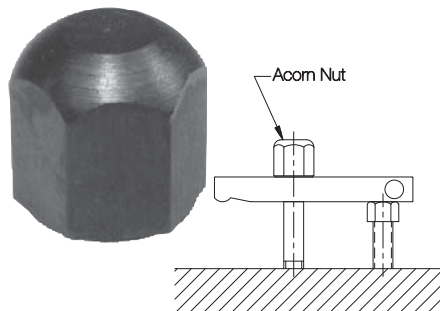


ACORN NUTS

12L14 STEEL, CARBURIZED-HARDENED, BLACK OXIDE FINISH



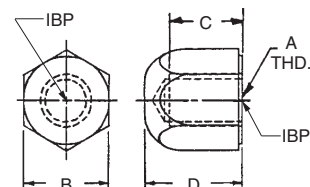
Closed end covers the end of a stud to prevent snags or thread damage.

USA

PART NO.	A	B	C	D
CL-0-AN	1/4-20	1/2	3/8	1/2
CL-1-AN	5/16-18	5/8	13/32	5/8
CL-5-AN	3/8-16	3/4	7/16	3/4
CL-2-AN	1/2-13	7/8	9/16	15/16
CL-3-AN	5/8-11	1-1/16	13/16	1-3/16
CL-4-AN	3/4-10	1-1/4	1	1-3/8

METRIC

CLM-6-AN	M6	10mm		.59
CLM-8-AN	M8	13mm	.39	
CLM-10-AN	M10	17mm		.79
CLM-12-AN	M12	19mm	.59	.98
CLM-16-AN	M16	24mm	.79	1.18
CLM-20-AN	M20	30mm	.98	1.38



KNURLED NUTS

12L14 STEEL, BLACK OXIDE FINISH



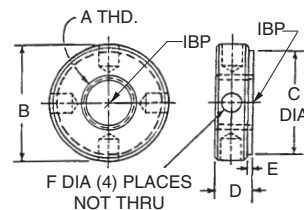
Heavy lock nut that can be tightened by hand or with an extension rod (1/4" or 6mm diameter). Large contact surface.

USA

PART NO.	A	B DIA	C DIA	D	E	F DIA
CL-0-KN	1/4-20					
CL-00-KN	5/16-18	1-1/8	1	7/16	1/16	.257
CL-1-KN	3/8-16					
CL-2-KN	1/2-13					
CL-3-KN	5/8-11	1-3/8				

METRIC

CLM-6-KN	M6					
CLM-8-KN	M8	1.12	.98	.43	.80	.256
CLM-10-KN	M10					
CLM-12-KN	M12					
CLM-16-KN	M16	1.38				



KNURLED CHECK NUTS

12L14 STEEL, BLACK OXIDE FINISH



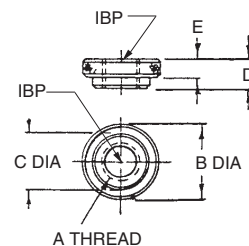
Multipurpose lock nut for finger tightening.

USA

PART NO.	A	B DIA	C DIA	D	E
CL-1024-TSJN	#10-24				
CL-1032-TSJN	#10-32				
CL-1420-TSJN	1/4-20	3/4	1/2	1/4	3/16
CL-51618-TSJN	5/16-18			5/16	1/4
CL-3816-TSJN	3/8-16				
CL-1213-TSJN	1/2-13	1	3/4	3/8	1/4
CL-5811-TSJN	5/8-11				

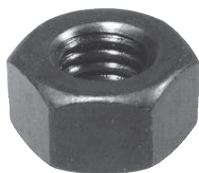
METRIC

CLM-5-TSJN	M5			.24	.20
CLM-6-TSJN	M6	.75	.51	.31	.28
CLM-8-TSJN	M8				
CLM-10-TSJN	M10				
CLM-12-TSJN	M12				
CLM-16-TSJN	M16	.98	.75	.39	.31



HEX NUTS

STEEL: MILD STEEL, BLACK OXIDE FINISH
STAINLESS STEEL: 300-SERIES, PASSIVATE FINISH



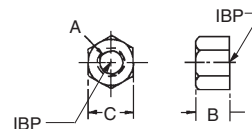
High-quality heavy Hex Nut, available in steel or stainless steel.

