

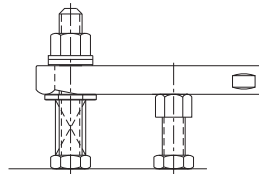
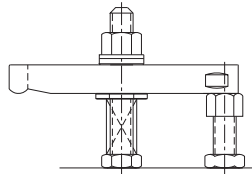
SLOTTED-HEEL CLAMP STRAPS

STEEL: 1018, CARBURIZED-HARDENED, BLACK OXIDE FINISH
STAINLESS STEEL: 300 SERIES

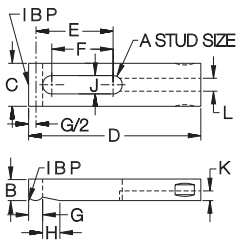


Steel and Stainless Steel

Popular Clamp Strap with a slot underneath to allow sliding it straight back for clear loading. Two drill spots on the sides provide a secure grip for retracting the clamp. Available in steel for 1/4-20 (M6) to 3/4-10 (M20) stud sizes, or stainless steel for #10-32 to 3/8-16 stud sizes. Each size is available in several strap lengths.



See pages 214-216 for complete assemblies using these Clamp Straps.



See pages 410-411 for stackable high-rise clamp-strap assemblies.

STRAPS — STEEL

PART NO.	A	B	C	D	E	F	G	H	J	K	L
CL-0-CS				2	27/32	19/32					
CL-1-CS	1/4-20 or M6	3/8	5/8	2-1/2	1-3/32	13/16	1/4	11/32	9/32	5/32	3/16
CL-1A-CS				2-1/2	27/32	1/2					
CL-1B-CS	5/16-18 or M8	1/2	3/4	3	1-11/32	1	5/16	7/16	11/32	7/32	1/4
CL-2-CS				3	1-9/32	7/8					
CL-3A-CS				3-1/2	1-17/32	1-1/8					
CL-3-CS	3/8-16 or M10	1/2	1-1/8	4	1-25/32	1-3/8	13/32	1/2	27/64	9/32	3/8
CL-4-CS				5	2-9/32	1-7/8					
CL-5-CS				6	2-25/32	2-3/8					
CL-6A-CS				3-1/2	1-1/2	1-1/32					
CL-6-CS				4	1-3/4	1-9/32					
CL-8-CS	1/2-13 or M12	5/8	1-1/4	5	2-1/4	1-25/32	13/32	1/2	17/32	9/32	3/8
CL-10-CS				6	2-3/4	2-9/32					
CL-15A-CS				4	1-11/16	1-3/32					
CL-16-CS				5	2-3/16	1-19/32					
CL-18-CS	5/8-11 or M16	7/8	1-1/2	6	2-11/16	2-3/32	1/2	19/32	21/32	9/32	1/2
CL-18A-CS				6-1/2	2-15/16	2-11/32					
CL-19-CS				6	2-5/8	2					
CL-21-CS	3/4-10 or M20	1	1-3/4	7	3-1/8	2-9/16	1/2	19/32	13/16	5/16	1/2
CL-22A-CS				8	3-5/8	3-1/8					

STRAPS — STAINLESS, MINIATURE

CL-17215	#10-32	1/4	1/2	1-1/2	21/32	15/32	3/16	5/16	7/32	3/32	7/32
CL-17220				2	29/32	23/32					
CL-17320	1/4-20	3/8	5/8	2	7/8	11/16	1/4	3/8	9/32	1/8	9/32
CL-17325				2-1/2	1-1/8	15/16					
CL-17420				2	27/32	19/32					
CL-17425	5/16-18	3/8	3/4	2-1/2	1-3/32	27/32	5/16	7/16	11/32	5/32	11/32
CL-17430				3	1-11/32	1-3/32					
CL-17530				3	1-5/16	1					
CL-17540	3/8-16	1/2	1	4	1-13/16	1-1/2	3/8	1/2	13/32	3/16	13/32

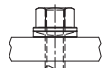
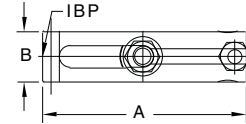
SLOTTED-HEEL CLAMP STRAPS

SEE PAGES 85, 92, 213, 252-255, 259-260, 268 FOR MATERIAL SPECIFICATIONS



Steel

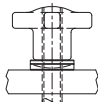
A complete clamp-strap assembly using a slotted-heel strap from page 213. Select any of the six nut/knob combinations shown below by adding the appropriate suffix to the part number. Other Stud and Clamp Rest lengths are available (order pieces individually).



Spherical Nut & Washer
CL-xx-SHA-1



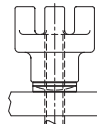
Flange Nut
CL-xx-SHA-2



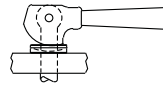
Hand Knob with Spherical Washer
CL-xx-SHA-4



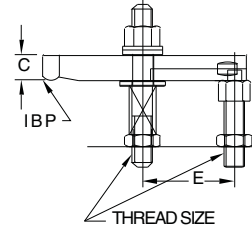
Acorn Nut with Spherical Washer
CL-xx-SHA-5



Bar Knob with Spherical Washer*
CL-xx-SHA-6



Cam Handle with Spherical Washer
(See page 215)



ASSEMBLIES — STEEL (USA)

PART NO	THREAD SIZE	A	B	C	E	CLAMP STRAP	CLAMP REST	SPRING	FLAT WASHER	STUD
CL-0-SHA-x	1/4-20	2	5/8	3/8	27/32	CL-0-CS	CL-1-CR	CL-5-SPG	CL-7-FW	CL-1/4-20x2.50-STUD
CL-1-SHA-x		2-1/2			1-3/32	CL-1-CS				
CL-1A-SHA-x	5/16-18	2-1/2	3/4	1/2	27/32	CL-1A-CS	CL-1A-CR	CL-6-SPG	CL-14-FW	CL-5/16-18x 3.00-STUD
CL-1B-SHA-x		3			1-11/32	CL-1B-CS				
CL-2-SHA-x	3/8-16	3	1-1/8	1/2	1-9/32	CL-2-CS	CL-2-CR	CL-7-SPG	CL-1-FW	CL-3/8-16x3.00-STUD
CL-3-SHA-x		3-1/2			1-17/32	CL-3A-CS				
CL-4-SHA-x		4			1-25/32	CL-3-CS				
CL-6-SHA-x		5			2-9/32	CL-4-CS				
CL-8-SHA-x		6			2-25/32	CL-5-CS				
CL-9-SHA-x		3-1/2			1-1/2	CL-6A-CS				
CL-10-SHA-x	1/2-13	4	1-1/4	5/8	1-3/4	CL-6-CS	CL-4-CR	CL-9-SPG	CL-2-FW	CL-1/2-13x4.00-STUD
CL-12-SHA-x		5			2-1/4	CL-8-CS				
CL-14-SHA-x	5/8-11	6	1-1/2	7/8	2-3/4	CL-10-CS	CL-6-CR	CL-11-SPG	CL-3-FW	CL-5/8-11x4.50-STUD
CL-20-SHA-x		4			1-11/16	CL-15A-CS				
CL-22-SHA-x		5			2-3/16	CL-16-CS				
CL-24-SHA-x		6			2-11/16	CL-18-CS				
CL-25-SHA-x		6-1/2			2-15/16	CL-18A-CS				
CL-27-SHA-x		6			2-5/8	CL-19-CS				
CL-29-SHA-x	3/4-10	7	1-3/4	1	3-1/8	CL-21-CS	CL-8-CR	CL-13-SPG	CL-4-FW	CL-3/4-10x5.00-STUD
CL-31-SHA-x		8			3-5/8	CL-22A-CS				

ASSEMBLIES — STEEL (METRIC)

PART NO	THREAD SIZE	A	B	C	E	CLAMP STRAP	CLAMP REST	SPRING	FLAT WASHER	STUD
CLM-0-SHA-x	M6	2	5/8	3/8	27/32	CL-0-CS	CLM-1-CR	CL-5-SPG	CL-7-FW	CLM-6x65-STUD
CLM-1-SHA-x		2-1/2			1-3/32	CL-1-CS				
CLM-1A-SHA-x	M8	2-1/2	3/4	1/2	27/32	CL-1A-CS	CLM-1A-CR	CL-6-SPG	CL-14-FW	CLM-8x80-STUD
CLM-1B-SHA-x		3			1-11/32	CL-1B-CS				
CLM-2-SHA-x	M10	3	1-1/8	1/2	1-9/32	CL-2-CS	CLM-2-CR	CL-7-SPG	CL-1-FW	CLM-1x80-STUD
CLM-3-SHA-x		3-1/2			1-17/32	CL-3A-CS				
CLM-4-SHA-x		4			1-25/32	CL-3-CS				
CLM-6-SHA-x		5			2-9/32	CL-4-CS				
CLM-8-SHA-x		6			2-25/32	CL-5-CS				
CLM-9-SHA-x		3-1/2			1-1/2	CL-6A-CS				
CLM-10-SHA-x	M12	4	1-1/4	5/8	1-3/4	CL-6-CS	CLM-4-CR	CL-9-SPG	CL-2-FW	CLM-12x95-STUD
CLM-12-SHA-x		5			2-1/4	CL-8-CS				
CLM-14-SHA-x	M16	6	1-1/2	7/8	2-3/4	CL-10-CS	CLM-5-CR	CL-11-SPG	CL-3-FW	CLM-16x110-STUD
CLM-20-SHA-x		4			1-11/16	CL-15A-CS				
CLM-22-SHA-x		5			2-3/16	CL-16-CS				
CLM-24-SHA-x		6			2-11/16	CL-18-CS				
CLM-25-SHA-x		6-1/2			2-15/16	CL-18A-CS				
CLM-27-SHA-x		6			2-5/8	CL-19-CS				
CLM-29-SHA-x	M20	7	1-3/4	1	3-1/8	CL-21-CS	CLM-8-CR	CL-13-SPG	CLM-10-FW	CLM-20x125-STUD
CLM-31-SHA-x		8			3-5/8	CL-22A-CS				

* Available in thread sizes 3/8-16 and above (M10 and above in metric).

