

Clamp Overview

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 *(see pages 54 - 69)*

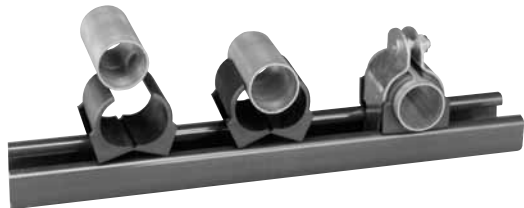
Line Sizes from 1/4" to 16" O.D.



Cushion Clamps *(see pages 73 - 74)*

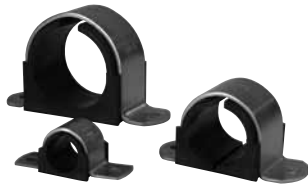
Line Sizes from 1/4" to 3 1/2" O.D.

Mount on standard 1 5/8" x 7/8" unistrut mounting rail



HOM Clamps *(see page 71)*

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



HSPN Clamps *(see page 72)*

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



Accumulator Clamps *(see pages 79 - 80)*

Line Sizes from 3/4" to 10" O.D.



U-Bolt Clamps *(see page 78)*

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



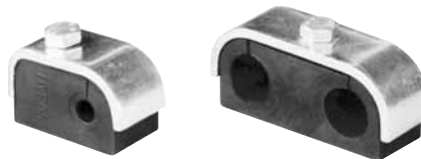
Oval Clamps *(see page 77)*

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



Buegu *(see pages 75 - 76)*

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



HUB Clamps *(see pages 72)*

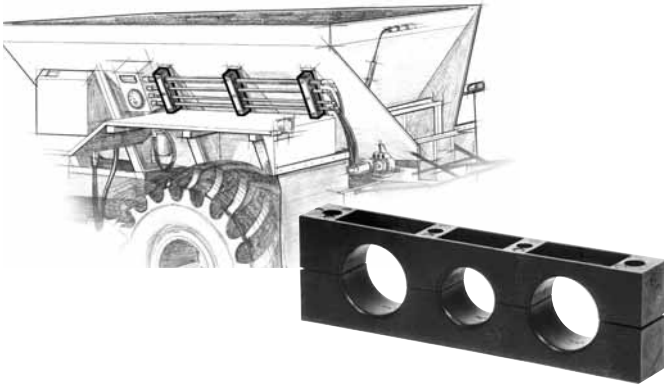
Line Sizes from 1/4" to 12" O.D.



Custom Solutions

HYDAC is also a market leader in providing custom mounting solutions. Our engineers work with yours to develop unique solutions that save time and money by simplifying inventory and installation. From simple modifications of standard product to custom bracketry, we will provide you a successful solution for your application. For more information on custom solutions, please contact product management at **1-877-GO HYDAC**.

Series Strip Clamps



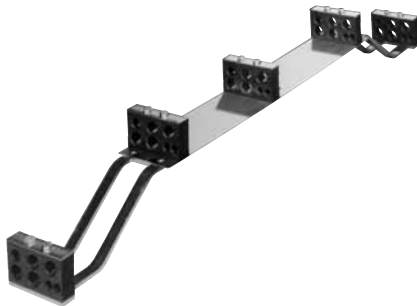
Series Strip Clamp & Custom Bracketry



Custom Molded Hose Bundle



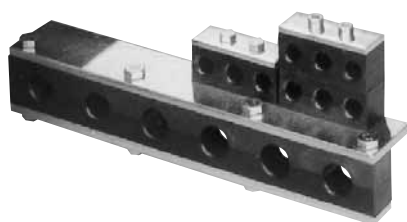
Stacking Series Strip Run



Cylinder / Tube Clamp



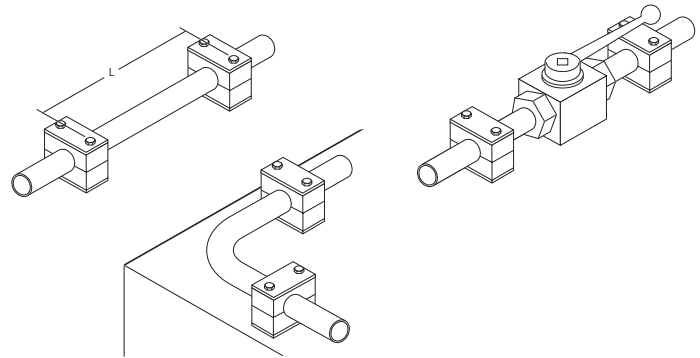
Series Strip Clamp & Custom Mounting Plates



Technical Specifications DIN 3015 Clamps

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 below right 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 3/4"	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
	10	M30	270	470	600
	HRZ (Twin)	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)

	Polypropylene PP	Polyimide 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	-	-	2800 psi
Brinell Hardness Number	-	-	60 BHN
Modules of Elasticity	-	-	9.7 x 10 ⁸ 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	1018 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 Clamp Overview

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. HYDAC clamps absorb shock, dampen vibration, and reduce noise in plumbing systems

Series

HRL - Standard Duty (see pages 51 - 52)



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

HRS - Heavy Duty (see pages 53 - 54)



- 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.

HRZ - Twin (see pages 55 - 56)



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

HREL - Standard Duty w/ Rubber Insert (see pages 57 - 58)



- 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

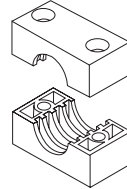
HRES - Heavy Duty w/ Rubber Insert (see pages 59 - 60)



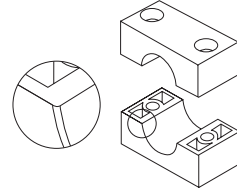
- Heavy duty available to 5 1/4" bore diameter
- Provide for greater noise reduction and resistance to axial movement

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



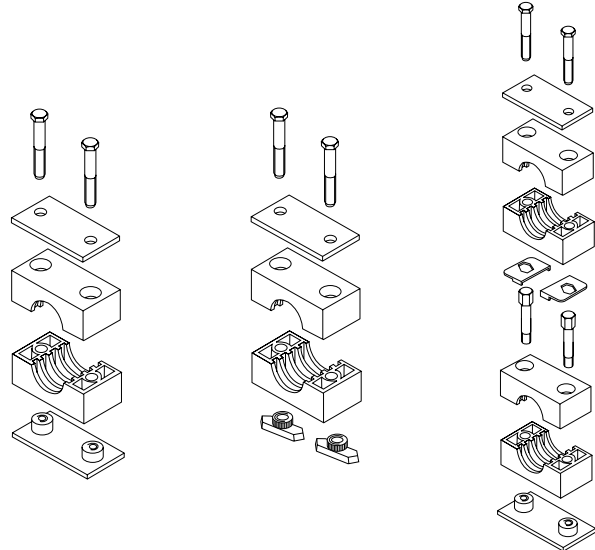
Ribbed Bore
(standard)



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

Arrangements

Various arrangements are available in each series.



Weld Plate Mounting

C-rail Mounting

Stacking Modules & Kits

Materials

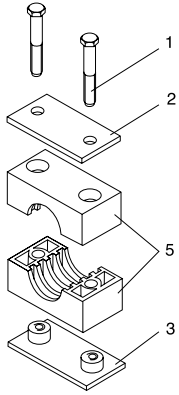
Metal components are carbon steel (standard.) Stainless steel is also available (see page 64 for details.) Metal components to be welded (weld plates and c-rails) and heavy duty top plates size 5-8 are phosphate coated, while all other metal components are zinc plated. Clamp pairs are polypropylene (standard.) Polyimide and aluminum clamp pairs are also available. For specifications on these materials, see page 65

Ordering

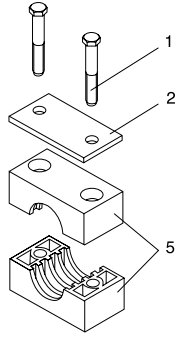
Clamps can be ordered as complete arrangements, or separate components. See each series for details.

HYDAC DIN 3015 Clamps

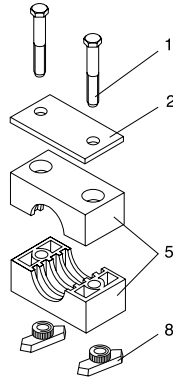
HRL Series Standard Duty Clamps



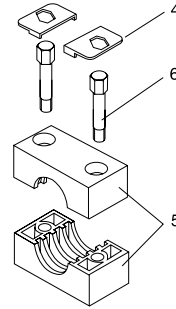
A
Single Clamp with
Weld Plate



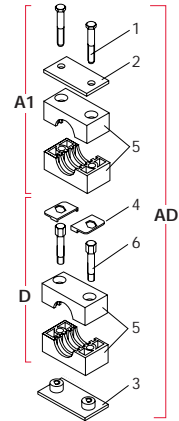
A1
Single Clamp without
Weld Plate



A1TM
Single Clamp for
C-Rail Mounting
(order C-Rail separately)



D
Single Clamp
Stacking Module
(not available for size 0)



AD
Complete Stacking Kit
with Weld Plate
(not available for size 0)

Parts Legend (see page 61 to order parts separately)

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

A maximum of 3 stacking modules is recommended

Model Code: HRL Series

Series

- 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) (size 7 and 8 available in Metric only)

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 (not available for size 0)
- AD = Complete single clamp stacking kit with weld plate (not available for size 0)

Bore Size (in mm)

(refer to table A on next page)

Clamp Material

- PP = Polypropylene
- PA = Polyimide*
- AL = Aluminum (not available for size 0)*

Metal Component Material

- (omit) = Carbon Steel
- A2 = 304 Stainless Steel
- A4 = 316 Stainless Steel (metric threads only)*

Thread Type

- UNC = Standard
- M = Metric*

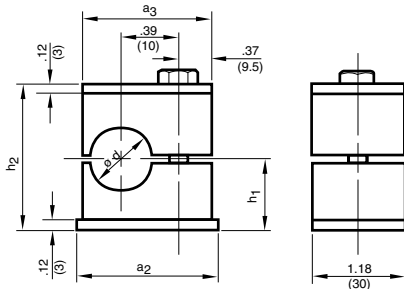
HRL 2 A 12.7 PP UNC

*Model Codes containing selections listed in red italics are non-standard items – Minimum quantities may apply – Contact HYDAC for information and availability
Not all combinations are available*

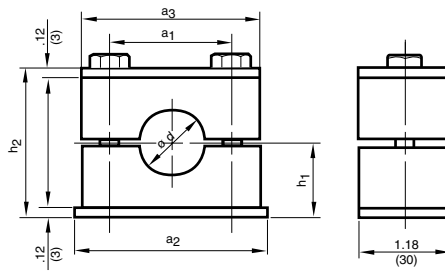
DIN 3015 Clamps **HYDAC**

Dimensions: HRL Series

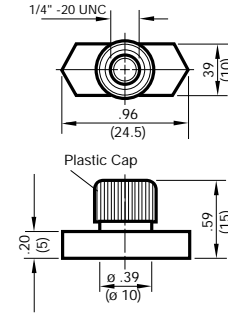
Size 0



Sizes 1-6



C-Rail Nut



C-Rail

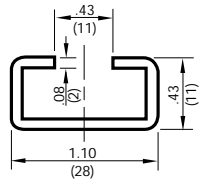


Table A

Size	Ød		Recommended		a1	a2	a3	h1	h2	Bolt Size Arrangement	Weight	
	Bore in	Size mm	Tube O. D.	Nominal Size Pipe							A	B
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 <i>(M6 x 30)</i>	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	10.0	-	1/8"								
	0.47	12.0	-	-								
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 <i>(M6 x 30)</i>	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	10.0	-	1/8"								
	0.47	12.0	-	-								
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 <i>(M6 x 35)</i>	0.27 (0.12)	0.16 (0.07)
	0.54	13.7	-	1/4"								
	0.50	14.0	-	-								
	0.59	15.0	-	-								
	0.63	16.0	5/8"	-								
	0.67	17.1	-	3/8"								
	0.71	18.0	-	-								
3	0.75	19.0	3/4"	-	1.30 (33)	1.97 (50)	1.89 (48)	0.85 (21.5)	1.69 (43)	1/4-20 x 1-1/2 <i>(M6 x 40)</i>	0.31 (0.14)	0.22 (0.10)
	0.79	20.0	-	-								
	0.84	21.3	-	1/2"								
	0.87	22.0	-	-								
	0.91	23.0	-	-								
	0.98	25.0	-	-								
	1.00	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 <i>(M6 x 45)</i>	0.33 (0.15)	0.27 (0.12)
	1.10	28.0	-	-								
	1.18	30.0	-	-								
5	1.26	32.0	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 <i>(M6 x 60)</i>	0.42 (0.19)	0.31 (0.14)
	1.33	33.7	-	1"								
	1.38	35.0	-	-								
	1.50	38.0	1-1/2"	-								
	1.57	40.0	-	-								
	1.65	42.0	-	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 <i>(M6 x 70)</i>	0.53 (0.24)	0.40 (0.18)
	1.90	48.3	-	1-1/2"								
	2.00	50.8	2"	-								
7	2.37	60.3	-	2	3.7 (94)	4.8 (122)	4.64 (118)	2.15 (54.5)	4.17 (106)	<i>(M6 x 100)</i>	-	-
	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)	2.66 (67.6)	5.16 (131)	<i>(M6 x 125)</i>	-	-

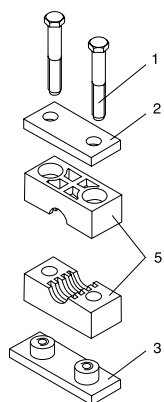
Note: Other bore diameters are available — Consult factory for details.

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

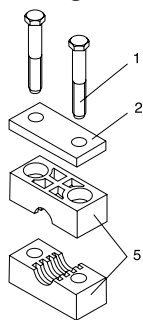
Dimensions are in inches/(mm) and lbs./(kg.)

