51618 2	.275	3/8	13/32	7/64	FER05-P	34 lbs.
5/16-18	3	PCP 51618 3	.275	3/8	13/32	7/64	FER05-P	51 lbs.
5/16-18	4	PCP 51618 4	.275	3/8	13/32	7/64	FER05-P	68 lbs.

\*Also available in metric. See ferrule spec sheet for ferrule specs.

**Partial Thread Studs** are used in all types of applications. They can be welded to a flat surface, or to the inside or outside of an angle.

**Length:** Length is listed before weld. Studs diameters 1/2" and below will be approx. 1/8" shorter after welding. 5/8" will be approx. 3/16" shorter after welding.

**Material:** Low carbon steel, ASTM A29, 1010 1020. PCP studs are also available in weld able stainless steel. Type 302 is the most commonly used, however other grades such as 302, 304, 316, 321, 310, and 430 are available when required.

Low Carbon Mechanical Property Requirements	
Tensile Strength	61,000 psi min.
Yield Strength	49,000 psi min.
Elongation (% in 2 in.)	17% min.
Elongation (% in 5x dia.)	14% min.
Reduction of Area	50% min.

#### HOW TO ORDER

Specify diameter, thread size before weld (BW) length, type of material.

#### EXAMPLE

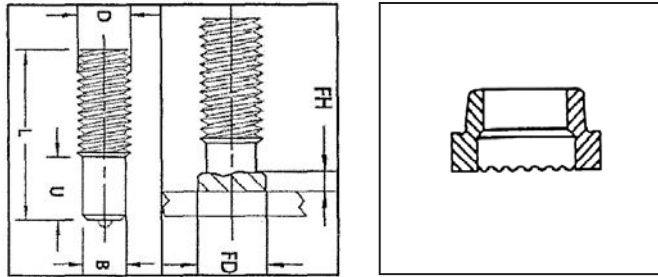
1/2-13 x 1-1/8" (BW) partial thread (PT), mild steel  
When ordering Stainless Steel, SS will be added to the part number. Example: Partial Thread Stainless Steel  
1/4-20x1" = PCPSS 1420 1

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# PCP PARTIAL THREAD STUDS



D Diameter	L Length	SWP Part#	B Base Diameter	U Minimum Base Length	FD Weld Fillet Diameter	FH Weld Fillet Height	Ferrule Part Number	1,000 Piece Weight
3/8-16	7/8	PCP 3816 78	.330	13/32	7/16	7/64	FER06-P	25 lbs.
3/8-16	1	PCP 3816 1	.330	13/32	7/16	7/64	FER06-P	25 lbs.
3/8-16	1-1/8	PCP 3816 118	.330	13/32	7/16	7/64	FER06-P	31.3 lbs.
3/8-16	1-3/8	PCP 3816 138	.330	13/32	7/16	7/64	FER06-P	37.5 lbs.
3/8-16	1-1/2	PCP 3816 112	.330	13/32	7/16	7/64	FER06-P	37.5 lbs.
3/8-16	1-5/8	PCP 3816 158	.330	13/32	7/16	7/64	FER06-P	43.8 lbs.
3/8-16	1-3/4	PCP 3816 134	.330	13/32	7/16	7/64	FER06-P	43.8 lbs.
3/8-16	2	PCP 3816 2	.330	13/32	7/16	7/64	FER06-P	50 lbs.
3/8-16	2-1/8	PCP 3816 218	.330	13/32	7/16	7/64	FER06-P	56.3 lbs.
3/8-16	2-1/4	PCP 3816 214	.330	13/32	7/16	7/64	FER06-P	56.3 lbs.
3/8-16	2-3/8	PCP 3816 238	.330	13/32	7/16	7/64	FER06-P	62.5 lbs.
3/8-16	2-1/2	PCP 3816 212	.330	13/32	7/16	7/64	FER06-P	62.5 lbs.
3/8-16	2-5/8	PCP 3816 258	.330	13/32	7/16	7/64	FER06-P	68.8 lbs.
3/8-16	2-3/4	PCP 3816 234	.330	13/32	7/16	7/64	FER06-P	68.8 lbs.
3/8-16	2-7/8	PCP 3816 278	.330	13/32	7/16	7/64	FER06-P	75 lbs.
3/8-16	3	PCP 3816 3	.330	13/32	7/16	7/64	FER06-P	75 lbs.
3/8-16	3-1/8	PCP 3816 318	.330	13/32	7/16	7/64	FER06-P	81.3 lbs.
3/8-16	3-1/2	PCP 3816 312	.330	13/32	7/16	7/64	FER06-P	87.5 lbs.
3/8-16	4	PCP 3816 4	.330	13/32	7/16	7/64	FER06-P	100 lbs.
3/8-16	5	PCP 3816 5	.330	13/32	7/16	7/64	FER06-P	125 lbs.
3/8-16	6	PCP 3816 6	.330	13/32	7/16	7/64	FER06-P	150 lbs.

\*Also available in metric. See ferrule spec sheet for ferrule specs.

**Partial Thread Studs** are used in all types of applications. They can be welded to a flat surface, or to the inside or outside of an angle.

**Length:** Length is listed before weld. Studs diameters 1/2" and below will be approx. 1/8" shorter after welding. 5/8" will be approx. 3/16" shorter after welding.

**Material:** Low carbon steel, ASTM A29, 1010 1020. PCP studs are also available in weld able stainless steel. Type 302 is the most commonly used, however other grades such as 302, 304, 316, 321, 310, and 430 are available when required.

Low Carbon Mechanical Property Requirements	
Tensile Strength	61,000 psi min.
Yield Strength	49,000 psi min.
Elongation (% in 2 in.)	17% min.
Elongation (% in 5x dia.)	14% min.
Reduction of Area	50% min.

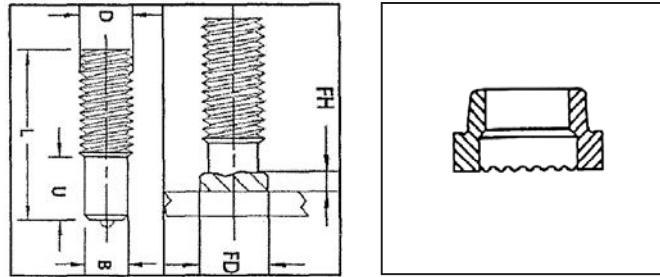
HOW TO ORDER
Specify diameter, thread size before weld (BW) length, type of material.
<b>EXAMPLE</b>
1/2-13 x 1-1/8" (BW) partial thread (PT), mild steel
When ordering Stainless Steel, SS will be added to the part number. Example: Partial Thread Stainless Steel 1/4-20x1"= PCPSS 1420 1

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# PCP PARTIAL THREAD STUDS



D Diameter	L Length	SWP Part#	B Base Diameter	U Minimum Base Length	FD Weld Fillet Diameter	FH Weld Fillet Height	Ferrule Part Number	1,000 Piece Weight
1/2-13	1	PCP 1213 1	.448	1/2	19/32	5/32	FER08-P	46 lbs.
1/2-13	1-1/8	PCP 1213 118	.448	1/2	19/32	5/32	FER08-P	57.5 lbs.
1/2-13	1-1/2	PCP 1213 112	.448	1/2	19/32	5/32	FER08-P	69 lbs.
1/2-13	2	PCP 1213 2	.448	1/2	19/32	5/32	FER08-P	92 lbs.
1/2-13	2-1/2	PCP 1213 212	.448	1/2	19/32	5/32	FER08-P	115 lbs.
1/2-13	3	PCP 1213 3	.448	1/2	19/32	5/32	FER08-P	138 lbs.
1/2-13	3-1/2	PCP 1213 312	.448	1/2	19/32	5/32	FER08-P	161 lbs.
1/2-13	4	PCP 1213 4	.448	1/2	19/32	5/32	FER08-P	184 lbs.
1/2-13	4-1/2	PCP 1213 4	.448	1/2	19/32	5/32	FER08-P	207 lbs.
1/2-13	5	PCP 1213 5	.448	1/2	19/32	5/32	FER08-P	230 lbs.
1/2-13	5-1/2	PCP 1213 512	.448	1/2	19/32	5/32	FER08-P	253 lbs.
1/2-13	6	PCP 1213 6	.448	1/2	19/32	5/32	FER08-P	276 lbs.