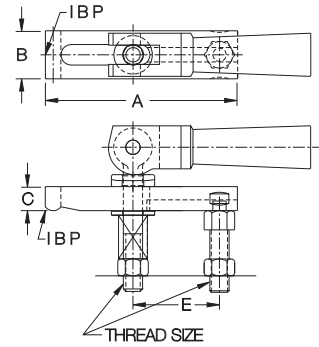
SLOTTED-HEEL CLAMP STRAPS

SEE PAGES 85, 92, 213, 252-255, 259-260, 268 FOR MATERIAL SPECIFICATIONS



**Straddle Cam
Steel**

A complete clamp-strap assembly using a slotted-heel strap from page 213 along with a Double Cam and Eyebolt. Other Eyebolt and Clamp Rest lengths are available (order pieces individually).



ASSEMBLIES — STRADDLE CAM, STEEL (USA)

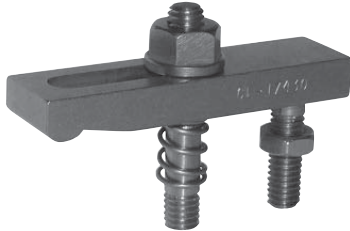
PART NO.	THREAD SIZE	A	B	C	E	CLAMP STRAP	CLAMP REST	SPRING	EYE BOLT	CAM HANDLE AND CLEVIS PIN	FLAT WASHER	SPHERICAL WASHER
CL-0-SCA	1/4-20	2	5/8	3/8	27/32	CL-0-CS	CL-1-CR	CL-5-SPG	CL-25-EB	CL-11-CH	CL-7-FW	CL-1-SW
CL-1-SCA	2-1/2	2-1/2			1-3/32	CL-1-CS				CL-610-CLVP		
CL-1A-SCA	5/16-18	2-1/2	3/4	1/2	27/32	CL-1A-CS	CL-1A-CR	CL-6-SPG	CL-31-EB	CL-11A-CH	CL-14-FW	CL-11-SW
CL-1B-SCA		3			1-11/32	CL-1B-CS				CL-810-CLVP		
CL-2-SCA		3			1-9/32	CL-2-CS						
CL-2A-SCA		3-1/2			1-17/32	CL-3A-CS						
CL-3-SCA	3/8-16	4	1-1/8	1/2	1-25/32	CL-3-CS	CL-2-CR	CL-7-SPG	CL-38-EB	CL-12-CH	CL-1-FW	CL-2-SW
CL-4-SCA		5			2-9/32	CL-4-CS				CL-1014-CLVP		
CL-5-SCA		6			2-25/32	CL-5-CS						
CL-6A-SCA		3-1/2			1-1/2	CL-6A-CS						
CL-6-SCA	1/2-13	4	1-1/4	5/8	1-3/4	CL-6-CS	CL-4-CR	CL-9-SPG	CL-50-EB	CL-13-CH	CL-2-FW	CL-3-SW
CL-8-SCA		5			2-1/4	CL-8-CS				CL-1218-CLVP		
CL-9A-SCA		6			2-3/4	CL-10-CS						
CL-17-SCA		4			1-11/16	CL-15A-CS						
CL-19-SCA	5/8-11	5	1-1/2	7/8	2-3/16	CL-16-CS	CL-6-CR	CL-11-SPG	CL-62-EB	CL-14-CH	CL-3-FW	CL-4-SW
CL-21-SCA		6			2-11/16	CL-18-CS				CL-2020-CLVP		
CL-22-SCA		6-1/2			2-15/16	CL-18A-CS						
CL-24-SCA		6			2-5/8	CL-19-CS						
CL-26-SCA	3/4-10	7	1-3/4	1	3-1/8	CL-21-CS	CL-8-CR	CL-13-SPG	CL-75-EB	CL-15-CH	CL-4-FW	CL-5-SW
CL-28-SCA		8			3-5/8	CL-22A-CS				CL-2024-CLVP		

ASSEMBLIES — STRADDLE CAM, STEEL (METRIC)

CLM-0-SCA	M6	2	5/8	3/8	27/32	CL-0-CS	CLM-1-CR	CL-5-SPG	CLM-25A-EB	CLM-11-CH	CL-7-FW	CL-1-SW
CLM-1-SCA		2-1/2			1-3/32	CL-1-CS				CLM-616-CLVP		
CLM-2-SCA		3			1-9/32	CL-2-CS						
CLM-2A-SCA		3-1/2			1-17/32	CL-3A-CS						
CLM-3-SCA	M10	4	1-1/8	1/2	1-25/32	CL-3-CS	CLM-2-CR	CL-7-SPG	CLM-40-EB	CLM-12-CH	CL-1-FW	CL-2-SW
CLM-4-SCA		5			2-9/32	CL-4-CS				CLM-1023-CLVP		
CLM-5-SCA		6			2-25/32	CL-5-CS						
CLM-6A-SCA		3-1/2			1-1/2	CL-6A-CS						
CLM-6-SCA	M12	4	1-1/4	5/8	1-3/4	CL-6-CS	CLM-4-CR	CL-9-SPG	CLM-50A-EB	CLM-13-CH	CL-2-FW	CL-3-SW
CLM-8-SCA		5			2-1/4	CL-8-CS				CLM-1229-CLVP		
CLM-9A-SCA		6			2-3/4	CL-10-CS						
CLM-17-SCA		4			1-11/16	CL-15A-CS						
CLM-19-SCA	M16	5	1-1/2	7/8	2-3/16	CL-16-CS	CLM-5-CR	CL-11-SPG	CLM-62-EB	CLM-14-CH	CL-3-FW	CL-4-SW
CLM-21-SCA		6			2-11/16	CL-18-CS				CLM-1632-CLVP		
CLM-22-SCA		6-1/2			2-15/16	CL-18A-CS						
CLM-24-SCA		6			2-5/8	CL-19-CS						
CLM-26-SCA	M20	7	1-3/4	1	3-1/8	CL-21-CS	CLM-8-CR	CL-13-SPG	CLM-76A-EB	CLM-15-CH	CLM-10-FW	CLM-20-SW
CLM-28-SCA		8			3-5/8	CL-22A-CS				CLM-2038-CLVP		

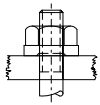
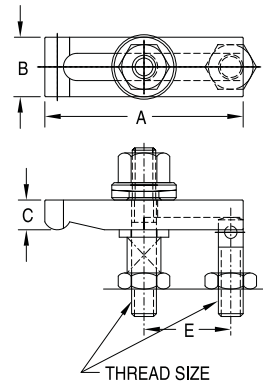
SLOTTED-HEEL CLAMP STRAPS

SEE PAGES 100, 213, 251-252, 253 FOR MATERIAL SPECIFICATIONS



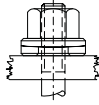
**Stainless Steel
(Miniature)**

A complete clamp-strap assembly using a stainless steel slotted-heel strap from page 213. Select any of the four nut/knob combinations shown below by adding the appropriate suffix to the part number. Fixture Stud has a thread-locking interference thread at the bottom end to install permanently in a fixture plate.



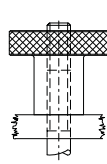
Flange Nut

CL-xxxx-1



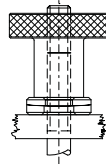
Spherical Nut
and Washer

CL-xxxx-2



Knurled
Knob

CL-xxxx-3



Knurled Knob
and Spherical
Washer

CL-xxxx-4

ASSEMBLIES — STAINLESS, MINIATURE (USA)

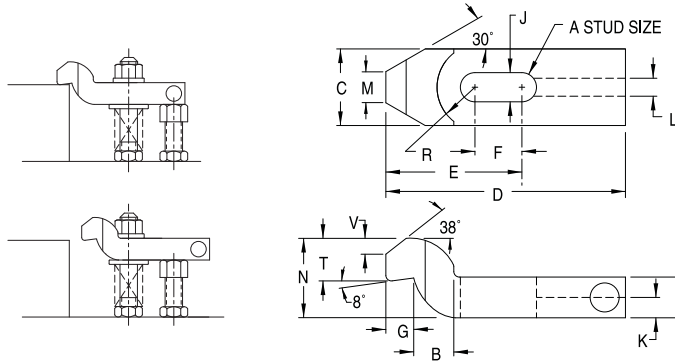
PART NO.	THREAD SIZE	A	B	C	E	CLAMP STRAP	CLAMP REST	SPRING	FLAT WASHER	STUD	JAM NUT
CL-2715-x	#10-32	1-1/2	1/2	1/4	21/32	CL-17215	CL-13410	CL-2430.7	CL-254	CL-11415	CL-3-FJN-S
CL-2720-x		2			29/32	CL-17220					
CL-2820-x	1/4-20	2	5/8	3/8	7/8	CL-17320	CL-13515	CL-2440.7	CL-255	CL-11520	CL-4-JN-S
CL-2825-x		2-1/2			1-1/8	CL-17325					
CL-2920-x	5/16-18	2	3/4	3/8	27/32	CL-17420	CL-13612	CL-2450.7	CL-256	CL-11620	CL-5-JN-S
CL-2925-x		2-1/2			1-3/32	CL-17425					
CL-2930-x		3			1-11/32	CL-17430					
CL-3030-x		3			1-5/16	CL-17530					
CL-3040-x	3/8-16	4	1	1/2	1-13/16	CL-17540	CL-13717	CL-2461.0	CL-257	CL-11725	CL-6-JN-S

SLOTTED-HEEL GOOSENECK CLAMP STRAPS

STRAP: ALLOY STEEL, BLACK OXIDE FINISH
SEE PAGES 85, 250-253, 266 FOR OTHER MATERIAL SPECIFICATIONS



Gooseneck version of our Slotted-Heel Clamp Straps. This design recesses the clamping nut to provide a low overall profile. Slotted-Heel Clamp Straps have a slot underneath to slide straight back for clear loading. An indentation at the rear of each side provides a secure finger grip for retracting the clamp. Available to fit 1/2-13 studs (M12 in metric).



STRAPS – STEEL

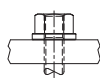
PART NO.	A	B	C	D	E	F	G	J	K	L	M	N	R	T	V
CL-85-GCS	1/2 OR M12	.79	1.57	4.92	2.87	1.02	.63	.55	.34	.38	.79	1.57	.79	.90	.34



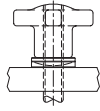
Slotted-Heel Gooseneck Clamp Straps are also available as a complete assembly. Select any of the five nut/knob combinations shown below by adding the appropriate suffix to the part number. Other lengths of Clamping Studs and Clamp Rests are available (order pieces individually).



