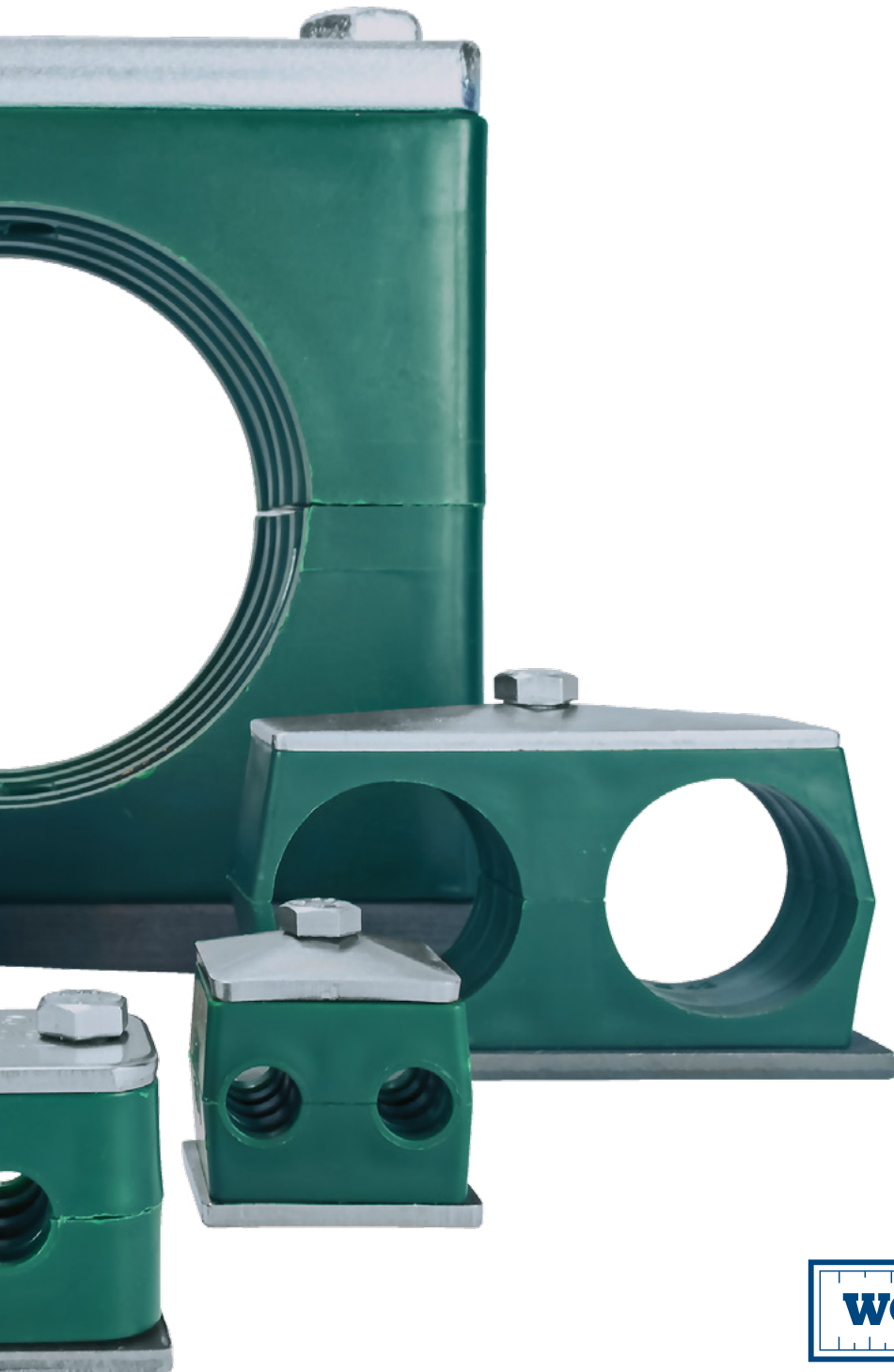
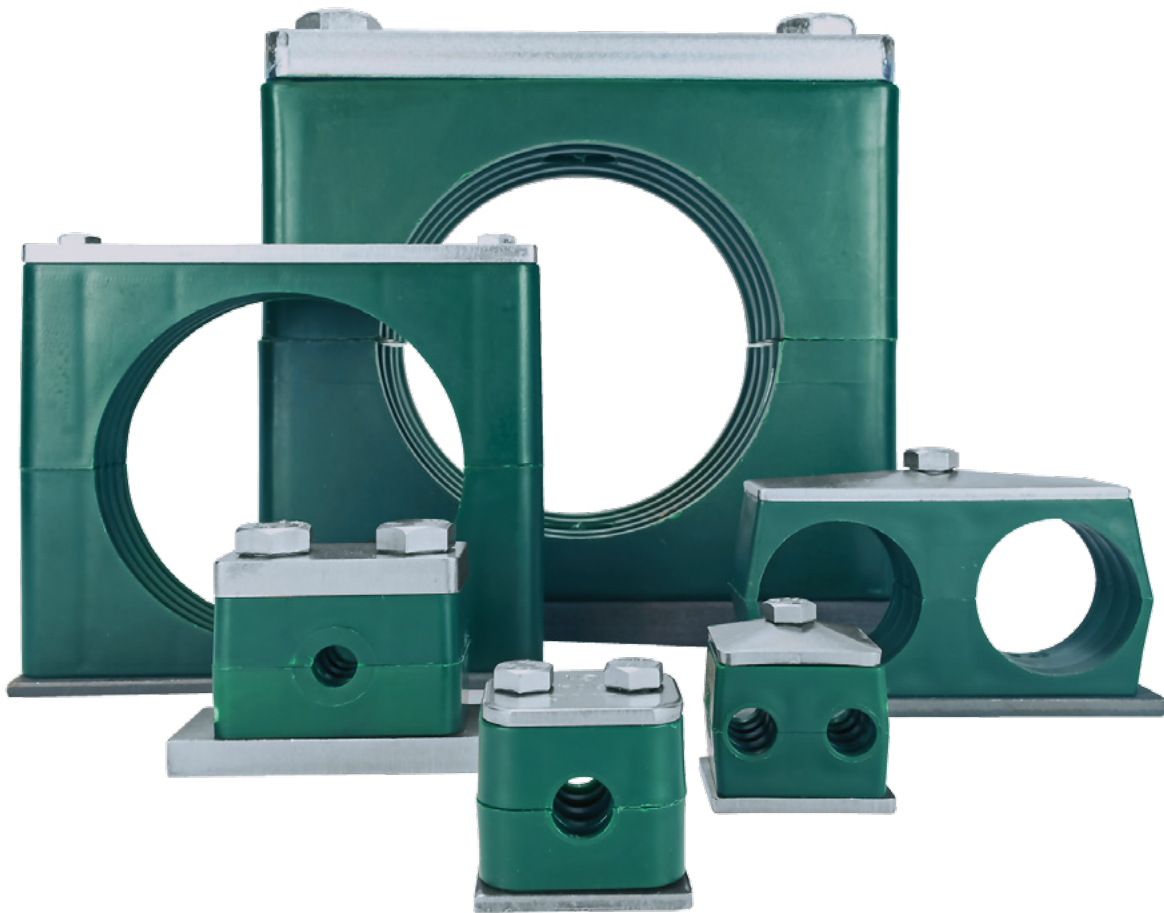


TUBE CLAMPS

Standard, Heavy & Twin





World Wide Metric distributes a complete line of tube clamps and mounting components according to the DIN 3015 standard.

All clamps and components in the Standard Series, Heavy Series and Twin Series have been awarded a Type Approval Certificate from Lloyd's Register.

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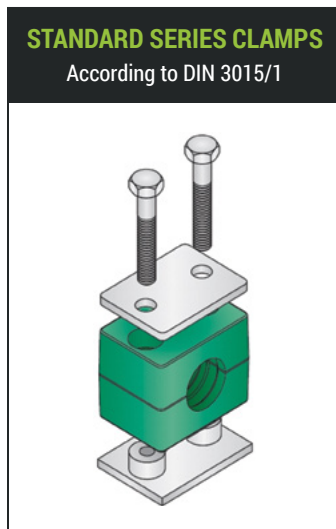
Introduction

World Wide Metric offers a complete line of beta clamps and mounting components that are manufactured to the DIN 3015 standard. Beta clamps provide simple, reliable dampening support for tubes, pipes and hoses. In many installations, they can prevent the loosening of joints and welds by absorbing shock, dampening vibration and reducing noise.

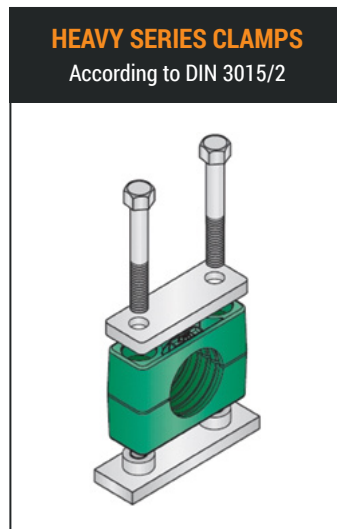
Simple to operate and easy to install, our beta clamps make for quick, easy pipe installations and layouts. By providing high impact resistance and accommodating various temperature ranges, they are suitable for a wide range of applications, that include: industrial, mobile and marine hydraulics, process industries and electrical construction, as well as instrumentation and control technology.

Clamp Series

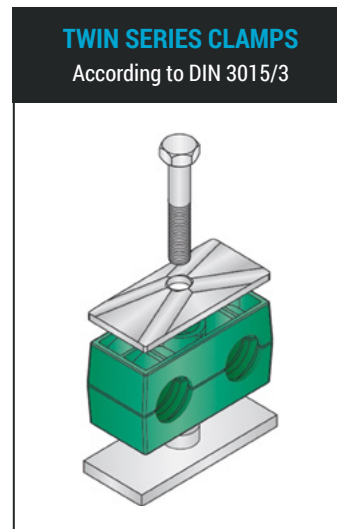
World Wide Metric offers three series of clamps: standard, heavy and twin. Each clamp series is manufactured to international standards and features a full line of individual components, so that users can assemble the configuration that best meets the needs of their application.



For average load moderate vibration installations. Available for tube and pipe sizes up to 4" O.D.
(See pages 7 - 13)



For installations with higher loads and vibrations. Available for tube and pipe sizes up to 16" O.D.
(See pages 14 - 26)



For installations with closely placed lines. Available for tube and pipe sizes up to 1.65" O.D.
(See pages 27 - 31)

Materials

All metal components are carbon steel (ST 37-2) as a standard. Weld plates are phosphated, while all other metal components are zinc plated. Metal components are also available in 316 stainless steel.

All clamp bodies are green polypropylene as a standard.

Threads

All threaded parts are UNC (unified coarse) as a standard, and are also available in Metric ISO thread.

Clamp Selection

SERIES

Determine the appropriate series of clamp by considering the operating pressure of the line that it will secure, the weight that will be supported and the dynamic load. Other factors to consider include: size, environment and application.

SIZE

Select a clamp size based on the O.D. of tube/pipe or nominal bore (NB) of pipe. All clamps are available in imperial and metric sizes, according to groups. Groups are size families within a series that share compatible hardware. Each group is unique to its series, so be sure to select components from both the same series and the same group when configuring a clamp.

CONFIGURATION

Clamps can be ordered as complete clamp kits, or as individual components. Ordering compatible individual components provides a wide range of possible clamp configurations and mounting options. Available clamp mounting options include stacking, side-by-side, weld and rail mount.

HARDWARE OPTIONS

Determine the hardware material and thread type required for your application. Please refer to the Technical Data section (pages 29-31) for more information on material and thread options.

Ordering Information & Notes

Clamps can be ordered as complete clamp kits, or as individual components. Please see each series for details and more information.

GROUPS

Groups are size families within a series that share compatible hardware. In each series, the group number can be found in the leftmost column on any product page. Each group is unique to its series. For example, the Group 1 components in the Standard Series are not compatible with the Group 1 components in the Heavy Series. When ordering individual clamp components, please be sure to select components that are from both the same series and the same group.

CLAMP KITS

For simplified ordering, complete clamp arrangements are available as complete clamp kits. Clamp kits contain everything you need in one package and only require one item number to order. Clamp kits are available in each series and allow for users to select the hardware material and thread for the clamp.

CLAMP BODIES

An order of one clamp body is a complete set containing two clamp halves.