\*Also available in metric. See ferrule spec sheet for ferrule specs.

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**Length:** Length is listed before weld. Studs diameters 1/2" and below will be approx. 1/8" shorter after welding. 5/8" will be approx. 3/16" shorter after welding.

**Material:** Low carbon steel, ASTM A29, 1010 1020. PCP studs are also available in weld able stainless steel. Type 302 is the most commonly used, however other grades such as 302, 304, 316, 321, 310, and 430 are available when required.

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Tensile Strength	61,000 psi min.
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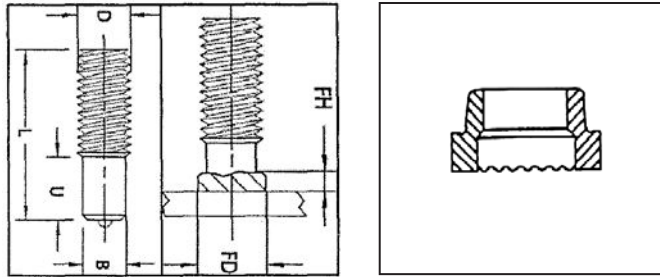
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When ordering Stainless Steel, SS will be added to the part number. Example: Partial Thread Stainless Steel 1/4-20x1"= PCPSS 1420 1

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# PCP PARTIAL THREAD STUDS



D Diameter	L Length	SWP Part#	B Base Diameter	U Minimum Base Length	FD Weld Fillet Diameter	FH Weld Fillet Height	Ferrule Part Number	1,000 Piece Weight
5/8-11	1-1/4	PCP 5811 114	.562	5/8	3/4	3/16	FER10-P	87.5 lbs.
5/8-11	1-1/2	PCP 5811 112	.562	5/8	3/4	3/16	FER10-P	105 lbs.
5/8-11	2	PCP 5811 2	.562	5/8	3/4	3/16	FER10-P	140 lbs.
5/8-11	2-1/2	PCP 5811 212	.562	5/8	3/4	3/16	FER10-P	175 lbs.
5/8-11	3	PCP 5811 3	.562	5/8	3/4	3/16	FER10-P	210 lbs.
5/8-11	3-1/2	PCP 5811 312	.562	5/8	3/4	3/16	FER10-P	245 lbs.
5/8-11	4	PCP 5811 4	.562	5/8	3/4	3/16	FER10-P	280 lbs.
5/8-11	5	PCP 5811 5	.562	5/8	3/4	3/16	FER10-P	350 lbs.
5/8-11	5-1/2	PCP 5811 512	.562	5/8	3/4	3/16	FER10-P	385 lbs.
5/8-11	6	PCP 5811 6	.562	5/8	3/4	3/16	FER10-P	420 lbs.

\*Also available in metric. See ferrule spec sheet for ferrule specs.

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Low Carbon Mechanical Property Requirements	
Tensile Strength	61,000 psi min.
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#### HOW TO ORDER

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#### EXAMPLE

1/2-13 x 1-1/8" (BW) partial thread (PT), mild steel  
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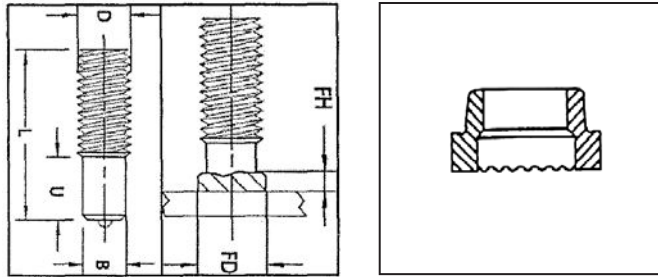
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# PCP PARTIAL THREAD STUDS



D Diameter	L Length	SWP Part#	B Base Diameter	U Minimum Base Length	FD Weld Fillet Diameter	FH Weld Fillet Height	Ferrule Part Number	1,000 Piece Weight
3/4-10	1-1/2	PCP 3410 112	.680	13/16	7/8	1/4	FER12-P	160.5 lbs.
3/4-10	2	PCP 3410 2	.680	13/16	7/8	1/4	FER12-P	214 lbs.
3/4-10	2-1/2	PCP 3410 212	.680	13/16	7/8	1/4	FER12-P	267.5 lbs.
3/4-10	3	PCP 3410 3	.680	13/16	7/8	1/4	FER12-P	321 lbs.
3/4-10	3-1/2	PCP 3410 312	.680	13/16	7/8	1/4	FER12-P	374.5 lbs.
3/4-10	4	PCP 3410 4	.680	13/16	7/8	1/4	FER12-P	428 lbs.
3/4-10	4-1/2	PCP 3410 412	.680	13/16	7/8	1/4	FER12-P	481.5 lbs.
3/4-10	5	PCP 3410 5	.680	13/16	7/8	1/4	FER12-P	535 lbs.
3/4-10	5-1/2	PCP 3410 512	.680	13/16	7/8	1/4	FER12-P	588.5 lbs.
3/4-10	6	PCP 3410 6	.680	13/16	7/8	1/4	FER12-P	642 lbs.

\*Also available in metric. See ferrule spec sheet for ferrule specs.

**Partial Thread Studs** are used in all types of applications. They can be welded to a flat surface, or to the inside or outside of an angle.

**Length:** Length is listed before weld. Studs diameters 1/2" and below will be approx. 1/8" shorter after welding. 5/8" will be approx. 3/16" shorter after welding.

**Material:** Low carbon steel, ASTM A29, 1010 1020. PCP studs are also available in weld able stainless steel. Type 302 is the most commonly used, however other grades such as 302, 304, 316, 321, 310, and 430 are available when required.

Low Carbon Mechanical Property Requirements	
Tensile Strength	61,000 psi min.
Yield Strength	49,000 psi min.
Elongation (% in 2 in.)	17% min.
Elongation (% in 5x dia.)	14% min.
Reduction of Area	50% min.

#### HOW TO ORDER

Specify diameter, thread size before weld (BW) length, type of material.

#### EXAMPLE

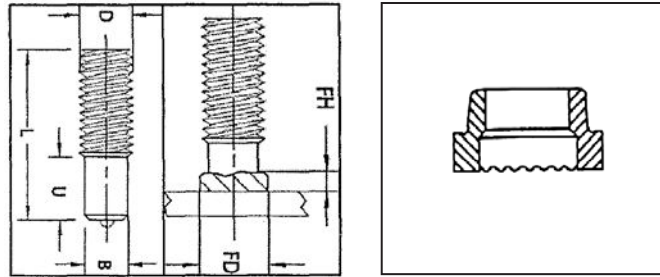
1/2-13 x 1-1/8" (BW) partial thread (PT), mild steel  
When ordering Stainless Steel, SS will be added to the part number. Example: Partial Thread Stainless Steel 1/4-20x1"= PCPSS 1420 1

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# PCP PARTIAL THREAD STUDS



D Diameter	L Length	SWP Part#	B Base Diameter	U Minimum Base Length	FD Weld Fillet Diameter	FH Weld Fillet Height	Ferrule Part Number	1,000 Piece Weight
7/8-9	2	PCP 789 2	.798	7/8	1	5/16	FER14-P	325 lbs.
7/8-9	2-1/2	PCP 789 212	.798	7/8	1	5/16	FER14-P	406.3 lbs.
7/8-9	3	PCP 789 3	.798	7/8	1	5/16	FER14-P	487.5 lbs.
7/8-9	3-1/2	PCP 789 312	.798	7/8	1	5/16	FER14-P	568.8 lbs.
7/8-9	4	PCP 789 4	.798	7/8	1	5/16	FER14-P	650 lbs.
7/8-9	4-1/2	PCP 789 412	.798	7/8	1	5/16	FER14-P	731.3 lbs.
7/8-9	5	PCP 789 5	.798	7/8	1	5/16	FER14-P	812.5 lbs.
7/8-9	5-1/2	PCP 789 512	.798	7/8	1	5/16	FER14-P	893.75 lbs.
7/8-9	6	PCP 789 6	.798	7/8	1	5/16	FER14-P	975 lbs.