HYDAC *DIN 3015 Clamps*

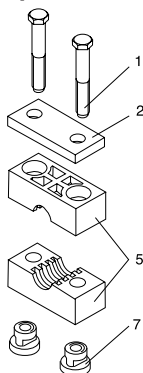
HRS Series Heavy Duty Clamps



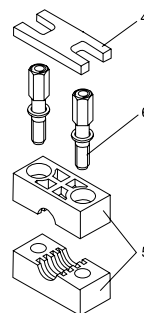
S
Single Clamp with
Weld Plate



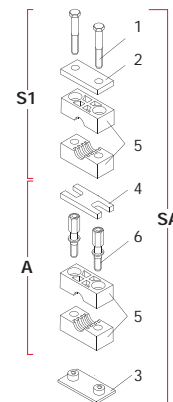
S1
Single Clamp without
Weld Plate



S1TM
Single Clamp for
C-Rail Mounting
(size 1 to 4 only)
(order C-Rail separately)



A
Single Clamp
Stacking Module
(size 1 to 5 only)



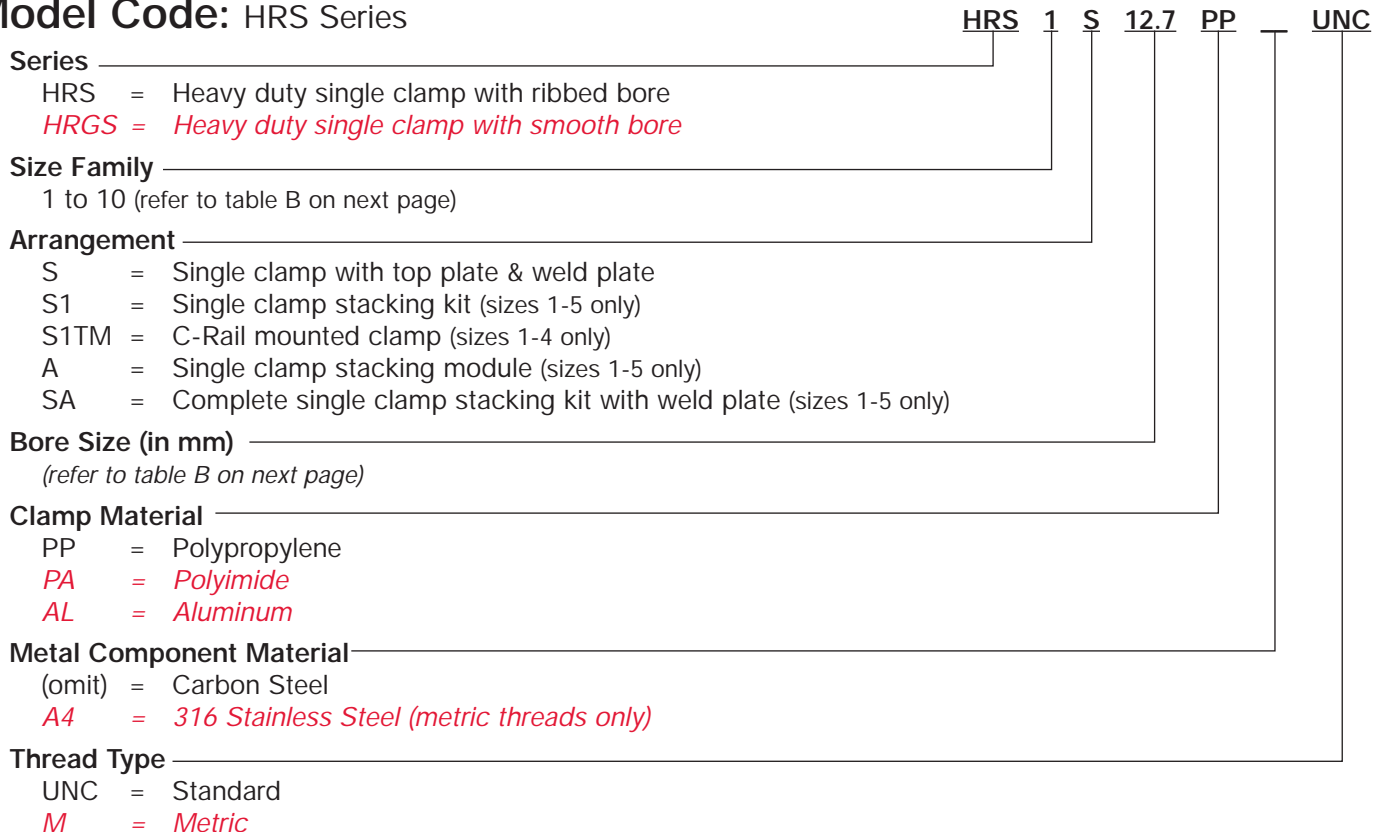
SA
Complete Stacking Kit
with Weld Plate
(size 1 to 5 only)

Parts Legend (see page 62 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	

A maximum of 3 stacking modules is recommended

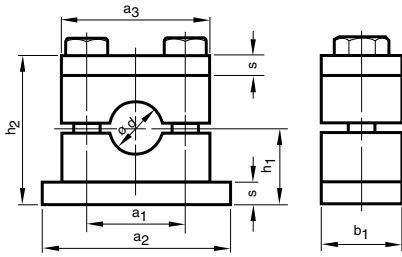
Model Code: HRS Series



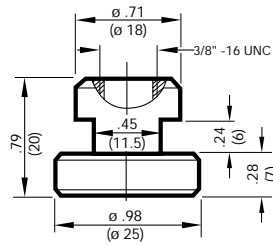
*Model Codes containing selections listed in red italics are non-standard items – Minimum quantities may apply – Contact HYDAC for information and availability
Not all combinations are available*

Dimensions: HRS Series

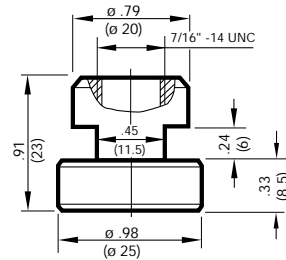
All Sizes



C-Rail Nut (sizes 1-3)



C-Rail Nut (size 4)



C-Rail (all sizes)

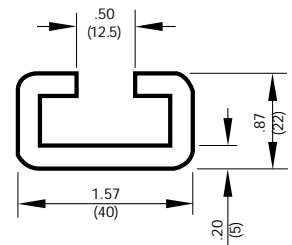


Table B

Ød		Recommended			a1	a2	a3	b1	h1	h2	s	Bolt Size
Size	Bore Size	Size	Nominal Size	Tube O.D.								
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)	3/8-16x1-3/4 (M10 x 45)
	0.25	6.4	1/4"	-								
	0.32	8.0	5/16"	-								
	0.37	9.5	3/8"	-								
	0.39	10.0	-	-								
	0.41	10.3	-	1/8"								
	0.50	12.7	1/2"	1/4"								
	0.54	13.7	-	-								
	0.55	14.0	-	-								
	0.59	15.0	-	-								
2	0.63	16	5/8"	-	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)
	0.67	17.1	-	3/8"								
	0.71	18.0	-	-								
	0.75	19.0	3/4"	-								
	0.79	20.0	-	1/2"								
	0.84	21.3	-	-								
	0.87	22.0	7/8"	-								
	0.98	25.0	-	-								
3	1.00	25.4	1"	-	2.36 (60)	3.94 (100)	3.35 (85)	1.18 (30)	1.50 (38)	2.99 (76)	0.31 (8)	3/8-16x2-3/4 (M10 x 70)
	1.05	26.7	-	3/4"								
	1.10	28.0	-	-								
	1.18	30.0	-	-								
	0.98	25.0	-	-								
	1.18	30.0	-	-								
	1.26	32.0	1-1/4"	-								
	1.33	33.7	-	1"								
4	1.38	35.0	-	-	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)
	1.50	38.0	1-1/2"	-								
	1.57	40.0	-	-								
	1.65	42.0	-	1-1/4"								
	1.18	30.0	-	-								
	1.50	38.0	1-1/2"	-								
	1.65	42.0	-	-								
	1.75	44.5	1-3/4"	-								
5	1.90	48.3	-	1-1/2"	4.80 (122)	7.09 (180)	5.98 (152)	2.36 (60)	2.76 (70)	5.51 (140)	0.39 (10)	5/8-11x5-1/2 (M16 x 130)
	2.00	50.8	2"	-								
	2.13	54.0	-	-								
	2.24	57.0	2-1/4"	-								
	2.37	60.3	-	2"								
	2.50	63.5	2-1/2"	-								
	2.56	65.0	-	-								
	2.75	70.0	2-3/4"	-								
6	1.50	38.0	1-1/2"	-	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)
	2.56	65.0	-	-								
	3.78	96.0	-	-								
	4.00	101.6	4"	3-1/2"								
	4.25	108.0	4-1/4"	-								
7	4.50	114.3	4-1/2"	4"	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 (M20 x 220)
	3.54	90.0	-	-								
	5.35	136.0	-	-								
	5.50	139.7	-	5"								
8	6.61	168.0	-	6"	10.43 (265)	13.39 (340)	12.60 (320)	4.72 (120)	6.30 (160)	12.60 (320)	0.98 (25)	M30 x 300
	7.63	193.7	7-5/8"	7"								
9	8.62	219.1	-	8"	15.55 (395)	20.47 (520)	18.35 (466)	6.30 (160)	9.25 (235)	18.50 (470)	1.18 (30)	M30 x 450
	10.75	273.0	-	10"								
10	12.75	323.9	-	12"	21.06 (535)	26.77 (680)	24.80 (630)	7.09 (180)	11.61 (295)	23.23 (590)	1.18 (30)	M30 x 560
	14.00	355.6	-	14"								
	16.00	406.4	-	16"								

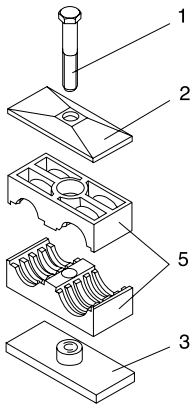
Note: Other bore diameters are available — Consult factory for details.

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

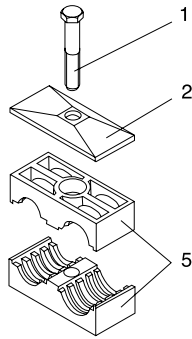
Dimensions are in inches/(mm) and lbs./(kg).

HYDAC DIN 3015 Clamps

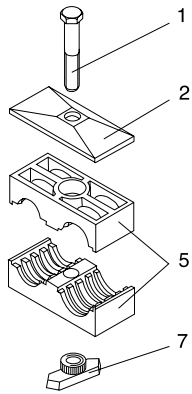
HRZ Series Twin Clamps



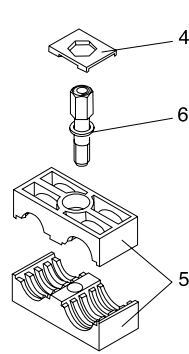
A
Twin Clamp with
Weld Plate



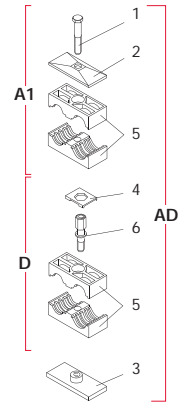
A1
Twin Clamp without
Weld Plate



A1TM
Twin Clamp for
C-Rail Mounting
(order C-Rail separately)



D
Twin Clamp
Stacking Module



AD
Complete Stacking Kit
with Weld Plate

Parts Legend (see page 63 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	

A maximum of 3 stacking modules is recommended

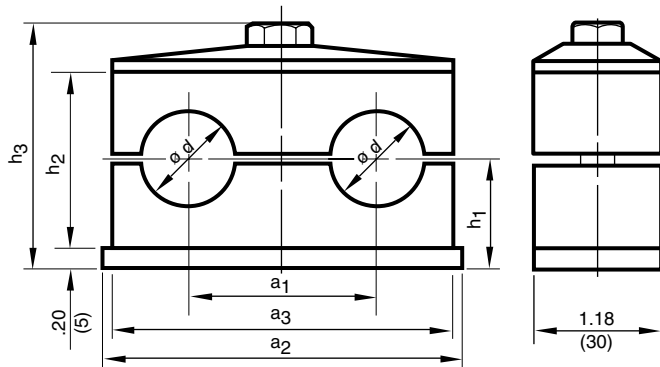
Model Code: HRZ Series

Series	HRZ	1	A	9.5 - 9.5	PP	UNC
<p>HRZ = Standard duty twin clamp with ribbed bore</p> <p><i>HRGZ = Standard duty twin clamp with smooth bore</i></p>						
Size Family						
0 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						
AD - Complete twin clamp stacking kit with weld plate						
Bore Size (in mm)						
(refer to table C on next page)						
Clamp Material						
PP - Polypropylene						
<i>PA - Polyimide</i>						
Thread Type						
UNC = Standard						
<i>M = Metric</i>						

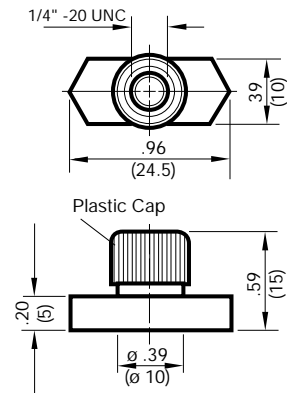
Model Codes containing selections listed in red italics are non-standard items – Minimum quantities may apply – Contact HYDAC for information and availability
Not all combinations are available

Dimensions: HRZ Series

All sizes



C-Rail Nut



C-Rail

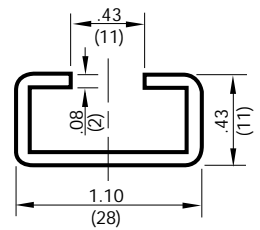


Table C

Size	Ød		Recommended		a1	a2	a3	h1	h2	h3	Bolt Size
	Bore Size in	mm	Nominal Size	Tube O.D. Pipe							
1	0.24	6.0	-	-	0.79 (20)	1.46 (37)	1.42 (36)	0.73 (18.5)	1.06 (27)	1.69 (43)	1/4-20 x 1-1/2 <i>(M6 x 35)</i>
	0.25	6.4	1/4"	-							
	0.32	8.0	5/16"	-							
	0.37	9.5	3/8"	-							
	0.39	10.0	-	1/8"							
	0.41	10.3	-	1/8"							
	0.47	12.0	-	-							
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 1-1/4 <i>(M8 x 35)</i>
	0.54	13.7	-	1/4"							
	0.55	14.0	-	-							
	0.59	15.0	-	-							
	0.63	16.0	5/8"	-							
	0.67	17.1	-	3/8"							
3	0.75	19.0	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 1-3/4 <i>(M8 x 45)</i>
	0.79	20.0	-	-							
	0.84	21.3	-	1/2"							
	0.87	22.0	7/8"	-							
	0.91	23.0	-	-							
	0.98	25.0	-	-							
	1.00	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 <i>(M8 x 50)</i>
	1.10	28.0	-	-							
	1.18	30.0	-	-							
5	1.26	32.0	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 <i>(M8 x 60)</i>
	1.33	33.7	-	1"							
	1.38	35.0	-	-							
	1.50	38.0	1-1/2"	-							
	1.65	40.0	-	-							
	1.65	42.0	-	1-1/4"							

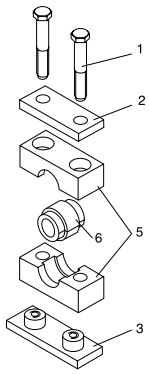
Note: Other bore diameters are available — Consult factory for details.

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

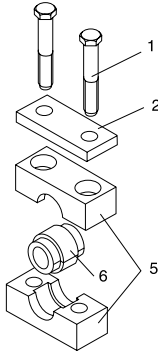
Dimensions are in inches/(mm) and lbs./kg.)