Certificates

LLOYD'S REGISTER

All clamps in our Standard Series, Heavy Series and Twin Series have been awarded a Type Approval Certificate from Lloyd's Register. Approved applications include general use in marine, industrial piping systems, offshore and offshore oil and gas installations, chemical and petrochemical industry for static loads (dynamic loads excluded).

Contents of Complete Clamp Kits

Complete clamp kits contain everything you need in one package and only require one item number to order. They are available in all clamp series, Standard, Heavy and Twin, and are manufactured to the DIN 3015 standard.

The contents of clamp kits and their available options are shown below. When ordering a complete clamp kit with non-standard hardware material or non-standard thread, please refer to the kit options that are displayed on the clamp kit pages to ensure that the correct item number is determined.

KIT CONTENTS

EACH CLAMP KIT CONTAINS:

- (1) Polypropylene Clamp Body*
- (1) Galvanized Steel Cover Plate
- (1) Phosphated Steel Weld Plate
- (2) Galvanized Steel Hex Head Bolts

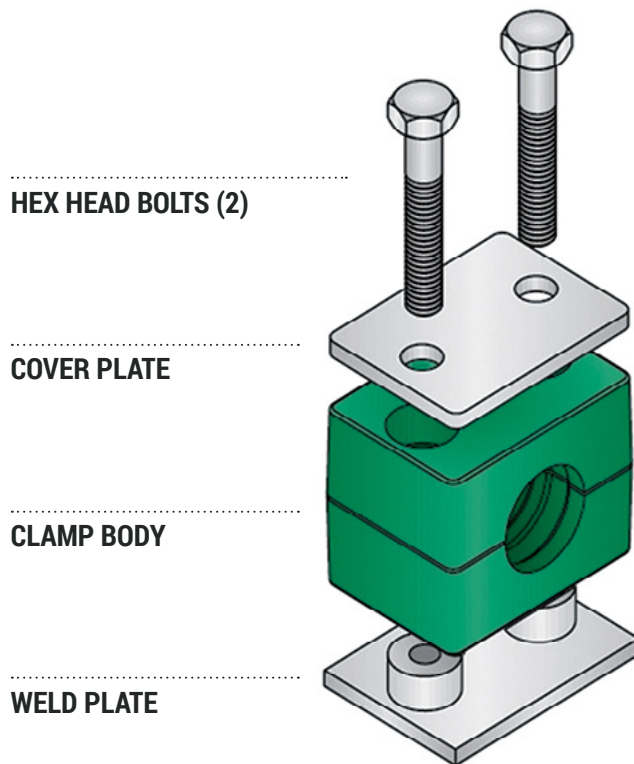
KIT OPTIONS

HARDWARE MATERIAL

Carbon Steel (ST 37-2) is standard
316 Stainless Steel is also available

THREAD

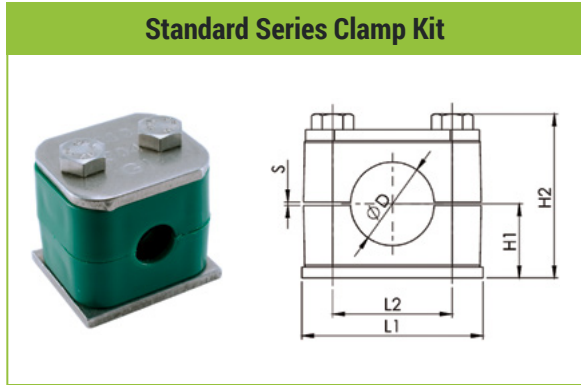
UNC is standard
Metric Thread is also available



* PLEASE NOTE: A clamp body is a complete set containing two clamp halves.

Complete Clamp Kits

KIT CONTENTS	
(1)	Polypropylene Clamp Body
(1)	Galvanized Steel Cover Plate
(1)	Phosphated Steel Weld Plate
(2)	Galvanized Steel Hex Head Bolts
Standard Series Clamp Kits are also available with 316 Stainless Steel hardware.	



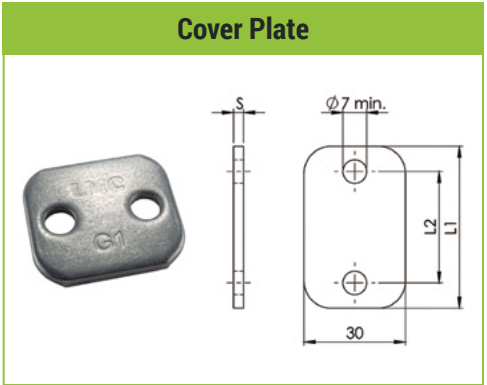
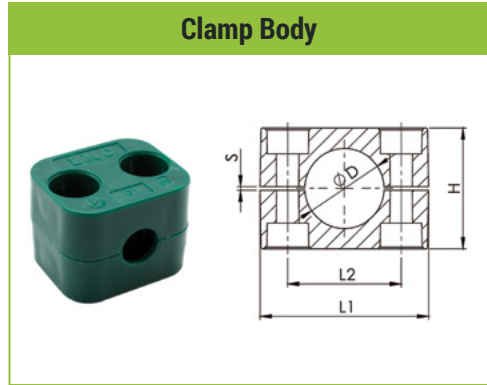
Group	Ø (mm)	NB (in)	Ø (in)
S1	6		
	6.4		1/4
	8		5/16
	9.5		3/8
	10	R 1/8	
S2	12		
	12.7		1/2
	13.5	R 1/4	
	14		
	15		
	16		5/8
S3	17.2	R 3/8	
	18		
	19		3/4
	20		
	21.3	R 1/2	
	22		7/8
	23		
S4	25		
	25.4		1
	26.9	R 3/4	
S5	28		
	30		
	32		1-1/4
	33.7	R 1	
	35		
	38		1-1/2
S6	40		
	42	R 1-1/4	
	44.5		1-3/4
S7	48.3	R 1-1/2	
	50.8		2
	57.2		2-1/4
	60.3	R 2	
	63.5		2-1/2
S8	70		2-3/4
	73		
	76.1	R 2-1/2	3
	88.9	R 3	3-1/2
	101.6		4

Dimensions (mm)					Item Number
L1	L2	H1	H2	S min.	
36	20	16.5	37	0.4	HCS-006.0-STU*
					HCS-006.4-STU
					HCS-008.0-STU
					HCS-009.5-STU
					HCS-010.0-STU
42	26	19.5	43	0.6	HCS-012.0-STU
					HCS-012.7-STU
					HCS-013.5-STU
					HCS-014.0-STU
					HCS-015.0-STU
					HCS-016.0-STU
50	33	21	46	0.6	HCS-017.2-STU
					HCS-018.0-STU
					HCS-019.0-STU
					HCS-020.0-STU
					HCS-021.3-STU
					HCS-022.0-STU
					HCS-023.0-STU
60	40	24	52	0.6	HCS-025.0-STU
					HCS-025.4-STU
					HCS-026.9-STU
					HCS-028.0-STU
71	52	32	68	0.8	HCS-030.0-STU
					HCS-032.0-STU
					HCS-033.7-STU
					HCS-035.0-STU
					HCS-038.0-STU
					HCS-040.0-STU
86	66	36	76	0.8	HCS-042.0-STU
					HCS-044.5-STU
					HCS-048.3-STU
122	94	51.5	107	0.8	HCS-050.8-STU
					HCS-057.2-STU
					HCS-060.3-STU
					HCS-063.5-STU
					HCS-070.0-STU
					HCS-073.0-STU
148	120	64	132	0.8	HCS-076.1-STU
					HCS-088.9-STU
					HCS-101.6-STU

KIT OPTIONS
HARDWARE MATERIAL Carbon Steel (ST 37-2) is standard For 316 Stainless Steel, CHANGE -ST to -SS on the item number.
*ORDERING EXAMPLE: HCS-006.0-SSU
THREAD UNC is standard For metric, CHANGE "U" to "M" on the item number.
NOTE: Groups S1 - S8 are 1/4-20 UNC or M6 thread
*ORDERING EXAMPLE: HCS-006.0-STM

Clamp Bodies & Cover Plates

MATERIALS	
CLAMP BODY	Polypropylene
COVER PLATE	Galvanized Carbon Steel (ST 37-2)
For 316 Stainless Steel, ADD -SS6 to the end of the item number.	



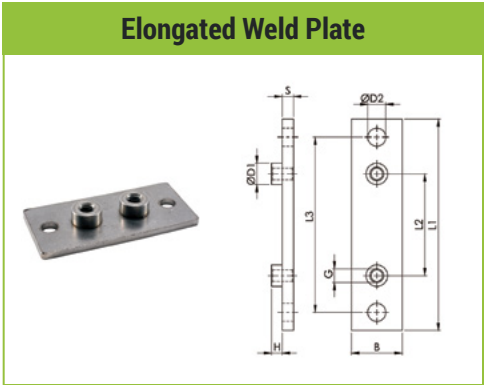
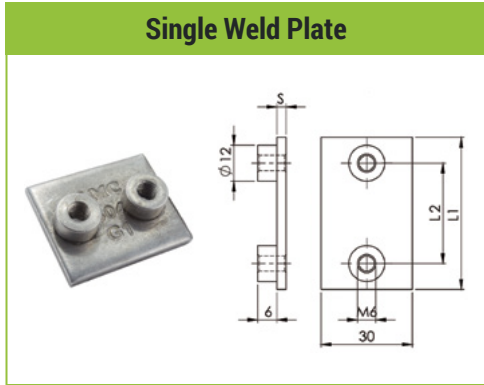
Group	Ø (mm)	NB (in)	Ø (in)
S1	6		
	6.4		1/4
	8		5/16
	9.5		3/8
	10	R 1/8	
	12		
S2	12.7		1/2
	13.5	R 1/4	
	14		
	15		
	16		5/8
	17.2	R 3/8	
18			
S3	19		3/4
	20		
	21.3	R 1/2	
	22		7/8
	23		
	25		
25.4		1	
S4	26.9	R 3/4	
	28		
	30		
S5	32		1-1/4
	33.7	R 1	
	35		
	38		1-1/2
	40		
	42	R 1-1/4	
S6	44.5		1-3/4
	48.3	R 1-1/2	
	50.8		2
S7	57.2		2-1/4
	60.3	R 2	
	63.5		2-1/2
	70		2-3/4
	73		
	76.1	R 2-1/2	3
S8	88.9	R 3	3-1/2
	101.6		4

Dimensions (mm)				Item Number
L1	L2	H	S min.	
37	20	27	0.4	HCS-PP-006.0
				HCS-PP-006.4
				HCS-PP-008.0
				HCS-PP-009.5
				HCS-PP-010.0
				HCS-PP-012.0
42	26	33	0.6	HCS-PP-012.7
				HCS-PP-013.5
				HCS-PP-014.0
				HCS-PP-015.0
				HCS-PP-016.0
				HCS-PP-017.2
18.0				
50	33	36	0.6	HCS-PP-019.0
				HCS-PP-020.0
				HCS-PP-021.3
				HCS-PP-022.0
				HCS-PP-023.0
				HCS-PP-025.0
25.4				
59	40	42	0.6	HCS-PP-026.9
				HCS-PP-028.0
				HCS-PP-030.0
71	52	58	0.8	HCS-PP-032.0
				HCS-PP-033.7
				HCS-PP-035.0
				HCS-PP-038.0
				HCS-PP-040.0
				HCS-PP-042.0
86	66	66	0.8	HCS-PP-044.5
				HCS-PP-048.3
				HCS-PP-050.8
121	94	93	0.8	HCS-PP-057.2
				HCS-PP-060.3
				HCS-PP-063.5
				HCS-PP-070.0
				HCS-PP-073.0
				HCS-PP-076.1
147	120	118	0.8	HCS-PP-088.9
				HCS-PP-101.6

Dimensions (mm)			Item Number	
L1	L2	S		
34	9.5	3	HCS-CP-01	
40	9.5	3	HCS-CP-02	
48	9.5	3	HCS-CP-03	
57	9.5	3	HCS-CP-04	
70	9.5	3	HCS-CP-05	
86	9.5	3	HCS-CP-06	
118	9.5	5	HCS-CP-07	
144	9.5	5	HCS-CP-08	

Weld Plates

OPTIONS	
MATERIAL	Phosphated Carbon Steel (ST 37-2)
	For 316 Stainless Steel, ADD -SS6 to the end of the item number.
THREAD	UNC (Groups S1-S8 are ¼-20 UNC)
	For metric, CHANGE "U" to "M" (Groups S1-S8 are M6)



