

HYDAC INTERNATIONAL

Hydraulic Accessories Clamp Mounting Technology





Components, Systems and Service. All from one Company.

Our fluid engineering solutions are defined by the scope and complexity of our customers' requirements.

Our products range from individually designed components in the fields of fluid engineering, hydraulics and electronics right up to complete systems for specific functions.

All components and systems are conceived and designed in-house. Experienced industrial and product specialists develop innovative products and efficient solutions for high-quality, cost-effective production. Throughout the globe, our production facilities share one common goal: quality. We take great pride in both our products and solutions.

Industries and Applications



TABLE OF CONTENTS

Section:

Clamps

Overview - **A1**; Standard Solutions - **A2**; Custom Solutions - **A3**; Quick Reference Guide - **A4**

A

Band Strap Clamps

Swivel Bolt Band Clamps [HR(S)GBLPU] - **B2**; Quick Release Swivel Bolt Clamps [HRGKSM] - **B6**;
Cylinder/Tube Clamps [HRHZ, HRHZZ] - **B8**; Special Perbent Straps - **B9**; Connectors, Bases & Attachements/Fixtures - **B9**

B

DIN 3015 & Series Strip Clamps

Overview - **C2**; Technical Specifications - **C3**; DIN 3015 Bulk Packaging - **C4**; DIN 3015 Kit Packaging - **C5**; Standard Duty [HRL] - **C6**;
Heavy Duty [HRS] - **C8**; Twin [HRZ] - **C10**; Std. Duty w/Rubber Inserts [HREL] - **C12**; Heavy Duty w/Rubber Inserts [HRES] - **C14**;
Parts [HRL, HRS, HRZ] - **C16**; Clamps w/Rubber Inserts [HREL & HRES] - **C19**; Parts [HRL, HRS, HRZ] - **C20**;
SS Metal Components [HRL, HRS] - **C21**; Series Strip Clamps [HRRL, HRRLE] - **C23**

C

Standard Clamps

Buegu Clamps [HRBGS] - **D2**; Flying Clip Clamp [HFC] - **D4**; U-Bolt w/Cushion Clamps [HUB] - **D5**; U-Bolt Clamps [HRRBS] - **D6**;
Flat Cushion Clamps [HOM] - **D7**; Cushion Clamps [CUSH] - **D8**; "P" Style Loop Clamps [HSVW, HLZV] - **D9**; Oval Clamps [HROS] - **D10**;
"P" Style Clamps [HSPN & HSPW] - **D11**; Direct Mount / C-Rail Mount Clamps [HY-LOOP] - **D12**

D

Custom Clamps

Power Cable Clamps [HY-ROFLEX] - **E2**

E



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NOTE

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HYDAC ACCESSORIES

We've made **Advanced Technical Support (ATS)** better by adding a "hunt" telephone number:

484-240-2871

HOW ATS BENEFITS YOU:

ATS is one central phone, Skype and email contact to remember or save

ATS answers every call by utilizing the hunt group telephone number



ATS addresses your day-to-day concerns while finding the most appropriate contact

ATS eliminates missed calls due to any one team member being out of the office



OUR COMMITMENT:

Answer all phone calls and return or acknowledge emails in two hours or less!

Call Hours:
8am to 5pm (EST)

Internal Skype: Accessories ATS
Email: Accessories.ATS@hydacusa.com

Global Replacement

The offerings of HYDAC Technology Corp, the USA branch of HYDAC Accessories GmbH, does not have an identical line of offerings and as such maintains a separate catalog housed at www.hydac-na.com. However, as a global company, we also provide our commitment to our US based customers to replace any items offered by our European counterparts that is installed on a machine or piece of equipment. If you need to replace one of these items, contact our Advanced Technical Support Team today!

A Overview of Clamps

OVERVIEW OF CLAMPS

Standard Solutions

HYDAC Manufactures a complete line of hose, tube, and pipe mounting components. For many years, these products have been successfully applied, worldwide. Our standard product offering includes:

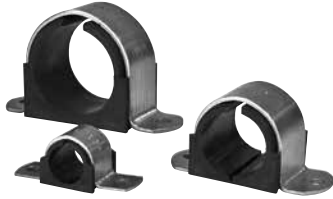
DIN 3015 Clamps

HRL, HRS, HRZ, HREL, & HRES Series
Line Sizes from 1/4" to 16" O.D.



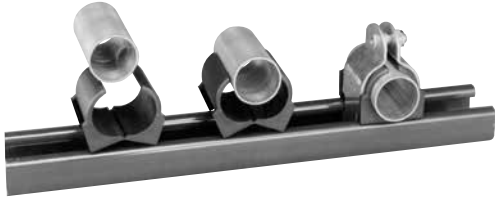
Flat Cushion Clamps

HOM Series
Line Sizes from 1/4" to 2" O.D.



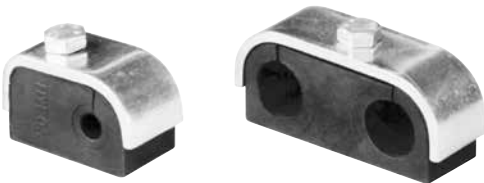
Cushion Clamps

CUSH Series
Line Sizes from 1/4" to 3 1/2" O.D.
Mount on standard 1 5/8" x 7/8" unistrut® mounting rail



Buegu

HRBGS Series
Line Sizes from 1/4" to 3/4" O.D.



U-Bolt Clamps

HRRBS Series
Line Sizes from 3/4" to 16" O.D.



U-Bolt with Cushion Clamps

HUB Series
Line Sizes from 1/4" to 12" O.D.



Oval Clamps

HR0S Series
Line Sizes from 1/4" to 1" O.D.



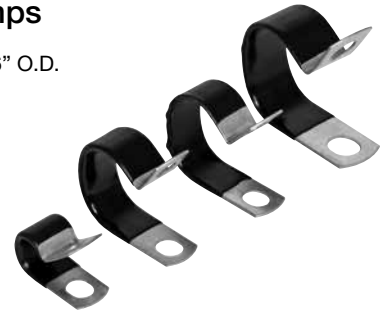
"P" Style Clamps

HSPN Series
Line Sizes from 1/4" to 3" O.D.



"P" Style Loop Clamps

HSVW & HLVZ Series
Line Sizes from 3/16" to 3-9/16" O.D.



Quick Release Swivel Bolt Clamps

HRGKSM Series
Line Sizes from 1.54" to 17.87" O.D.



Clamp Sample Kit

P/N 00265928



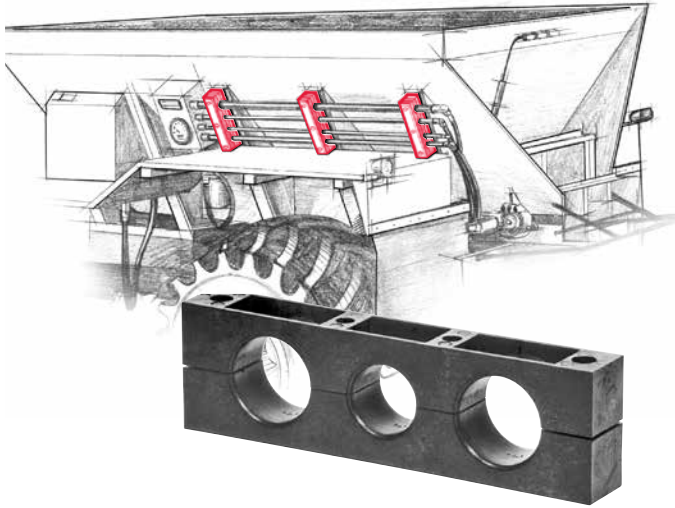
Custom Solutions

There are always a number of different ways to mount components. **HYDAC's** mounting technology experts are always available to help you determine what the best solution is for your while balancing the technical and commercial aspects of the application. For truly unique applications, **HYDAC Accessories** can be your resource for developing custom solutions when off the shelf solutions don't get the job done. Contact **Accessories ATS (Advanced Technical Support)** today with your application details: **484-240-287**

Series Strip Clamps

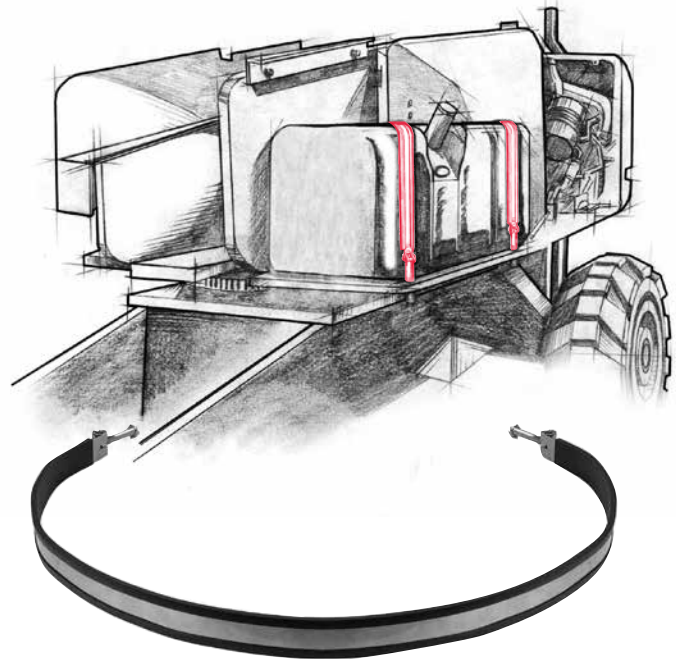
HRRL & HRRLE Series

Line Sizes from 6 to 25.4 mm O.D.



Band Straps

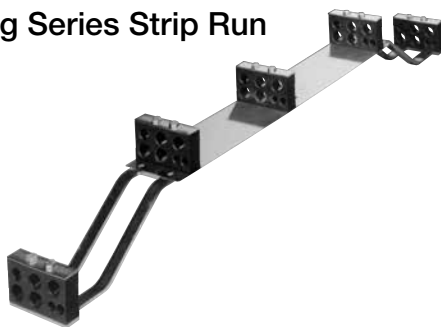
Length Ranges from 187 to 1511 mm



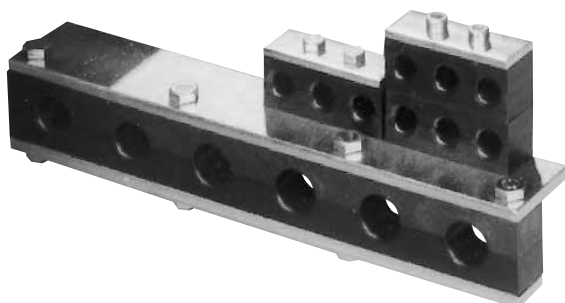
Series Strip Clamp & Custom Brackets



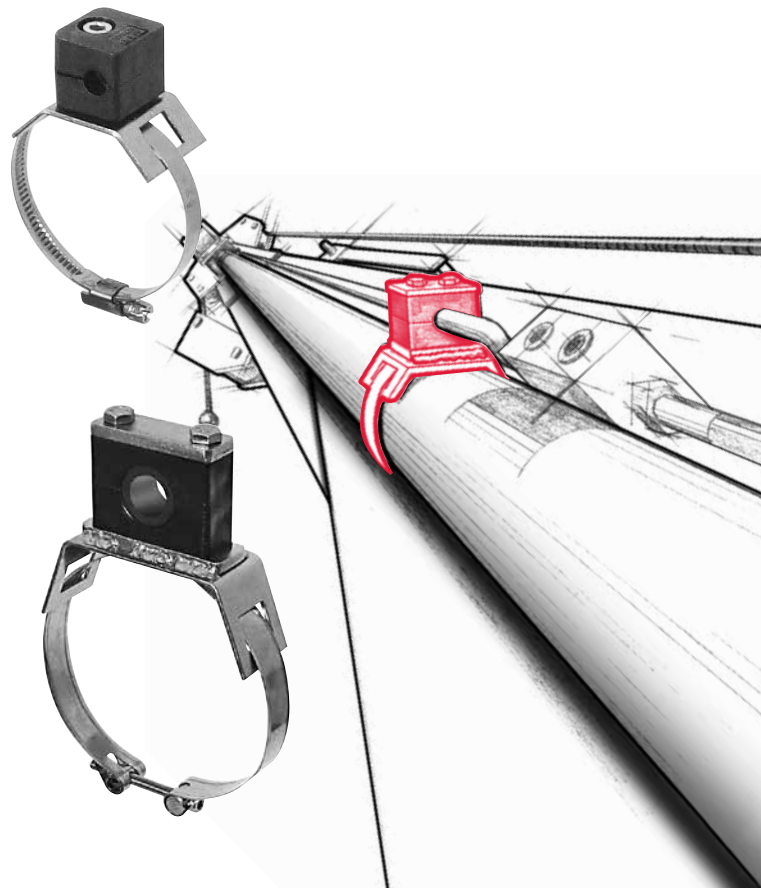
Stacking Series Strip Run



Series Strip Clamp & Custom Mounting Plates










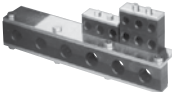

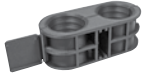






Cylinder / Tube Clamp





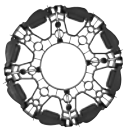


OVERVIEW OF CLAMPS

Quick Reference Guide of Clamps

Type	Series	Sizes	Specifications	Page No.	
	Clamping Band	Band Straps	Diameters up to 20"	Effective for most non-cylindrical shapes many bolt/connectors available	B2
	Quick Release Swivel Bolt Clamps	HRGKSM	Available up to 20" bore diameter	Zinc plated steel polyethelyne profile stainless steel band strap	B6
	Cylinder / Tube Clamp	HRHZ HRHZZ	Cylinders 67-299 mm Pipes 6-70 mm	Clamps for mounting piping to cylindrical components, carbon or stainless steel, PP or PA, with or without rubber profile	B8
	Special Straps - Prebent Straps	—	Contact Product Management to Develop your Solution	Pre-bent straps with multiple options available to tailor a custom solution for your specific mounting project.	B9
	Standard Duty DIN 3015	HRL HRGL	Available to 2" tube outside diameter	Up to 1500 PSI - no dynamic loads	C6
	Heavy Duty DIN 3015	HRS HRGS	Available to 16" nominal pipe size	Greater than 1500 PSI	C8
	Twin DIN 3015	HRZ HRGZ	Available to 1-1/4" nominal pipe size	Up to 1500 PSI - no dynamic loads	C10
	Standard Duty w/ Rubber Insert	HREL	Available to 2" tube outside diameter	Up to 1500 PSI - no dynamic loads	C12
	Heavy Duty w/ Rubber Insert	HRES	Available to 5 1/4" bore diameter	Noise reduction - resistance to axial movement	C14
	Series Strip Clamps	HRRL HRRLE	HRRL bore up to 1" HRRLE bore up to 2.22"	For multiple lines similar to DIN 3015 standards	C23
	Buegu Clamps	HRBGS	Available to 3/8" bore diameter	Stirrup & Weld plate - carbon steel Clamp body - thermoplastic elastomer Temperature (-40° to 125°C)	D2
	Flying Clip Clamp	HFC	Available in 9.5mm & 19mm bore diameter	Reusable clip clamp that keeps hoses separate and prevents rubbing.	D4
	U-Bolt w/ Cushion Clamps	HUB	Available to 12" nominal pipe size	U-Bolt - Steel with electro-galvanized finish or 316 stainless steel Cushion - Thermoplastic elastomer, rated from -50° to 275°F *The A4 in the model code denotes 316 stainless steel	D5
	U-Bolt Clamps	HRRBS	Available to 16" nominal pipe size	Threaded "U" - zinc plated carbon steel Saddle - polypropylene	D6
	Flat Cushion Clamps	HOM	Available to 2" bore diameter	Withstands the effect of most oils. Chemical and other cleaning compounds in temperatures from -50° to 275°F	D7
	Cushion Clamps	CUSH	Available to 6" bore dia. - fits standard 1 5/8" w/ mounting rail	Withstands the effect of most oils. Chemical and other cleaning compounds in temperatures from -40° to 275°F	D8

Quick Reference Guide of Clamps (cont'd)

Type	Series	Sizes	Specifications	Page No.
 <p>"P" Style Loop Clamps</p>	HSVW HLVZ	HSVW available up to 1-3/8" HLVZ available up to 3-9/16"	Galvanized steel PVC coated	D9
 <p>Oval Clamps</p>	HROS	Available to 1" tube size	PP - Polypropylene (standard) PA or others may be available -22° to 194°F (-30° to 90°C)	D10
 <p>"P" Style Clamps</p>	HSPN HSPW	HSPN available up to 3" HSPW available up to 1-1/8"	EPDM cushion steel clamp- steel w/ electroplated finish or 304 stainless steel	D11
 <p>Adjustable Cable Management Straps</p>	HY-LOOP	10-30 mm band widths	Available as complete units or in component form for securing cables.	D12
 <p>Cable Clamp</p>	HRFLEX	Flexible/modular design	Wind turbine power cable management system	E2

B Band Strap Clamps

HYDAC offers customized series strips and tank mounting band strap solutions for OEM's requiring multiple line runs. In addition we provide a rugged, high durability power cable harness for cable management requirements. Ciist quas reriae culparit volo vitio. Ibus, sintium namus.

Genis aut quam eatur, nitatur? Ipsuntu ribusam, volori ratemod ma aut quiae omnihic tet landitatur.

BAND STRAP CLAMPS

HR(S)GBLPU Series

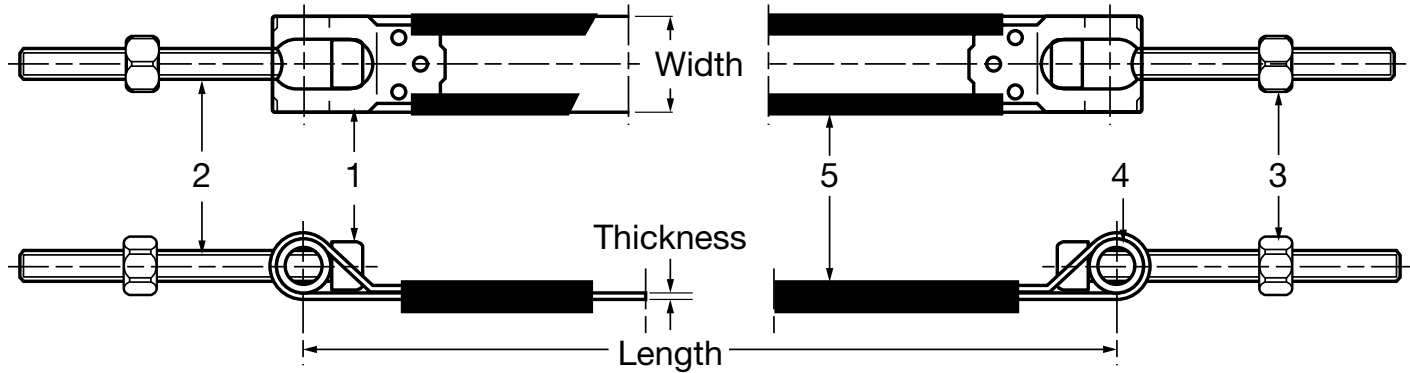
Swivel Bolt Band Clamps



Description

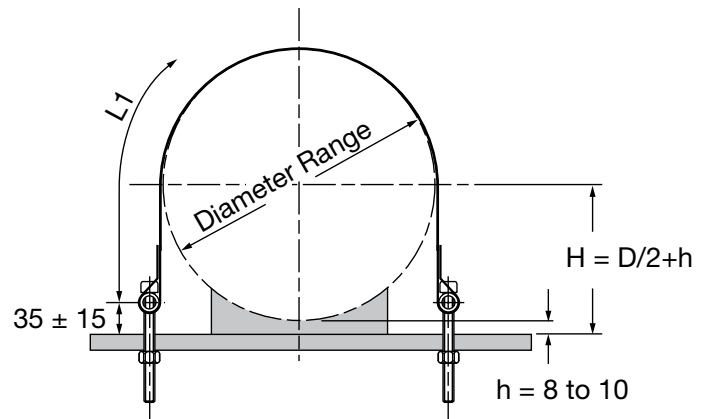
For OEM's requiring mounting solutions to secure non-cylindrical objects such as plastic fuel tanks, HYDAC offers steel band straps.

Item	Description/Material
1	Clamping Band, Stainless Steel
2	Metric Zinc-Plated Steel Socket Head Bolts <i>(Note: other bolt and connection styles are available based on customer's specifications)</i>
3	Nuts, Zinc Plated Steel
4	Swivel Sleeve, Zinc Plated Steel
5	Rubber Profile



Dimensions

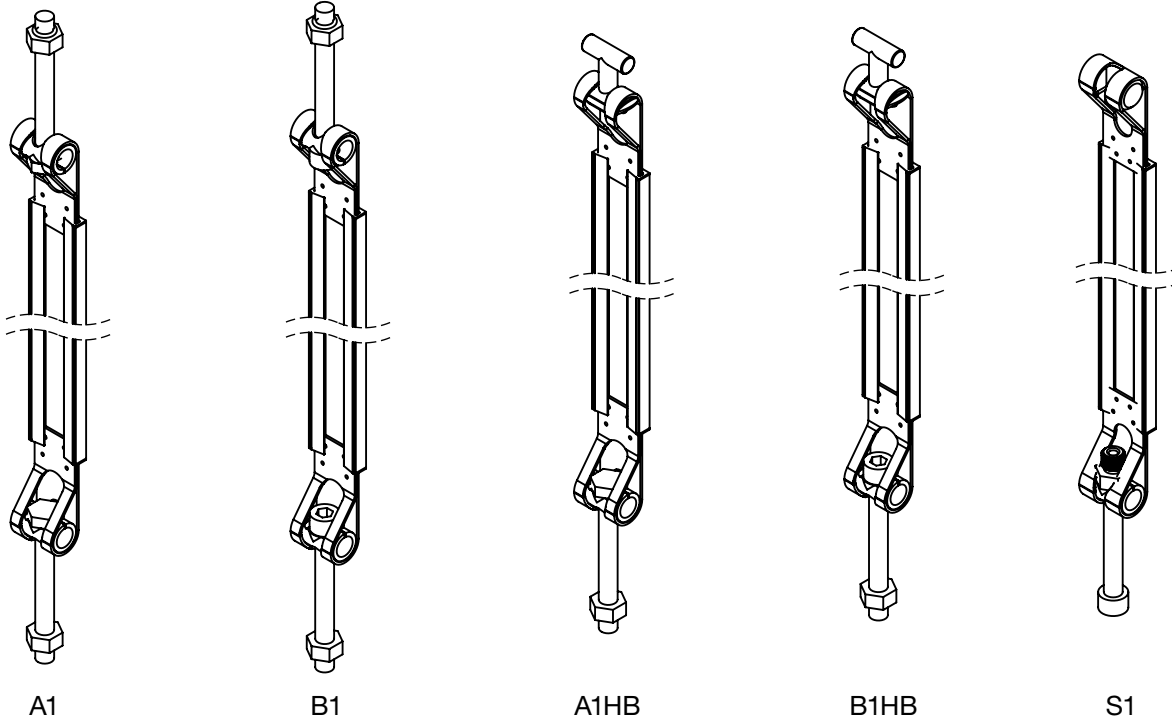
	Width x Thickness	Length Range (L1)
Light Range	25 x 1	187 - 921 mm
Heavy Range	30 X 1	232 - 1511 mm
Heavy II Range	30 X 1.5	232 - 1511 mm



Ordering

Band Straps are a custom product which must be quoted on an individual project basis. Band Straps are available with various lengths, widths, connecting hardware, and with or without rubber profiles. Contact **HYDAC** at **1-877-GO HYDAC (1.877.464.9322)** with your specifications to request a quotation.