USA

STEEL PART NO.	STAINLESS STEEL PART NO.	A THREAD	B	C
CL-4-HN	CL-4-HN-S	1/4-20	15/64	1/2
CL-5-HN	CL-5-HN-S	5/16-18	19/64	9/16
CL-6-HN	CL-6-HN-S	3/8-16	23/64	11/16
CL-8-HN	CL-8-HN-S	1/2-13	31/64	7/8
CL-10-HN	CL-10-HN-S	5/8-11	39/64	1-1/16
CL-12-HN	CL-12-HN-S	3/4-10	47/64	1-1/4
CL-14-HN	—	7/8-9	55/64	1-7/16
CL-16-HN	—	1"-8	63/64	1-5/8
CL-20-HN	—	1-1/4"-7	1-7/32	2

USA FINE

CL-4-FHN	CL-4-FHN-S	1/4-28	7/32	7/16
CL-5-FHN	CL-5-FHN-S	5/16-24	17/64	1/2
CL-6-FHN	CL-6-FHN-S	3/8-24	21/64	9/16
CL-8-FHN	CL-8-FHN-S	1/2-20	7/16	3/4
CL-10-FHN	—	5/8-18	35/64	15/16
CL-12-FHN	—	3/4-16	41/64	1-1/8



METRIC

STEEL PART NO.	STAINLESS STEEL PART NO.	A THREAD	B	C
CLM-6-HN	—	M6	.20	10mm
CLM-8-HN	—	M8	.26	13mm
CLM-10-HN	—	M10	.31	17mm
CLM-12-HN	—	M12	.39	19mm
CLM-16-HN	—	M16	.51	24mm
CLM-20-HN	—	M20	.63	30mm
CLM-24-HN	—	M24	.75	36mm
CLM-30-HN	—	M30	.94	46mm

JAM NUTS

STEEL: MILD STEEL, BLACK OXIDE FINISH
STAINLESS STEEL: 300-SERIES, PASSIVATE FINISH



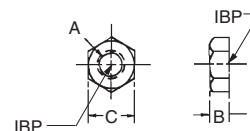
High-quality heavy Jam Nut, available in steel or stainless steel.

USA

STEEL PART NO.	STAINLESS STEEL PART NO.	A THREAD	B	C
—	CL-2-JN-S	#8-32	1/8	11/32
—	CL-3-JN-S	#10-24	1/8	3/8
CL-4-JN	CL-4-JN-S	1/4-20	11/64	1/2
CL-5-JN	CL-5-JN-S	5/16-18	13/64	9/16
CL-6-JN	CL-6-JN-S	3/8-16	15/64	11/16
CL-8-JN	—	1/2-13	19/64	7/8
CL-10-JN	—	5/8-11	23/64	1-1/16
CL-12-JN	—	3/4-10	27/64	1-1/4
CL-14-JN	—	7/8-9	31/64	1-7/16
CL-16-JN	—	1"-8	35/64	1-5/8

USA FINE

CL-3-FJN	CL-3-FJN-S	#10-32	1/8	3/8
CL-4-FJN	CL-4-FJN-S	1/4-28	5/32	7/16
CL-5-FJN	CL-5-FJN-S	5/16-24	3/16	1/2
CL-6-FJN	CL-6-FJN-S	3/8-24	7/32	9/16



METRIC

STEEL PART NO.	STAINLESS STEEL PART NO.	A THREAD	B	C
—	CLM-4-JN-S	M4	.08	7mm
—	CLM-5-JN-S	M5	.10	8mm
CLM-6-JN	CLM-6-JN-S	M6	.13	10mm
CLM-8-JN	CLM-8-JN-S	M8	.16	13mm
CLM-10-JN	CLM-10-JN-S	M10	.20	17mm
CLM-12-JN	CLM-12-JN-S	M12	.24	19mm
CLM-16-JN	CLM-16-JN-S	M16	.31	24mm
CLM-20-JN	CLM-20-JN-S	M20	.39	30mm
CLM-24-JN	—	M24	.47	36mm