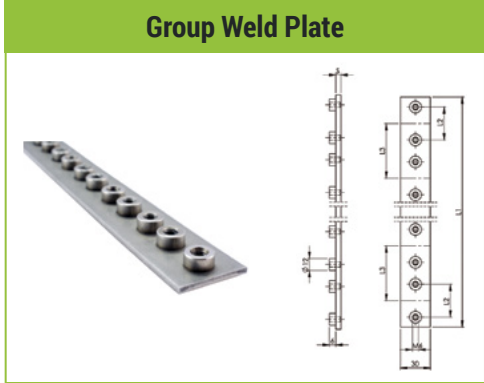
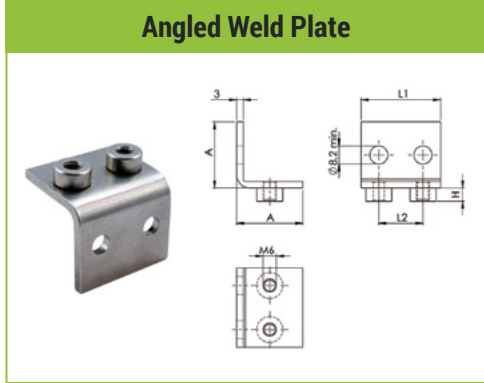
Group	Ø (mm)	NB (in)	Ø (in)
S1	6		
	6.4		1/4
	8		5/16
	9.5		3/8
	10	R 1/8	
S2	12		
	12.7		1/2
	13.5	R 1/4	
	14		
	15		5/8
S3	16		
	17.2	R 3/8	
	18		
	19		3/4
	20		
S4	21.3	R 1/2	
	22		7/8
	23		
	25		
	25.4		1
S5	26.9	R 3/4	
	28		
	30		
S6	32		1-¼
	33.7	R 1	
	35		
	38		1-½
	40		
S7	42	R 1-¼	
	44.5		1-¾
	48.3	R 1-½	
S8	50.8		2
	57.2		2-¼
	60.3	R 2	
	63.5		2-½
	70		2-¾
S9	73		
	76.1	R 2-½	3
	88.9	R 3	3-½
S10	101.6		4

Dimensions (mm)			Item Number
L1	L2	S	
36	20	3	HCS-WPU-01
42	26	3	HCS-WPU-02
50	33	3	HCS-WPU-03
60	40	3	HCS-WPU-04
71	52	3	HCS-WPU-05
88	66	3	HCS-WPU-06
122	94	5	HCS-WPU-07
148	120	5	HCS-WPU-08

Dimensions (mm)				Item Number
L1	L2	L3	S	
64	20	50	3	HCS-EWPU-01
70	26	56	3	HCS-EWPU-02
78	33	64	3	HCS-EWPU-03
87	40	73	3	HCS-EWPU-04
100	52	86	3	HCS-EWPU-05
115	66	100	3	HCS-EWPU-06
150	94	136	5	HCS-EWPU-07
178	120	162	5	HCS-EWPU-08

Weld Plates

OPTIONS	
MATERIAL	Phosphated Carbon Steel (ST 37-2)
	For 316 Stainless Steel, ADD -SS6 to the end of an item number.
THREAD	UNC (Groups S1-S8 are ¼-20 UNC)
	For metric, CHANGE "U" to "M" (Groups S1-S8 are M6)



Group	Ø (mm)	NB (in)	Ø (in)
S1	6		
	6.4		1/4
	8		5/16
	9.5		3/8
	10	R 1/8	
12			
S2	12.7		1/2
	13.5	R 1/4	
	14		
	15		
	16		5/8
17.2	R 3/8		
18			
S3	19		3/4
	20		
	21.3	R 1/2	
	22		7/8
	23		
25			
25.4		1	
S4	26.9	R 3/4	
	28		
	30		
S5	32		1-¼
	33.7	R 1	
	35		
	38		1-½
	40		
42	R 1-¼		
S6	44.5		1-¾
	48.3	R 1-½	
	50.8		2

Dimensions (mm)				Item Number
A	L1	L2	H	
30 x 30	32	20	6.5	HCS-AWPU-01
30 x 30	42	26	6.5	HCS-AWPU-02
30 x 30	50	33	6.5	HCS-AWPU-03
30 x 30	60	40	6.5	HCS-AWPU-04
30 x 30	70	52	6.5	HCS-AWPU-05
30 x 30	88	66	6.5	HCS-AWPU-06

Dimensions (mm)					Item Number
L1	L2	L3	n	S	
337	20	37	10	3	HCS-GWPU-01
442	26	44	10	3	HCS-GWPU-02
521	33	52	10	3	HCS-GWPU-03
300	40	60	5	3	HCS-GWPU-04
376	52	75	5	3	HCS-GWPU-05
450	66	90	5	3	HCS-GWPU-06

Mounting Components

OPTIONS

MATERIAL

Galvanized Carbon Steel (ST 37-2)

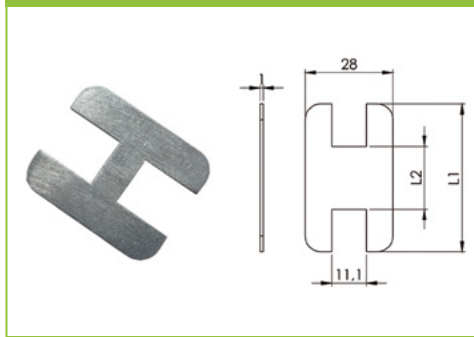
For 316 Stainless Steel, **ADD -SS6**
to the end of the item number.

THREAD

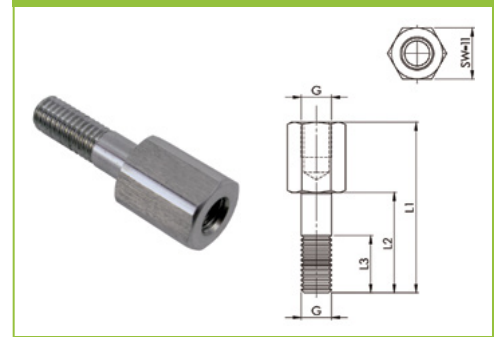
UNC (Groups S1-S8 are ¼-20 UNC)

For metric, **CHANGE "U" to "M"**
(Groups S1-S8 are M6)

Safety Locking Plate



Stacking Bolt



Group	Ø (mm)	NB (in)	Ø (in)
S1	6		
	6.4		1/4
	8		5/16
	9.5		3/8
	10	R 1/8	
S2	12		
	12.7		1/2
	13.5	R 1/4	
	14		
	15		
S3	16		5/8
	17.2	R 3/8	
	18		
	19		3/4
	20		
S4	21.3	R 1/2	
	22		7/8
	23		
	25		
	25.4		1
S5	26.9	R 3/4	
	28		
	30		
S6	32		1-¼
	33.7	R 1	
	35		
	38		1-½
	40		
S7	42	R 1-¼	
	44.5		1-¾
	48.3	R 1-½	
S8	50.8		2
	57.2		2-¼
	60.3	R 2	
	63.5		2-½
	70		2-¾
S8	73		
	76.1	R 2-½	3
S8	88.9	R 3	3-½
	101.6		4

Dimensions (mm)		Item Number
L1	L2	
34	7	HCS-LP-01
40	13	HCS-LP-02
48	20	HCS-LP-03
57	27	HCS-LP-04
69	39	HCS-LP-05
85	52	HCS-LP-06
117	81	HCS-LP-07
144	107	HCS-LP-08

Dimensions (mm)			Item Number
L1	L2	L3 min.	
34	20	12	HCS-SBU-01
39	25	12	HCS-SBU-02
44	30	12	HCS-SBU-03
48	35	12	HCS-SBU-04
64	50	12	HCS-SBU-05
74	60	12	HCS-SBU-06
102	88	12	HCS-SBU-07
124	110	12	HCS-SBU-08

Mounting Components

OPTIONS

MATERIAL

Galvanized Carbon Steel (ST 37-2)

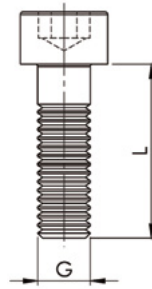
For 316 Stainless Steel, **ADD -SS6**
to the end of the item number.

THREAD

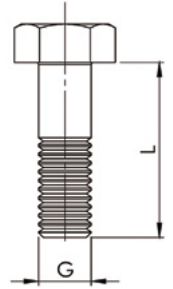
UNC (Groups S1-S8 are ¼-20 UNC)

For metric, **CHANGE "U" to "M"**
(Groups S1-S8 are M6)

Socket Cap Screw



Hex Head Bolt



Group	Ø (mm)	NB (in)	Ø (in)
S1	6		
	6.4		1/4
	8		5/16
	9.5		3/8
	10	R 1/8	
S2	12		
	12.7		1/2
	13.5	R 1/4	
	14		
	15		
S3	16		5/8
	17.2	R 3/8	
	18		
	19		3/4
	20		
S4	21.3	R 1/2	
	22		7/8
	23		
	25		
	25.4		1
S5	26.9	R 3/4	
	28		
	30		
S6	32		1-¼
	33.7	R 1	
	35		
	38		1-½
	40		
S7	42	R 1-¼	
	44.5		1-¾
	48.3	R 1-½	
S8	50.8		2
	57.2		2-¼
	60.3	R 2	
	63.5		2-½
	70		2-¾
S9	73		
	76.1	R 2-½	3
	88.9	R 3	3-½
S10	101.6		4

G x L	Item Number
¼-20 UNC x ¾ M6 x 20	HCS-SCU-01 HCS-SCM-01
¼-20 UNC x 1 M6 x 25	HCS-SCU-02 HCS-SCM-02
¼-20 UNC x 1-⅛ M6 x 30	HCS-SCU-03 HCS-SCM-03
¼-20 UNC x 1-¾ M6 x 35	HCS-SCU-04 HCS-SCM-04
¼-20 UNC x 2 M6 x 50	HCS-SCU-05 HCS-SCM-05
¼-20 UNC x 2-½ M6 x 60	HCS-SCU-06 HCS-SCM-06
¼-20 UNC x 3-⅜ M6 x 90	HCS-SCU-07 HCS-SCM-07
¼-20 UNC x 4-⅜ M6 x 110	HCS-SCU-08 HCS-SCM-08

G x L	Item Number
¼-20 UNC x 1-¼ M6 x 30	HCS-HBU-01 HCS-HBM-01
¼-20 UNC x 1-⅜ M6 x 35	HCS-HBU-02 HCS-HBM-02
¼-20 UNC x 1-½ M6 x 40	HCS-HBU-03 HCS-HBM-03
¼-20 UNC x 1-¾ M6 x 45	HCS-HBU-04 HCS-HBM-04
¼-20 UNC x 2-⅜ M6 x 60	HCS-HBU-05 HCS-HBM-05
¼-20 UNC x 2-¾ M6 x 70	HCS-HBU-06 HCS-HBM-06
¼-20 UNC x 4 M6 x 100	HCS-HBU-07 HCS-HBM-05
¼-20 UNC x 4-⅞ M6 x 125	HCS-HBU-08 HCS-HBM-08

Mounting Components

OPTIONS	
MATERIAL	Galvanized Carbon Steel (ST 37-2) For 316 Stainless Steel, ADD -SS6 to the end of the item number.
THREAD	UNC (Groups S1-S8 are ¼-20 UNC) For metric, CHANGE "U" to "M" (Groups S1-S8 are M6)

Mounting Rail

NOTE: Available in Uncoated Carbon Steel and 316 Stainless Steel only.

Rail Nut

Group	Ø (mm)	NB (in)	Ø (in)
S1	6		
	6.4		1/4
	8		5/16
	9.5		3/8
	10	R 1/8	
S2	12		
	12.7		1/2
	13.5	R 1/4	
	14		
	15		
S3	16		5/8
	17.2	R 3/8	
	18		
	19		3/4
	20		
S4	21.3	R 1/2	
	22		7/8
	23		
	25		
	25.4		1
S5	26.9	R 3/4	
	28		
	30		
S6	32		1-¼
	33.7	R 1	
	35		
	38		1-½
	40		
S7	42	R 1-¼	
	44.5		1-¾
	48.3	R 1-½	
S8	50.8		2
	57.2		2-¼
	60.3	R 2	
	63.5		2-½
	70		2-¾
S9	73		
	76.1	R 2-½	3
	88.9	R 3	3-½
	101.6		4

Dimensions		Item Number
H	Length	
11mm	2m	HCS-R-11-2MT
14mm		HCS-R-14-2MT

Dimensions (mm)				Item Number
L	B	H1	H2	
25.4	10.4	13	5	HCS-RNU-01-08

Complete Clamp Kits

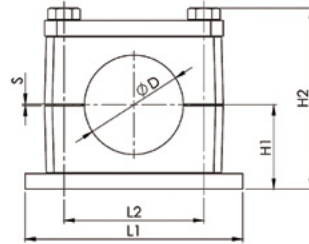
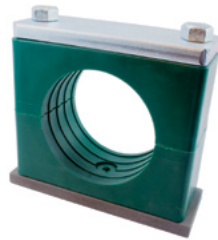
Groups 1 - 4

KIT CONTENTS

- (1) Polypropylene Clamp Body
- (1) Galvanized Steel Cover Plate
- (1) Phosphated Steel Weld Plate
- (2) Galvanized Steel Hex Head Bolts

Heavy Series Clamp Kits are also available with 316 Stainless Steel hardware.

