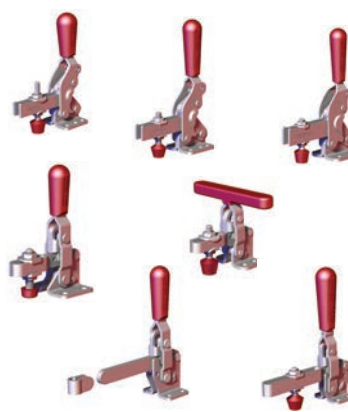
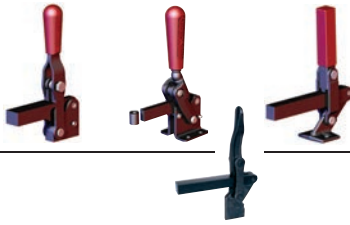
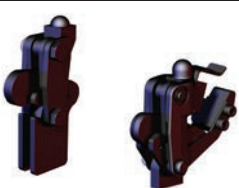
			Max. Holding Capacity N [lbf.]							Height Under Clamping Bar mm [inch]							Overall Height mm [inch]									
	Series	Section.Page	0 to 1000 [0 to 225]	1000 to 2000 [225 to 450]	2000 to 3000 [450 to 675]	3000 to 5000 [675 to 1125]	5000 to 7000 [1125 to 1575]	7000 to 10000 [1575 to 2250]	10000+ [2250+]	0 to 25 [0 to 0.98]	25 to 40 [0.98 to 1.57]	40 to 55 [1.57 to 2.17]	55 to 70 [2.17 to 2.76]	70 to 85 [2.76 to 3.35]	85 to 100 [3.35 to 3.94]	100+ [3.94+]	0 to 50 [0 to 1.97]	50 to 100 [1.97 to 3.94]	100 to 125 [3.94 to 4.92]	125 to 150 [4.92 to 5.91]	150 to 175 [5.91 to 6.89]	175 to 200 [6.89 to 7.87]	200 to 225 [7.87 to 8.86]	225 to 250 [8.86 to 9.84]	250 to 275 [9.84 to 10.83]	275+ [10.83+]
	2002	1.3																								
	2007	1.5																								
	2010	1.7																								
	201	1.9																								
	202	1.11																								
	207	1.15																								
	210	1.19																								
	247	1.21																								
	267	1.21																								
		5905	1.25																							
5910		1.25																								
5915		1.25																								
5105		1.27																								
5110		1.27																								
		528	1.29																							
	548/578	1.30																								
	533/535	1.31																								
	558	1.33																								
	91090	1.34																								
	317	1.35																								
	527	1.37																								
	7-101	1.38																								
	7-58	1.38																								
	7-59	1.38																								
	7-60	1.38																								
	229	1.39																								
	501	1.41																								
	503	1.41																								
	505	1.41																								
	506	1.41																								

● Excellent/High ○ Fair/Medium ● Poor/Low ⊗ Not Recommended

Series 2002 Product Overview

Features:

- Large hand clearance for improved safety
- Bolt pattern interchangeable with 202 Series
- Three times the holding capacity of 202 Series
- Hardened bushings at key pivot points
- Near vertical clamping contact

Applications:

- Checking fixtures
- Assembly & test
- Light machining
- Woodworking

Also Available:

See page 8.1 for accessories

Accepts M6 or 1/4 spindle accessories

Covered under one or more U.S./International Patents

2002-U
Flanged Base
U-Bar



2002-S
Flanged Base
Solid Bar



2002-UB
Straight Base
U-Bar



2002-SB
Straight Base
Solid Bar



2002-UR
Flanged Base
U-Bar
with
DE-STA-CO®
Toggle Lock
Plus



2002-SR^①
Flanged Base
Solid Bar
with
DE-STA-CO®
Toggle Lock
Plus



2002-UBR
Straight Base
U-Bar
with
DE-STA-CO®
Toggle Lock
Plus



2002-SBR^①
Straight Base
Solid Bar
with
DE-STA-CO®
Toggle Lock
Plus



2002-U207
Flanged Base
U-Bar
Interchangeable
with 207 Series



2002-UR207
Flanged Base
U-Bar
Interchangeable
with 207 Series,
DE-STA-CO®
Toggle
Lock Plus



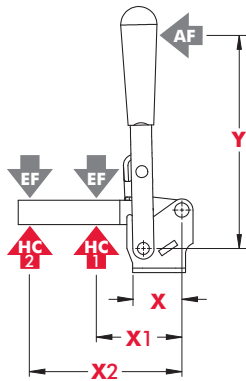
Note:
Clamps shown with included accessories.

Series 2002 Technical Information

Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Weight	Accessories (Supplied)		
					Bolt Retainer	Spindle Assembly	Flanged Washers
2002-U	2700 N [600 lbf]	75°	66°	0,22kg [0.48lb]	---	215208-M	215105
2002-S					2002115-E	---	---
2002-UB					---	215208-M	215105
2002-SB					2002115-E	---	---
2002-UR		90°	72°	0,25kg [0.55lb]	---	215208-M	215105
2002-SR^①					2002115-E	---	---
2002-UBR					---	215208-M	215105
2002-SBR^①					2002115-E	---	---
2002-U207	2700 N [600 lbf]	75°	57°	0,26kg [0.57lb]	---	215208-M	215105
2002-UR207		75°	57°		---	215208-M	215105

^① This item is available upon request

Series 2002 Holding Capacities



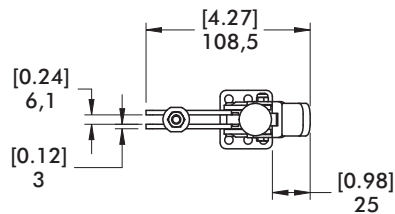
Model	X	X1	X2	Y	±HC1	±HC2	±EF(X1):AF	±EF(X2):AF
2002-()	[1.12] 28,5	[1.45] 37	[2.64] 67	[3.66] 93	[600 lbf] 2700N	[295 lbf] 1310N	11:1	5:1

Dimensions shown "mm [inch]" ±HC = Holding Capacity, EF = Exerting Force, AF = Applied Force
Refer to page 19.4 for additional information.

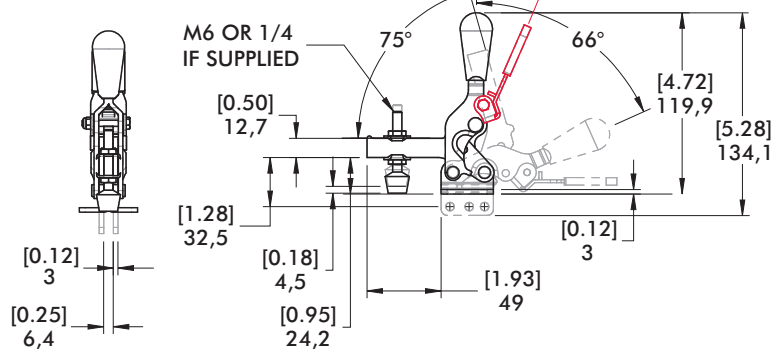
Series 2002 Standard Clamp Dimensions

-U/-S/-UB/-SB/-UR/-SR/-UBR/-SBR

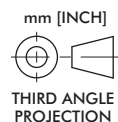
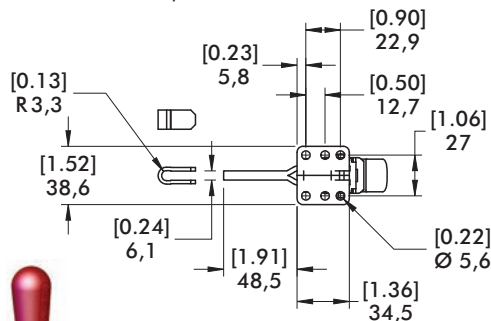
2002-U Flanged Base U-Bar



DE-STA-CO®
TOGGLE LOCK
PLUS OPTION

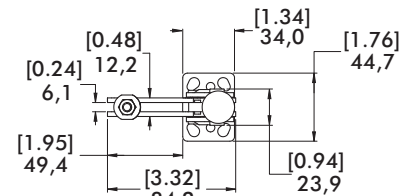


2002-SB Straight Base Solid Bar

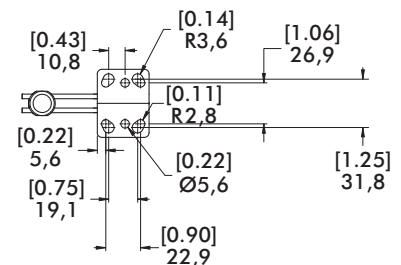
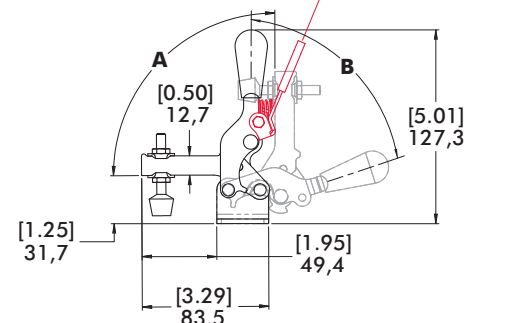


2002-U207/2002-UR207

with interchangeable Series 207
Mounting Pattern



DE-STA-CO®
TOGGLE LOCK
PLUS OPTION



Model	A	B
2002-U-207	90°	72°
2002-UR207	75°	57°

Series 2007 Product Overview

Features:

- Large hand clearance for improved safety
- Bolt pattern interchangeable with 207 Series
- Over two times the holding capacity of 207 Series
- Hardened bushings at key pivot points
- Near vertical clamping contact

Applications:

- Checking fixtures
- Assembly & test
- Light machining
- Woodworking

Also Available:

See page 8.1 for accessories

Accepts M8 or 5/16 spindle accessories

Covered under one or more U.S./International Patents

2007-U
Flanged Base
U-Bar



2007-S
Flanged Base
Solid Bar



2007-UB
Straight Base
U-Bar



2007-SB
Straight Base
Solid Bar



2007-UR
Flanged Base
U-Bar
with
DE-STA-CO®
Toggle Lock
Plus



2007-SR^①
Flanged Base
Solid Bar
with
DE-STA-CO®
Toggle Lock
Plus



2007-UBR
Straight Base
U-Bar
with
DE-STA-CO®
Toggle Lock
Plus



2007-SBR^①
Straight Base
Solid Bar
with
DE-STA-CO®
Toggle Lock
Plus



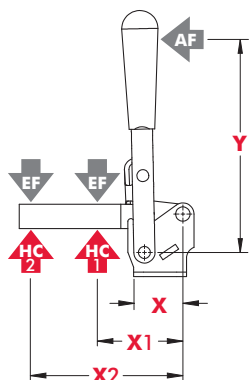
Note:
Clamps shown with included accessories.

Series 2007 Technical Information

Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Weight	Accessories (Supplied)		
					Bolt Retainer	Spindle Assembly	Flanged Washers
2007-U	4450 N [1000 lbf]	76°	64°	0,54kg [1.20lbs]	---	2007208-M	507107
2007-S					2007115-E	---	---
2007-UB					---	2007208-M	507107
2007-SB					2007115-E	---	---
2007-UR					---	2007208-M	507107
2007-SR^①					2007115-E	---	---
2007-UBR					---	2007208-M	507107
2007-SBR^①					2007115-E	---	---

^① This item is available upon request

Series 2007 Holding Capacities



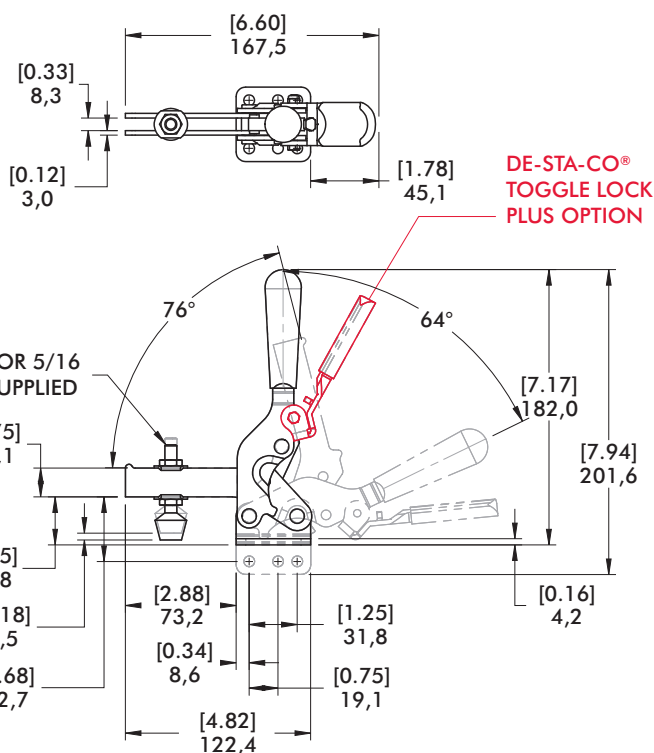
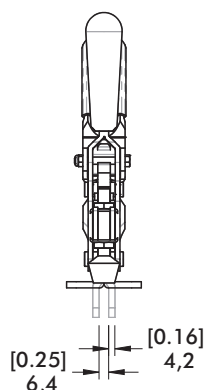
Model	X	X1	X2	Y	±HC1	±HC2	±EF(X1):AF	±EF(X2):AF
2007-()	[1.59] 40,5	[1.95] 49,5	[3.92] 99,5	[5.16] 131	[1000lbf.] 4450N	[470lbf.] 2090N	10:1	5.3:1

Dimensions shown "mm [inch]" ± HC = Holding Capacity, EF = Exerting Force, AF = Applied Force
Refer to page 19.4 for additional information.

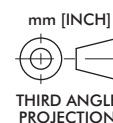
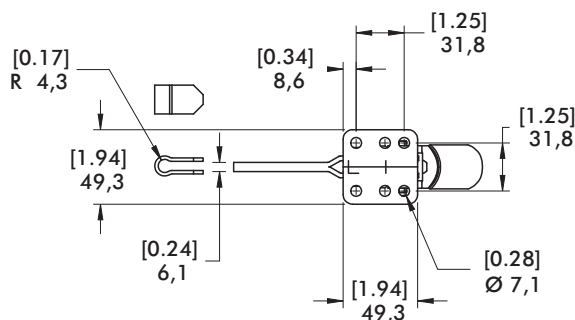
Series 2007 Standard Clamp Dimensions

-U/-S/-UB/-SB/-UR/-SR/-UBR/-SBR

2007-U Flanged Base U-Bar



2007-SB Straight Base Solid Bar



Series 2010 Product Overview

Features:

- Large hand clearance for improved safety
- Bolt pattern interchangeable with 210 Series
- Over two times the holding capacity of 210 Series
- Hardened bushings at key pivot points
- Near vertical clamping contact

Applications:

- Checking fixtures
- Assembly & test
- Light machining
- Woodworking

Also Available:

See page 8.1 for accessories

Accepts M10 or 3/8 spindle accessories

Covered under one or more U.S./International Patents

2010-U
Flanged Base
U-Bar



2010-S
Flanged Base
Solid Bar



2010-UB
Straight Base
U-Bar



2010-SB
Straight Base
Solid Bar



2010-UR
Flanged Base
U-Bar
with DE-STA-CO®
Toggle Lock Plus



2010-SR^①
Flanged Base
Solid Bar
with DE-STA-CO®
Toggle Lock Plus



2010-UBR
Straight Base
U-Bar
with DE-STA-CO®
Toggle Lock Plus



2010-SBR^①
Straight Base
Solid Bar
with DE-STA-CO®
Toggle Lock Plus



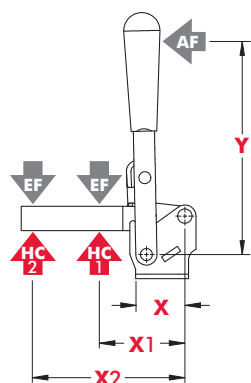
Note:
Clamps shown with included accessories.

