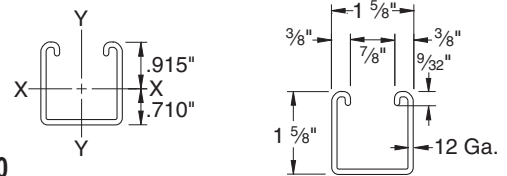
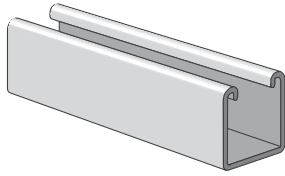


# CHANNEL

Finish: Plain, Painted Green, or Pregalvanized Order By: No., Length and Finish



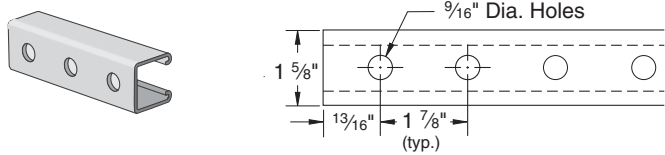
## PS 200 – Steel Channel (1<sup>5</sup>/<sub>8</sub>" x 1<sup>5</sup>/<sub>8</sub>" x 12 ga.)



ELEMENTS OF SECTION – PS 200

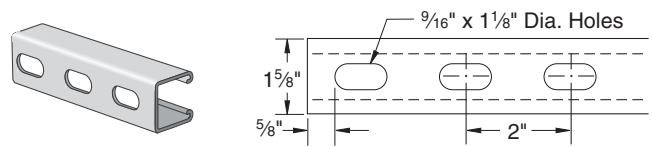
Weight (lbs./100 ft.)	Area of Section (Inch <sup>2</sup> )	X-X Axis			Y-Y Axis		
		Moment of Inertia (Inch <sup>4</sup> )	Section Modulus (Inch <sup>3</sup> )	Radius of Gyration (Inch)	Moment of Inertia (Inch <sup>4</sup> )	Section Modulus (Inch <sup>3</sup> )	Radius of Gyration (Inch)
189	0.555	0.185	0.202	0.577	0.236	0.290	0.651

### PS 200 H - Channel with Holes



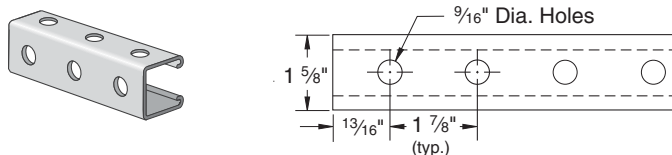
Weight: 186 lbs./100 ft.

### PS 200 EH – Channel with Elongated Holes



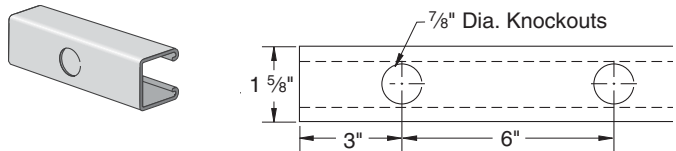
Weight: 185 lbs./100 ft.

### PS 200 H3 - Channel with Holes



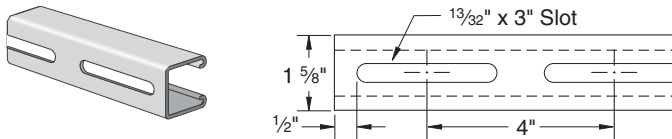
Weight: 175 lbs./100 ft.

### PS 200 K06 – Channel with Knockouts



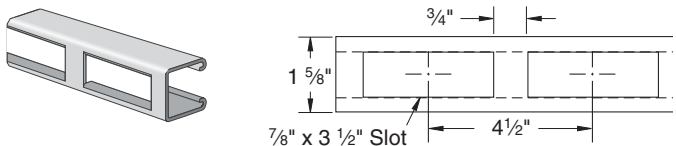
Weight: 189 lbs./100 ft.

### PS 200 S - Channel with Slots



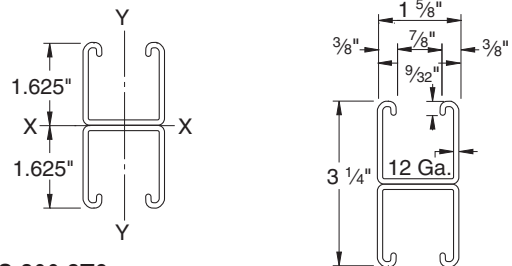
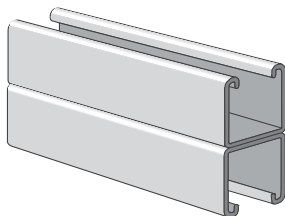
Weight: 185 lbs./100 ft.

### PS 200 SB – Channel with Slotted Back



Weight: 173 lbs./100 ft.