Head Bolt Arrangements



Parts Legend	
1 Hex Head Bolt	5 Swivel Sleeve
2 Socket Head Bolt	6 Hex Head Nut
3 Steel Band	7 H-Bolt
4 Band Profile	8 Locking Sleeve

Model Code

HRSGBLPU 30 A1 373 ST

Series

HRGBLPU = 25 x 1 / 30 x 1
 HRSGBLPU = 30 x 1.5 / 40 x 1.5

Band Width (mm)

25, 30, 40

Hardware

A1 = Metric Hex Head Bolts
 B1 = Metric Socket Head Bolts
 A1HB = Metric Hex Head Bolt w/ H-Bolt
 B1HB = Metric Socket Head Bolt w/ H-Bolt
 S1 = 360° Clamp Arrangement, Metric Socket Head Bolt

Type

(Refer to table on next page)

Material of Metal Components

ST = Carbon Steel
 A2 = 304 Stainless Steel

Material of Profile

(omit) = EPDM
 NBR = Nitrile (Buna)

BAND STRAP CLAMPS

Dimensions

A1 and B1 -

Band width 1" (25mm)

Type	L1	Diameter Range
64	7.4 (187)	3 - 3.3 (77 - 83)
70	8.1 (206)	3.3 - 3.5 (84 - 90)
76	8.8 (224)	3.6 - 3.9 (91-98)
82	9.5 (242)	3.9-4.2 (98 -106)
88	10.2 (260)	4.1 - 4.6 (105 - 118)
94	11 (279)	4.4 - 4.9 (112 - 125)
100	11.7 (297)	4.7 - 5.4 (119 - 136)
106	12.4 (316)	5 - 5.7 (127 - 145)
115	13.5 (343)	5.4 - 6.1 (137 - 156)
120	14.1 (358)	5.6 - 6.3 (143 - 161)
124	14.6 (371)	5.8 - 6.5 (148 - 166)
133	15.7 (399)	6.3 - 7 (159 - 177)
142	16.8 (427)	6.7 - 7.4 (170 - 188)
151	17.9 (455)	7.1 - 7.8 (181 - 199)
160	19 (483)	7.6 - 8.3 (192 - 210)
169	20.1 (511)	8 - 8.7 (203 - 221)
178	21.2 (539)	8.4 - 9.1 (214 - 232)
187	22.3 (567)	8.9 - 9.6 (225 - 243)
196	23.3 (591)	9.3 - 10 (236 - 254)
205	24.5 (623)	9.7 - 10.4 (247 - 265)
214	25.6 (651)	10.2 - 10.9 (258 - 276)
223	26.7 (679)	10.6 - 11.3 (269 - 287)
231	27.7 (704)	10.9 - 11.7 (278 - 296)
234	28.1 (713)	11.1 - 11.8 (281 - 299)
241	28.9 (735)	11.4 - 12.1 (290 - 308)
250	30.1 (764)	11.9 - 12.6 (301 - 319)
259	31.2 (792)	12.3 - 13 (312 - 330)
268	32.3 (820)	12.7 - 13.4 (323 - 341)
277	33.4 (849)	13.1 - 13.9 (334 - 352)
286	34.5 (877)	13.6 - 14.3 (345 - 363)
295	35.6 (905)	14 - 14.7 (356 - 374)
300	36.3 (921)	14.3 - 15 (363 - 382)

Dimensions

A1 and B1 -

Band width 1.2" (30mm) / 1.6" (40 mm)

Type	L1	Diameter Range
80	9.1 (232)	3.8 - 4.2 (96 - 106)
89	10.2 (260)	4.2 - 4.6 (107 - 116)
98	11.3 (287)	4.6 - 5 (117 - 127)
107	12.4 (315)	5 - 5.4 (128 - 138)
116	13.5 (342)	5.5 - 5.9 (139 - 150)
125	14.6 (370)	5.9 - 6.6 (150 - 168)
134	15.7 (398)	6.3 - 7.2 (161 - 183)
143	16.8 (426)	6.8 - 7.6 (172 - 194)
152	17.9 (454)	7.2 - 8.1 (183 - 205)
165	19.4 (494)	7.8 - 8.7 (198 - 221)
178	21 (534)	8.4 - 9.3 (213 - 236)
191	22.6 (575)	9 - 9.9 (229 - 252)
204	24.2 (615)	9.6 - 10.6 (245 - 268)
217	25.8 (656)	10.3 - 11.2 (261 - 284)
230	27.4 (696)	10.9 - 11.8 (276 - 299)
243	29 (737)	11.5 - 12.4 (292 - 315)
256	30.6 (777)	12.1 - 13 (308 - 331)
269	32.2 (818)	12.8 - 13.7 (324 - 347)
282	33.8 (859)	13.3 - 14.3 (339 - 362)
295	35.4 (900)	14 - 14.9 (355 - 378)
300	36.1 (916)	14.3 - 15.2 (363 - 386)
308	37 (941)	14.6 - 15.5 (371 - 394)
321	38.6 (981)	15.2 - 16.1 (387 - 410)
334	40.2 (1022)	15.9 - 16.8 (403 - 426)
347	41.9 (1063)	16.5 - 17.4 (419 - 442)
360	43.4 (1103)	17.1 - 18 (434 - 457)
373	45 (1144)	17.7 - 18.6 (450 - 473)
386	46.7 (1185)	18.3 - 19.3 (466 - 489)
399	48.2 (1225)	19 - 19.9 (482 - 505)
412	49.8 (1266)	19.5 - 20.5 (496 - 521)
425	51.5 (1307)	20.2 - 21.1 (513 - 537)
438	53.1 (1348)	20.8 - 21.8 (529 - 553)
451	54.6 (1388)	21.5 - 22.4 (545 - 568)
464	56.3 (1429)	22.1 - 23 (561 - 584)
477	57.9 (1470)	22.7 - 23.6 (577 - 600)
490	59.5 (1511)	23.3 - 24.3 (593- 616)

Dimensions

S1 -

Band width 1" (25mm)

Type	L1	Diameter Range
62	7.1 (181)	2.1 - 2.3 (54 - 59)
64	7.4 (187)	2.2 - 2.4 (56 - 61)
70	8.1 (206)	2.4 - 2.6 (62 - 67)
76	8.8 (224)	2.7 - 2.9 (68 - 73)
82	9.5 (242)	2.9 - 3.1 (74 - 79)
88	10.2 (260)	3.1 - 3.3 (80 - 85)
94	11 (279)	3.4 - 3.6 (86 - 91)
100	11.7 (297)	3.6 - 3.8 (92 - 97)
106	12.4 (316)	3.9 - 4.2 (98 - 106)
115	13.5 (343)	4.2 - 4.5 (107 - 115)
124	14.6 (371)	4.6 - 4.9 (116 - 124)
133	15.7 (399)	4.9 - 5.2 (125 - 133)
142	16.8 (427)	5.3 - 5.6 (134 - 142)
151	17.9 (455)	5.6 - 5.9 (143 - 151)
160	19 (483)	6 - 6.3 (152 - 160)
169	20.1 (511)	6.3 - 6.7 (161 - 169)
178	21.2 (539)	6.7 - 7 (170 - 178)
187	22.3 (567)	7 - 7.4 (179 - 187)
196	23.4 (595)	7.4 - 7.7 (188 - 196)
205	24.5 (623)	7.8 - 8.1 (197 - 205)
214	25.6 (651)	8.1 - 8.4 (206 - 214)
223	26.7 (679)	8.5 - 8.8 (215 - 223)
231	27.7 (704)	8.8 - 9.1 (224 - 232)
241	28.9 (735)	9.2 - 9.5 (233 - 241)
250	30.1 (764)	9.5 - 9.8 (242 - 250)
259	31.2 (792)	9.9 - 10.2 (251 - 259)
268	32.3 (820)	10.2 - 10.6 (260 - 268)
277	33.4 (849)	10.6 - 10.9 (269 - 277)
286	34.5 (877)	10.9 - 11.3 (278 - 286)
295	35.6 (905)	11.3 - 11.6 (287 - 295)

Dimensions

S1 -

Band width 1.2" (30mm) / 1.6" (40 mm)

Type	L1	Diameter Range
80	9.1 (232)	2.8 - 3 (71 - 76)
89	10.2 (260)	3.1 - 3.3 (80 - 85)
98	11.3 (287)	3.5 - 3.7 (89 - 94)
107	12.4 (315)	3.9 - 4.1 (98 - 103)
116	13.5 (342)	4.2 - 4.5 (107 - 115)
125	14.6 (370)	4.6 - 4.9 (116 - 124)
134	15.7 (398)	4.9 - 5.2 (125 - 133)
143	16.8 (426)	5.3 - 5.6 (134 - 142)
152	17.9 (454)	5.6 - 5.9 (143 - 151)
165	19.4 (494)	6.1 - 6.5 (156 - 164)
178	21 (534)	6.7 - 7 (169 - 177)
191	22.6 (575)	7.2 - 7.5 (182 - 190)
204	24.2 (615)	7.7 - 8 (195 - 203)
217	25.8 (656)	8.2 - 8.5 (208 - 216)
230	27.4 (696)	8.7 - 9 (221 - 229)
243	29 (737)	9.2 - 9.6 (234 - 245)
256	30.6 (777)	9.7 - 10.2 (247 - 258)
269	32.2 (818)	10.2 - 10.7 (260 - 271)
282	33.8 (859)	10.7 - 11.2 (273 - 284)
295	35.4 (900)	11.3 - 11.7 (286 - 297)
300	36.1 (916)	11.5 - 11.9 (291 - 302)
308	37 (941)	11.8 - 12.2 (299 - 310)
321	38.6 (981)	12.3 - 12.7 (312 - 323)
334	40.2 (1022)	12.8 - 13.2 (325 - 336)
347	41.9 (1063)	13.3 - 13.7 (338 - 349)
360	43.4 (1103)	13.8 - 14.3 (351 - 362)
373	45 (1144)	14.3 - 14.8 (364 - 375)
386	46.7 (1185)	14.8 - 15.3 (377 - 388)
399	48.2 (1225)	15.4 - 15.8 (390 - 401)
412	49.8 (1266)	15.9 - 16.3 (403 - 414)
425	51.5 (1307)	16.4 - 16.8 (416 - 427)
438	53.1 (1348)	16.9 - 17.3 (429 - 440)
451	54.6 (1388)	17.4 - 17.8 (442 - 453)
464	56.3 (1429)	17.9 - 18.3 (455 - 466)
477	57.9 (1470)	18.4 - 18.9 (468 - 479)
490	59.5 (1511)	18.9 - 19.4 (481 - 492)
503	61.1 (1552)	19.4 - 19.9 (494 - 505)

BAND STRAP CLAMPS

HRGKSM Series

Quick Release Swivel Bolt Clamps



Model Code

	HRGKSM	2	R	186-194	192	ST
Series	HRGKSM					
Group	0-4 (Refer to table)					
Model	R					
Diameter Range	(Refer to table)					
Type	(Refer to table)					
Material of Steel Part	ST = Zinc Plated Steel					

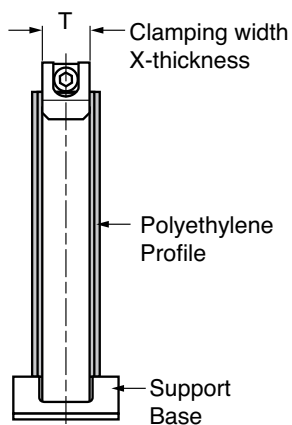
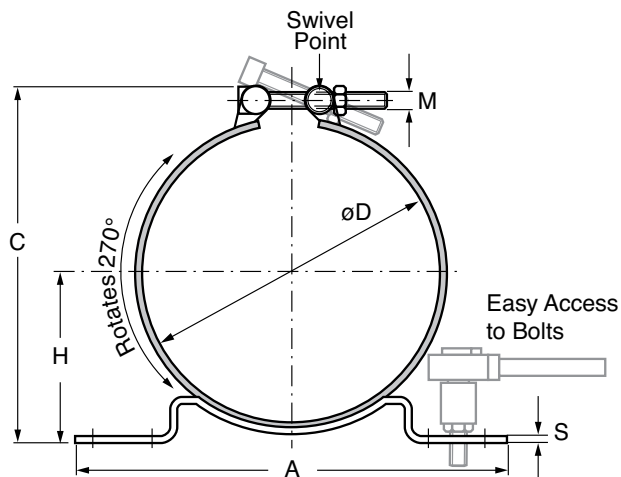
Description

The HRGKS is a clamp designed to mount cylindrical components. It is similar to the HYDAC HYRAC clamp, which is designed for accumulators, with some additional benefits that make it more practical for non-accumulator applications.

Features

- Swivel assembly provides for simple installation and a tight fit
- Support base provides easy access to bolts / unit easy to install
- The clamp rotates ~270°F / Easy access
- Polyethylene profile does not compress
Clamp stays tight over time

Dimensions



HRGKSM vs. HYRAC*

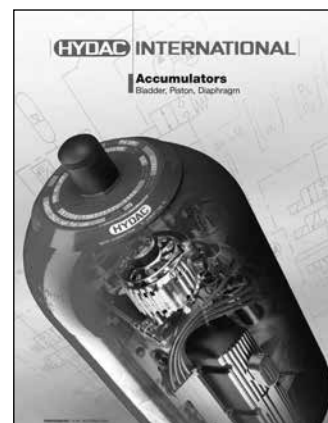
Difference	HRGKSM	HYRAC
Profile Material	Polyethylene	Rubber
Capability to Rotate	Can be rotated 270°F	Fixed at 90°F
Fit in clamp	Component sits flat	Two nubs ensure H dimension is consistent with other HYDAC Accumulator Clamps

*HYRAC clamp sizes 96-100 and under have the same construction as the HRGKSM Series

Materials

Description	Material / Coating
Support Base	Zinc Plated Steel
Polyethylene Profile	Polyethylene
Quick Release Swivel Bolt	Zinc-Plated Steel
Band Strap	Stainless Steel

Also available in all stainless steel



For more detailed information on the HYRAC Clamps please refer to the HYDAC Accumulator Catalog

Dimensions

HRGKSM Series (see illustration previous page)

Group	Diameter Range	Type	Dimensions										Weight
			H	C _{MAX}	A	S	L	B	E	F	M	T	
0	1.7-1.8 (44-46)	47	1.2-1.3 (29.8-32.3)	2.6 (67)	4.72 (120)	0.12 (3)	.31 (8)	3.35 (85)	1.57 (40)	0.35 (9)	M6 x 50	0.8 x .03 (20 x 0.8)	.33 (0.15)
	1.8-1.9 (46-49)	50	1.2-1.3 (30.8-32.3)	2.7 (69)									.33 (0.15)
	2.0-2.1 (51-54)	55	1.3-1.4 (33.3-34.8)	2.9 (75)									.33 (0.15)
	2.2-2.3 (55-58)	59	1.4-1.5 (35.3-36.8)	3.0 (77)									.35 (0.16)
	2.3-2.4 (58-61)	62	1.5 (37.3-38.8)	3.3 (83)									.35 (0.16)
	2.4-2.6 (62-65)	65	.3-1.6 (8.0-39.5)	3.4 (85)									.44 (0.20)
	2.6-2.7 (66-69)	69	1.6 (40.0-41.5)	3.5 (89)									.46 (0.21)
	2.8-2.9 (70-73)	73	1.7 (42.0-43.5)	3.7 (93)									.46 (0.21)
	2.9-3.0 (73-76)	76	1.7-1.8 (43.5-45.0)	3.8 (96)									.48 (0.22)
	3.0-3.1 (77-80)	80	1.8-1.9 (45.5-47.0)	3.9 (100)									.48 (0.22)
	3.2-3.3 (81-84)	85	1.9 (47.0-48.5)	4.1 (104)									.51 (0.23)
	3.3-3.5 (85-88)	89	1.9-2.0 (49.0-50.5)	4.3 (108)									.51 (0.23)
	3.5-3.6 (89-92)	9	2.0-2.1 (51.0-52.5)	4.4 (112)									.53 (0.24)
	3.6-3.7 (92-95)	96	2.1 (52.5-54.0)	4.5 (115)									.53 (0.24)
3.7-3.9 (95-100)	100	2.1-2.2 (54.5-56.5)	4.7 (120)	.53 (0.24)									
1	4.0-4.3 (101-109)	106	2.3-2.5 (58.5-62.5)	5.4 (137)	6.14 (156)	0.12 (3)	0.71 (18)	3.94 (100)	1.97 (50)	0.35 (9)	M8 x 80	1.0 x .03 (25 x 1.0)	.75 (0.34)
	4.3-4.6 (110-118)	115	2.5-2.6 (63.0-67.0)	5.7 (146)									.77 (0.35)
	4.7-5.0 (119-127)	124	2.6-2.8 (66.8-70.8)	6.1 (154)									.79 (0.36)
	5.0-5.4 (128-136)	133	2.8-3.0 (71.3-75.3)	6.4 (163)									.82 (0.37)
	5.4-5.7 (137-145)	142	3.0-3.1 (76.0-80.0)	6.8 (172)									.84 (0.38)
	5.7-6.1 (146-154)	151	3.2-3.3 (80.5-84.5)	7.1 (181)									.86 (0.39)
6.1-6.4 (155-163)	160	3.3-3.5 (85.0-89.0)	7.5 (190)	.88 (0.40)									
2	6.4-6.7 (163-171)	169	3.5-3.7 (90.1-94.1)	7.9 (200)	9.30 (236)	0.12 (3)	1.26 (32)	5.98 (152)	2.36 (60)	0.35 (9)	M8 x 80	1.0 x .03 (25 x 1.0)	1.26 (0.57)
	6.6-6.9 (167-175)	173	3.6-3.8 (92.1-96.1)	8.0 (204)									1.28 (0.58)
	6.8-7.1 (172-180)	178	3.7-3.9 (94.6-98.6)	8.2 (209)									1.28 (0.58)
	7.1-7.4 (181-189)	187	3.9-4.0 (98.4-102.4)	8.5 (217)									1.30 (0.59)
	7.3-7.6 (186-194)	192	4.0-4.1 (100.9-104.9)	8.7 (222)									1.32 (0.60)
	7.5-7.8 (190-198)	196	4.1-4.2 (102.9-106.9)	8.9 (226)									1.32 (0.60)
	7.8-8.1 (199-207)	205	4.2-4.4 (107.4-111.4)	9.2 (235)									1.34 (0.61)
	8.2-8.5 (208-216)	214	4.4-4.5 (111.2-115.2)	9.6 (243)									1.37 (0.62)
	8.5-8.9 (217-225)	223	4.6-4.7 (115.7-119.7)	9.9 (252)									1.39 (0.63)
8.9-9.2 (226-234)	231	4.7-4.9 (120.2-124.2)	10.3 (261)	1.41 (0.64)									
3	9.3-9.7 (235-246)	243	5.1-5.3 (129.0-134.5)	11.0 (279)	11.81 (300)	0.16 (4)	1.26 (32)	8.43 (214)	2.36 (60)	0.43 (11)	M10 x 90	1.2 x .03 (30 x 1.0)	2.14 (0.97)
	9.8-10.2 (24-259)	256	5.3-5.6 (135.5-141.0)	11.5 (292)									2.18 (0.99)
	10.3-10.7 (261-272)	269	5.5-5.8 (140.9-146.4)	12.0 (304)									2.20 (1.00)
	10.7-11.2 (271-285)	282	5.8-6.0 (147.4-152.9)	12.5 (317)									2.25 (1.02)
	11.3-11.7 (287-298)	295	6.1-6.3 (153.9-159.4)	13.0 (330)									2.27 (1.03)
	11.8-12.2 (300-311)	308	6.3-6.5 (159.4-164.9)	13.5 (342)									2.31 (1.05)
	12.3-12.6 (313-324)	321	6.5-6.7 (165.9-171.4)	14.0 (355)									2.34 (1.06)
	12.8-13.3 (326-337)	334	6.8-7.0 (172.4-177.9)	14.5 (368)									2.38 (1.08)
4	13.3-13.8 (339-350)	347	7.1-7.4 (181.2-186.7)	15.2 (385)	15.75 (400)	0.16 (4)	1.26 (32)	12.36 (314)	2.36 (60)	0.43 (11)	M10 x 90	1.2 x .06 (30 x 1.5)	3.24 (1.47)
	13.9-14.3 (352-363)	360	7.4-7.6 (187.7-193.2)	15.7 (398)									3.28 (1.49)
	14.4-14.8 (365-376)	373	7.6-7.9 (194.2-199.7)	16.2 (411)									3.33 (1.51)
	14.9-15.3 (378-389)	386	7.9-8.1 (200.7-206.2)	16.7 (424)									3.35 (1.52)
	15.4-15.8 (391-402)	399	8.1-8.3 (205.2-210.7)	17.1 (435)									3.40 (1.54)
	15.9-16.3 (404-415)	412	8.3-8.6 (211.7-217.2)	17.6 (448)									3.44 (1.56)
	16.4-16.8 (417-428)	425	8.6-8.8 (218.2-223.7)	18.1 (461)									3.48 (1.58)
	16.9-17.4 (430-441)	438	8.8-9.1 (224.7-230.2)	18.7 (474)									3.53 (1.60)
	17.4-17.9 (443-454)	451	9.0-9.2 (229.4-234.9)	19.1 (485)									3.57 (1.62)
	18.0-18.4 (456-467)	464	9.3-9.5 (235.9-241.4)	19.6 (498)									3.60 (1.63)
	18.5-18.9 (469-480)	477	9.5-9.8 (242.4-247.9)	20.1 (511)									3.64 (1.65)
	19.0-19.4 (482-493)	490	9.8-10.0 (248.9-254.4)	20.6 (524)									3.68 (1.67)
	19.5-19.9 (495-506)	503	10.1-10.3 (255.4-260.9)	21.1 (537)									3.75 (1.70)

Notes:

1. Dimensions are in inches (mm) and lbs (kg).
2. Dimensions are for general information only, all critical dimensions should be verified by requesting a certified print.
3. For larger sizes contact HYDAC Accessories Group

BAND STRAP CLAMPS

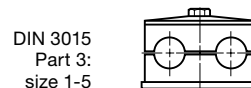
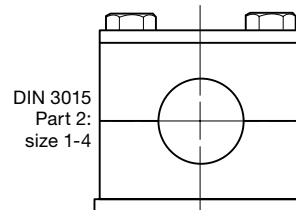
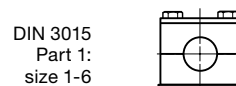
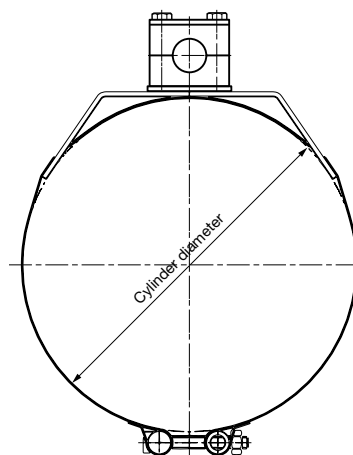
HRHZ, HRHZT Series

Cylinder / Tube Clamp

Swivel Bolt / DIN 3015 Combination Clamps



Dimensions



Description

Clamps for mounting piping to cylindrical components, carbon or stainless steel, PP or PA, with or without rubber profile.

Features

- Need features if we have them
- Need features if we have them
- Need features if we have them
- Need features if we have them

Size	Cylinder \varnothing D (range) [mm]
7	67 - 88
8	89 - 99
9	100 - 114
10	115 - 140
11	141 - 169
12	170 - 194
13	195 - 220
14	221 - 274
15	275 - 299

Note: Other materials on request.

Model Code

HRHZ 12 / 3S A / PP ST M ZN

Series _____
 HRHZ = HY-ROS clamp for cylinders
 HRHZT = HY-ROS clamp for cylinders w/PE insert

Size _____
 (According to dimensions)

Clamp Size _____
 L = DIN 3015 Part 1, size 1-6
 S = DIN 3015 Part 2, size 1-4
 Z = DIN 3015 Part 3, size 1-5

Type _____
 A = standard

Diameter, Cylinder _____

Diameter, Pipe _____

Material of Clamp Jaws _____
 PP = polypropylene
 PA = polyamide

Material of Steel Part _____
 ST = Zinc Plated Steel
 A2 = Stainless Steel (on request)
 A4 = Stainless Steel (on request)

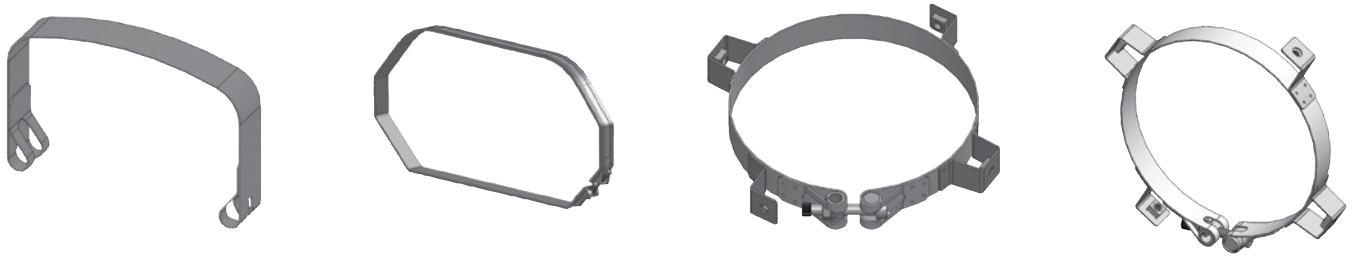
Thread Type _____
 M = Metric Thread

Plating of Steel Parts _____
 ZN = Zinc Plated

Special Straps

Prebent Straps Tailored to Your Needs

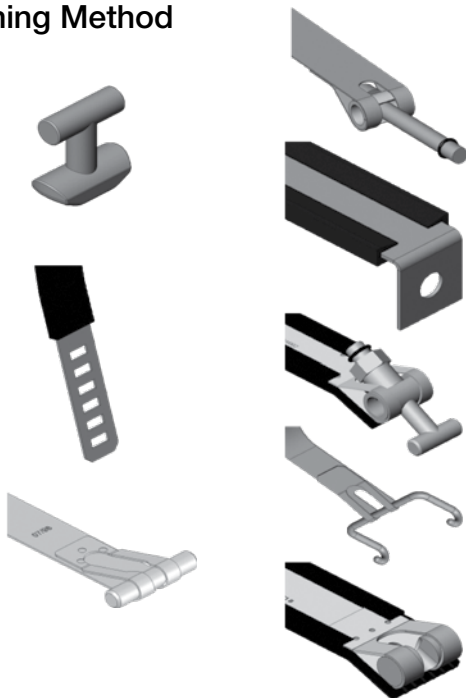
Special pre-bent band straps with options to weld custom attachment points formable to almost any geometry available to tailor a custom solution for your specific mounting project.



Connectors, Bases & Attachments/Fixtures*

Additional components for mounting pipes and hoses

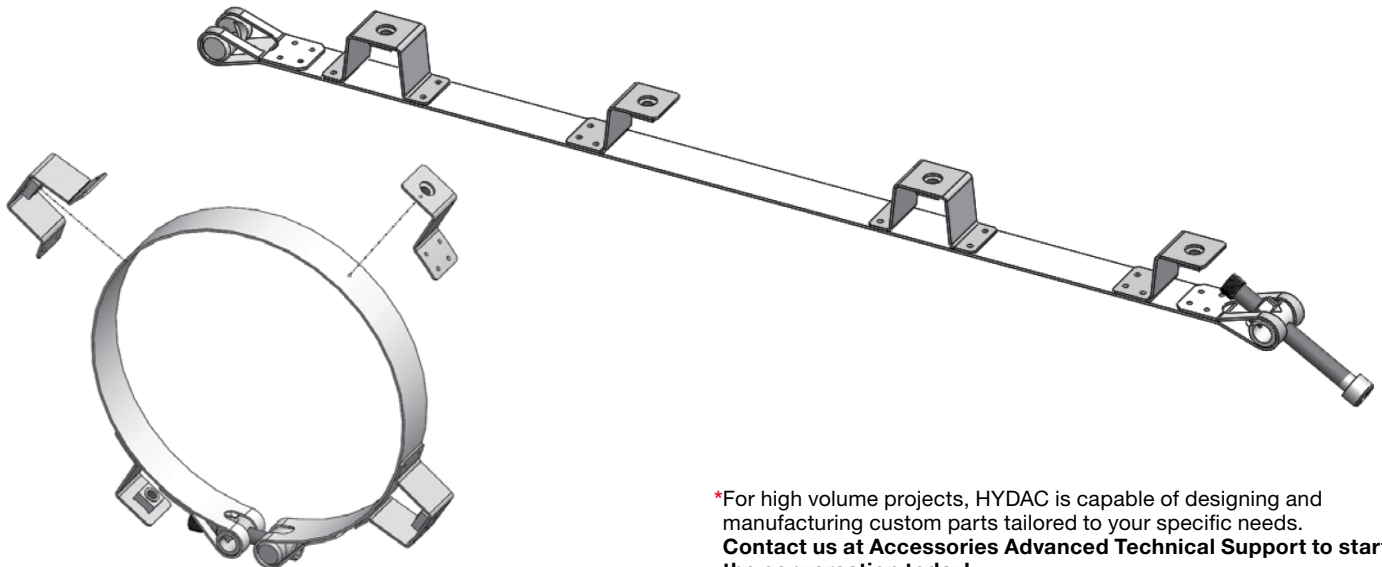
Fastening Method



Bases



Attachments and Fixtures for guiding and mounting other components



*For high volume projects, HYDAC is capable of designing and manufacturing custom parts tailored to your specific needs. **Contact us at Accessories Advanced Technical Support to start the conversation today!**

C DIN 3015 and Series Strip Clamps

HYDAC manufactures a complete line of hose, tube, and pipe mounting components according to the DIN 3015 standard. HYDAC clamps assure a simple, reliable dampening support for lines which absorb shock, dampen vibration, and reduce noise in plumbing systems.