FLANGE NUTS

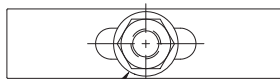
STEEL: 12L14, CARBURIZED-HARDENED, BLACK OXIDE FINISH
STAINLESS STEEL: 300-SERIES, PASSIVATE FINISH

USA

STEEL PART NO.	STAINLESS STEEL PART NO.	A	B	C DIA	D	E
—	CL-123	#10-24	5/16	1/2	3/8	.08
—	CL-125	1/4-20	5/16	9/16	7/16	.12
CL-1-FN	—	—	—	5/8	1/2	.12
—	CL-126	5/16-18	3/8	11/16	9/16	.09
CL-9-FN	—	—	—	3/4	—	.12
CL-2-FN	CL-127	3/8-16	1/2	7/8	11/16	.12
CL-3-FN	CL-128	1/2-13	11/16	1-1/8	7/8	.20
CL-4-FN	CL-129	5/8-11	13/16	1-3/8	1-1/16	.25
CL-5-FN	—	3/4-10	1	1-5/8	1-1/4	.25
CL-6-FN	—	7/8-9	1-1/8	1-3/4	1-7/16	.32
CL-7-FN	—	1"-8	1-1/4	2	1-5/8	.28
CL-10-FN	—	1-1/4"-7	1-3/8	2-1/4	1-13/16	.25



Flanged face provides a large bearing surface to avoid damaging the part underneath, especially when clamping over a slot. Precision machined from one solid piece of steel for extra strength.



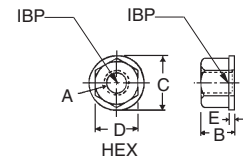
Flange Nut

USA FINE

—	CL-124	#10-32	5/16	1/2	3/8	.08
CL-1-FFN	—	1/4-28	—	5/8	1/2	.12
CL-9-FFN	—	5/16-24	3/8	3/4	9/16	.12
CL-2-FFN	—	3/8-24	1/2	7/8	11/16	.20
CL-3-FFN	—	1/2-20	11/16	1-1/8	7/8	.20
CL-4-FFN	—	5/8-18	13/16	1-3/8	1-1/16	.25
CL-5-FFN	—	3/4-16	1	1-5/8	1-1/4	.25
CL-7-FFN	—	1"-14	1-1/4	2	1-5/8	.25

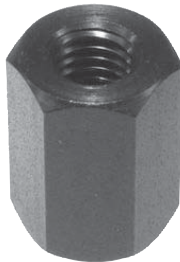
METRIC

CLM-6-FN	—	M6	.31	.63	10mm	.12
CLM-8-FN	—	M8	.39	.75	13mm	.20
CLM-10-FN	—	M10	.51	.87	17mm	.24
CLM-12-FN	—	M12	.67	1.10	19mm	.28
CLM-16-FN	—	M16	.83	1.34	24mm	.28
CLM-20-FN	—	M20	.98	1.61	30mm	.28
CLM-24-FN	—	M24	1.26	2.01	36mm	.28

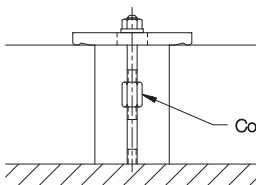


COUPLING NUTS

12L14 STEEL, CARBURIZED-HARDENED, BLACK OXIDE FINISH



For joining two or more studs together to create an extra-long stud.