Heavy Series Clamp Kit



Group	Ø (mm)	NB (in)	Ø (in)
H1	6		
	6.4		1/4
	8		5/16
	9.5		3/8
	10	R 1/8	
	12		
	12.7		1/2
	13.5	R 1/4	
	14		
	15		
	16		5/8
	17.2	R 3/8	
18			
H2	19		3/4
	20		
	21.3	R 1/2	
	22		7/8
	25		
	25.4		1
	26.9	R 3/4	
	28		
30			
H3	32		1-¼
	33.7	R 1	
	35		
	38		1-½
	40		
42	R 1-¼		
H4	44.5		1-¾
	48.3	R 1-½	
	50.8		2

Dimensions (mm)						Item Number
L1	L2	H1	H2	S min.	Width	
74	33	24	55	0.6	30	HCH-006.0-STU*
						HCH-006.4-STU
						HCH-008.0-STU
						HCH-009.5-STU
						HCH-010.0-STU
						HCH-012.0-STU
						HCH-012.7-STU
						HCH-013.5-STU
						HCH-014.0-STU
						HCH-015.0-STU
						HCH-016.0-STU
						HCH-017.2-STU
						HCH-018.0-STU
86	45	32	71	0.6	30	HCH-019.0-STU
						HCH-020.0-STU
						HCH-021.3-STU
						HCH-022.0-STU
						HCH-025.0-STU
						HCH-025.4-STU
						HCH-026.9-STU
						HCH-028.0-STU
						HCH-030.0-STU
100	60	38	83	0.6	30	HCH-032.0-STU
						HCH-033.7-STU
						HCH-035.0-STU
						HCH-038.0-STU
						HCH-040.0-STU
						HCH-042.0-STU
140	90	54.5	117	2	45	HCH-044.5-STU
						HCH-048.3-STU
						HCH-050.8-STU

KIT OPTIONS

HARDWARE MATERIAL

Carbon Steel (ST 37-2) is standard

For 316 Stainless Steel, **CHANGE -ST to -SS** on the item number.

***ORDERING EXAMPLE:**
HCH-006.0-SSU

THREAD

UNC is standard

For metric, **CHANGE "U" to "M"** on the item number.

***ORDERING EXAMPLE:**
HCH-006.0-STM

Complete Clamp Kits

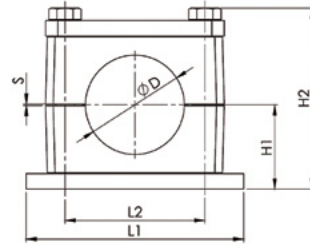
Groups 4 - 10

KIT CONTENTS

- (1) Polypropylene Clamp Body
- (1) Galvanized Steel Cover Plate
- (1) Phosphated Steel Weld Plate
- (2) Galvanized Steel Hex Head Bolts

Heavy Series Clamp Kits are also available with 316 Stainless Steel hardware.

Heavy Series Clamp Kit



Group	Ø (mm)	NB (in)	Ø (in)
H4	55		
	57		2-¼
	60.3	R 2	
	63.5		2-½
	65		
	70		2-¾
H5	73		2-⅞
	76.1	R 2-½	3
	80		
	82.5		3-¼
	88.9	R 3	3-½
H6	100		
	101.6	R 3-½	
	108		4-¼
	114.3	R 4	
	127		5
	133		5-¼
H7	139.7	R 5	
	152.4		6
	159		6-¼
	165		6-½
	168.3	R 6	
H8	177.8		7
	193.7		7-⅝
	216		8-½
	219.1	R 8	
H9	244.5		
	273	R 10	
	323.9	R 12	
H10	355	R 14	
	406.4	R 16	

Dimensions (mm)						Item Number
L1	L2	H1	H2	S min.	Width	
140	90	54.5	117	2	45	HCH-055.0-STU*
						HCH-057.0-STU
						HCH-060.3-STU
						HCH-063.5-STU
						HCH-065.0-STU
						HCH-070.0-STU
180	122	70	150	2	60	HCH-073.0-STU
						HCH-076.1-STU
						HCH-080.0-STU
						HCH-082.5-STU
						HCH-088.9-STU
226	168	99	211	2	80	HCH-100.0-STU
						HCH-101.6-STU
						HCH-108.0-STU
						HCH-114.3-STU
						HCH-127.0-STU
						HCH-133.0-STU
270	205	115	245	3	90	HCH-139.7-STU
						HCH-152.4-STU
						HCH-159.0-STU
						HCH-165.0-STU
						HCH-168.3-STU
340	265	160	339	3	120	HCH-177.8-STU
						HCH-193.7-STU
						HCH-216.0-STU
						HCH-219.1-STU
520	395	235	489	8	160	HCH-244.5-STU
						HCH-273.0-STU
						HCH-323.9-STU
680	534	295	609	18	180	HCH-355.6-STU
						HCH-406.4-STU

KIT OPTIONS

HARDWARE MATERIAL

Carbon Steel (ST 37-2) is standard

For 316 Stainless Steel, **CHANGE -ST to -SS** on the item number.

***ORDERING EXAMPLE:**
HCH-055.0-SSU

THREAD

UNC is standard

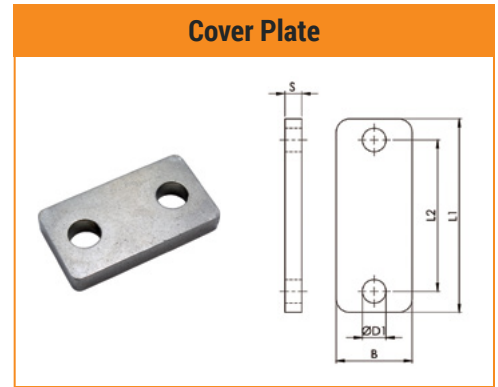
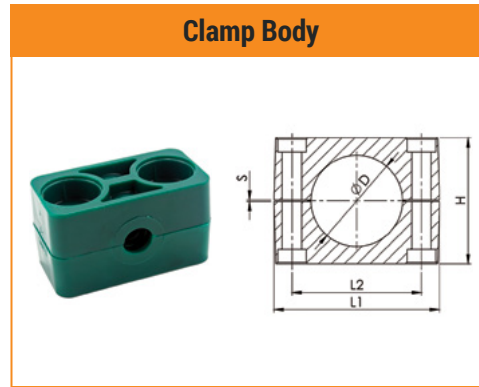
For metric, **CHANGE "U" to "M"** on the item number.

***ORDERING EXAMPLE:**
HCH-055.0-STM

Clamp Bodies & Cover Plates

Groups 1 - 4

MATERIALS	
CLAMP BODY	Polypropylene
COVER PLATE	Galvanized Carbon Steel (ST 37-2)
For 316 Stainless Steel, ADD -SS6 to the end of the item number.	



Group	Ø (mm)	NB (in)	Ø (in)
H1	6		
	6.4		1/4
	8		5/16
	9.5		3/8
	10	R 1/8	
	12		
	12.7		1/2
	13.5	R 1/4	
	14		
	15		
	16		5/8
	17.2	R 3/8	
18			
H2	19		3/4
	20		
	21.3	R 1/2	
	22		7/8
	25		
	25.4		1
	26.9	R 3/4	
	28		
30			
H3	32		1-¼
	33.7	R 1	
	35		
	38		1-½
	40		
42	R 1-¼		
H4	44.5		1-¾
	48.3	R 1-½	
	50.8		2

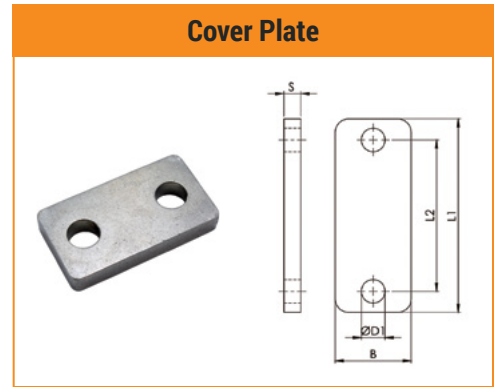
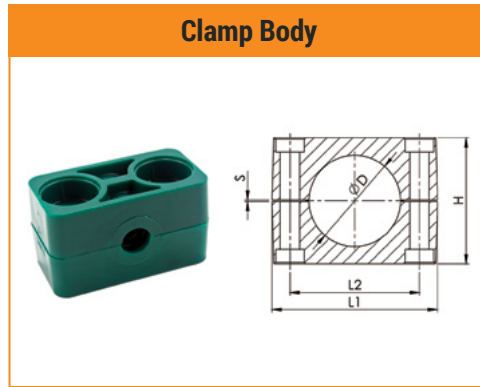
Dimensions (mm)					Item Number
L1	L2	H	S min	W	
55	33	32	0.6	30	HCH-PP-006.0
					HCH-PP-006.4
					HCH-PP-008.0
					HCH-PP-009.5
					HCH-PP-010.0
					HCH-PP-012.0
					HCH-PP-012.7
					HCH-PP-013.5
					HCH-PP-014.0
					HCH-PP-015.0
					HCH-PP-016.0
					HCH-PP-017.2
HCH-PP-018.0					
70	45	48	0.6	30	HCH-PP-019.0
					HCH-PP-020.0
					HCH-PP-021.3
					HCH-PP-022.0
					HCH-PP-025.0
					HCH-PP-025.4
					HCH-PP-026.9
					HCH-PP-028.0
HCH-PP-030.0					
85	60	50	0.6	30	HCH-PP-032.0
					HCH-PP-033.7
					HCH-PP-035.0
					HCH-PP-038.0
					HCH-PP-040.0
HCH-PP-042.0					
115	90	89	2	45	HCH-PP-044.5
					HCH-PP-048.3
					HCH-PP-050.8

Dimensions (mm)					Item Number	
L1	L2	B	S	ØD1		
55	33	30	8	11	HCH-CP-01	
70	45	30	8	11	HCH-CP-02	
85	60	30	8	11	HCH-CP-03	
115	90	45	10	14	HCH-CP-04	

Clamp Bodies & Cover Plates

Groups 4 - 10

MATERIALS	
CLAMP BODY	Polypropylene
COVER PLATE	Galvanized Carbon Steel (ST 37-2)
For 316 Stainless Steel, ADD -SS6 to the end of the item number.	