DIN 3015 & SERIES STRIP CLAMPS

Overview

HYDAC manufactures a complete line of hose, tube, and pipe mounting components according to the DIN 3015 standard. Our clamps assure a simple, reliable dampening support for lines which absorb shock, dampen vibration, and reduce noise in plumbing systems.

HRL Series – Standard Duty

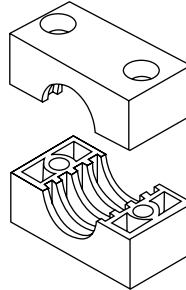
(see pages B1-4 to B1-5)

- Available to 2" tube outside diameter.
- Recommended for systems with less than 1500 PSI operating pressure and no dynamic loads.

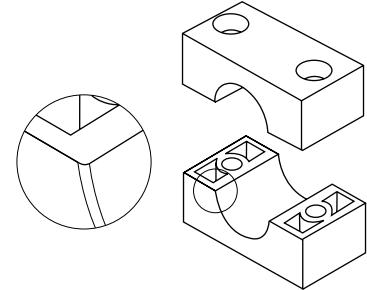


Bore Styles

Standard duty, heavy duty, and twin series are available with either ribbed bores (standard) or smooth bore (special order). When ordering a smooth bore arrangement or clamp pairs, a "G" is inserted in the code directly after the "HR" i.e. HRGL, HRGS and HRGZ



Ribbed Bore
(standard)



Smooth Bore
smooth surface and chamfered edge
prevent chaffing of hose (special)

HRS – Heavy Duty

(see pages B1-6 to B1-7)

- Available to 16" nominal pipe size
- Recommended for systems with greater than 1500 PSI operating pressure, operations with pressure surges and applications with wide temperature fluctuations.



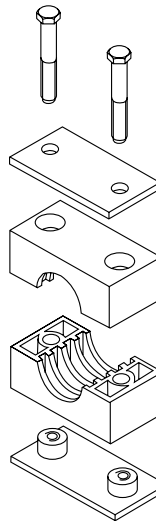
Arrangements

Various arrangements are available in each series.

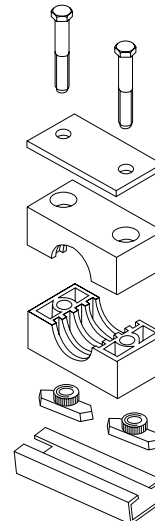
HRZ – Twin

(see pages B1-8 to B1-9)

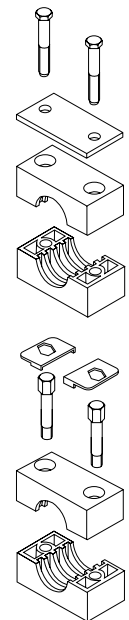
- Available to 1-1/4" nominal pipe size
- Recommended for systems with less than 1500 PSI operating pressure and no dynamic loads



Weld Plate Mounting



C-rail Mounting



Stacking Modules & Kits

HREL – Standard Duty w/ Rubber Insert

(see pages B1-10 to B1-11)

- Available to 2" tube outside diameter
- Recommended for systems with less than 1500 PSI operating pressure and no dynamic loads
- Provide for greater noise reduction and resistance to axial movement



HRES – Heavy Duty w/ Rubber Insert

(see pages B1-12 to B1-13)

- Heavy duty available to 5 1/4" bore diameter
- Provide for greater noise reduction and resistance to axial movement



Materials

Metal components are carbon steel (standard). Stainless steel is also available. Metal components to be welded (weld plates and c-rails) and heavy duty top plates size 5-8 are phosphate coated, while all other metal components are zinc plated. Clamp pairs are polypropylene (standard). Polyamide and aluminum clamp pairs are also available.

For specifications on these materials, see page B1-3.

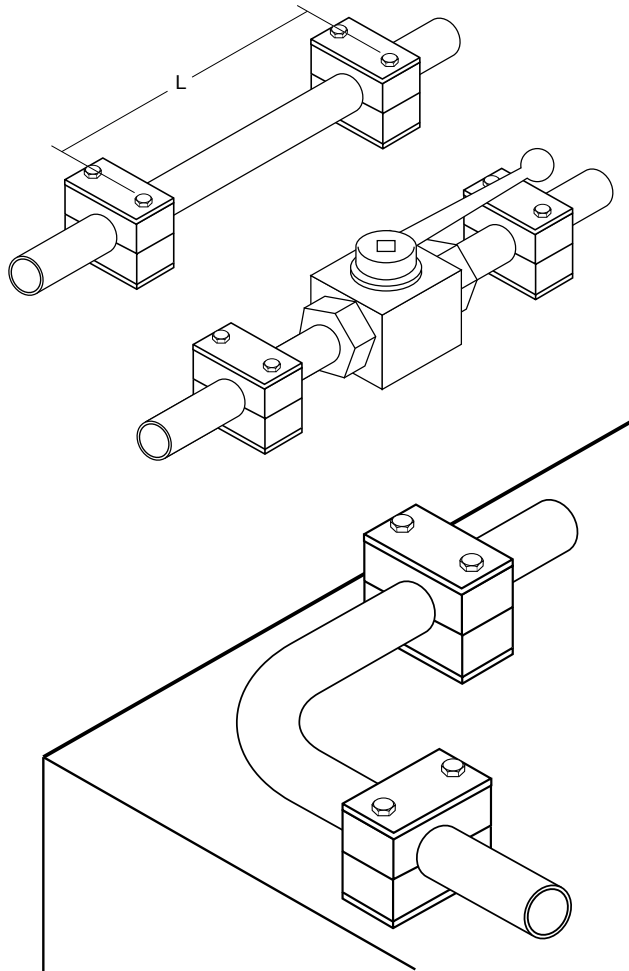
Ordering

Clamps can be ordered as complete arrangements, or separate components. See each series for details.

Technical Specifications

Mounting Guidelines

- The first clamp should be mounted directly after the threaded connection or coupling. This protects the connection from vibrations.
- Bends in the line should be clamped on BOTH sides of the bend.
- The line should be clamped directly before and after any inline valves.
- Proper torquing of the clamp bolts is important, and is part of the DIN 3015 Standard (see the chart for torque information)



Distance Between Clamps

Pipe Size	Distance (L)	Tube Size	Distance (L)
1/4"	4'	1/16"	3'
1/2"	4'	1/8"	3'
3/4"	5'	1/4"	3'
1"	5'	3/8"	3'
1 1/4"	7'	1/2"	3'
1 1/2"	8'	5/8"	4'
2"	10'	3/4"	4'
2 1/2"	10'	7/8"	4'
3"	12'	1"	5'
4"	13'	1 1/4"	7'
5"	13'	1 1/2"	7'
6"	14'	1 3/4"	7'
		2"	7'

Bolt Tightening Torque Specifications

Series	Size	Thread	PP	PA	AL
HRL (Std. Duty)	0 to 6	1/4-20	8	10	12
HRS (Heavy Duty)	1 & 2	3/8-16	12	20	30
	3	3/8-16	15	25	35
	4	7/16-14	30	40	55
	5	5/8-11	45	55	120
	6	3/4-10	80	150	220
	7	7/8-9	110	200	250
	8	M30	180	350	500
	9	M30	200	370	500
HRZ (Twin)	10	M30	270	470	600
	1	1/4-20	5	6	-
	2 to 4	5/16-18	12	12	-
	5	5/16-18	8	8	-

Note: Torque is given in Nm (Nm x 0.7376 = Ft-lbs)

Properties of Materials (clamp pairs)

Properties	Polypropylene PP	Polyamide PA	Aluminum AL
Mechanical Properties			
Tensile Strength	4200 psi	7800-11500 psi	-
Flexural Yield Strength	7600 psi	20500 psi	-
Impact Strength (Izod Method)	No Failure	No Failure	-
Tensile Test	-	-	28000 psi
Brinell Hardness No.	-	-	60 BHN
Modules of Elasticity	-	-	9.7 x 10 ⁶ - 11.1 x 10 ⁶ psi
Thermal Properties			
Continuous Service Temperature Range	-22° to 194°F -30° to 90°C	-40° to 284°F -40° to 140°C	-67° to 500°F -55° to 260°C
Electrical Properties			
Volume Resistivity	1015 Ohm-cm	1015 Ohm-cm	-
Chemical Properties			
Chemical Resistance	Resistant to most aqueous solutions of inorganic salts, minerals, and organic acids, even at high temperatures.	Resistant to organic solvents, dilute acids, and bases. Resistant to radiation.	Resistant to neutral and sea water, organic acids, esters, oils, and inorganic salt solutions.

DIN 3015 & SERIES STRIP CLAMPS

Bulk Packaging for DIN 3015 Clamps

Bulk Arrangements

Multiple individual components, unassembled, that build a clamp assembly. Packaged and shipped in one box as separate components in bagged quantities. For quantities other than bagged quantities, the difference shall be sold in "kits". Example: Arrangement orders for HRL 1 clamps should be in multiples of 50. If you order quantity 50 HRL 1 assemblies, you will receive 50 clamp pairs, 50 weld plates, 50 top plates and 100 bolts in bags. Labeled with arrangement number.


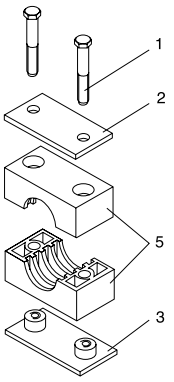

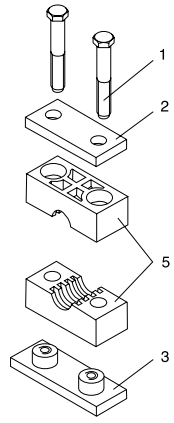

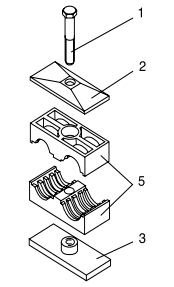
Bulk Packaging

Multiple individual components, unassembled, sold in bagged quantities. Packaged in bagged quantities. Bulk orders for individual clamp components are acceptable. An example would be a "Bulk" order for (50) HRL 1 Weld Plates. Labeled with arrangement number.



Note: Clamps come unassembled in bulk packages either in bags or boxes.

Quantities for Bulk Arrangements and Bulk Packaging

Type	Series/ Size	(Item 5) Clamp Pairs Per Bag/ Box	(Item 3) Weld Plates Per Bag/ Box	(Item 2) Top Plates Per Bag/ Box	(Item 1) Hex Bolts Per Bag/ Box	Quantity of Arrangements	Items Description
 Standard Duty	HRL 0	50	50	50	100	50	
	HRL 1	50	50	50	100	50	
	HRL 2	50	50	50	100	50	
	HRL 3	50	50	50	100	50	
	HRL 4	25	25	25	50	25	
	HRL 5	25	25	25	50	25	
	HRL 6	25	25	25	50	25	
 Heavy Duty	HRS 1	25	25	25	50	25	
	HRS 2	25	25	25	50	25	
	HRS 3	25	25	25	50	25	
	HRS 4*	25	25	25	50	25	
	HRS 5*	25	25	25	50	25	
	HRS 6*	10	10	10	20	10	
	HRS 7*	10	10	10	20	10	
	HRS 8*	10	10	10	20	10	
 Twin	HRZ 1	50	25	50	50	50	
	HRZ 2	50	25	50	50	50	
	HRZ 3	50	25	50	50	50	
	HRZ 4	25	25	25	25	25	
	HRZ 5	25	25	25	25	25	

*Indicates these items are packaged in boxes, all other items packaged in bags.

Kit Packaging for DIN 3015 Clamps


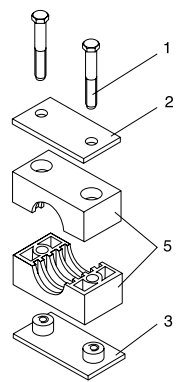

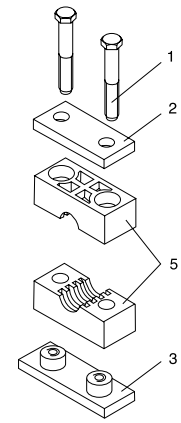

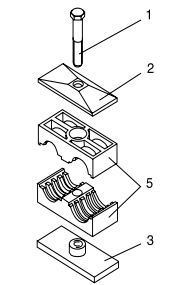
Kit Packaging

Multiple individual components, unassembled, that build a clamp assembly. Packaged as individual kits, each building one clamp per bag. Any quantity less than a bagged quantity will be sold in "kits". Please note that kits have new part numbers. Example: If you order quantity 5 HRL 1 kits, you will receive five bags that include the following: 1 clamp pair, 1 weld plate, 1 top plate and 2 bolts.)



Note: Kits come unassembled in a single bag or box.

Quantities for Kit Packaging

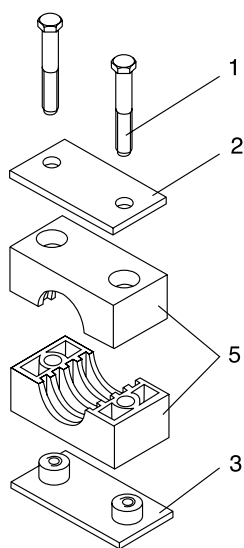
Type	Series/ Size	(Item 5) Clamp Pairs Per Bag	(Item 3) Weld Plates Per Bag	(Item 2) Top Plates Per Bag	(Item 1) Hex Bolts Per Bag	Quantity of Arrangements	Items Description
 Standard Duty	HRL 0	1	1	1	1	1	
	HRL 1	1	1	1	2	1	
	HRL 2	1	1	1	2	1	
	HRL 3	1	1	1	2	1	
	HRL 4	1	1	1	2	1	
	HRL 5	1	1	1	2	1	
	HRL 6	1	1	1	2	1	
 Heavy Duty	HRS 1	1	1	1	2	1	
	HRS 2	1	1	1	2	1	
	HRS 3	1	1	1	2	1	
	HRS 4*	1	1	1	2	1	
	HRS 5*	1	1	1	2	1	
	HRS 6*	1	1	1	2	1	
	HRS 7*	1	1	1	2	1	
	HRS 8*	1	1	1	2	1	
 Twin	HRZ 1	1	1	1	1	1	
	HRZ 2	1	1	1	1	1	
	HRZ 3	1	1	1	1	1	
	HRZ 4	1	1	1	1	1	
	HRZ 5	1	1	1	1	1	

*Indicates these items are packaged in boxes, all other items packaged in bags.

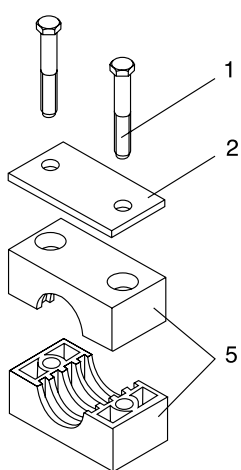
DIN 3015 & SERIES STRIP CLAMPS

HRL Series

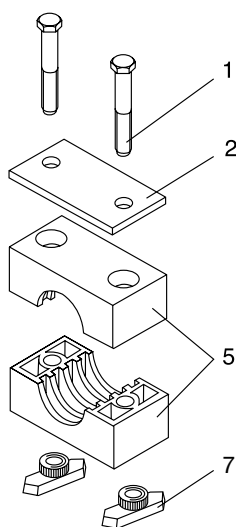
Standard Duty Clamps



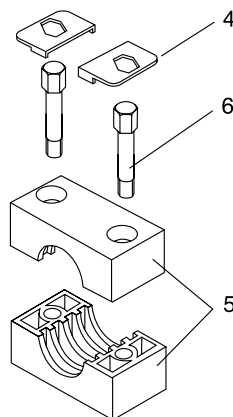
A
Single Clamp with
Weld Plate



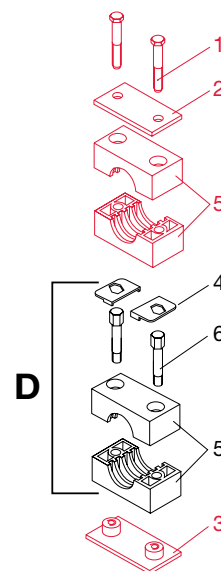
A1
Single Clamp without
Weld Plate



A1TM
Single Clamp for
C-Rail Mounting
(order C-Rail separately)
(size 1 to 8 only)



D
Single Clamp
Stacking Module
(size 0 to 6 only)



A + D
Order one A (red)
arrangement and
one D (black)
arrangement separately.

A maximum of 3 stacking modules is recommended

Parts Legend (see page B1-14 to B1-18 to order parts separately)

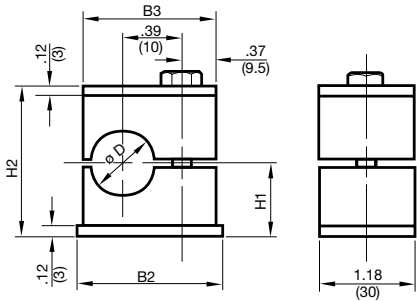
1 Hex Head Bolt	5 Clamp Pair
2 Top Plate	6 Stacking Bolt
3 Weld Plate	7 C-Rail Nut
4 Safety Plate	

Model Code

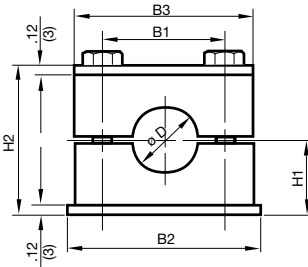
Series	HRL	2	A	12.7	PP	UNC
HRL = Standard duty single clamp with ribbed bore						
HRGL = Standard duty single clamp with smooth bore						
Size Family						
0 to 8 (refer to table A on next page)						
Arrangement						
A = Single clamp with top plate and weld plate						
A1 = Single clamp without weld plate						
A1TM = C-Rail mounted clamp						
D = Single clamp stacking module (size 0-6 only)						
Bore Size						
(refer to table A on next page)						
Clamp Material						
PP = Polypropylene						
PA = Polyamide						
AL = Aluminum						
Metal Component Material						
(omit) = Carbon Steel						
A2 = 304 Stainless Steel						
A4 = 316 Stainless Steel						
Thread Type						
UNC = Standard						
M = Metric						

Dimensions

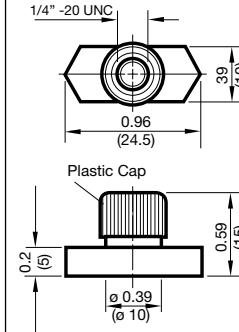
Size 0



Sizes 1-8



C-Rail Nut



C-Rail

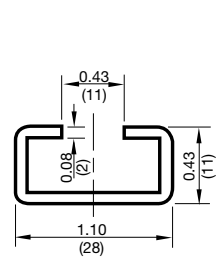


Table A

Size	øD Bore Size	Recommended Nominal Size		B1	B2	B3	H1	H2	Bolt Size Arrangement	Weight Arrangement	
		Tube O.D.	Pipe							A	A1
0	0.24 (6)	-	-	N/A	1.18 (30)	1.10 (28)	0.63 (16)	1.26 (32)	1/4-20 x 1-1/4 (M6 x 30)	0.14 (0.06)	0.12 (0.05)
	0.25 (6.4)	1/4"	-								
	0.31 (8.0)	5/16"	-								
	0.37 (9.5)	3/8"	-								
	0.39 (10)	-	1/8"								
	0.47 (12)	-	-								
1	0.24 (6)	-	-	0.79 (20)	1.42 (36)	1.34 (34)	0.63 (16)	1.26 (32)	1/4-20 x 1-1/4 (M6 x 30)	0.18 (0.08)	0.13 (0.06)
	0.25 (6.4)	1/4"	-								
	0.31 (8.0)	5/16"	-								
	0.37 (9.5)	3/8"	-								
	0.39 (10)	-	1/8"								
	0.47 (12)	-	-								
2	0.50 (12.7)	1/2"	-	1.02 (26)	1.65 (42)	1.57 (40)	0.77 (19.5)	1.53 (39)	1/4-20 x 1-1/2 (M6 x 35)	0.27 (0.12)	0.16 (0.07)
	0.54 (13.7)	-	1/4"								
	0.55 (14)	-	-								
	0.59 (15)	-	-								
	0.63 (16)	5/8"	-								
	0.67 (17.1)	-	3/8"								
0.71 (18)	-	-									
3	0.75 (19)	3/4"	-	1.30 (33)	1.97 (50)	1.89 (48)	0.85 (21.5)	1.69 (43)	1/4-20 x 1-5/8u (M6 x 40)	0.31 (0.14)	0.22 (0.10)
	0.79 (20)	-	-								
	0.84 (21.3)	-	1/2"								
	0.87 (22)	-	-								
	0.91 (23)	-	-								
	0.98 (25)	-	-								
1.0 (25.4)	1"	-									
4	1.05 (26.6)	-	3/4"	1.57 (40)	2.32 (59)	2.24 (57)	0.94 (24)	1.89 (48)	1/4-20 x 1-3/4 (M6 x 45)	0.33 (0.15)	0.27 (0.12)
	1.10 (28)	-	-								
	1.18 (30)	-	-								
5	1.26 (32)	1-1/4"	-	2.05 (52)	2.83 (72)	2.75 (70)	1.26 (32)	2.52 (64)	1/4-20 x 2-1/2 (M6 x 60)	0.42 (0.19)	0.31 (0.14)
	1.33 (33.7)	-	1"								
	1.38 (35)	-	-								
	1.50 (38)	1-1/2"	-								
	1.57 (40)	-	-								
1.65 (42)	-	1-1/4"									
6	1.75 (44.5)	1-3/4"	-	2.60 (66)	3.46 (88)	3.38 (86)	1.42 (36)	2.83 (72)	1/4-20 x 2-3/4 (M6 x 70)	0.53 (0.24)	0.40 (0.18)
	1.9 (48.3)	-	1-1/2"								
	2.0 (50.8)	2"	-								
7	2.37 (60.3)	-	2	3.7 (94)	4.8 (122)	4.64 (118)	1.97 (50)	3.94 (100)	1/4-20 x 4 (M6 x 100)	0.82 (0.37)	0.53 (0.24)
	2.5 (63.5)	2 1/2"	-								
	2.87 (73)	-	2 1/2"								
	3 (76.1)	3"	-								
8	3.5 (88.9)	-	3"	4.72 (120)	5.8 (148)	5.67 (143.96)	2.44 (62)	4.88 (124)	1/4-20 x 5 (M6 x 125)	1.05 (0.48)	0.72 (0.33)

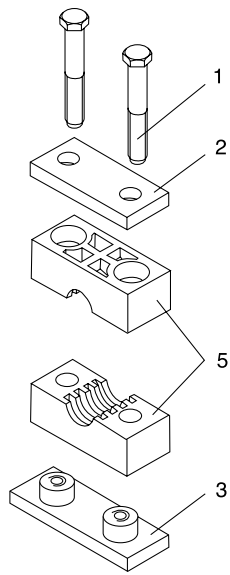
Notes:

1. Other bore diameters are available — Consult factory for details.
2. Dimensions are in inches (mm) and lbs (kg).
3. Dimensions are for general information only, all critical dimensions should be verified by requesting a certified print.

DIN 3015 & SERIES STRIP CLAMPS

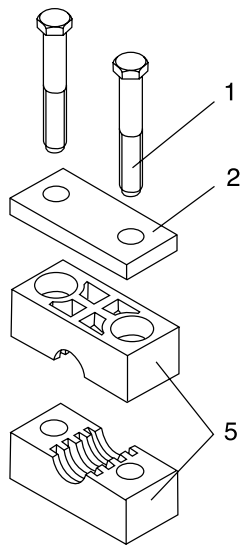
HRS Series

Heavy Duty Clamps



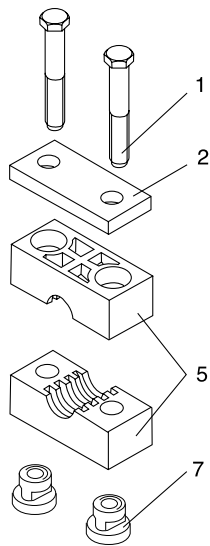
S

Single Clamp
with Weld Plate



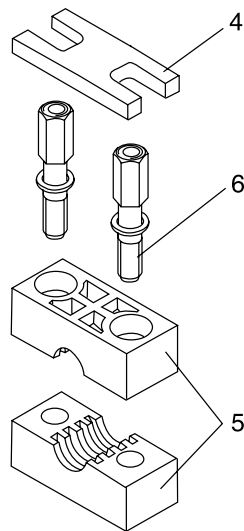
S1

Single Clamp
without Weld Plate



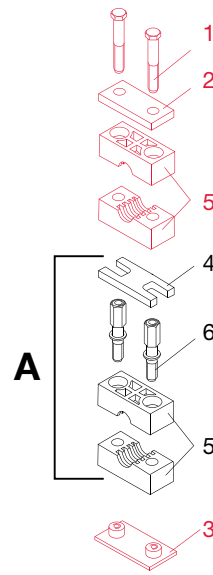
S1TM

Single Clamp for
C-Rail Mounting
(size 1 to 4 only)
(order C-Rail separately)



A

Single Clamp
Stacking Module
(size 1 to 7 only)



S + A

Order one S (red)
arrangement and one
A (black) arrangement
separately.