Series 2010 Technical Information

Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Weight	Accessories (Supplied)		
					Bolt Retainer	Spindle Assembly	Flanged Washers
2010-U	6230 N [1400 lbf]	78°	66°	1,16kg [2.56lbs]	---	240208-M	235106
2010-S					2010115-E	---	---
2010-UB					---	240208-M	235106
2010-SB					2010115-E	---	---
2010-UR					---	240208-M	235106
2010-SR^①					2010115-E	---	---
2010-UBR					---	240208-M	235106
2010-SBR^①					2010115-E	---	---

^① This item is available upon request

Series 2010 Holding Capacities

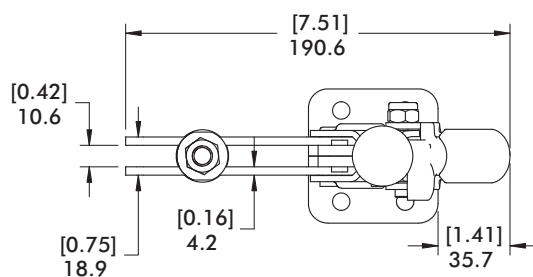
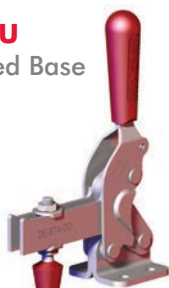


Model	X	X1	X2	Y	±HC1	±HC2	±EF(X1):AF	±EF(X2):AF
2010-()	[2.04] 51,8	[2.44] 62	[4.88] 124	[7.00] 178	[1400lbf.] 6230N	[720lbf.] 3200N	13:1	6:1

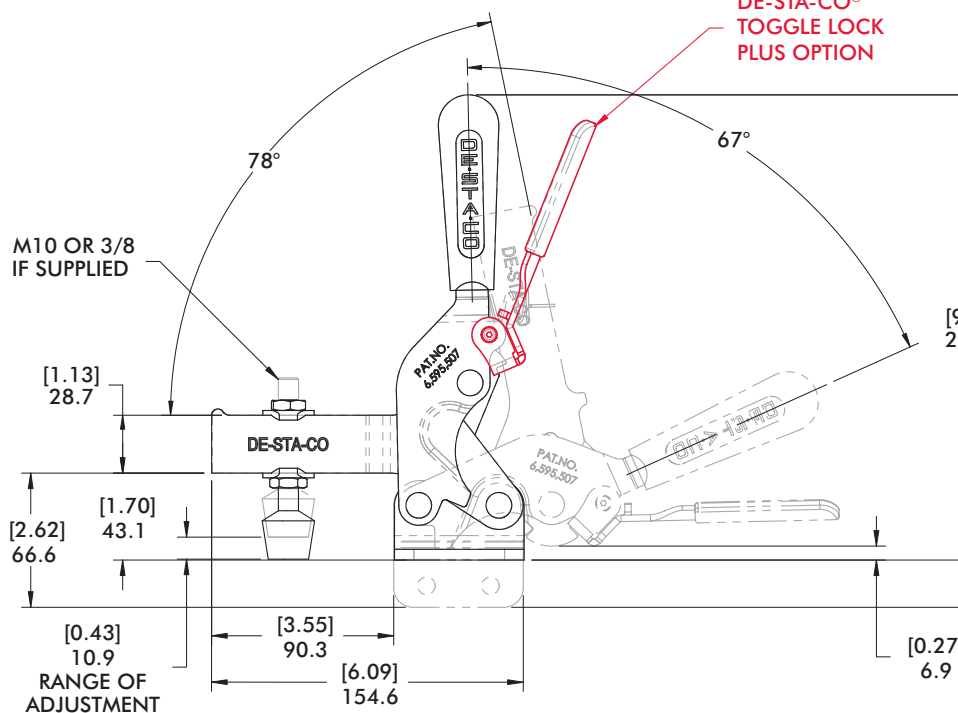
Dimensions shown "mm [inch]" ± HC = Holding Capacity, EF = Exerting Force, AF = Applied Force
Refer to page 19.4 for additional information.

Series 2010 Standard Clamp Dimensions -U/-S/-UB/-SB/-UR/-SR/-UBR/-SBR

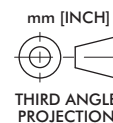
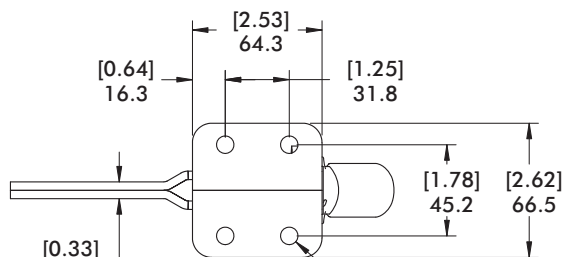
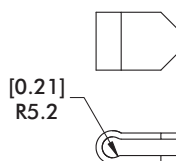
2010-U
Flanged Base
U-Bar



DE-STA-CO®
TOGGLE LOCK
PLUS OPTION



2010-SB
Straight Base
Solid Bar



Series 201 Product Overview

Features:

- Smallest series in the Vertical Handle series
- Stainless steel version available

Applications:

- Checking fixtures
- Assembly & test
- Woodworking

Also Available:

See page 8.1 for accessories

812-U Pneumatic Toggle Clamp
(See page 10.4)

201-U
Flanged Base
U-Bar



201-UB
Straight Base



201-TU
Straight
Base, U-Bar,
T-Handle



201-USS
Flanged Base
U-Bar, Stainless
Steel



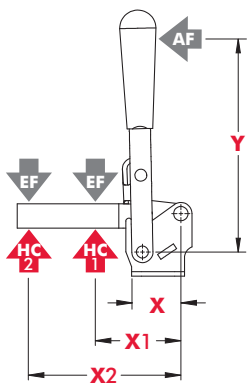
Note:

Clamps shown with included accessories.

Series 201 Technical Information

Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Weight	Accessories (Supplied)	
					Spindle Assembly	Flanged Washers
201-U	440 N [100 lbf]	100°	55°	0,70kg [0.15lbs]	305208-M	102111
201-UB						
201-TU						
201-USS	560 N [125 lbf]				201943	102911

Series 201 Holding Capacities

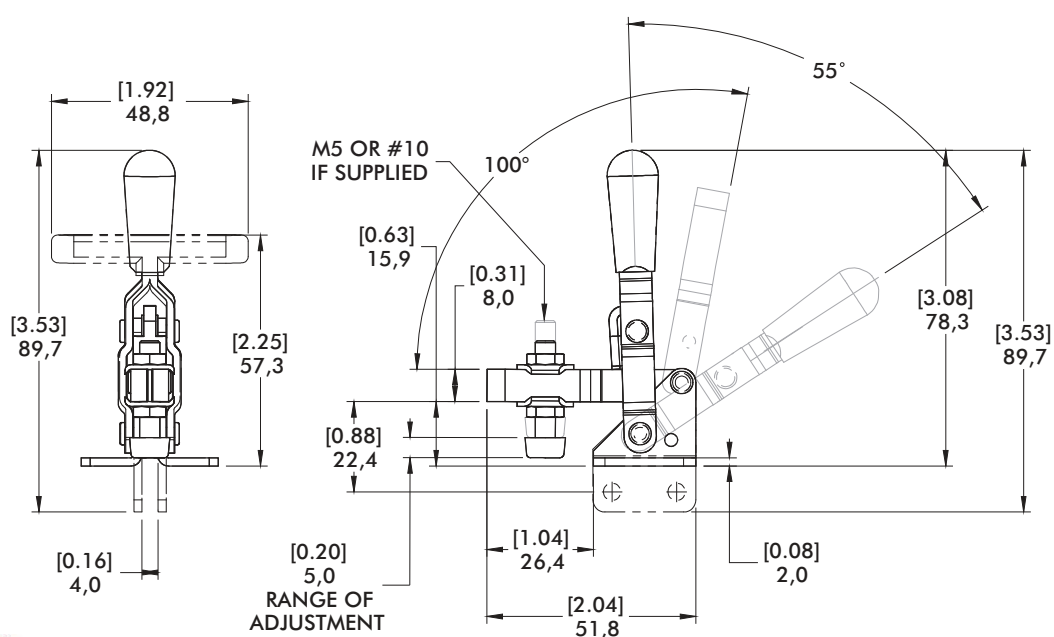
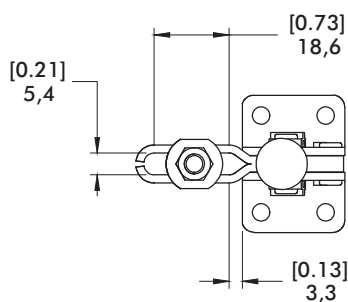


Model	X	X1	X2	Y	±HC1	±HC2	±EF(X1):AF	±EF(X2):AF
U/UB				[2.25] 57	[100lbf.] 440N	[55lbf.] 245N	9:1	6:1
TU	[0.87] 22	[1.06] 27	[1.75] 44,5	[1.38] 35			8.4:1	4:4:1
USS				[2.25] 57	[125lbf.] 560N	[60lbf.] 270N	9:1	6:1

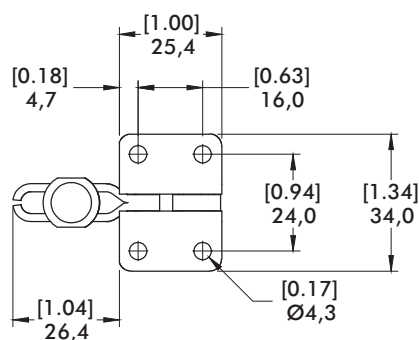
Dimensions shown "mm [inch]" ± HC = Holding Capacity, EF = Exerting Force, AF = Applied Force
Refer to page 19.4 for additional information.

Series 201 Standard Clamp Dimensions -U/-UB/-TU/-USS

201-U[†]
Flanged Base
U-Bar



201-UB[†]
Straight Base



Series 202 Product Overview

Features:

- Two bar styles available
- Low profile T-Handle version available
- Available in stainless steel
- Accommodates M6 or 1/4" spindle accessories

Applications:

- Checking fixtures
- Assembly & test
- Light machining
- Woodworking

Also Available:

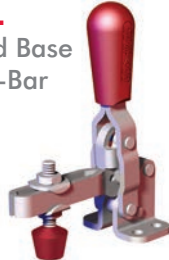
See page 8.1 for accessories

802-U Pneumatic Toggle Clamp
(See page 10.6)

202-U
Flanged Base
U-Bar



202-UL
Flanged Base
Long U-Bar



202-USS
Flanged Base
U-bar, Stainless
Steel



202
Flange Base
Solid Bar



202-SS
Flanged Base
Solid Bar
Stainless Steel



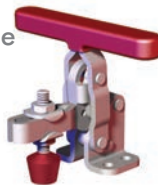
202-UB
Straight Base
U-bar



202-B
Straight Base
Solid Bar



202-TU
Flanged Base
U-bar,
T-Handle



202-T
Flanged Base
Solid Bar
T-Handle



202-U-L
Flanged Base
Open U-Bar



202-UB-L
Straight Base
Open U-Bar



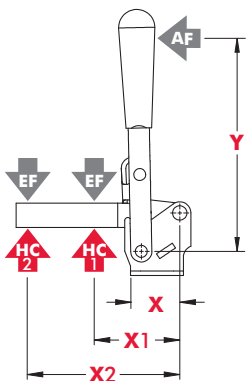
Note:
Clamps shown with included accessories.

Series 202 Technical Information

					Accessories (Supplied)	
Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Weight	Spindle Assembly	Flanged Washers
202-U	890 N [200 lbf]	105°	65°	0,16kg [0.35lbs]	202208-M	215105
202-UL						
202-USS					202943	215905
202	890 N [200 lbf]			0,15kg [0.33lbs]	202208-M	---
202-SS	1110 N [250 lbf]				202943	---
202-UB	890 N [200 lbf]				0,16kg [0.35lbs]	202208-M
202-B				0,15kg [0.33lbs]		
202-TU				0,17kg [0.38lbs]		
202-T				0,16kg [0.35lbs]	---	---
202-U-L ⓘ						
202-UB-L ⓘ						

ⓘ This item is available upon request

Series 202 Holding Capacities



Model	X	X1	X2	Y	±HC1	±HC2	±EF(X1):AF	±EF(X2):AF
202-U	[0.79] 20	[1.25] 32	[2.25] 57	[3.42] 87	[200 lbf] 890N	[140 lbf] 625N	10:1	5:1
202-UL			[2.88] 73	[3.42] 87	[250 lbf] 1110N	[150 lbf] 670N		4:1
202-USS			[2.25] 57			[170 lbf] 760N		5:1
202		---	[1.88] 48		---	[200 lbf] 890N	---	8:1
202-SS			[3.00] 76			[250 lbf] 1110N		
202-UB			[1.25] 32	[2.25] 57		[3.42] 87		[200 lbf] 890N
202-B		---	[1.88] 48	87	---	[200 lbf] 890N	---	8:1
202-TU		[1.25] 32	[2.25] 57	[2.13] 54	[200 lbf] 890N	[140 lbf] 625N	11:1	7:1
202-T		---	[1.88] 48	54	---	[200 lbf] 890N	---	6:1
202-U-L ⓘ		[1.25] 32	[2.25] 57	[3.42] 87	[200 lbf] 890N	[140 lbf] 625N	10:1	5:1
202-UB-L ⓘ								

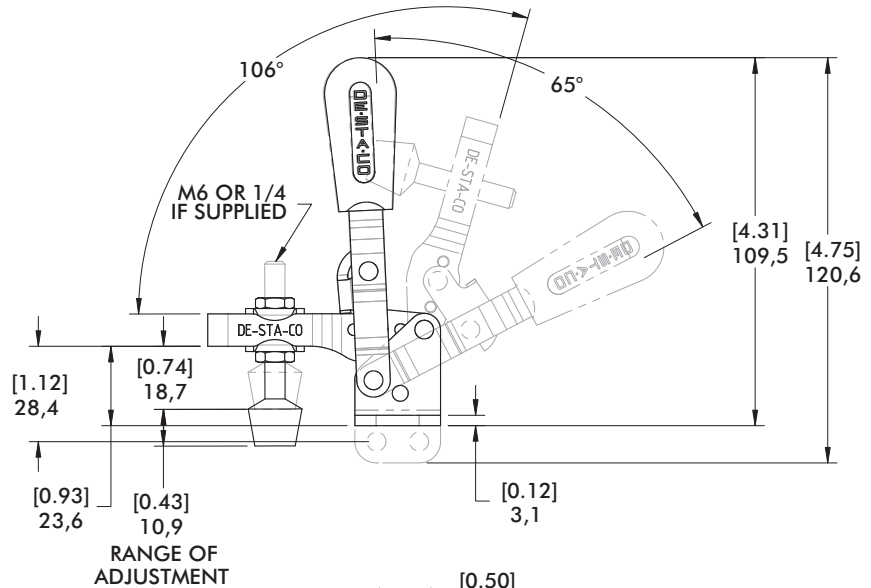
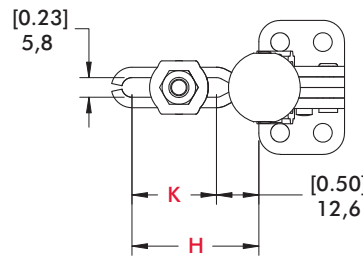
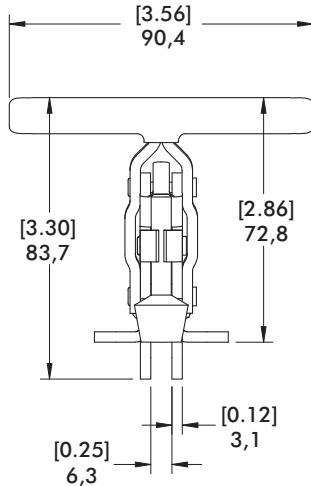
Dimensions shown "mm [inch]" ± HC = Holding Capacity, EF = Exerting Force, AF = Applied Force

ⓘ This item is available upon request

Series 202 Standard Clamp Dimensions

202/-U/-UL/-USS/-SS/-UB/-B/-TU/-T

202-U[†]
Flanged Base
U-Bar

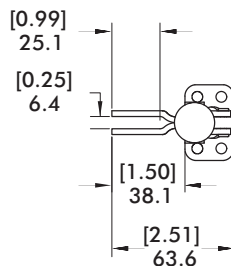


Series 202 Open Bar

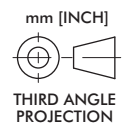
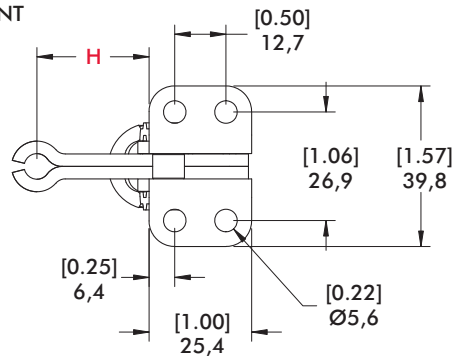
Flanged Base
Model
202-U-L[†]



See page (8.7) for
Complete offering of
Open bar accessories



Straight Base
Model
202-UB-L[†]



Bar Style	Clamp Models	H	K
	202-U/202-UB/ 202-USS/202-TU	[1.73] 44,1	[0.98] 25
	202-UL [†]	[2.29] 58,1	[1.51] 38,4
	202/202-B/ 202-T/202-SS	[1.31] 33,3	---
	202-U-L [†] / 202-UB-L [†]	[1.50] 38,1	---