Group	Ø (mm)	NB (in)	Ø (in)
H4	55		
	57		2-¼
	60.3	R 2	
	63.5		2-½
	65		
	70		2-¾
H5	73		2-⅞
	76.1	R 2-½	3
	80		
	82.5		3-¼
	88.9	R 3	3-½
H6	100		
	101.6	R 3-½	
	108		4-¼
	114.3	R 4	
	127		5
	133		5-¼
H7	139.7	R 5	
	152.4		6
	159		6-¼
	165		6-½
	168.3	R 6	
H8	177.8		7
	193.7		7-⅝
	216		8-½
	219.1	R 8	
H9	244.5		
	273	R 10	
	323.9	R 12	
H10	355	R 14	
	406.4	R 16	

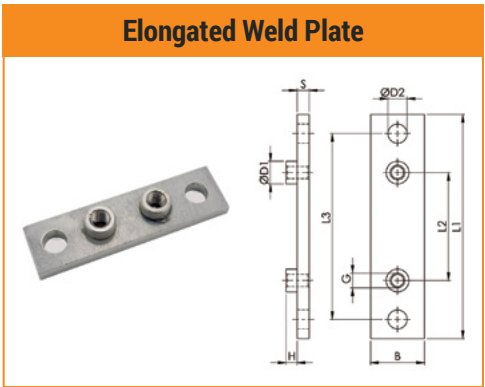
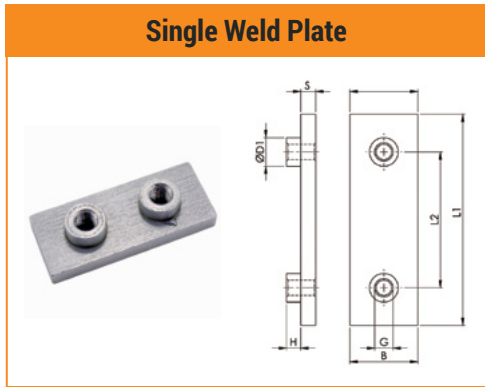
Dimensions (mm)					Item Number
L1	L2	H	S min	W	
115	90	89	2	45	HCH-PP-055.0
					HCH-PP-057.0
					HCH-PP-060.3
					HCH-PP-063.5
					HCH-PP-065.0
					HCH-PP-070.0
154	122	120	2	60	HCH-PP-073.0
					HCH-PP-076.1
					HCH-PP-080.0
					HCH-PP-082.5
					HCH-PP-088.9
206	168	168	2	80	HCH-PP-100.0
					HCH-PP-101.6
					HCH-PP-108.0
					HCH-PP-114.3
					HCH-PP-127.0
					HCH-PP-133.0
251	205	200	3	91	HCH-PP-139.7
					HCH-PP-152.4
					HCH-PP-159.0
					HCH-PP-165.0
					HCH-PP-168.3
335	265	270	3	120	HCH-PP-177.8
					HCH-PP-193.7
					HCH-PP-216.0
					HCH-PP-219.1
470	395	410	8	162	HCH-PP-244.5
					HCH-PP-273.0
					HCH-PP-323.9
630	534	530	18	182	HCH-PP-355.6
					HCH-PP-406.4

Dimensions (mm)					Item Number	
L1	L2	B	S	ØD1		
115	90	45	10	14	HCH-CP-04	
152	122	60	10	19	HCH-CP-05	
206	168	80	15	22	HCH-CP-06	
251	205	90	15	26	HCH-CP-07	
340	265	120	25	35	HCH-CP-08	
470	395	160	30	35	HCH-CP-09	
630	534	180	30	35	HCH-CP-10	

Weld Plates

Groups 1 - 4

OPTIONS	
MATERIAL	Phosphated Carbon Steel (ST 37-2)
	For 316 Stainless Steel, ADD -SS6 to the end of the item number.
THREAD	UNC
	For metric, CHANGE "U" to "M"



Group	Ø (mm)	NB (in)	Ø (in)	G (Thread)
H1	6			
	6.4		1/4	
	8		5/16	
	9.5		3/8	
	10	R 1/8		
	12			
	12.7		1/2	3/8-16
	13.5	R 1/4		M10
	14			
	15			
16		5/8		
17.2	R 3/8			
18				
H2	19		3/4	
	20			
	21.3	R 1/2		
	22		7/8	
	25			3/8-16
	25.4		1	M10
	26.9	R 3/4		
	28			
30				
H3	32		1-1/4	
	33.7	R 1		
	35			3/8-16
	38		1-1/2	M10
	42	R 1-1/4		
H4	44.5		1-3/4	
	48.3	R 1-1/2		7/16-14
	50.8		2	M12

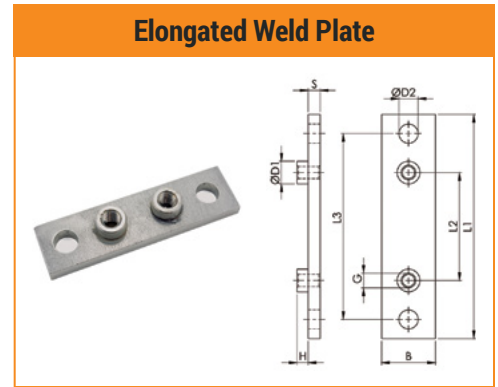
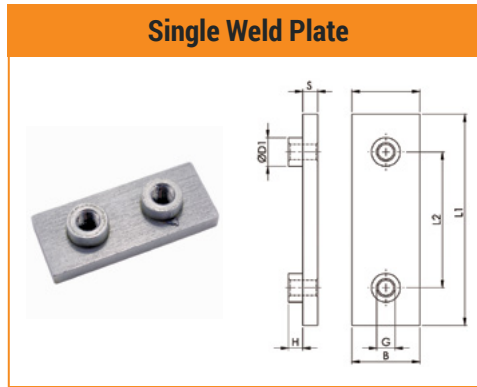
Dimensions (mm)					Item Number
L1	L2	S	B		
74	33	8	30	HCH-WPU-01 HCH-WPM-01	
86	45	8	30	HCH-WPU-02 HCH-WPM-02	
100	60	8	30	HCH-WPU-03 HCH-WPM-03	
140	90	10	45	HCH-WPU-04 HCH-WPM-04	

Dimensions (mm)					Item Number
L1	L2	L3	S	B	
113	33	85	8	30	HCH-EWPU-01 HCH-EWPM-01
125	45	97	8	30	HCH-EWPU-02 HCH-EWPM-02
140	60	112	8	30	HCH-EWPU-03 HCH-EWPM-03
187	90	155	10	45	HCH-EWPU-04 HCH-EWPM-04

Weld Plates

Groups 4 - 10

OPTIONS	
MATERIAL	Phosphated Carbon Steel (ST 37-2)
	For 316 Stainless Steel, ADD -SS6 to the end of the item number.
THREAD	UNC
	For metric, CHANGE "U" to "M"



Group	Ø (mm)	NB (in)	Ø (in)	G (Thread)
H4	55			
	57		2-¼	
	60.3	R 2		7/16-14
	63.5		2-½	
	65			M12
	70		2-¾	
H5	73		2-7/8	
	76.1	R 2-½	3	
	80			5/8-11
	82.5		3-¼	
	88.9	R 3	3-½	M16
H6	100			
	101.6	R 3-½		
	108		4-¼	
	114.3	R 4		¾-10
	127		5	M20
	133		5-¼	
H7	139.7	R 5		
	152.4		6	
	159		6-¼	
	165		6-½	
	168.3	R 6		M24
H8	177.8		7	
	193.7		7-5/8	
	216		8-½	
	219.1	R 8		M30
H9	244.5			
	273	R 10		1-1/8-7 M30
	323.9	R 12		
H10	355	R 14		
	406.4	R 16		1-1/8-7 M30

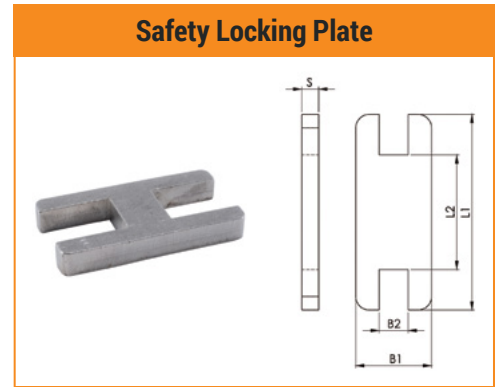
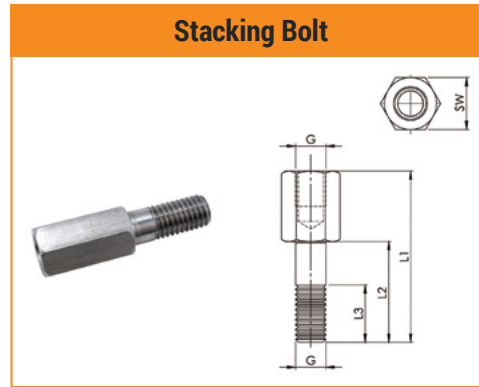
Dimensions (mm)					Item Number
L1	L2	S	B		
140	90	10	45		HCH-WPU-04 HCH-WPM-04
180	122	10	60		HCH-WPU-05 HCH-WPM-05
226	168	15	80		HCH-WPU-06 HCH-WPM-06
270	205	15	90		HCH-WPU-07 HCH-WPM-07
340	265	25	120		HCH-WPU-08 HCH-WPM-08
520	395	30	160		HCH-WPU-09 HCH-WPM-09
680	534	30	180		HCH-WPU-10 HCH-WPM-10

Dimensions (mm)					Item Number
L1	L2	L3	S	B	
187	90	155	10	45	HCH-EWPU-04 HCH-EWPM-04
238	122	198	10	60	HCH-EWPU-05 HCH-EWPM-05
309	168	259	15	80	HCH-EWPU-06 HCH-EWPM-06
370	205	310	15	90	HCH-EWPU-07 HCH-EWPM-07
440	265	380	25	120	HCH-EWPU-08 HCH-EWPM-08
590	395	530	30	160	HCH-EWPU-09 HCH-EWPM-09
750	534	690	30	180	HCH-EWPU-10 HCH-EWPM-10

Mounting Components

Groups 1 - 4

OPTIONS	
MATERIAL	Galvanized Carbon Steel (ST 37-2)
	For 316 Stainless Steel, ADD -SS6 to the end of the item number.
THREAD	UNC
	For metric, CHANGE "U" to "M"



Group	Ø (mm)	NB (in)	Ø (in)
H1	6		
	6.4		1/4
	8		5/16
	9.5		3/8
	10	R 1/8	
	12		
	12.7		1/2
	13.5	R 1/4	
	14		
	15		
H2	16		5/8
	17.2	R 3/8	
	18		
	19		3/4
	20		
	21.3	R 1/2	
	22		7/8
	25		
	25.4		1
	26.9	R 3/4	
H3	28		
	30		
	32		1-1/4
	33.7	R 1	
	35		
H4	38		1-1/2
	40		
	42	R 1-1/4	
	44.5		1-3/4
	48.3	R 1-1/2	
	50.8		2

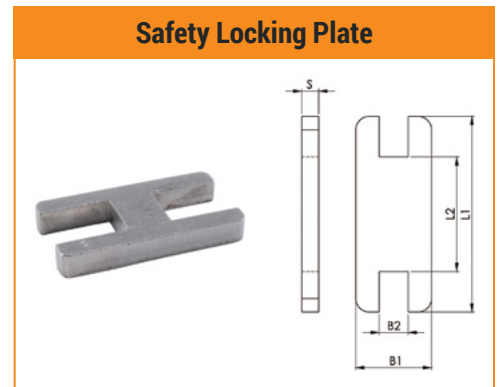
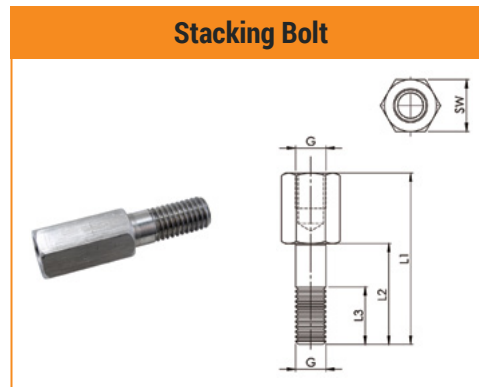
Dimensions (mm)					Item Number
L1	L2	L3 min	G	SW	
49	24	15	3/8-16 M10	15	HCH-SBU-01 HCH-SBM-01
65	40	15	3/8-16 M10	15	HCH-SBU-02 HCH-SBM-02
74	50	15	3/8-16 M10	15	HCH-SBU-03 HCH-SBM-03
108	81	18	7/16-14 M12	17	HCH-SBU-04 HCH-SBM-04

Dimensions (mm)					Item Number
L1	L2	B1	B2	S	
56	13.5	30	15	8	HCH-LP-01
70	25	30	15	8	HCH-LP-02
85	40	30	15	8	HCH-LP-03
116	68	45	17	10	HCH-LP-04

Mounting Components

Groups 4 - 8

OPTIONS	
MATERIAL	Galvanized Carbon Steel (ST 37-2)
	For 316 Stainless Steel, ADD -SS6 to the end of the item number.
THREAD	UNC
	For metric, CHANGE "U" to "M"



Group	Ø (mm)	NB (in)	Ø (in)
H4	55		
	57		2-¼
	60.3	R 2	
	63.5		2-½
	65		
H5	70		2-¾
	73		2-7/8
	76.1	R 2-½	3
	80		
	82.5		3-¼
H6	88.9	R 3	3-½
	100		
	101.6	R 3-½	
	108		4-¼
	114.3	R 4	
H7	127		5
	133		5-¼
	139.7	R 5	
	152.4		6
	159		6-¼
H8	165		6-½
	168.3	R 6	
	177.8		7
	193.7		7-5/8
	216		8-½
	219.1	R 8	