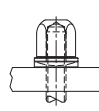
Spherical Nut & Washer
CL-xx-GCSA-1



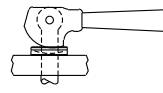
Flange Nut
CL-xx-GCSA-2



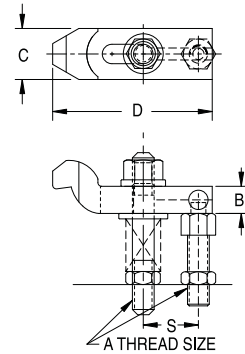
Hand Knob with Spherical Washer
CL-xx-GCSA-4



Acorn Nut with Spherical Washer
CL-xx-GCSA-5



Cam Handle with Spherical Washer
CL-xx-GCSA-7



ASSEMBLIES – STEEL (USA)

PART NO.	A	B	C	D	S	CLAMP STRAP	CLAMP REST	SPRING	FLAT WASHER	STUD	JAM NUT
CL-85-GCSA-X	1/2 OR M12	.79	1.57	5.91	2.75	CL-85-GCS	CL-4-CR	CL-9-SPG	CL-2-FW	CL-1/2-13X4.00-STUD	CL-8-JN

ASSEMBLIES – STEEL (METRIC)

PART NO.	A	B	C	D	S	CLAMP STRAP	CLAMP REST	SPRING	FLAT WASHER	STUD	JAM NUT
CLM-85-GCSA-X	1/2 OR M12	.79	1.57	5.91	2.75	CL-85-GCS	CLM-4-CR	CL-9-SPG	CL-2-FW	CLM-12X95-STUD	CLM-12-JN

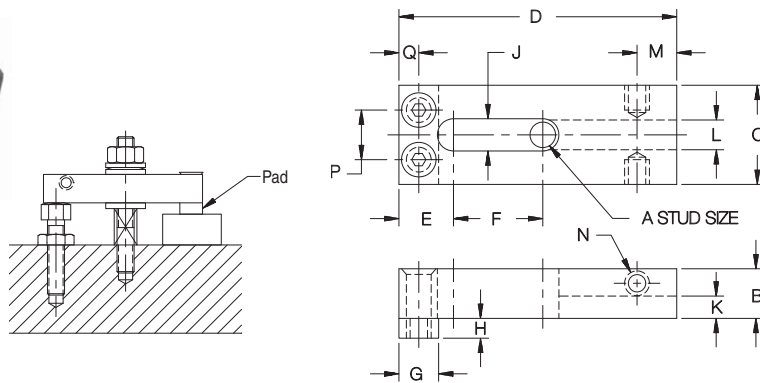
SLOTTED-HEEL PADDED CLAMP STRAPS

STRAP & PAD: 1018 STEEL, CARBURIZED-HARDENED, BLACK OXIDE FINISH
SEE PAGES 85, 254, 257, 267-268 FOR OTHER MATERIAL SPECIFICATIONS



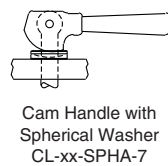
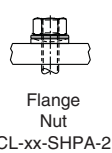
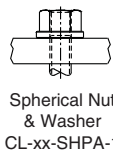
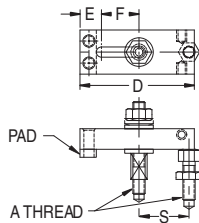
Steel

Slotted-Heel Clamp Strap that features a replaceable clamping pad attached with two screws (furnished). Clamp Strap also easily accepts custom pads or other attachments. Rear end is tapped on either side for a Finger Pin (see page 120). Available for 1/4-20 (M6) to 1/2-13 (M12) stud sizes, most in a choice of several strap lengths.



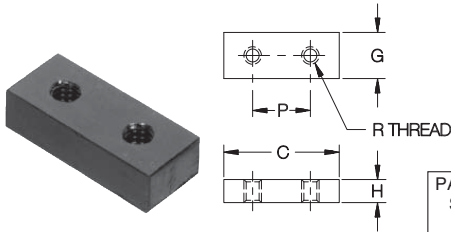
STRAPS — STEEL WITH STEEL PAD

PART NO.	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q
CL-165-CS	1/4-20 or M6	3/8	5/8	2	3/8	5/8	1/4	1/8	9/32	5/32	1/4			11/32	9/64
CL-166-CS	3/8-16 or M10	5/8	1-1/4	3-1/2	11/16	1-1/8	1/2	1/4	27/64	9/32	3/8	1/2	5/16-18	5/8	1/4
CL-168-CS				4-1/2		1-5/8									
CL-169-CS				4-1/2		1-1/4									
CL-170A-CS	1/2-13 or M12	3/4	1-1/2	6	7/8	2	5/8	3/8	17/32	9/32	3/8	1/2	5/16-18	3/4	5/16



ASSEMBLIES — STEEL WITH STEEL PAD (USA)

PART NO.	A	D	E	F	S	CLAMP STRAP	CLAMP REST	SPRING	FLAT WASHER	CLAMPING STUD
CL-165-SHPA-x	1/4-20	2	3/8	5/8	7/8	CL-165-CS	CL-1-CR	CL-5-SPG	CL-7-FW	CL-1/4-20x2.50-STUD
CL-166-SHPA-x	3/8-16	3-1/2	11/16	1-1/8	1-7/16	CL-166-CS	CL-2-CR	CL-7-SPG	CL-1-FW	CL-3/8-16x3.00-STUD
CL-168-SHPA-x				4-1/2	1-5/8	1-15/16				
CL-169-SHPA-x	1/2-13	4-1/2	7/8	1-1/4	2-1/8	CL-169-CS	CL-4-CR	CL-9-SPG	CL-2-FW	CL-1/2-13x4.00-STUD
CL-170A-SHPA-x				6	2	2-7/8				



Replacement or optional pads for the Clamp Straps shown above. Available in steel, reinforced plastic, or brass.

REPLACEMENT PADS

PART NO. STEEL PAD	PART NO. PLASTIC PAD	PART NO. BRASS PAD	STUD SIZE	C	G	H	P	R
CL-40-CP	CL-20-CP	CL-30-CP	1/4-20 or M6	5/8	1/4	1/8	11/32	#5-40
CL-42-CP	CL-22-CP	CL-32-CP	3/8-16 or M10	1-1/4	1/2	1/4	5/8	#10-24
CL-43-CP	CL-23-CP	CL-33-CP	1/2-13 or M12	1-1/2	5/8	3/8	3/4	1/4-20

TAPPED-HEEL CLAMP STRAPS

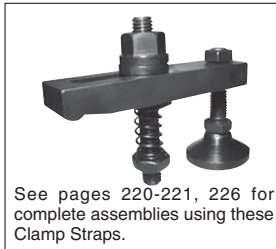
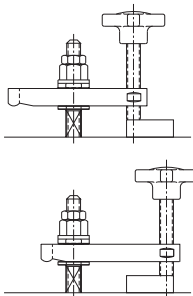
STEEL: 1018, CARBURIZED-HARDENED, BLACK OXIDE FINISH
STAINLESS STEEL: 300 SERIES



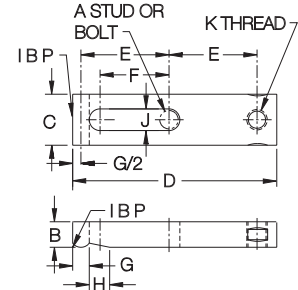
Steel and Stainless Steel

Popular Clamp Strap with a tapped heel that accepts a clamping screw or rear support. Often used with a Guide Block to allow sliding the strap straight back for clear loading. Two drill spots on the sides provide a secure grip for retracting the clamp. Can also be used with a Stud Leveling Foot as a rear support (see pages 172-173).

Available in steel for 1/4-20 to 3/4-10 stud sizes (M6 to M20 in metric), or stainless steel for #10-32 to 3/8-16 stud sizes. Each size is available in several strap lengths.



See pages 220-221, 226 for complete assemblies using these Clamp Straps.



STRAPS — STEEL (USA)

PART NO.	A	B	C	D	E	F	G	H	J	K
CL-61-CS	1/4-20	3/8	5/8	2	13/16	9/16	1/4	11/32	9/32	1/4-20
CL-62-CS				2-1/2	1-1/16	13/16				
CL-63-CS				3	1-7/32	13/16				
CL-65-CS	3/8-16	1/2	1-1/8	4	1-23/32	1-5/16	13/32	1/2	27/64	3/8-16
CL-67-CS				5	2-7/32	1-13/16				
CL-69-CS				6	2-23/32	2-5/16				
CL-70-CS	1/2-13	5/8	1-1/4	3-1/2	1-13/32	15/16	13/32	1/2	17/32	1/2-13
CL-71-CS				4	1-21/32	1-3/16				
CL-72-CS				4-1/2	1-29/32	1-7/16				
CL-73-CS				5	2-5/32	1-11/16				
CL-74-CS				5-1/2	2-13/32	1-15/16				
CL-75-CS				6	2-21/32	2-3/16				
CL-81-CS	5/8-11	7/8	1-1/2	4	1-9/16	1	1/2	19/32	21/32	5/8-11
CL-77-CS				4-1/2	1-13/16	1-1/4				
CL-83-CS				5	2-1/16	1-1/2				
CL-85-CS				6	2-9/16	2				
CL-86-CS				6-1/2	2-13/16	2-1/4				
CL-88-CS				6	2-1/2	1-29/32				
CL-90-CS	3/4-10	1	1-3/4	7	3	2-13/32	1/2	19/32	13/16	3/4-10
CL-92-CS				8	3-1/2	2-29/32				

STRAPS — STEEL (METRIC)

PART NO.	A	B	C	D	E	F	G	H	J	K
CLM-61-CS	M6	3/8	5/8	2	13/16	9/16	1/4	11/32	9/32	M6
CLM-62-CS				2-1/2	1-1/16	13/16				
CLM-63-CS				3	1-7/32	13/16				
CLM-65-CS	M10	1/2	1-1/8	4	1-23/32	1-5/16	13/32	1/2	27/64	M10
CLM-67-CS				5	2-7/32	1-13/16				
CLM-70-CS				3-1/2	1-13/32	15/16				
CLM-71-CS	M12	5/8	1-1/4	4	1-21/32	1-3/16	13/32	1/2	17/32	M12
CLM-72-CS				4-1/2	1-29/32	1-7/16				
CLM-73-CS				5	2-5/32	1-11/16				
CLM-75-CS				6	2-21/32	2-3/16				
CLM-81-CS				4	1-9/16	1				
CLM-83-CS				5	2-1/16	1-1/2				
CLM-85-CS	6	2-9/16	2							
CLM-88-CS	M20	1	1-3/4	6	2-1/2	1-29/32	1/2	19/32	13/16	M20
CLM-92-CS				8	3-1/2	2-29/32				