\*Also available in metric. See ferrule spec sheet for ferrule specs.

**Partial Thread Studs** are used in all types of applications. They can be welded to a flat surface, or to the inside or outside of an angle.

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**Material:** Low carbon steel, ASTM A29, 1010 1020. PCP studs are also available in weld able stainless steel. Type 302 is the most commonly used, however other grades such as 302, 304, 316, 321, 310, and 430 are available when required.

Low Carbon Mechanical Property Requirements	
Tensile Strength	61,000 psi min.
Yield Strength	49,000 psi min.
Elongation (% in 2 in.)	17% min.
Elongation (% in 5x dia.)	14% min.
Reduction of Area	50% min.

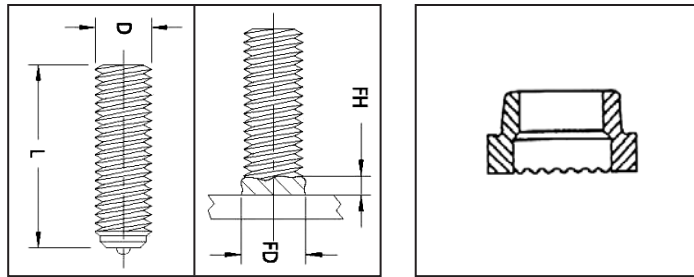
HOW TO ORDER
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<b>EXAMPLE</b>
1/2-13 x 1-1/8" (BW) partial thread (PT), mild steel
When ordering Stainless Steel, SS will be added to the part number. Example: Partial Thread Stainless Steel 1/4-20x1"= PCPSS 1420 1

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# PCF FULL THREAD STUDS



D Diameter	L Length	SWP Part#	FD Weld Fillet Diameter	FH Weld Fillet Height	Ferrule Part Number	1,000 Piece Weight
10-24	3/4	PCF 1024 34	17/64	7/64	FER03-FHD	
10-24	7/8	PCF 1024 78	17/64	7/64	FER03-FHD	
10-24	1	PCF 1024 1	17/64	7/64	FER03-FHD	
10-32	3/4	PCF 1032 34	17/64	7/64	FER03-FHD	
10-32	1	PCF 1032 1	17/64	7/64	FER03-FHD	

\*Also available in metric. See ferrule spec sheet for ferrule specs.

**Full Thread Studs** are used in all types of applications. They can be welded to a flat surface, or to the inside or outside of an angle.

**Length:** Length is listed before weld. Studs diameters 1/2" and below will be approx. 1/8" shorter after welding. 5/8" will be approx. 3/16" shorter after welding. Stud Welding Products PCF Studs can be made in any length above the standard minimum.

**Material:** Low carbon steel, ASTM A29, 1010 1020. PCF studs are also available in weldable stainless steel. Type 302 is the most commonly used. Other grades of stainless steel (except Type 303) are available when required.

Low Carbon Mechanical Property Requirements	
Tensile Strength	61,000 psi min.
Yield Strength	49,000 psi min.
Elongation (% in 2 in.)	17% min.
Elongation (% in 5x dia.)	14% min.
Reduction of Area	50% min.

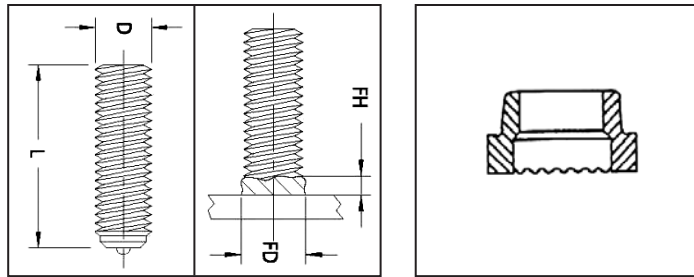
**HOW TO ORDER**  
Specify diameter, thread size before weld (BW) length, type of material.  
**EXAMPLE**  
1/2-13 x 1-1/8" (BW) partial thread (PT), mild steel  
When ordering Stainless Steel, SS will be added to the part number. Example: Partial Thread Stainless Steel 1/4-20x1" = PCPSS 1420 1

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# PCF FULL THREAD STUDS



D Diameter	L Length	SWP Part#	FD Weld Fillet Diameter	FH Weld Fillet Height	Ferrule Part Number	1,000 Piece Weight
1/4-20	5/8	PCF 1420 58	23/64	7/64	FER04-FHD	8.3 lbs.
1/4-20	3/4	PCF 1420 34	23/64	7/64	FER04-FHD	8.3 lbs.
1/4-20	7/8	PCF 1420 78	23/64	7/64	FER04-FHD	11 lbs.
1/4-20	1	PCF 1420 1	23/64	7/64	FER04-FHD	11 lbs.
1/4-20	1-1/8	PCF 1420 118	23/64	7/64	FER04-FHD	13.8 lbs.
1/4-20	1-1/4	PCF 1420 114	23/64	7/64	FER04-FHD	13.8 lbs.
1/4-20	1-3/8	PCF 1420 138	23/64	7/64	FER04-FHD	16.5 lbs.
1/4-20	1-1/2	PCF 1420 112	23/64	7/64	FER04-FHD	16.5 lbs.
1/4-20	1-5/8	PCF 1420 158	23/64	7/64	FER04-FHD	19.3 lbs.
1/4-20	2	PCF 1420 2	23/64	7/64	FER04-FHD	22 lbs.

\*Also available in metric. See ferrule spec sheet for ferrule specs.

**Full Thread Studs** are used in all types of applications. They can be welded to a flat surface, or to the inside or outside of an angle.

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**Material:** Low carbon steel, ASTM A29, 1010 1020. PCF studs are also available in weldable stainless steel. Type 302 is the most commonly used. Other grades of stainless steel (except Type 303) are available when required.

Low Carbon Mechanical Property Requirements	
Tensile Strength	61,000 psi min.
Yield Strength	49,000 psi min.
Elongation (% in 2 in.)	17% min.
Elongation (% in 5x dia.)	14% min.
Reduction of Area	50% min.

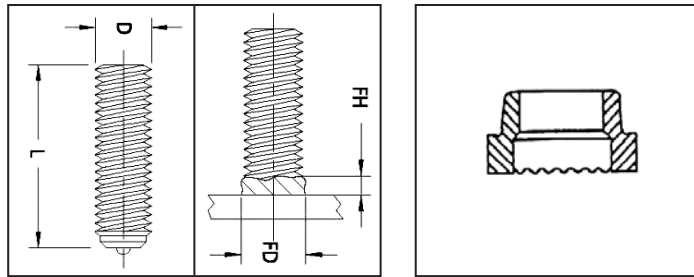
HOW TO ORDER
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<b>EXAMPLE</b>
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# PCF FULL THREAD STUDS



D Diameter	L Length	SWP Part#	FD Weld Fillet Diameter	FH Weld Fillet Height	Ferrule Part Number	1,000 Piece Weight
5/16-18	5/8	PCF 51618 58	7/16	7/64	FER05-FHD	12.8 lbs.
5/16-18	3/4	PCF 51618 34	7/16	7/64	FER05-FHD	12.8 lbs.
5/16-18	7/8	PCF 51618 78	7/16	7/64	FER05-FHD	17 lbs.
5/16-18	1	PCF 51618 1	7/16	7/64	FER05-FHD	17 lbs.
5/16-18	1-1/8	PCF 51618 118	7/16	7/64	FER05-FHD	21.3 lbs.
5/16-18	1-1/4	PCF 51618 114	7/16	7/64	FER05-FHD	21.3 lbs.
5/16-18	1-3/8	PCF 51618 138	7/16	7/64	FER05-FHD	25.5 lbs.
5/16-18	1-1/2	PCF 51618 112	7/16	7/64	FER05-FHD	25.5 lbs.

\*Also available in metric. See ferrule spec sheet for ferrule specs.