HYDAC DIN 3015 Clamps

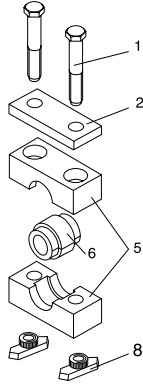
HREL Series Standard Duty Clamps with Rubber Inserts



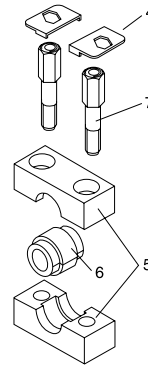
A
Single Clamp with
Weld Plate



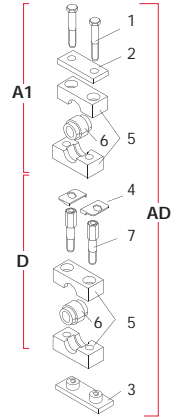
A1
Single Clamp without
Weld Plate



A1TM
Single Clamp for
C-Rail Mounting
(order C-Rail separately)



D
Single Clamp
Stacking Module



AD
Complete Stacking Kit
with Weld Plate

Parts Legend (see page 61 to order parts separately)

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

A maximum of 3 stacking modules is recommended

Model Code: HREL Series

Series	HREL
Size Family	4
Arrangement	A
Bore Size (in mm)	12.7
Clamp Material	PP
Metal Components Materials	UNC
Thread Type	UNC

A = Single clamp with top plate and weld plate
 A1 = Single clamp stacking kit
 A1TM = C-Rail mounted clamp
 D = Single clamp stacking module (not available for size 0)
 AD = Complete stacking kit with weld plate

PP = Polypropylene
PA = Polyimide

(omit) = Carbon Steel
 A2 = 304 Stainless Steel
A4 = 316 Stainless Steel (metric threads only)

UNC = Standard
M = Metric

Model Codes containing selections listed in red italics are non-standard items – Minimum quantities may apply – Contact HYDAC for information and availability
Not all combinations are available

Dimensions: HREL Series

All sizes

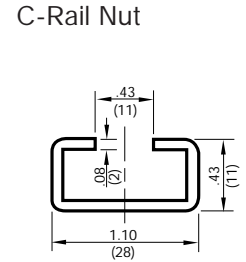
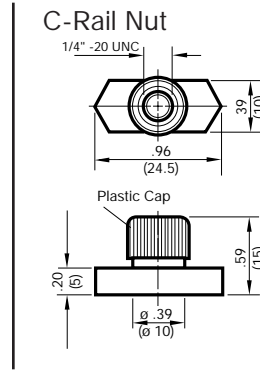
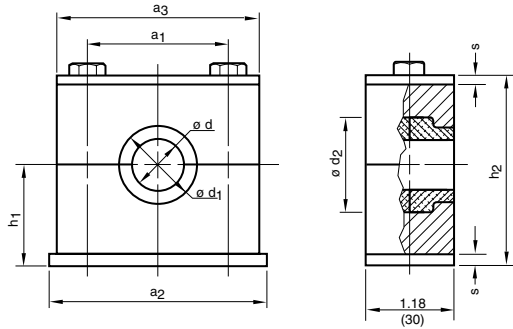


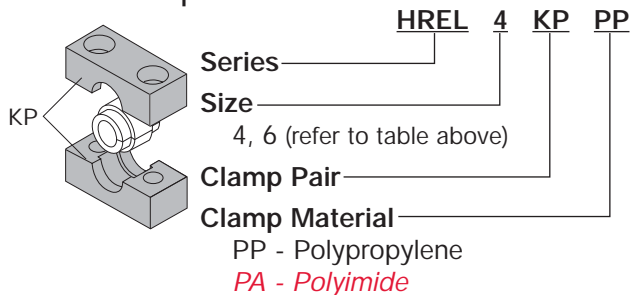
Table D

Clamp Size	EE-Rubber Insert Bore Size	Bore Size		Tube O.D.	Pipe	Recommended Nominal Size		Ø d1	Ø d2	h1	h2	a1	a2	a3	s	Bolt Size		
		in	mm			Hose O.D.	Min (in)										Max (in)	
4	2/4 L	0.24	6	-	-	0.22	0.24											
		0.32	8	1/16"	-	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	1.00	1.22	0.925	1.85	1.57	2.32	2.24	0.118	1/4-20x1 3/4		
		0.55	14	-	-	0.53	0.55	(25.5)	(31)	(23.5)	(47)	(40)	(59)	(57)	(3)	<i>(M6 x 45)</i>		
		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											
		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	1.54	1.81	1.40	2.80	2.60	3.46	3.39	0.118	1/4-20x2 3/4		
		1.10	28	-	-	1.08	1.10	(39)	(46)	(35.5)	(71)	(66)	(88)	(86)	(3)	<i>(M6 x 70)</i>		
		1.18	30	-	-	1.16	1.18											
1.26	32	1 1/4"	-	1.24	1.26													

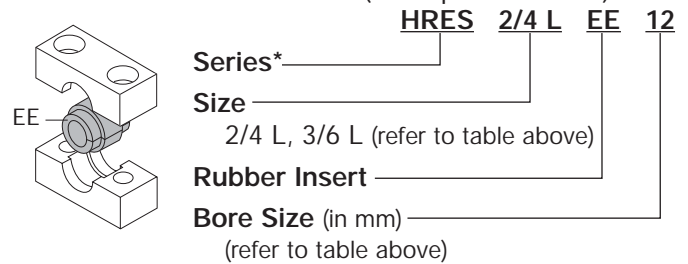
Note: Other bore diameters are available — Consult factory for details.
 Dimensions are for general information only, all critical dimensions should be verified by requesting a certified print.
 Dimensions are in inches/(mm) and lbs./(kg.)

Parts: HREL Series

KP = Clamp Pair



EE = Rubber Insert (Santoprene TPE 73)

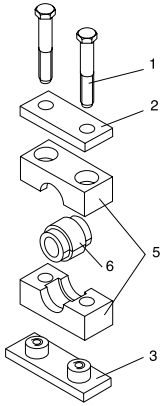


Model Codes containing selections listed in red italics are non-standard items – Minimum quantities may apply – Contact HYDAC for information and availability

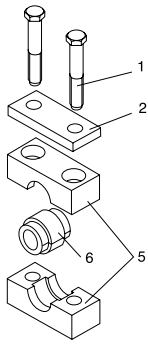
Note: All other components for these clamps are the same as for HRL series standard duty single clamps. Refer to page 61 for details

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

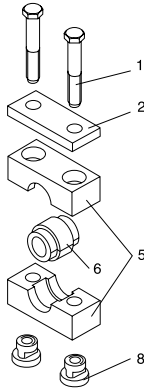
HRES Series Heavy Duty Clamps with Rubber Inserts



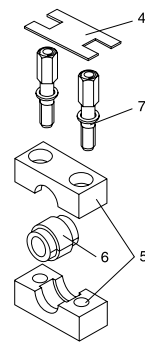
S
Single Clamp with
Weld Plate



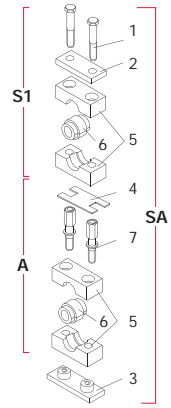
S1
Single Clamp without
Weld Plate



S1TM
Single Clamp for
C-Rail Mounting
(order C-Rail separately)



A
Single Clamp
Stacking Module



SA
Complete Stacking Kit
with Weld Plate

Parts Legend (see page 62 to order parts separately)

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

A maximum of 3 stacking modules is recommended

Model Code: HRES Series

Series	HRES
Size Family	4
Arrangement	S
Bore Size (in mm)	35
Clamp Material	PP
Thread Type	UNC

2 to 7 (refer to table E on next page)

S - Single clamp with weld plate
S1 - Single clamp stacking kit
S1TM - C-Rail mounted clamp
A - Single clamp stacking module
SA - Complete stacking kit with weld plate

(refer to table E on next page)

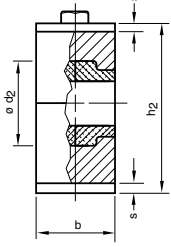
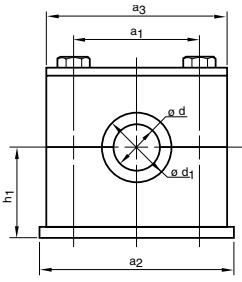
PP - Polypropylene
PA - Polyimide

UNC = Standard
M = Metric

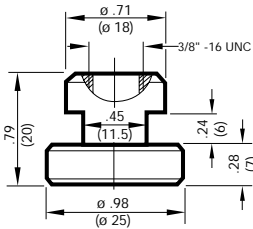
*Model Codes containing selections listed in red italics are non-standard items – Minimum quantities may apply – Contact HYDAC for information and availability
Not all combinations are available*

Dimensions: HRES Series

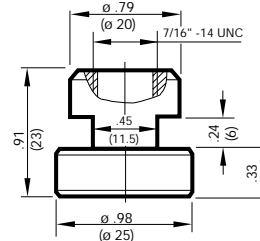
All Sizes



C-Rail Nut (sizes 1-3)



C-Rail Nut (size 4)



C-Rail (all sizes)

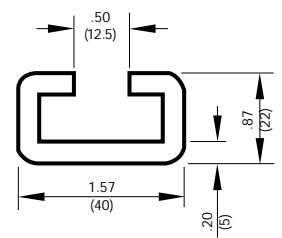


Table E

Clamp Size	EE-Rubber Insert Size	Bore Size ø D	Tube O.D.		Pipe		Recommended Nominal Size Hose O.D.		Ø d1	Ø d2	b	h1	h2	a1	a2	a3	s	Bolt Size		
			Min (in)	Max (in)	Min (in)	Max (in)	Min (in)	Max (in)												
2	2/4 L	0.24	6	-	-	0.22	0.24													
		0.32	8	-	1/16"	-	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	1.00	1.24	1.18	1.22	2.44	1.77	3.35	2.76	0.32	3/8-16x2-1/4		
		0.55	14	-	-	-	0.53	0.55	(25.5)	(31.5)	(30)	(31)	(62)	(45)	(85)	(70)	(8)	(M10 x 60)		
		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													
		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	1.54	1.83	1.18	1.46	2.91	2.36	3.94	3.35	0.32	3/8-16x2-3/4		
		1.10	28	-	-	-	1.08	1.10	(39)	(46.5)	(30)	(37)	(74)	(60)	(100)	(85)	(8)	(M10 x 70)		
		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													
		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	2.56	2.91	1.77	2.11	4.21	3.56	5.51	4.53	0.39	7/16-14x4		
		1.79	45.5	-	-	-	1.77	1.79	(65)	(74)	(45)	(53.5)	(107)	(90.5)	(140)	(115)	(10)	(M12 x 100)		
		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													
		2.56	65	-	-	-	2.54	2.56	3.50	3.86	2.36	2.70	5.39	4.80	7.09	5.98	0.39	5/8-11x5 1/2		
		2.76	70	-	-	-	2.74	2.76	(89)	(98)	(60)	(68.5)	(137)	(122)	(180)	(152)	(10)	(M16 x 130)		
		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													
		3.50	89	-	3 1/2"	3"	3.43	3.50	4.57	5.20	3.15	3.88	7.76	6.61	8.86	8.07	0.59	3/4-10x7 1/2		
		3.70	94	-	-	-	3.62	3.70	(116)	(132)	(80)	(98.5)	(197)	(168)	(225)	(205)	(15)	(M20 x 190)		
		3.98	101	-	4"	3 1/2"	3.90	3.98												
7	7	4.26	108	-	-	4.17	4.26	6.06	6.61	3.54	4.47	8.94	8.07	10.63	9.92	0.59	7/8-9x8 1/2			
		4.49	114	-	-	-	4.41	4.49	(154)	(168)	(90)	(113.5)	(227)	(205)	(270)	(252)	(15)	(M20 x 220)		
		5.24	133	-	-	-	5.16	5.24												

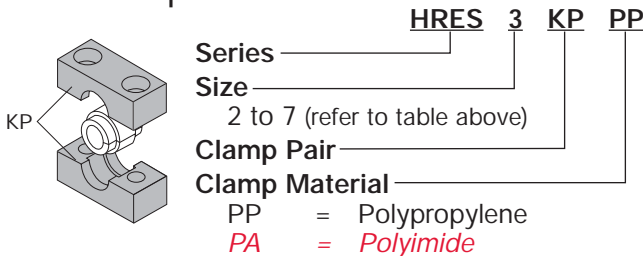
Note: Other bore diameters are available — Consult factory for details.

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

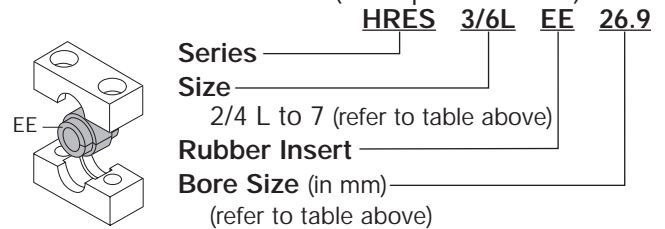
Dimensions are in inches/(mm) and lbs./(kg.)

Parts: HRES Series

KP = Clamp Pair



EE = Rubber Insert (Santoprene TPE 73)



Model Codes containing selections listed in red italics are non-standard items – Minimum quantities may apply – Contact HYDAC for information and availability

Not all combinations are available

Note: All other components for these clamps are the same as for HRS series heavy duty single clamps.

Refer to page 62 for details

Clamps with Stainless Steel Metal Components

Description

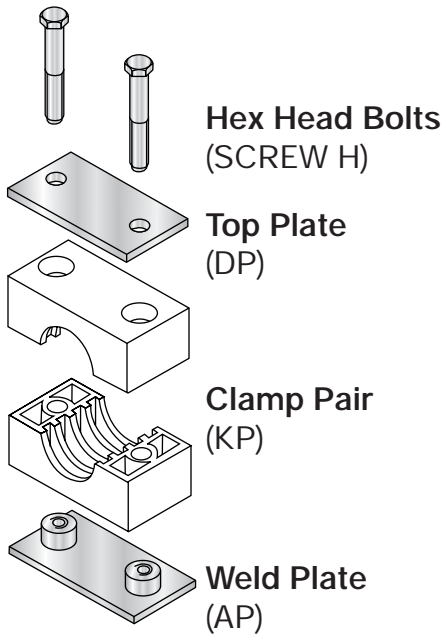
Clamps with stainless steel metal components are available for corrosive environments. Our complete line of DIN 3015 clamps are available in stainless steel. Some models are special order, which may require minimum quantities, and/or extended delivery times. Listed here are the standard duty and heavy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

Typical Arrangement

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

304 Stainless Steel: (A2)

- Available from stock
- UNC bolts

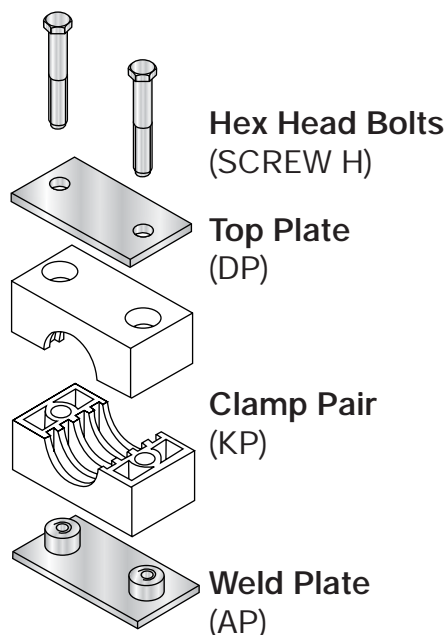


Standard Duty (HRL)

304 stainless steel (A2) metal components

Size	Model Code	Part Number
Arrangements (complete with PP clamp pair)		
1	HRL 1 A XX PP A2 UNC	XX = bore diameter
2	HRL 2 A XX PP A2 UNC	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 52 for available bore sizes.
3	HRL 3 A XX PP A2 UNC	
4	HRL 4 A XX PP A2 UNC	
5	HRL 5 A XX PP A2 UNC	
6	HRL 6 A XX PP A2 UNC	
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 1.50 SS316	02700906
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

Clamps with Stainless Steel Metal Components



Typical Arrangement

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

316 Stainless Steel: (A4)

- Salt water resistance
- Only metric bolts available

Standard Duty (HRL)