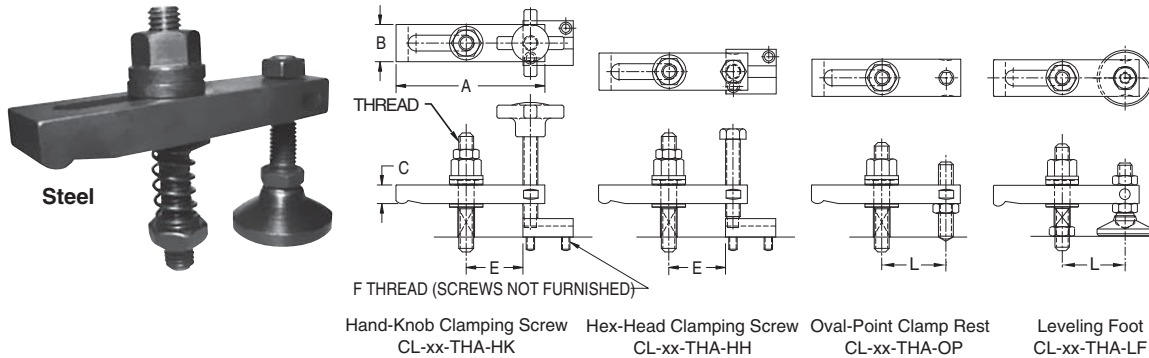
STRAPS — STAINLESS, MINIATURE (USA)

PART NO.	A	B	C	D	E	F	G	H	J	K
CL-18215	#10-32	1/4	1/2	1-1/2	19/32	13/32	3/16	5/16	7/32	#10-32
CL-18220				2	27/32	21/32				
CL-18320	1/4-20	3/8	5/8	2	13/16	19/32	1/4	3/8	9/32	1/4-20
CL-18325				2-1/2	1-1/16	27/32				
CL-18420				2	3/4	1/2				
CL-18425	5/16-18	3/8	3/4	2-1/2	1	3/4	5/16	7/16	11/32	5/16-18
CL-18430				3	1-1/4	1				
CL-18530				3	1-7/32	7/8				
CL-18535	3/8-16	1/2	1	3-1/2	1-15/32	1-1/8	3/8	1/2	27/64	3/8-16
CL-18540				4	1-23/32	1-3/8				

TAPPED-HEEL CLAMP STRAPS

SEE PAGES 86, 219, 251, 254, 257-258, 267-268 FOR MATERIAL SPECIFICATION

A complete clamp-strap assembly using a tapped-heel strap from page 219. Select one of two clamping screws or a rear Clamp Rest, as shown below, by adding the appropriate suffix to the part number.



ASSEMBLIES — STEEL (USA)

PART NO.	THREAD SIZE	A	B	C	E	F	L	CLAMP STRAP	GUIDE BLOCK*	STUD & SPRING	NUTS	FLAT WASHER
CL-1-THA-xx	1/4-20	2	5/8	3/8	11/16	#6-32	13/16	CL-61-CS	CL-2-GB	CL-1/4-20x2.00-STUD CL-5-SPG	CL-4-JN CL-1-SNW	CL-7-FW
CL-2-THA-xx		2-1/2			15/16		1-1/16	CL-62-CS				
CL-3-THA-xx		3			1-1/32		1-7/32	CL-63-CS				
CL-5-THA-xx	3/8-16	4	1-1/8	1/2	1-17/32	#10-32	1-23/32	CL-65-CS	CL-4-GB	CL-3/8-16x3.00-STUD CL-7-SPG	CL-6-JN CL-2-SNW	CL-1-FW
CL-7-THA-xx		5			2-1/32		2-7/32	CL-67-CS				
CL-9-THA-xx		6			2-17/32		2-23/32	CL-69-CS				
CL-10-THA-xx	1/2-13	3-1/2	1-1/4	5/8	1-5/32	1/4-20	1-13/32	CL-70-CS	CL-6-GB	CL-1/2-13x4.00-STUD CL-9-SPG	CL-8-JN CL-3-SNW	CL-2-FW
CL-11-THA-xx		4			1-13/32		1-21/32	CL-71-CS				
CL-12-THA-xx		4-1/2			1-21/32		1-29/32	CL-72-CS				
CL-13-THA-xx	5/8-11	5	1-1/2	7/8	1-29/32	1/4-20	2-5/32	CL-73-CS	CL-8-GB	CL-5/8-11x4.00-STUD CL-11-SPG	CL-10-JN CL-4-SNW	CL-3-FW
CL-14-THA-xx		5-1/2			2-5/32		2-13/32	CL-74-CS				
CL-15-THA-xx		6			2-13/32		2-21/32	CL-75-CS				
CL-21-THA-xx	3/4-10	4	1-3/4	1	1-1/4	1/4-20	1-9/16	CL-81-CS	CL-11-GB	CL-3/4-10x5.00-STUD CL-13-SPG	CL-12-JN CL-5-SNW	CL-4-FW
CL-17-THA-xx		4-1/2			1-1/2		1-13/16	CL-77-CS				
CL-23-THA-xx		5			1-3/4		2-1/16	CL-83-CS				
CL-25-THA-xx	3/4-10	6	1	1	2-1/4	1/4-20	2-9/16	CL-85-CS	CL-11-GB	CL-3/4-10x5.00-STUD CL-13-SPG	CL-12-JN CL-5-SNW	CL-4-FW
CL-26-THA-xx		6-1/2			2-1/2		2-13/16	CL-86-CS				
CL-28-THA-xx		6			2-1/8		2-1/2	CL-88-CS				
CL-30-THA-xx	3/4-10	7	1-3/4	1	2-5/8	1/4-20	3	CL-90-CS	CL-11-GB	CL-3/4-10x5.00-STUD CL-13-SPG	CL-12-JN CL-5-SNW	CL-4-FW
CL-32-THA-xx		8			3-1/8		3-1/2	CL-92-CS				

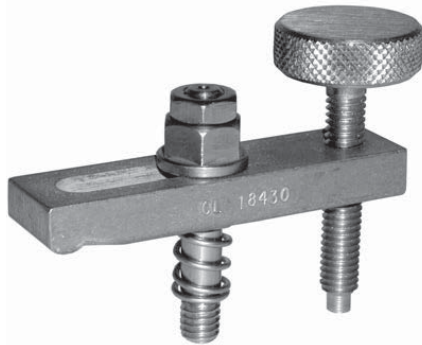
ASSEMBLIES — STEEL (METRIC)

CLM-1-THA-xx	M6	2	5/8	3/8	11/16	M4	13/16	CLM-61-CS	CL-2-GB	CLM-6x65-STUD CL-5-SPG	CLM-6-JN CLM-6-SNW	CL-7-FW
CLM-2-THA-xx	M10	2-1/2			15/16	M5	1-1/16	CLM-62-CS				
CLM-3-THA-xx		3			1-1/32	1-1/16	CLM-63-CS					
CLM-5-THA-xx		4	1-17/32	1-23/32	CLM-65-CS							
CLM-7-THA-xx	M12	5	2-1/32	5/8	M6	2-7/32	CLM-67-CS	CL-4-GB	CLM-10x80-STUD CL-7-SPG	CLM-10-JN CLM-10-SNW	CL-1-FW	
CLM-10-THA-xx		3-1/2	1-5/32		1-13/32	CLM-70-CS						
CLM-11-THA-xx		4	1-13/32		1-21/32	CLM-71-CS						
CLM-12-THA-xx	M16	4-1/2	1-21/32	7/8	M6	1-29/32	CLM-72-CS	CL-6-GB	CLM-12x95-STUD CL-9-SPG	CLM-12-JN CLM-12-SNW	CL-2-FW	
CLM-13-THA-xx		5	1-29/32		2-5/32	CLM-73-CS						
CLM-15-THA-xx		6	2-13/32		2-21/32	CLM-75-CS						
CLM-21-THA-xx	M20	4	1-1/4	1	M6	1-9/16	CLM-81-CS	CL-8-GB	CLM-16x110-STUD CL-11-SPG	CLM-16-JN CLM-16-SNW	CL-3-FW	
CLM-23-THA-xx		5	1-3/4		2-1/16	CLM-83-CS						
CLM-25-THA-xx		6	2-1/4		2-9/16	CLM-85-CS						
CLM-28-THA-xx	M20	6	2-1/8	1	M6	2-1/2	CLM-88-CS	CL-11-GB	CLM-20x125-STUD CL-13-SPG	CLM-20-JN CLM-20-SNW	CLM-10-FW	
CLM-32-THA-xx		8	3-1/8		3-1/2	CLM-92-CS						

* Not included on oval-point version

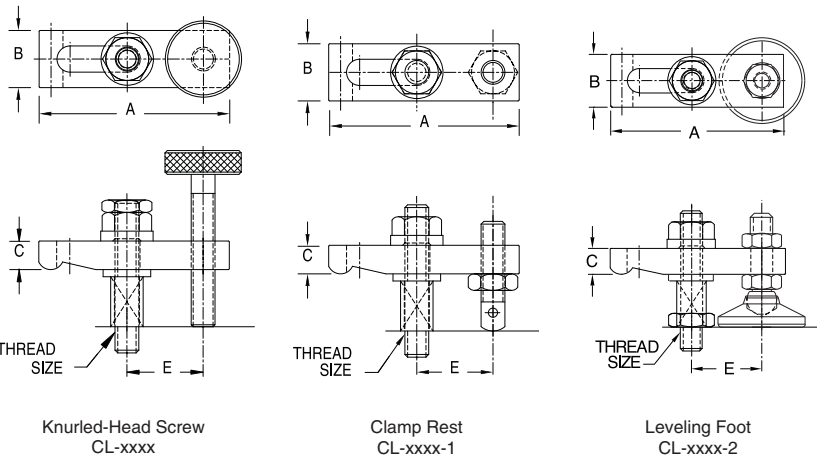
TAPPED-HEEL CLAMP STRAPS

SEE PAGES 100, 219, 252, 254, 257-258, 267 FOR MATERIAL SPECIFICATIONS



**Stainless Steel
(Miniature)**

A complete clamp-strap assembly using a stainless steel tapped-heel strap from page 219. Fixture Stud has a thread-locking interference thread at the bottom end to install permanently in a fixture plate. Standard assembly includes a Knurled-Head Screw. To order with a rear Clamp Rest instead, add "-1" to the part number (example: CL-3115-1). To order with a Leveling Foot instead, add "-2" to the part number (example: CL-3115-2).