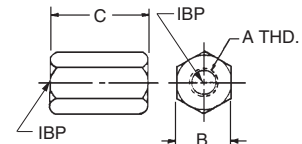
Coupling Nut

USA

PART NO.	A	B	C
CL-0-CN	1/4-20	1/2	5/8
CL-00-CN	5/16-18	9/16	7/8
CL-1-CN	3/8-16	11/16	1
CL-2-CN	1/2-13	7/8	1-1/4
CL-3-CN	5/8-11	1-1/16	1-5/8
CL-4-CN	3/4-10	1-1/4	1-7/8
CL-6-CN	1"-8	1-5/8	2-1/2

METRIC

CLM-6-CN	M6	10mm	.71
CLM-8-CN	M8	13mm	.79
CLM-10-CN	M10	17mm	.98
CLM-12-CN	M12	19mm	1.18
CLM-16-CN	M16	24mm	1.57
CLM-20-CN	M20	30mm	1.97

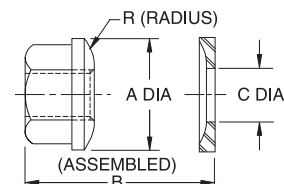
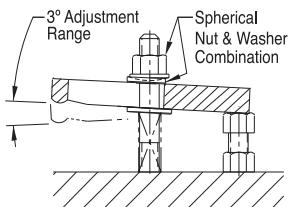


SPHERICAL NUTS AND WASHERS

STEEL: 12L14, CARBURIZED-HARDENED, BLACK OXIDE FINISH
STAINLESS STEEL: 300-SERIES, PASSIVATED



Combination nut and washer that compensates whenever a stud and clamp strap are not perpendicular. The nut has a convex spherical radius, while the washer has a matching concave spherical radius.



USA

STEEL PART NO.	STAINLESS STEEL PART NO.	THREAD	HEX	A DIA	B	C DIA	R
CL-1-SNW	CL-1-SNW-S	1/4-20	1/2	5/8	15/32	5/16	3/4
CL-9-SNW	CL-9-SNW-S	5/16-18	9/16	3/4	17/32	3/8	1
CL-2-SNW	CL-2-SNW-S	3/8-16	11/16	7/8	19/32	7/16	1-1/4
CL-3-SNW	CL-3-SNW-S	1/2-13	7/8	1-1/8	7/8	9/16	1-1/2
CL-4-SNW	CL-4-SNW-S	5/8-11	1-1/16	1-3/8	1	11/16	1-3/4
CL-5-SNW	CL-5-SNW-S	3/4-10	1-1/4	1-5/8	1-3/16	7/8	2-1/4
CL-6-SNW	—	7/8-9	1-7/16	1-3/4	1-5/16	1	2-1/2
CL-7-SNW	—	1"-8	1-5/8	2	1-7/16	1-1/8	2-3/4

METRIC

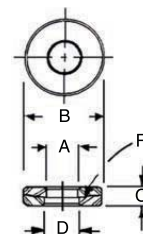
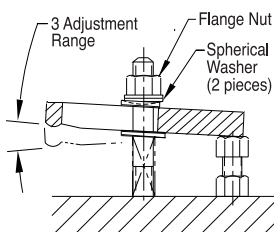
CLM-6-SNW	—	M6	10mm	5/8	.47	5/16	3/4
CLM-8-SNW	—	M8	13mm	3/4	.55	3/8	1
CLM-10-SNW	—	M10	17mm	7/8	.69	7/16	1-1/4
CLM-12-SNW	—	M12	19mm	1-1/8	.87	9/16	1-1/2
CLM-16-SNW	—	M16	24mm	1-3/8	.98	11/16	1-3/4
CLM-20-SNW	—	M20	30mm	1-5/8	1.18	7/8	2-1/4
CLM-24-SNW	—	M24	36mm	2	1.41	1	2-3/4

SPHERICAL WASHERS

STEEL: 12L14, CARBURIZED-HARDENED, BLACK OXIDE FINISH
STAINLESS STEEL: 300-SERIES, PASSIVATED



Two-piece washer that compensates whenever a stud and clamp strap are not perpendicular. The top washer has a convex spherical radius, while the bottom washer has a matching concave spherical radius.