A maximum of 3 stacking modules is recommended

Parts Legend (see page B1-14 to B1-18 to order parts separately)

1 Hex Head Bolt	5 Clamp Pair
2 Top Plate	6 Stacking Bolt
3 Weld Plate	7 C-Rail Nut
4 Safety Plate	

Model Code

Series _____ **HRS 1 S 12.7 PP UNC**

HRS = Heavy duty single clamp with ribbed bore
HRGS = Heavy duty single clamp with smooth bore

Size Family _____
1 to 10 (refer to table B on next page)

Arrangement _____
S = Single clamp with top plate & weld plate
S1 = Single clamp without weld plate
S1TM = C-Rail mounted clamp (sizes 1-4 only)
A = Single clamp stacking module (sizes 1-7 only)

Bore Size (in mm) _____
(refer to table B on next page)

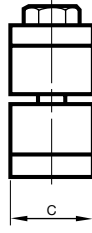
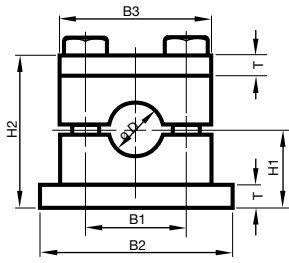
Clamp Material _____
PP = Polypropylene
PA = Polyamide
AL = Aluminum

Metal Component Material _____
(omit) = Carbon Steel
A4 = 316 Stainless Steel

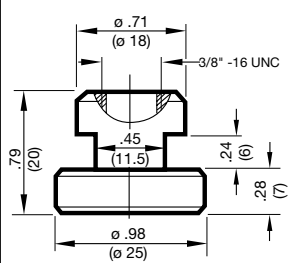
Thread Type _____
UNC = Standard
M = Metric (sizes 8, 9 and 10 available in Metric only)

Dimensions

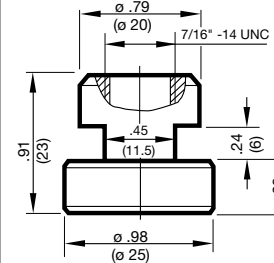
All Sizes



C-Rail Nut (sizes 1-3)



C-Rail Nut (size 4)



C-Rail (all sizes)

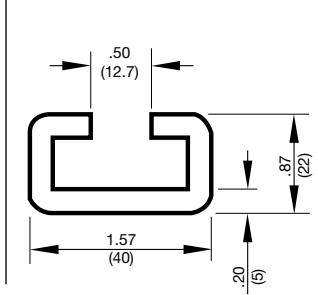


Table B

Size	øD Bore Size	Recommended Nominal Size		B1	B2	B3	C	H1	H2	T	Bolt Size	Weight Arrangement	
		Tube O.D.	Pipe									S	S1
1	0.24 (6.0)	—	—	1.30 (33)	2.87 (73)	2.17 (55)	1.18 (30)	0.94 (24)	1.89 (48)	0.31 (8)	3/8-16 x 1-3/4 (M10 x 45)	0.52 (0.24)	0.26 (0.12)
	0.25 (6.4)	1/4"	—										
	0.32 (8.0)	5/16"	—										
	0.37 (9.5)	3/8"	—										
	0.39 (10)	—	—										
	0.41 (10.3)	—	1/8"										
	0.5 (12.7)	1/2"	—										
	0.54 (13.7)	—	1/4"										
	0.55 (14)	—	—										
	0.59 (15)	—	—										
0.63 (16)	5/8"	—											
0.67 (17.1)	—	3/8"											
0.71 (18)	—	—											
2	0.75 (19)	3/4"	—	1.77 (45)	3.35 (85)	2.76 (70)	1.18 (30)	1.26 (32)	2.52 (64)	0.31 (8)	3/8-16x2-1/4 (M10 x 60)	0.72 (0.33)	0.34 (0.16)
	0.79 (20)	—	1/2"										
	0.84 (21.3)	—	—										
	0.87 (22)	7/8"	—										
	0.98 (25)	—	—										
	1.0 (25.4)	1"	—										
	1.05 (26.7)	—	3/4"										
	1.1 (28)	—	—										
1.18 (30)	—	—											
3	0.98 (25)	—	—	2.36 (60)	3.94 (100)	3.35 (85)	1.18 (30)	1.50 (38)	2.99 (76)	0.31 (8)	3/8-16 x 2-3/4 (M10 x 70)	0.97 (0.44)	0.52 (0.24)
	1.18 (30)	—	—										
	1.26 (32)	1-1/4"	—										
	1.33 (33.7)	—	1"										
	1.38 (35)	—	—										
	1.5 (38)	1-1/2"	—										
	1.57 (40)	—	—										
1.65 (42)	—	1-1/4"											
4	1.18 (30)	—	—	3.56 (90.5)	5.51 (140)	4.52 (115)	1.77 (45)	2.17 (55)	4.33 (110)	0.39 (10)	7/16-14 x 4 (M12 x 100)	2.58 (1.17)	1.35 (0.61)
	1.5 (38)	1-1/2"	—										
	1.65 (42)	—	1-1/4"										
	1.75 (44.5)	1-3/4"	—										
	1.9 (48.3)	—	1-1/2"										
	2.0 (50.8)	2"	—										
	2.13 (54)	—	—										
	2.24 (57)	2-1/4"	—										
	2.37 (60.3)	—	2"										
	2.5 (63.5)	2-1/2"	—										
2.56 (65)	—	—											
2.75 (70)	2-3/4"	—											
5	1.5 (38)	1-1/2"	—	4.80 (122)	7.09 (180)	5.98 (152)	2.36 (60)	2.76 (70)	5.51 (140)	0.39 (10)	5/8-11 x 5-1/4 (M16 x 130)	4.37 (1.99)	2.50 (1.14)
	2.6 (66)	—	—										
	2.76 (70)	—	—										
	2.87 (73)	—	2-1/2"										
	3.0 (76.1)	3"	—										
3.5 (88.9)	—	3"											
6	2.56 (65)	—	—	6.61 (168)	8.86 (225)	8.07 (205)	3.15 (80)	3.94 (100)	7.87 (200)	0.59 (15)	3/4-10x7-1/2 (M20 x 190)	11.11 (5.05)	6.76 (3.07)
	3.78 (96)	—	—										
	4.0 (101.6)	4"	3-1/2"										
	4.25 (108)	4-1/4"	—										
	4.5 (114.3)	4-1/2"	4"										
7	3.54 (90)	—	—	8.07 (205)	10.63 (270)	9.92 (252)	3.54 (90)	4.53 (115)	9.06 (230)	0.59 (15)	7/8-9x8-1/2 (M24 x 220)	15.89 (7.22)	9.58 (4.36)
	5.35 (136)	—	—										
	5.5 (139.7)	—	5"										
	6.61 (168)	—	6"										
8	7.63 (193.7)	7-5/8"	7"	10.43 (265)	13.39 (340)	12.60 (320)	4.72 (120)	6.30 (160)	12.60 (320)	0.98 (25)	M30 x 300	58.47 (26.58)	37.43 (17.01)
	8.62 (219.1)	—	8"										
9	10.75 (273.0)	—	10"	15.55 (395)	20.47 (520)	18.35 (466)	6.30 (160)	9.25 (235)	18.50 (470)	1.18 (30)	M30 x 450	112.92 (51.33)	67.01 (30.46)
	12.75 (323.9)	—	12"										
10	14 (355.6)	—	14"	20.87 (530)	26.77 (680)	24.80 (630)	7.09 (180)	11.42 (290)	22.23 (580)	1.18 (30)	M30 x 560	149.59 (67.99)	86.54 (39.34)
	16 (406.4)	—	16"										

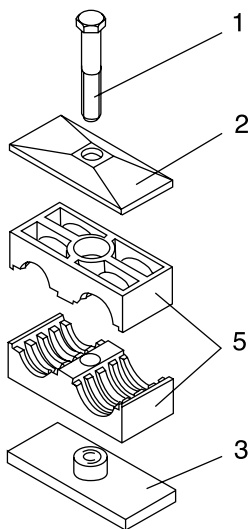
Notes:

1. Other bore diameters are available — Consult factory for details.
2. Dimensions are in inches (mm) and lbs (kg).
3. Dimensions are for general information only, all critical dimensions should be verified by requesting a certified print.

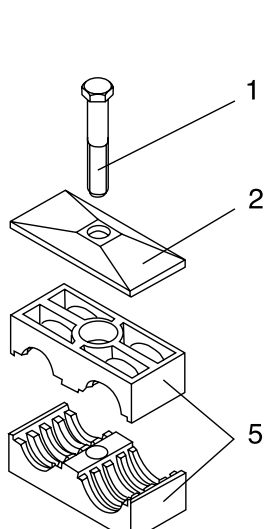
DIN 3015 & SERIES STRIP CLAMPS

HRZ Series

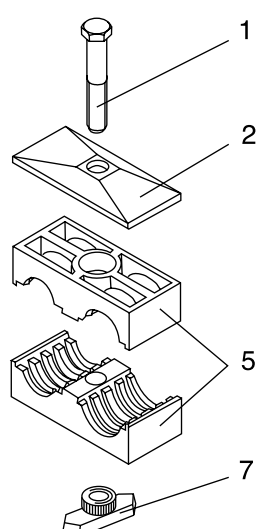
Twin Clamps



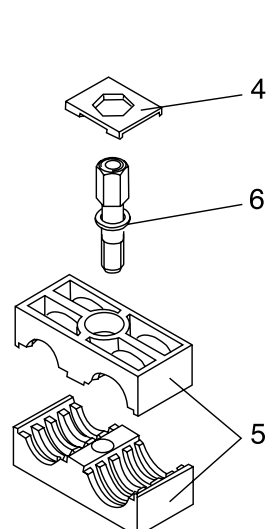
A
Twin Clamp
with Weld Plate



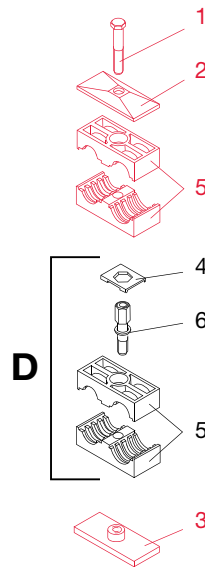
A1
Twin Clamp
without Weld Plate



A1TM
Twin Clamp for
C-Rail Mounting
(order C-Rail separately)
(size 1 to 5 only)



D
Twin Clamp
Stacking Module



A + D
Order one A (red)
arrangement and
one D (black)
arrangement separately.

A maximum of 3 stacking modules is recommended

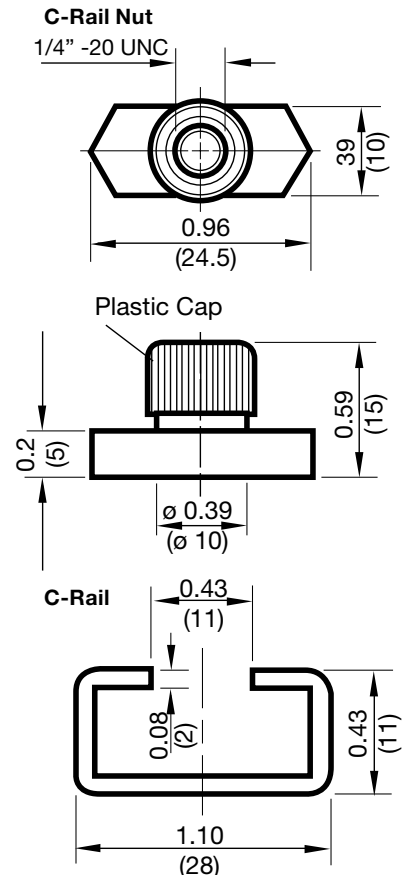
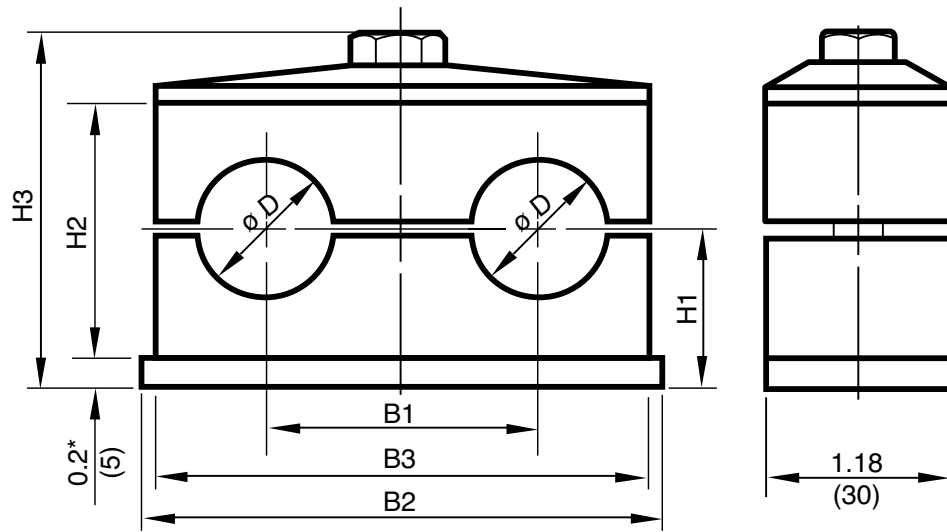
Parts Legend (see page B1-14 to B1-18 to order parts separately)

- | | |
|-----------------|-----------------|
| 1 Hex Head Bolt | 5 Clamp Pair |
| 2 Top Plate | 6 Stacking Bolt |
| 3 Weld Plate | 7 C-Rail Nut |
| 4 Safety Plate | |

Model Code

	HRZ	1	A	9.5 - 9.5	PP	UNC
Series	_____					
HRZ = Standard duty twin clamp with ribbed bore						
HRGZ = Standard duty twin clamp with smooth bore						
Size Family	_____					
1 to 5 (refer to table C on next page)						
Arrangement	_____					
A = Twin clamp with weld plate						
A1 = Twin clamp without weld plate						
A1TM = C-Rail mounted twin clamp						
D = Twin clamp stacking module						
Bore Size (in mm)	_____					
(refer to table C on next page)						
Clamp Material	_____					
PP = Polypropylene						
PA = Polyamide						
AL = Aluminum						
Metal Component Material	_____					
(omit) = Carbon Steel						
A2 = 304 Stainless Steel						
A4 = 316 Stainless Steel						
Thread Type	_____					
UNC = Standard						
M = Metric						

Dimensions HRZ Series All Sizes



* Size 1 UNC weld plate has a thickness of 0.118 (3)

Table C

Size	øD Bore Size	Recommended Nominal Size		B1	B2	B3	H1	H2	H3	Bolt Size
		Tube O.D.	Pipe							
1	0.24 (6)	-	-	0.79 (20)	1.46 (37)	1.42 (36)	0.73 (18.5)	1.06 (27)	1.69 (43)	1/4-20 x 1-3/8 (M6 x 35)
	0.25 (6.4)	1/4"	-							
	0.32 (8)	5/16"	-							
	0.37 (9.5)	3/8"	-							
	0.39 (10)	-	1/8"							
	0.41 (10.3)	-	1/8"							
0.47 (12)	-	-								
2	0.50 (12.7)	1/2"	-	1.14 (29)	2.17 (55)	2.09 (53)	0.71 (18)	1.02 (26)	1.71 (43.5)	5/16-18 x 1-3/8 (M8 x 35)
	0.54 (13.7)	-	1/4"							
	0.55 (14)	-	-							
	0.59 (15)	-	-							
	0.63 (16)	5/8"	-							
0.67 (17.1)	-	3/8"								
3	0.75 (19)	3/4"	-	1.42 (36)	2.76 (70)	2.64 (67)	0.93 (23.5)	1.46 (37)	2.15 (54.5)	5/16-18 x 1-3/8 (M8 x 45)
	0.79 (20)	-	-							
	0.84 (21.3)	-	1/2"							
	0.87 (22)	7/8"	-							
	0.91 (23)	-	-							
	0.98 (25)	-	-							
1.0 (25.4)	1"	-								
4	1.05 (26.7)	-	3/4"	1.77 (45)	3.35 (85)	3.23 (82)	1.02 (26)	1.65 (42)	2.34 (59.5)	5/16-18 x 2 (M8 x 50)
	1.1 (28)	-	-							
	1.18 (30)	-	-							
5	1.26 (32)	1-1/4"	-	2.20 (56)	4.33 (110)	4.17 (106)	1.26 (32)	2.13 (54)	2.81 (71.5)	5/16-18 x 2-1/2 (M8 x 60)
	1.33 (33.7)	-	1"							
	1.38 (35)	-	-							
	1.5 (38)	1-1/2"	-							
	1.57 (40)	-	-							
	1.65 (42)	-	1-1/4"							

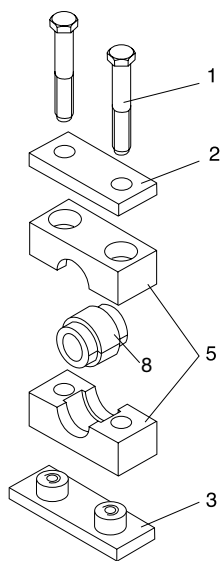
Notes:

1. Other bore diameters are available — Consult factory for details.
2. Dimensions are in inches (mm) and lbs (kg).
3. Dimensions are for general information only, all critical dimensions should be verified by requesting a certified print.

DIN 3015 & SERIES STRIP CLAMPS

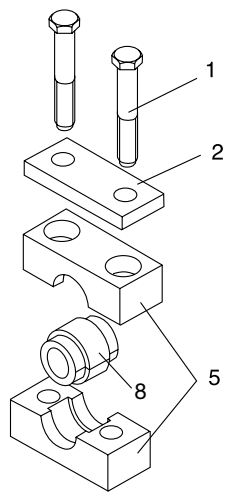
HREL Series

Standard Duty Clamps with Rubber Inserts



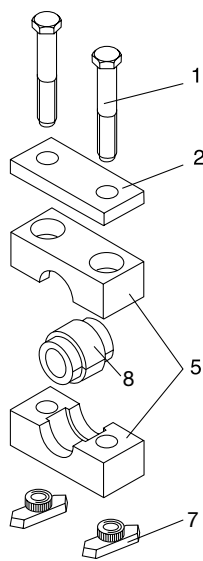
A

Single Clamp
with Weld Plate



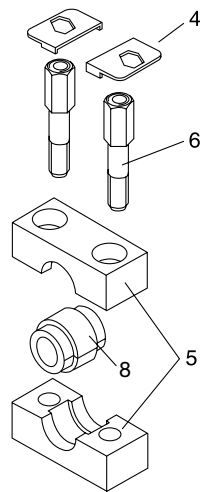
A1

Single Clamp
without Weld Plate



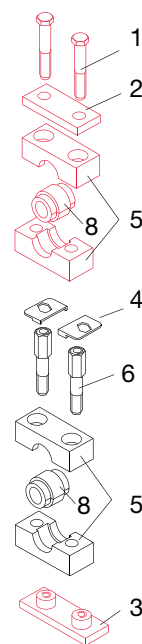
A1TM

Single Clamp
for C-Rail Mounting
(order C-Rail separately)
(size 1 to 8 only)



D

Single Clamp
Stacking Module



A + D

Order one A (red)
arrangement and
one D (black)
arrangement separately.

A maximum of 3 stacking modules is recommended

Parts Legend (B1-14 to B1-18 to order parts separately)

- | | |
|-----------------|-----------------|
| 1 Hex Head Bolt | 5 Clamp Pair |
| 2 Top Plate | 6 Stacking Bolt |
| 3 Weld Plate | 7 C-Rail Nut |
| 4 Safety Plate | 8 Rubber Insert |

Model Code

Series HREL

Size Family 4
4, 6 (refer to table D on next page)

Arrangement A
A = Single clamp with top plate and weld plate
A1 = Single clamp stacking kit
A1TM = C-Rail mounted clamp
D = Single clamp stacking module

Bore Size (in mm) 12.7
(refer to table D on next page)

Clamp Material PP
PP = Polypropylene
PA = Polyamide

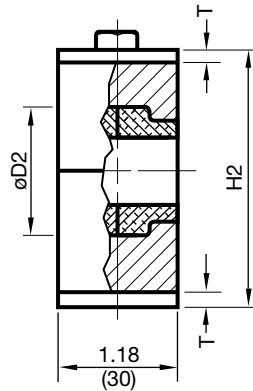
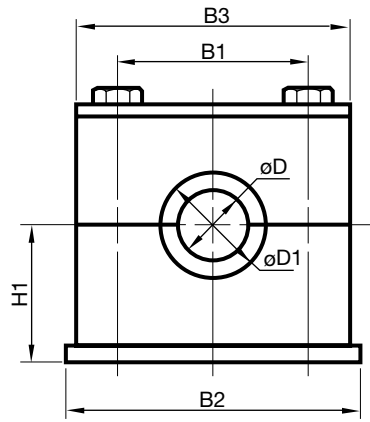
Metal Components Materials UNC

(omit) = Carbon Steel
A2 = 304 Stainless Steel
A4 = 316 Stainless Steel

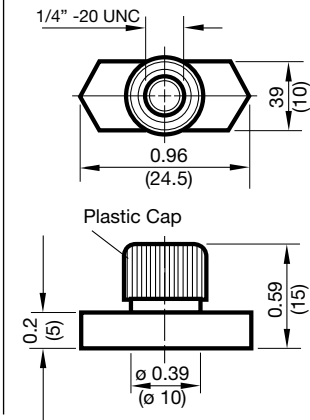
Thread Type UNC
UNC = Standard
M = Metric

Dimensions

All Sizes



C-Rail Nut



C-Rail

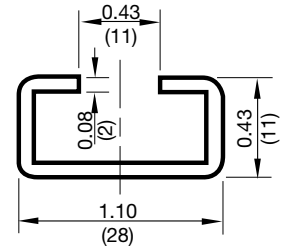


Table D

Clamp Size	EE-Rubber Insert		Recommended Nominal Size				øD1	øD2	H1	H2	B1	B2	B3	T	Bolt Size
	Size	Bore Size øD	Tube O.D.	Pipe	Hose O.D. Min. Max.										
4	2/4 L	0.24 (6)	—	—	0.22	0.24	1.00 (25.5)	1.22 (31)	0.925 (23.5)	1.85 (47)	1.57 (40)	2.32 (59)	2.24 (57)	0.118 (3)	1/4-20 x 1 3/4 (M6 x 45)
		0.32 (8)	5/16"	—	0.30	0.32									
		0.39 (10)	—	1/8"	0.37	0.39									
		0.47 (12)	—	—	0.45	0.47									
		0.50 (12.7)	1/2"	—	0.48	0.50									
		0.55 (14)	—	—	0.53	0.55									
		0.59 (15)	—	—	0.57	0.59									
		0.63 (16)	5/8"	—	0.61	0.63									
		0.68 (17.2)	—	3/8"	0.66	0.68									
0.75 (19)	3/4"	—	0.73	0.75											
6	3/6 L	0.79 (20)	—	1/2"	0.77	0.79	1.54 (39)	1.81 (46)	1.40 (35.5)	2.80 (71)	2.60 (66)	3.46 (88)	3.39 (86)	0.118 (3)	1/4-20x2 3/4 (M6 x 70)
		0.87 (22)	7/8"	—	0.85	0.87									
		0.98 (25)	1"	—	0.96	0.98									
		1.06 (27)	—	3/4"	1.04	1.06									
		1.10 (28)	—	—	1.08	1.10									
		1.18 (30)	—	—	1.16	1.18									
1.26 (32)	1 1/4"	—	1.24	1.26											

Notes:

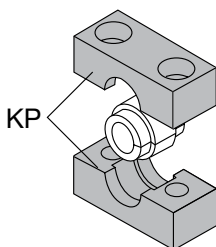
1. Other bore diameters are available — Consult factory for details.

2. Dimensions are in inches (mm) and lbs (kg).

3. Dimensions are for general information only, all critical dimensions should be verified by requesting a certified print.

Parts

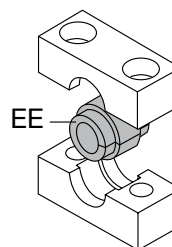
KP = Clamp Pair



HREL 4 KP PP

Series _____
 Size _____
 4, 6 (refer to table above)
 Clamp Pair _____
 Clamp Material _____
 PP = Polypropylene
 PA = Polyamide

EE = Rubber Insert (Santoprene TPE 73)



HRES 2/4 L EE 12

Series* _____
 Size _____
 2/4 L, 3/6 L (refer to table above)
 Rubber Insert _____
 Bore Size (in mm) _____
 (refer to table above)

*HREL series use the same rubber inserts as the HRES series, therefore the model code for them is HRES.

Note:

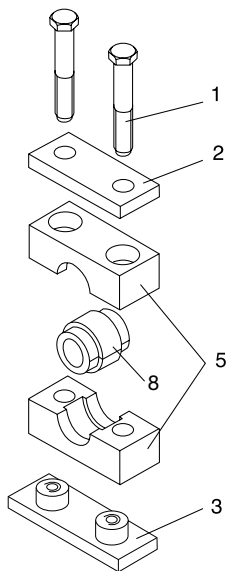
All other components for these clamps are the same as for HRL series standard duty single clamps.

Refer to page B1-14 to B1-18 for details.

DIN 3015 & SERIES STRIP CLAMPS

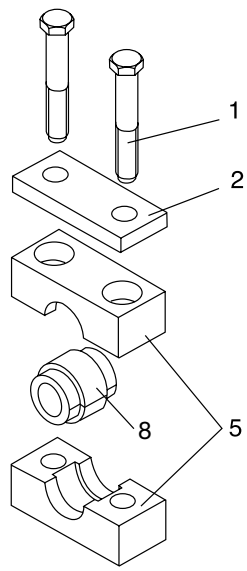
HRES Series

Heavy Duty Clamps with Rubber Inserts



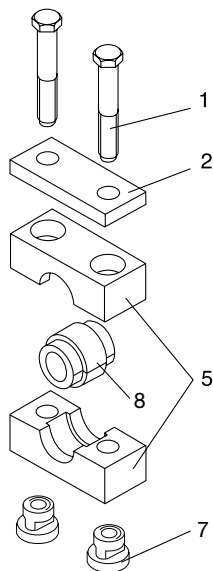
S

Single Clamp
with Weld Plate



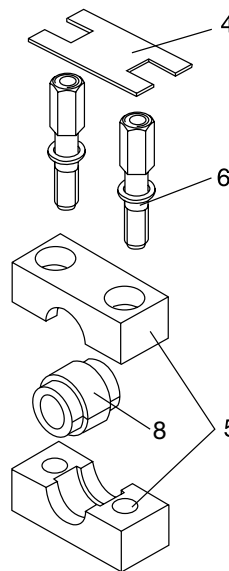
S1

Single Clamp
without Weld Plate



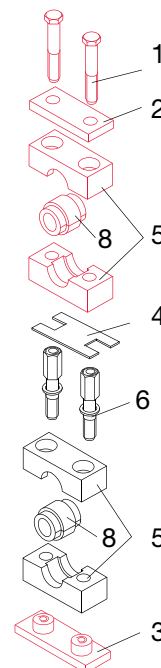
S1TM

Single Clamp for
C-Rail Mounting
(size 1 to 4 only)
(order C-Rail separately)



A

Single Clamp
Stacking Module
(size 1 to 5 only)



S + A

Order one S (red)
arrangement and one
A (black) arrangement
separately.