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Yield Strength	49,000 psi min.
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Elongation (% in 5x dia.)	14% min.
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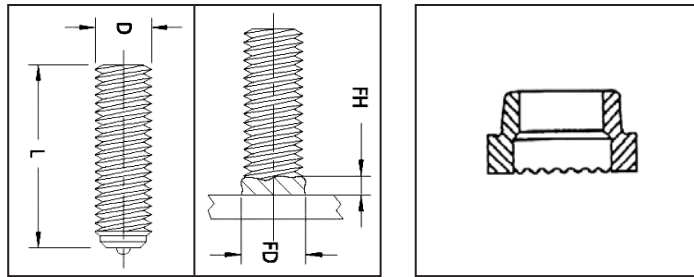
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<b>EXAMPLE</b>
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# PCF FULL THREAD STUDS



D Diameter	L Length	SWP Part#	FD Weld Fillet Diameter	FH Weld Fillet Height	Ferrule Part Number	1,000 Piece Weight
3/8-16	3/4	PCF 3816 34	1/2	1/8	FER06-FHD	18.8 lbs.
3/8-16	7/8	PCF 3816 78	1/2	1/8	FER06-FHD	25 lbs.
3/8-16	1	PCF 3816 1	1/2	1/8	FER06-FHD	25 lbs.
3/8-16	1-1/8	PCF 3816 118	1/2	1/8	FER06-FHD	31.3 lbs.
3/8-16	1-1/4	PCF 3816 114	1/2	1/8	FER06-FHD	31.3 lbs.
3/8-16	1-3/8	PCF 3816 138	1/2	1/8	FER06-FHD	37.5 lbs.
3/8-16	1-1/2	PCF 3816 112	1/2	1/8	FER06-FHD	37.5 lbs.
3/8-16	1-3/4	PCF 3816 134	1/2	1/8	FER06-FHD	43.8 lbs.

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Yield Strength	49,000 psi min.
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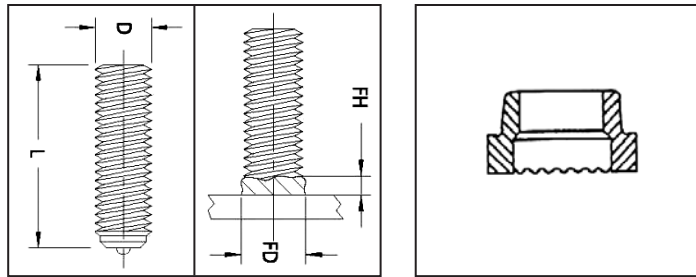
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# PCF FULL THREAD STUDS



<b>D</b> Diameter	<b>L</b> Length	<b>SWP</b> <b>Part#</b>	<b>FD</b> Weld Fillet Diameter	<b>FH</b> Weld Fillet Height	<b>Ferrule</b> Part Number	1,000 Piece Weight
1/2-13	7/8	PCF 1213 78	11/16	5/32	FER08-FHD	46 lbs.
1/2-13	1	PCF 1213 1	11/16	5/32	FER08-FHD	46 lbs.
1/2-13	1-1/8	PCF 1213 118	11/16	5/32	FER08-FHD	57.5 lbs.
1/2-13	1-1/4	PCF 1213 114	11/16	5/32	FER08-FHD	57.5 lbs.
1/2-13	1-3/8	PCF 1213 138	11/16	5/32	FER08-FHD	69 lbs.
1/2-13	1-1/2	PCF 1213 112	11/16	5/32	FER08-FHD	69 lbs.
1/2-13	1-5/8	PCF 1213 158	11/16	5/32	FER08-FHD	80.5 lbs.

\*Also available in metric. See ferrule spec sheet for ferrule specs.

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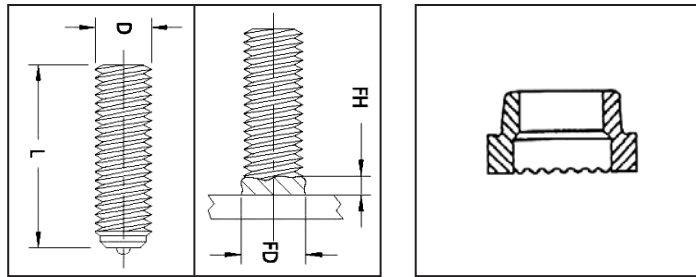
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# PCF FULL THREAD STUDS



D Diameter	L Length	SWP Part#	FD Weld Fillet Diameter	FH Weld Fillet Height	Ferrule Part Number	1,000 Piece Weight
5/8	1	PCF 5811 1	7/8	3/16	FER10-FHD	70 lbs.
5/8	1-1/4	PCF 5811 114	7/8	3/16	FER10-FHD	87.5 lbs.
5/8	1-1/2	PCF 5811 112	7/8	3/16	FER10-FHD	105 lbs.
5/8	2	PCF 5811 2	7/8	3/16	FER10-FHD	140 lbs.
5/8	2-1/4	PCF 5811 214	7/8	3/16	FER10-FHD	157.5 lbs.
5/8	2-1/2	PCF 5811 212	7/8	3/16	FER10-FHD	175 lbs.
5/8	3	PCF 5811 3	7/8	3/16	FER10-FHD	210 lbs.

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HOW TO ORDER
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<b>EXAMPLE</b>
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When ordering Stainless Steel, SS will be added to the part number. Example: Partial Thread Stainless Steel 1/4-20x1"= PCPSS 1420 1

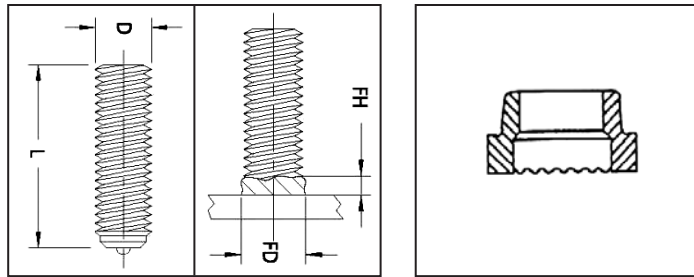
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# PCF FULL THREAD STUDS



<b>D</b> Diameter	<b>L</b> Length	<b>SWP</b> <b>Part#</b>	<b>FD</b> Weld Fillet Diameter	<b>FH</b> Weld Fillet Height	<b>Ferrule</b> Part Number	1,000 Piece Weight
3/4	1	PCF 3410 1	1-1/16	1/4	FER12-F	133.8 lbs.
3/4	1-1/4	PCF 3410 114	1-1/16	1/4	FER12-F	133.8 lbs.
3/4	1-1/2	PCF 3410 112	1-1/16	1/4	FER12-F	160.5 lbs.
3/4	1-3/4	PCF 3410 134	1-1/16	1/4	FER12-F	187.3 lbs.
3/4	2	PCF 3410 2	1-1/16	1/4	FER12-F	214 lbs.
3/4	2-1/4	PCF 3410 214	1-1/16	1/4	FER12-F	240.8 lbs.
3/4	2-1/2	PCF 3410 212	1-1/16	1/4	FER12-F	267.5 lbs.

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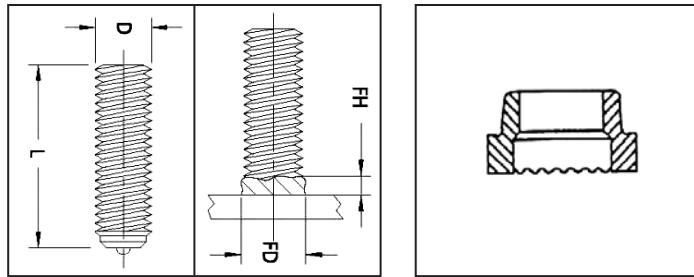
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# PCF FULL THREAD STUDS



<b>D</b> Diameter	<b>L</b> Length	<b>SWP</b> <b>Part#</b>	<b>FD</b> Weld Fillet Diameter	<b>FH</b> Weld Fillet Height	<b>Ferrule</b> Part Number	1,000 Piece Weight
7/8	2	PCF 789 2	1-1/8	5/16	FER14-F	325 lbs.
7/8	2-1/2	PCF 789 212	1-1/8	5/16	FER14-F	406.3 lbs.
7/8	3	PCF 789 3	1-1/8	5/16	FER14-F	487.5 lbs.
7/8	3-1/2	PCF 789 312	1-1/8	5/16	FER14-F	568.8 lbs.
7/8	4	PCF 789 4	1-1/8	5/16	FER14-F	650 lbs.
7/8	4-1/2	PCF 789 412	1-1/8	5/16	FER14-F	731.3 lbs.
7/8	5	PCF 789 5	1-1/8	5/16	FER14-F	812.5 lbs.