316 stainless steel (A4) metal components

Size	Model Code	Part Number
Arrangements (complete with PP clamp pair)		
1	<i>HRL 1 A XX PP A4 M</i>	<i>XX = bore diameter</i>
2	<i>HRL 2 A XX PP A4 M</i>	<i>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 52 for available bore sizes.</i>
3	<i>HRL 3 A XX PP A4 M</i>	
4	<i>HRL 4 A XX PP A4 M</i>	
5	<i>HRL 5 A XX PP A4 M</i>	
6	<i>HRL 6 A XX PP A4 M</i>	
Weld Plates		
1	<i>HRL 1 AP A4 M</i>	<i>00268508</i>
2	<i>HRL 2 AP A4 M</i>	<i>00268509</i>
3	<i>HRL 3 AP A4 M</i>	<i>00268510</i>
4	<i>HRL 4 AP A4 M</i>	<i>00268511</i>
5	<i>HRL 5 AP A4 M</i>	<i>00261215</i>
6	<i>HRL 6 AP A4 M</i>	<i>00261216</i>
Top Plates		
1	<i>HRL 1 DP A4</i>	<i>00261108</i>
2	<i>HRL 2 DP A4</i>	<i>00261109</i>
3	<i>HRL 3 DP A4</i>	<i>00261110</i>
4	<i>HRL 4 DP A4</i>	<i>00261111</i>
5	<i>HRL 5 DP A4</i>	<i>00261112</i>
6	<i>HRL 6 DP A4</i>	<i>00261113</i>
Hex Head Bolts		
1	<i>SCREW H M6X30 A4</i>	<i>00603039</i>
2	<i>SCREW H M6X35 A4</i>	<i>00602136</i>
3	<i>SCREW H M6X40 A4</i>	<i>00602138</i>
4	<i>SCREW H M6X45 A4</i>	<i>00602140</i>
5	<i>SCREW H M6X60 A4</i>	<i>00602142</i>
6	<i>SCREW H M6X70 A4</i>	<i>00602144</i>

Heavy Duty (HRS)

316 stainless steel (A4) metal components

Size	Model Code	Part Number
Arrangements (complete with PP clamp pair)		
1	<i>HRS 1 S XX PP A4 M</i>	<i>XX = bore diameter</i>
2	<i>HRS 2 S XX PP A4 M</i>	<i>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 54 for available bore sizes.</i>
3	<i>HRS 3 S XX PP A4 M</i>	
4	<i>HRS 4 S XX PP A4 M</i>	
5	<i>HRS 5 S XX PP A4 M</i>	
6	<i>HRS 6 S XX PP A4 M</i>	
Weld Plates		
1	<i>HRS 1 AP A4 M</i>	<i>00263646</i>
2	<i>HRS 2 AP A4 M</i>	<i>00263647</i>
3	<i>HRS 3 AP A4 M</i>	<i>00263648</i>
4	<i>HRS 4 AP A4 M</i>	<i>00267902</i>
5	<i>HRS 5 AP A4 M</i>	<i>00263700</i>
6	<i>HRS 6 AP A4 M</i>	<i>00263701</i>
Top Plates		
1	<i>HRS 1 DP A4</i>	<i>00262018</i>
2	<i>HRS 2 DP A4</i>	<i>00262019</i>
3	<i>HRS 3 DP A4</i>	<i>00262020</i>
4	<i>HRS 4 DP A4</i>	<i>00262021</i>
5	<i>HRS 5 DP A4</i>	<i>00262022</i>
6	<i>HRS 6 DP A4</i>	<i>00262023</i>
Hex Head Bolts		
1	<i>SCREW H M10X45 A4</i>	<i>00602151</i>
2	<i>SCREW H M10X60 A4</i>	<i>00602153</i>
3	<i>SCREW H M10X70 A4</i>	<i>00602155</i>
4	<i>SCREW H M12X100 A4</i>	<i>00602157</i>
5	<i>SCREW H M16X130 A4</i>	<i>00602160</i>
6	<i>SCREW H M20X190 A4</i>	<i>00602163</i>
HRS C-Rail		
1	<i>HRS TS 40X22 A4 2M</i>	<i>00263359</i>
HRS C-Rail Nuts		
1	<i>HRS TM 10 A4 M</i>	<i>00262736</i>
2	<i>HRS TM 12 A4 M</i>	<i>00262739</i>

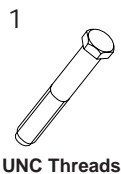
Model Codes containing selections listed in red italics are non-standard items – Minimum quantities may apply – Contact **HYDAC** for information and availability

HYDAC DIN 3015 Clamps

Parts HRL Series

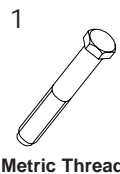
All metal components are carbon steel. For stainless steel metal components please refer to page 64.

ST = Carbon Steel **BL** = Phosphate coated **ZN** = Zinc Plated



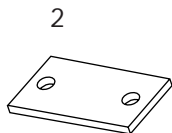
UNC Threads

UNC Hex Head Bolts	
size family	model code
0	SCREW H 1/4 - 20 x 1.25 GR2
1	SCREW H 1/4 - 20 x 1.25 GR2
2	SCREW H 1/4 - 20 x 1.50 GR2
3	SCREW H 1/4 - 20 x 1.50 GR2
4	SCREW H 1/4 - 20 x 1.75 GR2
5	SCREW H 1/4 - 20 x 2.50 GR2
6	SCREW H 1/4 - 20 x 2.75 GR2



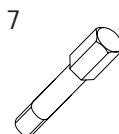
Metric Threads

Metric Hex Head Bolts	
size family	model code
0	SCREW H M6 X 30 - 8.8
1	SCREW H M6 X 30 - 8.8
2	SCREW H M6 X 35 - 8.8
3	SCREW H M6 X 40 - 8.8
4	SCREW H M6 X 45 - 8.8
5	SCREW H M6 X 60 - 8.8
6	SCREW H M6 X 70 - 8.8



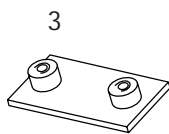
2

DP = Top Plate	
size family	model code
0	HRL 0 DP ST ZN
1	HRL 1 DP ST ZN
2	HRL 2 DP ST ZN
3	HRL 3 DP ST ZN
4	HRL 4 DP ST ZN
5	HRL 5 DP ST ZN
6	HRL 6 DP ST ZN



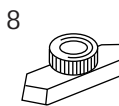
7

AF = Stacking Bolt	
size family	model code
1	HRL 1 AF ST UNC
2	HRL 2 AF ST UNC
3	HRL 3 AF ST UNC
4	HRL 4 AF ST UNC
5	HRL 5 AF ST UNC
6	HRL 6 AF ST UNC



3

AP = Weld Plate	
size family	model code
0	HRL 0 AP ST UNC BL
1	HRL 1 AP ST UNC BL
2	HRL 2 AP ST UNC BL
3	HRL 3 AP ST UNC BL
4	HRL 4 AP ST UNC BL
5	HRL 5 AP ST UNC BL
6	HRL 6 AP ST UNC BL



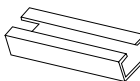
8

TM = C-Rail Nut	
size family	model code
0 - 6	HRL 0-6 TM1/4 ST UNC KAP



4

SIP = Safety Plate	
size family	model code
0-6	HRL 0-6 SIP ST ZN

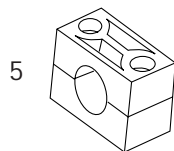


TS = C-Rail	
size family	model code
39"	HRL TS 28x11 ST BL 1M
78"	HRL TS 28x11 ST BL 2M

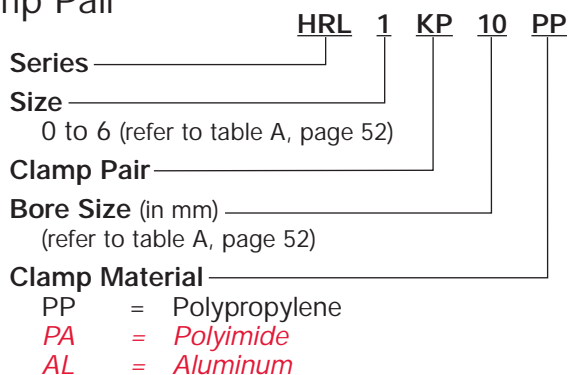
Parts Legend

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

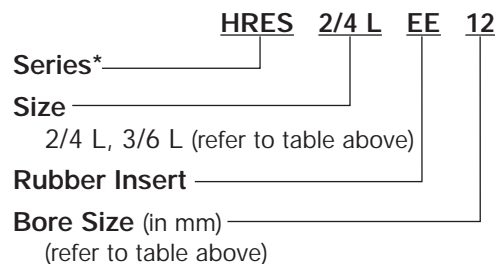
KP = Clamp Pair



5



EE = Rubber Insert (Santoprene TPE 73)

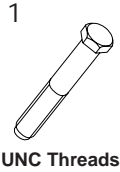


Model Codes containing selections listed in red italics are non-standard items – Minimum quantities may apply – Contact HYDAC for information and availability
Not all combinations are available

Parts HRS Series

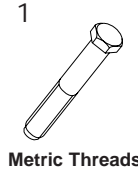
All metal components are carbon steel. For stainless steel metal components please refer to page 53.

ST = Carbon Steel **BL** = Phosphate coated **ZN** = Zinc Plated



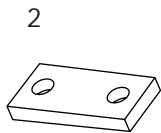
UNC Threads

UNC Hex Head Bolts	
size family	model code
1	SCREW H 3/8 - 16 x 1.75 GR5
2	SCREW H 3/8 - 16 x 2.25 GR5
3	SCREW H 3/8 - 16 x 2.75 GR5
4	SCREW H 7/16 - 14 x 4.00 GR5
5	SCREW H 5/8 - 11 x 5.50 GR5
6	SCREW H 3/4 - 10 x 7.50 GR5
7	SCREW H 7/8 - 9 x 8.50 GR5
8	N/A (size 8 metric only)



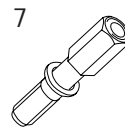
Metric Threads

Metric Hex Head Bolts	
size family	model code
1	SCREW H M10 X 45 - 8.8
2	SCREW H M10 X 60 - 8.8
3	SCREW H M10 X 70 - 8.8
4	SCREW H M12 X 100 - 8.8
5	SCREW H M16 X 130 - 8.8
6	SCREW H M20 X 190 - 8.8
7	SCREW H M20 X 220 - 8.8
8	SCREW H M30 X 300 - 8.8



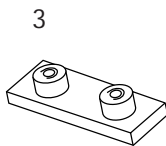
2

DP = Top Plate	
size family	model code
1	HRS 1 DP ST ZN
2	HRS 2 DP ST ZN
3	HRS 3 DP ST ZN
4	HRS 4 DP ST ZN
5	HRS 5 DP ST ZN
6	HRS 6 DP ST BL
7	HRS 7 DP ST BL
8	HRS 8 DP ST BL



7

AF = Stacking Bolt w/ Washer	
size family	model code
1	HRS 1 AF ST UNC
2	HRS 2 AF ST UNC
3	HRS 3 AF ST UNC
4	HRS 4 AF ST UNC
5	HRS 5 AF ST UNC



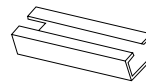
3

AP = Weld Plate	
size family	model code
1	HRS 1 AP ST UNC BL
2	HRS 2 AP ST UNC BL
3	HRS 3 AP ST UNC BL
4	HRS 4 AP ST UNC BL
5	HRS 5 AP ST UNC BL
6	HRS 6 AP ST UNC BL
7	HRS 7 AP ST UNC BL
8	HRS 8 AP ST UNC BL



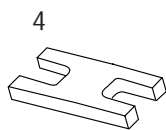
8

TM = C-Rail Nut	
size family	model code
1-3	HRS 1-3 TM3/8 ST UNC BL
4	HRS 4 TM7/16 ST UNC BL



8

TS = C-Rail	
size family	model code
39"	HRS TS 40x22 ST BL 1M
78"	HRS TS 40x22 ST BL 2M



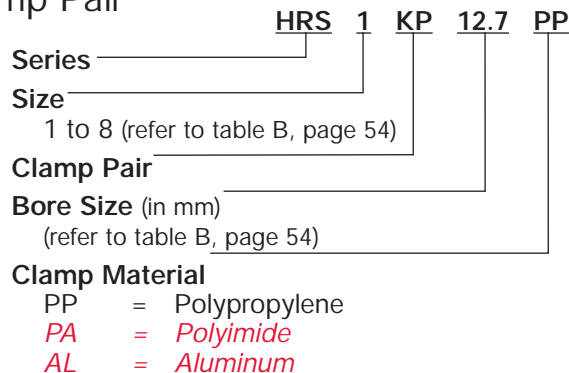
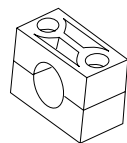
4

SIP = Safety Plate	
size family	model code
1	HRS 1 SIP ST ZN
2	HRS 2 SIP ST ZN
3	HRS 3 SIP ST ZN
4	HRS 4 SIP ST ZN
5	HRS 5 SIP ST ZN

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

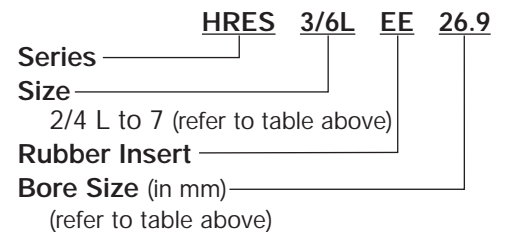
KP = Clamp Pair

5



EE = Rubber Insert (Santoprene TPE 73)

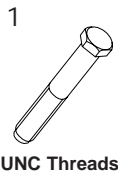
6



Model Codes containing selections listed in red italics are non-standard items – Minimum quantities may apply – Contact **HYDAC** for information and availability
 Not all combinations are available

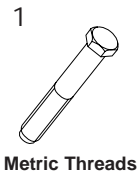
HYDAC DIN 3015 Clamps

Parts HRZ Series



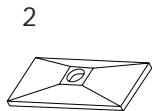
UNC Threads

UNC Hex Head Bolts	
size	model code
1	SCREW H 1/4 - 20 x 1.5 GR2
2	SCREW H 5/16 - 18 x 1.25 GR2
3	SCREW H 5/16 - 18 x 1.75 GR2
4	SCREW H 5/16 - 18 x 2.00 GR2
5	SCREW H 5/16 - 18 x 2.50 GR2



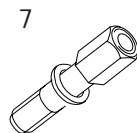
Metric Threads

Metric Hex Head Bolts	
size	model code
1	SCREW H M6x35 MM - 8.8 DIN 933
2	SCREW H M8x35 MM - 8.8 DIN 933
3	SCREW H M8x45 MM - 8.8 DIN 933
4	SCREW H M8x50 MM - 8.8 DIN 933
5	SCREW H M8x60 MM - 8.8 DIN 933



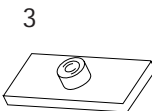
2

DP = Top Plate	
size	model code
1	HRZ 1 DP ST ZN
2	HRZ 2 DP ST ZN
3	HRZ 3 DP ST ZN
4	HRZ 4 DP ST ZN
5	HRZ 5 DP ST BL



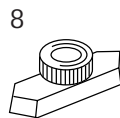
7

AF = Stacking Bolt w/ Washer	
size	model code
1	HRZ 1 AF ST UNC
2	HRZ 2 AF ST UNC
3	HRZ 3 AF ST UNC
4	HRZ 4 AF ST UNC
5	HRZ 5 AF ST UNC