A maximum of 3 stacking modules is recommended

Parts Legend (see page B1-14 to B1-18 to order parts separately)

1 Hex Head Bolt	5 Clamp Pair
2 Top Plate	6 Stacking Bolt
3 Weld Plate	7 C-Rail Nut
4 Safety Plate	8 Rubber Insert

Model Code

Series _____ **HRES**

Size Family _____ **4**
2 to 7 (refer to table E on next page)

Arrangement _____ **S**
S = Single clamp with weld plate
S1 = Single clamp stacking kit
S1TM = C-Rail mounted clamp
A = Single clamp stacking module

Bore Size (in mm) _____ **35**
(refer to table E on next page)

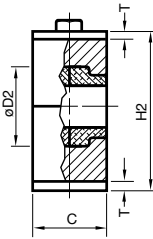
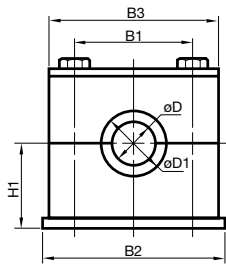
Clamp Material _____ **PP**
PP = Polypropylene
PA = Polyamide

Metal Component Material _____ **UNC**
(omit) = Carbon Steel
A4 = 316 Stainless Steel

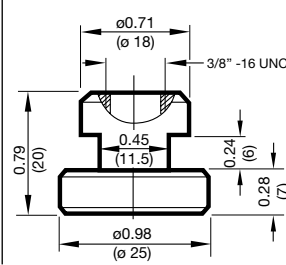
Thread Type _____ **UNC**
UNC = Standard
M = Metric

Dimensions

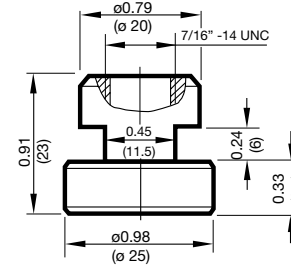
All Sizes



C-Rail Nut (sizes 1-3)



C-Rail Nut (size 4)



C-Rail (all sizes)

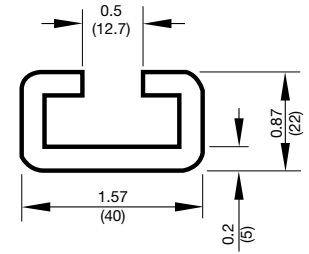


Table E

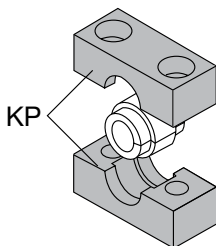
Clamp Size	EE-Rubber Insert Size	Bore Size ØD in	Recommended Nominal Size				ØD1	ØD2	C	H1	H2	B1	B2	B3	T	Bolt Size
			Tube O.D.	Pipe	Hose O.D.											
					Min.	Max.										
2	2/4 L	0.24 (6)	-	-	0.22	0.24	1.00 (25.5)	1.22 (31)	1.18 (30)	0.925 (23.5)	1.85 (47)	1.57 (40)	2.32 (59)	2.24 (57)	0.118 (3)	3/8-16 x 2 1/4 (M10 x 60)
		0.32 (8)	5/16"	-	0.30	0.32										
		0.39 (10)	-	1/8"	0.37	0.39										
		0.47 (12)	-	-	0.45	0.47										
		0.50 (12.7)	1/2"	-	0.48	0.50										
		0.55 (14)	-	-	0.53	0.55										
		0.59 (15)	-	-	0.57	0.59										
		0.63 (16)	5/8"	-	0.61	0.63										
0.68 (17.2)	-	3/8"	0.66	0.68												
0.75 (19)	3/4"	-	0.73	0.75												
3	3/6 L	0.79 (20)	-	1/2"	0.77	0.79	1.54 (39)	1.81 (46)	1.18 (30)	1.40 (35.5)	2.80 (71)	2.60 (66)	3.46 (88)	3.39 (86)	0.118 (3)	3/8-16 x 2 1/4 (M6 x 70)
		0.87 (22)	7/8"	-	0.85	0.87										
		0.98 (25)	1"	-	0.96	0.98										
		1.06 (26.9)	-	3/4"	1.04	1.06										
		1.10 (28)	-	-	1.08	1.10										
		1.18 (30)	-	-	1.16	1.18										
1.26 (32)	1 1/4"	-	1.24	1.26												
4	4	1.33 (33.7)	-	1"	1.31	1.33	2.56 (65)	2.91 (74)	1.77 (45)	2.11 (53.5)	4.21 (107)	3.56 (90.5)	5.51 (140)	4.53 (115)	0.39 (10)	7/16-14x4 (M12 x 100)
		1.38 (35)	-	-	1.36	1.38										
		1.50 (38)	1 1/2"	-	1.48	1.50										
		1.58 (40)	-	-	1.56	1.58										
		1.65 (42)	-	-	1.63	1.65										
		1.79 (45.5)	-	-	1.77	1.79										
		1.89 (48)	-	1 1/2"	1.87	1.89										
		2.01 (51)	2"	-	1.99	2.01										
		2.10 (53.4)	-	-	2.08	2.10										
		2.22 (56.4)	-	-	2.20	2.22										
5	5	2.36 (60)	-	2"	2.34	2.36	3.50 (89)	3.86 (98)	2.36 (60)	2.70 (68.5)	5.39 (137)	4.80 (122)	7.09 (180)	5.98 (152)	0.39 (10)	5/8-11x5 1/2 (M16 x 130)
		2.56 (65)	-	-	2.54	2.56										
		2.76 (70)	-	-	2.74	2.76										
		2.87 (73)	-	2 1/2"	2.85	2.87										
		2.99 (76)	3"	-	2.97	2.99										
6	6	3.27 (83)	-	-	3.19	3.27	4.57 (116)	5.20 (132)	3.15 (80)	3.88 (98.5)	7.76 (197)	6.61 (168)	8.86 (225)	8.07 (205)	0.59 (15)	3/4-10x7 1/2 (M20 x 190)
		3.50 (89)	3 1/2"	3"	3.43	3.50										
		3.70 (94)	-	-	3.62	3.70										
		3.98 (101)	4"	3 1/2"	3.90	3.98										
7	7	4.26 (108)	-	-	4.17	4.26	6.06 (154)	6.61 (168)	3.54 (90)	4.47 (113.5)	8.94 (227)	8.07 (205)	10.63 (270)	9.92 (252)	0.59 (15)	7/8-9x8 1/2 (M20 x 220)
		4.49 (114)	-	4"	4.41	4.49										
		5.24 (133)	-	-	5.16	5.24										

Notes:

- Other bore diameters are available — Consult factory for details.
- Dimensions are in inches (mm) and lbs (kg).
- Dimensions are for general information only, all critical dimensions should be verified by requesting a certified print.

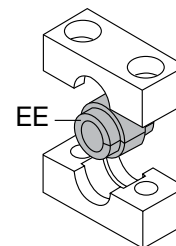
Model Code

KP = Clamp Pair



Series **HRES 3**
 Size **KP**
 Clamp Pair **PP**
 Clamp Material
 PP = Polypropylene
 PA = Polyamide

EE = Rubber Insert (Santoprene TPE 73 - sizes 2-4)
 (Buna NBR 70 - sizes 5-7)



Series **HRES 3/6 L**
 Size **EE**
 Rubber Insert **26.9**
 Bore Size (in mm)
 (refer to table above)

Note:

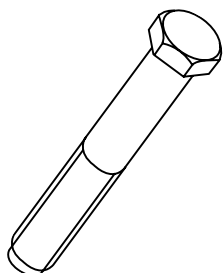
All other components for these clamps are the same as for HRS series heavy duty single clamps. Refer to page B1-14 to B1-18 for details.

DIN 3015 & SERIES STRIP CLAMPS

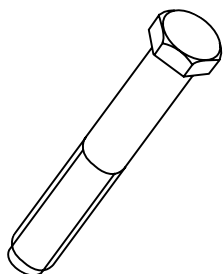
HRL, HRS, & HRZ Series

Parts

Hex Head Bolts

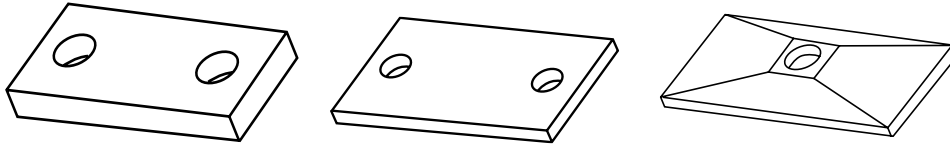


(UNC Threads)		Carbon Steel, Zinc Plated		316 Stainless Steel
Series	Size	Bolt	Model Code	Model Code
HRL	0	1/4"-20 x 1.25"	SCREW H 1/4-20 X 1.25 GR2	SCREW H 1/4-20 X 1.25 SS316
	1	1/4"-20 x 1.25"	SCREW H 1/4-20 X 1.25 GR2	SCREW H 1/4-20 X 1.25 SS316
	2	1/4"-20 x 1.50"	SCREW H 1/4-20 X 1.50 GR2	SCREW H 1/4-20 X 1.50 SS316
	3	1/4"-20 x 1.625"	SCREW H 1/4-20 X 1.625 GR2	SCREW H 1/4-20 X 1.625 SS316
	4	1/4"-20 x 1.75"	SCREW H 1/4-20 X 1.75 GR2	SCREW H 1/4-20 X 1.75 SS316
	5	1/4"-20 x 2.50"	SCREW H 1/4-20 X 2.50 GR2	SCREW H 1/4-20 X 2.50 SS316
	6	1/4"-20 x 2.75"	SCREW H 1/4-20 X 2.75 GR2	SCREW H 1/4-20 X 2.75 SS316
	7	1/4"-20 x 4.00"	SCREW H 1/4-20 X 4.00 GR2	<i>Only available in METRIC – see below</i>
8	1/4"-20 x 5.00"	SCREW H 1/4-20 X 5.00 GR2		
HRS	1	3/8"-16 x 1.75"	SCREW H 3/8-16 X 1.75 GR5	SCREW H 3/8-16 X 1.75 SS316
	2	3/8"-16 x 2.25"	SCREW H 3/8-16 X 2.25 GR5	SCREW H 3/8-16 X 2.25 SS316
	3	3/8"-16 x 2.75"	SCREW H 3/8-16 X 2.75 GR5	SCREW H 3/8-16 X 2.75 SS316
	4	7/16"-14 x 4.00"	SCREW H 7/16-14 X 4.00 GR5	SCREW H 7/16-14 X 4.00 SS316
	5	5/8"-11 x 5.25"	SCREW H 5/8-11 X 5.25 GR5	SCREW H 5/8-11 X 5.25 SS316
	6	3/4"-10 x 7.50"	SCREW H 3/4-10 X 7.50 GR5	SCREW H 3/4-10 X 7.50 SS316
	7	7/8"-9 x 8.50"	SCREW H 7/8-9 X 8.50 GR5	SCREW H 7/8-9 X 8.50 SS316
	8	<i>Only available in METRIC See below</i>		
	9			
	10			
10				
HRZ	1	1/4"-20 x 1.25"	SCREW H 1/4-20 X 1.375 GR2	SCREW H 1/4-20 X 1.25 SS316
	2	5/16"-18 x 1.25"	SCREW H 5/16-18 X 1.375 GR2	SCREW H 5/16-18 X 1.25 SS316
	3	5/16"-18 x 1.75"	SCREW H 5/16-18 X 1.875 GR2	SCREW H 5/16-18 X 1.75 SS316
	4	5/16"-18 x 2.00"	SCREW H 5/16-18 X 2.00 GR2	SCREW H 5/16-18 X 2.00 SS316
	5	5/16"-18 x 2.50"	SCREW H 5/16-18 X 2.50 GR2	SCREW H 5/16-18 X 2.50 SS316



(METRIC Threads)		Carbon Steel, Zinc Plated		316 Stainless Steel
Series	Size	Bolt	Model Code	Model Code
HRL	0	M6 x 30	SCREW H M6 x 30-8.8	SCREW H M6 x 30 A4
	1	M6 x 30	SCREW H M6 x 30-8.8	SCREW H M6 x 30 A4
	2	M6 x 35	SCREW H M6 x 35-8.8	SCREW H M6 x 35 A4
	3	M6 x 40	SCREW H M6 x 40-8.8	SCREW H M6 x 40 A4
	4	M6 x 45	SCREW H M6 x 45-8.8	SCREW H M6 x 45 A4
	5	M6 x 60	SCREW H M6 x 60-8.8	SCREW H M6 x 60 A4
	6	M6 x 70	SCREW H M6 x 70-8.8	SCREW H M6 x 70 A4
	7	M6 x 100	SCREW H M6 x 100-8.8	SCREW H M6 x 100 A4
HRS	8	M6 x 125	SCREW H M6 x 125-8.8	SCREW H M6 x 125 A4
	1	M10 x 45	SCREW H M10 x 45-8.8	SCREW H M10 x 45 A4
	2	M10 x 60	SCREW H M10 x 60-8.8	SCREW H M10 x 60 A4
	3	M10 x 70	SCREW H M10 x 70-8.8	SCREW H M10 x 70 A4
	4	M12 x 100	SCREW H M12 x 100-8.8	SCREW H M12 x 100 A4
	5	M16 x 130	SCREW H M16 x 130-8.8	SCREW H M16 x 130 A4
	6	M20 x 190	SCREW H M16 x 190-8.8	SCREW H M16 x 190 A4
	7	M24 x 220	SCREW H M24 x 220-8.8	SCREW H M24 x 220 A4
	8	M30 x 300	SCREW H M30 x 300-8.8	SCREW H M30 x 300 A4
	9	M30 x 450	SCREW H M30 x 450-8.8	SCREW H M30 x 450 A4
HRZ	10	M30 x 560	SCREW H M30 x 560-8.8	SCREW H M30 x 560 A4
	1	M6 x 35	SCREW H M6 x 35-8.8	SCREW H M6 x 35 A4
	2	M8 x 35	SCREW H M8 x 35-8.8	SCREW H M8 x 35 A4
	3	M8 x 45	SCREW H M8 x 45-8.8	SCREW H M8 x 45 A4
	4	M8 x 50	SCREW H M8 x 50-8.8	SCREW H M8 x 50 A4
5	M8 x 60	SCREW H M8 x 60-8.8	SCREW H M8 x 60 A4	

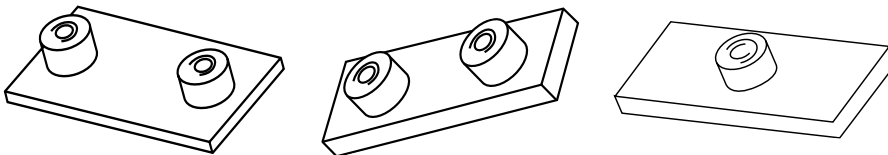
Top Plates



Model Code

	HRL	3	DP	ST	ZN
Series _____					
HRL, HRS, HRZ					
Clamp Size _____					
Top Plate _____					
Material _____					
ST = Carbon Steel					
A2 = 304 Stainless Steel (Not available for HRS series)					
A4 = 316 Stainless Steel					
Material Finish _____					
(omit) A2 and A4 Stainless Steel					
ZN = Zinc Plated					
ZN Ni = Zinc Nickel Plated (Standard for HRL and HRZ)					

Weld Plates



Model Code

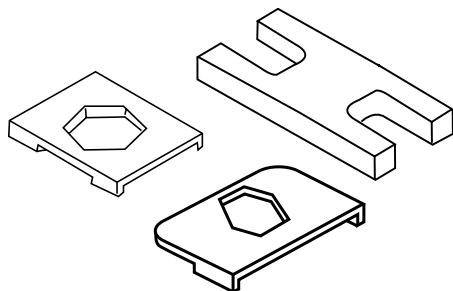
	HRL	3	AP	ST	UNC	BL
Series _____						
HRL, HRS, HRZ						
Clamp Size _____						
Weld Plate _____						
Material _____						
ST = Carbon Steel						
A2 = 304 Stainless Steel (Not available for HRS series)						
A4 = 316 Stainless Steel						
Thread Type _____						
UNC = Standard						
M = Metric						
Material Finish _____						
(omit) A2 and A4 Stainless Steel						
BL = Phosphate Coated (Standard)						
ZN = Zinc Plated						
ZN Ni = Zinc Nickel Plated						

DIN 3015 & SERIES STRIP CLAMPS

HRL, HRS, & HRZ Series (cont'd)

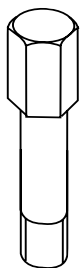
Parts

Safety Plates

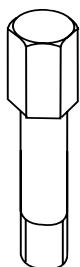


		Carbon Steel, Zinc Plated	316 Stainless Steel
Series	Size	Model Code	Model Code
HRL	0-6	HRL 0-6 SIP ST ZN	HRL 0-6 SIP A4
HRS	1	HRS 1 SIP ST ZN	HRS 1 SIP A4
	2	HRS 2 SIP ST ZN	HRS 2 SIP A4
	3	HRS 3 SIP ST ZN	HRS 3 SIP A4
	4	HRS 4 SIP ST ZN	HRS 4 SIP A4
	5	HRS 5 SIP ST ZN	HRS 5 SIP A4
	6	HRS 6 SIP ST ZN	HRS 6 SIP A4
	7	HRS 7 SIP ST ZN	HRS 7 SIP A4
HRZ	1	HRZ 1 SIP ST ZN	HRZ 1 SIP A4
	2-5	HRZ 2/5 SIP ST ZN	HRZ 2/5 SIP A4

Stacking Bolts

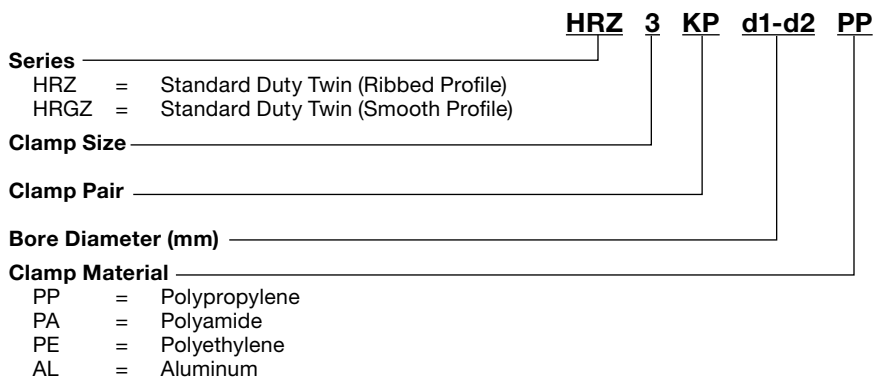
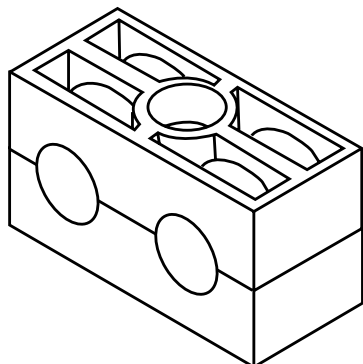
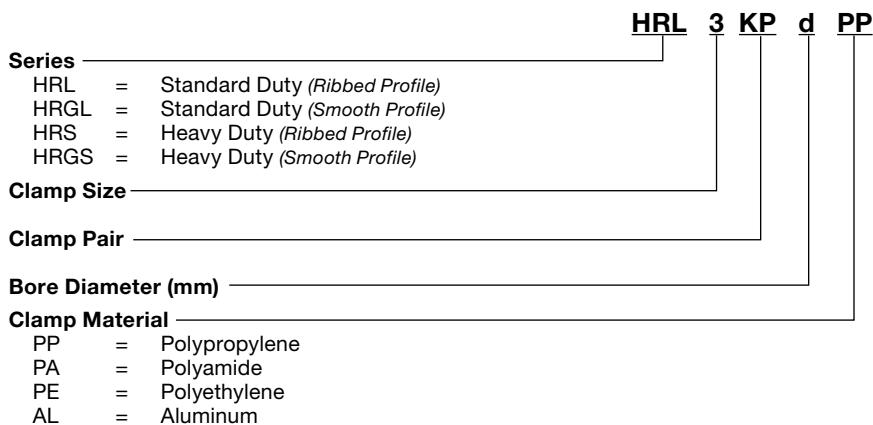
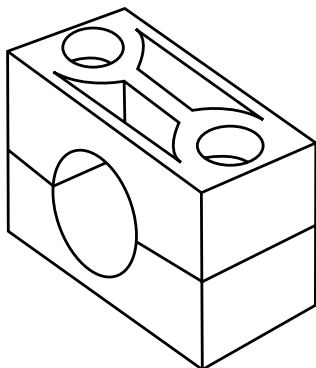


(UNC Threads)		Carbon Steel, Zinc Plated	316 Stainless Steel
Series	Size	Model Code	Model Code
HRL	0 & 1	HRL/Z 0+1 AF ST UNC ZN	HRL/Z 0+1 AF A4 UNC
	2	HRL 2 AF ST UNC ZN	HRS 2 AF A4 UNC
	3	HRL 3 AF ST UNC ZN	HRS 3 AF A4 UNC
	4	HRL 4 AF ST UNC ZN	HRS 4 AF A4 UNC
	5	HRL 5 AF ST UNC ZN	HRS 5 AF A4 UNC
	6	HRL 6 AF ST UNC ZN	HRS 6 AF A4 UNC
HRS	1	HRS 1 AF ST UNC ZN	HRS 1 AF A4 UNC
	2	HRS 2 AF ST UNC ZN	HRS 2 AF A4 UNC
	3	HRS 3 AF ST UNC ZN	HRS 3 AF A4 UNC
	4	HRS 4 AF ST UNC ZN	HRS 4 AF A4 UNC
	5	HRS 5 AF ST UNC ZN	HRS 5 AF A4 UNC
	6	HRS 6 AF ST UNC ZN	HRS 6 AF A4 UNC
	7	HRS 7 AF ST UNC ZN	HRS 7 AF A4 UNC
HRZ	1	HRL/Z 0+1 AF ST UNC ZN	HRL/Z 0+1 AF A4 UNC
	2	HRZ 2 AF ST UNC ZN	HRZ 2 AF A4 UNC
	3	HRZ 3 AF ST UNC ZN	HRZ 3 AF A4 UNC
	4	HRZ 4 AF ST UNC ZN	HRZ 4 AF A4 UNC
	5	HRZ 5 AF ST UNC ZN	HRZ 5 AF A4 UNC

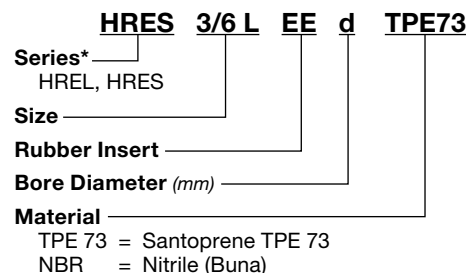
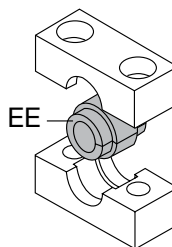
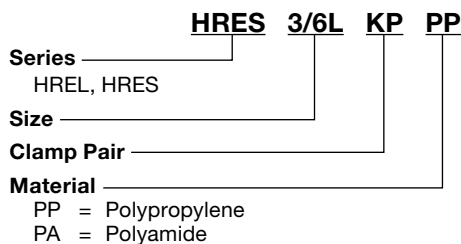
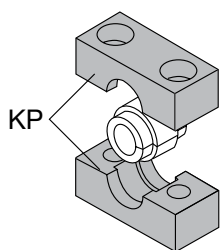


(METRIC Threads)		Carbon Steel, Zinc Plated	316 Stainless Steel
Series	Size	Model Code	Model Code
HRL	0 & 1	HRL/Z 0+1 AF ST M ZN	HRL/Z 0+1 AF A4 M
	2	HRL 2 AF ST M ZN	HRL 2 AF A4 UNC
	3	HRL 3 AF ST M ZN	HRL 3 AF A4 UNC
	4	HRL 4 AF ST M ZN	HRL 4 AF A4 UNC
	5	HRL 5 AF ST M ZN	HRL 5 AF A4 UNC
	6	HRL 6 AF ST M ZN	HRL 6 AF A4 UNC
HRS	1	HRS 1 AF10 ST M ZN	HRS 1 AF10 A4 M
	2	HRS 2 AF10 ST M ZN	HRS 2 AF10 A4 M
	3	HRS 3 AF10 ST M ZN	HRS 3 AF10 A4 M
	4	HRS 4 AF ST M ZN	HRS 4 AF A4 M
	5	HRS 5 AF ST M ZN	HRS 5 AF A4 M
	6	HRS 6 AF ST M ZN	HRS 6 AF A4 M
	7	HRS 7 AF ST M ZN	HRS 7 AF A4 M
HRZ	1	HRL/Z 0+1 AF ST M ZN	HRL/Z 0+1 AF A4 M
	2	HRZ 2 AF ST M ZN	HRZ 2 AF A4 M
	3	HRZ 3 AF ST M ZN	HRZ 3 AF A4 M
	4	HRZ 4 AF ST M ZN	HRZ 4 AF A4 M
	5	HRZ 5 AF ST M ZN	HRZ 5 AF A4 M

Clamp Pairs



HREL & HRES Series Clamps with Rubber Inserts



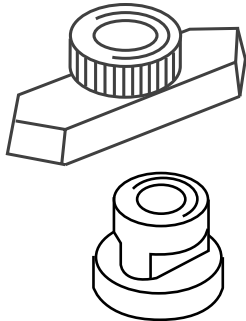
*HREL series use the same rubber inserts as the HRES series, therefore the model code for them is HRES.
 Note:
 All other components for these clamps are the same as for HRL series standard duty single clamps.
 Refer to page B1-14 to B1-18 for details.