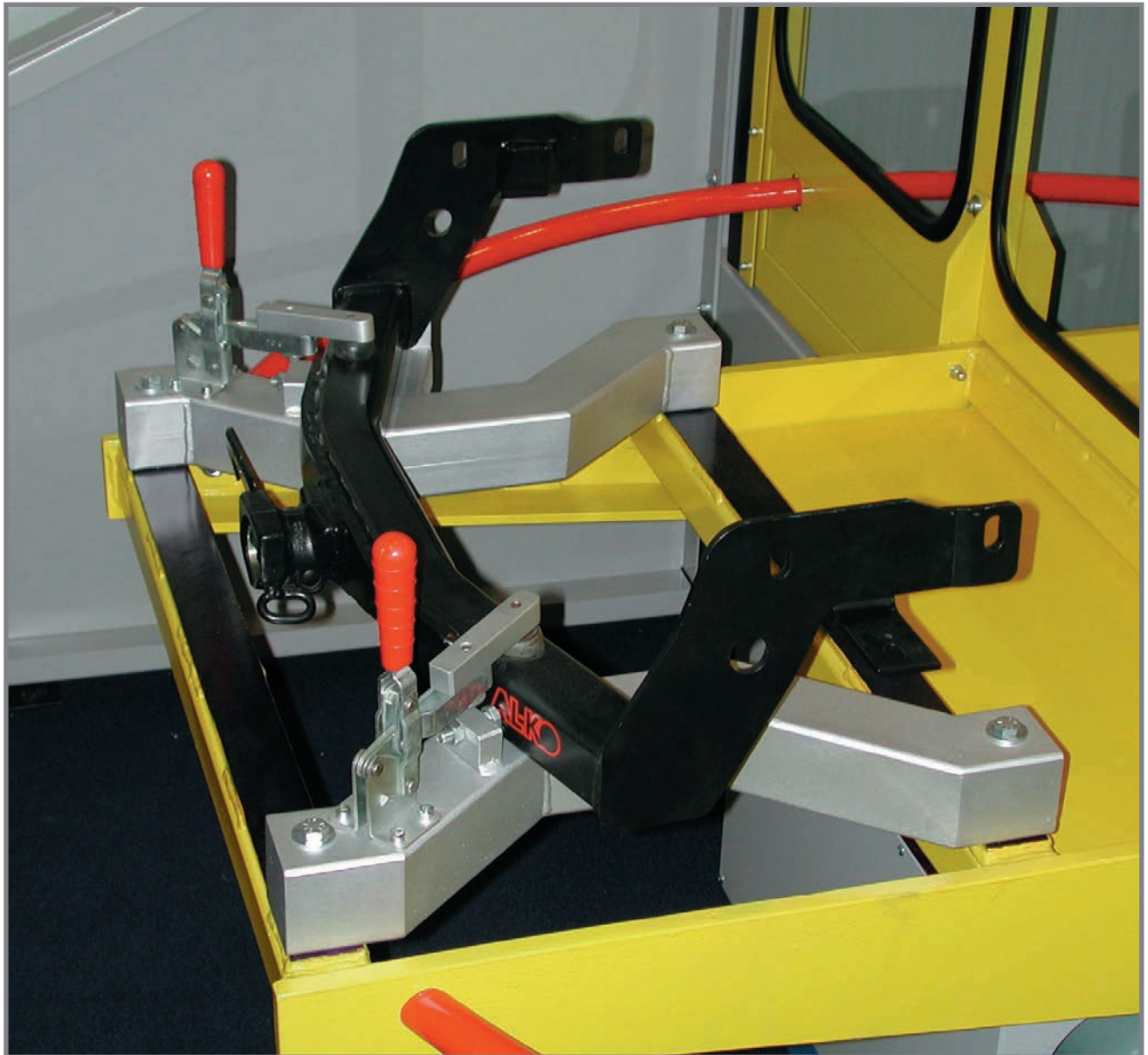
[†] This item is available upon request

Application Areas

Clamping during the assembling, drilling, testing, gluing, locking of covers and much more. The vertical clamp is the most frequently used product whenever clamping products are to be integrated with a manual fixture.

The essential product features

- In the clamping position, the handle is vertical
- Vertical clamps open at an angle between 75° and 215°
- Vertical clamps are offered with U-shaped or heavy-duty solid clamping bars
- Vertical clamps have a straight or flanged base.
The heavy-duty vertical clamps possess a base that can be welded on without a hole pattern



Series 207 Product Overview

Features:

- Largest selection of arm and mounting options
- Low profile T-Handle version available
- Available in stainless steel

Applications:

- Checking fixtures
- Assembly & test
- Light machining
- Woodworking

Also Available:

See page 8.1 for accessories

807-U Pneumatic toggle clamp
(See page 10.8)

807-S Pneumatic toggle clamp
(See page 10.8)

Accepts M8 or 5/16 spindle accessories

207-U
Flanged Base
U-Bar



207-UL
Flanged Base
Long U-Bar



207-USS
Stainless
Flanged Base
U-Bar



207-S
Flanged Base
Solid Bar



207-L
Flanged Base
Long Solid Bar



207-TU
Flanged Base
T-Handle
U-Bar



207-TUL
Flanged Base
T-Handle
Long U-Bar



207-UR
Flanged Base
U-Bar
with
DE-STA-CO®
Toggle Lock
Plus



207-LR
Flanged Base
Long Solid Bar
with
DE-STA-CO®
Toggle Lock
Plus



207-UB
Straight Base
U-Bar



207-ULB
Straight Base
Long U-Bar



207-SB
Straight Base
Solid Bar



207-LB
Straight Base
Long Solid
Bar



207-LBR^①
Straight Base
Long Solid
Bar with
DE-STA-CO®
Toggle Lock
Plus



207-UF^①
U-Bar
Dual Mount



207-SF^①
Solid Bar
Dual Mount



207-U-L^①
Flange Base
Open Bar



207-UB-L^①
Straight Base
Open Bar



Note:

Clamps shown with
included accessories

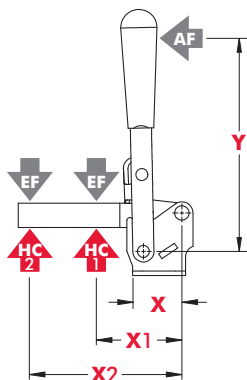
^① This item is available upon request

Series 207 Technical Information

Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Weight	Accessories (Supplied)		
					Bolt Retainer	Spindle Assembly	Flanged Washers
207-U 207-UR 207-UL	1670 N [375 lbf]	99°	57°	0,30kg [0.67lb] 0,45kg [1.00lb] 0,30kg [0.67lb]	---	225208-M	507107
207-USS	2000 N [450 lbf]			0,32kg [0.70lb]	---	---	507907
207-S 207-L 207-LR	2220 N [500 lbf]			0,31kg [0.69lb] 0,34kg [0.74lb] 0,45kg [1.00lb]	207105	---	---
207-UB 207-ULB	1670 N [375 lbf]			0,33kg [0.72lb]	---	225208-M	507107
207-SB 207-LB 207-LBR ⓘ	2220 N [500 lbf]			0,31kg [0.69lb] 0,34kg [0.75lb] 0,45kg [1.00lb]	207105	---	---
207-TU 207-TUL	1670 N [375 lbf]			0,33kg [0.72lb]	---	---	507107
207-UF ⓘ	1670 N [375 lbf]	96°	56°	0,43kg [0.94lb]	---	225208-M	507107
207-SF ⓘ	2220 N [500 lbf]	90°	57°	0,38kg [0.84lb]	207105	---	---
207-U-L ⓘ 207-UB-L ⓘ	1670 N [375 lbf]	99°		0,38kg [0.84lb]	---	---	---

ⓘ This item is available upon request

Series 207 Holding Capacities



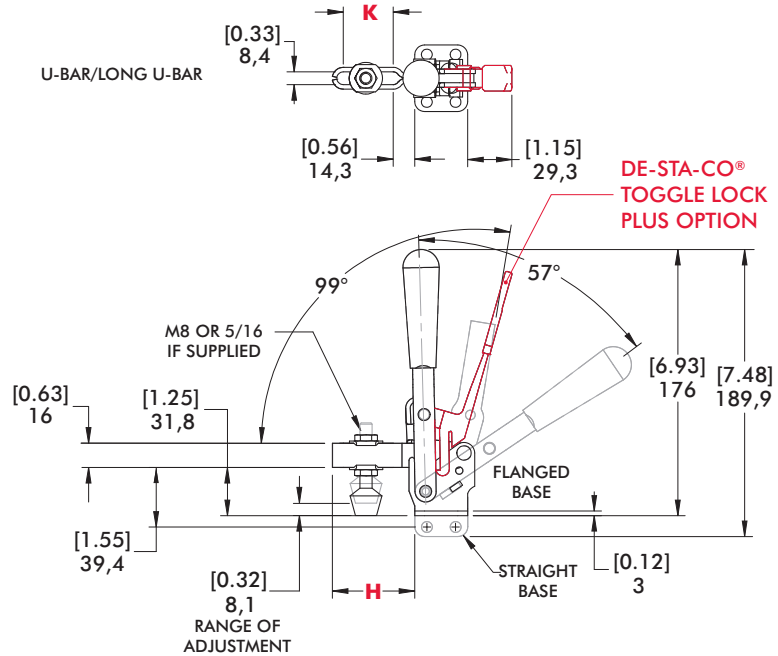
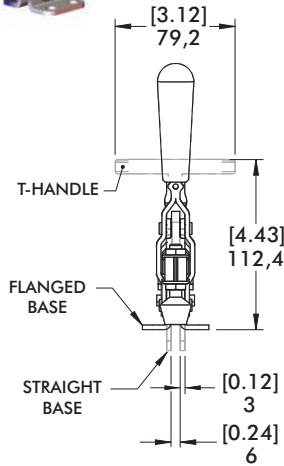
Model	X	X1	X2	Y	±HC1	±HC2	±EF(X1):AF	±EF(X2):AF
U/UB/UR		[2.00] 50,8	[3.75] 95,3		[375 lbf] 1670N	[225 lbf] 1000N	12:1	6:1
UL/ULB		[3.88] 98,5	[5.00] 127			[150 lbf] 670N	7:1	4:1
USS		[2.00] 50,8	[3.75] 95,3	[4.90] 124,5	[450 lbf] 2000N	[240 lbf] 1070N		5:1
S/SB		[2.88] 73,0			[500 lbf] 2220N	[350 lbf] 1560N	10:1	7:1
L/LR LB/LBR	[1.28] 32,6	[2.88] 73,0	[5.00] 127					5:1
TU		[2.00] 50,8	[3.75] 95,3	[3.66] 9	[375 lbf] 1670N	[225 lbf] 1000N	6:1	4:1
TUL		[3.88] 98,5	[5.00] 127			[150 lbf] 670N	4:1	3:1
U-L UB-L		[2.00] 50,8	[3.75] 95,3	[4.90] 124,5	[375 lbf] 1670N	[2225 lbf] 1000N	12:1	6:1

Dimensions shown "mm [inch]" ± HC = Holding Capacity, EF = Exerting Force, AF = Applied Force

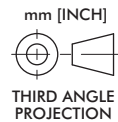
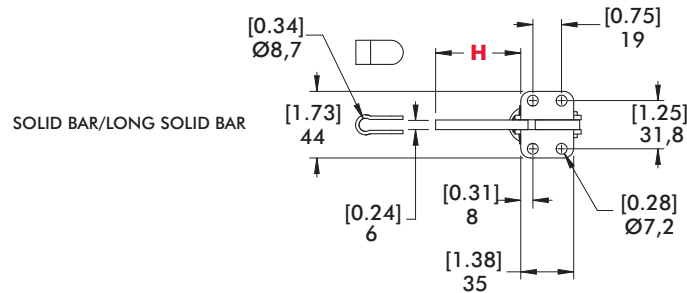
Series 207 Standard Clamp Dimensions

-U/-UL/-S/-L/-TU/-TUL/-UR/-LR/-UB/-ULB/-SB/-LB/-LBR

207-U[†] Flanged Base U-Bar



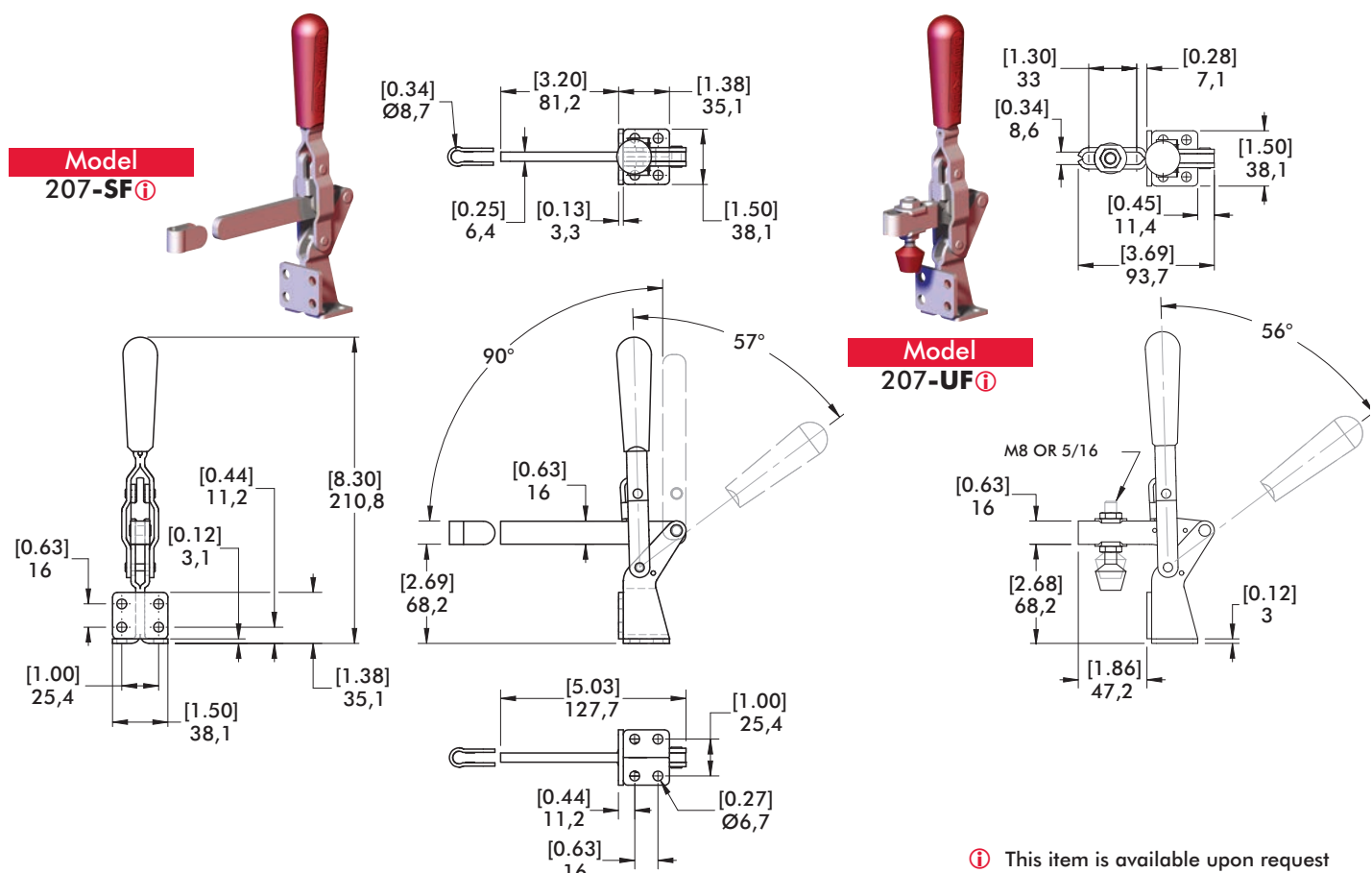
207-SB Straight Base Solid Bar



Bar Style	Clamp Models	H	K
	207-U/207-UR/207-TU/207-UB	[2.14] 54,4	[1.30] 33
	207-UL/207-ULB/207-TUL	[3.84] 97,6	[2.94] 74,6
	207-S/207-SB	[2.21] 56,2	---
	207-L/207-LR/207-LB/207-LBR [†]	[3.48] 88,4	---

[†] This item is available upon request

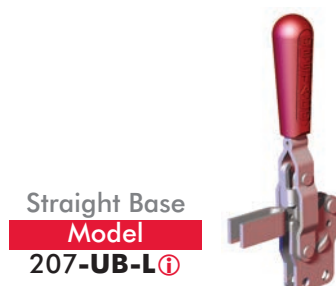
Series 207 Standard Clamp Dimensions - Dual Mount



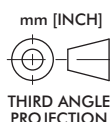
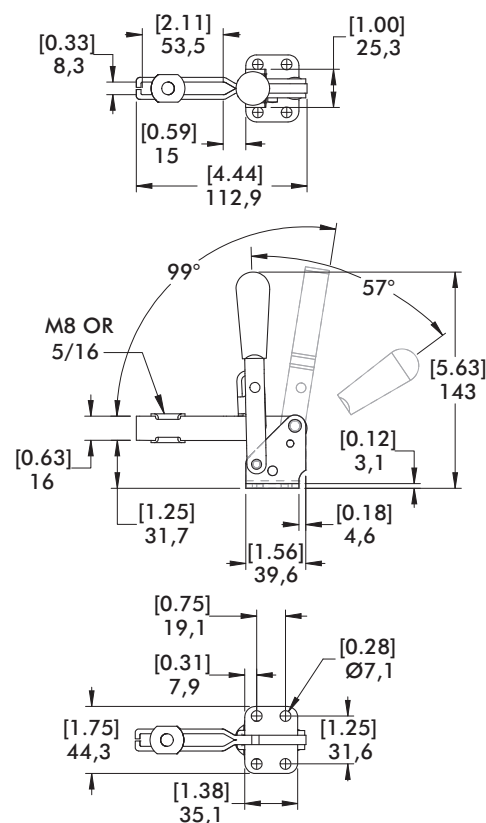
Series 207 Open Bar



See page 8.7 for
Complete offering of
Open bar accessories



207-USS Stainless Steel



Series 210 Product Overview

Features:

- DE-STA-CO® Toggle Lock Plus versions available
- Available in stainless steel
- Accomodates M10 or 3/8 spindle accessories

Applications:

- Assembly & test
- Light machining
- Light welding

Also Available:

See page 8.1 for accessories
810-U Pneumatic Toggle Clamp
(See page 10.9)
810-S Pneumatic Toggle Clamp
(See page 10.9)

210-U
Flanged Base
U-Bar



210-USS
Flanged Base
U-bar, Stainless
Steel



210-S
Flanged Base
Solid Bar



210-UB
Straight Base
U-bar



210-SB
Straight Base,
Solid Bar



210-UR
Flanged Base
U Bar
with
DE-STA-CO®
Toggle Lock
Plus



210-SR
Flanged Base
Solid Bar
with
DE-STA-CO®
Toggle Lock
Plus



210-UBR^①
Straight Base
U Bar
with
DE-STA-CO®
Toggle Lock
Plus



210-TU
Flanged Base
U Bar,
T-Handle



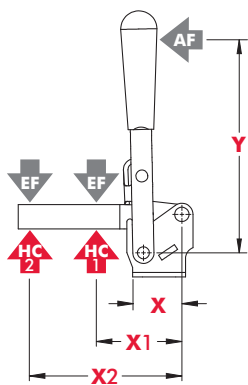
Note:
Clamps shown with included accessories.