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**Length:** Length is listed before weld. Studs diameters 1/2" and below will be approx. 1/8" shorter after welding. 5/8" will be approx. 3/16" shorter after welding. Stud Welding Products PCF Studs can be made in any length above the standard minimum.

**Material:** Low carbon steel, ASTM A29, 1010 1020. PCF studs are also available in weldable stainless steel. Type 302 is the most commonly used. Other grades of stainless steel (except Type 303) are available when required.

<b>Low Carbon Mechanical Property Requirements</b>	
Tensile Strength	61,000 psi min.
Yield Strength	49,000 psi min.
Elongation (% in 2 in.)	17% min.
Elongation (% in 5x dia.)	14% min.
Reduction of Area	50% min.

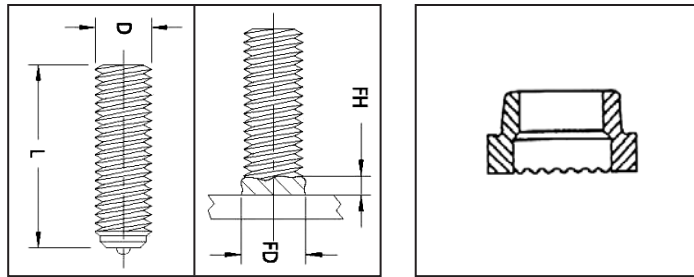
<b>HOW TO ORDER</b>
Specify diameter, thread size before weld (BW) length, type of material.
<b>EXAMPLE</b>
1/2-13 x 1-1/8" (BW) partial thread (PT), mild steel
When ordering Stainless Steel, SS will be added to the part number. Example: Partial Thread Stainless Steel 1/4-20x1"= PCPSS 1420 1

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# PCF FULL THREAD STUDS



<b>D</b> Diameter	<b>L</b> Length	<b>SWP</b> Part#	<b>FD</b> Weld Fillet Diameter	<b>FH</b> Weld Fillet Height	<b>Ferrule</b> Part Number	1,000 Piece Weight
1	2	PCF 18 2	1-3/8	3/8	FER16-F	
1	2-1/2	PCF 18 212	1-3/8	3/8	FER16-F	
1	3	PCF 18 3	1-3/8	3/8	FER16-F	
1	3-1/2	PCF 18 312	1-3/8	3/8	FER16-F	
1	4	PCF 18 4	1-3/8	3/8	FER16-F	
1	4-1/2	PCF 18 412	1-3/8	3/8	FER16-F	
1	5	PCF 18 5	1-3/8	3/8	FER16-F	

\*Also available in metric. See ferrule spec sheet for ferrule specs.

**Full Thread Studs** are used in all types of applications. They can be welded to a flat surface, or to the inside or outside of an angle.

**Length:** Length is listed before weld. Studs diameters 1/2" and below will be approx. 1/8" shorter after welding. 5/8" will be approx. 3/16" shorter after welding. Stud Welding Products PCF Studs can be made in any length above the standard minimum.

**Material:** Low carbon steel, ASTM A29, 1010 1020. PCF studs are also available in weldable stainless steel. Type 302 is the most commonly used. Other grades of stainless steel (except Type 303) are available when required.

<b>Low Carbon Mechanical Property Requirements</b>	
Tensile Strength	61,000 psi min.
Yield Strength	49,000 psi min.
Elongation (% in 2 in.)	17% min.
Elongation (% in 5x dia.)	14% min.
Reduction of Area	50% min.

<b>HOW TO ORDER</b>
Specify diameter, thread size before weld (BW) length, type of material.
<b>EXAMPLE</b>
1/2-13 x 1-1/8" (BW) partial thread (PT), mild steel
When ordering Stainless Steel, SS will be added to the part number. Example: Partial Thread Stainless Steel 1/4-20x1"= PCPSS 1420 1

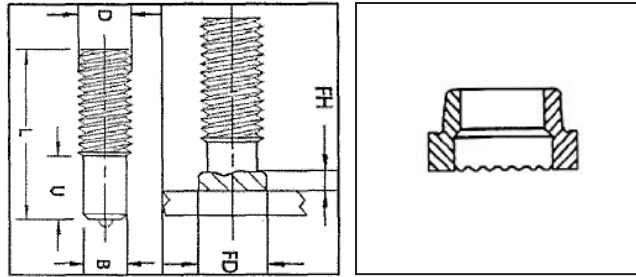
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**RB**

# REDUCED WELD BASE THREADED STUD



<b>D</b> Diameter	<b>L</b> Min Length	<b>SWP</b> <b>Part#</b>	<b>B</b> Base Diam- eter	<b>U</b> Minimum Base Length	<b>FD</b> Weld Fillet Diameter	<b>FH</b> Weld Fillet Height	<b>Ferrule</b> Part Number
3/8-16	3/4	RB 3816 34	.310	3/8	7/16	7/64	FER06-R
7/16-14	7/8	RB 71614 78	.373	3/8	1/2	1/8	FER06-R
1/2-13	7/8	RB 1213 78	.37	7/16	19/32	9/64	FER06-R
5/8-11	1-1/2	RB 5811 112	.500	1/2	11/16	5/32	FER06-R
3/4-10	1-3/16	RB 3410 1316	.625	5/8	7/8	3/16	FER06-R
7/8-9	1-1/2	RB 789 112	.750	1	1-1/16	1/4	FER06-R
1-8	2	RB 18 2	.875	1	1-1/8	5/16	FER06-R

\*Also available in metric. See ferrule spec sheet for ferrule specs.

**RB Studs** are used in all types of applications. They can be welded to a flat surface, or to the inside or outside of an angle.

**Length:** Length is listed before weld. Studs diameters 1/2" and below will be approx. 1/8" shorter after welding. 5/8" will be approx. 3/16" shorter after welding. Tru-Deck applications burn off 3/8". Stud Welding Products RB Studs can be made in any length above the standard minimum.

**Material:** Low carbon steel, ASTM A29, 1010 1020. RB studs are also available in weldable stainless steel. Type 302 is the most commonly used. Other grades of stainless steel (except Type 303) are available when required.

<b>Low Carbon Mechanical Property Requirements</b>	
Tensile Strength	61,000 psi min.
Yield Strength	49,000 psi min.
Elongation (% in 2 in.)	17% min.
Elongation (% in 5x dia.)	14% min.
Reduction of Area	50% min.

### **HOW TO ORDER**

Specify diameter, thread size before weld (BW) length, type of material.

#### **EXAMPLE**

1/2-13 x 1-1/8" (BW) partial thread (PT), mild steel

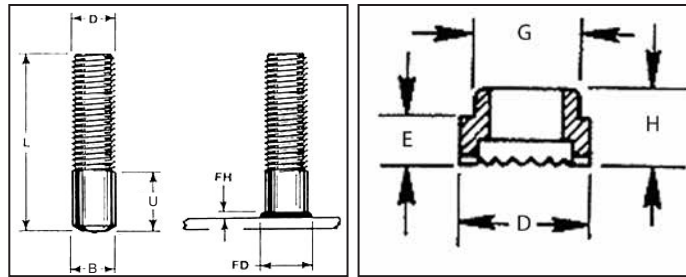
When ordering Stainless Steel, SS will be added to the part number. Example: Partial Thread Stainless Steel 1/4-20x1"= PCPSS 1420 1

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# FB FULL BASE THREADED STUD



<b>D</b> Diameter	<b>L</b> Length	<b>SWP</b> <b>Part#</b>	<b>B</b> Base Diameter	<b>U</b> Minimum Base Length	<b>FD</b> Weld Fillet Diameter	<b>FH</b> Weld Fillet Height	<b>Ferrule</b> Part Number
1/4-20	25/32	FB 1420 2532	1/4	.187	23/64	7/64	FER04-FHD
5/16-18	25/32	FB 51618 2532	5/16	.250	7/16	7/64	FER05-FHD
3/8-16	25/32	FB 3816 2532	3/8	.265	1/2	1/8	FER06-FHD
7/16-14	25/32	FB 71614 2532	7/16	.281	19/32	9/64	FER07-FHD
1/2-13	13/16	FB 1213 1316	1/2	.296	11/16	5/32	FER08-FHD
5/8-11	31/32	FB 5811 3132	5/8	.359	7/8	3/16	FER10-FHD
3/4-10	1-15/64	FB 3410 11564	3/4	.500	1-1/16	1/4	FER12-F
7/8-9	1-1/2	FB 789 112	7/8	.625	1-1/8	5/16	FER14-F
1-8	1-41/64	FB 18 14164	1	.750	1-3/8	3/8	FER16-FHD

\*also available in aluminum

**Full Base Studs** are used where additional shear strength is required at the weld.

**Length:** Length is listed before weld. Studs diameters 1/2" and below will be approx. 1/8" shorter after welding. 5/8" will be approx. 3/16" shorter after welding. Stud Welding Products PCF Studs can be made in any length above the standard minimum.