ASSEMBLIES — STAINLESS, MINIATURE (USA)

PART NO. WITH KNURLED HEAD SCREW	THREAD SIZE	A	B	C	E	CLAMP STRAP	KNURLED HEAD SCREW	CLAMP REST	LEVELING FOOT	SPRING	FLAT WASHER	STUD	FLANGE NUT
CL-3115	#10-32	1-1/2	1/2	1/4	19/32	CL-18215	CL-23212	CL-13410	CL-3-SLF-S	CL-2430.7	CL-254	CL-11415	CL-124
CL-3120		2			27/32	CL-18220							
CL-3220	1/4-20	2	5/8	3/8	13/16	CL-18320	CL-23515	CL-13515	CL-4-SLF-S	CL-2440.7	CL-255	CL-11520	CL-125
CL-3225		2-1/2			1-1/16	CL-18325							
CL-3320		2			3/4	CL-18420							
CL-3325	5/16-18	2-1/2	3/4	3/8	1	CL-18425	CL-23620	CL-13612	CL-5-SLF-S	CL-2450.7	CL-256	CL-11620	CL-126
CL-3330		3			1-1/4	CL-18430							
CL-3430		3			1-7/32	CL-18530							
CL-3435	3/8-16	3-1/2	1	1/2	1-15/32	CL-18535	CL-23820	CL-13717	CL-6-SLF-S	CL-2461.0	CL-257	CL-11725	CL-127
CL-3440		4			1-23/32	CL-18540							

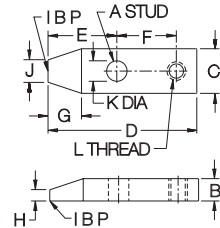
TAPERED-NOSE CLAMP STRAPS

STRAP: 300-SERIES STAINLESS STEEL
SEE PAGES 100, 252, 254, 257-258, 267-268 FOR OTHER MATERIAL SPECIFICATIONS



**Stainless Steel
(Miniature)**

Tapped-Heel Clamp Strap with a tapered nose for clamping in tight spaces. Available in stainless steel for #10-32 to 3/8-16 stud sizes.



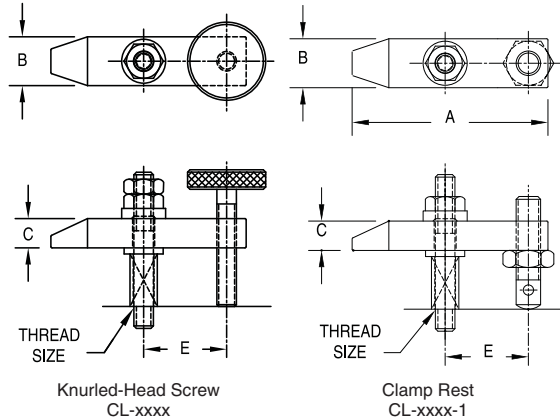
STRAPS — STAINLESS, MINIATURE (USA)

PART NO.	A	B	C	D	E	F	G	H	J	K	L
CL-20215	#10-32	1/4	1/2	1-1/2	11/16	19/32	3/8	1/8	1/4	7/32	#10-32
CL-20220				2	15/16	27/32					
CL-20320	1/4-20	3/8	5/8	2	15/16	13/16	15/32	5/32	5/16	9/32	1/4-20
CL-20325				2-1/2	1-3/16	1-1/16					
CL-20425	5/16-18	3/8	3/4	2-1/2	1-5/32	1	9/16	3/16	3/8	11/32	5/16-18
CL-20535	3/8-16	1/2	1	3-1/2	1-21/32	1-15/32	3/4	1/4	1/2	27/64	3/8-16



**Stainless Steel
(Miniature)**

A complete Clamp-Strap assembly using one of the straps shown above. Fixture Stud has a thread-locking interference thread at the bottom end to install permanently in a fixture plate. Standard assembly includes a Knurled-Head Screw. To order with a rear Clamp Rest instead, add "-1" to the part number. Example: CL-3915-1.



ASSEMBLIES — STAINLESS, MINIATURE (USA)

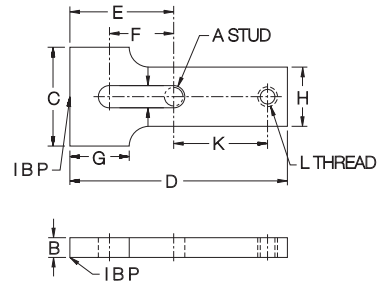
PART NO. WITH KNURLED HEAD SCREW	PART NO. WITH CLAMP REST	THREAD SIZE	A	B	C	E	CLAMP STRAP	KNURLED HEAD SCREW	CLAMP REST	SPRING	FLAT WASHER	STUD	FLANGE NUT
CL-3915	CL-3915-1	#10-32	1-1/2	1/2	1/4	19/32	CL-20215	CL-23212	CL-13410	CL-2430.7	CL-254	CL-11415	CL-124
CL-3920	CL-3920-1		2			27/32	CL-20220						
CL-4020	CL-4020-1	1/4-20	2	5/8	3/8	13/16	CL-20320	CL-23515	CL-13515	CL-2440.7	CL-255	CL-11520	CL-125
CL-4025	CL-4025-1		2-1/2			1-1/16	CL-20325						
CL-4125	CL-4125-1	5/16-18	2-1/2	3/4	3/8	1	CL-20425	CL-23620	CL-13612	CL-2450.7	CL-256	CL-11620	CL-126
CL-4235	CL-4235-1	3/8-16	3-1/2	1	1/2	1-15/32	CL-20535	CL-23820	CL-13717	CL-2461.0	CL-257	CL-11725	CL-127

WIDE-NOSE CLAMP STRAPS

STRAP: 300-SERIES STAINLESS STEEL
SEE PAGES 100, 252, 254, 257-258, 267-268 FOR OTHER MATERIAL SPECIFICATIONS



Stainless Steel (Miniature)



Tapped-Heel Clamp Strap with an extra-wide nose. Available in stainless steel for 1/4-20 studs.

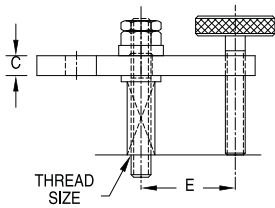
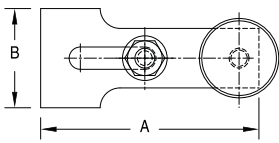


Stainless Steel (Miniature)

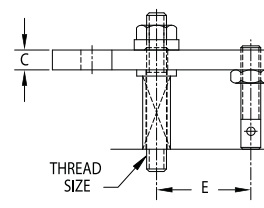
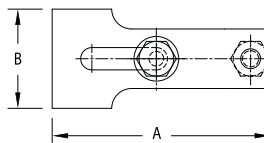
STRAPS — STAINLESS, MINIATURE (USA)

PART NO.	A	B	C	D	E	F	G	H	J	K	L
CL-22227	1/4-20	1/4	1-1/4	2-3/4	1-5/16	13/16	3/4	3/4	9/32	1-3/16	1/4-20

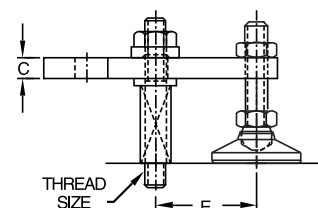
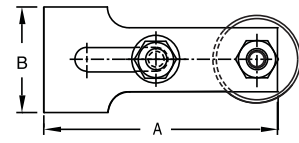
A complete Clamp-Strap assembly using the Clamp Strap shown above. Fixture stud has a thread-locking interference thread at the bottom end to install permanently in a fixture plate. Standard assembly includes a Knurled-Head Screw. To order with a rear Clamp Rest instead, add "-1" to the part number (CL-44227-1). To order with a levelling foot instead, add "-2" to the part number (CL-44227-2).



Knurled-Head Screw
CL-xxxx



Clamp Rest
CL-xxxx-1



Levelling Foot
CL-xxxx-2

ASSEMBLIES — STAINLESS, MINIATURE (USA)

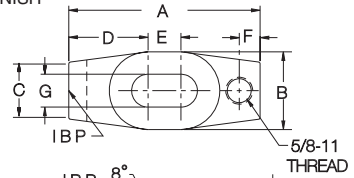
PART NO. WITH KNURLED HEAD SCREW	THREAD SIZE	A	B	C	E	CLAMP STRAP	KNURLED HEAD SCREW	CLAMP REST	LEVELING FOOT	SPRING	FLAT WASHER	STUD	FLANGE NUT
CL-44227	1/4-20	2-3/4	1-1/4	1/4	1-3/16	CL-22227	CL-23515	CL-13515	CL-13515	CL-2440.7	CL-255	CL-11520	CL-125

FORGED CLAMP STRAPS

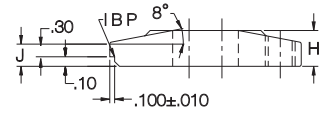
FORGED STEEL, 70,000 PSI YIELD STRENGTH, BLACK OXIDE FINISH



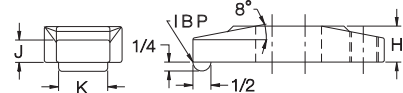
**Straight
Locator Nose**



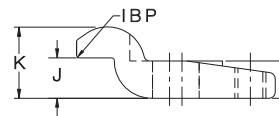
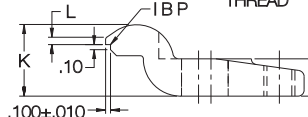
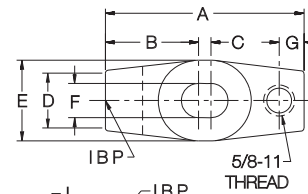
**Straight
Plain Nose**



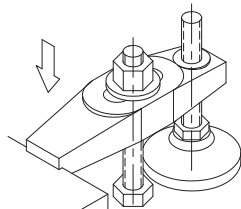
**Gooseneck
Locator Nose**



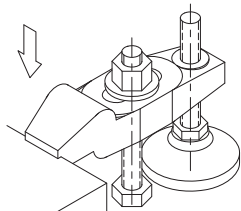
**Gooseneck
Plain Nose**



High-strength Tapped-Heel Clamp Strap available in straight or gooseneck design, with locator nose or plain nose. Locator-nose version is ideal for workpieces with machined sides. The accurately machined notch ensures precise, repeatable clamp location for increased machining clearance. For rear Clamp Rests, see Stud Leveling Feet on pages 172-173.