Series 210 Technical Information

					Accessories (Supplied)		
Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Weight	Bolt Retainer	Spindle Assembly	Flanged Washers
210-U	2670 N [600 lbf]	103°	58°	0,59kg [1.29lbs]	---	240208-M	235106
210-USS	3340 N [750 lbf]					237943	235906
210-S					210114	---	---
210-UB	2670 N [600 lbf]				---	240208-M	235106
210-SB	3340 N [750 lbf]			210114	---	---	
210-UR	2670 N [600 lbf]			---	240208-M	235106	
210-SR	3340 N [750 lbf]			210114	---	---	
210-UBR ⓘ	2670 N [600 lbf]			---	240208-M	235106	
210-TU					0,62kg [1.36lbs]		---

^① This item is available upon request

Series 210 Holding Capacities

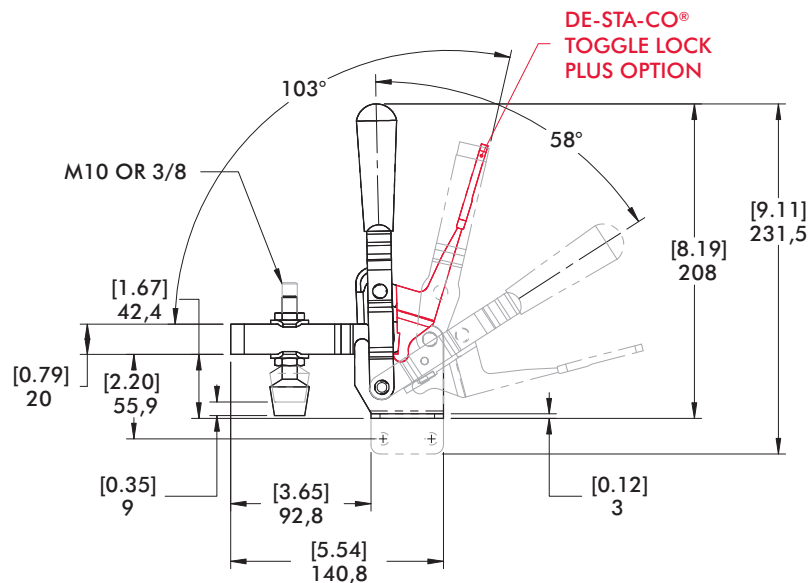
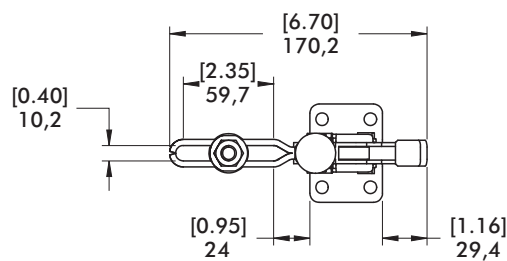
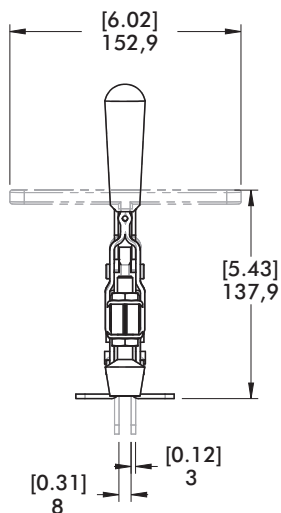


Model	X	X1	X2	Y	±HC1	±HC2	±EF(X1):AF	EF(X2):AF
U/UB/ UR/UBR ^①		[2.38] 60,5	[4.88] 124	[6.75] 171,5	[600lbf.] 2670N	[290lbf.] 1290N	14:1	7:1
USS	[1.54] 39				[750lbf.] 3340N	[360lbf.] 1600N		
S/SR/SB		[3.62] 92,0	[5.25] 133	[4.50] 114,5	[750lbf.] 3340N	[500lbf.] 2220N	11:1	9:1
TU		[2.38] 60,5	[4.88] 124		[600lbf.] 2670N	[290lbf.] 1290N		

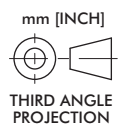
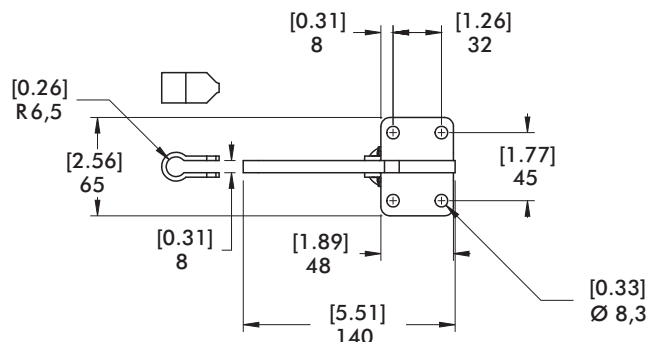
Dimensions shown "mm [inch]" **±HC** = Holding Capacity, **EF** = Exerting Force, **AF** = Applied Force
Refer to page 19.4 for additional information. ^① This item is available upon request

Series 210 Standard Clamp Dimensions -U/-USS/-S/-UB/-SB/-UR/-SR/-UBR/-TU

210-U[†]
Flanged Base
U-Bar



210-SR
Flanged Base
Solid Bar
with
DE-STA-CO®
Toggle Lock
Plus



Series 247, 267 Product Overview

Features:

- Hardened steel bushings
- Large bar guides for greater lateral stability on Model 247
- Series 247 accommodates M12 or 1/2 spindle accessory
- Series 267 accommodates M16 or 5/8 spindle accessory

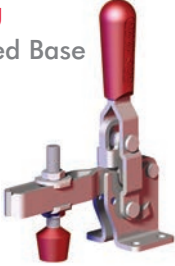
Applications:

- Assembly & test
- Light machining
- Welding

Also Available:

See page 8.1 for accessories
847-U Pneumatic Toggle Clamp
(See page 10.15)
847-S Pneumatic Toggle Clamp
(See page 10.15)

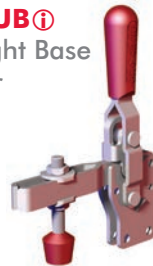
247-U
Flanged Base
U-Bar



247-S
Flanged Base
Solid Bar



247-UB ⓘ
Straight Base
U-Bar



267-U
Flanged Base
U-Bar



267-S ⓘ
Flanged Base
Solid Bar



Note:

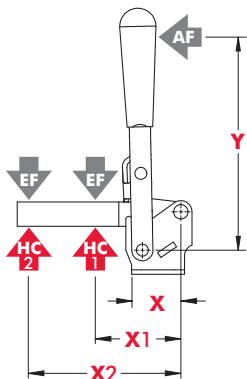
Clamps shown with included accessories.

Series 247, 267 Technical Information

Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Weight	Accessories (Supplied)		
					Bolt Retainer	Spindle Assembly	Flanged Washers
247-U	4400 N [1000 lbf]	120°	67°	1,07kg [2.36lbs]	---	247208-M	247109
247-S				1,08kg [2.36lbs]	210114	---	---
247-UB ⓘ				1,07kg [2.36lbs]	---	247208-M	247109
267-U	5340 N [1200 lbf]	140°	72°	2,18kg [4.80lbs]	---	247203-M	267102
267-S ⓘ				1,98kg [4.36lbs]	110122	---	---

ⓘ This item is available upon request

Series 247 Holding Capacities

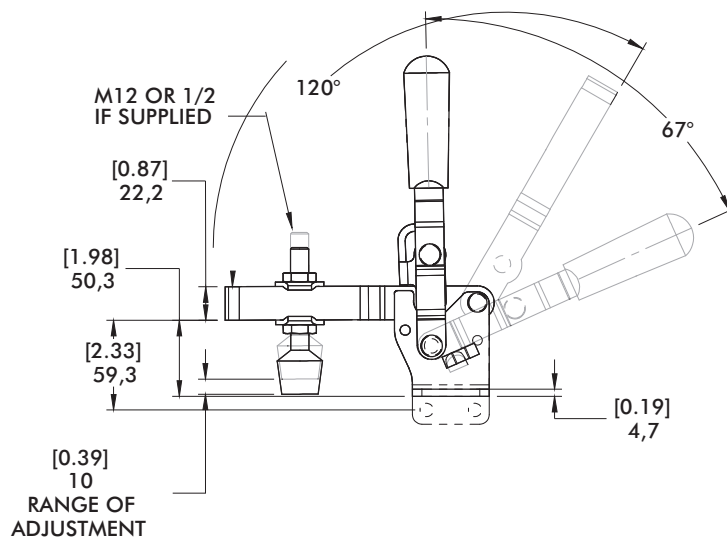
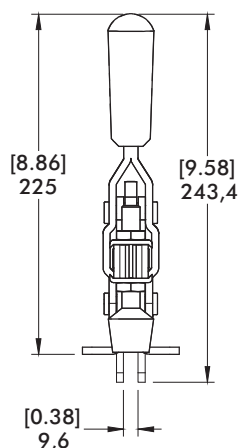
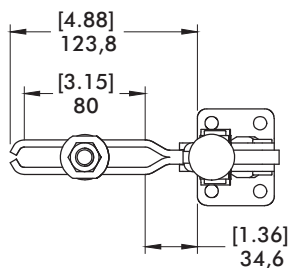
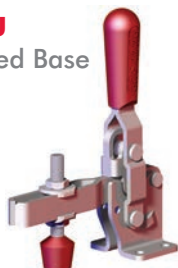


Model	X	X1	X2	Y	‡HC1	‡HC2	‡EF(X1):AF	‡EF(X2):AF
247-U/ 247-UB ⓘ	[1.69] 43	[3.00] 76,2	[6.13] 155,7	[6.71] 170,5	[1000lbf.] 4450N	[480lbf.] 2140N	12:1	6:1
247-S		[4.56] 115,8	[7.00] 177,8			[650lbf.] 2900N	10:1	5:1
267-U	[2.50] 63,5	[4.00] 101,6	[8.00] 203,2	[9.25] 235	[1200lbf.] 5340N	[600lbf.] 2670N	18:1	8:1
267-S ⓘ		[6.00] 152,4	[8.75] 222,3			[820lbf.] 3650N	12:1	

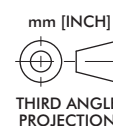
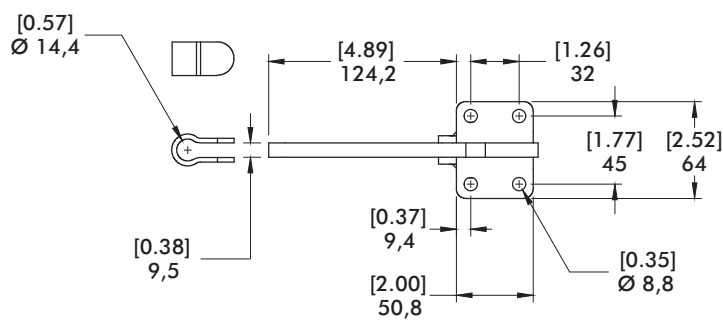
Dimensions shown "mm [inch]" ‡ HC = Holding Capacity, EF = Exerting Force, AF = Applied Force
Refer to page 19.4 for additional information. ⓘ This item is available upon request

Series 247 Standard Clamp Dimensions -U/-S/-UB

247-U
Flanged Base
U-Bar

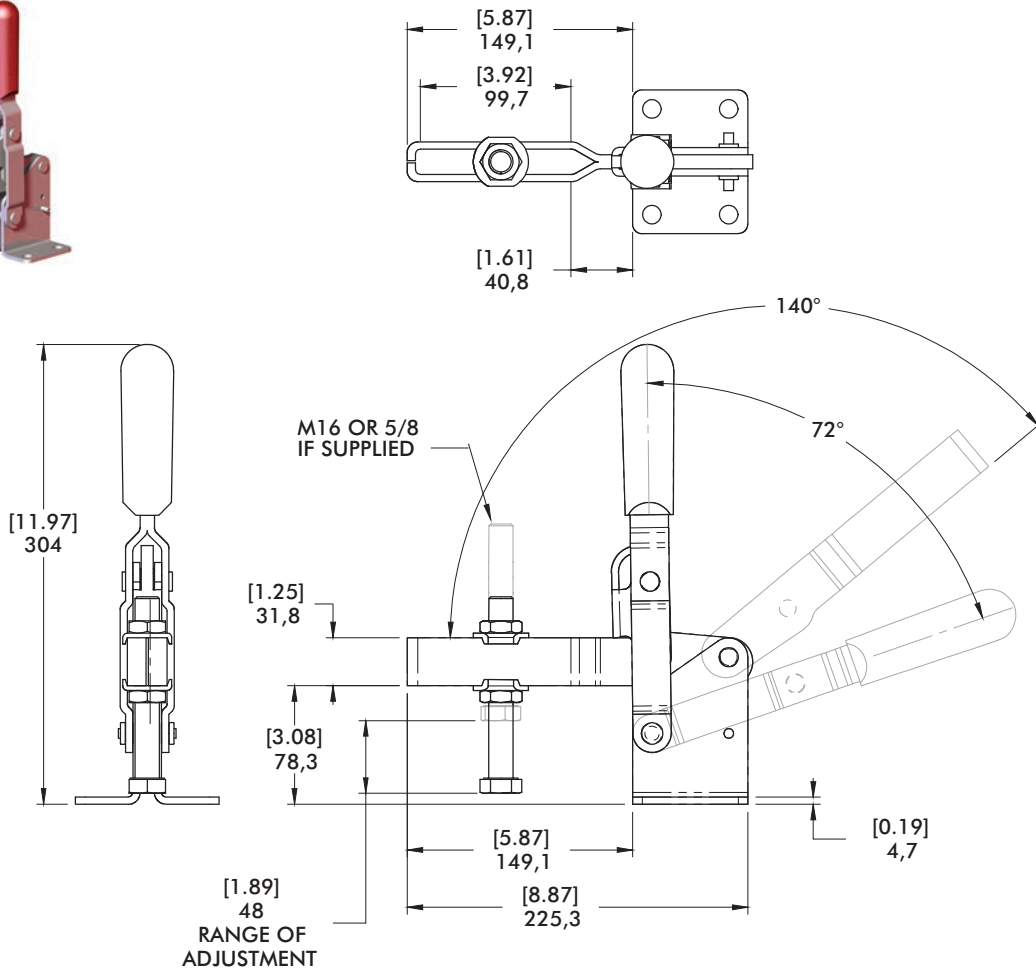


247-S
Flanged Base
Solid Bar

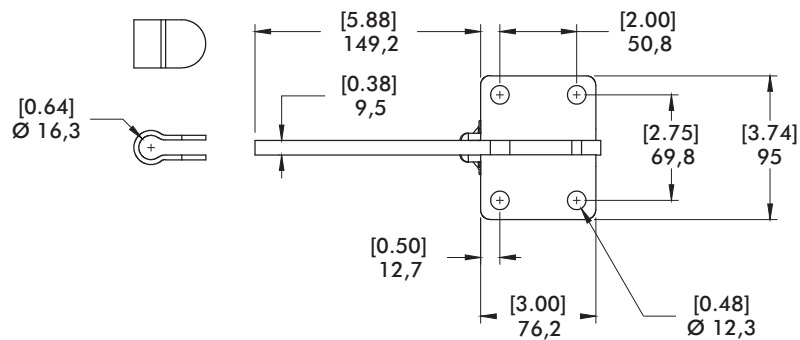


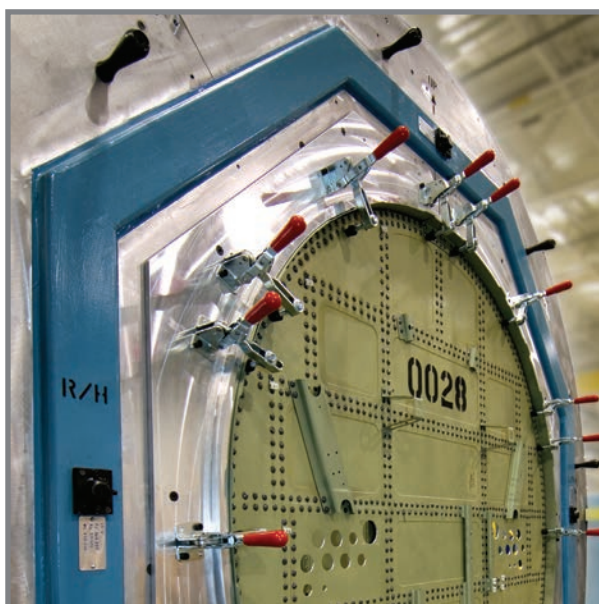
Series 267 Standard Clamp Dimensions -U/-S