## PS 200 2T3 – Steel Channel (1<sup>5</sup>/<sub>8</sub>" x 3<sup>1</sup>/<sub>4</sub>" x 12 ga.)



ELEMENTS OF SECTION – PS 200 2T3

Weight (lbs./100 ft.)	Area of Section (Inch <sup>2</sup> )	X-X Axis			Y-Y Axis		
		Moment of Inertia (Inch <sup>4</sup> )	Section Modulus (Inch <sup>3</sup> )	Radius of Gyration (Inch)	Moment of Inertia (Inch <sup>4</sup> )	Section Modulus (Inch <sup>3</sup> )	Radius of Gyration (Inch)
378	1.111	0.928	0.571	0.914	0.471	0.580	0.651



Channel

## PS 200 & PS 200 2T3 – Load Data

### BEAM LOADING – PS 200

Span (in)	Max Allowable Uniform Load (lb)	Defl. at Uniform Load (in)	Uniform Loading at Deflection		
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
24	1,690	0.06	1,690	1,690	1,690
36	1,130	0.13	1,130	1,130	900
48	850	0.22	850	760	500
60	680	0.35	650	480	320
72	560	0.50	450	340	220
84	480	0.68	330	250	160
96	420	0.89	250	190	130
108	380	1.14	200	150	100
120	340	1.40	160	120	80
144	280	2.00	110	80	60
168	240	2.72	80	60	40
192	210	3.55	60	50	NR
216	190	4.58	50	40	NR
240	170	5.62	40	NR	NR

\* Bearing load may govern capacity.

NR - Not Recommended

This load table is based on a solid channel section.

For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by 0.8.

Loads include weight of channel, which must be deducted.

Loads must be multiplied by the applicable unbraced factor from page 42.

For Pierced Channels, reduce beam load values as follows:

PS-200-EH 15%    PS-200-S 15%

PS-200-H 10%    PS-200-K06 5%

PS-200-SB 30%

For Extruded Aluminum Channels, reduce beam load values 38%.

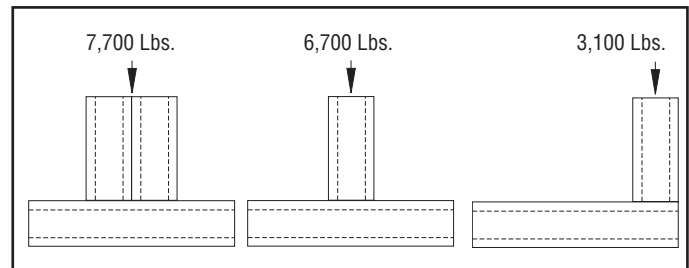
### COLUMN LOADING – PS 200

Unbraced Height (in)	Max. Allowable Load at Slot Face (lbs)	Maximum Column Load Applied at C.G.			
		K = 0.65 (lbs)	K = 0.80 (lbs)	K = 1.0 (lbs)	K = 1.2 (lbs)
24	3,550	10,740	9,890	8,770	7,740
36	3,190	8,910	7,740	6,390	5,310
48	2,770	7,260	6,010	4,690	3,800
60	2,380	5,910	4,690	3,630	2,960
72	2,080	4,840	3,800	2,960	2,400
84	1,860	4,040	3,200	2,480	1,980
96	1,670	3,480	2,750	2,110	1,660
108	1,510	3,050	2,400	1,810	**
120	1,380	2,700	2,110	**	**
144	1,150	2,180	1,660	**	**

\*\*  $K_L > 200$

Column loads are for allowable axial loads and must be reduced for eccentric loading.

### PS200 – Crush Loads



Resistance to Slip – 1,500 lbs. per bolt when 1/2" PS NS channel nuts are used.  
Pull Out Strength – 2,000 lbs. per bolt when 1/2" PS NS channel nuts are used.

### BEAM LOADING – PS 200 2T3

Span (in)	Max Allowable Uniform Load (lb)	Defl. at Uniform Load (in)	Uniform Loading at Deflection		
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
24	3,500 *	0.02	3,500 *	3,500 *	3,500 *
36	3,190	0.07	3,190	3,190	3,190
48	2,390	0.13	2,390	2,390	2,390
60	1,910	0.20	1,910	1,910	1,620
72	1,600	0.28	1,600	1,600	1,130
84	1,370	0.39	1,370	1,240	830
96	1,200	0.51	1,200	950	630
108	1,060	0.64	1,000	750	500
120	960	0.79	810	610	410
144	800	1.14	560	420	280
168	680	1.53	410	310	210
192	600	2.02	320	240	160
216	530	2.54	250	190	130
240	480	3.16	200	150	100

\*Load limited by spot weld shear.

For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by 0.8. This load table is based on a solid channel section.