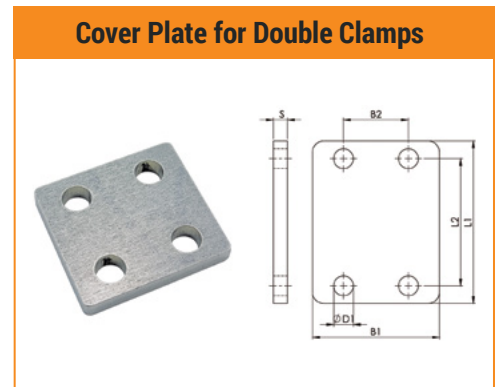
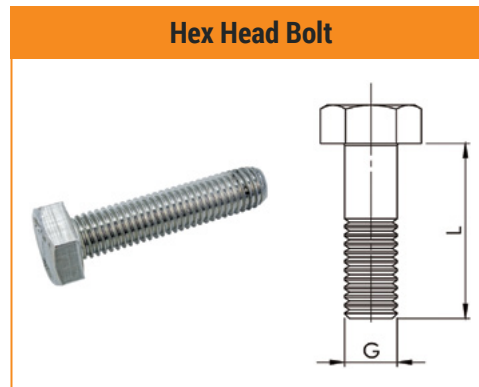
Dimensions (mm)					Item Number
L1	L2	L3 min	G	SW	
108	81	18	7/16-14	17	HCH-SBU-04
			M12		HCH-SBM-04
144	110	24	5/8-11	21	HCH-SBU-05
			M16		HCH-SBM-05
200	151	30	¾-10	27	HCH-SBU-06
			M20		HCH-SBM-06
240	180	50	7/8-9	30	HCH-SBU-07
			M24		HCH-SBM-07
331	256	62	1-1/8-7	46	HCH-SBU-08
			M30		HCH-SBM-08

Dimensions (mm)					Item Number
L1	L2	B1	B2	S	
116	68	45	17	10	HCH-LP-04
153	97	60	21	10	HCH-LP-05
206	130	80	27	15	HCH-LP-06
251	166	90	30	15	HCH-LP-07
325	205	120	49	25	HCH-LP-08

Mounting Components

Groups 1 - 4

OPTIONS	
MATERIAL	Galvanized Carbon Steel (ST 37-2)
	For 316 Stainless Steel, ADD -SS6 to the end of the item number.
THREAD	UNC
	For metric, CHANGE "U" to "M"



Group	Ø (mm)	NB (in)	Ø (in)
H1	6		
	6.4		1/4
	8		5/16
	9.5		3/8
	10	R 1/8	
	12		
	12.7		1/2
	13.5	R 1/4	
	14		
	15		
16		5/8	
17.2	R 3/8		
18			
H2	19		3/4
	20		
	21.3	R 1/2	
	22		7/8
	25		
	25.4		1
	26.9	R 3/4	
	28		
30			
H3	32		1-1/4
	33.7	R 1	
	35		
	38		1-1/2
	40		
42	R 1-1/4		
H4	44.5		1-3/4
	48.3	R 1-1/2	
	50.8		2

G x L	Item Number
3/8-16 UNC x 1-3/4 M10 x 45	HCH-HBU-01
	HCH-HBM-01
3/8-16 UNC x 2-1/4 M10 x 60	HCH-HBU-02
	HCH-HBM-02
3/8-16 UNC x 2-3/4 M10 x 70	HCH-HBU-03
	HCH-HBM-03
7/16-14 UNC x 4 M12 x 100	HCH-HBU-04
	HCH-HBM-04

Dimensions (mm)				Item Number
L1	L2	B1	S	
55	33	60	8	HCH-DCP-01
70	45	60	8	HCH-DCP-02
85	60	60	8	HCH-DCP-03
115	90	90	10	HCH-DCP-04

Mounting Components

Groups 4 - 10

OPTIONS

MATERIAL

Galvanized Carbon Steel (ST 37-2)

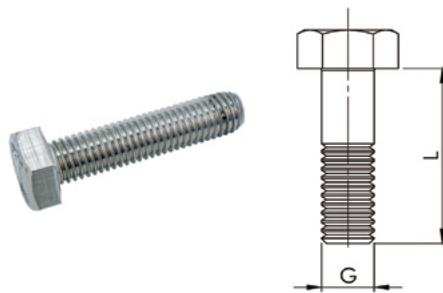
For 316 Stainless Steel, **ADD -SS6**
to the end of the item number.

THREAD

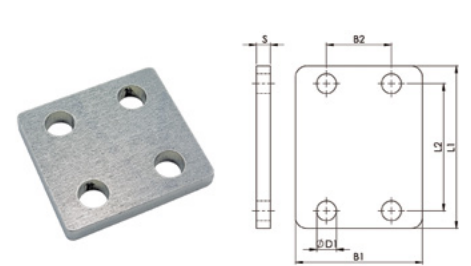
UNC

For metric, **CHANGE "U" to "M"**

Hex Head Bolt



Cover Plate for Double Clamps



Group	Ø (mm)	NB (in)	Ø (in)
H4	55		
	57		2-¼
	60.3	R 2	
	63.5		2-½
	65		
H5	70		2-¾
	73		2-⅞
	76.1	R 2-½	3
	80		
	82.5		3-¼
H6	88.9	R 3	3-½
	100		
	101.6	R 3-½	
	108		4-¼
	114.3	R 4	
H7	127		5
	133		5-¼
	139.7	R 5	
	152.4		6
	159		6-¼
H8	165		6-½
	168.3	R 6	
	177.8		7
	193.7		7-⅝
H9	216		8-½
	219.1	R 8	
	244.5		
H9	273	R 10	
	323.9	R 12	
H10	355	R 14	
	406.4	R 16	

G x L	Item Number
7/16-14 UNC x 4	HCH-HBU-04
M12 x 100	HCH-HBM-04
5/8-11 UNC x 5-¼	HCH-HBU-05
M16 x 130	HCH-HBM-05
¾-10 UNC x 7-½	HCH-HBU-06
M20 x 190	HCH-HBM-06
7/8-9 UNC x 8-¾	HCH-HBU-07
M24 x 220	HCH-HBM-07
1-1/8-7 UNC x 12	HCH-HBU-08
M30 x 300	HCH-HBM-08
1-1/8-7 UNC x 17-½	HCH-HBU-09
M30 x 300	HCH-HBM-09
1-1/8-7 UNC x 22	HCH-HBU-10
M30 x 560	HCH-HBM-10

Dimensions (mm)				Item Number
L1	L2	B1	S	
115	90	90	10	HCH-DCP-04
152	122	120	10	HCH-DCP-05
206	168	160	15	HCH-DCP-06
251	205	182	15	HCH-DCP-07
320	265	240	25	HCH-DCP-08
470	395	324	30	HCH-DCP-09
630	534	364	30	HCH-DCP-10

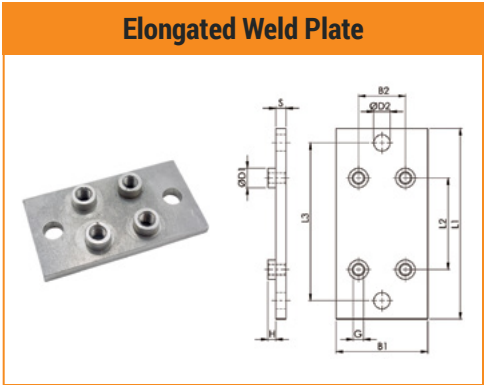
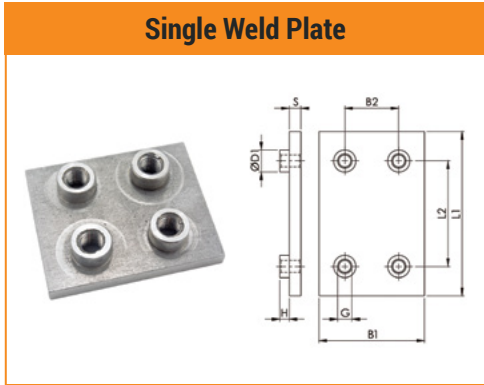
Weld Plates for Double Clamps

Groups 1 - 4

OPTIONS

MATERIAL
Phosphated Carbon Steel (ST 37-2)
For 316 Stainless Steel, **ADD -SS6**
to the end of the item number.

THREAD
UNC
For metric, **CHANGE "U" to "M"**



Group	Ø (mm)	NB (in)	Ø (in)	G (Thread)
H1	6			3/8-16 M10
	6.4		1/4	
	8		5/16	
	9.5		3/8	
	10	R 1/8		
	12			
	12.7		1/2	
	13.5	R 1/4		
	14			
	15			
H2	16		5/8	
	17.2	R 3/8		
	18			
	19		3/4	
	20			
	21.3	R 1/2		
	22		7/8	
	25			
	25.4		1	
	26.9	R 3/4		
H3	28			
	30			
	32		1-1/4	
	33.7	R 1		
	35			
	38		1-1/2	
H4	40			
	42	R 1-1/4		
	44.5		1-3/4	
	48.3	R 1-1/2		
	50.8		2	

Dimensions (mm)					Item Number
L1	L2	B1	S		
74	33	60	8	HCH-DWPU-01 HCH-DWPM-01	
86	45	60	8	HCH-DWPU-02 HCH-DWPM-02	
100	60	60	8	HCH-DWPU-03 HCH-DWPM-03	
140	90	90	10	HCH-DWPU-04 HCH-DWPM-04	

Dimensions (mm)					Item Number
L1	L2	L3	B1	S	
113	33	85	60	8	HCH-EDWPU-01 HCH-EDWPM-01
125	45	97	60	8	HCH-EDWPU-02 HCH-EDWPM-02
140	60	112	60	8	HCH-EDWPU-03 HCH-EDWPM-03
187	90	155	90	10	HCH-EDWPU-04 HCH-EDWPM-04

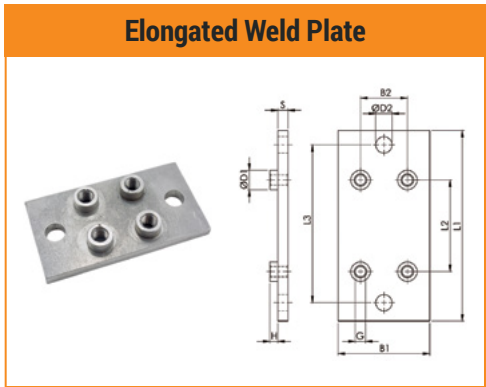
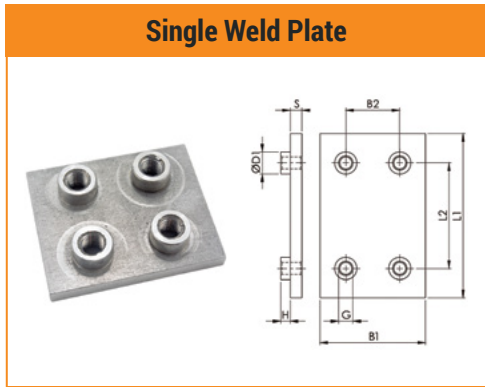
Weld Plates for Double Clamps

Groups 4 - 10

OPTIONS

MATERIAL
Phosphated Carbon Steel (ST 37-2)
For 316 Stainless Steel, **ADD -SS6** to the end of the item number.

THREAD
UNC
For metric, **CHANGE "U" to "M"**



Group	Ø (mm)	NB (in)	Ø (in)	G (Thread)
H4	55			
	57		2-¼	
	60.3	R 2		7/16-14
	63.5		2-½	
	65			M12
H5	70		2-¾	
	73		2-7/8	
	76.1	R 2-½	3	5/8-11
	80			
	82.5		3-¼	M16
H6	88.9	R 3	3-½	
	100			
	101.6	R 3-½		¾-10
	108		4-¼	
	114.3	R 4		
H7	127		5	M20
	133		5-¼	
	139.7	R 5		
	152.4		6	7/8-9
	159		6-¼	
H8	165		6-½	M24
	168.3	R 6		
	177.8		7	
	193.7		7-5/8	1-1/8-7
	216		8-½	
H9	219.1	R 8		M30
	244.5			
	273	R 10		1-1/8-7 M30
H10	323.9	R 12		
	355	R 14		1-1/8-7 M30
	406.4	R 16		

Dimensions (mm)					Item Number
L1	L2	B1	S		
140	90	90	10	HCH-DWPU-04 HCH-DWPM-04	
180	122	120	10	HCH-DWPU-05 HCH-DWPM-05	
226	168	160	15	HCH-DWPU-06 HCH-DWPM-06	
270	205	182	15	HCH-DWPU-07 HCH-DWPM-07	
340	265	240	25	HCH-DWPU-08 HCH-DWPM-08	
520	395	324	30	HCH-DWPU-09 HCH-DWPM-09	
680	534	364	30	HCH-DWPU-10 HCH-DWPM-10	

Dimensions (mm)					Item Number
L1	L2	L3	B1	S	
187	90	155	90	10	HCH-EDWPU-04 HCH-EDWPM-04
238	122	198	120	10	HCH-EDWPU-05 HCH-EDWPM-05
309	168	259	160	15	HCH-EDWPU-06 HCH-EDWPM-06
370	205	310	182	15	HCH-EDWPU-07 HCH-EDWPM-07
440	265	380	240	25	HCH-EDWPU-08 HCH-EDWPM-08
590	395	530	326	30	HCH-EDWPU-09 HCH-EDWPM-09
750	534	690	364	30	HCH-EDWPU-10 HCH-EDWPM-10

Mounting Components

Groups 1 - 4

OPTIONS

MATERIAL
Galvanized Carbon Steel (ST 37-2)
For 316 Stainless Steel, **ADD -SS6**
to the end of the item number.