**Material:** Low carbon steel, ASTM A29 1010-1020. Stainless steel 18-8.

<b>Low Carbon Mechanical Property Requirements</b>	
Tensile Strength	61,000 psi min.
Yield Strength	49,000 psi min.
Elongation (% in 2 in.)	17% min.
Elongation (% in 5x dia.)	14% min.
Reduction of Area	50% min.

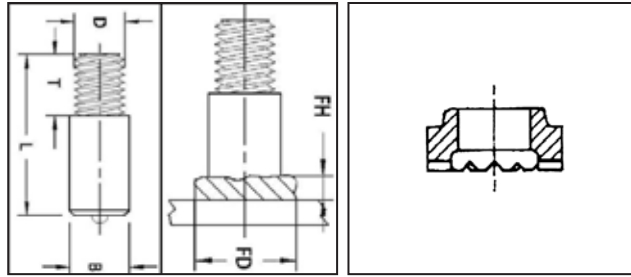
<b>HOW TO ORDER</b>
Specify diameter, thread size before weld (BW) length, type of material.
<b>EXAMPLE</b>
1/2-13 x 1-1/8" (BW) partial thread (PT), mild steel
When ordering Stainless Steel, SS will be added to the part number. Example: Partial Thread Stainless Steel 1/4-20x1"= PCPSS 1420 1

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# SS SHOULDER STUDS



D Thread Diameter	T Thread Length	SWP Part#	B Base Diameter	T Stud Length	Ferrule Part Number
1/4-20	3/8	SS 1420 38	3/8	3/4	FER06 FHD
5/16-18	7/16	SS 51618 716	7/16	7/8	FER07 FHD
3/8-16	1/2	SS 3816 12	1/2	1	FER08 FHD
1/2-13	11/16	SS 1213 1116	5/8	1-1/4	FER10 FHD
5/8-11	11/16	SS 5811 1116	3/4	1-9/16	FER12 F
3/4-10	13/16	SS 3410 1316	7/8	1-7/8	FER14 F
7/8-	13/16	SS 78 1316	1/4	1-7/8	FER16 F

\*Also available in metric. See ferrule spec sheet for ferrule specs.

<b>HOW TO ORDER</b>	
Specify diameter, thread size before weld (BW) length, type of material.	
<b>EXAMPLE</b>	
1/2-13 x 1-1/8" (BW) partial thread (PT), mild steel	
When ordering Stainless Steel, SS will be added to the part number. Example: Partial Thread Stainless Steel 1/4-20x1"= PCPSS 1420 1	
Diameters 9/16" and below will be 1/8" shorter AFTER weld	
Diameters " 5/8 - 7/8" will be 3/16" shorter AFTER weld	
Diameters 1 - 1 1/4" will be 1/4" shorter AFTER weld	

**Shoulder Studs** are used where additional shear strength is required at the weld.

**Material:** Low carbon steel, ASTM A 108 1010-1020. Stainless steel 18-8.

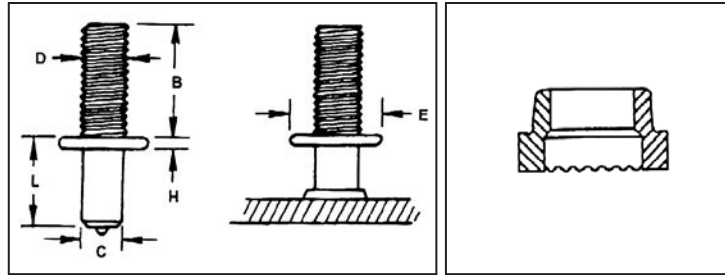
<b>Low Carbon Mechanical Property Requirements</b>		<b>Stainless Steel</b>
Tensile Strength	61,000 psi min.	Material: Stainless Steel AISI grade - 302/304/316. Other grades available upon request.
Yield Strength	49,000 psi min.	
Elongation (% in 2 in.)	17% min.	Mechanical Properties: Values for various grades available upon request.
Elongation (% in 5x dia.)	14% min.	
Reduction of Area	50% min.	

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# CS COLLAR STUDS



D	Std. B	SWP Part#	Min. L.	C	E	H	Ferrule Part Number
1/4-20	5/8	call	3/8	.214	1/2	3/32	FER04 C
5/16-18	5/8	call	3/8	.273	5/8	3/32	FER05 C
3/8-16	5/8	call	3/8	.331	5/8	3/32	FER06 C
1/2-13	3/4	call	1/2	.446	3/4	3/32	FER08 C

\*Also available in metric. Other sizes available. See ferrule spec sheet for ferrule specs.

HOW TO ORDER
Specify diameter, thread size before weld (BW) length, type of material.
<b>EXAMPLE</b>
CK .330 x 4 1/8 w/ 3/8-16 x 5/8
When ordering Stainless Steel, SS will be added to the part number.
Diameters 9/16" and below will be 1/8" shorter AFTER weld
Diameters " 5/8 - 7/8" will be 3/16" shorter AFTER weld
Diameters 1- 1 1/4" will be 1/4" shorter AFTER weld

**Collar Studs** are used to provide a spacer between the parent metal and the part secured on threaded extension.

**Material:** Low carbon steel, ASTM A 108 1010-1020. Stainless steel 18-8.

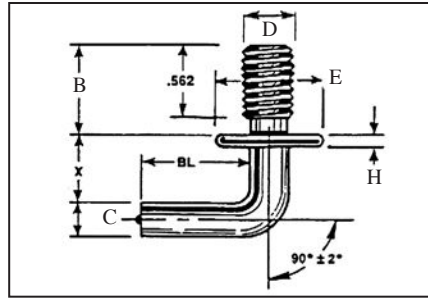
Low Carbon Mechanical Property Requirements		Stainless Steel
Tensile Strength	61,000 psi min.	Material: Stainless Steel AISI grade - 302/304/316. Other grades available upon request.
Yield Strength	49,000 psi min.	
Elongation (% in 2 in.)	17% min.	Mechanical Properties: Values for various grades available upon request.
Elongation (% in 5x dia.)	14% min.	
Reduction of Area	50% min.	

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# BCS BENT COLLAR STUDS



D	B	SWP Part#	Min. BL	C	E	H	X
3/8-16	1.375	BC 3816 138	.625	.331	5/8	.109	5/8

\*Also available in metric. See ferrule spec sheet for ferrule specs.

### HOW TO ORDER

Specify diameter, thread size before weld (BW) length, type of material.

#### EXAMPLE

C x BLW D x B

When ordering Stainless Steel, SS will be added to the part number.

Diameters 9/16" and below will be 1/8" shorter AFTER weld  
 Diameters " 5/8 - 7/8" will be 3/16" shorter AFTER weld  
 Diameters 1 - 1 1/4" will be 1/4" shorter AFTER weld

**Threads:** Standard thread is UNC-2A (Rolled when possible), other threads are available upon request. Other diameters available upon request.