Loads include weight of channel, which must be deducted.

Loads must be multiplied by the applicable unbraced factor from page 42.

### COLUMN LOADING – PS 200 2T3

Unbraced Height (in)	Max. Allowable Load at Slot Face (lbs)	Maximum Column Load Applied at C.G.			
		K = 0.65 (lbs)	K = 0.80 (lbs)	K = 1.0 (lbs)	K = 1.2 (lbs)
24	6,430	24,280	23,610	22,700	21,820
36	6,290	22,810	21,820	20,650	19,670
48	6,160	21,410	20,300	18,670	16,160
60	6,000	20,210	18,670	15,520	12,390
72	5,620	18,970	16,160	12,390	8,950
84	5,170	16,950	13,630	9,470	6,580
96	4,690	14,890	11,190	7,250	5,040
108	4,170	12,850	8,950	5,730	3,980
120	3,690	10,900	7,250	4,640	**
144	2,930	7,630	5,040	**	**

\*\*  $K_L > 200$

Column loads are for allowable axial loads and must be reduced for eccentric loading.

For Pierced Channels, reduce beam load values as follows:

PS 200 2T3 EH 15%

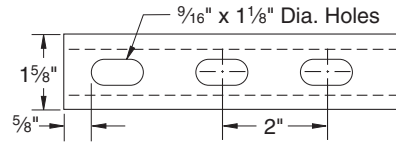
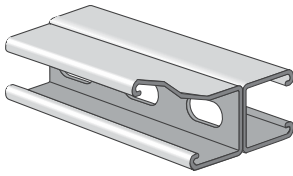
(See PS 200 2T3 EH on page 28.)

# CHANNEL

Finish: Plain, Painted Green, or Pregalvanized Order By: No., Length and Finish

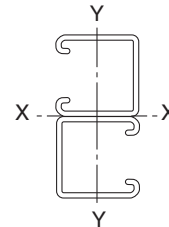
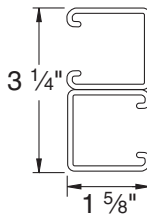
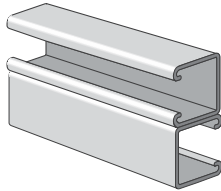


## PS 200 2T3 EH – Channel with Elongated Holes



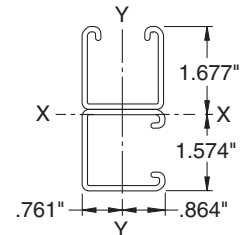
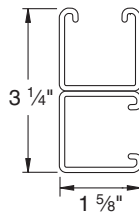
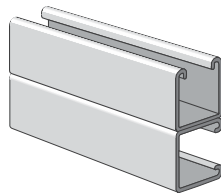
Weight: 370 lbs./100 ft.

## PS 200 2T2 – Welded Steel Channel (1 5/8" x 3 1/4" x 12 ga.)



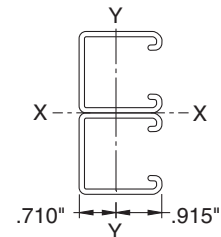
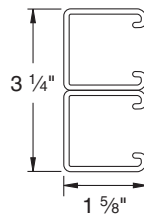
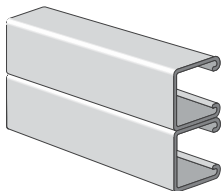
Weight: 378 lbs./100 ft.  
Allowable Moment 18,640 In-Lbs

## PS 200 2T4 – Welded Steel Channel (1 5/8" x 3 1/4" x 12 ga.)



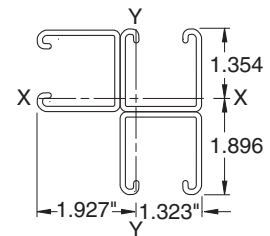
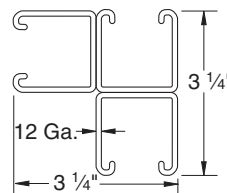
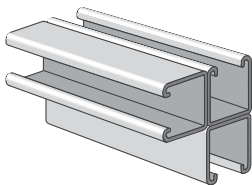
Weight: 378 lbs./100 ft.  
Allowable Moment 15,950 In-Lbs

## PS 200 2T5 – Welded Steel Channel (1 5/8" x 3 1/4" x 12 ga.)



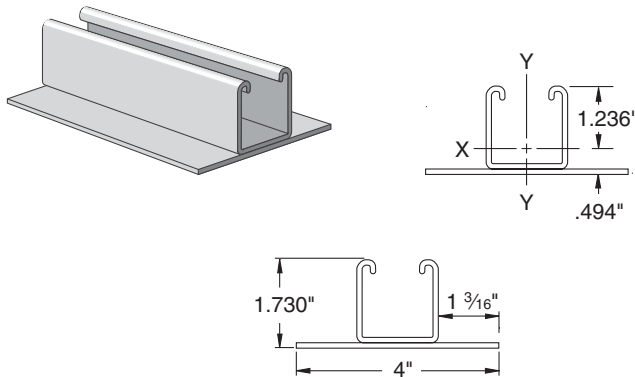
Weight: 378 lbs./100 ft.  
Allowable Moment 18,640 In-Lbs