**Straight
Locator Nose
Clamp**



**Gooseneck
Locator Nose
Clamp**

STRAIGHT — LOCATOR NOSE

PART NO.	STUD SIZE	A	B	C	D	E	F	G	H	J	K
CL-4-FSCS	5/8-11	4	1-5/8	1-3/16	1-21/32	11/16	7/16	11/16	3/4	1/2	
CL-6-FSCS		6	1-3/4	1-1/4	2-5/16	1-3/8	9/16		7/8	9/16	
CL-8-FSCS	3/4-10	8	2-1/8	1-1/2	3	2	11/16	13/16	1-1/8	3/4	
CL-10-FSCS	7/8-9	10	2-1/2	1-3/4	3-5/8	2-3/4	13/16	15/16	1-3/8	15/16	

STRAIGHT — PLAIN NOSE

PART NO.	STUD SIZE	A	B	C	D	E	F	G	H	J	K	L
CL-4-FRCS	5/8-11	4	1-5/8	1-3/16	1-21/32	11/16	7/16	11/16	3/4	1/2		1
CL-6-FRCS		6	1-3/4	1-1/4	2-5/16	1-3/8	9/16		7/8	9/16		
CL-8-FRCS	3/4-10	8	2-1/8	1-1/2	3	2	11/16	13/16	1-1/8	3/4	1-1/4	
CL-10-FRCS	7/8-9	10	2-1/2	1-3/4	3-5/8	2-3/4	13/16	15/16	1-3/8	15/16	1-1/2	

GOOSENECK — LOCATOR NOSE

PART NO.	STUD SIZE	A	B	C	D	E	F	G	H	J	K	L
CL-40-FGNS	5/8-11	4	1-31/32	3/16	1-3/16	1-3/4		1/2	3/4	3/4	1-7/16	.15
CL-60-FGNS		6	2-17/32	1	1-1/4	1-3/4	11/16	5/8	7/8	15/16	1-9/16	.25
CL-80-FGNS		8	3-9/32	1-5/8	1-9/16	2-1/4	13/16	1	1-1/8	1-1/8	2	.35

GOOSENECK — PLAIN NOSE

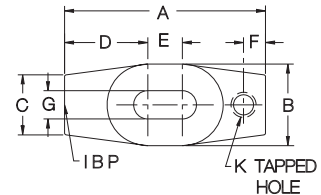
PART NO.	STUD SIZE	A	B	C	D	E	F	G	H	J	K	L
CL-4-FGNS	5/8-11	4	1-31/32	3/16	1-3/16	1-3/4		1/2	3/4	3/4	1-7/16	
CL-6-FGNS		6	2-17/32	1	1-1/4	1-3/4	11/16	5/8	7/8	15/16	1-9/16	
CL-8-FGNS		8	3-9/32	1-5/8	1-9/16	2-1/8	13/16	1	1-1/8	1-1/8	2	

ALUMINUM CLAMP STRAPS

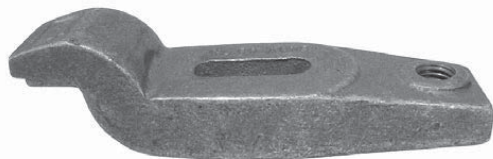
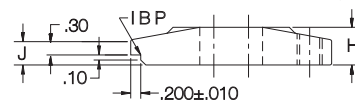
TENZALOY ALUMINUM ALLOY, 25,000 PSI YIELD STRENGTH, BRINELL HARDNESS-74



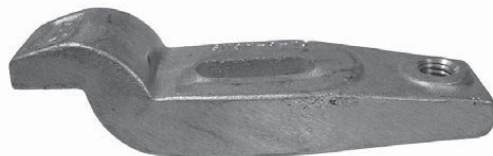
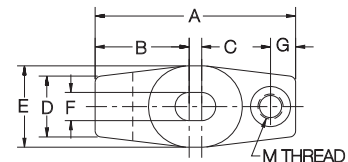
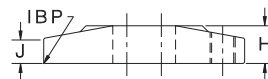
**Straight
Locator Nose**



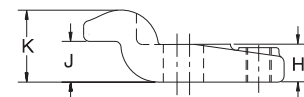
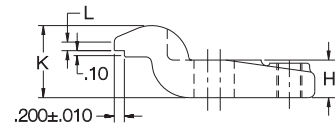
**Straight
Plain Nose**



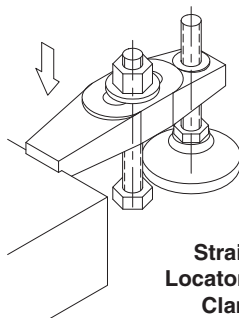
**Gooseneck
Locator Nose**



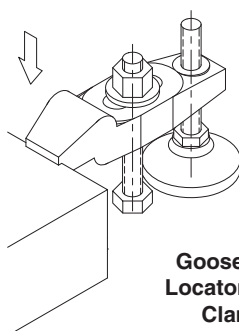
**Gooseneck
Plain Nose**



Soft Clamp Strap made of high-strength aluminum alloy. This tapped-heel clamp is available in straight or gooseneck design, with locator nose or plain nose. Locator-nose version is ideal for workpieces with machined sides. The accurately machined notch ensures precise, repeatable clamp location for increased machining clearance. For rear Clamp Rests, see Stud Leveling Feet on pages 172-173.



**Straight
Locator Nose
Clamp**



**Gooseneck
Locator Nose
Clamp**

STRAIGHT — LOCATOR NOSE

PART NO.	STUD SIZE	A	B	C	D	E	F	G	H	J	K
CL-4-ALCS	1/2-13	4	1-5/8	1-3/16	1-21/32	11/16	7/16	9/16	3/4	1/2	1/2-13
CL-6-ALCS		6	1-3/4	1-1/4	2-5/16	1-3/8	9/16		7/8	9/16	1/2-13
CL-8-ALCS		8	2-1/8	1-1/2	3	2	11/16		1-1/8	3/4	5/8-11

STRAIGHT — PLAIN NOSE

CL-4-ASCS	1/2-13	4	1-5/8	1-3/16	1-21/32	11/16	7/16	9/16	3/4	1/2	1/2-13
CL-6-ASCS		6	1-3/4	1-1/4	2-5/16	1-3/8	9/16		7/8	9/16	1/2-13
CL-8-ASCS		8	2-1/8	1-1/2	3	2	11/16		1-1/8	3/4	5/8-11

GOOSENECK — LOCATOR NOSE

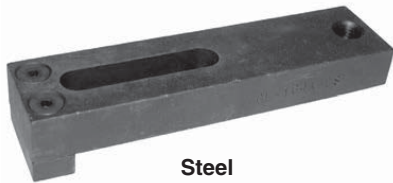
PART NO.	STUD SIZE	A	B	C	D	E	F	G	H	J	K	L	M
CL-40-AGNS	1/2-13	4	1-7/8	1/4	1-3/16	1-5/8	9/16	1/2	3/4	13/16	1-7/16	.25	1/2-13
CL-60-AGNS		6	2-1/2	1	1-1/4	1-3/4		5/8	7/8	15/16	1-9/16	.30	1/2-13
CL-80-AGNS		8	3-3/16	1-5/8	1-1/2	2-1/8		11/16	1	1-1/8	1-1/8	2-1/16	.40

GOOSENECK — PLAIN NOSE

CL-4-AGNS	1/2-13	4	1-7/8	1/4	1-3/16	1-5/8	9/16	1/2	3/4	13/16	1-7/16	—	1/2-13
CL-6-AGNS		6	2-1/2	1	1-1/4	1-3/4		5/8	7/8	15/16	1-9/16	—	1/2-13
CL-8-AGNS		8	3-3/16	1-5/8	1-1/2	2-1/8		11/16	1	1-1/8	1-1/8	2-1/16	—

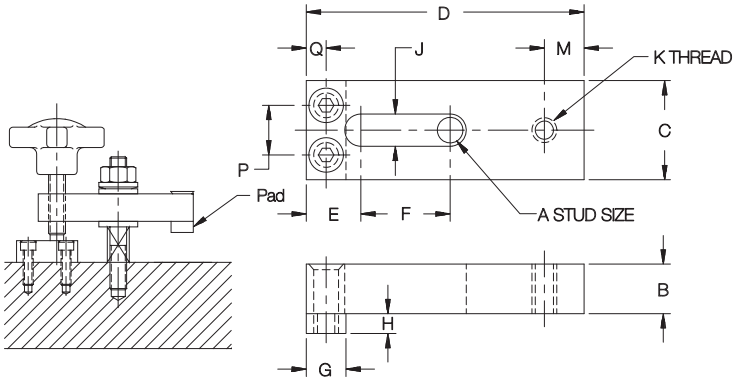
TAPPED-HEEL PADDED CLAMP STRAPS

STRAP & PAD: 1018 STEEL, CARBURIZED-HARDENED, BLACK OXIDE FINISH
SEE PAGES 251, 253-254, 257, 268 FOR OTHER MATERIAL SPECIFICATIONS



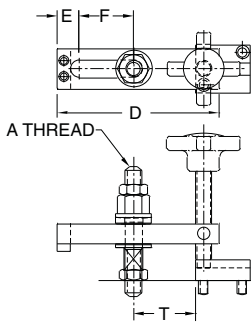
Steel

Tapped-Heel Clamp Strap that features a replaceable clamping pad attached with two screws (furnished). Clamp Strap also easily accepts custom pads or other attachments. Available for 1/4-20 to 1/2-13 stud sizes, most in a choice of several strap lengths.