**Material:** Low carbon steel, C - 0.23% max., P - 0.04% max., Mn - 0.60% max., S - 0.05% max.

Low Carbon Mechanical Property Requirements		Stainless Steel
Tensile Strength	61,000 psi min.	Material: Stainless Steel AISI grade - 302/304/316. Other grades available upon request.
Yield Strength	49,000 psi min.	
Elongation (% in 2 in.)	17% min.	Mechanical Properties: Values for various grades available upon request.
Elongation (% in 5x dia.)	14% min.	
Reduction of Area	50% min.	

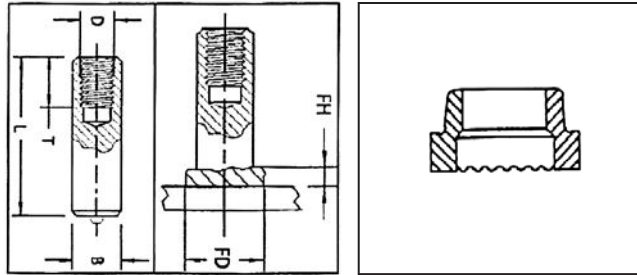
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# TP INTERNALLY TAPPED STUD FULL WELD BASE



<b>B</b> Stud Diameter	<b>D</b> Tap Diameter	<b>L</b> Length (BW)	<b>T</b> Tap Depth	<b>SWP Part#</b>	<b>Ferrule Part Number</b>
1/4	#8 32	5/8	1/4	call	FER04-FHD
5/16	#10 24	5/8	5/16	call	FER05-FHD
3/8	1/4 20	13/16	3/8	call	FER06-FHD
7/16	5/16 18	1	1/2	call	FER07-FHD
1/2	3/8 16	1-1/8	9/16	call	FER08-FHD
5/8	7/16 14	1-3/16	5/8	call	FER10-FHD
3/4	1/2 13	1-7/16	3/4	call	FER12-FHD
7/8	5/8 11	1-5/8	15/16	call	FER14-FHD
1	3/4 10	2-1/4	1-1/8	call	FER16-FHD

\*Also available in metric. See ferrule spec sheet for ferrule specs.

<b>HOW TO ORDER</b>
Specify base diameter, finished length before weld (BW) length, tap size, tap depth and type of material.
<b>EXAMPLE</b>
5/8 x 1-1/4" (BW) Tapped Stud (TS) with a 3/8-16 x 7/16 tap, mild steel
When ordering Stainless Steel, SS will be added to the part number.
Diameters 9/16" and below will be 1/8" shorter AFTER weld
Diameters " 5/8 - 7/8" will be 3/16" shorter AFTER weld
Diameters 1 - 1 1/4" will be 1/4" shorter AFTER weld

**Tapped Studs** are used in all types of applications. They can be welded to a flat surface, or to the inside or outside of an angle.

**Length:** Length is listed before weld. Studs Welding Products TP Studs can be made in any length above the standard minimum.

**Material:** Low carbon steel, ASTM A29, 1010 1020. TP studs are also available in weldable stainless steel.

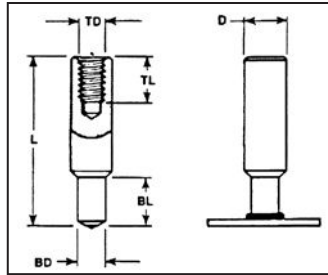
<b>Low Carbon Mechanical Property Requirements</b>		<b>Stainless Steel</b>
Tensile Strength	61,000 psi min.	Material: Stainless Steel AISI grade - 302/304/316. Other grades available upon request.
Yield Strength	49,000 psi min.	
Elongation (% in 2 in.)	17% min.	
Elongation (% in 5x dia.)	14% min.	Mechanical Properties: Values for various grades available upon request.
Reduction of Area	50% min.	

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# TP INTERNALLY TAPPED STUD REDUCED WELD BASE



D	Min L	TD	TL*	SWP Part#	BD	BL	Ferrule Part Number
3/8	1-1/2	1/4-20	3/8	call	.250	7/16	FS250
1/2	1-1/2	3/8-16	9/16	call	.375	7/16	FS375
5/8	1-1/2	7/16-14	21/32	call	.500	1/2	FS500
3/4	1-1/2	7/16-14	21/32	call	.500	1/2	FS500
7/8	2	5/8-11	15/16	call	.625	5/8	FS625
1	2-1/2	3/4-10	1	call	.75	5/8	FS750

\*Maximum standard tap depth equals 1-1/2 times tap diameter.

Taps: Standard tap is UNC-2B, other taps are available.

HOW TO ORDER
Specify base diameter, finished length before weld (BW) length, tap size, tap depth and type of material.
<b>EXAMPLE</b>
5/8 x 1-1/4" (BW) Tapped Stud (TS) with a 3/8-16 x 7/16 tap, mild steel
When ordering Stainless Steel, SS will be added to the part number.
Diameters 9/16" and below will be 1/8" shorter AFTER weld
Diameters " 5/8 - 7/8" will be 3/16" shorter AFTER weld
Diameters 1- 1 1/4" will be 1/4" shorter AFTER weld

**Tapped Studs** are used in all types of applications. They can be welded to a flat surface, or to the inside or outside of an angle.

**Length:** Length is listed before weld. Studs Welding Products TP Studs can be made in any length above the standard minimum.

**Material:** Low carbon steel, ASTM A29, 1010 1020. TP studs are also available in weldable stainless steel.

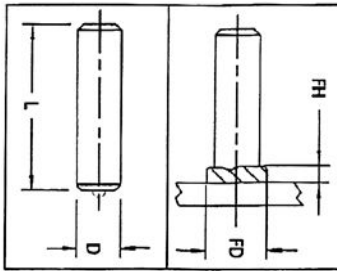
Low Carbon Mechanical Property Requirements		Stainless Steel
Tensile Strength	61,000 psi min.	Material: Stainless Steel AISI grade - 302/304/305 std. Other grades available upon request.
Yield Strength	49,000 psi min.	
Elongation (% in 2 in.)	17% min.	
Elongation (% in 5x dia.)	14% min.	Mechanical Properties: Values for various grades available upon request.
Reduction of Area	50% min.	

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# NT NO THREAD STUD FULL WELD BASE



D Stud Diameter	L Length (BW)	SWP Part#	FD Weld Fillet Diameter	FH Weld Fillet Height	Ferrule Part Number
1/4	3/4	NT 14 78	23/64	7/64	FER04-FHD
5/16	3/4	NT 516 78	7/16	7/64	FER05-FHD
3/8	3/4	NT 38 34	1/2	1/8	FER06-FHD
7/16	3/4	NT 716 34	19/32	9/64	FER07-FHD
1/2	3/4	NT 12 34	11/16	5/32	FER08-FHD
5/8	1	NT 58 1	7/8	3/16	FER10-FHD
3/4	1	NT 34 1	1-1/16	1/4	FER12-F
7/8	1-1/2	NT 78 112	1-1/8	5/16	FER14-F
1	1-1/2	NT 1 112	1-3/8	3/8	FER16-F

\*Also available in metric. See ferrule spec sheet for ferrule specs.

**NT Studs** are used in all types of applications. They can be welded to a flat surface, or to the inside or outside of an angle.

**Length:** Length is listed before weld. Stud Welding Products NT Studs can be made in any length above the standard minimum.

**Material:** Low carbon steel, ASTM A29, 1010 1020. NT studs are also available in weldable stainless steel.

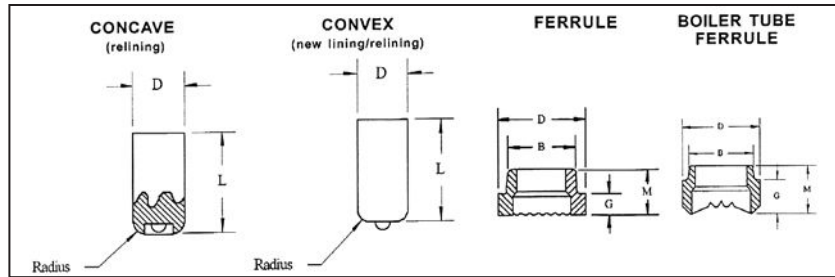
Low Carbon Mechanical Property Requirements		<b>HOW TO ORDER</b> Specify diameter, thread size before weld (BW) length, type of material. <b>EXAMPLE</b> 1/2 x 1 No Thread Pin  When ordering Stainless Steel, SS will be added to the part number.  Diameters 9/16" and below will be 1/8" shorter AFTER weld Diameters " 5/8 - 7/8" will be 3/16" shorter AFTER weld Diameters 1 - 1 1/4" will be 1/4" shorter AFTER weld
Tensile Strength	55,000 psi min.	
Yield Strength	50,000 psi min.	
Elongation (% in 2 in.)	17% min.	
Elongation (% in 5x dia.)	14% min.	
Reduction of Area	50% min.	