## PS 200 3T6 – Welded Steel Channel (3 1/4" x 3 1/4" x 12 ga.)

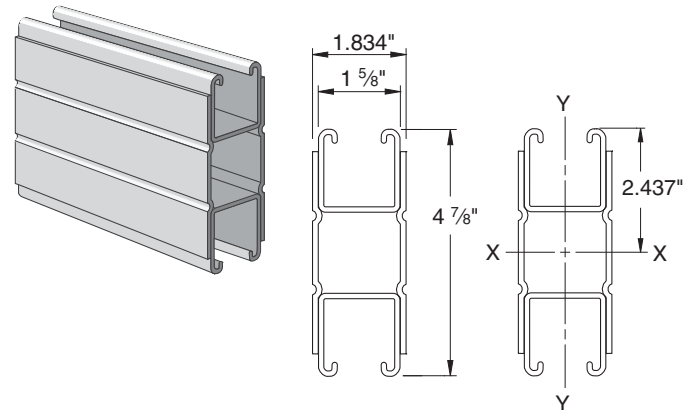


Weight: 566 lbs./100 ft.  
Allowable Moment 18,680 In-Lbs

## PS 200 PLA – Welded Steel Channel & Plate



## PS 200 PLC – Welded Steel Channel & Plate



### ELEMENTS OF SECTION

Part No.	Weight (lbs./100 ft.)	Area of Section (Inch <sup>2</sup> )	X-X Axis			Y-Y Axis		
			Moment of Inertia (Inch <sup>4</sup> )	Section Modulus (Inch <sup>3</sup> )	Radius of Gyration (Inch)	Moment of Inertia (Inch <sup>4</sup> )	Section Modulus (Inch <sup>3</sup> )	Radius of Gyration (Inch)
PS 200 PLA	333	0.739	0.287	0.248	0.623	0.617	0.290	0.914
PS 200 PLC	668	1.965	4.068	1.669	1.439	1.092	1.190	0.745

## PS 200 PLC – Load Data

### BEAM LOADING – PS 200 PLC

Span (in)	Max Allowable Uniform Load (lb)	Defl. at Uniform Load (in)	Uniform Loading at Deflection		
			Span/180 (lbs)	Span/240 (lbs)	Span/360 (lbs)
24	9,100 *	0.01	9,100 *	9,100 *	9,100 *
36	9,100 *	0.05	9,100 *	9,100 *	9,100 *
48	7,000	0.08	7,000	7,000	7,000
60	5,600	0.13	5,600	5,600	5,600
72	4,660	0.19	4,660	4,660	4,660
84	4,000	0.26	4,000	4,000	3,630
96	3,500	0.34	3,500	3,500	2,780
108	3,110	0.43	3,110	3,110	2,200
120	2,800	0.52	2,800	2,670	1,780
144	2,330	0.75	2,330	1,850	1,230
168	2,000	1.03	1,810	1,360	910
192	1,750	1.34	1,390	1,040	690
216	1,550	1.69	1,100	820	550
240	1,400	2.10	890	670	440

### COLUMN LOADING – PS 200 PLC

Unbraced Height (in)	Max. Allowable Load at Slot Face (lbs)	Maximum Column Load Applied at C.G.			
		K = 0.65 (lbs)	K = 0.80 (lbs)	K = 1.0 (lbs)	K = 1.2 (lbs)
24	11,420	36,800	33,890	30,440	27,600
36	10,600	30,840	27,600	24,400	22,160
48	9,860	26,400	23,560	21,060	19,470
60	9,160	23,370	21,060	19,160	18,020
72	8,610	21,310	19,470	18,020	17,140
84	8,170	19,890	18,410	17,260	15,240
96	7,790	18,890	17,670	16,760	11,670
108	7,460	18,160	17,140	13,280	9,220
120	7,150	17,590	16,760	10,750	7,470
144	5,660	16,840	11,670	7,470	**
168	4,520	12,990	8,570	**	**

\*\*  $K \geq 200$

Column loads are for allowable axial loads and must be reduced for eccentric loading.

\*Load limited by spot weld shear.

† Bearing load may govern capacity.

For concentrated load at center of span, divide uniform load by 2 and multiply corresponding deflection by 0.8. This load table is based on a solid channel section.

Loads include weight of channel, which must be deducted.

Loads must be multiplied by the applicable unbraced factor from page 42.