DIN 3015 & SERIES STRIP CLAMPS

HRL, HRS, & HRZ Series

Parts

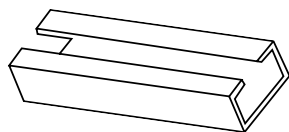
C-Rail Nuts



(UNC Threads)		Carbon Steel, Zinc Plated	316 Stainless Steel
Series	Size	Model Code	Model Code
HRL	0	HRL 0-6 TM1/4 UNC ST ZN	HRL 0-6 TM 1/4 UNC A4
	1		
	2		
	3		
	4		
	5		
	6		
	7		
HRS	1	HRS 1-3 TM3/8 UNC ST ZN	HRS 1-3 TM3/8 UNC A4
	2		
	3	HRS 4 TM7/16 UNC ST ZN	HRS 4 TM7/16 UNC A4
	4		
HRZ	1	HRZ 2-5 TM5/16 UNC ST ZN	HRZ 2-5 TM5/16 UNC A4
	2		
	3		
	4		
	5		

(METRIC Threads)		Carbon Steel, Zinc Plated	316 Stainless Steel
Series	Size	Model Code	Model Code
HRL	0	HRL 0-6 TM6 M ST ZN	HRL 0-6 TM6 M A4
	1		
	2		
	3		
	4		
	5		
	6		
	7		
HRS	1	HRS 1-3 TM10 M ST ZN	HRS 1-3 TM10 M A4
	2		
	3	HRS 4 TM12 M ST ZN	HRS 4 TM12 M A4
	4		
HRZ	1	HRZ 2-5 TM8 M ST ZN	HRZ 2-5 TM8 M A4
	2		
	3		
	4		
	5		

C-Rail



		Carbon Steel, Phosphate Coated	316 Stainless Steel
Series	Size	Model Code	Model Code
HRL	1M	HRL TS 28X11 ST BL 1M	HRL TS 28X11 A4 1M
	2M	HRL TS 28X11 ST BL 2M	HRL TS 28X11 A4 2M
HRS	1M	HRS TS 40X22 ST BL 1M	HRS TS 40X22 A4 1M
	2M	HRS TS 40X22 ST BL 2M	HRS TS 40X22 A4 2M
HRZ	1M	HRL TS 28X11 ST BL 1M	HRL TS 28X11 A4 1M
	2M	HRL TS 28X11 ST BL 2M	HRL TS 28X11 A4 2M

HRL & HRS Series with Stainless Steel Metal Components

HRL – Standard Duty HRS – Heavy Duty



Description

Clamps with stainless steel metal components are available for corrosive environments. Our complete line of DIN 3015 clamps are available in stainless steel. Some models are special order, which may require minimum quantities, and/or extended delivery times. Listed here are the standard duty and heavy duty single clamps with weld plate.

304 Stainless Steel: (A2)

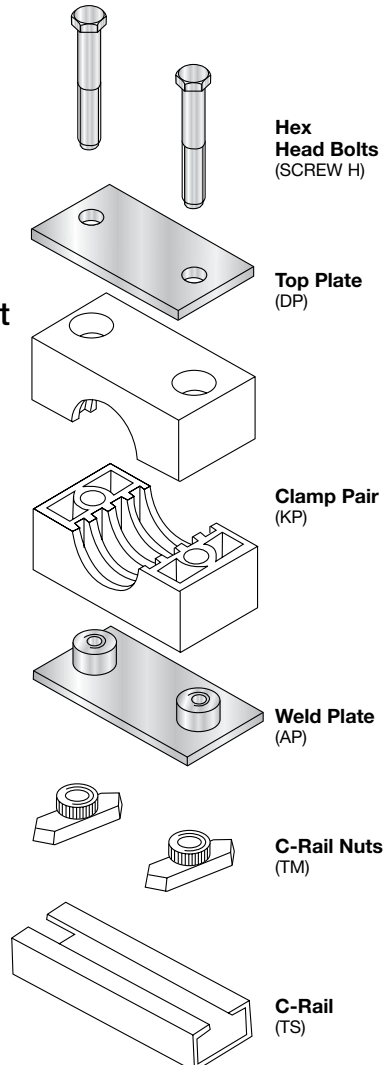
- Available from stock
- UNC bolts

316 Stainless Steel: (A4)

- Salt water resistance
- HRL sizes 1-5 in UNC - available from stock
- HRS sizes 1-5 in UNC
- Larger sizes in metric only

Typical Arrangement

Single Clamp with Weld Plate (HRL...A...) for Standard Duty (HRS...S...) for Heavy Duty



316 Stainless Steel UNC Stocked Program

Light Duty Series (HRL)

Size	Model Code	Part Number
Arrangements (complete with PP clamp pair)		
		XX = bore diameter A unique part number exists for each individual clamp bore diameter. A complete model code is sufficient for ordering. Use the dimensions table for standard HRL clamps on page B1-5 for available bore sizes.
1	HRL 1 A XX PP A4 UNC	
2	HRL 2 A XX PP A4 UNC	
3	HRL 3 A XX PP A4 UNC	
4	HRL 4 A XX PP A4 UNC	
5	HRL 5 A XX PP A4 UNC	
Weld Plates		
1	HRL 1 AP A4 UNC	00268617
2	HRL 2 AP A4 UNC	03001899
3	HRL 3 AP A4 UNC	00261220
4	HRL 4 AP A4 UNC	00261221
5	HRL 5 AP A4 UNC	00261222
Top Plates		
1	HRL 1 DP A4	00261108
2	HRL 2 DP A4	00261109
3	HRL 3 DP A4	00261110
4	HRL 4 DP A4	00261111
5	HRL 5 DP A4	00261112
Ext Hex Screws		
1	Screw H 1/4-20 x 1.25 SS316	02700627
2	Screw H 1/4-20 x 1.50 SS316	02700906
3	Screw H 1/4-20 x 1.625 SS316	02703611
4	Screw H 1/4-20 x 1.75 SS316	02700157
5	Screw H 1/4-20 x 2.50 SS316	02700646

Heavy Duty Series (HRS)

Size	Model Code	Part Number
Arrangements (complete with PP clamp pair)		
		XX = bore diameter A unique part number exists for each individual clamp bore diameter. A complete model code is sufficient for ordering. Use the dimensions table for standard HRS clamps on page B1-7 for available bore sizes.
1	HRS 1 S XX PP A4 UNC	
2	HRS 2 S XX PP A4 UNC	
3	HRS 3 S XX PP A4 UNC	
4	HRS 4 S XX PP A4 UNC	
5	HRS 5 S XX PP A4 UNC	
Weld Plates		
1	HRS 1 AP A4 UNC	00268617
2	HRS 2 AP A4 UNC	03001899
3	HRS 3 AP A4 UNC	00261220
4	HRS 4 AP A4 UNC	00261221
5	HRS 5 AP A4 UNC	00261222
Top Plates		
1	HRS 1 DP A4	00261108
2	HRS 2 DP A4	00261109
3	HRS 3 DP A4	00261110
4	HRS 4 DP A4	00261111
5	HRS 5 DP A4	00262022
Ext Hex Screws		
1	Screw H 3/8-16x1.75 SS316	02701227
2	Screw H 3/8-16x2.25 SS316	02701234
3	Screw H 3/8-16x2.75 SS316	02702474
4	Screw H 3/8-16x4.00 SS316	02702475
5	Screw H 3/8-16x5.25 SS316	02703106

DIN 3015 & SERIES STRIP CLAMPS

HRL Standard Duty

304 stainless steel (A2) metal components

Size	Model Code	Part Number
Arrangements (complete with PP clamp pair)		
		XX = bore diameter
1	HRL 1 A XX PP A2 UNC	A unique part number exists
2	HRL 2 A XX PP A2 UNC	for each individual clamp bore
3	HRL 3 A XX PP A2 UNC	diameter. A complete model
4	HRL 4 A XX PP A2 UNC	code is sufficient for ordering.
5	HRL 5 A XX PP A2 UNC	Use the dimensions table for
6	HRL 6 A XX PP A2 UNC	standard HRL clamps on page
		B1-5 for available bore sizes.
Weld Plates		
1	HRL 1 AP A2 UNC	02701275
2	HRL 2 AP A2 UNC	02701276
3	HRL 3 AP A2 UNC	02701277
4	HRL 4 AP A2 UNC	02701278
5	HRL 5 AP A2 UNC	02701279
6	HRL 6 AP A2 UNC	02701280
Top Plates		
1	HRL 1 DP A2	02701283
2	HRL 2 DP A2	02701284
3	HRL 3 DP A2	02701285
4	HRL 4 DP A2	02701286
5	HRL 5 DP A2	02701287
6	HRL 6 DP A2	02701288
Ext Hex Screws (316 Stainless Steel)		
1	SCREW H 1/4-20 x 1.25 SS316	02700627
2	SCREW H 1/4-20 x 1.50 SS316	02700906
3	SCREW H 1/4-20 x 1.625 SS316	02703611
4	SCREW H 1/4-20 x 1.75 SS316	02700157
5	SCREW H 1/4-20 x 2.50 SS316	02700646
6	SCREW H 1/4-20 x 2.75 SS316	02701205
HRL C-Rail		
1	HRL TS 28 x 11 A4 2M	00261229
HRL C-Rail Nuts		
1	HRL 0-6 TM 1/4 UNC A4	03035720

316 stainless steel (A4) metal components (metric)

Size	Model Code	Part Number
Arrangements (complete with PP clamp pair)		
		XX = bore diameter
1	HRL 1 A XX PP A4 M	A unique part number exists
2	HRL 2 A XX PP A4 M	for each individual clamp bore
3	HRL 3 A XX PP A4 M	diameter. A complete model
4	HRL 4 A XX PP A4 M	code is sufficient for ordering.
5	HRL 5 A XX PP A4 M	Use the dimensions table for
6	HRL 6 A XX PP A4 M	standard HRL clamps on page
		B1-5 for available bore sizes.
Weld Plates (metric thread)		
1	HRL 1 AP A4 M	00268508
2	HRL 2 AP A4 M	00268509
3	HRL 3 AP A4 M	00268510
4	HRL 4 AP A4 M	00268511
5	HRL 5 AP A4 M	00261215
6	HRL 6 AP A4 M	00261216
Top Plates		
1	HRL 1 DP A4	00261108
2	HRL 2 DP A4	00261109
3	HRL 3 DP A4	00261110
4	HRL 4 DP A4	00261111
5	HRL 5 DP A4	00261112
6	HRL 6 DP A4	00261113
Hex Head Bolts		
1	SCREW H M6X30 A4	00603039
2	SCREW H M6X35 A4	00602136
3	SCREW H M6X40 A4	00602138
4	SCREW H M6X45 A4	00602140
5	SCREW H M6X60 A4	00602142
6	SCREW H M6X70 A4	00602144

HRS Heavy Duty

316 stainless steel (A4) metal components (metric)

Size	Model Code	Part Number
Arrangements (complete with PP clamp pair)		
		XX = bore diameter
1	HRS 1 S XX PP A4 M	A unique part number exists
2	HRS 2 S XX PP A4 M	for each individual clamp bore
3	HRS 3 S XX PP A4 M	diameter. A complete model
4	HRS 4 S XX PP A4 M	code is sufficient for ordering.
5	HRS 5 S XX PP A4 M	Use the dimensions table for
6	HRS 6 S XX PP A4 M	standard HRS clamps on page
		B1-7 for available bore sizes.
Weld Plates (metric thread)		
1	HRS 1 AP A4 M	00263646
2	HRS 2 AP A4 M	00263647
3	HRS 3 AP A4 M	00263648
4	HRS 4 AP A4 M	00267902
5	HRS 5 AP A4 M	00263700
6	HRS 6 AP A4 M	00263701
Top Plates		
1	HRS 1 DP A4	00262018
2	HRS 2 DP A4	00262019
3	HRS 3 DP A4	00262020
4	HRS 4 DP A4	00262021
5	HRS 5 DP A4	00262022
6	HRS 6 DP A4	00262023
Hex Head Bolts (metric)		
1	SCREW H M10X45 A4	00602151
2	SCREW H M10X60 A4	00602153
3	SCREW H M10X70 A4	00602155
4	SCREW H M12X100 A4	00602157
5	SCREW H M16X130 A4	00602160
6	SCREW H M20X190 A4	00602163
HRS C-Rail		
1	HRS TS 40X22 A4 2M	00263359
HRS C-Rail Nuts		
1	HRS TM 10 A4 M	00262736
2	HRS TM 12 A4 M	00262739

HRRL & HRRLE Series

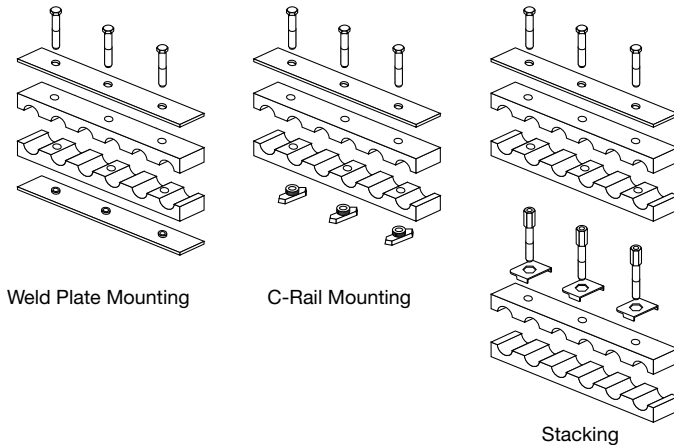
Series Strip Clamps

Description

For OEM's requiring solutions for multiple line runs HYDAC offers customized series strips. These clamps reduce inventory and installation time, while providing a more compact solution than multiple DIN 3015 clamps. The design and dimensions are based on the DIN 3015 specifications set forth for single and twin clamps. The Series Strip Program, echoes that of the DIN 3015 Clamps in that it offers similar arrangements, sizes, options, and model coding.

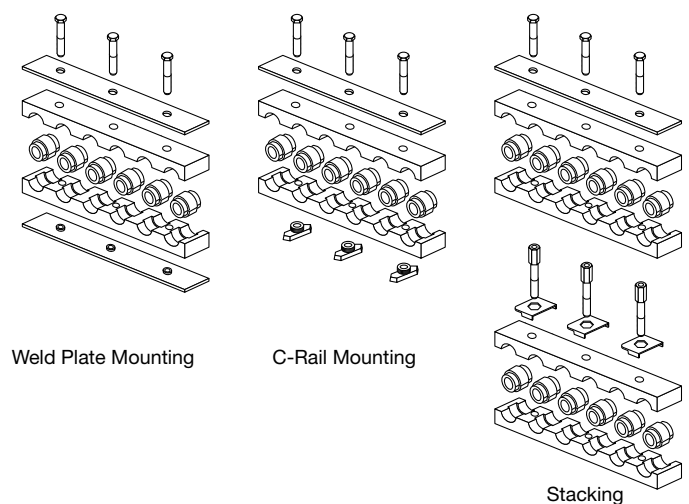
Arrangements

HRRL Series: Standard Duty



Arrangements

HRRLE Series: Heavy Duty with Rubber Inserts

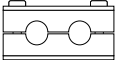


Number of Lines & Bolts

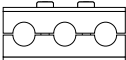
HRRL Series: Standard Duty

(diameter range: 6 to 25.4 mm)

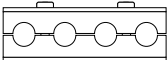
2 Lines / 2 Bolts (HRRL...2 X.../2...)



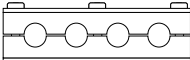
3 Lines / 2 Bolts (HRRL...3 X.../2...)



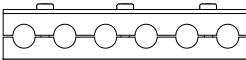
4 Lines / 2 Bolts (HRRL...4 X.../2...)



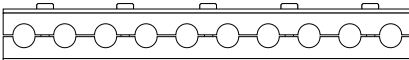
4 Lines / 3 Bolts (HRRL...4 X.../3...)



6 Lines / 3 Bolts (HRRL...6 X.../3...)



10 Lines / 5 Bolts (HRRL...10 X.../5...)



Number of Lines & Bolts

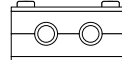
HRRLE Series: Heavy Duty with Rubber Inserts

(diameter range: 6 to 56.4 mm)

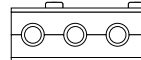
2 Lines / 1 Bolt (HRRLE...2 X.../1...)



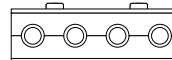
2 Lines / 2 Bolts (HRRLE...2 X.../2...)



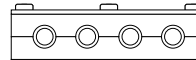
3 Lines / 2 Bolts (HRRLE...3 X.../2...)



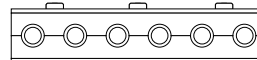
4 Lines / 2 Bolts (HRRLE...4 X.../2...)



4 Lines / 3 Bolts (HRRLE...4 X.../3...)



6 Lines / 3 Bolts (HRRLE...6 X.../3...)



Ordering

Series Strip Clamps are a custom product which must be quoted on an individual project basis. As with DIN 3015 Clamps, the Series Strip Clamps can be ordered as complete arrangements or as individual components. Series Strip Clamps are available with differing bore sizes. Contact **HYDAC** at **1.877.GO.HYDAC** (1.877.464.9322) with your specifications to request a quotation.

D Standard Clamps

In addition to the DIN 3015 Clamps HYDAC offers other standard products that assure a simple, reliable dampening support for lines which absorb shock, dampen vibration, and reduce noise in plumbing systems. Please contact HYDAC to discuss what product is right for you and your application.

STANDARD CLAMPS

HRBGS Series

Buegu Clamps



Description

Buegu clamps are ideal for mobile applications where space is limited. They absorb shock and vibration, and reduce noise.

Features

- Low Profile Design
- Shock and vibration reduction
- Easy installation

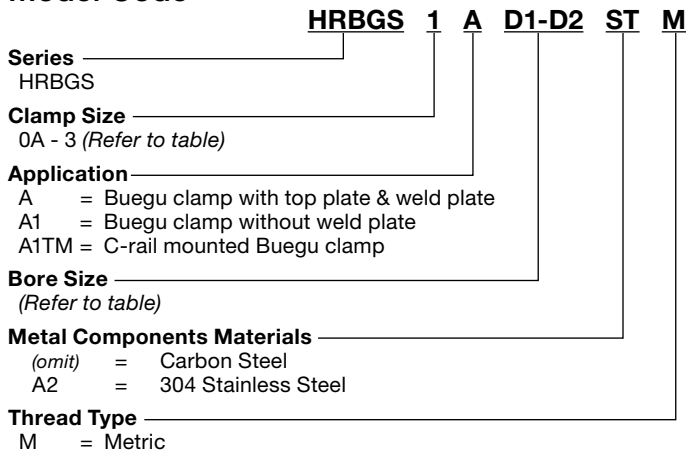
Materials

- Stirrup & Weld Plate - carbon steel
- Clamp Body - thermoplastic elastomer (*Santoprene TPE 73*)

Temp Specifications

- -40° to 257°F (-40° to 125°C)

Model Code

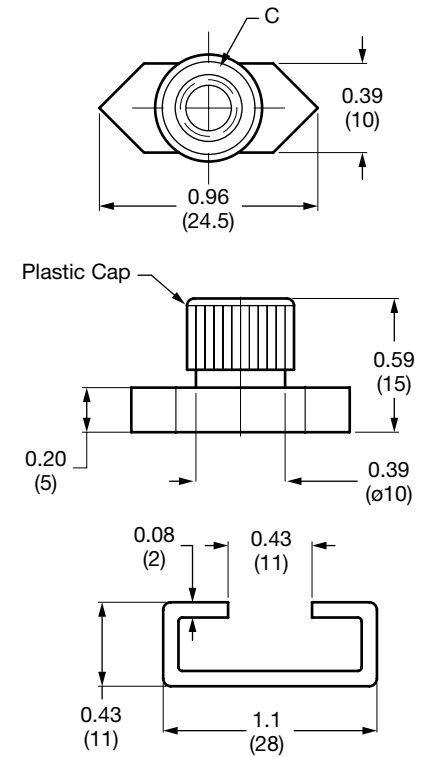
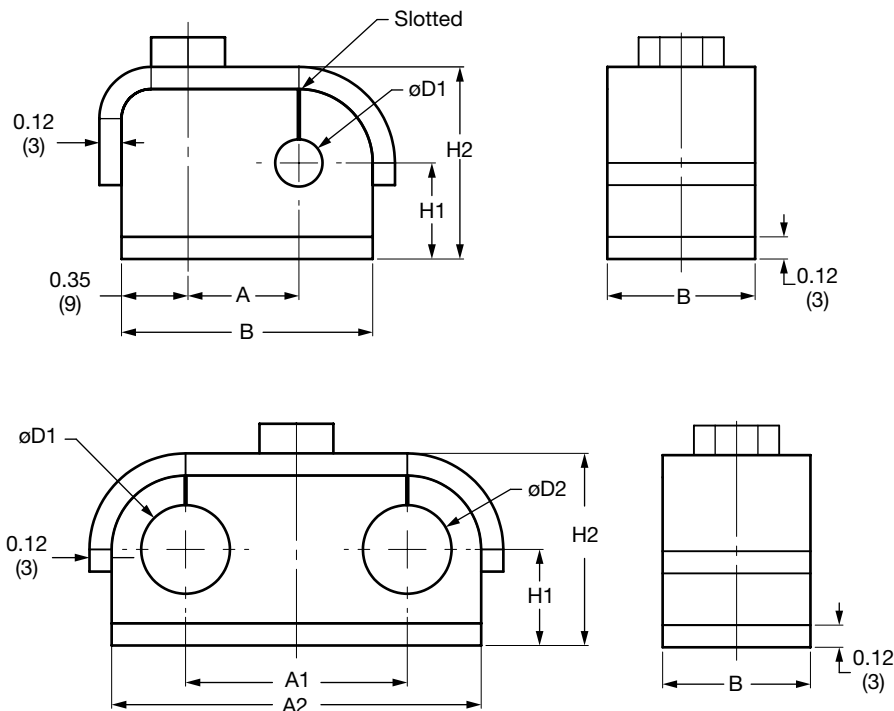


Part Legend	A - Buegu Clamp with Weld Plate
1. Hex Head Bolt	
2. Stirrup	
3. Sleeve	
4. Rubber Body	
5. Weld Plate	

Part Legend	A1 - Buegu Clamp without Weld Plate
1. Hex Head Bolt	
2. Stirrup	
3. Sleeve	
4. Rubber Body	

Part Legend	A1TM - Buegu Clamp - C-Rail Mounted
1. Hex Head Bolt	
2. Stirrup	
3. Sleeve	
4. Rubber Body	
5. C-Rail Nut	
6. C-Rail	

Dimensions HRBGS Series



Clamp Size	Tube O.D.	Pipe Size	Bore Diameter*		Dimensions				Bolt Size C	
			$\phi D1$	$\phi D2$	A1	A2	H1	H2		B
0A	1/4"	-	0.25 (6.4)	-	0.56 (15)	1.34 (34)	0.39 (10)	0.91 (23)	0.78 (20)	M6 X 25
	3/8"	-	0.375 (9.5)	-						
	-	1/8"	0.394 (10.0)	-						
0B	1/2"	-	0.5 (12.7)	-	0.71 (18)	1.54 (39)	0.47 (12)	1.03 (27)	0.78 (20)	M6 X 25
	-	1/4"	0.54 (13.7)	-						
	5/8"	-	0.625 (16.0)	-						
	-	3/8"	0.675 (17.1)	-						
0C	3/4"	-	0.75 (19.0)	-	0.93 (23.5)	2.26 (57.5)	0.78 (20)	1.69 (43)	1.18 (30)	M8 X 45
	-	1/2"	0.84 (21.3)	-						
	1"	-	1.0 (25.4)	-						
1	1-1/4"	-	1.26 (32.0)	-	1.18 (30)	1.97 (50)	0.39 (10)	0.91 (23)	0.78 (20)	M6 X 25
	1/4"	-	0.25 (6.4)	0.25 (6.4)						
	3/8"	-	0.375 (9.5)	0.375 (9.5)						
	-	1/8"	0.394 (10.0)	0.394 (10.0)						
2	1/2"	-	0.5 (12.7)	0.5 (12.7)	1.38 (35)	2.32 (59)	0.47 (12)	1.03 (27)	1.18 (30)	M8 X 45
	5/8"	-	0.625 (16.0)	0.625 (16.0)						
	-	3/8"	0.675 (17.1)	0.675 (17.1)						
3	3/4"	-	0.75 (19.0)	0.75 (19.0)	1.85 (47)	3.39 (86)	0.78 (20)	1.69 (43)	1.18 (30)	M8 X 45
	-	1/2"	0.84 (21.3)	0.84 (21.3)						
	1"	-	1.0 (25.4)	1.0 (25.4)						
	1-1/4"	-	1.260 (32.0)	1.26 (32.0)						

* Consult factory for sizes 1 and 2 with different bore diameters.

Notes:

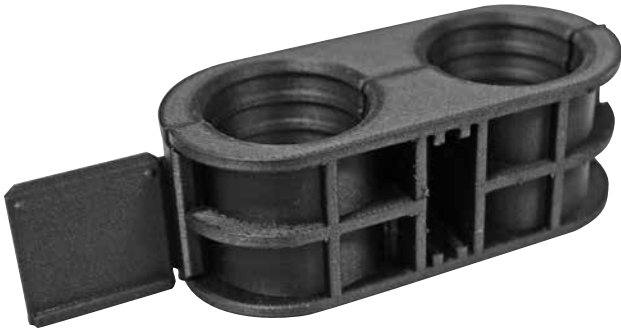
1. Dimensions are in inches (mm).

2. Dimensions are for general information only, all critical dimensions should be verified by requesting a certified print.

STANDARD CLAMPS

HFC Series

Flying Clip Clamp



Description

Holds free hanging hydraulic hoses, used in mobile and industrial environments, and prevents parallel running hoses from rubbing together.