267-U Flanged Base U-Bar



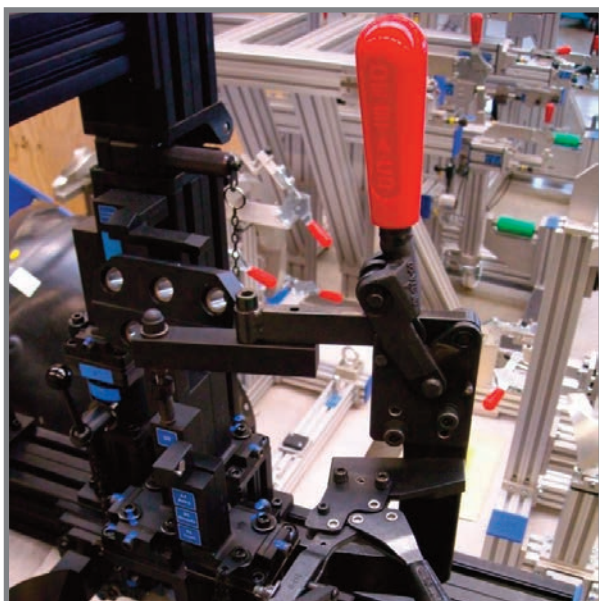
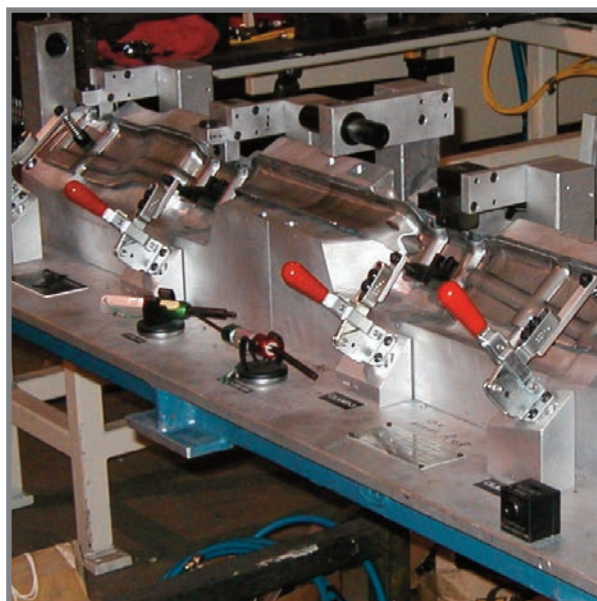
267-Sⁱ Flanged Base Solid Bar





Model **210-U**
used in an airframe
assembly fixture

Model **210-U**
shown being used
in a checking fixture
application.



Model **533-LB**
and **227-UB** shown
with black finish in
a fixture for used for
optical inspection.

Series 5905, 5910, 5915 Product Overview

Features:

- High strength forged clamping arm for heavy-duty service
- Hardened steel pivot pins and bushings provide long life
- Black oxide finish
- Large clearance under the clamping bar

Applications:

- Welding fixtures
- Assembly fixtures



5905/5910/5915
Flanged Base



5905-B/5910-B
Solid Base



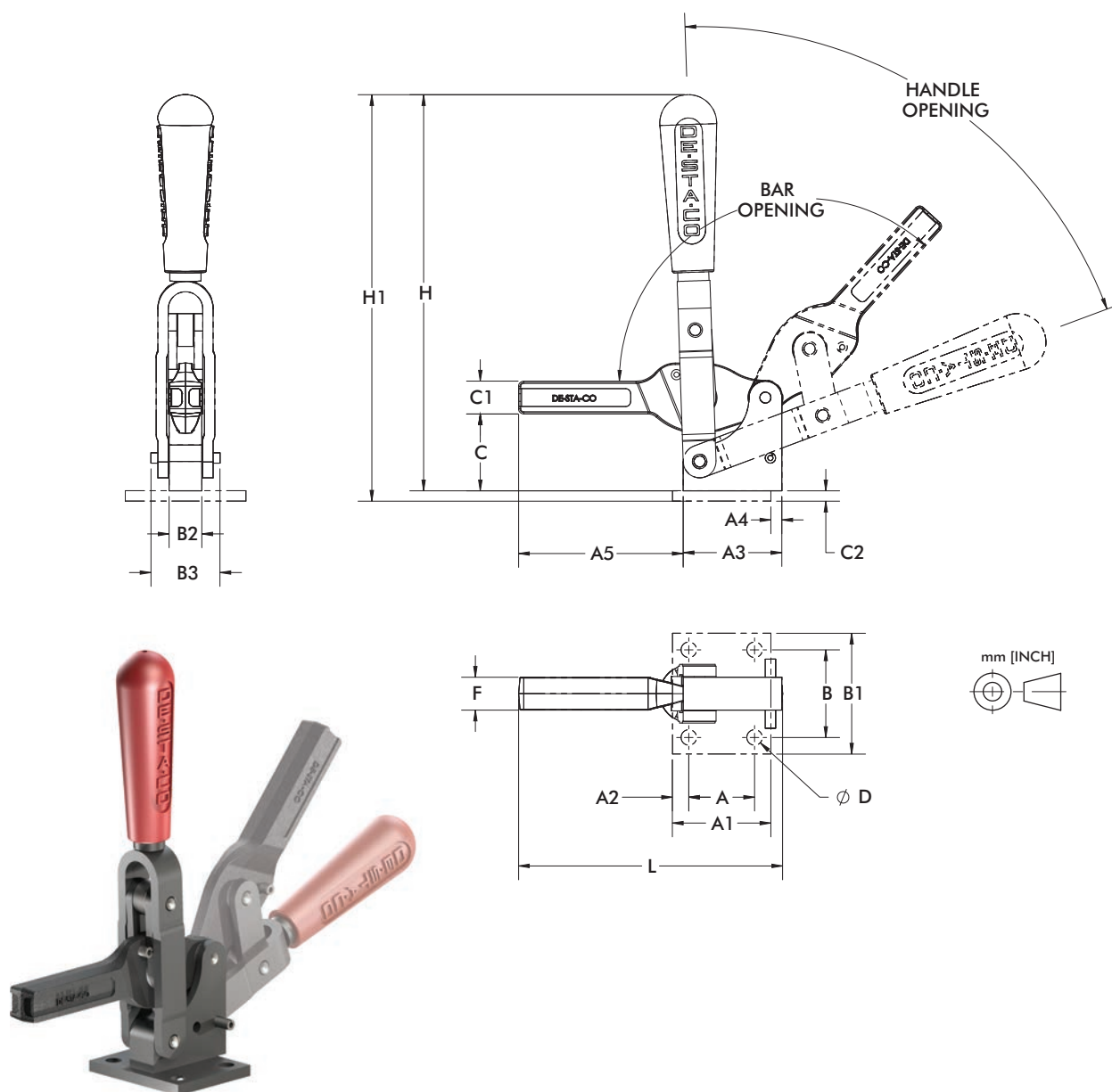
Series 5905, 5910, 5915 Technical Information

Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Weight
5905	[750lbf.] 3340N	135°	70°	[1.08lbs] 0,49kg
5905-B				[0.82lbs] 0,37kg
5905-R				[1.09lbs] 0,49kg
5905-BR				[0.83lbs] 0,37kg
5910	[1600lbf.] 7120N	132°	71°	[2.84lbs] 1,29kg
5910-B				[2.24lbs] 1,02kg
5910-R				[2.87lbs] 1,30kg
5910-BR				[2.27lbs] 1,03kg
5915	[2750lbf.] 12230N	147°	74°	[6.44lbs] 2,92kg



Removable handle stop can be repositioned to limit opening angle to 90°

Series 5905, 5910, 5915 Standard Clamp Dimensions



Model	A	A1	A2	A3	A4	A5	B	B1	B2	B3	C	C1	C2	D	F	H	H1	L
5905	[1.00] 25,4	[1.50] 38,1	[0.25] 6,4	[1.51] 38,4	[0.25] 6,4	[2.49] 63,2	[1.50] 38,1	[2.13] 54,1	[0.59] 15,0	[1.02] 25,9	[1.27] 32,3	[0.51] 12,9	[0.24] 6,1	[0.29] 7,3	[0.56] 14,2	[6.51] 165,4	[6.75] 171,4	[4.02] 102,10
5910	[1.50] 38,1	[2.24] 56,9	[0.37] 9,4	[2.25] 57,2	[0.25] 6,4	[3.76] 95,5	[2.00] 50,8	[2.76] 70,1	[0.75] 19,1	[1.57] 39,9	[1.75] 44,5	[0.75] 19,1	[0.24] 6,1	[0.41] 10,5	[0.56] 14,2	[9.04] 229,5	[9.27] 235,5	[6.02] 152,88
5915	[2.00] 50,8	[2.95] 74,9	[0.48] 12,2	[2.99] 75,9	[0.38] 9,7	[5.00] 127,0	[2.75] 69,9	[3.88] 98,6	[0.98] 24,9	[1.97] 50,0	[2.37] 60,2	[1.00] 25,4	[0.35] 8,9	[0.55] 14,0	[1.00] 25,4	[10.89] 276,7	[11.25] 285,7	[7.50] 190,50

Model	A3	A5	B2	B3	F	H
5905-B	[1.51] 38,4	[2.49] 63,2	[0.59] 15,0	[1.02] 25,9	[0.56] 12,2	[6.24] 158,5
5910-B	[2.25] 57,2	[3.76] 95,5	[0.75] 19,1	[1.57] 39,9	[0.75] 19,1	[8.72] 221,5

Series 5105, 5110 Product Overview

Features:

- High strength forged clamping arm for heavy-duty service
- Hardened steel pivot pins and bushings provide long life
- Black oxide finish
- Large clearance under the clamping bar
- DE-STA-CO® Toggle Lock Plus versions available

Applications:

- Welding fixtures
- Assembly fixtures



Covered under one or more U.S./International Patents

5105/5110
Flanged Base



5105-B/5110-B
Solid Base



5105-R/5110-R
Flanged Base
with
DE-STA-CO®
Toggle Lock
Plus



5105-BR①/5110-BR①
Solid Base
with
DE-STA-CO®
Toggle Lock
Plus

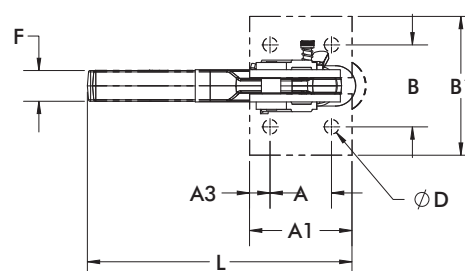
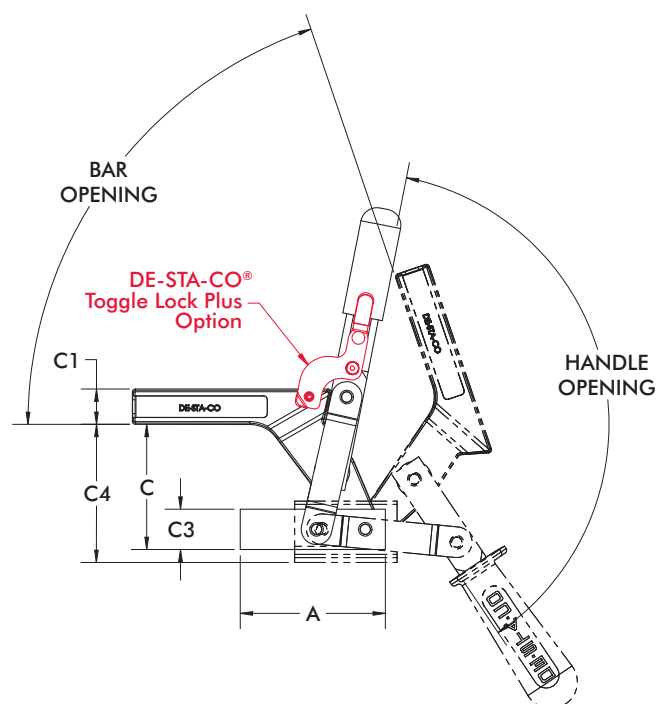
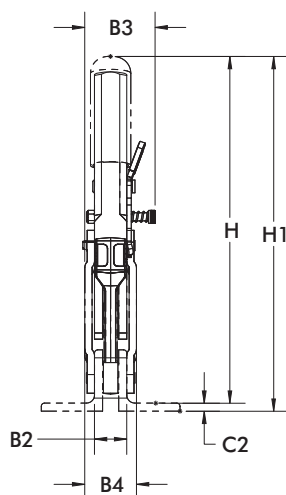


Series 5105, 5110 Technical Information

Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Weight
5105	[700lbf.] 3100N	89°	159°	[1.12lbs] 0,51kg
5105-B				[1.06lbs] 0,48kg
5105-R				[1.10lbs] 0,50kg
5105-BR①				[1.17lbs] 0,53kg
5110	[1150lbf.] 5100N	74°	138°	[2.98lbs] 1,35kg
5110-B				[2.95lbs] 1,34kg
5110-R				[3.00lbs] 1,36kg
5110-BR①				[3.02lbs] 1,37kg

① This item is available upon request

Series 5105,5110 Standard Clamp Dimensions



Model	A	A1	A2	B	B1	B2	B3	B4	C1	C2	C4	D	F	H1	L
5105	[1.00]	[1.62]	[0.31]	[1.46]	[2.24]	[0.59]	--	[0.98]	[0.51]	[0.16]	[2.54]	[0.26]	[0.56]	[6.54]	[4.13]
5105-R	25,4	41,2	7,9	37	57	15	[1.48] 37,5	25	13,0	4,0	64,6	6,6	14,3	166,1	104,9
5110	[1.50]	[2.50]	[0.50]	[2.00]	[2.76]	[0.79]	--	[1.26]	[0.87]	[0.20]	[3.37]	[0.35]	[0.75]	[8.70]	[6.33]
5110-R	38,1	63,5	12,7	50,8	70	20	[1.67] 42,5	32	22,0	5,0	85,6	9,0	19,1	221,1	160,9

Model	A3	B2	B3	B4	C	C1	C3	F	H
5105-B	[2.50]	[0.59]	--	[0.98]	[2.14]	[0.51]	[0.59]	[0.56]	[6.14]
5105-BR ^①	63,5	15	[1.48] 37,5	25	54,3	13,0	15,0	14,3	156,0
5110-B	[3.54]	[0.79]	--	[1.26]	[3.05]	[0.87]	[0.98]	[0.75]	[8.39]
5110-BR ^①	90	20	[1.67] 42,5	32	77,5	22,0	25,0	19,1	213,0

^① This item is available upon request

Series 528 Product Overview

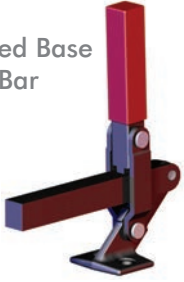
Features:

- Hardened steel bushings at pivot points for long life
- Solid bar may be modified to suit application requirements

Applications:

- Assembly & test
- Light machining
- Welding
- Medium to heavy duty clamping requirements

528
Flanged Base
Solid Bar



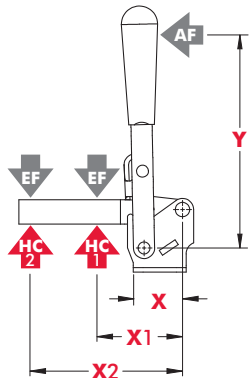
528-F
Front Mount
Base Solid Bar



Series 528 Technical Information

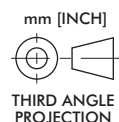
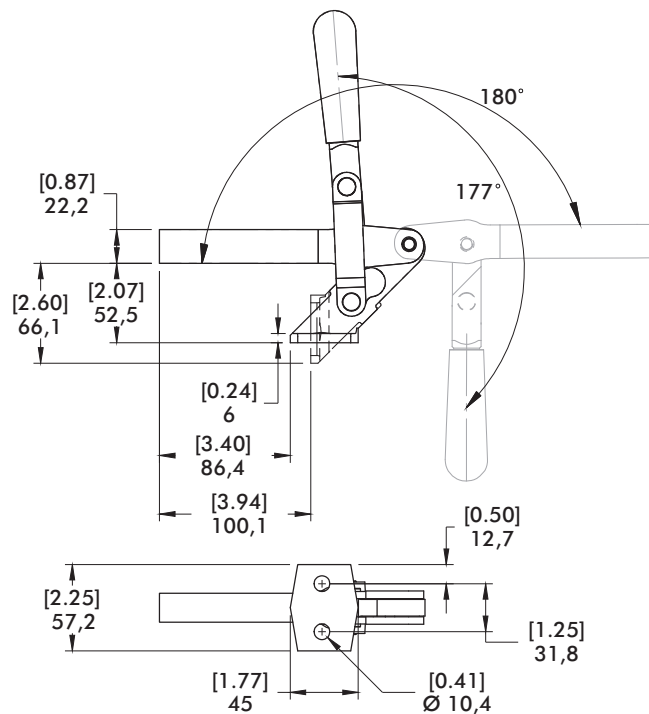
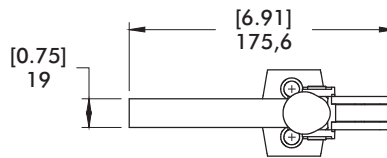
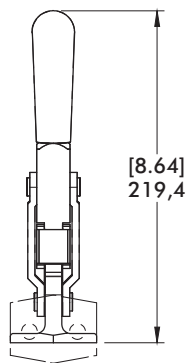
Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Weight
528	4450 N [1000 lbf]	180°	177°	[2.50lbs] 1,13kg
528-F				

Series 528 Holding Capacities, Standard Clamp Dimensions



Model	X	X1	X2	Y	±HC1	±HC2	±EF(X1):AF	±EF(X2):AF
528	[1.38] 35	[3.50] 89	[6.00] 152	[5.50] 140	[1000lbf.] 4450N	[580lbf.] 2580N	23:1	12:1
528-F								

Dimensions shown "mm [inch]" ±HC = Holding Capacity, EF = Exerting Force, AF = Applied Force
Refer to page 19.4 for additional information.



Features:

- Large bar guides for lateral stability
- Hardened steel pins and bushings for long life
- Replaceable pins

Applications:

- Assembly & test
- Light machining
- Welding
- Heavy duty clamping requirements

548
Straight Base
Solid Bar



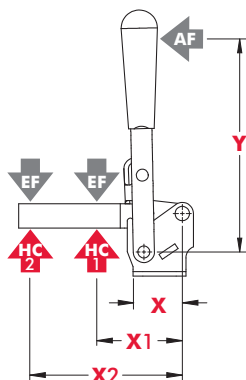
578
Straight Base
Solid Bar



Series 548, 578 Technical Information

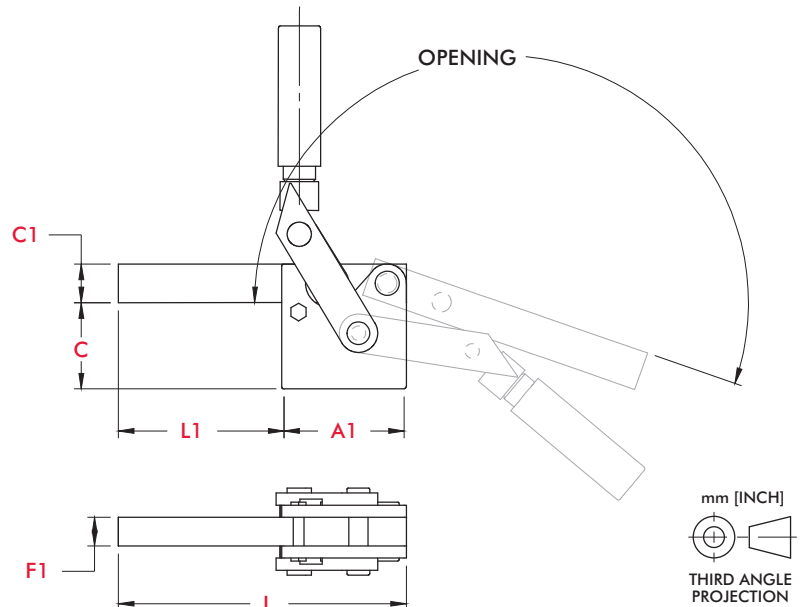
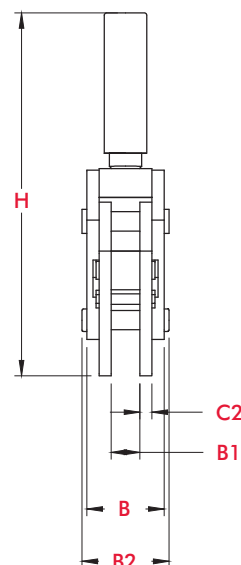
Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Weight
548	11100N [2500lbf]	199°	129°	2,40kg [5.30lbs]
578	17800N [4000lbf]			4,14kg [9.12lbs]

Series 548, 578 Holding Capacities, Standard Clamp Dimensions



Model	X	X1	X2	Y	±HC1	±HC2	±EF(X1):AF	±EF(X2):AF
548	[2.75] 70	[3.50] 89	[6.00] 152	[7.50] 190	[2500lbf] 11100N	[1500lbf] 6680N	4.5:1	3.4:1
578	[4.25] 108	[4.50] 114	[7.00] 178	[10.31] 262	[4000lbf] 17800N	[2500lbf] 11100N	7.6:1	4.2:1

Dimensions shown "mm [inch]" ± HC = Holding Capacity, EF = Exerting Force, AF = Applied Force
Refer to page 19.4 for additional information.



Model	A1	B	B1	B2	C	C1	C2	F1	H	L	L1
548	[3.25] 82,6	[2.01] 51	[0.75] 19,1	[2.26] 57,5	[2.24] 56,9	[1.00] 25,4	[0.31] 7,9	[0.75] 19,1	[9.45] 240	[7.50] 190,5	[4.25] 107,9
578	[4.02] 102,1	[2.38] 60,5	[0.87] 22,1	[2.70] 68,6	[2.79] 70,9	[1.26] 32	[0.37] 9,5	[0.87] 22,1	[11.04] 280,3	[8.62] 219	[4.61] 117,1

Series 533, 535 Product Overview

Features:

- Hardened steel bushings and pivot pins
- Large bar guides for greater lateral support
- Solid clamping bar may be modified to suit application requirements

Applications:

- Welding
- Heavy duty clamping applications

Also Available:

See page 8.1 for accessories

533-L
Flanged Base
Solid Bar



533-LB
Straight Base
Solid Bar



535-L
Flanged Base
Solid Bar



535-LB
Straight Base
Solid Bar



Series 533, 535 Technical Information

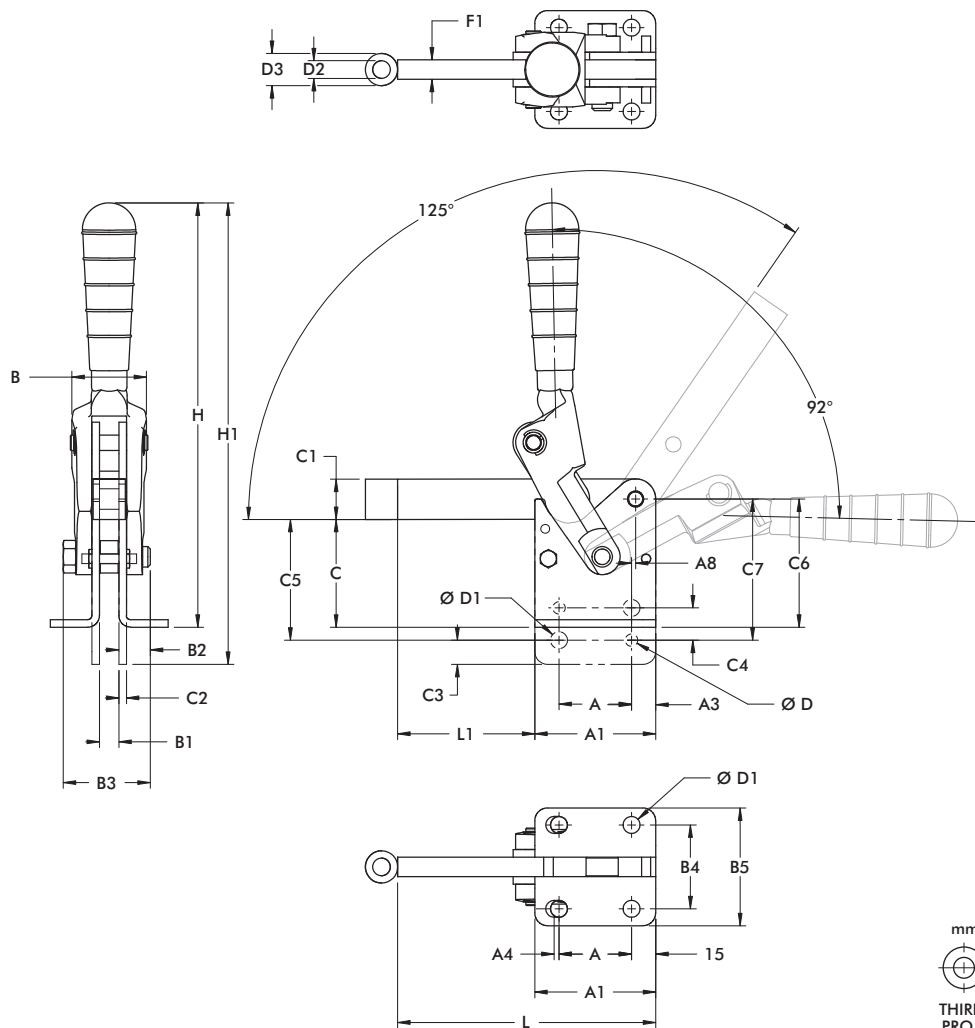
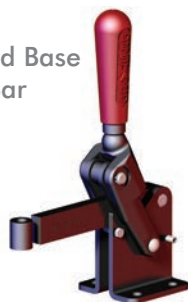
Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Weight	Accessories (Supplied)
					Bolt Retainer
533-L	7000 N [1575 lbf]	120°	90°	1,00kg [2.20lbs]	533108-M
533-LB					
535-L	10000 N [2250 lbf]	120°	90°	1,85kg [4.087lbs]	535108-M
535-LB					

Series 533, 535 Standard Clamp Dimensions

533-L
Flanged Base
Solid Bar



535-L
Flanged Base
Solid Bar



mm [INCH]



THIRD ANGLE
PROJECTION

Model	A	A1	A3	A4	A8	B	B1	B2	B3	B4	B5	C	C1	C2	
533-L	[1.18]	[2.36]	[0.59] 15	[0.08] 2	[0.20]	[1.52]	[0.39]	[0.69]	[1.75]	[1.77] 45	[2.44] 62	[1.86] 47,2	[0.79]	[0.19] 4,8	
533-LB	30	59,9			5.1	38,6	9,9	15,5	44,5	--	--	--	20,1		
535-L	[1.77]	[2.95]			--	[0.18]	[1.89]	[0.47]	[0.89]	[2.13]	[2.05] 52,1	[2.87] 72,9	[2.63] 66,8		[0.98]
535-LB	45	74,9				4,6	48	11,9	22,6	54,1	--	--	--		24,9

Model	C3	C4	C5	C6	C7	D	D1	D2	D3	F1	H	H1	L	L1
533-L	--	--	--	[2.24] 56,9	--	--	[0.33] 8,4	[0.35] 8,9	[0.59] 15	[0.39] 9,9	[8.6] 218,4	--	[4.92] 125	[2.56] 65
533-LB	[0.39] 9,9	[0.59] 15	[1.86] 55,1	--	[2.56] 65	[0.22] 5.6					--	[9.31] 236,5		
535-L	--	--	--	[3.13] 79,5	--	--	[0.41] 10,4	[0.43] 10,9	[0.79] 20,1	[0.47] 11,9	[10.35] 262,9	--	[6.30] 160	[3.35] 85,1
535-LB	[0.59] 15	[0.79] 20,1	[2.95] 74,9	--	[3.44] 87,4	[0.30] 7,6					--	[11.26] 286		

Series 558 Product Overview

Features:

- Forged alloy steel handle and links for rugged service
- Hardened steel pins and bushings
- Hold down bar can be machined to suit application requirements

Applications:

- Welding
- Heavy duty clamping requirements

Also Available:

Model 858 Pneumatic Toggle clamp
See page 10.18

558



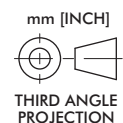
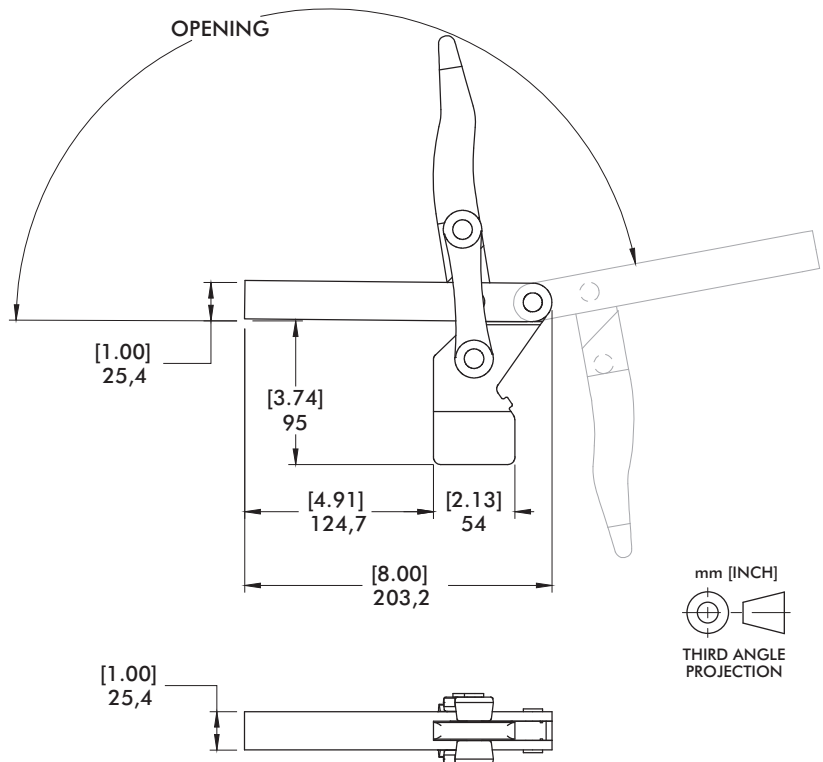
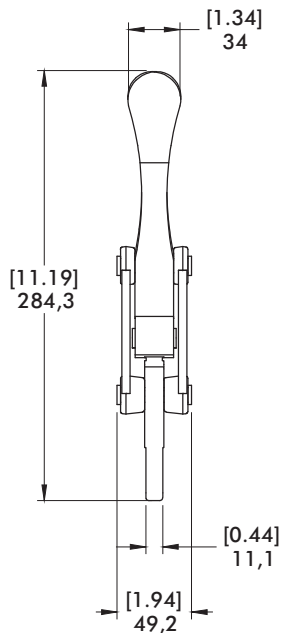
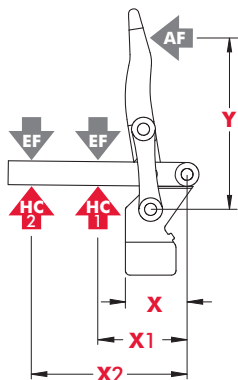
Series 558 Technical Information

Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Weight
558	11100 N [2500 lbf]	192°	64°	2,27kg [5.0lbs]