THREAD
UNC
For metric, **CHANGE "U" to "M"**

Mounting Rail

NOTE: Available in Uncoated Carbon Steel and 316 Stainless Steel only.

Rail Nut

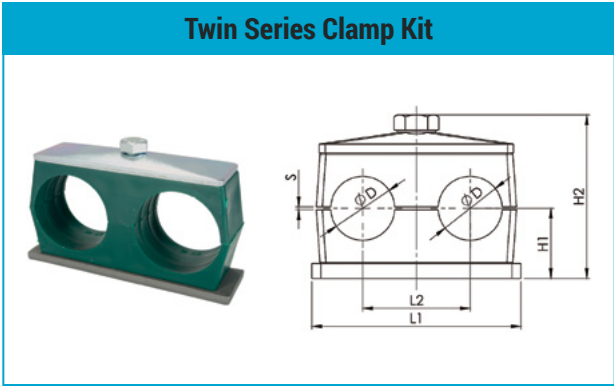
Group	Ø (mm)	NB (in)	Ø (in)
H1	6		
	6.4		1/4
	8		5/16
	9.5		3/8
	10	R 1/8	
	12		
	12.7		1/2
	13.5	R 1/4	
	14		
	15		
16		5/8	
17.2	R 3/8		
18			
H2	19		3/4
	20		
	21.3	R 1/2	
	22		7/8
	25		
	25.4		1
	26.9	R 3/4	
	28		
	30		
	H3	32	
33.7		R 1	
35			
38			1-1/2
40			
42	R 1-1/4		
H4	44.5		1-3/4
	48.3	R 1-1/2	
	50.8		2
	55		
	57		2-1/4
	60.3	R 2	
	63.5		2-1/2
65			
70		2-3/4	

Dimensions		Item Number
H	Length	
22mm	2m	HCH-R-22-2MT

Dimensions (mm)					Item Number
L1	H1	ØD1	ØD2	G	
21	7.5	17.8	24	3/8-16	HCH-RNU-01-03
				M10	HCH-RNM-01-03
23	8.5	19.8	24	7/16-14	HCH-RNU-04
				M12	HCH-RNM-04

Complete Clamp Kits

KIT CONTENTS	
(1) Polypropylene Clamp Body	
(1) Galvanized Steel Cover Plate	
(1) Phosphated Steel Weld Plate	
(2) Galvanized Steel Hex Head Bolts	
Twin Series Clamp Kits are also available with 316 Stainless Steel hardware.	



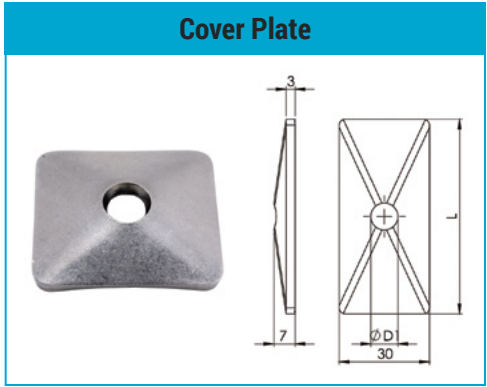
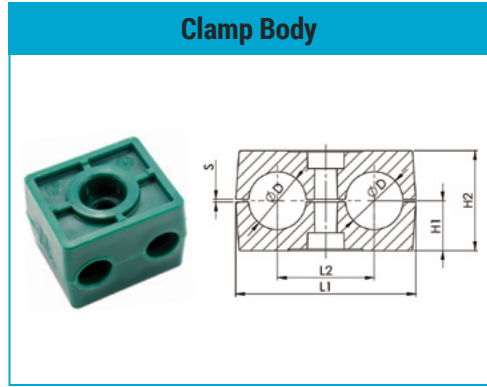
Group	Ø (mm)	NB (in)	Ø (in)
T1	6		
	6.4		1/4
	8		5/16
	9.5		3/8
	10	R 1/8	
	12		
T2	12.7		1/2
	13.5	R 1/4	
	14		
	15		
	16		5/8
	17.2	R 3/8	
	18		
T3	19		3/4
	20		
	21.3	R 1/2	
	22		7/8
	23		
	25		
	25.4		1
T4	26.9	R 3/4	
	28		
	30		
T5	32		1-1/4
	33.7	R 1	
	35		
	38		1-1/2
	40		
	42	R 1-1/4	

Dimensions (mm)					Item Number
L1	L2	H1	H2	S min.	
37	20	16.5	41	0.6	HCT-006.0-STU*
					HCT-006.4-STU
					HCT-008.0-STU
					HCT-009.5-STU
					HCT-010.0-STU
					HCT-012.0-STU
55	29	18.5	44.5	0.7	HCT-012.7-STU
					HCT-013.5-STU
					HCT-014.0-STU
					HCT-015.0-STU
					HCT-016.0-STU
					HCT-017.2-STU
					HCT-018.0-STU
70	36	23.5	54.5	0.7	HCT-019.0-STU
					HCT-020.0-STU
					HCT-021.3-STU
					HCT-022.0-STU
					HCT-023.0-STU
					HCT-025.0-STU
					HCT-025.4-STU
85	45	25.5	58.5	0.7	HCT-026.9-STU
					HCT-028.0-STU
					HCT-030.0-STU
110	56	32	71.5	0.7	HCT-030.0-STU
					HCT-033.7-STU
					HCT-035.0-STU
					HCT-038.0-STU
					HCT-040.0-STU
					HCT-042.0-STU

KIT OPTIONS	
HARDWARE MATERIAL	
Carbon Steel (ST 37-2) is standard	
For 316 Stainless Steel, CHANGE -ST to -SS on the item number.	
*ORDERING EXAMPLE: HCT-006.0-SSU	
THREAD	
UNC is standard	
For metric, CHANGE "U" to "M" on the item number.	
*ORDERING EXAMPLE: HCT-006.0-STM	

Clamp Bodies & Cover Plates

MATERIALS	
CLAMP BODY	Polypropylene
COVER PLATE	Galvanized Carbon Steel (ST 37-2)
For 316 Stainless Steel, ADD -SS6 to the end of the item number.	



Group	Ø (mm)	NB (in)	Ø (in)
T1	6		
	6.4		1/4
	8		5/16
	9.5		3/8
	10	R 1/8	
12			
T2	12.7		1/2
	13.5	R 1/4	
	14		
	15		
	16		5/8
	17.2	R 3/8	
18			
T3	19		3/4
	20		
	21.3	R 1/2	
	22		7/8
	23		
	25		
25.4		1	
T4	26.9	R 3/4	
	28		
	30		
T5	32		1-¼
	33.7	R 1	
	35		
	38		1-½
	40		
42	R 1-¼		

Dimensions (mm)					Item Number
L1	L2	H1	H2	S min	
36	20	13.5	27	0.6	HCT-PP-006.0
					HCT-PP-006.4
					HCT-PP-008.0
					HCT-PP-009.5
					HCT-PP-010.0
					HCT-PP-012.0
					HCT-PP-012.7
					HCT-PP-013.5
					HCT-PP-014.0
53	29	13.5	27	0.7	HCT-PP-015.0
					HCT-PP-016.0
					HCT-PP-017.2
					HCT-PP-018.0
					HCT-PP-019.0
					HCT-PP-020.0
					HCT-PP-021.3
67	36	18.5	37	0.7	HCT-PP-022.0
					HCT-PP-023.0
					HCT-PP-025.0
					HCT-PP-025.4
					HCT-PP-026.9
82	45	20.5	41	0.7	HCT-PP-028.0
					HCT-PP-030.0
					HCT-PP-032.0
					HCT-PP-033.7
					HCT-PP-035.0
106	56	27	54	0.7	HCT-PP-038.0
					HCT-PP-040.0
					HCT-PP-042.0

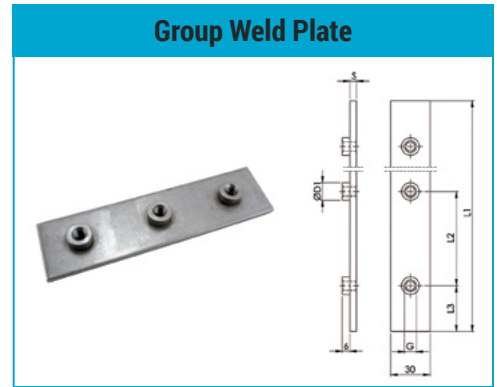
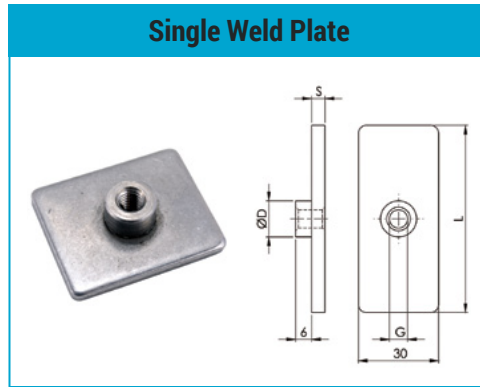
Dimensions (mm)		Item Number
L	ØD1	
34	9	HCT-CP-01
52	9	HCT-CP-02
65	9	HCT-CP-03
79	9	HCT-CP-04
102	9	HCT-CP-05

Weld Plates

OPTIONS

MATERIAL
Phosphated Carbon Steel (ST 37-2)
For 316 Stainless Steel, **ADD -SS6**
to the end of the item number.

THREAD
UNC
For metric, **CHANGE "U" to "M"**



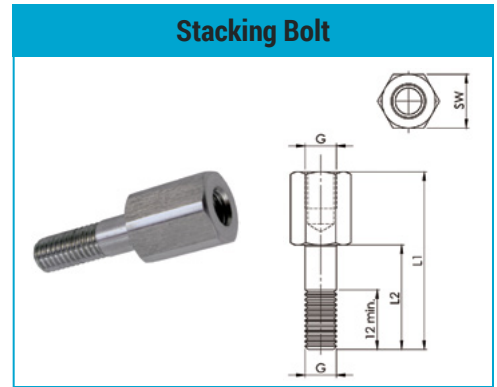
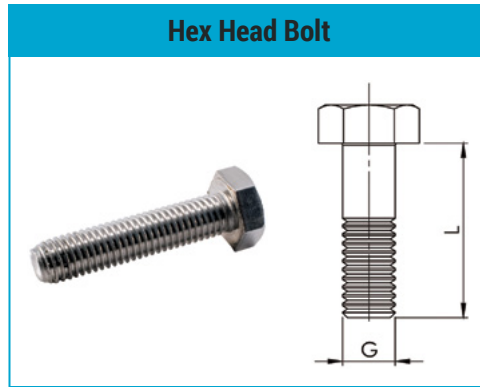
Group	Ø (mm)	NB (in)	Ø (in)
T1	6		
	6.4		1/4
	8		5/16
	9.5		3/8
	10	R 1/8	
12			
T2	12.7		1/2
	13.5	R 1/4	
	14		
	15		
	16		5/8
	17.2	R 3/8	
18			
T3	19		3/4
	20		
	21.3	R 1/2	
	22		7/8
	23		
	25		
25.4		1	
T4	26.9	R 3/4	
	28		
	30		
T5	32		1-1/4
	33.7	R 1	
	35		
	38		1-1/2
	40		
42	R 1-1/4		