Features

- Clamshell design for hinge durability
- Easy Installation
- Resistant to torsional forces

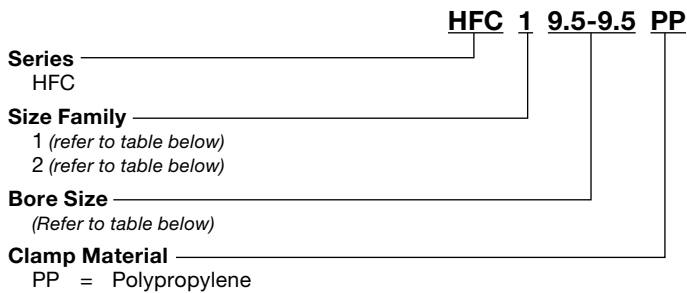
Materials

- PP - Polypropylene (standard)

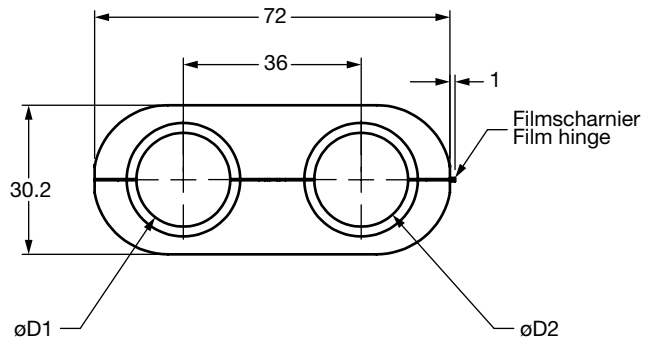
Temp Specifications:

- Polypropylene: -30°C to +90°C

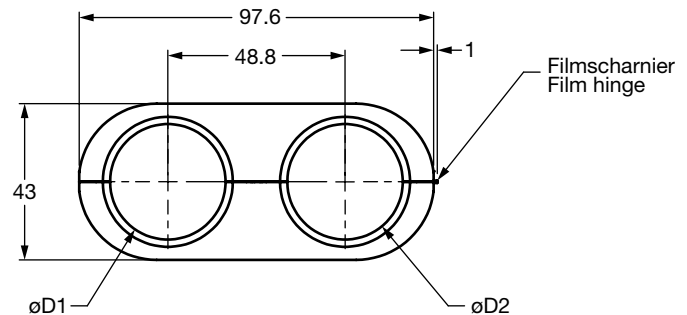
Model Code



Dimensions Family Size 1



Dimensions Family Size 2



Available Family Size 1

Model	Part Number	Bore Diameter	Length
HFC 1 9.5-9.5PP	2208368	9.5 mm	72 mm
HFC 1 19-19PP	2210467	19.0 mm	72 mm

Available Family Size 2

Model	Part Number	Bore Diameter	Length
HFC 2 25.4-25.4 PP	2212160	25.4 mm	97.6mm
HFC 2 28.6-28.6 PP	2212161	28.6 mm	97.6 mm

Notes:

1. Dimensions are in mm.
2. Dimensions are for general information only, all critical dimensions should be verified by requesting a certified print.

HUB Series

U-Bolt with Cushion Clamps



Description

Designed for the tough jobs, the HUB Series secures pipe runs to any flat surface. The U-Bolt traps and secures the cushion in place to prevent lateral movement, while nylon insert locknuts provide a positive lock.

Features

The cushion design provides total load distribution, allowing the U-Bolt to become a full contact hanger, eliminating knife-edge loading. Extremely cost effective, especially in larger sizes.

Materials

- U-Bolt - Steel with electro-galvanized finish or 316 stainless steel*
- Cushion - Thermoplastic elastomer, rated from -50° to 275°F

Model Code

HUB 1/4 P -

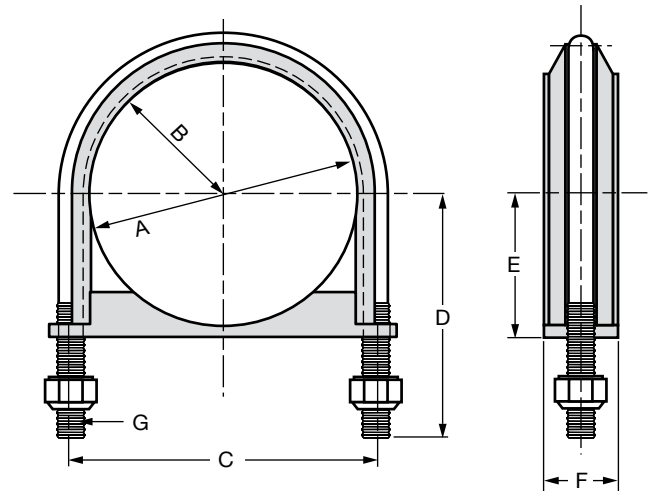
Series _____
 HUB

Clamp Size _____
 (Refer to table)

Application _____
 P = Pipe

Metal Components Materials _____
 (omit) = Carbon Steel
 A4 = 316 Stainless Steel

Dimensions



Clamp Size	Pipe Size	øA	B	C	D	E	F	G
1/2	1/2	0.84	0.80	1.60	1.50	0.67	0.68	1/4-20 UNC-2B
3/4	3/4	1.05	0.90	1.80	1.60	0.78	0.68	
1	1	1.31	1.02	2.05	1.70	0.91	0.68	
1-1/4	1-1/4	1.66	1.27	2.55	2.10	1.08	1.24	3/8-16 UNC-2B
1-1/2	1-1/2	1.90	1.40	2.80	2.20	1.19	1.24	
2	2	2.37	1.67	3.35	2.5	1.45	1.24	
2-1/2	2-1/2	2.87	1.95	3.90	3.00	1.69	1.24	1/2-13 UNC-2B
3	3	3.5	2.27	4.55	3.3	2	1.24	
3-1/2	3-1/2	4	2.52	5.05	3.7	2.25	1.24	
4	4	4.5	2.75	5.5	3.9	2.5	1.24	
5	5	5.56	3.25	6.56	4.5	3.03	1.24	
6	6	6.62	3.87	7.75	5.4	3.56	1.44	5/8-11 UNC-2B
8	8	8.82	4.85	9.82	6.4	4.56	1.44	
10	10	10.75	6.08	12.16	7.7	5.68	1.65	3/4-10 UNC-2B
12	12	12.75	7.13	14.25	8.7	6.68	1.65	

Notes:
 1. Dimensions are in inches (mm).
 2. Dimensions are for general information only, all critical dimensions should be verified by requesting a certified print.

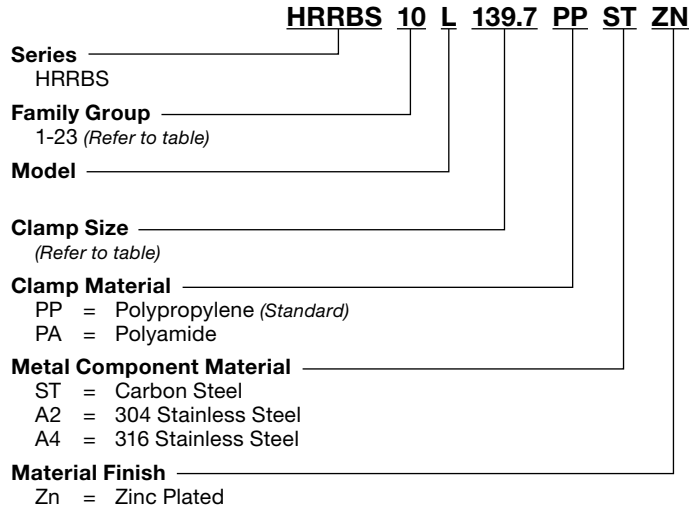
STANDARD CLAMPS

HRRBS Series

U-Bolt Clamps



Model Code



Description

U-bolt clamps are a simple solution for securing pipes and other cylindrical objects. The clamps consist of a threaded "U" and a contoured saddle.

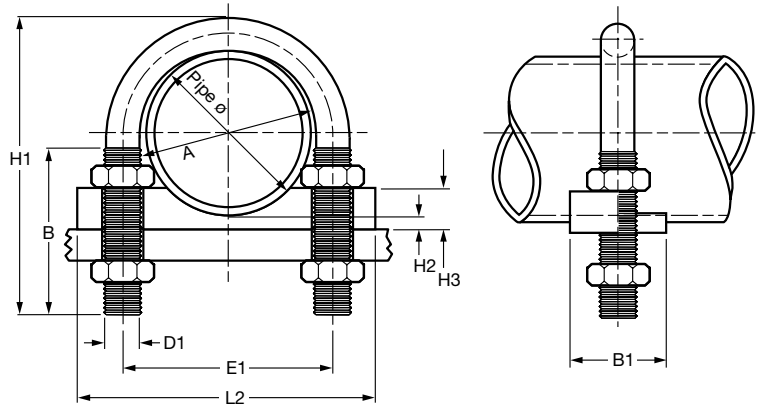
Features

- Metric Threads
- Easy installation

Materials

- Threaded "U" - zinc-plated carbon steel
- Saddle - polypropylene

Dimensions



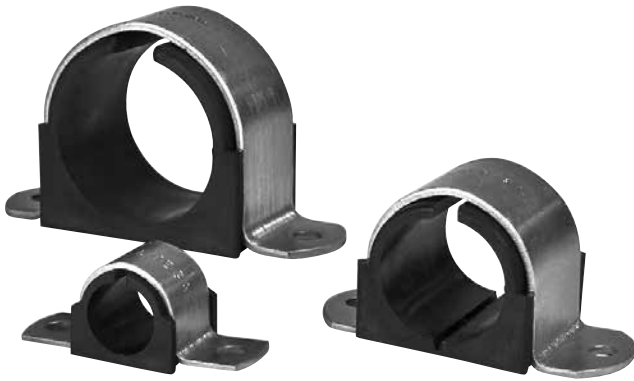
Group	Clamp Size	Pipe Size	øA	B	D1	E1	H1	H2	H3	L2	B1
1	0.67 (17.1) 0.84 (21.3)	3/8 (9.5) 1/2 (12.7)	0.91 (23)	1.57 (40)	M10	1.3 (33)	2.56 (65)			2.36 (60)	0.98 (25)
2	1.06 (26.9)	3/4 (19.1)	1.18 (30)			1.57 (40)	2.76 (70)			2.95 (75)	
3	1.33 (33.7)	1 (25.4)	1.5 (38)	1.89 (48)		2.95 (75)	3.15 (80)				
4	1.67 (42.4)	1-1/4 (31.8)	1.81 (46)	2.2 (56)		3.39 (86)	3.54 (90)				
5	1.9 (48.3)	1-1/2 (38.1)	2.05 (52)	1.97 (50)	2.44 (62)	3.62 (92)	3.74 (95)	1.38 (35)	4.33 (110)	1.77 (45)	
6	2.37 (60.3)	2 (50.8)	2.52 (64)	2.99 (76)	4.29 (109)	5.31 (135)					
7	3 (76.1)	-	3.23 (82)	2.36 (60)	M12	3.7 (94)	4.92 (125)			5.71 (145)	1.97 (50)
8	3.5 (88.9)	3 (76.2)	3.7 (94)	4.17 (106)	5.43 (138)	7.48 (190)					
9	4.5 (114.3)	4 (101.6)	4.72 (120)	3.15 (80)	M16	5.35 (136)	6.73 (171)			8.66 (220)	1.77 (45)
10	5.5 (139.7)	5 (127)	5.83 (148)			6.46 (164)	7.52 (191)			8.66 (220)	
11	6.63 (168.3)	6 (152.4)	6.93 (176)	7.56 (192)		8.54 (217)	9.84 (250)				
12	7.63 (193.7)	7 (177.8)	7.95 (202)	8.58 (218)		9.8 (249)	10.63 (270)				
13	8.63 (219.1)	8 (203.2)	8.98 (228)	3.94 (100)	M20	9.76 (248)	11.14 (283)			12.4 (315)	1.97 (50)
14	10.75 (273)	10 (254)	11.1 (282)			11.89 (302)	13.15 (334)			14.57 (370)	
15	12.75 (323.9)	12 (304.8)	13.07 (332)		13.86 (352)	15.16 (385)	16.54 (420)				
16	14 (355.6)	14 (355.6)	14.88 (378)		15.83 (402)	17.13 (435)	18.9 (480)				
17	16 (406.4)	16 (406.4)	16.85 (428)	M24	17.8 (452)	19.17 (487)	21.26 (540)	2.36 (60)	25.2 (640)	2.76 (70)	
18	20 (508)	20 (508)	20.87 (530)		21.81 (554)	23.19 (589)	27.56 (700)				
19	21.97 (558)	22 (558.8)	22.44 (570)	5.91 (150)	M30	23.62 (600)	25.59 (650)			29.53 (750)	2.76 (70)
20	23.98 (609)	24 (609.6)	24.49 (622)			25.67 (652)	27.56 (700)			31.89 (810)	
21	25.98 (660)	26 (660.4)	26.77 (680)			27.95 (710)	29.92 (760)			34.25 (870)	
22	27.99 (711)	28 (711.2)	28.74 (730)			29.92 (760)	31.89 (810)			35.83 (910)	
23	30 (762)	30 (762)	30.91 (785)			32.09 (815)	34.25 (870)				

Notes:

1. Dimensions are in inches (mm).
2. Dimensions are for general information only, all critical dimensions should be verified by requesting a certified print.

HOM Series

Flat Cushion Clamps



Description

The interlock edge insures that the cushion remains in place. The HOM Series clamp assembly retains, guides, protects and uniformly spaces line runs. They go up fast, lines are rigid, and look neat.

Features

Attached with two standard* fasteners to any flat surface, the HOM Series clamp eliminates the use of special channels, providing savings in both space and cost.

- Low profile for limited space applications.

Materials

The Clamp

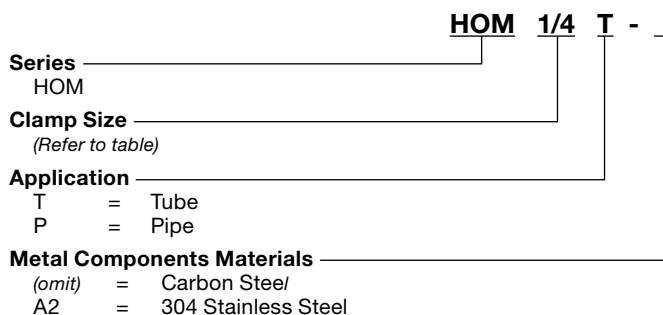
Available in steel (with electro-dichromate finish), and 304 stainless steel (*A2 in the model code denotes 304 stainless steel*).

The Cushion

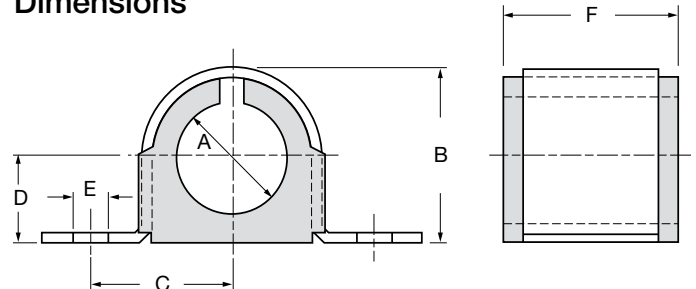
Manufactured from a thermoplastic elastomer, it's built tough to withstand the effects of most oils, chemical and industrial cleaning compounds, in temperatures from -50°F to 275°F.

*Note: Fasteners not provided.

Model Code



Dimensions



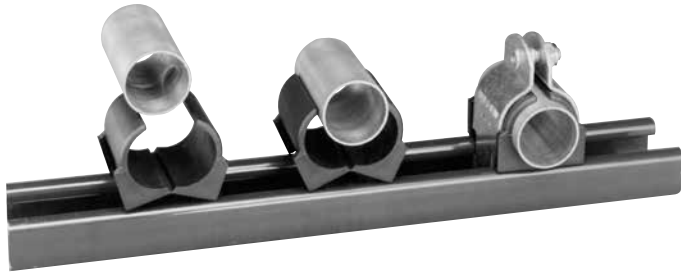
Clamp Size / Application		Dimensions					
Tube O.D.	Pipe	A	B	C	D	E	F
1/4"	-	0.25	0.48	0.60	0.22	0.26	0.78
-	1/4"	0.50	0.81	0.83	0.40	0.26	0.98
3/8"	-	0.37	0.62	0.66	0.31	0.26	0.81
-	3/8"	0.62	0.93	0.85	0.40	0.26	0.98
1/2"	-	0.50	0.81	0.83	0.40	0.26	0.98
-	1/2"	0.87	1.12	1.03	0.53	0.26	0.98
5/8"	-	0.62	0.93	0.85	0.40	0.26	0.98
3/4"	-	0.75	1.02	0.9	0.5	0.26	0.98
-	3/4"	1.05	1.4	1.11	0.7	0.26	0.98
7/8"	-	0.87	1.12	1.03	0.53	0.26	0.98
1"	-	1	1.24	1.04	0.59	0.26	0.98
-	1"	1.31	1.71	1.28	0.81	0.26	1.56
1-1/8"	-	1.12	1.4	1.17	0.7	0.26	0.98
1-1/4"	-	1.25	1.6	1.2	0.77	0.26	1.56
-	1-1/4"	1.66	2.12	1.55	0.99	0.34	1.56
1-3/8"	-	1.37	1.71	1.28	0.83	0.26	1.56
1-1/2"	-	1.5	1.85	1.36	0.9	0.26	1.56
-	1-1/2"	1.87	2.25	1.64	1.09	0.34	1.56
1-5/8"	-	1.62	1.95	1.43	0.96	0.26	1.56
1-3/4"	-	1.75	2.12	1.55	1.02	0.34	1.56
1-7/8"	-	1.87	2.25	1.64	1.09	0.34	1.56
2"	-	2.87	2.38	1.69	1.15	0.34	1.56
-	2"	2.37	2.88	1.94	1.41	0.34	1.56
2-1/8"	-	2.12	2.62	1.96	1.27	0.34	1.56
2-3/8"	-	2.37	2.88	1.94	1.41	0.34	1.56
5-1/8"	-	5.12	5.82	3.55	2.84	0.43	1.56

Notes:

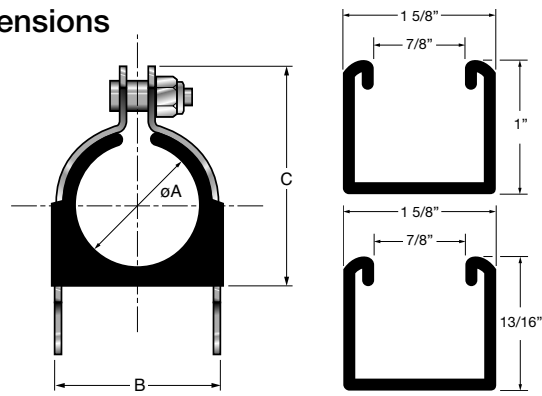
1. Dimensions are in inches (mm).
2. Dimensions are for general information only, all critical dimensions should be verified by requesting a certified print.

STANDARD CLAMPS

CUSH Series Cushion Clamps



Dimensions



Clamp Size / Application		Dimensions		
Tube O.D.	Pipe	A	B	C
1/4"	-	0.25	0.62	0.98
-	1/4"	0.54	0.98	1.34
3/8"	-	0.37	0.82	1.13
-	3/8"	0.67	1.13	1.54
1/2"	-	0.50	0.94	1.34
-	1/2"	0.84	1.29	1.82
5/8"	-	0.62	1.06	1.54
3/4"	-	0.75	1.2	1.68
-	3/4"	1.05	1.5	1.95
7/8"	-	0.87	1.31	1.82
1"	-	1	1.44	1.95
-	1"	1.31	1.76	2.34
1-1/8"	-	1.12	1.57	2.08
1-1/4"	-	1.25	1.7	2.21
-	1-1/4"	1.66	2.17	2.73
1-3/8"	-	1.37	1.82	2.34
1-1/2"	-	1.5	1.95	2.47
-	1-1/2"	1.9	2.35	2.86
1-5/8"	-	1.62	2.07	2.6
1-3/4"	-	1.75	2.2	2.73
1-7/8"	-	1.87	2.32	2.86
2"	-	2	2.45	3.04
-	2"	2.37	2.82	3.67
2-1/8"	-	2.12	2.57	3.23
2-3/8"	-	2.37	2.82	3.67
2-1/2"	-	2.5	2.94	3.79
-	2-1/2"	2.87	3.32	4.17
2-5/8"	-	2.62	3.07	3.92
2-7/8"	-	2.87	3.32	4.17
3"	-	3.00	3.57	4.42
-	3"	3.50	3.95	4.79
3-1/8"	-	3.12	3.57	4.42
3-5/16"	-	3.31	3.96	4.75
3-1/2"	-	3.50	3.95	4.79
-	3-1/2"	4	4.45	5.11
3-5/8"	-	3.62	4.2	5.11
4"	-	4	4.45	5.11
-	4"	4.5	4.95	5.92
4-1/8"	-	4.12	4.57	5.54
4-1/2"	-	4.5	4.95	5.92
-	5"	5.56	6.01	6.92
5-1/8"	-	5.12	5.57	6.54
6"	-	6	6.57	7.54
-	6"	6.62	7.07	8.23
6-1/8"	-	6.12	6.57	7.54

Notes:
 1. Dimensions are in inches (mm).
 2. Dimensions are for general information only, all critical dimensions should be verified by requesting a certified print.

Description

Cushion clamps are ideal for multiple line runs, while absorbing shock and vibration, reducing unwanted noise and preventing galvanic corrosion.

Features

- Distortion free clamping
- Shock and vibration reduction
- Elimination of rotation
- Retrofit without disassembly
- Easy installation
- Control squeeze shoulder bolt prevents over tightening of the clamp assembly, preventing the possibility of crushing the tube.
- Fits standard 1-5/8" wide mounting rail

Materials

- Clamp - carbon steel (with electro-dichromate finish)
- Cushion - thermoplastic elastomer
- Cushion material withstands the effect of most oils, chemicals and industrial cleaning solvents at temperatures -40° to 275°F.

Mounting Rail

- **Part Number:** 02073325
- **Model Code:** Cush Rail 1" x 4' Galvanized
- **Material:** Low gauge carbon steel
- **Finish:** Galvanized
- **Length:** 4'

Materials

- Clamp - Stainless steel 304
- Cushion - thermoplastic elastomer

Mounting Rail

- **Part Number:** 02701588
- **Model Code:** Cush Rail 13/16" x 10' A2
- **Material:** Stainless steel 304
- **Length:** 10'0" 4'

Model Code

CUSH 1/4 T -



HSVW & HLVZ Series

“P” Style Loop Clamps (Vinyl Dipped Galvanized Steel)



Description

“P” style clamp used for mounting a multitude of light duty applications including cables, pneumatic lines, and conduit.

Materials

- PVC coated
- Steel clamps are galvanized for corrosion resistance
- Color- Silver with black

Model Code

HSVW - 10

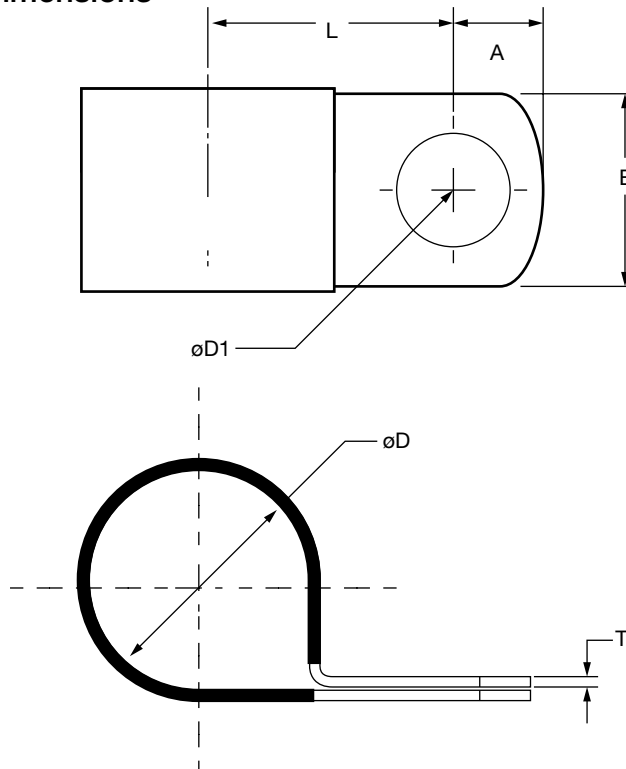
Series

HSVW = 3/4" wide
HLVZ = 1" wide

Clamp Size

(Refer to table)

Dimensions



Dimensions HSVW

Size	Holding Diameter ØD	L	øD1	A	B	T
3	3/16" (4.8)	5/8" (15.9)	0.41 (10.3)	0.31 (8)	0.75 (19.1)	0.03 (0.8)
4	1/4" (6.4)	21/32" (16.7)				
5	5/16" (7.9)	9/16" (14.3)				
6	3/8" (9.5)	23/32" (18.2)				0.05 (1.3)
7	7/16" (11.1)	3/4" (19.1)				
8	1/2" (12.7)	25/32" (19.8)				
9	9/16" (14.3)	13/16" (20.6)				
10	5/8" (15.9)	27/32" (21.4)				
11	11/16" (17.5)	7/8" (22.2)				
12	3/4" (19.1)	29/32" (23.0)				
13	13/16" (20.6)	15/16" (23.8)				
14	7/8" (22.2)	31/32" (24.6)				
15	15/16" (23.8)	1" (25.4)				
16	1" (25.4)	1-1/32" (26.2)				
17	1-1/16" (26.9)	1-1/16" (26.9)				
18	1-1/8" (28.6)	1-3/32" (27.8)				
22	1-3/8" (34.9)	1-7/32" (30.9)				

Dimensions HLVZ

Size	Holding Diameter ØD	L	øD1	A	B	T
18	1-1/8" (28.7)	1-7/32" (30.9)	0.53 (13.5)	0.56 (14.3)	1.00 (25.4)	0.05 (1.3)
19	1-3/16" (30.2)	1-1/4" (31.8)				
20	1-1/4" (31.8)	1-9/32" (32.5)				
21	1-5/16" (33.3)	1-5/16" (33.3)				
24	1-1/2" (38.1)	1-13/32" (35.7)				
25	1-9/16" (39.6)	1-7/16" (36.5)				
28	1-3/4" (44.5)	1-17/32" (38.9)				
29	1-13/16" (46.0)	1-9/16" (39.6)				
32	2" (50.8)	1-11/16" (42.8)				
33	2-1/16" (52.3)	1-23/32" (43.6)				
36	2-1/4" (57.2)	1-13/16" (46.0)				
40	2-1/2" (63.5)	1-15/16" (49.2)				
42	2-5/8" (66.8)	2" (50.8)				
44	2-3/4" (69.9)	2-1/16" (52.3)				
46	2-7/8" (73.1)	2-1/4" (57.2)				
57	3-9/16" (90.4)	2-7/16" (61.9)				

Notes:

1. Dimensions are in inches (mm).
2. Dimensions are for general information only, all critical dimensions should be verified by requesting a certified print.