Series 558 Holding Capacities, Standard Clamp Dimensions

Model	X	X1	‡HC1	‡HC2
558	65,8 [2.59]	76,2 [3.00]	[2500 lbf] 11100 N	[1500 lbf] 6680 N

Dimensions shown "mm [inch]" , ‡ HC = Holding Capacity



Features:

- Front flange mount
- Accepts M8 or 5/16" spindle accessory (not supplied)

Applications:

- Assembly & test
- Checking fixtures
- Light machining
- Woodworking

Also Available:

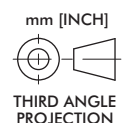
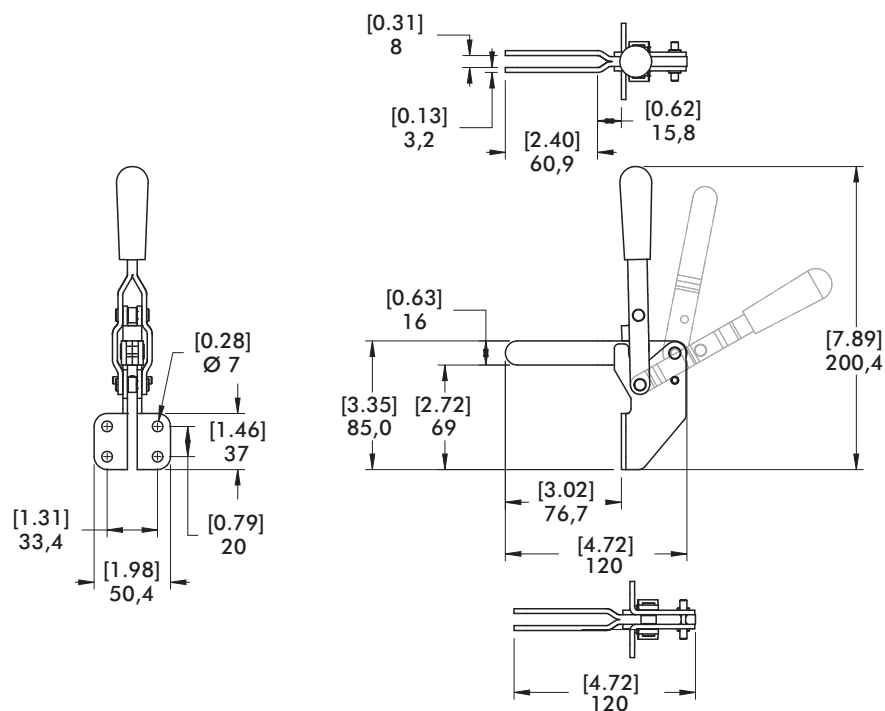
See page 8.1 for accessories

91090
Front Flanged Base
Open Bar



Series 91090 Technical Information, Standard Clamp Dimensions

Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Weight	Recommended Accessories		
					Bolt Retainer	Spindle Assembly	Flanged Washers
91090	1710 N [385 lbf]	100°	60°	0,37kg [0.81lbs]	---	507208-M	507107



Series 317 Product Overview

Features:

- Dual mounting surfaces
- Large bar opening angle
- Accommodates M8 or 5/16" spindle accessories

Applications:

- Assembly & test
- Checking fixtures
- Light machining
- Woodworking

Also Available:

See page 8.1 for accessories
817-U Pneumatic Toggle Clamp
(See page 10.22)
817-S Pneumatic Toggle Clamp
(See page 10.22)

317-U
U-Bar



317-S
Solid Bar

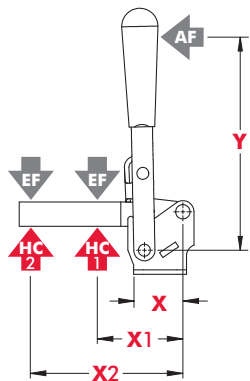


Note:
Clamps shown with included accessories.

Series 317 Technical Information

Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Weight	Accessories (Supplied)		
					Bolt Retainer	Spindle Assembly	Flanged Washers
317-U	1670 N [375 lbf]	185°	60°	0,34kg [0.75lbs]	---	507208-M	507107
317-S	1780 N [400 lbf]				207105	---	---

Series 317 Holding Capacities

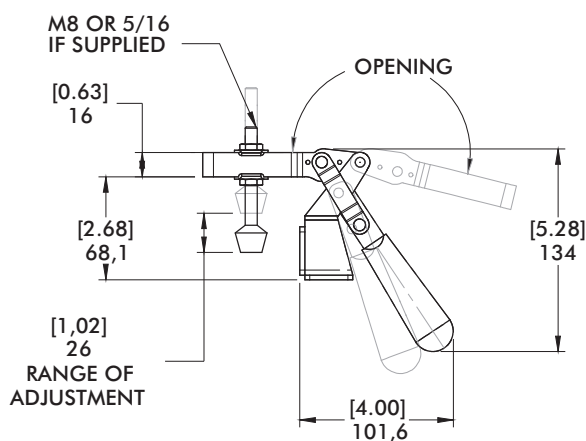
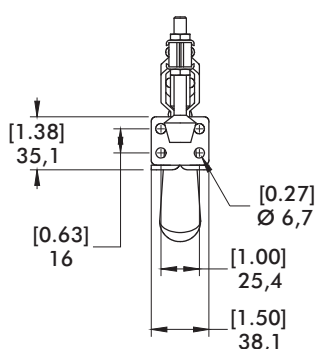
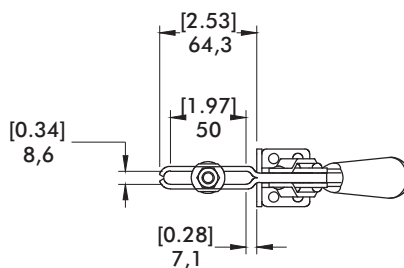


Model	X	X1	X2	Y	±HC1	±HC2	±EF(X1):AF	±EF(X2):AF
317-U	[1.57] 40,0	[2.00] 50,8	[3.75] 95,3	[4.00] 101,6	[375 lbf] 1670 N	[200lbf.] 900N	17:1	8:1
317-S		[2.50] 63,5	[5.00] 127,0		[400 lbf] 1780 N	[190lbf.] 850N	13:1	5:1

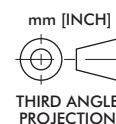
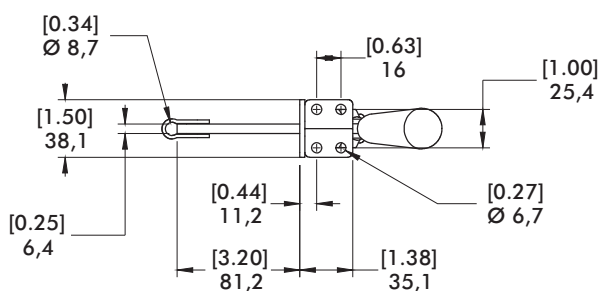
Dimensions shown "mm [inch]" ± HC = Holding Capacity, EF = Exerting Force, AF = Applied Force
Refer to page 19.4 for additional information.

Series 317 Standard Clamp Dimensions -U/-S

317-U
U-Bar



317-S
Solid Bar



Series 527 Product Overview

Features:

- Hardened steel bushings at pivot points
- Solid bar can be modified to suit application requirements
- Thumb lever on link for easy opening

Applications:

- Assembly & test
- Light machining
- Woodworking

527
Flanged Base



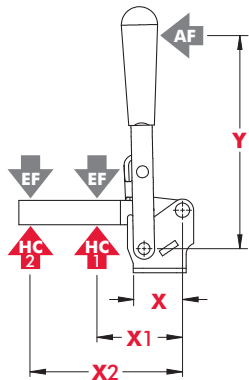
527-F
Front Mount



Series 527 Technical Information

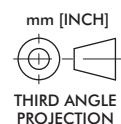
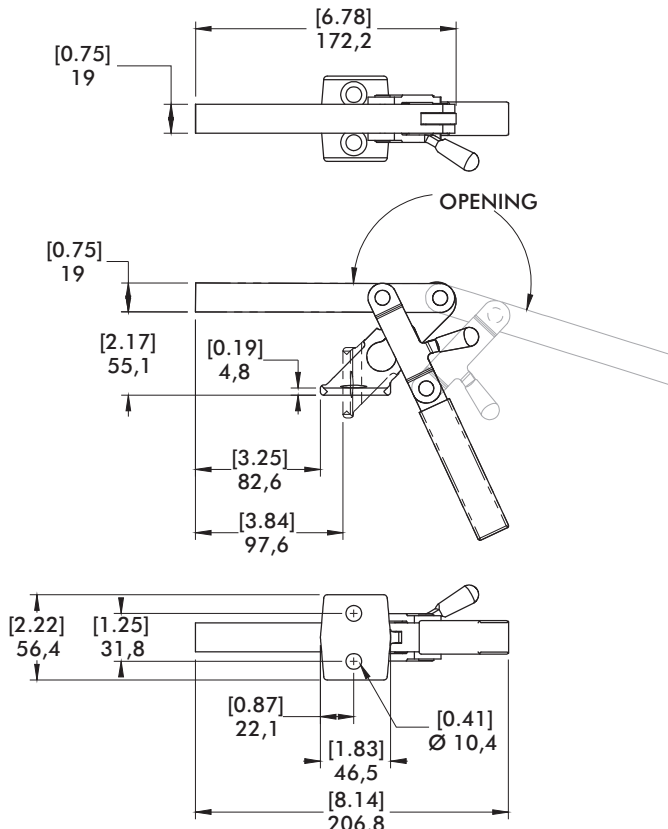
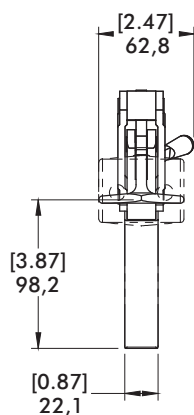
Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Weight
527	4450 N [1000 lbf]	195°	65°	[2.50lbs] 1,13kg
527-F				

Series 527 Holding Capacities, Standard Clamp Dimensions



Model	X	X1	X2	Y	±HC1	±HC2	±EF(X1):AF	±EF(X2):AF
527	[3.12] 79,2	[3.50] 89,0	[6.00] 152,4	[4.00] 101,6	[1000lbf.] 4450N	[580lbf.] 2580N	23:1	12:1
527-F	[2.53] 64,3							

Dimensions shown "mm [inch]" ± HC = Holding Capacity, EF = Exerting Force, AF = Applied Force
Refer to page 19.4 for additional information.



Heavy Duty Cam Action Series Product Overview

Features:

- Cam action accommodates variable workpiece thickness
- Heavy duty construction
- Solid clamp arms may be modified to suit application requirements

Applications:

- Light machining
- Welding
- Assembly

Technical Information

7-101

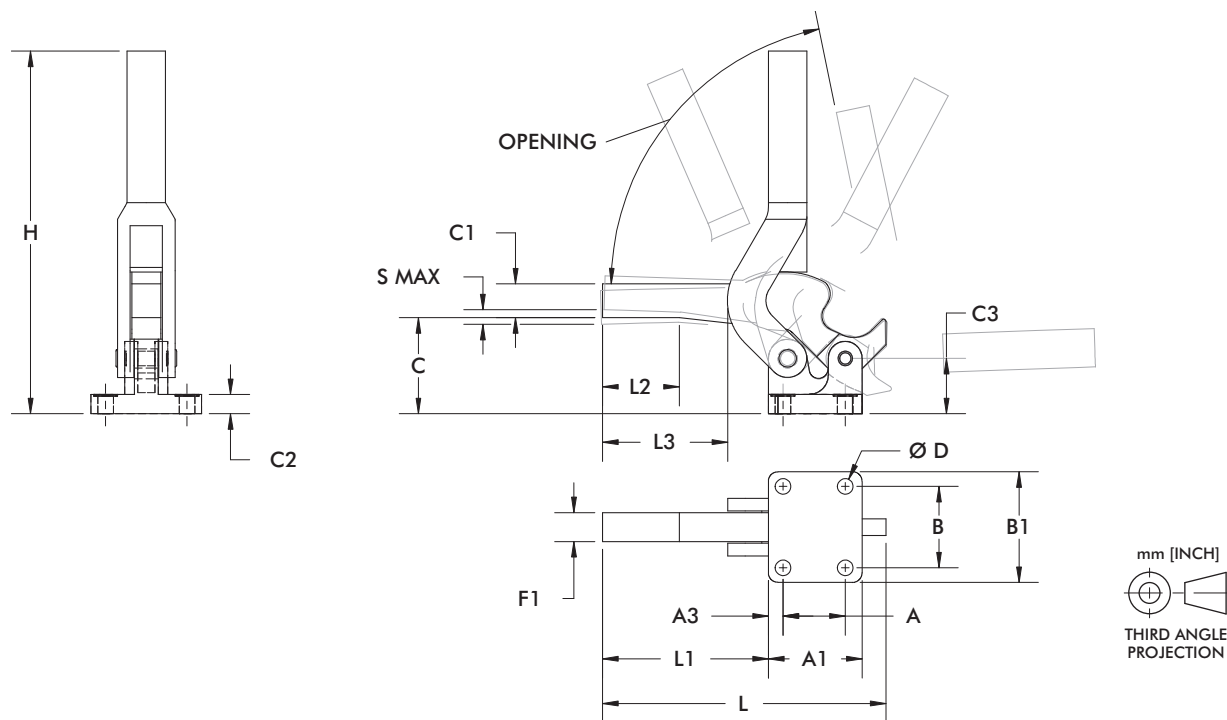


7-58



Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Weight
7-101	2110 N [475 lbf]	80°	0,45kg [1.0lbs]
7-58	2670 N [600 lbf]	95°	0,91kg [2.0lbs]
7-59	4450 N [1000 lbf]	95°	1,36kg [3.0lbs]
7-60	7120 N [1600 lbf]	80°	2,27kg [5.0lbs]

Heavy Duty Cam Action Series Standard Clamp Dimensions - Flanged Base



Model	A	A1	A3	B	B1	C	C1	C2	C3	D	F1	H	L	L1	L2	S max.
7-101	[0.75] 19,1	[1.25] 31,8	[0.25] 6,1	[1.25] 31,8	[1.75] 44,5	[1.44] 36,6	[0.50] 12,7	[0.31] 7,9	[1.00] 25,4	[0.22] 5,6	[0.50] 12,7	[5.00] 127	[4.63] 117,6	[3.12] 79,3	-	[0.13] 3,3
7-58	[1.00] 25,4	[1.69] 42,9	[0.34] 8,6	[1.62] 41,2	[2.25] 57,2	[1.87] 47,5	[0.56] 14,2	[0.38] 9,7	[1.12] 28,5	[0.28] 7,1	[0.50] 12,7	[7.00] 177,8	[6.99] 177,6	[2.55] 64,8	-	[0.13] 3,3
7-59	[1.38] 35,1	[2.06] 52,3	[0.39] 9,9	[1.88] 47,8	[2.50] 63,5	[2.19] 55,6	[0.63] 16	[0.44] 11,2	[1.25] 31,8	[0.34] 8,6	[0.63] 16	[8.50] 215,9	[6.00] 152,4	[3.50] 88,9	[1.24] 31,5	[0.19] 4,8
7-60	[1.62] 41,2	[2.44] 62	[0.44] 11,2	[2.12] 53,9	[2.88] 73,2	[2.50] 63,5	[0.88] 22,4	[0.50] 12,7	[1.44] 36,6	[0.41] 10,4	[0.75] 19,1	[9.50] 241,3	[7.40] 188	[4.38] 111,3	[1.97] 50	[0.25] 6,4

Series 229 Product Overview

Features:

- Cam action clamp holds workpieces of varying height
- Total clamping range of 8mm [.31 in.]
- Accommodates M12 or 1/2" accessories

Applications:

- Assembly & test
- Light machining
- Welding

Also Available:

See page 8.1 for accessories

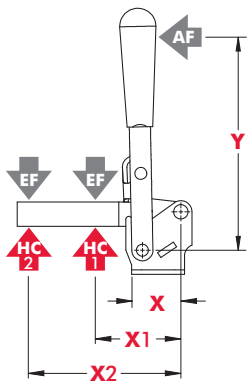
229
Flanged Base
Open Bar



Series 229 Technical Information

Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Handle Opening (+10°)	Weight	Accessories (Supplied)	
					Spindle Assembly	Flanged Washers
229	4450 N [1000 lbf]	115°	180°	1,17kg [2.59lbs]	229203	247109