USA & METRIC

STEEL PART NO.	STAINLESS STEEL PART NO.	BOLT SIZE	A DIA	B DIA	C	D DIA	R
—	CL-144	#10 & M5	7/32	1/2	1/8	1/4	3/4
CL-1-SW	CL-145	1/4 & M6	9/32	5/8	3/16	5/16	1
CL-11-SW	—	5/16 & M8	11/32	3/4	1/4	3/8	1
CL-2-SW	—	3/8 & M10	13/32	7/8	1/4	7/16	1-1/4
CL-3-SW	CL-148	1/2 & M12	17/32	1-1/8	5/16	9/16	1-1/2
CL-4-SW	CL-149	5/8 & M16	21/32	1-3/8	11/16	1-3/4	1-3/4
CL-5-SW	CL-150	3/4 & M18	25/32	1-5/8	7/8	2-1/4	2-1/4
CLM-20-SW	—	M20	.83	3/8	7/8	1	2-1/2
CL-6-SW	—	7/8 & M22	15/16	1-3/4	1	2-1/2	2-3/4
CL-7-SW	—	1 & M24	1-1/16	2	1-1/8	2-3/4	2-3/4
CL-8-SW	—	1-1/8	1-3/16	2-1/4	1-1/4	1-1/4	3
CL-9-SW	—	1-1/4 & M30	1-5/16	2-5/8	1-3/8	3	3
CL-10-SW	—	1-1/2 & M36	1-9/16	2-7/8	1-5/8	3	3

FLAT WASHERS

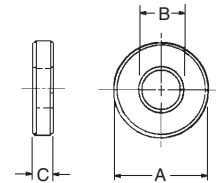
STEEL: 1010, CARBURIZED-HARDENED, BLACK OXIDE FINISH
STAINLESS STEEL: 300-SERIES



Thick, heavy-duty washer with both faces held flat and parallel. Available in steel or stainless steel.

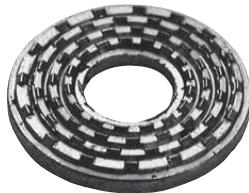
USA & METRIC

STEEL PART NO.	STAINLESS STEEL PART NO.	BOLT SIZE	A DIA	B DIA	C
—	CL-254	#10 or M5	7/16	7/32	5/64
—	CL-255	—	1/2	—	5/64
CL-7-FW	—	1/4 or M6	5/8	9/32	1/8
—	CL-256	—	5/8	—	3/32
CL-14-FW	—	5/16 or M8	3/4	11/32	1/8
—	CL-257	—	3/4	—	3/32
CL-1-FW	—	3/8 or M10	7/8	13/32	1/8
CL-8-FW	—	—	1	—	3/16
CL-2-FW	—	1/2 or M12	1-1/8	17/32	1/8
CL-9-FW	CL-258	—	—	—	3/16
CL-3-FW	—	5/8 or M16	1-3/8	21/32	1/8
CL-10-FW	CL-259	—	—	—	3/16
CL-4-FW	—	3/4 or M18	1-5/8	25/32	5/32
CL-11-FW	CL-260	—	—	—	1/4
CLM-10-FW	—	M20	1-5/8	.827	1/4
CL-13-FW	—	7/8 or M22	1-3/4	29/32	1/4
CL-12-FW	—	1	2	1-1/32	9/32



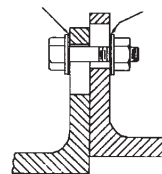
KNURLED-FACE WASHERS

4130 STEEL, HEAT TREATED 125,000-140,000 PSI PER MIL-H-6875, ZINC PLATED YELLOW CHROMATE



Flat washer with a serrated face to prevent two parts from sliding in relation to each other. Close tolerance on washer ID prevents the stud from slipping.

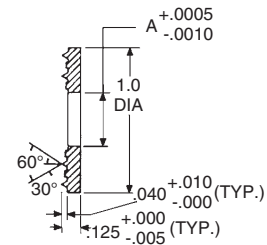
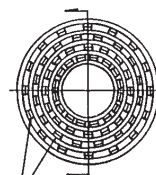
Serrated Washers
Teeth Facing Inward



USA

PART NO.	BOLT DIA	A DIA
CL-3-KFW	#10	.1935
CL-4-KFW	1/4	.2500
CL-5-KFW	5/16	.3125
CL-6-KFW	3/8	.3750

64 TEETH, 16 EQUALLY SPACED
ON EACH DIAMETER WITH
ALTERNATE ROWS STAGGERED

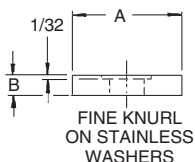
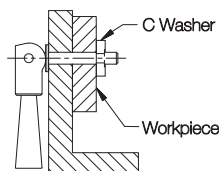
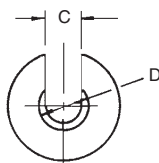