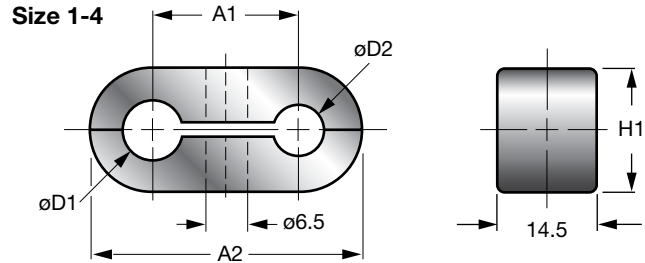
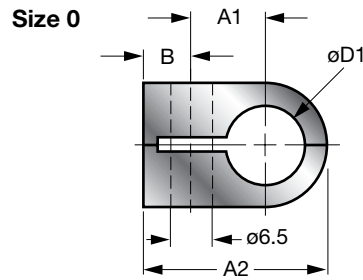
STANDARD CLAMPS

HROS Series

Oval Clamps



Dimensions



Description

Oval clamps are ideal for mobile applications where space is limited. One-piece, hinged polypropylene clamp body.

Features

- Low profile design
- Easy installation

Materials

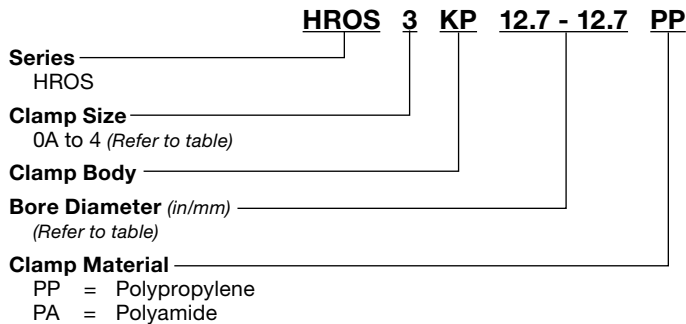
- PP - Polypropylene (standard)
- PA or others may be available

Temp Specifications

Polypropylene: -22° to 194°F (-30° to 90°C)

Polyamide: -40° to 248°F (-40° to 120°C)

Model Code



Clamp Size	$\phi D1$ & $\phi D2$ Bore Size*	Nominal Size		Dimensions			
		Tube O.D.	Pipe	A1	A2	B	H1
0A	0.24 (6.0)	-	-	0.35 (9)	0.9 (22.8)	0.28 (7)	0.53 (13.5)
	0.25 (6.4)	1/4"	-				
1	0.31 (8.0)	5/16"	-	0.7 (18)	1.26 (32)	-	
0B	0.31 (8.0)	5/16"	-	0.43 (11)	1.07 (27.2)	0.28 (7)	0.73 (18.5)
	0.37 (9.5)	3/8"	-				
	0.39 (10.0)	-	-				
2	0.40 (10.2)	-	1/8"	0.87 (22)	1.59 (40.5)	-	
	0.47 (12.0)	-	-				
	0.50 (12.7)	1/2"	-				
0C	0.39 (10.0)	-	-	0.59 (15)	1.32 (33.5)	0.28 (7)	0.93 (23.6)
	0.40 (10.2)	-	1/8"				
	0.47 (12.0)	-	-				
	0.50 (12.7)	1/2"	-				
3	0.53 (13.5)	-	1/4"	1.81 (30)	2.11 (53.6)	-	
	0.55 (14.0)	-	-				
	0.59 (15.0)	-	-				
	0.63 (16.0)	5/8"	-				
0D	0.55 (14.0)	-	-	0.75 (19)	1.57 (40)	0.24 (6)	1.2 (30.6)
	0.59 (15.0)	-	-				
	0.63 (16.0)	5/8"	-				
	0.68 (17.2)	-	3/8"				
	0.71 (18.0)	-	-				
4	0.75 (19.0)	3/4"	-	1.5 (38)	2.69 (68.3)	-	
	0.79 (20.0)	-	-				
	0.84 (21.3)	-	1/2"				
	0.87 (22.0)	7/8"	-				
	0.98 (25.0)	-	-				
	1.00 (25.4)	1"	-				

*D1 and D2 dimensions may have different bore sizes.

Dimensions listed are standard.

Notes:

1. Dimensions are in inches (mm).

2. Dimensions are for general information only, all critical dimensions should be verified by requesting a certified print.

HSPN & HSPW Series

“P” Style Clamps



Description

P style clamp used for mounting a multitude of light duty applications including cables, pneumatic lines, and conduit.

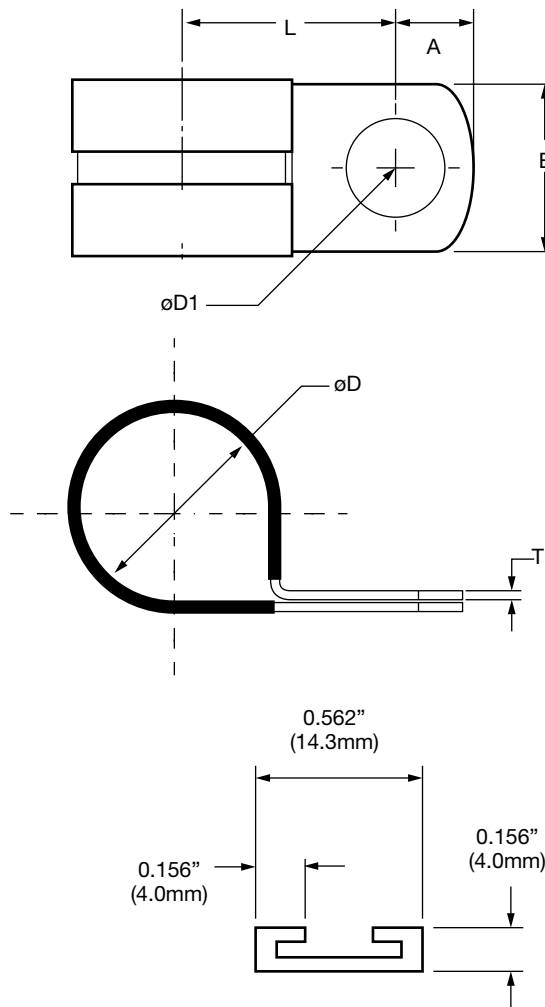
Features

HSPN clamps provide electrical insulation and vibration absorption.

Materials

- EPDM cushion
- Steel clamps are zinc electroplated for corrosion resistance
- Color- Silver with black EPDM cushion
- The A2 in the model code denotes 304 stainless steel

Dimensions



Model Code

Series HSPN 10

HSPN = 1/2" wide
HSPW = 3/4" wide

Clamp Size _____
(Refer to table)

Metal Components Materials _____
(omit) = Carbon Steel
A2 = 304 Stainless Steel (HSPN only)

Dimensions HSPN

Clamp Size	Holding Diameter ØD	L	ØD1	A	B	T
3	3/16" (4.8)	3/8" (9.5)	0.26 (6.6)	0.26 (6.6)	0.50 (12.7)	0.03 (0.8)
4	1/4" (6.4)	13/32" (10.3)				
5	5/16" (7.9)	7/16" (11.1)				
6	3/8" (9.5)	15/32" (11.9)				
7	7/16" (11.1)	1/2" (12.7)				
8	1/2" (12.7)	17/32" (13.5)				
9	9/16" (14.3)	9/16" (14.3)				
10	5/8" (15.9)	19/32" (15.1)				
11	11/16" (17.5)	5/8" (15.9)				
12	3/4" (19.1)	3/4" (19.1)				
14	7/8" (22.2)	13/16" (20.6)				
16	1" (25.4)	7/8" (22.2)				
18	1-1/8" (28.6)	15/16" (23.8)				
20	1-1/4" (31.8)	1" (25.4)				
22	1-3/8" (34.9)	1-5/32" (29.3)				
24	1-1/2" (38.1)	1-7/32" (30.9)				
26	1-5/8" (41.3)	1-9/32" (32.5)				
28	1-3/4" (44.5)	1-11/32" (34.1)				
30	1-7/8" (47.6)	1-13/32" (35.7)				
32	2" (50.8)	1-15/32" (37.2)				
34	2-1/8" (54.0)	1-17/32" (38.8)				
40	2-1/2" (63.5)	1-23/32" (43.6)				
48	3" (76.2)	1-31/32" (50.1)				

Dimensions HSPW

Clamp Size	Holding Diameter ØD	L	ØD1	A	B	T
4	1/4" (6.4)	21/32" (16.7)	0.41 (10.3)	0.31 (8)	0.75 (19.1)	0.03 (0.8)
6	3/8" (9.5)	23/32" (18.2)				
7	7/16" (11.1)	24/32" (18.5)				
8	1/2" (12.7)	25/32" (19.8)				
9	9/16" (14.3)	13/16" (20.6)				
10	5/8" (15.9)	27/32" (21.4)				
12	3/4" (19.1)	29/32" (23.0)				
14	7/8" (22.2)	31/32" (24.6)				
16	1" (25.4)	1-1/32" (26.2)				
18	1-1/8" (28.6)	1-3/32" (27.8)				0.05 (1.3)

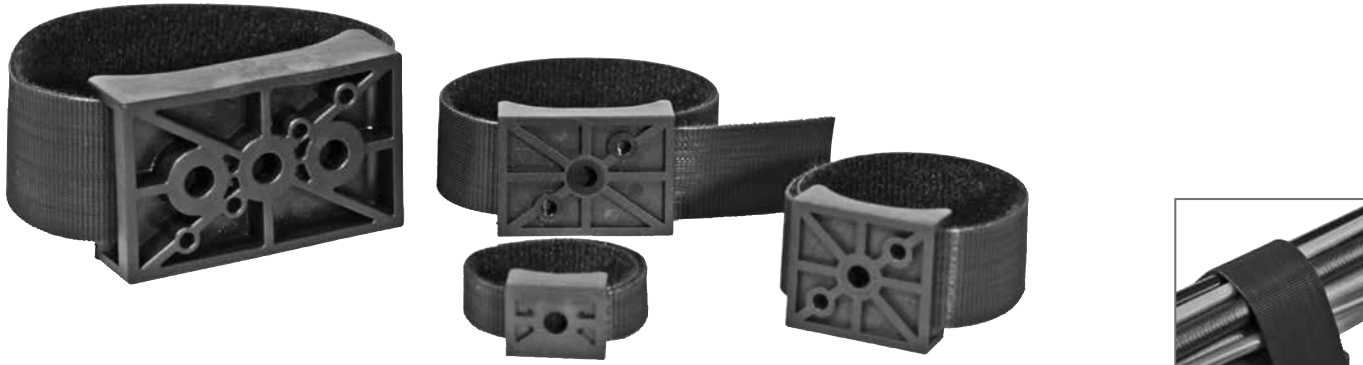
Notes:

1. Dimensions are in inches (mm).
2. Dimensions are for general information only, all critical dimensions should be verified by requesting a certified print.

STANDARD CLAMPS

HY-LOOP Series

Direct Mount or C-Rail Mount Clamps



Description

The HY-LOOP product family is designed to offer a tool free and easy to use solution to your cable management needs. The HY-LOOP comes in a direct mount and C-rail mount in addition to mount free option.

Features and Benefits

- Hook-and-loop tape in fixed lengths or adjustable lengths
- Damage-free installation of sensitive cables
- Tool-free cable assembly
- Extremely easy to use
- Expandable cable bundling

Technical Specifications

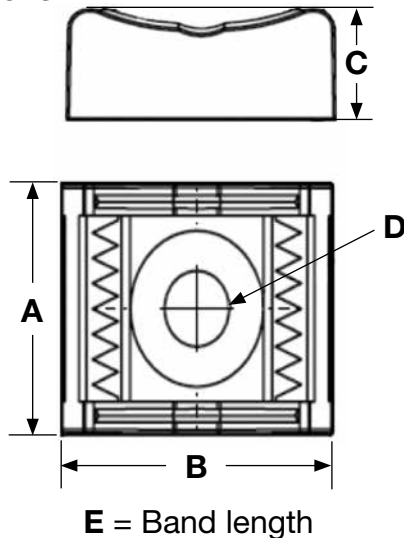
Plastic parts:

- Polyamid glasfaserverstärkt (PA GF)
- Self-extinguishing acc. to UL94-VO
- Temp. range: -40 to +80 C (normal load)
- Free of halogens

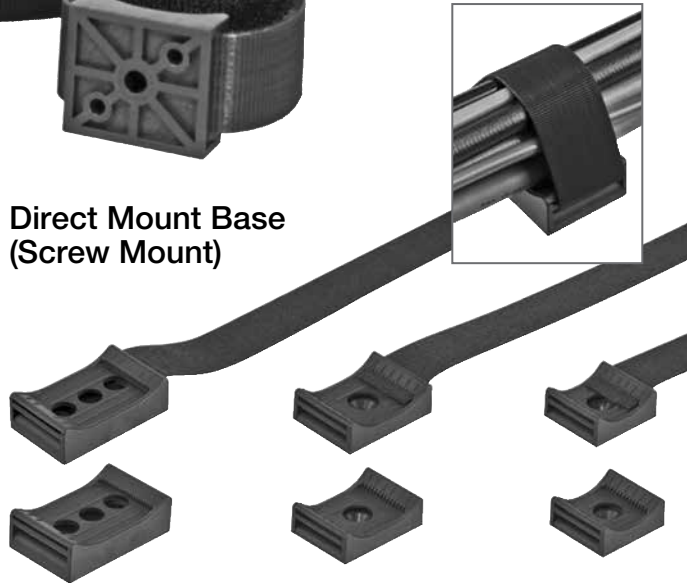
Hook and Loop:

- Polypropylen & Velours PA (extruded and laminated)
- Hooks/cm²: average 272
- Flammability test UL94-V2
- Lifetime: 50% failure at 100 cycles
- Melting point: 150°C
- Free from halogens and silicone
- Shear Strength: min. 7,0 N/cm²
- Peel strength: min. 0,4 N/cm
- Tear resistance: min. 120 N/cm²

Dimensions



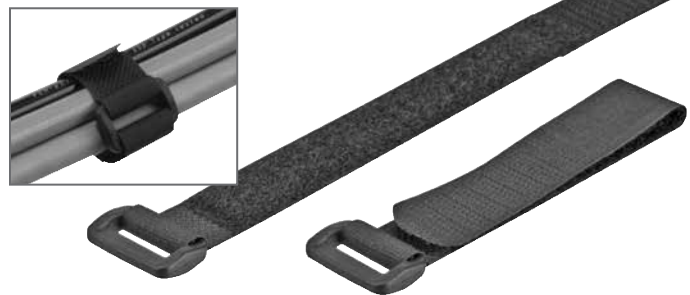
Direct Mount Base (Screw Mount)



C-Rail Mounting Base



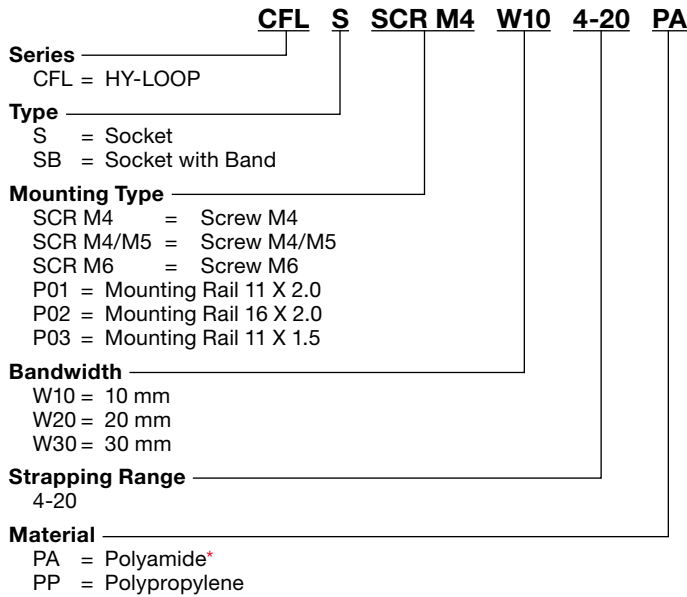
Hook & Loop Tape Straps



HY-LOOP Dimensions (mm)

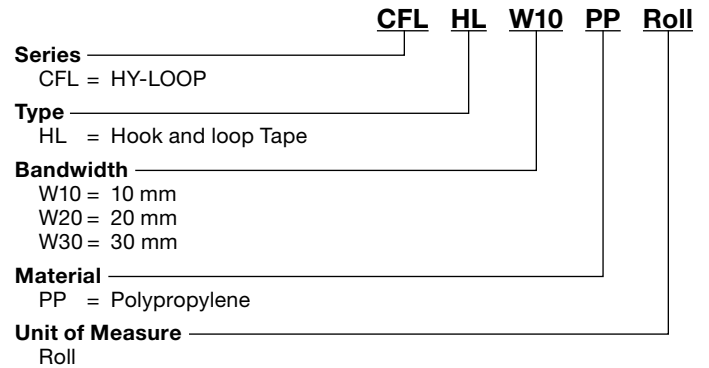
Size	4512954	4512992	4512988	4512994
A	15	26	26	38
B	18.6	29	36	62
C	8.6	11.3	11.3	18.5
D	DIN ISO sunk screw M4	DIN ISO sunk screw M4 o. M5	DIN ISO sunk screw M4 o. M5	3 holes DIN ISO for cap screw M6 Distance Lt. & Rt. hole 30
E	150	180	200	300

Model Code - Direct Mount



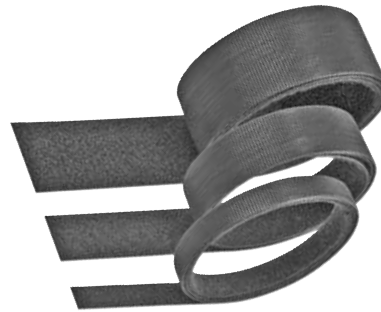
*Note: All hook and loop tape is polypropylene.

Model Code - C-Rail Mount



Hook and Loop Tape Rolls

Part No.	Description	Tape Width (mm)
4512771	CFL HL W10 PP Roll	10
4512825	CFL HL W20 PP Roll	20
4512827	CFL HL W30 PP Roll	30



Mounting Sockets (for Hook and Loop tape)

Part No.	Description	Clamp Range (mm)	Tape Width (mm)	Bolt Size
4512953	CFL SSCR M4 W10 4-20 PA	4-20	10	M4
4512990	CFL SSCR M4/M5 W20 8-35 PA	8-35	20	M4/M5
4512987	CFL SSCR M4/M5 W20 10-60 PA	10-60	20	M4/M5
4512993	CFL SSCR M6 W30 20-100 PA	20-100	30	M6



Mounting Sockets with Hook and Tape

Part No.	Description	Clamp Range (mm)	Tape Width (mm)	Bolt Size
4512954	CFL SBSCR M4 W10 4-20 PA/PP	4-20	10	M4
4512992	CFL SBSCR M4/M5 W20 8-35 PA/PP	8-35	20	M4/M5
4512988	CFL SBSCR M4/M5 W20 10-60 PA/PP	10-60	20	M4/M5
4512994	CFL SBSCR M6 W30 20-100 PA/PP	20-100	30	M6



C-Rail Sockets (for Hook and Loop tape)

Part No.	Description	Clamp Range (mm)	Tape Width (mm)	C-Rail Size
4512947	CFL SP01 W20 8-35 PA	8-35	20	C11 x 2.0





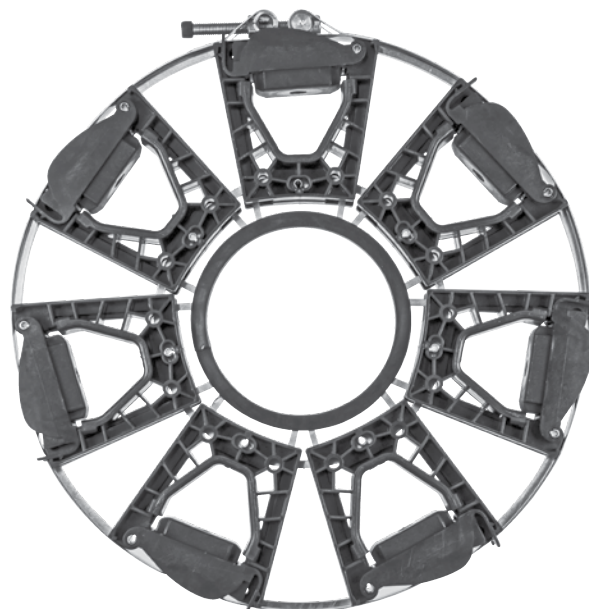
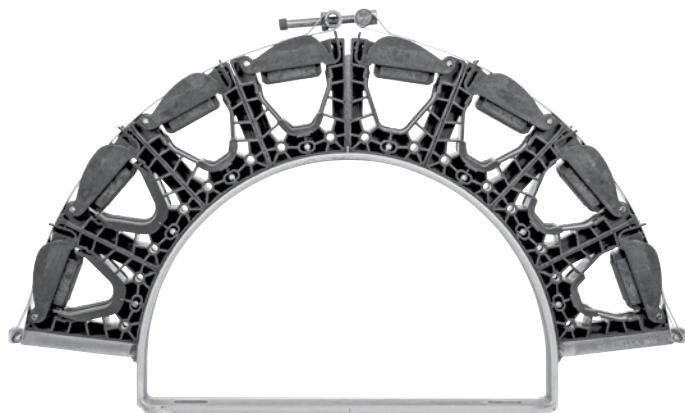
Custom Clamps

HYDAC offers customized series strips and tank mounting band strap solutions for OEM's requiring multiple line runs. In addition we provide a rugged, high durability power cable harness for cable management requirements.

CUSTOM CLAMPS

HY-ROFLEX Series

Power Cable Clamps



Contact Accessories ATS (Advanced Technical Support) today with your custom mounting needs: 484-240-287

Description

Up until now, installing and maintaining power cables has been a costly and time consuming procedure. With the development of the HY-ROFLEX, HYDAC shows how it should be done. This innovative design for supporting power cables simplifies both installation and replacement considerably. Being modular, the installation system saves the manufacturer and the operator time and money.

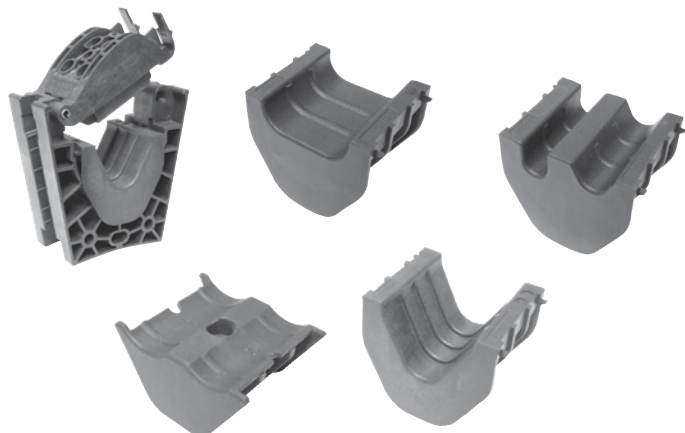
The new development is an extremely flexible and professional solution for quick and easy installation.

The flexible design of the individual segments which secure the cables harnesses opens up numerous possibilities for combining different types, quantities and configurations (*individual cables, bundles of three*) of power cables. Thanks to the excellent accessibility of individual cables, even when replacing cables, "one click" per segment is all that is required. Opening and closing the clamping band is equally simple.

Features

- Quick and easy installation of power cables "one click"
- Non-damaging and secure clamping of the power cable
- HR-ROS clamping bands provide a secure hole in the event of a short circuit.
- Ensures easy maintenance due to clear distribution of cable bundles and excellent accessibility to individual cables.
- Quick replacement
- Up to 27 power cables (*max. 9 segments with 3 cables in each*) can be installed in modular or flexible combinations of clamps segments
- Compensation of manufacturing tolerances in the cables achieved by means of spring-action fastening.

Segments and Inserts



Technical Specification

Diameter

Variable to suit all commonly-used cable diameters up to $\varnothing 73$ mm (individual cables)

Materials

PPVO

HY-ROFLEX Clamping band in stainless steel

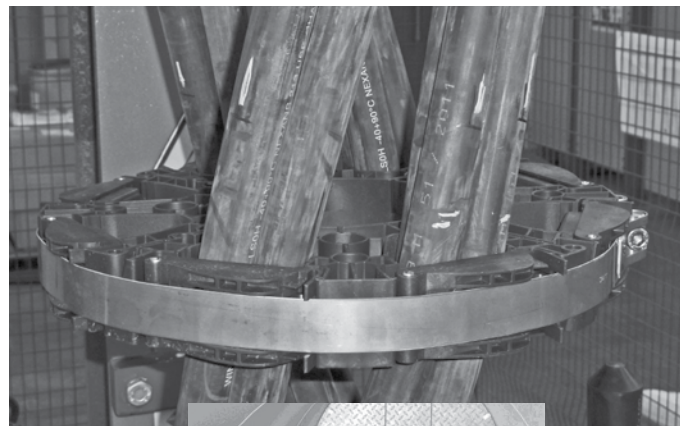
HY-ROS Support set in zinc-plated steel

Temperature range

-40°F (functional) up to +194°F

Subject to technical modifications

HY-ROFLEX



Ordering HYDAC Literature...

HYDAC literature is available for ordering. Email us at HYD.catalog@hydac-na.com using the appropriate Part Number (PN) and name. Other brochures, manuals and technical documents are also available when ordering from our website.

Overview Brochure
PN02088157



Filters Catalog
PN02081318



Accumulators Catalog
PN02068195



Compact Hydraulics
Catalog* (online only)



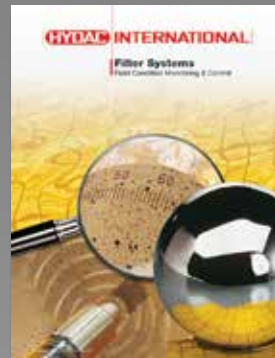
Elec. Sensors & Controls
Brochure PN2205620



Standard Coolers
Catalog - PN02085359



Filter Systems Catalog
PN02075860



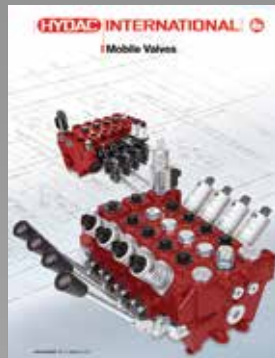
Control Technology*
Catalog (online only)



Accessories Catalog
PN02080105



Mobile Valves Brochure
PN02092408



Hydraulic Cylinders
Brochure PN2204454



Process Technology*
Catalog (online only)



*These catalogs are digital file versions only.

Various market and product brochures are also available for ordering.



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