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# BT BOILER TUBE PINS



D	Length before weld	SWP Part#	Ferrule Part Number
3/8	3/4	NT 38 34	FER06-F
1/2	3/4	NT 12 34	FER08-F

Pipe diameter equals radius x 2.

**Boiler Tube Heat Transfer Pins** are designed for power, or waste boiler/incinerator lining and re-lining. Specify auto feed quality required.

**Material:** Low carbon steel, ASTM 108. Stainless steel 430, 302, 304, 310, 316 and 320.

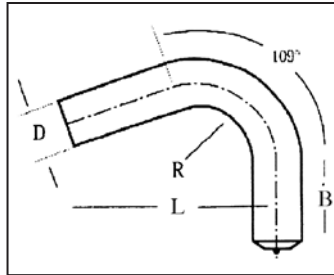
Low Carbon Mechanical Property Requirements		Stainless Steel
Tensile Strength	61,000 psi min.	Material: Stainless Steel AISI grade - 302/304/305 std. Other grades available upon request.  Mechanical Properties: Values for various grades available upon request.
Yield Strength	49,000 psi min.	
Elongation (% in 2 in.)	17% min.	
Elongation (% in 5x dia.)	14% min.	
Reduction of Area	50% min.	

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# RH ROPE HOOK STUDS



D	B	L	SWP Part#	Ferrule Part Number
7/16	.687	1.875	RH 716 90 B	FER07-FHD

**Rope hook studs** are designed to be welded to trucks, trailers and other vehicles to provide a means of securing tarpaulins with ropes. Studs can be rapidly applied, compared to manual welding of J-bent rods, the Rope Hook studs are ideal in situations where large quantities of studs must be applied.

Rope Hook studs can be welded to the perimeter of multistory buildings to facilitate the securing of ropes during building construction. Rope Hook studs meet OSHA regulations for such applications.

**Material:** Available in low carbon mild steel and stainless steel 302 and 306.

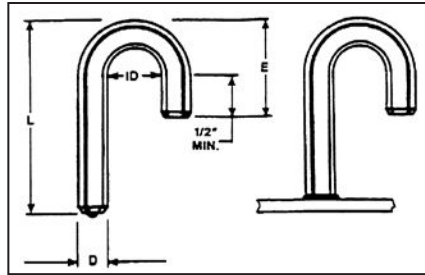
Low Carbon Mechanical Property Requirements		Stainless Steel
Tensile Strength	61,000 psi min.	Material: Stainless Steel AISI grade - 302/304/305 std. Other grades available upon request.  Mechanical Properties: Values for various grades available upon request.
Yield Strength	49,000 psi min.	
Elongation (% in 2 in.)	17% min.	
Elongation (% in 5x dia.)	14% min.	
Reduction of Area	50% min.	

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# JB “J” BOLT STUD



D	MIN L	SWP Part#	MIN ID	MIN E	Ferrule Part Number
1/4	1-1/4	JB 14 114	5/8	1-1/8	FER04-FHD
5/16	1-1/2	JB 516 112	3/4	1-1/4	FER05-FHD
3/8	1-5/8	JB 38 158	7/8	1-3/8	FER06-FHD
7/16	1-3/4	JB 716 134	1	1-1/2	FER07-FHD
1/2	2	JB 12 2	1	1-1/2	FER08-FHD
5/8	2-1/2	JB 58-212	1-1/2	1-7/8	FER10-FHD

\*Also available in metric. See ferrule spec sheet for ferrule specs.

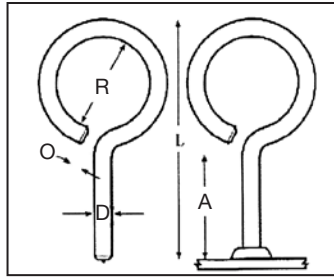
Low Carbon Mechanical Property Requirements		Stainless Steel
Tensile Strength	60,000 psi min.	Material: Stainless Steel AISI grade - 302/304/316 std. Other grades available upon request.  Mechanical Properties: Values for various grades available upon request.
Yield Strength	50,000 psi min.	
Elongation (% in 2 in.)	20% (in 2")	
Elongation (% in 5x dia.)	20% (in 2")	

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# EB EYEBOLT STUDS



Stud Diameter <b>D</b>	Length <b>L</b>	Min <b>R</b>	Min <b>A</b>	Max Opening <b>O</b>	<b>SWP Part#</b>	<b>Ferrule Part Number</b>
.187	1.875	.750	.750	.187	call	FER03-FHD
.250	1.750	.500	.750	.250	call	FER04-FHD
.312	1.812	.437	.750	.312	call	FER05-FHD
.375	2.562	.875	.937	.375	call	FER06-FHD
.437	3.000	1.000	1.125	.437	call	FER07-FHD
.500	3.562	1.250	1.312	.500	call	FER08-FHD

**Eyebolt studs** are welded to a variety of parts or structures to provide a means of attachment to the assembly or a means of lifting parts.

The length of the weld base portion of the stud is needed for the ferrule height and the burn off, or length reduction, during the stud welding process.

**Material:** Available in low carbon mild steel and stainless steel 302 and 304.

Low Carbon Mechanical Property Requirements		Stainless Steel
Tensile Strength	61,000 psi min.	Material: Stainless Steel AISI grade - 302/304/305 std. Other grades available upon request.  Mechanical Properties: Values for various grades available upon request.
Yield Strength	49,000 psi min.	
Elongation (% in 2 in.)	17% min.	
Elongation (% in 5x dia.)	14% min.	
Reduction of Area	50% min.	

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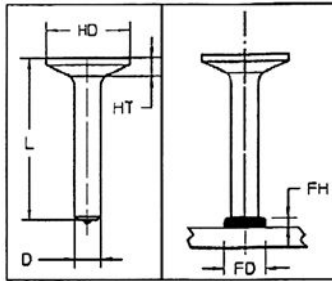
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# PSR PUNCHING SHEAR RESISTOR

## HEADED CONCRETE ANCHOR – FULL WELD BASE

TYPE PSR STUD  
TYPE FHD FERRULE SUPPLIED



D Diameter	L	SWP Part#	HD Head Diameter	HT Head Height	FD Fillet Diameter	FH Fillet Height	Ferrule Part Number
3/8	3-7/16	PSR 38 3716	1.190	.260	1/2	1/8	FER06-HD
1/2	2-5/8	PSR 12 258	1.580	.330	11/16	5/32	FER08-HD
5/8	3-3/4	PSR 58 334	1.980	.400	7/8	3/16	FER10-HD
3/4	4-3/8	PSR 34 438	2.370	.470	1-1/16	1/4	FER12-HD

1) Stud Welding Products studs are available in any length above the standard minimum.

2) Listed Ferrule above is for the standard flat down hand position.

Diameters 9/16" and below will be 1/8" shorter AFTER weld  
 Diameters " 5/8 - 7/8" will be 3/16" shorter AFTER weld  
 Diameters 1- 1 1/4" will be 1/4" shorter AFTER weld

Low Carbon Mechanical Property Requirements		Stainless Steel
Tensile Strength	65,000 psi min.	Material: Stainless Steel AISI grade - 302/304/316. Other grades available upon request.  Mechanical Properties: Values for various grades available upon request.
Yield Strength	51,000 psi min.	
Elongation (% in 2 in.)	20% min.	
Elongation (% in 5x dia.)	15% min.	
Reduction of Area	50% min.	

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