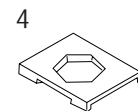
3

AP = Weld Plate	
size	model code
1	HRZ 1 AP ST UNC BL
2	HRZ 2 AP ST UNC BL
3	HRZ 3 AP ST UNC BL
4	HRZ 4 AP ST UNC BL
5	HRZ 5 AP ST UNC BL



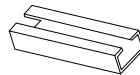
8

TM = C-Rail Nut	
size	model code
1	HRZ 1 TM1/4 ST UNC KAP
2-5	HRZ 2/5 TM5/16 ST UNC O-Ring



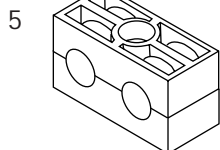
4

SIP = Safety Plate	
size	model code
1	HRZ 1 SIP ST ZN
2-5	HRZ 2/5 SIP ST ZN

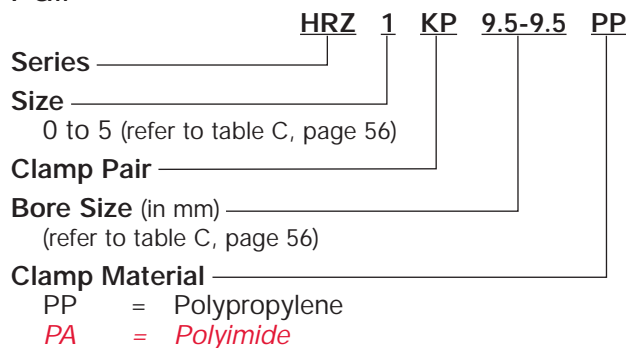


TS = C-Rail	
size	model code
39"	HRL TS 28x11 ST BL 1M
78"	HRL TS 28x11 ST BL 2M

KP = Clamp Pair



5



Parts Legend

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

Model Codes containing selections listed in red italics are non-standard items – Minimum quantities may apply – Contact HYDAC for information and availability
Not all combinations are available

HSPN Series

Description:

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



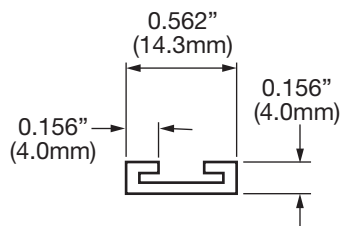
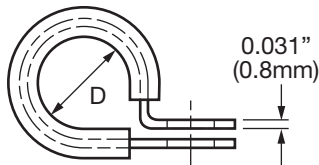
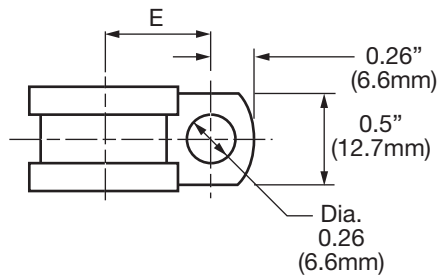
Features:

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



HYDAC Model Code	Part Number	Holding Dia. D	E
HSPN-3	02080818	3/16" (4.8)	3/8" (9.5)
HSPN-4	02080819	1/4" (6.4)	13/32" (10.3)
HSPN-4 A2	02080844		
HSPN-5	02080820	5/16" (7.9)	7/16" (11.1)
HSPN-5 A2	02080845		
HSPN-6	02080821	3/8" (9.5)	15/32" (11.9)
HSPN-6 A2	02080846		
HSPN-7	02080822	7/16" (11.1)	1/2" (12.7)
HSPN-7 A2	02080847		
HSPN-8	02080823	1/2" (12.7)	17/32" (13.5)
HSPN-8 A2	02080848		
HSPN-9	02080824	9/16" (14.30)	9/16" (14.3)
HSPN-9 A2	02080849		
HSPN-10	02080825	5/8" (15.9)	19/32" (15.1)
HSPN-10 A2	02080850		
HSPN-11	02080826	11/16" (17.5)	5/8" (15.9)
HSPN-12	02080827	3/4" (19.1)	3/4" (19.1)
HSPN-12 A2	02080852		
HSPN-14	02080829	7/8" (22.2)	13/16" (20.6)
HSPN-14 A2	02080854		
HSPN-16	02080831	1" (25.4)	7/8" (22.2)
HSPN-16 A2	02080856		
HSPN-18	02080832	1-1/8" (28.6)	15/16" (23.8)
HSPN-18 A2	02080857		
HSPN-20	02080833	1-1/4" (31.8)	1" (25.4)
HSPN-20 A2	02080858		
HSPN-22	02080834	1-3/8" (34.9)	1-5/32" (29.3)
HSPN-24	02080835	1-1/2" (38.1)	1-7/32" (30.9)
HSPN-24 A2	02080860		
HSPN-26	02080836	1-5/8" (41.3)	1-9/32" (32.5)
HSPN-28	02080837	1-3/4" (44.5)	1-11/32" (34.1)
HSPN-28 A2	02080862		
HSPN-30	02080838	1-7/8" (47.6)	1-13/32" (35.7)
HSPN-32	02080839	2" (50.8)	1-15/32" (37.2)
HSPN-32 A2	02080864		
HSPN-34	02080840	2-1/8" (54.0)	1-17/32" (38.8)
HSPN-40	02080841	2-1/2" (63.5)	1-23/32" (43.6)
HSPN-48	02080842	3" (76.2)	1-31/32" (50.1)

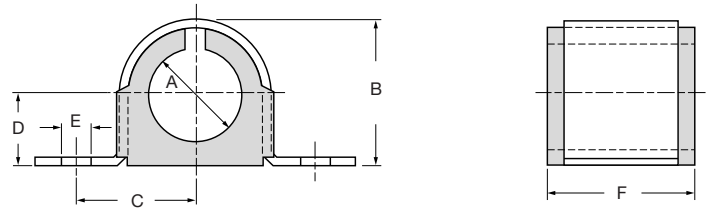
Dimensions are for general information only, all critical dimensions should be verified by requesting a certified print. Dimensions are in inches/(mm) and lbs./(kg.)

Model Codes containing selections listed in red italics are non-standard items – Minimum quantities may apply – Contact **HYDAC** for information and availability

HOM Series



Dimensions



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 specials channels, providing a 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° to 275°F.

*Note: Fasteners not provided.

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

Model Code	Part Number	Copper & Steel Tubing O.D.	Copper Water Pipe	Pipe Size	A	B	C	D	E	F
HOM 1/4T	02080747	1/4"	-	-	0.25"	0.48"	0.60"	0.22"	0.26"	0.78"
HOM 1/4T A2	02080768									
HOM 3/8T	02080748	3/8"	1/4"	-	0.37"	0.62"	0.66"	0.31"	0.26"	0.81"
HOM 3/8T A2	02080769									
HOM 1/2T - 1/4P	02080749	1/2"	3/8"	1/4"	0.50"	0.81"	0.83"	0.40"	0.26"	0.98"
HOM 1/2T - 1/4P A2	02080770									
HOM 5/8-3/8P	02080750	5/8"	1/2"	3/8"	0.62"	0.93"	0.85"	0.46"	0.26"	0.98"
HOM 5/8-3/8P A2	02080771									
HOM 3/4T	02080751	3/4"	5/8"	-	0.75"	1.02"	0.90"	0.50"	0.26"	0.98"
HOM 3/4T A2	02080772									
HOM 7/8 - 1/2P	02080752	7/8"	3/4"	1/2"	0.87"	1.12"	1.03"	0.53"	0.26"	0.98"
HOM 7/8 - 1/2P A2	02080773									
HOM 1T	02080753	1"	-	-	1.00"	1.24"	1.04"	0.59"	0.26"	0.98"
HOM 1T A2	02080774									
HOM 3/4P	02080754	-	-	3/4"	1.05"	1.40"	1.11"	0.70"	0.26"	0.98"
HOM 3/4P A2	02080775									
HOM 1 1/8T	02080755	1 1/8"	1"	-	1.12"	1.40"	1.17"	0.70"	0.26"	0.98"
HOM 1 1/8T A2	02080776									
HOM 1 1/4T	02080756	1 1/4"	-	-	1.25"	1.60"	1.20"	0.77"	0.26"	1.56"
HOM 1 1/4T A2	02080777									
HOM 1P	02080757	-	-	1"	1.31"	1.71"	1.28"	0.81"	0.26"	1.56"
HOM 1P A2	02080778									
HOM 1 3/8T	02080758	1 3/8"	1 1/4"	-	1.37"	1.71"	1.28"	0.83"	0.26"	1.56"
HOM 1 3/8T A2	02080779									
HOM 1 1/2T	02080759	1 1/2"	-	-	1.50"	1.85"	1.36"	0.90"	0.26"	1.56"
HOM 1 1/2T A2	02080780									
HOM 1 5/8T	02080760	1 5/8"	1 1/2"	-	1.62"	1.95"	1.43"	0.96"	0.26"	1.56"
HOM 1 5/8T A2	02080781									
HOM 1 1/4P	02080761	-	-	1 1/4"	1.66"	2.12"	1.55"	0.99"	0.34"	1.56"
HOM 1 1/4P A2	02080782									
HOM 1 3/4T	02080762	1 3/4"	-	-	1.75"	2.12"	1.55"	1.02"	0.34"	1.56"
HOM 1 3/4T A2	02080783									
HOM 1 7/8T - 1 1/2P	02080763	1 7/8"	-	1 1/2"	1.87"	2.25"	1.64"	1.09"	0.34"	1.56"
HOM 1 7/8T - 1 1/2P A2	02080784									
HOM 2T	02080764	2"	-	-	2.00"	2.38"	1.69"	1.15"	0.34"	1.56"
HOM 2T A2	02080785									
HOM 2 1/8T	02080765	2 1/8"	-	-	2.12"	2.62"	1.86"	1.27"	0.34"	1.56"
HOM 2 1/8T A2	02080786									
HOM 2 3/8T - 2P	02080766	2 3/8"	-	2"	2.37"	2.88"	1.94"	1.41"	0.34"	1.56"
HOM 2 3/8T - 2P A2	02080787									
HOM 5 1/8T	02080767	5 1/8"	5"	-	5.12"	5.82"	3.55"	2.84"	0.43"	1.56"

Model Codes containing selections listed in red italics are non-standard items – Minimum quantities may apply – Contact HYDAC for information and availability

HUB Series



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:

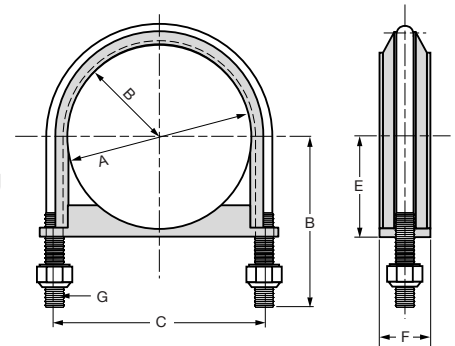
The cushion design provides total load distribution, allowing the U-Bolt to become a full contact hanger, eliminating knife-edge loading. Extremely cost effective, especially in larger sizes.

Materials:

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

* the A4 in the model code denotes 316 stainless steel

Dimensions



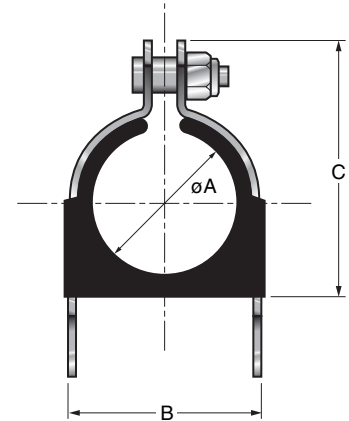
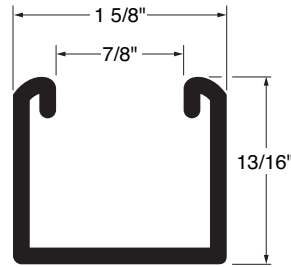
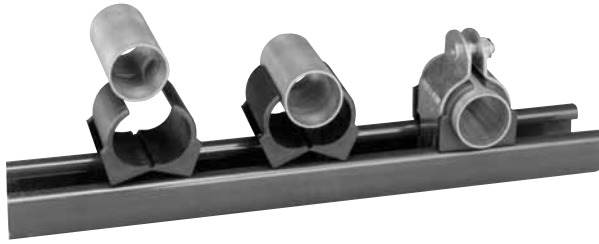
Model Code	Part Number	Pipe Size	ø A	B radius	C	D	E	F	G	H
HUB 1/2P	02080788	1/2"	0.84"	0.80"	1.60"	1.50"	0.67"	0.68"	1/4	1/4-20 UNC-2B
<i>HUB 1/2P A4</i>	<i>02080803</i>									
HUB 3/4P	02080789	3/4"	1.05"	0.90"	1.80"	1.60"	0.78"	0.68"	1/4	1/4-20 UNC-2B
<i>HUB 3/4P A4</i>	<i>02080804</i>									
HUB 1P	02080790	1"	1.31"	1.02"	2.05"	1.70"	0.91"	0.68"	1/4	1/4-20 UNC-2B
<i>HUB 1P A4</i>	<i>02080805</i>									
HUB 1 1/4P	02080791	1 1/4"	1.66"	1.27"	2.55"	2.10"	1.08"	1.24"	3/8	3/8-16 UNC-2B
<i>HUB 1 1/4P A4</i>	<i>02080806</i>									
HUB 1 1/2P	02080792	1 1/2"	1.90"	1.40"	2.80"	2.20"	1.19"	1.24"	3/8	3/8-16 UNC-2B
<i>HUB 1 1/2P A4</i>	<i>02080807</i>									
HUB 2P	02080793	2"	2.37"	1.67"	3.35"	2.50"	1.45"	1.24"	3/8	3/8-16 UNC-2B
<i>HUB 2P A4</i>	<i>02080808</i>									
<i>HUB 2 1/2P</i>	<i>02080794</i>	2 1/2"	2.87"	1.95"	3.90"	3.00"	1.69"	1.24"	1/2	1/2-13 UNC-2B
<i>HUB 2 1/2P A4</i>	<i>02080809</i>									
HUB 3P	02080795	3"	3.50"	2.27"	4.55"	3.30"	2.00"	1.24"	1/2	1/2-13 UNC-2B
<i>HUB 3P A4</i>	<i>02080810</i>									
<i>HUB 3 1/2P</i>	<i>02080796</i>	3 1/2"	4.00"	2.52"	5.05"	3.70"	2.25"	1.24"	1/2	1/2-13 UNC-2B
<i>HUB 3 1/2P A4</i>	<i>02080811</i>									
HUB 4P	02080797	4"	4.50"	2.75"	5.50"	3.90"	2.50"	1.24"	1/2	1/2-13 UNC-2B
<i>HUB 4P A4</i>	<i>02080812</i>									
HUB 5P	02080798	5"	5.56"	3.25"	6.56"	4.50"	3.03"	1.24"	1/2	1/2-13 UNC-2B
<i>HUB 5P A4</i>	<i>02080813</i>									
HUB 6P	02080799	6"	6.62"	3.87"	7.75"	5.40"	3.56"	1.44"	5/8	5/8-11 UNC-2B
<i>HUB 6P A4</i>	<i>02080814</i>									
HUB 8P	02080800	8"	8.82"	4.85"	9.82"	6.40"	4.56"	1.44"	5/8	5/8-11 UNC-2B
<i>HUB 8P A4</i>	<i>02080815</i>									
HUB 10P	02080801	10"	10.75"	6.08"	12.16"	7.70"	5.68"	1.65"	3/4	3/4-10 UNC-2B
<i>HUB 10P A4</i>	<i>02080816</i>									
HUB 12P	02080802	12"	12.75"	7.13"	14.25"	8.70"	6.68"	1.65"	3/4	3/4-10 UNC-2B
<i>HUB 12P A4</i>	<i>02080817</i>									