Dimensions (mm)				Item Number
L	S	ØD1	G	
37	3	12	1/4-20	HCT-WPU-01
			M6	HCT-WPM-01
55	5	14	5/16-18	HCT-WPU-02
			M8	HCT-WPM-02
70	5	14	5/16-18	HCT-WPU-03
			M8	HCT-WPM-03
85	5	14	5/16-18	HCT-WPU-04
			M8	HCT-WPM-04
110	5	14	5/16-18	HCT-WPU-05
			M8	HCT-WPM-05

Dimensions (mm)					Item Number
L1	L2	L3	S	G	
196	40	18	3	1/4-20	HCT-GWPU-01
				M6	HCT-GWPM-01
288	58	28	5	5/16-18	HCT-GWPU-02
				M8	HCT-GWPM-02
358	72	35	5	5/16-18	HCT-GWPU-03
				M8	HCT-GWPM-03
445	90	42	5	5/16-18	HCT-GWPU-04
				M8	HCT-GWPM-04
558	112	55	5	5/16-18	HCT-GWPU-05
				M8	HCT-GWPM-05

Mounting Components

OPTIONS	
MATERIAL	Galvanized Carbon Steel (ST 37-2)
	For 316 Stainless Steel, ADD -SS6 to the end of the item number.
THREAD	UNC
	For metric, CHANGE "U" to "M"



Group	Ø (mm)	NB (in)	Ø (in)
T1	6		
	6.4		1/4
	8		5/16
	9.5		3/8
	10	R 1/8	
T2	12		
	12.7		1/2
	13.5	R 1/4	
	14		
	15		
	16		5/8
T3	17.2	R 3/8	
	18		
	19		3/4
	20		
	21.3	R 1/2	
	22		7/8
T4	23		
	25		
	25.4		1
T5	26.9	R 3/4	
	28		
	30		
T5	32		1-1/4
	33.7	R 1	
	35		
	38		1-1/2
	40		
	42	R 1-1/4	

G x L	Item Number
1/4-20 UNC x 1-3/8	HCS-HBU-02
M6 x 35	HCS-HBM-02
5/16-18 UNC x 1-3/8	HCT-HBU-02
M8 x 35	HCT-HBM-02
5/16-18 UNC x 1-3/4	HCT-HBU-03
M8 x 45	HCT-HBM-03
5/16-18 UNC x 2	HCT-HBU-04
M8 x 50	HCT-HBM-04
5/16-18 UNC x 2-1/2	HCT-HBU-05
M8 x 60	HCT-HBM-05

Dimensions (mm)				Item Number
L1	L2	SW	G	
34	20	11	1/4-20	HCS-SBU-01
			M6	HCS-SBM-01
34	20	12	5/16-18	HCT-SBU-02
			M8	HCT-SBM-02
44	29	12	5/16-18	HCT-SBU-03
			M8	HCT-SBM-03
49	34	12	5/16-18	HCT-SBU-04
			M8	HCT-SBM-04
61	46	12	5/16-18	HCT-SBU-05
			M8	HCT-SBM-05

Mounting Components

OPTIONS

MATERIAL
Galvanized Carbon Steel (ST 37-2)
For 316 Stainless Steel, **ADD -SS6**
to the end of the item number.

THREAD
UNC
For metric, **CHANGE "U" to "M"**

Safety Locking Plate

Rail Nut

NOTE: For compatible Mounting Rail, please refer to page 10.

Group	Ø (mm)	NB (in)	Ø (in)	G (Thread)
T1	6			¼-20 M6
	6.4		1/4	
	8		5/16	
	9.5		3/8	
	10	R 1/8		
T2	12			5/16-18 M8
	12.7		1/2	
	13.5	R 1/4		
	14			
	15			
	16		5/8	
T3	17.2	R 3/8		5/16-18 M8
	18			
	19		3/4	
	20			
	21.3	R 1/2		
	22		7/8	
T4	23			5/16-18 M8
	25			
	25.4		1	
T5	26.9	R 3/4		5/16-18 M8
	28			
	30			
T5	32		1-¼	5/16-18 M8
	33.7	R 1		
	35			
	38		1-½	
	40			
	42	R 1-¼		

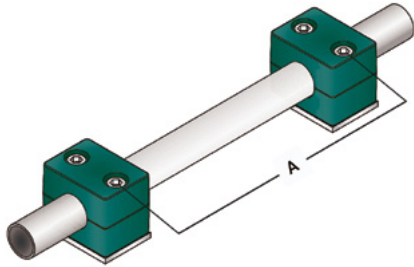
Dimensions (mm)		Item Number
SW		
11.1		HCT-LP-01
12.1		HCT-LP-02-05

Dimensions (mm)					Item Number
L	B	H1	H2	ØD1	
25.4	10.4	13	5	12	HCS-RNU-01-08 HCS-RNM-01-08
25.4	10.4	13	5	14	HCT-RNU-02-05 HCT-RNM-02-05

Mounting Guidelines

SPACING FOR CLAMPS

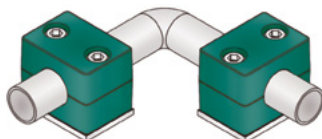
The given distances between the clamps are standard values that are valid for static loading. Choosing shorter distances between the clamps is recommended to have a secure operation. If the clamps are used as pipe fittings support for high pipe lines, then half the given distance must be used.



Pipe Ø (mm)	Distance A (m)
6.0 - 12.7	1.0
12.7 - 22.0	1.2
22.0 - 32	1.5
32 - 38	2.0
38 - 57	2.7
57 - 75	3.0
75 - 76.1	3.5
76.1 - 88.9	3.7
88.9 - 102	4.0
102 - 114	4.5
114 - 168	5.0
168 - 219	6.0
219 - 324	6.7
324 - 356	7.0
356 - 406	7.5
406 - 419	8.2
419 - 508	8.5
508 - 521	9.0
521 - 558	10.0
558 - 800	12.5

PIPE BEND INSTALLATION

Bends in the line should be clamped on both sides, with clamps located as close to the bends as possible.



SUGGESTIONS FOR PIPE INSTALLATIONS

In order to fulfill their purpose, clamps must be affixed strongly in situ for all types of connections. If there are fittings on the pipeline, the first clamp must be placed right after the fitting to prevent any loosening of the thread connection. If there are valves on the pipeline, the pipes must be affixed using clamps right before and after the valves in order to ensure safe operation of the system.

THREAD CHARTS

Standard Series

Group	UNC Thread	Metric Thread
S1		
S2		
S3		
S4	1/4-20 UNC	M6
S5		
S6		
S7		
S8		

Heavy Series

Group	UNC Thread	Metric Thread
H1		
H2	3/8-16 UNC	M10
H3		
H4	7/16-14 UNC	M12
H5	5/8-11 UNC	M16
H6	3/4-10 UNC	M20
H7	7/8-9 UNC	M24
H8		
H9	1-1/8-7 UNC	M30
H10		

Twin Series

Group	UNC Thread	Metric Thread
T1	1/4-20 UNC	M6
T2		
T3		
T4	5/16-18 UNC	M8
T5		

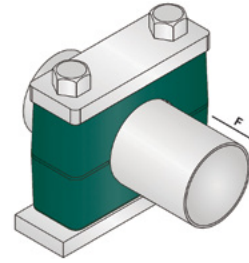
Bolt Tightening Torque

TIGHTENING TORQUES & MAX. LOADS IN PIPE DIRECTION

All values supplied for tightening torques and max. loads in pipe direction refer to clamps with cover plates and hexagon head bolts acc. to DIN 931/933 (DIN EN ISO 4014/4017).

The maximum loads in pipe direction (acc. to DIN 3015/10) are average values, obtained from three tests at 23°C with a steel pipe (acc. to DIN 2448, St 37).

When the values (F) given below are reached, sliding starts.



Standard Series

Group	Hex Head Bolt		Polypropylene		Polyamide		Aluminium	
	UNC Thread	Metric Thread	Tightening Torque (Nm)	Max. Load (F) KN	Tightening Torque (Nm)	Max. Load (F) KN	Tightening Torque (Nm)	Max. Load (F) KN
S1	1/4-20	M6	8	1.1	10	0.7	12	4.2
S2			8	1.3	10	0.8	12	4.3
S3			8	1.4	10	1.6	12	4.9
S4			8	1.5	10	1.7	12	5.0
S5			8	1.9	10	2.0	12	7.3
S6			8	2.0	10	2.5	12	8.9
S7			8	2.3	10	3.2	-	-
S8			8	2.3	10	3.2	-	-

Heavy Series

Group	Hex Head Bolt		Polypropylene		Polyamide		Aluminium	
	UNC Thread	Metric Thread	Tightening Torque (Nm)	Max. Load (F) KN	Tightening Torque (Nm)	Max. Load (F) KN	Tightening Torque (Nm)	Max. Load (F) KN
H1	3/8-16	M10	12	1.6	20	4.2	30	12.1
H2			12	2.9	20	4.5	30	15.1
H3			15	3.3	25	5.1	35	15.5
H4	7/16-14	M12	30	8.2	40	9.3	55	29.4
H5	5/8-11	M16	45	11	55	25.8	120	34.8
H6	3/4-10	M20	80	14	150	21	220	50.0
H7	7/8-9	M24	110	28	200	32	250	70.6
H8	1-1/8-7	M30	180	40	350	48	500	84.5
H9			200	119	370	125	500	181.5
H10			270	168	470	180	600	244.5

Twin Series

Group	Hex Head Bolt		Polypropylene		Polyamide	
	UNC Thread	Metric Thread	Tightening Torque (Nm)	Max. Load (F) KN	Tightening Torque (Nm)	Max. Load (F) KN
T1	1/4-20	M6	5	0.9	5	0.95
T2	5/16-18	M8	12	2.1	12	2.2
T3			12	1.9	12	2.0
T4			12	2.7	12	2.5
T5			8	1.7	8	2.5

Material Properties

CLAMP BODY MATERIAL PROPERTIES				
	P	N	A	T
Clamp Body Materials	Polypropylene (Copolymer) PP	Polyamide PA	Aluminium AL	Thermoplastic Elastomer TPE
Mechanical Properties				
Izod Impact Strength (Notched, 23°C)	> 40 KJ/m ² ISO 180	> 5 KJ/m ² ISO 180	---	---
Izod Impact Strength (Notched, -30°C)	> 6 KJ/m ² ISO 180	> 2 KJ/m ² ISO 180	---	---
Modulus of Elasticity	1200 - 1250 N/mm ² ISO 527-2	2000 N/mm ² ISO 527-2	70.000 N/mm ²	3.6 N/mm ² (Modulus @100) ASTM D 412
Tensile Strength at Yield	> 23 N/mm ² ISO 527-2	> 60 N/mm ² ISO 527-2	> 160 N/mm ² DIN EN 10002	> 3.95 N/mm ² ASTM D 412
Hardness	> 80 ISO 2039-2 (Rockwell-R)	> 70 ISO 868 (Shore D)	> 80 Brinell Hardness	> 85 ASTM D 2240 (Shore A)
Thermal Properties				
Recommended Temp. Range	-30°C + 90°C	-40°C + 120°C	Max. 300°C	-40°C + 120°C
Chemical Properties				
Weak Acids, Solvents	Conditionally Consistent	Conditionally Consistent	Conditionally Consistent	Consistent
Benzine, Mineral Oils	Conditionally Consistent	Consistent	Consistent	Conditionally Consistent
Alcohol, Other Oils, Seawater	Consistent	Consistent	Consistent	Consistent

All Metal Parts

- Are made of carbon steel ST 37-2 (S235JR acc. to EN 10025) as a standard. Stainless steel (AISI 304, AISI 316) are also available upon request.
- Are coated with Fe/Zn 8C Cr3-B galvanized as standard. Untreated, phosphated, zinc-nickel and other alternative surface finishing are available upon request.
- Are UNC threaded as a standard. Metric ISO thread is also available.

All Plastic Parts

- Polypropylene, Polyamide and TPE plastic parts could be V-0 resistant acc. to UL 94 upon request.

About World Wide Metric

World Wide Metric is an ISO-9001 certified global supplier serving the maritime, offshore, industrial and fluid power markets. With over 50,000 quality products stocked in five convenient locations across North America, customers count on us for product availability, speed of service, and technical expertise.

Serving North and South American ports and exporting products around the world, World Wide Metric works closely with engineering and purchasing departments to provide comprehensive technical support that includes engineering data and logistics handling. We provide material test reports for all of our products, as well as class certifications from international agencies including LRS, DNV-GL, ABS, BV and RINA.

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World Wide Metric stocks the largest inventory of metric products in all of our five strategically located facilities in North America. Since 1970, we have proudly served our customers with expert product advice, same-day quotations and on-time deliveries.

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