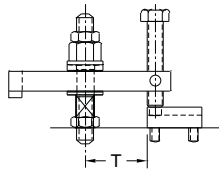
STRAPS — STEEL WITH STEEL PAD

PART NO.	A	B	C	D	E	F	G	H	J	K	M	P	Q
CL-157-CS	1/4-20	3/8	5/8	2	3/8	5/8	1/4	1/8	9/32	1/4-20	7/32	11/32	9/64
CL-158A-CS	5/16-18	1/2	7/8	2-1/2	9/16	3/4	3/8	3/16	11/32	5/16-18	1/4	1/2	3/16
CL-159A-CS				3-1/2		1-1/4							
CL-160A-CS	3/8-16	5/8	1-1/4	3-1/2	11/16	1-1/8	1/2	1/4	27/64	3/8-16	3/8	5/8	1/4
CL-162A-CS				4-1/2		1-5/8							
CL-163A-CS	1/2-13	3/4	1-1/2	4-1/2	7/8	1-1/4	5/8	3/8	17/32	1/2-13	7/16	3/4	5/16
CL-164A-CS				6		2							

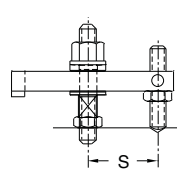


A THREAD

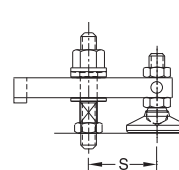
Hand-Knob Clamping Screw
CL-xx-THPA-HK



Hex-Head Clamping Screw
CL-xx-THPA-HH



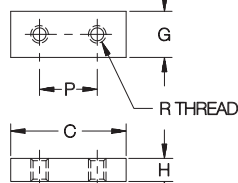
Oval-Point Clamp Rest
CL-xx-THPA-OP



Leveling Foot
CL-xx-THPA-LF

ASSEMBLIES — STEEL WITH STEEL PAD (USA)

PART NO.	A	D	E	F	S	T	CLAMP STRAP	GUIDE BLOCK	SPRING	CLAMPING STUD	NUTS	FLAT WASHER
CL-157-THPA-xx	1/4-20	2	3/8	5/8	25/32	21/32	CL-157-CS	CL-2-GB	CL-5-SPG	CL-1/4-20x2.00-STUD	CL-4-JN CL-1-SNW	CL-7-FW
CL-160A-THPA-xx	3/8-16	3-1/2	11/16	1-1/8	1-5/16	1-1/8	CL-160A-CS	CL-4-GB	CL-7-SPG	CL-3/8-16x3.00-STUD	CL-6-JN CL-2-SNW	CL-1-FW
CL-162A-THPA-xx		4-1/2		1-5/8	1-13/16	1-5/8	CL-162A-CS					
CL-163A-THPA-xx	1/2-13	4-1/2	7/8	1-1/4	1-15/16	1-11/16	CL-163A-CS	CL-8-GB	CL-9-SPG	CL-1/2-13x4.00-STUD	CL-8-JN CL-3-SNW	CL-2-FW
CL-164A-THPA-xx		6		2	2-11/16	2-7/16	CL-164A-CS					



Replacement or optional pads for the Clamp Straps shown above. Available in steel, reinforced plastic, or brass.

REPLACEMENT PADS

PART NO. STEEL PAD	PART NO. PLASTIC PAD	PART NO. BRASS PAD	STUD SIZE	C	G	H	P	R
CL-40-CP	CL-20-CP	CL-30-CP	1/4-20	5/8	1/4	1/8	11/32	#5-40
CL-41-CP	CL-21-CP	CL-31-CP	5/16-18	7/8	3/8	3/16	1/2	#8-32
CL-42-CP	CL-22-CP	CL-32-CP	3/8-16	1-1/4	1/2	1/4	5/8	#10-24
CL-43-CP	CL-23-CP	CL-33-CP	1/2-13	1-1/2	5/8	3/8	3/4	1/4-20

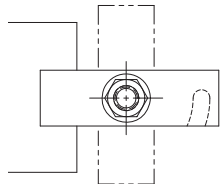
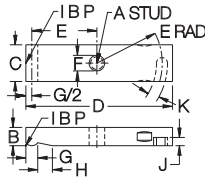
SWIVEL-HEEL CLAMP STRAPS

STRAP: 1018 STEEL, CARBURIZED-HARDENED, BLACK OXIDE FINISH
SEE PAGES 85, 92, 250-253, 259-260 AND 268 FOR OTHER MATERIAL SPECIFICATIONS

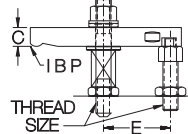
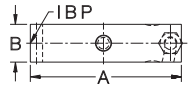


Steel

Clamp strap that swings out of the way for clear loading. Available for 1/4-20 (M6) to 3/4-10 (M20) stud sizes, each in several strap lengths. See below for complete Clamp-Strap assemblies using the straps shown above. Select any of the six nut/knob combinations shown by adding the appropriate suffix to the part number. Other Stud and Clamp Rest lengths are available (order pieces individually).

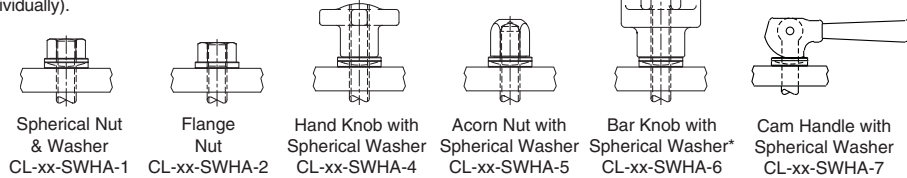


Steel



STRAPS — STEEL

PART NO.	A	B	C	D	E	F	G	H	J	K
CL-125-CS	1/4-20 or M6	3/8	5/8	2	27/32	9/32	1/4	11/32	1/8	3/16
CL-127-CS				3	1-7/32					
CL-129-CS	3/8-16 or M10	1/2	1-1/8	4	1-23/32	27/64	13/32	1/2	9/32	3/8
CL-131-CS				5	2-7/32					
CL-134-CS				3-1/2	1-15/32					
CL-135-CS	1/2-13 or M12	5/8	1-1/4	4	1-23/32	17/32	13/32	1/2	9/32	3/8
CL-137-CS				5	2-7/32					
CL-139-CS				6	2-23/32					
CL-140-CS				4	1-5/8					
CL-142-CS	5/8-11 or M16	7/8	1-1/2	5	2-1/8	21/32	1/2	19/32	9/32	1/2
CL-144-CS				6	2-5/8					
CL-152-CS				6	2-5/8					
CL-154-CS	3/4-10 or M20	1	1-3/4	7	3-1/8	13/16	1/2	19/32	5/16	1/2
CL-156-CS				8	3-5/8					



Spherical Nut & Washer
CL-xx-SWHA-1

Flange Nut
CL-xx-SWHA-2

Hand Knob with Spherical Washer
CL-xx-SWHA-4

Acorn Nut with Spherical Washer
CL-xx-SWHA-5

Bar Knob with Spherical Washer*
CL-xx-SWHA-6

Cam Handle with Spherical Washer
CL-xx-SWHA-7

ASSEMBLIES — STEEL (USA)

PART NO.	THREAD SIZE	A	B	C	E	CLAMP STRAP	CLAMP REST	FLAT WASHER	STUD & SPRING
CL-0-SWHA-x	1/4-20	2	5/8	3/8	27/32	CL-125-CS	CL-1-CR	CL-7-FW	CL-1/4-20x2.50-STUD CL-5-SPG
CL-2-SWHA-x		3			1-7/32	CL-127-CS			
CL-4-SWHA-x	3/8-16	4	1-1/8	1/2	1-23/32	CL-129-CS	CL-2-CR	CL-1-FW	CL-3/8-16x3.00-STUD CL-7-SPG
CL-6-SWHA-x		5			2-7/32	CL-131-CS			
CL-9-SWHA-x		3-1/2			1-15/32	CL-134-CS			
CL-10-SWHA-x	1/2-13	4	1-1/4	5/8	1-23/32	CL-135-CS	CL-4-CR	CL-2-FW	CL-1/2-13x4.00-STUD CL-9-SPG
CL-12-SWHA-x		5			2-7/32	CL-137-CS			
CL-14-SWHA-x		6			2-23/32	CL-139-CS			
CL-19-SWHA-x		4			1-5/8	CL-140-CS			
CL-17-SWHA-x	5/8-11	5	1-1/2	7/8	2-1/8	CL-142-CS	CL-6-CR	CL-3-FW	CL-5/8-11x4.50-STUD CL-11-SPG
CL-15-SWHA-x		6			2-5/8	CL-144-CS			
CL-27-SWHA-x		6			2-5/8	CL-152-CS			
CL-29-SWHA-x	3/4-10	7	1-3/4	1	3-1/8	CL-154-CS	CL-8-CR	CL-4-FW	CL-3/4-10x5.00-STUD CL-13-SPG
CL-31-SWHA-x		8			3-5/8	CL-156-CS			

ASSEMBLIES — STEEL (METRIC)

CLM-0-SWHA-x	M6	2	5/8	3/8	27/32	CL-125-CS	CLM-1-CR	CL-7-FW	CLM-6x65-STUD CL-5-SPG
CLM-2-SWHA-x		3			1-7/32	CL-127-CS			
CLM-4-SWHA-x	M10	4	1-1/8	1/2	1-23/32	CL-129-CS	CLM-2-CR	CL-1-FW	CLM-10x80-STUD CL-7-SPG
CLM-6-SWHA-x		5			2-7/32	CL-131-CS			
CLM-9-SWHA-x		3-1/2			1-15/32	CL-134-CS			
CLM-10-SWHA-x		4	1-1/4	5/8	1-23/32	CL-135-CS	CLM-4-CR	CL-2-FW	CLM-12x95-STUD CL-9-SPG
CLM-12-SWHA-x	M12	5			2-7/32	CL-137-CS			
CLM-14-SWHA-x		6			2-23/32	CL-139-CS			
CLM-19-SWHA-x		4			1-5/8	CL-140-CS			
CLM-17-SWHA-x	M16	5	1-1/2	7/8	2-1/8	CL-142-CS	CLM-5-CR	CL-3-FW	CLM-16x110-STUD CL-11-SPG
CLM-15-SWHA-x		6			2-5/8	CL-144-CS			
CLM-27-SWHA-x		6			2-5/8	CL-152-CS			
CLM-29-SWHA-x	M20	7	1-3/4	1	3-1/8	CL-154-CS	CLM-8-CR	CLM-10-FW	CLM-20x125-STUD CL-13-SPG
CLM-31-SWHA-x		8			3-5/8	CL-156-CS			

* Available in thread sizes 3/8-16 and above (M10 and above in metric).