Series 229 Holding Capacities

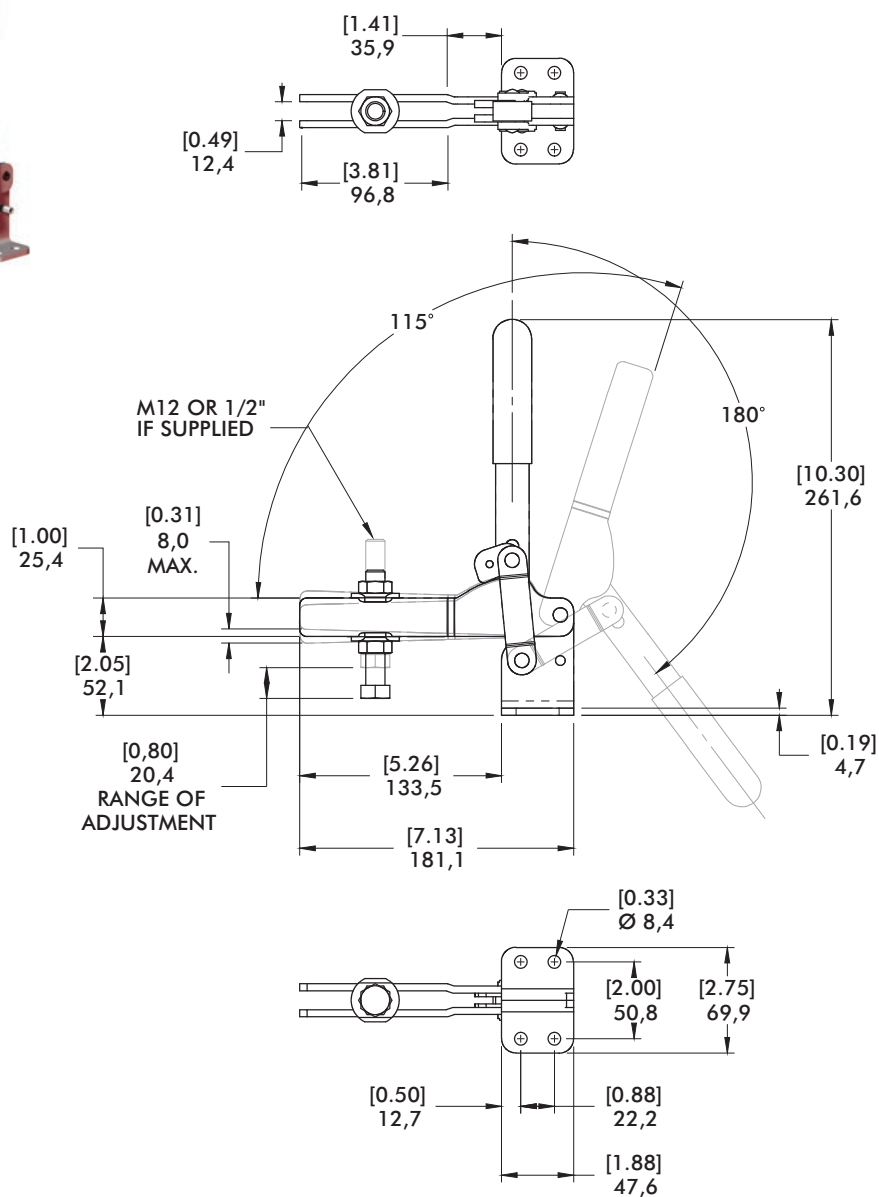
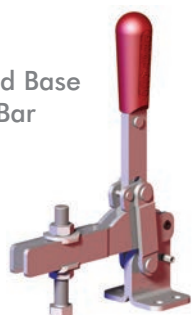


Model	X	X1	X2	Y	‡HC1	‡HC2	‡EF(X1):AF	‡EF(X2):AF
229	[1.53] 38,9	[3.00] 76,2	[6.12] 155,4	[7.06] 179,3	[1000lbf.] 4450N	[500lbf.] 2230N	7:1	3:1

Dimensions shown "mm [inch]" ‡ HC = Holding Capacity, EF = Exerting Force, AF = Applied Force
Refer to page 19.4 for additional information.

Series 229 Standard Clamp Dimensions

229
Flanged Base
Open Bar



Series 500 Product Overview

Features:

- Hardened pivot pins and bushings
- Weldable clamping bar
- LSC version with locking spring clip for securing the handle in the open position
- Modular design allows you to set up the clamp to meet application requirements

Applications:

- Welding
- Assembly
- Heavy duty, production clamping applications

Also Available:

See page 1.43 for accessories

501-B①
Swivel Base



501-LB①
Long Base



503-MB
Swivel Base



503-MLB
Long Base



503-MBLSC①
Swivel Base
with Locking
Spring Clip



503-MLBLSC①
Long Base
with Locking
Spring Clip



505-MB
Swivel Base



505-MLB
Long Base



505-MBLSC①
Swivel Base
with Locking
Spring Clip



505-MLBLSC①
Long Base
with Locking
Spring Clip



506-MB
Swivel Base



506-MLB①
Long Base



506-MBLSC①
Swivel Base
with Locking
Spring Clip

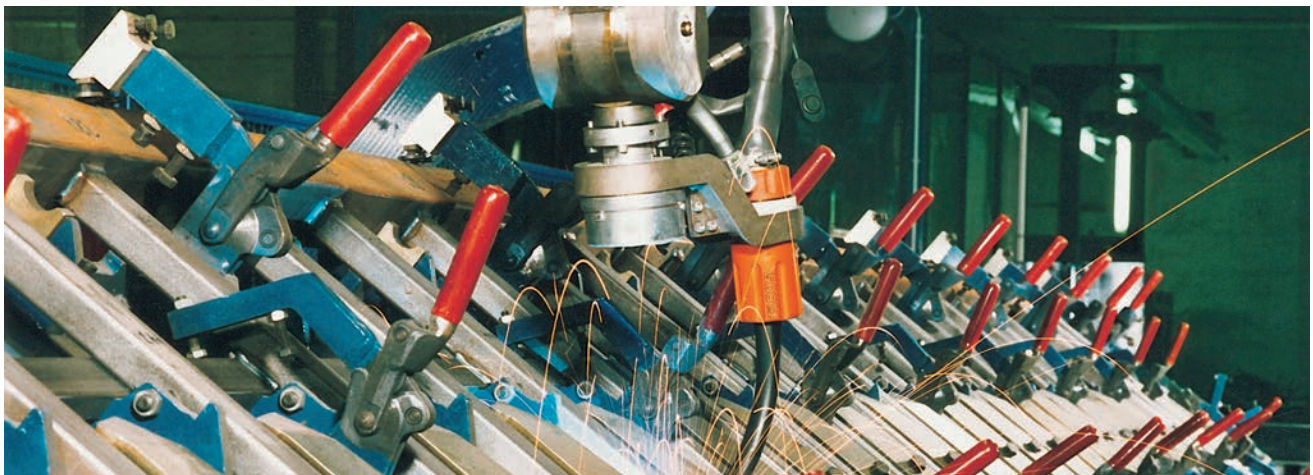


506-MLBLSC①
Long Base
with Locking
Spring Clip



Model 505-MLB in a robotic welding fixture

① This item is available upon request



Series 500 Technical Information

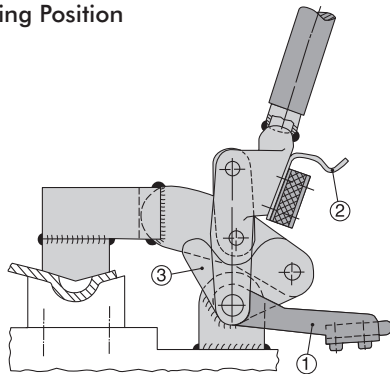
Model	Max. Holding Capacity	Clamp Bar Opening (+10°)	Weight
501-B ⓘ	2000 N [450 lbf]	200°	0,18kg [0.40lbs]
501-LB ⓘ			0,20kg [0.44lbs]
503-MB	0,70kg [1.54lbs]		
503-MLB	7000 N [1575 lbf]		0,80kg [1.76lbs]
503-MBLSC ⓘ			0,90kg [1.98lbs]
503-MLBLSC ⓘ	1,40kg [3.09lbs]		
505-MB	11000 N [2475 lbf]		1,50kg [3.31lbs]
505-MLB			1,60kg [3.53lbs]
505-MBLSC ⓘ			2,60kg [5.73lbs]
505-MLBLSC ⓘ			2,80kg [6.17lbs]
506-MB	22500 N [5060 lbf]		3,00kg [6.61lbs]
506-MLB ⓘ			
506-MBLSC ⓘ			
506-MLBLSC ⓘ			

ⓘ This item is available upon request

Note:

The clamping bars are made from forged alloy steel and must be heated to 200°C(400°F) prior to welding. We recommend welding the handles, clamp arms, and mounting bases when disassembled. Welding of non pre-heated parts may only be done with the addition of welding fillers.

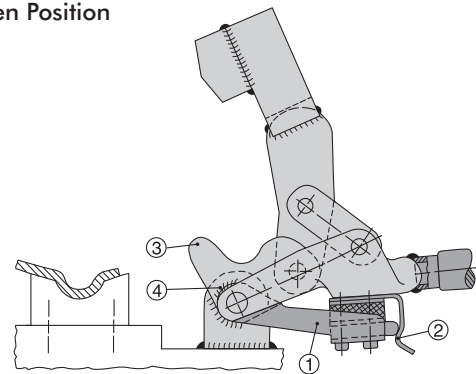
Clamping Position



Patented spring latch hold-open device

1. Mount the clamp and place it in the closed position
2. Position the bracket ① in the leaf spring ②

Open Position

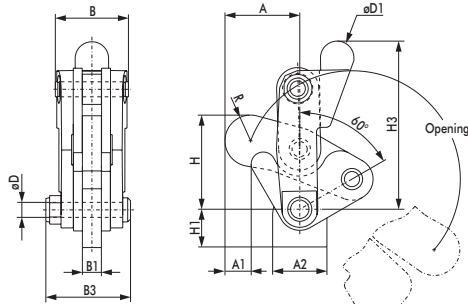


3. Swivel the clamp into the open position
4. In this position, weld the bracket ① with the bar guide feature ③ at point ④

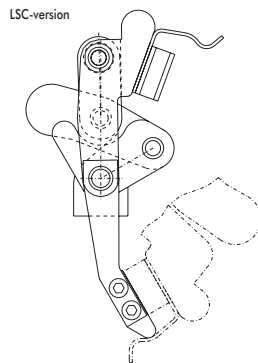
Series 500 Standard Clamp Dimensions

-B/-LB/-MB/-MLB/-MBLSC/-MLBLSC

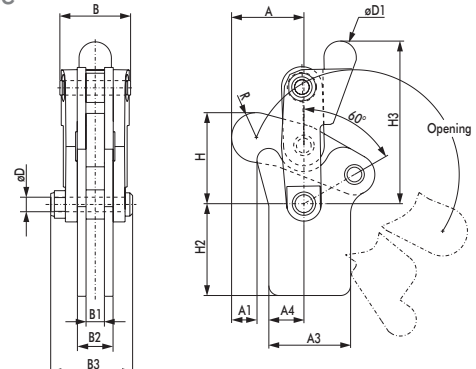
Swivel Base



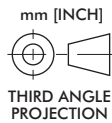
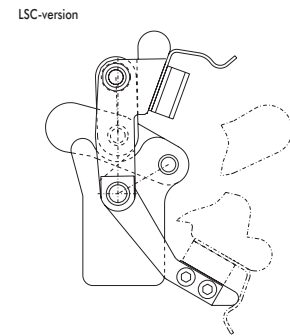
503-MB
Swivel Base



Long Base



503-MLB
Long Base



Swivel Base Dimensions

Model	A	A1	A2	B	B1	B3	ØD	ØD1	H	H1	H3	R
501-B ⓘ	[1.13] 28,6	[0.56] 14,3	[0.75] 19,1	[0.79] 20,0	[0.25] 6,4	[1.09] 27,8	[0.19] 4,8	[0.50] 12,7	[1.12] 28,5	[0.79] 20	[2.20] 56	[0.37] 9,5
503-MB	[1.54] 39,2	[0.50] 12,8	[1.12] 28,5	[1.52] 38,5	[0.39] 10	[1.82] 46,2	[0.31] 8	[0.69] 17,5	[1.96] 49,8	20	[3.51] 89,1	[0.53] 13,5
503-MBLSC ⓘ												
505-MB	[2.22] 56,5	[1.02] 25,9	[1.38] 35	[1.89] 48	[0.48] 12,3	[2.31] 58,6	[0.37] 9,5	[0.87] 22,2	[2.79] 70,8	[1.10] 28	[4.33] 110,1	[0.72] 18,3
505-MBLSC ⓘ												
506-MB	[2.82] 71,7	[1.27] 32,3	[1.97] 50	[1.91] 48,4	[0.63] 16	[2.72] 69	[0.47] 12	[0.94] 24	[3.45] 87,7	[1.29] 32,8	[5.30] 134,6	[0.84] 21,4
506-MBLSC ⓘ												

Long Base Dimensions

Model	A	A1	A3	A4	B	B1	B2	B3	ØD	ØD1	H	H2	H3	R
501-LB ⓘ	[1.13] 28,6	[0.50] 12,8	[1.13] 28,6	[0.56] 14,3	[0.79] 20	[0.25] 6,4	[0.51] 13	[1.09] 27,8	[0.19] 4,8	[0.50] 12,7	[1.12] 28,5	[1.32] 33,5	[2.21] 56,1	[0.37] 9,5
503-MLB	[1.54] 39,2	[0.50] 12,8	[1.75] 44,5	[0.75] 19	[1.52] 38,5	[0.39] 10	[0.79] 20	[1.82] 46,2	[0.31] 8	[0.69] 17,5	[1.96] 49,8	[1.97] 50	[3.51] 89,1	[0.53] 13,5
503-MLBLSC ⓘ														
505-MLB	[2.22] 56,5	[1.02] 25,9	[2.09] 53	[1.08] 27,5	[1.89] 48	[0.48] 12,3	[0.88] 22,3	[2.31] 58,6	[0.37] 9,5	[0.87] 22,2	[2.79] 70,8	[2.50] 63,5	[4.33] 110,1	[0.72] 18,3
505-MLBLSC ⓘ														
506-MLB	[2.82] 71,7	[1.27] 32,3	[2.58] 65,5	[1.45] 36,9	[1.91] 48,4	[0.63] 16	[1.10] 28	[2.72] 69	[0.47] 12	[0.94] 24	[3.45] 87,7	[3.00] 76,2	[5.30] 134,6	[0.84] 21,4
506-MLBLSC ⓘ														

Features:

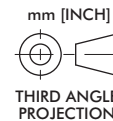
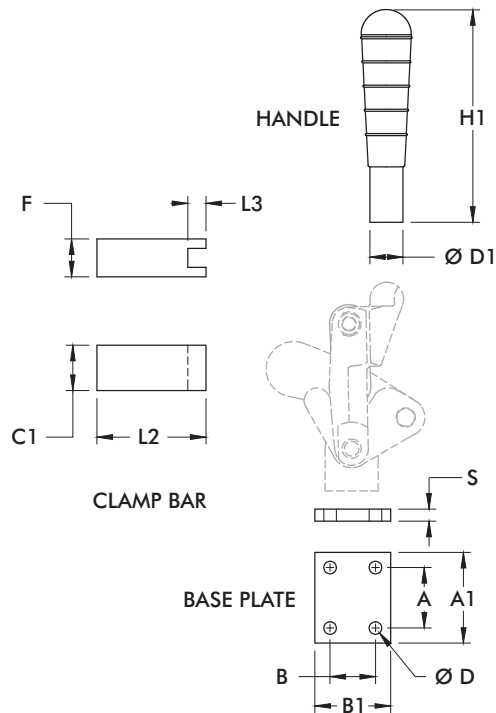
- Used with 500 Series Vertical Clamps
- Allows you to customize the clamp to suit application requirements

Applications:

- Welding
- Assembly
- Heavy duty, production clamping applications

Also Available:

See page 1.41 for clamp linkage



Use with	Part No.	Handle		Clamping Bar				Base Plate					
		ØD1	H1	C1	F	L2	L3	A	A1	B	B1	ØD	S
501	501503 ⓘ	6x10	61	-	-	-	-	-	-	-	-	-	-
	501501 ⓘ	-	-	15	15	40	10	-	-	-	-	-	-
	503502	-	-	-	-	-	-	25	40	35	50	6.3	8
503	503503-L	Ø18	129.5	-	-	-	-	-	-	-	-	-	-
	503501	-	-	25	20	50	8	-	-	-	-	-	-
	503502	-	-	-	-	-	-	25	40	35	50	6.3	8
505	505503-L	Ø22	159	-	-	-	-	-	-	-	-	-	-
	505501	-	-	30	25	60	12	-	-	-	-	-	-
	505502	-	-	-	-	-	-	40	60	30	50	8.1	8
506	506503-L	Ø28	188	-	-	-	-	-	-	-	-	-	-
	506501	-	-	35	30	75	15	-	-	-	-	-	-
	506502	-	-	-	-	-	-	50	70	45	65	8.1	8

ⓘ This item is available upon request Note: Dimensions shown in millimeters.