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

Model Codes containing selections listed in red italics are non-standard items – Minimum quantities may apply – Contact HYDAC for information and availability

CUSH Series Cushion Clamps

Dimensions



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 electrochromate 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' Green
- **Material:** Low gauge carbon steel
- **Finish:** Green paint
- **Length:** 10'0"

Model Code	Application		Nom. Pipe Size in.	Dimensions			Part No.
	Copper Tubing in. (nom.)	Copper Water Pipe in.		ϕA in.	B in.	C in.	
<i>CUSH 1/4T</i>	1/4			0.25	0.62	0.98	<i>02073330</i>
CUSH 3/8T	3/8	1/4		0.37	0.82	1.13	02073331
CUSH 1/2T	1/2	3/8		0.50	0.94	1.34	02073332
CUSH 1/4P			1/4	0.54	0.98	1.34	02073361
CUSH 5/8T	5/8	1/2		0.62	1.06	1.54	02073333
<i>CUSH 3/8P</i>			3/8	0.67	1.13	1.54	<i>02073362</i>
CUSH 3/4T	3/4	5/8		0.75	1.20	1.68	02073334
<i>CUSH 1/2P</i>			1/2	0.84	1.29	1.82	<i>02073363</i>
CUSH 7/8T	7/8	3/4		0.87	1.31	1.82	02073335
CUSH 1T	1			1.00	1.44	1.95	02073336
CUSH 3/4P			3/4	1.05	1.50	1.95	02073364
<i>CUSH 1-1/8T</i>	1 1/8	1		1.12	1.57	2.08	<i>02073337</i>
CUSH 1-1/4T	1 1/4			1.25	1.70	2.21	02073338
CUSH 1P			1	1.31	1.76	2.34	02073365
<i>CUSH 1-3/8T</i>	1 3/8	1 1/4		1.37	1.82	2.34	<i>02073339</i>
CUSH 1-1/2T	1 1/2			1.50	1.95	2.47	02073340
CUSH 1-5/8T	1 5/8	1 1/2		1.62	2.07	2.60	02073341
CUSH 1-1/4P			1 1/4	1.66	2.17	2.73	02073366
CUSH 1-3/4T	1 3/4			1.75	2.20	2.73	02073342
<i>CUSH 1-7/8T</i>	1 7/8			1.87	2.32	2.86	<i>02073343</i>
CUSH 1-1/2P			1 1/2	1.90	2.35	2.86	02073367
CUSH 2T	2			2.00	2.45	3.04	02073344
<i>CUSH 2-1/8T</i>	2 1/8			2.12	2.57	3.23	<i>02073345</i>
CUSH 2-3/8T	2 3/8			2.37	2.82	3.67	02073346
CUSH 2P			2	2.37	2.82	3.67	02073368
<i>CUSH 2-5/8T</i>	2 5/8			2.62	3.07	3.92	<i>02073348</i>
CUSH 2-1/2P			2 1/2	2.87	3.32	4.17	02073369
<i>CUSH 3-1/8T</i>	3 1/8			3.12	3.57	4.42	<i>02073351</i>
<i>CUSH 3P</i>			3	3.50	3.95	4.79	<i>02073370</i>
<i>CUSH 4p</i>	4			4.50	4.95	5.95	<i>02073372</i>
<i>CUSH 5p</i>	5			5.56	6.01	6.92	<i>02073373</i>
<i>CUSH 6P</i>	6		3	6.62	7.07	8.23	<i>02073374</i>

Tube Series: T = with Controlled Squeeze Shoulder Bolt (sizes 1 3/8" and smaller)

Pipe Series: P = without Controlled Squeeze Shoulder Bolt

Dimensions are for general information only. Due to constant development and updating of details, we ask that all critical dimensions be verified by requesting a certified print.

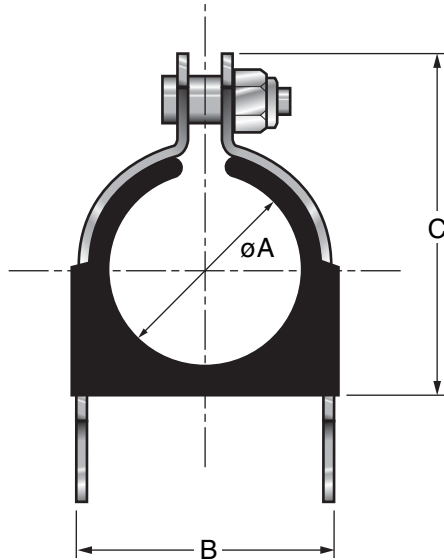
*Model Codes containing selections listed in red italics are non-standard items – Minimum quantities may apply – Contact HYDAC for information and availability
Not all combinations are available*

CUSH Stainless Steel Cushion Clamps

Materials

- Clamp - 316 stainless steel
- Cushion - thermoplastic elastomer

Dimensions



Mounting Rail

Model Code: Cush Rail 13/16" x 10' A4

Part Number: 02701588

Material: Stainless Steel 316

Length: 10'0"

Model Code	Part Number	Size	A	B	C
CUSH 1/4T A4	02080701	1/4"	0.25"	0.62"	0.98"
CUSH 3/8T A4	02080702	3/8"	0.37"	0.82"	1.13"
CUSH 1/2T A4	02080703	1/2"	0.50"	0.94"	1.34"
CUSH 5/8T A4	02080704	5/8"	0.62"	1.06"	1.54"
CUSH 3/4T A4	02080705	3/4"	0.75"	1.20"	1.68"
CUSH 7/8T A4	02080706	7/8"	0.87"	1.31"	1.82"
CUSH 1T A4	02080707	1"	1.00"	1.44"	1.95"
CUSH 1 1/8T A4	02080708	1 1/8"	1.12"	1.57"	2.08"
CUSH 1 1/4T A4	02080709	1 1/4"	1.25"	1.70"	2.21"
CUSH 1 3/8T A4	02080710	1 3/8"	1.37"	1.82"	2.34"
CUSH 1 1/2T A4	02080711	1 1/2"	1.50"	1.95"	2.47"
CUSH 1 5/8T A4	02080712	1 5/8"	1.62"	2.07"	2.60"
CUSH 1 3/4T A4	02080713	1 3/4"	1.75"	2.20"	2.73"
CUSH 1 7/8T A4	02080714	1 7/8"	1.87"	2.32"	2.86"
CUSH 2T A4	02080715	2"	2.00"	2.45"	3.04"
CUSH 2 1/8T A4	02080716	2 1/8"	2.12"	2.57"	3.23"
CUSH 2 1/4T A4	02080717	2 1/4"	2.37"	2.82"	3.67"
CUSH 2 3/8T A4	02080718	2 3/8"	2.37"	2.82"	3.67"
CUSH 2 1/2T A4	02080719	2 1/2"	2.50"	2.94"	3.79"
CUSH 2 5/8T A4	02080720	2 5/8"	2.62"	3.07"	3.92"
CUSH 2 7/8T A4	02080721	2 7/8"	2.87"	3.32"	4.17"
CUSH 3T A4	02080722	3"	3.00"	3.57"	4.42"
CUSH 3 1/8T A4	02080723	3 1/8"	3.12"	3.57"	4.42"
CUSH 3 5/16T A4	02080724	3 5/16"	3.31"	3.96"	4.75"
CUSH 3 1/2T A4	02080725	3 1/2"	3.50"	3.95"	4.79"
CUSH 3 5/8T A4	02080726	3 5/8"	3.62"	4.20"	5.11"
CUSH 4T A4	02080727	4"	4.00"	4.45"	5.11"
CUSH 4 1/8T A4	02080728	4 1/8"	4.12"	4.57"	5.54"
CUSH 4 1/2T A4	02080729	4 1/2"	4.50"	4.95"	5.92"
CUSH 5 1/8T A4	02080730	5 1/8"	5.12"	5.57"	6.54"
CUSH 6T A4	02080731	6"	6.12"	6.57"	7.54"
CUSH 6 1/8T A4	02080732	6 1/8"	6.12"	6.57"	7.54"
CUSH 1/4P A4	02080733	1/4"	0.54"	0.98"	1.34"
CUSH 3/8P A4	02080734	3/8"	0.67"	1.13"	1.54"
CUSH 1/2P A4	02080735	1/2"	0.84"	1.29"	1.82"
CUSH 3/4P A4	02080736	3/4"	1.05"	1.57"	2.08"
CUSH 1P A4	02080737	1"	1.31"	1.76"	2.34"
CUSH 1 1/4P A4	02080738	1 1/4"	1.66"	2.17"	2.73"
CUSH 1 1/2P A4	02080739	1 1/2"	1.90"	2.35"	2.86"
CUSH 2P A4	02080740	2"	2.37"	2.82"	3.67"
CUSH 2 1/2P A4	02080741	2 1/2"	2.87"	3.32"	4.17"
CUSH 3P A4	02080742	3"	3.50"	3.95"	4.79"
CUSH 3 1/2P A4	02080743	3 1/2"	4.00"	4.45"	5.11"
CUSH 4P A4	02080744	4"	4.50"	4.95"	5.92"
CUSH 5P A4	02080745	5"	5.56"	6.01"	6.92"
CUSH 6P A4	02080746	6"	6.62"	7.07"	8.23"

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Not all combinations are available*

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

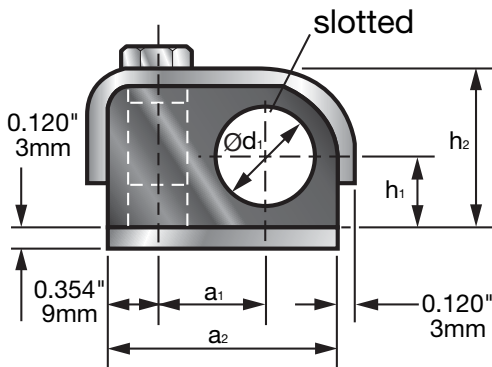
- Low Profile Design
- Shock and vibration reduction
- Easy installation

Materials

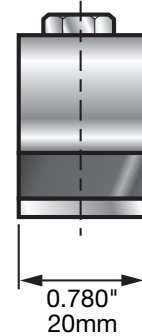
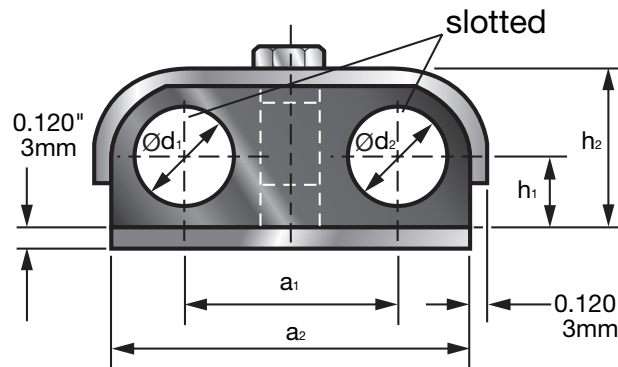
- Stirrup & Weld Plate - carbon steel
- Clamp Body - thermoplastic elastomer

Dimensions

Size: 0a & 0b



Size: 1 and 2



Clamp Size	Tube Size	Pipe Size	Bore Diameter ¹				Clamp Assembly Model Code	Part Number	Dimensions				Hex Head Bolt	
			Ød1 in	Ød1 mm	Ød2 in	Ød2 mm			a ₁	a ₂	h ₁	h ₂		
0A	1/4"	-	0.250	6.4	-	-	<i>HRBGS 0A A 6.4 ST</i>	<i>02063638</i>	mm	15	34	10	23	M6x25
	3/8"	-	0.375	9.5	-	-	<i>HRBGS 0A A 9.5 ST</i>	<i>02063639</i>	in	0.59	1.34	0.39	0.91	
	-	1/8"	0.394	10.0	-	-	<i>HRBGS 0A A 10.0 ST</i>	<i>02063640</i>						
0B	1/2"	-	0.500	12.7	-	-	<i>HRBGS 0B A 12.7 ST</i>	<i>02063641</i>	mm	18	39	12	27	M6x25
	-	1/4"	0.540	13.7	-	-	<i>HRBGS 0B A 13.7 ST</i>	<i>02063642</i>						
	5/8"	-	0.625	16.0	-	-	<i>HRBGS 0B A 16.0 ST</i>	<i>02063643</i>	in	0.71	1.54	0.47	1.06	
	-	3/8"	0.675	17.1	-	-	<i>HRBGS 0B A 17.1 ST</i>	<i>02063644</i>						
	3/4"	-	0.750	19.0	-	-	<i>HRBGS 0B A 19.0 ST</i>	<i>02063645</i>						
1	1/4"	-	0.250	6.4	0.250	6.4	HRBGS 1 A 6.4-6.4 ST	02063646	mm	30	50	10	23	M6x25
	3/8"	-	0.375	9.5	0.375	9.5	<i>HRBGS 1 A 9.5-9.5 ST</i>	<i>02063647</i>						
	-	1/8"	0.394	10.0	0.394	10.0	HRBGS 1 A 10-10 ST	02063648	in	1.18	1.97	0.39	0.91	
	1/2"	-	0.500	12.7	0.500	12.7	<i>HRBGS 1 A 12.7-12.7 ST</i>	<i>02063649</i>						
2	5/8"	-	0.625	16.0	0.625	16.0	HRBGS 2 A 16-16 ST	02063650	mm	35	59	12	27	M6x25
	-	3/8"	0.675	17.1	0.675	17.1	<i>HRBGS 2 A 17.1-17.1 ST</i>	<i>02063651</i>	in	1.38	2.32	0.47	1.06	
	3/4"	-	0.750	19.0	0.750	19.0	HRBGS 2 A 19-19 ST	02063652						

1) Consult Factory for sizes 1 and 2 with different bore diameters.

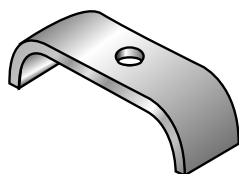
Dimensions are for general information only, all critical dimensions should be verified by requesting a certified print.