C WASHERS

STEEL: 12L14, CARBURIZED-HARDENED, BLACK OXIDE FINISH
STAINLESS STEEL: 300-SERIES



Washer that slides in and out of position for clear loading. Can be used with a nut, or by sliding it into a radial groove on a drawbar. Available in steel or stainless steel.

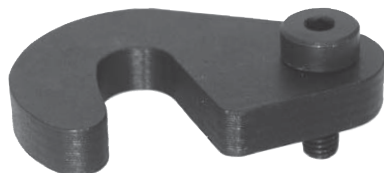


USA & METRIC

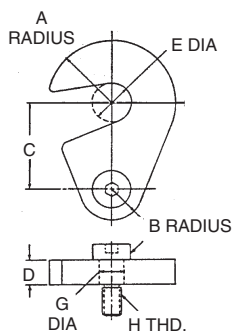
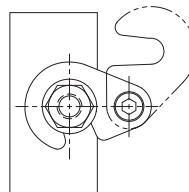
STEEL PART NO.	STAINLESS STEEL PART NO.	BOLT SIZE	A DIA	B	C	D DIA
CL-1-CW	—	#10 or M5	1/2	3/16	13/64	11/32
CL-3-CW	—	—	3/4	1/4	17/64	13/32
—	CL-155	1/4 or M6	7/8	3/16	9/32	25/64
CL-18-CW	—	—	1	1/4	17/64	13/32
CL-5-CW	—	5/16 or M8	1	3/16	21/64	1/2
—	CL-157	—	—	5/16	—	5/8
CL-6-CW	—	—	1-1/4	3/8	13/32	23/32
CL-7-CW	—	3/8 or M10	1-1/2	3/8	—	23/32
CL-22-CW	—	—	1-3/4	1/4	—	—
CL-8-CW	—	—	1-7/8	3/8	17/32	29/32
CL-24-CW	—	1/2 or M12	2-1/4	—	—	—
CL-9-CW	—	—	2-1/8	3/8	21/32	1-3/32
CL-26-CW	—	5/8 or M16	2-1/2	7/16	—	—
CL-11-CW	—	3/4 or M18	2-1/2	7/16	25/32	1-9/32
CL-12-CW	—	—	2-1/2	7/16	1-1/32	1-21/32
CL-15-CW	—	1 or M24	1/2	1/2	1-1/32	1-21/32

SWING C WASHERS

1018 STEEL, CARBURIZED-HARDENED, BLACK OXIDE FINISH



Permanently attached C washer that swings out of the way for clear loading. Can be reversed to swing into position either clockwise or counterclockwise. Shoulder Screw furnished.



USA

PART NO.	STUD SIZE	A	B	C	D	E DIA	G DIA	H	SHOULDER SCREW (FURNISHED)
CL-1-SCW	3/8	3/4	3/8	1	1/4	13/32	3/8	5/16-18	CL-24-SS
CL-2-SCW	1/2	1	1/2	1-1/4	3/8	17/32	—	—	CL-2-SS
CL-3-SCW	5/8	1-1/8	9/16	1-1/2	3/8	21/32	1/2	3/8-16	CL-3-SS
CL-4-SCW	3/4	1-1/4	5/8	1-3/4	1/2	13/16	—	—	CL-4-SS

METRIC

CLM-1-SCW	M10	3/4	3/8	1	.236	13/32	10mm	M8	CLM-1006-SS
CLM-2-SCW	M12	1	1/2	1-1/4	.375	17/32	—	—	CLM-1010-SS
CLM-3-SCW	M16	1-1/8	9/16	1-1/2	.375	21/32	13mm	M10	CLM-1310-SS
CLM-4-SCW	M20	1-1/4	5/8	1-3/4	.472	13/16	—	—	CLM-1312-SS