DOUBLE-END CLAMP STRAPS

STRAP: 1018 STEEL, CARBURIZED-HARDENED, BLACK OXIDE FINISH
SEE PAGES 85, 92, 250-253, 259-260 AND 268 FOR OTHER MATERIAL SPECIFICATIONS

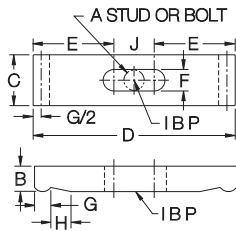
STRAPS — STEEL



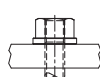
Steel

Clamp strap with two clamping ends, for holding two workpieces simultaneously. Available for 1/4-20 (M6) to 3/4-10 (M20) stud sizes, each in several strap lengths.

PART NO.	A	B	C	D	E	F	G	H	J
CL-23A-CS	1/4-20 or M6	3/8	5/8	2	11/16	9/32	1/4	11/32	5/8
CL-23B-CS				2-1/2	7/8				3/4
CL-23C-CS	5/16-18 or M8	1/2	3/4	2	1	3/8	5/16	7/16	0
CL-23D-CS				3	1-1/2				
CL-23-CS	3/8-16 or M10	1/2	1-1/8	3	1	27/64	13/32	1/2	1
CL-24-CS				4	1-1/2				
CL-25-CS	1/2-13 or M12	5/8	1-1/4	5	2	17/32	13/32	1/2	1
CL-27-CS				4	1-1/2				
CL-28-CS	5/8-11 or M16	7/8	1-1/2	5	1-7/8	21/32	1/2	19/32	1-1/4
CL-30-CS				6	2-3/8				
CL-32A-CS	3/4-10 or M20	1	1-3/4	6	2-1/8	13/16	1/2	19/32	1-3/4
CL-33-CS				7	2-5/8				
CL-37-CS				8	3-1/8				
CL-38-CS									
CL-39-CS									



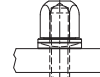
Spherical Nut & Washer
CL-xx-DEA-1



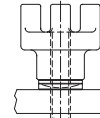
Flange Nut
CL-xx-DEA-2



Hand Knob with Spherical Washer
CL-xx-DEA-4



Acorn Nut with Spherical Washer
CL-xx-DEA-5



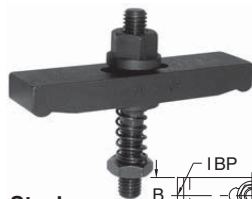
Bar Knob with Spherical Washer*
CL-xx-DEA-6



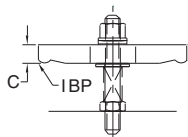
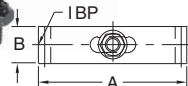
Cam Handle with Spherical Washer
CL-xx-DEA-7

ASSEMBLIES — STEEL (USA)

PART NO.	THREAD SIZE	A	B	C	CLAMP STRAP	FLAT WASHER	STUD & SPRING
CL-0-DEA-x	1/4-20	2	5/8	3/8	CL-23A-CS	CL-7-FW	CL-1/4-20x2.50-STUD CL-5-SPG
CL-1-DEA-x		2-1/2			CL-23B-CS		
CL-1A-DEA-x	5/16-18	2	3/4	1/2	CL-23C-CS	CL-14-FW	CL-5/16-18x3.00-STUD CL-6-SPG
CL-1B-DEA-x		3			CL-23D-CS		
CL-2-DEA-x	3/8-16	3	1-1/8	1/2	CL-23-CS	CL-1-FW	CL-3/8-16x3.00-STUD CL-7-SPG
CL-4-DEA-x		4			CL-24-CS		
CL-6-DEA-x	1/2-13	5	1-1/4	5/8	CL-25-CS	CL-2-FW	CL-1/2-13x4.00-STUD CL-9-SPG
CL-8-DEA-x		4			CL-27-CS		
CL-10-DEA-x	5/8-11	5	1-1/2	7/8	CL-28-CS	CL-3-FW	CL-5/8-11x4.50-STUD CL-11-SPG
CL-12-DEA-x		6			CL-30-CS		
CL-15-DEA-x	3/4-10	6	1-3/4	1	CL-32A-CS	CL-4-FW	CL-3/4-10x5.00-STUD CL-13-SPG
CL-13-DEA-x		6			CL-33-CS		
CL-20-DEA-x		7			CL-37-CS		
CL-22-DEA-x		7			CL-38-CS		
CL-23-DEA-x		8			CL-39-CS		



Steel



A complete Clamp-Strap assembly using one of the straps shown above. Select any of the six nut/knob combinations shown above by adding the appropriate suffix to the part number. Other stud lengths are available (order pieces individually).

ASSEMBLIES — STEEL (METRIC)

PART NO.	THREAD SIZE	A	B	C	CLAMP STRAP	FLAT WASHER	STUD & SPRING
CLM-0-DEA-x	M6	2	5/8	3/8	CL-23A-CS	CL-7-FW	CLM-6x65-STUD CL-5-SPG
CLM-1-DEA-x		2-1/2			CL-23B-CS		
CLM-1A-DEA-x	M8	2	3/4	1/2	CL-23C-CS	CL-14-FW	CLM-8x80-STUD CL-6-SPG
CLM-1B-DEA-x		3			CL-23D-CS		
CLM-2-DEA-x	M10	3	1-1/8	1/2	CL-23-CS	CL-1-FW	CLM-10x80-STUD CL-7-SPG
CLM-4-DEA-x		4			CL-24-CS		
CLM-6-DEA-x	M12	5	1-1/4	5/8	CL-25-CS	CL-2-FW	CLM-12x95-STUD CL-9-SPG
CLM-8-DEA-x		4			CL-27-CS		
CLM-10-DEA-x	M16	5	1-1/2	7/8	CL-28-CS	CL-3-FW	CLM-16x110-STUD CL-11-SPG
CLM-12-DEA-x		6			CL-30-CS		
CLM-15-DEA-x	M20	6	1-3/4	1	CL-32A-CS	CLM-10-FW	CLM-20x125-STUD CL-13-SPG
CLM-13-DEA-x		6			CL-33-CS		
CLM-20-DEA-x		7			CL-37-CS		
CLM-22-DEA-x		7			CL-38-CS		
CLM-23-DEA-x		8			CL-39-CS		

* Available in thread sizes 3/8-16 and above (M10 and above in metric).

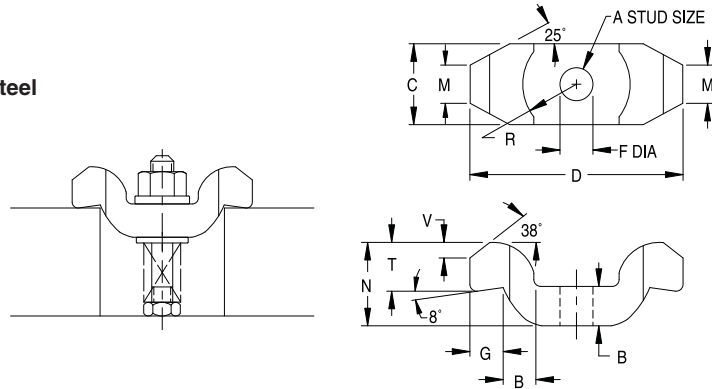
DOUBLE-END GOOSENECK CLAMP STRAPS

STRAP: ALLOY STEEL, BLACK OXIDE FINISH
SEE PAGES 85, 250-253 FOR OTHER MATERIAL SPECIFICATIONS



Steel

Gooseneck version of our Double-End Clamp Straps. This design recesses the clamping nut to provide a low overall profile. Double-End Clamps have two clamping ends, for holding two workpieces simultaneously. Turn strap 90° for clear loading. Available to fit 1/2-13 and 5/8-11 studs (M12 and M16 in metric).

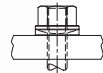


STRAPS – STEEL

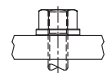
PART NO.	A	B	C	D	F	G	M	N	R	T	V
CL-842-GCS	1/2-13, 5/8-11, M12, or M16	.79	1.58	3.94	.67	.63	.79	1.58	.94	.90	.34



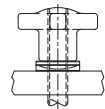
Double-End Gooseneck Clamp Straps are also available as a complete assembly. Select any of the four nut/knob combinations shown below by adding the appropriate suffix to the part number. Other lengths of Clamping Studs and Clamp Rests are available (order pieces individually).



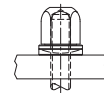
Spherical Nut & Washer
CL-xx-GCSA-1



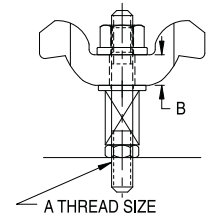
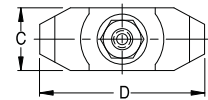
Flange Nut
CL-xx-GCSA-2



Hand Knob with Spherical Washer
CL-xx-GCSA-4



Acorn Nut with Spherical Washer
CL-xx-GCSA-5



ASSEMBLIES – STEEL (USA)

PART NO.	A	B	C	D	CLAMP STRAP	FLAT WASHER	CLAMP SPRING	CLAMPING STUD	JAM NUT
CL-842-GCSA-x	1/2-13	.79	1.58	3.94	CL-842-GCS	CL-2-FW	CL-9-SPG	CL-1/2-13X4.00-STUD	CL-8-JN
CL-1042-GCSA-x	5/8-11					CL-3-FW	CL-11-SPG	CL-5/8-11X4.50-STUD	CL-10-JN

ASSEMBLIES – STEEL (METRIC)

PART NO.	A	B	C	D	CLAMP STRAP	FLAT WASHER	CLAMP SPRING	CLAMPING STUD	JAM NUT
CLM-842-GCSA-x	M12	.79	1.58	3.94	CL-842-GCS	CL-2-FW	CL-9-SPG	CLM-12X95-STUD	CLM-12-JN
CLM-1042-GCSA-x	M16					CL-3-FW	CL-11-SPG	CLM-16X10-STUD	CLM-16-JN