Model Codes containing selections listed in red italics are non-standard items – Minimum quantities may apply – Contact HYDAC for information and availability

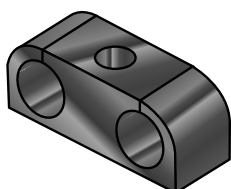
Parts Buegu Clamp Parts



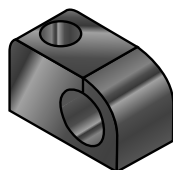
ASKT = Head Bolt



BUE = Stirrup



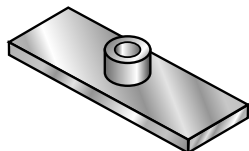
Size 1,2



Size 0
GT = Rubber Body



HUE= Sleeve



AP = Weld Plate

ASKT = Hex Head Bolt for use with Weld Plate		
Sizes	Model Code	Part Number
0A, 0B, 1, 2	HRBGS 0A/1 ASKT M6x25	02700852

BUE = Stirrup		
Sizes	Model Code	Part Number
0A	HRBGS 0A BUE ST ZN	00263306
0B	HRBGS 0B BUE ST ZN	00263307
1	HRBGS 1 BUE ST ZN	00263316
2	HRBGS 2 BUE ST ZN	00263309

Clamp Size	Bore Diameter ¹				Model Code	Part Number
	Ød1		Ød2			
	in	mm	in	mm		
0A	0.250	6.4	-	-	<i>HRBGS 0A GT 6.4</i>	<i>00268169</i>
	0.375	9.5	-	-	HRBGS 0A GT 9.5	00268170
	0.394	10.0	-	-	<i>HRBGS 0A GT 10.0</i>	<i>00263296</i>
0B	0.500	12.7	-	-	<i>HRBGS 0B GT 12.7</i>	<i>00268171</i>
	0.540	13.7	-	-	<i>HRBGS 0B GT 13.7</i>	<i>00268172</i>
	0.625	16.0	-	-	<i>HRBGS 0B GT 16.0</i>	<i>00263298</i>
	0.675	17.1	-	-	<i>HRBGS 0B GT 17.1</i>	<i>00268173</i>
1	0.750	19.0	-	-	<i>HRBGS 0B GT 19.0</i>	<i>00264713</i>
	0.250	6.4	0.250	6.4	HRBGS 1 A GT 6.4-6.4	00268174
	0.375	9.5	0.375	9.5	<i>HRBGS 1 GT 9.5-9.5</i>	<i>00268175</i>
	0.394	10.0	0.394	10.0	HRBGS 1 GT 10-10	00263313
2	0.500	12.7	0.500	12.7	<i>HRBGS 1 GT 12.7-12.7</i>	<i>00264011</i>
	0.630	16.0	0.625	16.0	HRBGS 2 GT 16-16	00263304
	0.675	17.1	0.675	17.1	<i>HRBGS 2 GT 17.1-17.1</i>	<i>00268176</i>
	0.750	19.0	0.750	19.0	HRBGS 2 GT 19-19	00268177

1) Consult Factory for sizes 1 and 2 with different bore diameters.

HUE = Sleeve for use with Weld Plate		
Sizes	Model Code	Part Number
0A	HRBGS 0A/1 HUE 11.5 ZN	00263418
0B	HRBGS 0B/2 HUE 15.5 ZN	00263419
1	HRBGS 0A/1 HUE 11.5 ZN	00263418
2	HRBGS 0B/2 HUE 15.5 ZN	00263419

HUE = Sleeve for use without Weld Plate		
Sizes	Model Code	Part Number
0A	<i>HRBGS 0A/1 HUE 18 ZN</i>	<i>00263310</i>
0B	HRBGS 0B/2 HUE 22 ZN	00263311
1	<i>HRBGS 0A/1 HUE 18 ZN</i>	<i>00263310</i>
2	HRBGS 0B/2 HUE 22 ZN	00263311

AP = Weld Plate		
Sizes	Model Code	Part Number
0A	<i>HRBGS 0A AP ST BL</i>	<i>00263582</i>
0B	HRBGS 0B AP ST BL	00263583
1	HRBGS 1 AP ST BL	00263585
2	HRBGS 2 AP ST BL	00263586

Model Codes containing selections listed in red italics are non-standard items – Minimum quantities may apply – Contact **HYDAC** for information and availability

Oval Clamps



Description

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

Features

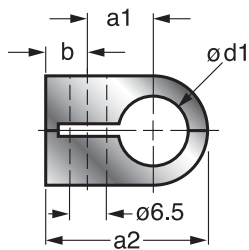
- Low Profile Design
- Easy installation

Materials

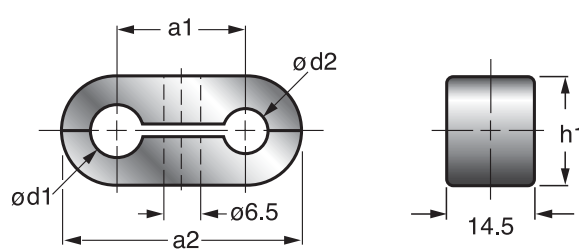
- Stirrup & Weld Plate - carbon steel
- Clamp Body - thermoplastic elastomer

Dimensions

Size 0



Sizes 1-4



Model Code	Part Number	Size	Tube Size	Pipe Size	a1	a2	b	Ød1* & Ød2*	Ød1* & Ød2*	h1
<i>HROS 0a KP 6.0 PP</i>	<i>00264377</i>	0a			9	22.8	7	6.0	6 to 8	13.5
<i>HROS 0a KP 6.4 PP</i>	<i>00267926</i>		1/4"					6.4		
<i>HROS 0a KP 8 PP</i>	<i>00266455</i>		5/16"					8.0		
<i>HROS 0b KP 8 PP</i>	<i>00267982</i>	0b	5/16"		11	27.2	7	8.0	8 to 12.7	18.5
<i>HROS 0b KP 9.5 PP</i>	<i>00267981</i>		3/8"					9.5		
<i>HROS 0b KP 12.7 PP</i>	<i>00267931</i>		1/2"					12.7		
<i>HROS 0c KP 10 PP</i>	<i>00267993</i>	0c		1/8"	15	33.5	6.7	10	10 to 16	23.6
<i>HROS 0c KP 12.7 PP</i>	<i>00267991</i>		1/2"					12.7		
<i>HROS 0c KP 16 PP</i>	<i>00264380</i>		5/8"					16		
<i>HROS 0d KP 14 PP</i>	<i>00268008</i>	0d			19	40	5.7	14	14 to 25.4	30.6
<i>HROS 0d KP 16 PP</i>	<i>00268004</i>		5/8"	3/8"				16		
<i>HROS 0d KP 19 PP</i>	<i>00267999</i>		3/4"	1/2"				19		
<i>HROS 0d KP 25.4 PP</i>	<i>00268217</i>		1"					25.4		
<i>HROS 1 KP 6 - 6 PP</i>	<i>00268231</i>	1			18	32	N/A	6-6	6 to 8	13.5
<i>HROS 1 KP 6.4 - 6.4 PP</i>	<i>00268230</i>		1/4"					6.4-6.4		
<i>HROS 1 KP 8 - 8 PP</i>	<i>00268229</i>		5/16"					8-8		
<i>HROS 2 KP 8 - 8 PP</i>	<i>00268236</i>	2	5/16"		22	40.5	N/A	8-8	8 to 12.7	18.5
<i>HROS 2 KP 9.5 - 9.5 PP</i>	<i>00268237</i>		3/8"					9.5-9.5		
<i>HROS 2 KP 12.7 - 12.7 PP</i>	<i>00268241</i>		1/2"					12.7-12.7		
<i>HROS 3 KP 10 - 10 PP</i>	<i>00268250</i>	3		1/8"	30	53.6	N/A	10-10	10 to 16	23.6
<i>HROS 3 KP 12.7 - 12.7 PP</i>	<i>00268253</i>		1/2"					12.7-12.7		
<i>HROS 3 KP 16 - 16 PP</i>	<i>00268257</i>		5/8"					16-16		
<i>HROS 4 KP 14 - 14 PP</i>	<i>00268270</i>	4			38	68.3	N/A	14-14	14 to 25.4	30.6
<i>HROS 4 KP 16 - 16 PP</i>	<i>00268272</i>		5/8"	3/8"				16-16		
<i>HROS 4 KP 19 - 19 PP</i>	<i>00268275</i>		3/4"	1/2"				19-19		
<i>HROS 4 KP 25.4 - 25.4 PP</i>	<i>00268280</i>		1"					25.4-25.4		

*d1 and d2 may be different bore sizes. Dimensions listed are standard.

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Dimensions are in inches.

Model Codes containing selections listed in red italics are non-standard items – Minimum quantities may apply – Contact HYDAC for information and availability

U-bolt Clamps



Description

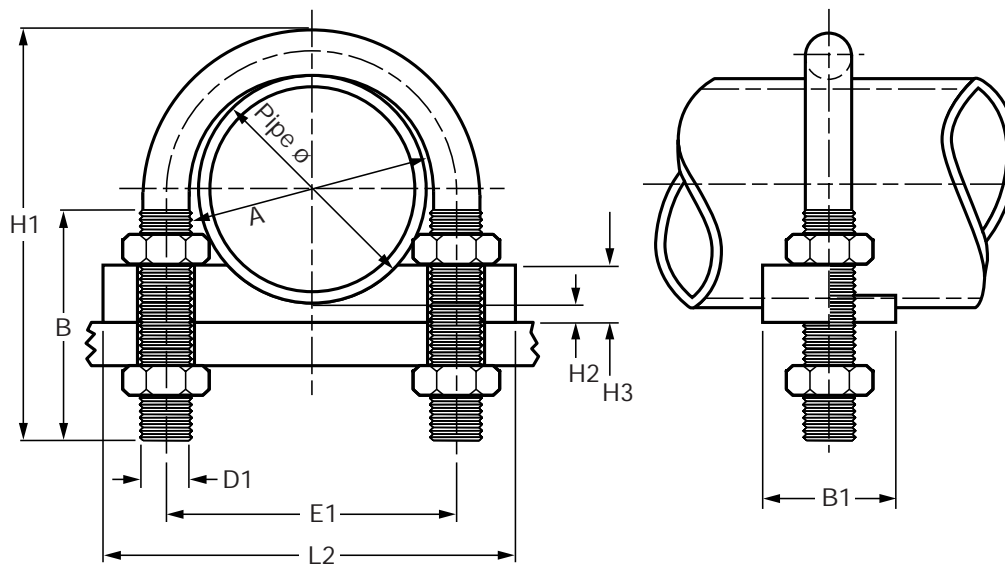
U-bolt clamps are a simple solution for securing pipes and other cylindrical objects. The clamps consist of a threaded "U" and a contoured saddle.

Features

- Metric Threads
- Easy installation

Materials

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



Size	Model Code	Part No.	Pipe or Tube	U-Bolt			Pipe support long version						
				A	B	D1	E1	H1	H2	H3	L2	B1	Pipe Ø
1	HRRBS 1 L 21.3 PP ST ZN	02072678	1/2" Pipe	23	40	M10	33	65	5	10	60	25	21.3
2	HRRBS 2 L 26.9 PP ST ZN	02065150	3/4" Pipe	30	40	M10	40	70	5	12	75	30	26.9
3	HRRBS 3 L 33.7 PP ST ZN	02065151	1" Pipe	38	40	M10	48	75	5	12	80	30	33.7
4	HRRBS 4 L 42.4 PP ST ZN	02065152	-	46	50	M10	56	86	5	12	90	30	42.4
5	HRRBS 5 L 48.3 PP ST ZN	02065153	1 1/2" Pipe	52	50	M10	62	92	5	15	95	35	48.3
6	HRRBS 6 L 60.3 PP ST ZN	02065154	2" Pipe	64	60	M12	76	109	5	15	110	35	60.3
7	HRRBS 7 L 76.1 PP ST ZN	02065155	3" Tube	82	60	M12	94	125	5	15	135	35	76.1
8	HRRBS 8 L 88.9 PP ST ZN	02065156	3" Pipe	94	60	M12	106	138	10	20	145	40	88.9
9	HRRBS 9 L 108 PP ST ZN	02065157	-	120	80	M16	136	171	10	20	190	40	108
9	HRRBS 9 L 114.3 PP ST ZN	02065158	4" Pipe / 4 1/2" Tube	120	80	M16	136	171	10	20	190	40	114.3
10	HRRBS 10 L 139.7 PP ST ZN	02065159	5" Pipe	148	80	M16	164	191	10	20	220	40	139.7
11	HRRBS 11 L 159 PP ST ZN	02065160	-	176	80	M16	192	217	12	25	250	50	159
11	HRRBS 11 L 168.3 PP ST ZN	02065161	6" Pipe	202	80	M16	218	249	12	25	270	50	168.3
13	HRRBS 13 L 219.1 PP ST ZN	02065162	8" Pipe	228	100	M20	248	283	12	25	315	50	219.1
14	HRRBS 14 L 273 PP ST ZN	02065163	10" Pipe	282	100	M20	302	334	12	25	370	50	273
17	HRRBS 17 L 406.4 PP ST ZN	02068318	16" Pipe	428	100	M24	452	487	15	30	540	60	406.4

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

Accumulator Clamps

HYDAC mounting components are used to mount all types of hydro-pneumatic accumulators safely and simply, regardless of the mounting position. Our range includes suitable mounting components for every type of static hydro-pneumatic accumulator, and can also be used to mount cylindrical items such as water tanks and pipes, or to mount flat items on cylindrical objects.

Types

HYDAC offers three styles of clamps:

- HyRac
- Regular Duty (HS)
- Heavy Duty (HSS)

Additionally, for larger accumulators, HYDAC offers:

- Base Brackets (KBK & KMS)
- Mounting Sets (SEB)

Construction

They are constructed out of zinc-plated sheet steel or stainless steel strap.

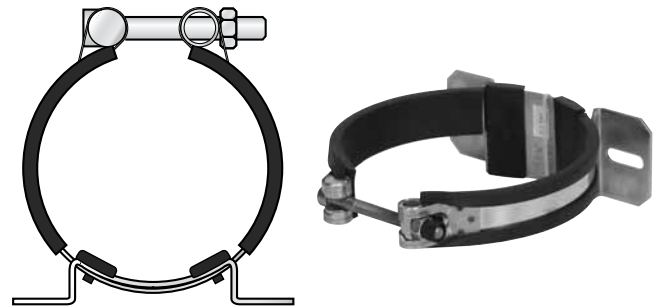
The HyRac and regular duty have a one piece construction with center adjustment.

Conversely, the heavy duty clamps have a two piece construction. This allows for easy installation and removal while improving the strength to weight ratio.

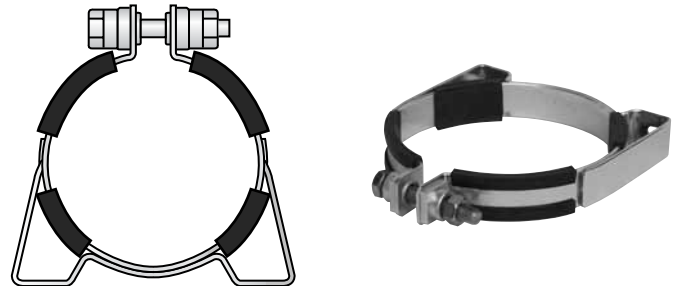
HYDAC also offers base brackets for larger accumulators for proper support and isolation from system vibrations. The brackets incorporate a rubber support ring for this reason.

All mounting components can be easily bolted to your system.

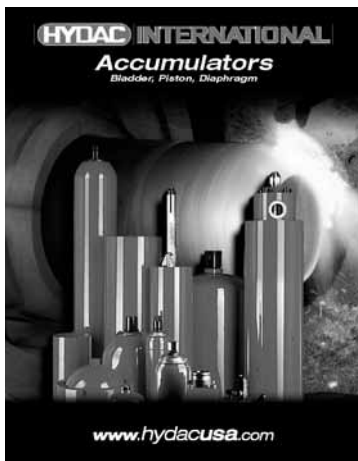
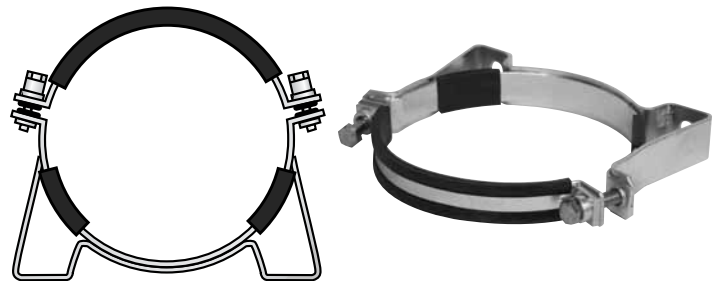
HyRac Clamp:



HS - Regular Duty Clamp:



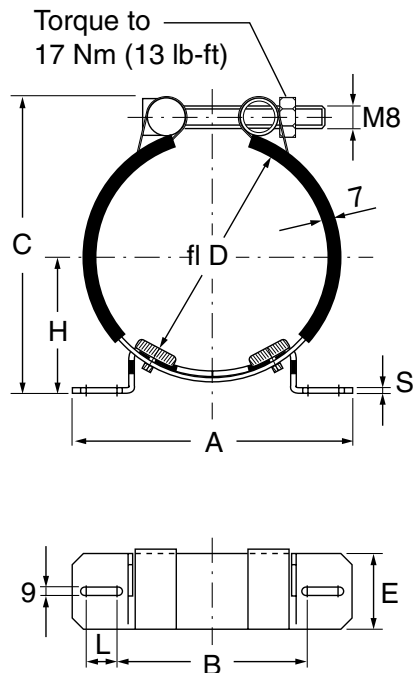
HSS - Heavy Duty Clamp:



For more information on accumulator mounting components including base brackets, please refer to the Accumulators catalog, which is available for download on our web site.

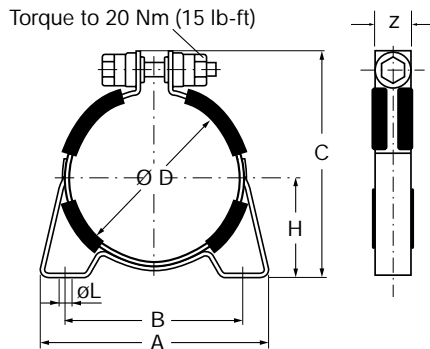
Dimensions: Accumulator Clamps

HyRac - Stainless Steel Strap with swivel-bolt adjustment



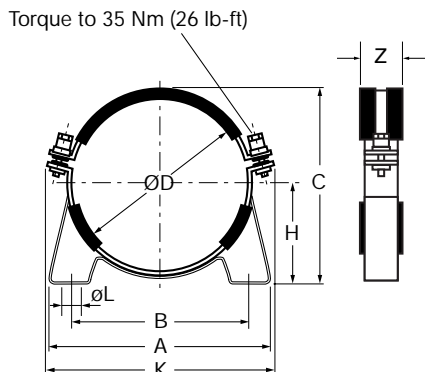
Model Code Part Number	A	B	C	ØD (range)	E	H	L	S	Weight kg.(lbs)
HyRac 62-65 ST 00445037	120 (4.72)	85 (3.34)	90 (3.54)	62-65 (2.4-2.6)	40 (1.6)	39-40.5 (1.5-1.6)	6 (0.24)	3 (0.12)	0.16 (0.35)
HyRac 73-76 ST 00445038	120 (4.72)	85 (3.34)	101 (3.98)	73-76 (2.9-3.0)	40 (1.6)	49.5-46 (1.9-1.8)	6 (0.24)	3 (0.12)	0.16 (0.35)
HyRac 89-92 ST 00445039	120 (4.72)	85 (3.34)	116 (4.57)	89-92 (3.5-3.6)	40 (1.6)	51.5-53 (2.0-2.1)	6 (0.24)	3 (0.12)	0.17 (0.37)
HyRac 100-105 ST 00444904	156 (6.14)	100 (3.94)	135 (5.31)	100-105 (3.9-4.1)	60 (2.4)	59-62 (2.3-2.4)	18 (0.71)	3 (0.12)	0.40 (0.88)
HyRac 106-114 ST 03059451	156 (6.14)	100 (3.94)	143 (5.63)	106-114 (4.2-4.5)	60 (2.4)	62.5-66 (2.5-2.6)	18 (0.71)	3 (0.12)	0.9 (0.41)
HyRac 110-118 ST 03059446	156 (6.14)	100 (3.94)	156 (6.14)	110-118 (4.3-4.6)	60 (2.4)	72.5-77 (2.8-3.0)	18 (0.71)	3 (0.12)	0.42 (0.93)
HyRac 121-129 ST 03059450	156 (6.14)	100 (3.91)	165 (6.50)	121-129 (4.8-5.1)	60 (2.4)	75.5-80 (3.0-3.1)	18 (0.71)	3 (0.12)	0.43 (0.95)
HyRac 133-142 ST 03059449	156 (6.14)	100 (3.91)	174 (6.85)	133-142 (5.2-5.6)	60 (2.4)	76.5-82 (3.0-3.2)	18 (0.71)	3 (0.12)	0.44 (0.97)
HyRac 143-151 ST 03059448	156 (6.14)	100 (3.91)	182 (7.17)	143-151 (5.6-5.9)	60 (2.4)	83-86.5 (3.3-3.4)	18 (0.71)	3 (0.12)	0.45 (0.99)
HyRac 152-159 ST 03059447	156 (6.14)	100 (3.91)	191 (7.52)	152-159 (6.0-6.3)	60 (2.4)	87-91 (3.4-3.6)	18 (0.71)	3 (0.12)	0.46 (1.01)
HyRac 160-167 ST 03059453	236 (9.29)	152 (5.98)	197 (7.76)	160-167 (6.3-6.6)	60 (2.4)	89-93 (3.5-3.7)	32 (1.3)	4 (0.16)	0.7 (1.54)
HyRac 167-175 ST 03059445	236 (9.29)	152 (5.98)	207 (8.15)	167-175 (6.6-6.9)	60 (2.4)	92.5-96.5 (3.6-3.8)	32 (1.3)	4 (0.16)	1.59 (0.72)
HyRac 202-210 ST 03059443	236 (9.29)	152 (5.98)	245 (9.65)	202-210 (7.9-8.3)	60 (2.4)	116-120 (4.6-4.7)	32 (1.3)	4 (0.16)	1.68 (0.76)
HyRac 209-217 ST 03059442	236 (9.29)	152 (5.98)	255 (10.04)	209-217 (8.2-8.5)	60 (2.4)	122.5-126.5 (4.8-5.0)	32 (1.3)	4 (0.16)	1.70 (0.77)

HS - Regular Duty Clamp, with single center adjustment



Model Code Part Number	ØD	ØD (range)	A	B	C(ref.)	H	ØL	Z	Weight kg.(lbs)
HS 167 02110642	167 (6.57)	164-170 (6.46-6.69)	185 (7.28)	153 (6.02)	211 (8.31)	92.5 (3.64)	9 (0.35)	30 (1.18)	0.9 (2.0)

HSS - Heavy Duty Clamp with two-piece construction



Model Code Part No.	ØD	ØD (range)	A	B	C(ref.)	H	K	ØL	Z	Weight kg.(lbs)
HSS 219 00237401	219 (8.62)	216-222 (8.50-8.74)	268 (10.55)	216 (8.50)	240 (9.45)	123 (4.84)	285 (11.22)	15 (0.59)	40 (1.57)	1.7 (3.8)
HSS 222/229 00235224	226 (8.90)	220-231 (8.66-9.10)	270 (10.63)	216 (8.50)	244 (9.61)	123 (4.84)	295 (11.61)	15 (0.59)	40 (1.57)	1.7 (3.8)
HSS 242 00362712	242 (9.53)	231-242 (9.10-9.53)	268 (10.55)	216 (8.50)	265 (10.43)	136 (5.35)	305 (12.01)	15 (0.59)	40 (1.57)	1.7 (3.8)
HSS 286 00237395	286 (11.26)	283-289 (11.14-11.38)	332 (13.07)	280 (11.02)	314 (12.36)	163 (6.42)	355 (13.98)	15 (0.59)	40 (1.57)	2.1 (4.6)
HSS 310 00237389	310 (12.20)	307-313 (12.09-12.32)	332 (13.07)	280 (11.02)	333 (13.11)	170 (6.69)	380 (14.96)	15 (0.59)	40 (1.57)	2.1 (4.6)

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

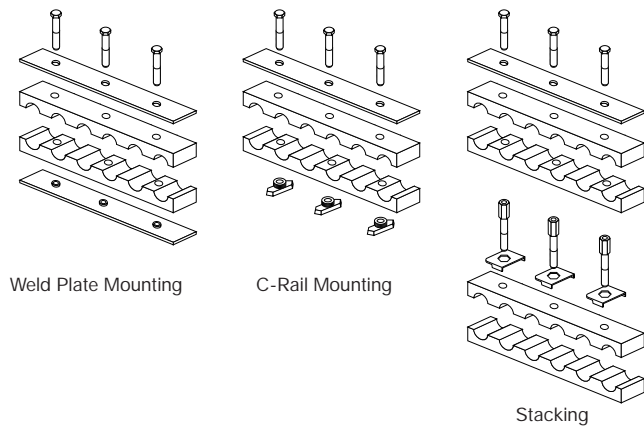
HRRL & HRRLE Series Series Strip Clamps

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.

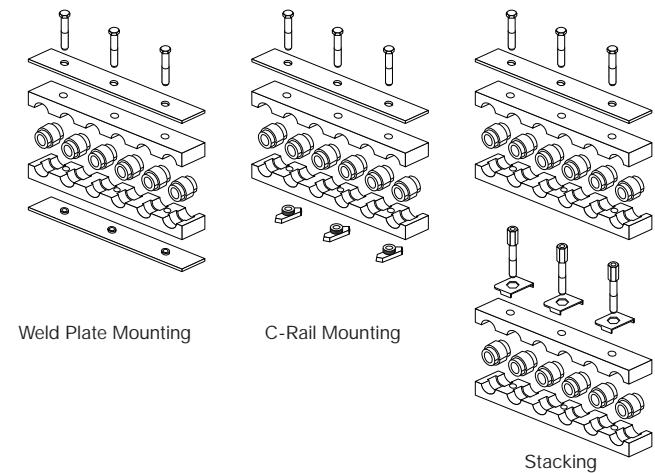
Arrangements:

HRRL: Standard Duty



Arrangements:

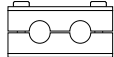
HRRLE: Heavy Duty w/ Rubber Inserts



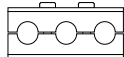
Number of Lines & Bolts:

HRRL: Standard Duty (diameter range: 6 to 25.4 mm)

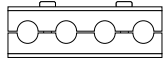
2 Lines / 2 Bolts (HRRL...2 X.../2...)



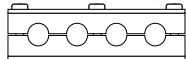
3 Lines / 2 Bolts (HRRL...3 X.../2...)



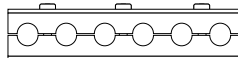
4 Lines / 2 Bolts (HRRL...4 X.../2...)



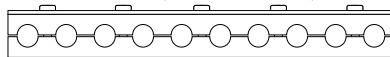
4 Lines / 3 Bolts (HRRL...4 X.../3...)



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



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



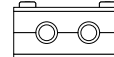
Number of Lines & Bolts:

HRRLE: Heavy Duty w/ Rubber Inserts (diameter range: 6 to 25.4 mm)

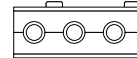
2 Lines / 1 Bolt (HRRLE...2 X.../1...)



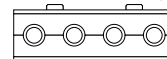
2 Lines / 2 Bolts (HRRLE...2 X.../2...)



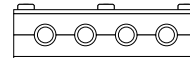
3 Lines / 2 Bolts (HRRLE...3 X.../2...)



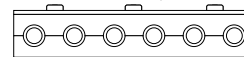
4 Lines / 2 Bolts (HRRLE...4 X.../2...)



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



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



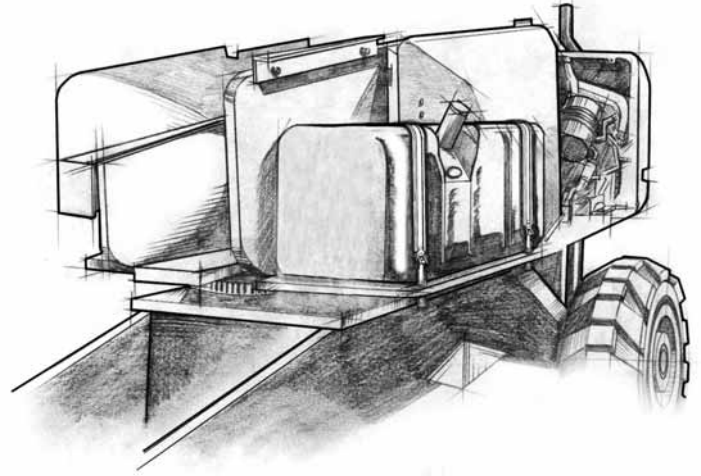
Ordering:

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** with your specifications to request a quotation.

Band Straps

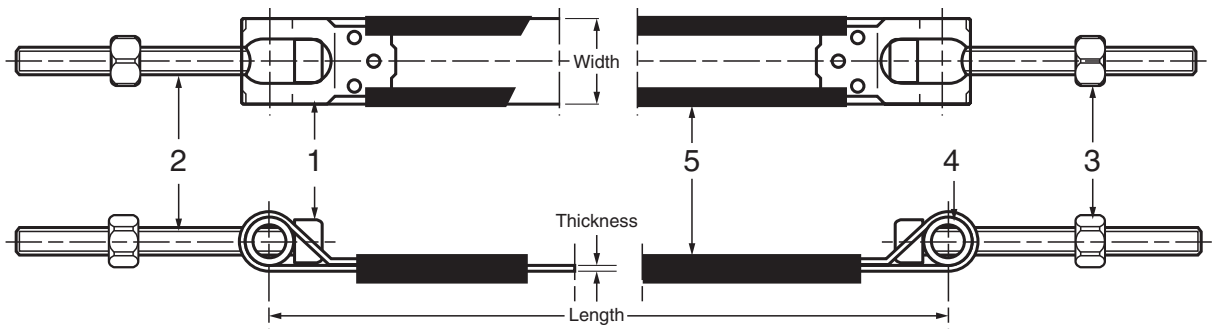
Description:

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



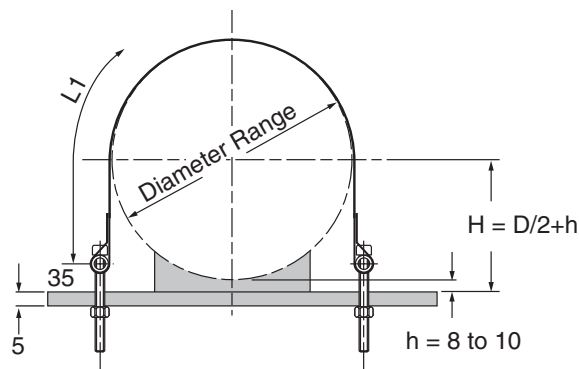
Item Description

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



Dimensions

	Width x Thickness	Length Range (L1)
Light Range	25 x 1	187 - 921 mm
Heavy Range	30 X 1	232 - 921 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 with your specifications to request a quotation.