



CUSHION CLAMPS - TECHNICAL DATA SHEET

FEATURES & BENEFITS



VIBRATION ISOLATION

Cushion insert absorbs vibration and reduces transmission to equipment and structures.



NOISE REDUCTION

Minimizes noise generated by pipe and tube movement.



PROTECTION

Protects tubes and hoses from abrasion, chafing and metal-to-metal contact.



SECURE RETENTION

Provides a firm grip on the line, preventing movement and displacement.



EASY INSTALLATION

Designed for quick and easy installation on standard mounting rails.



MATERIAL OPTIONS

Available in carbon steel or stainless steel (304) with various finishes to suit application requirements.



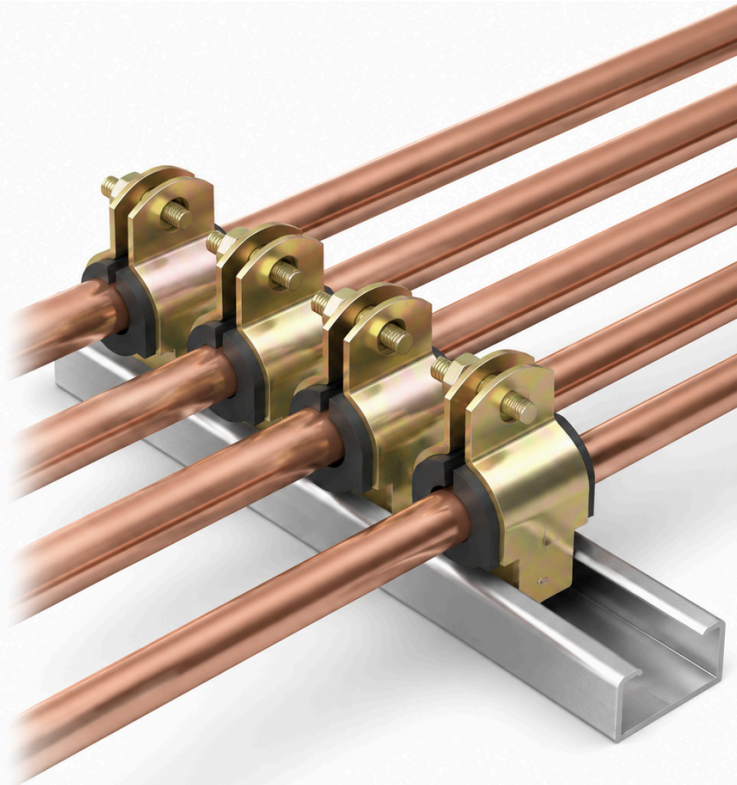
WIDE RANGE

Available in multiple sizes to accommodate 1/4" to 4-1/8" OD hoses, tubes and pipes.



CUSTOM SOLUTIONS

Special sizes, materials and configurations available on request.



TYPICAL APPLICATIONS



Hydraulic Systems



Pneumatic Systems



Fuel Lines

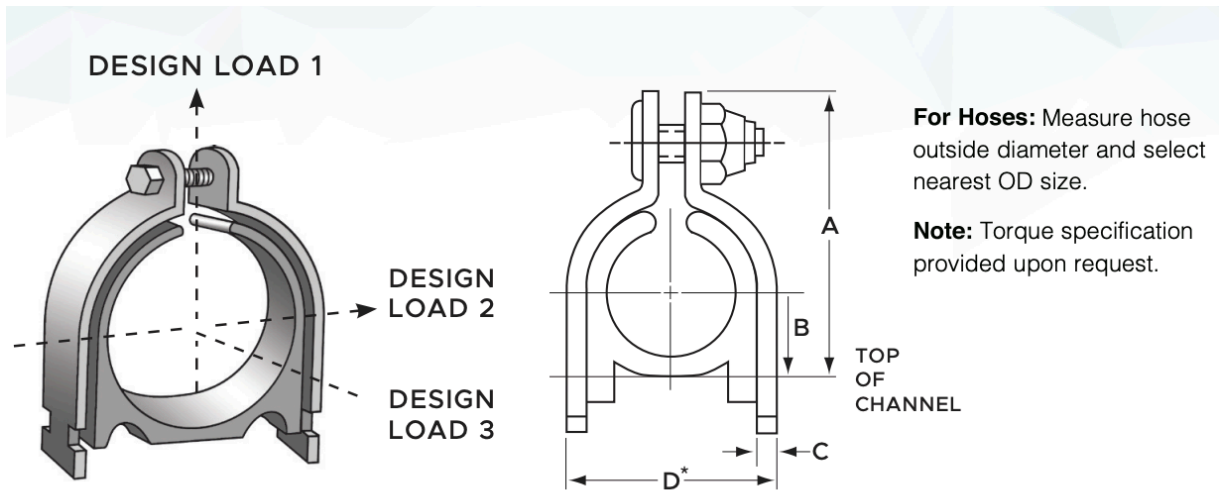


Cooling Lines



Industrial Applications

Invicta Cushion Clamps are designed for secure mounting of tubes, pipes and hoses while providing isolation from vibration, shock and metal-to-metal contact. The cushioned design helps reduce transmitted vibration and noise while protecting the supported line from abrasion.



DESIGN LOAD 1 (lbf) | DESIGN LOAD 2 (lbf) | DESIGN LOAD 3 (lbf)
A (in.) | B (in.) | C (in.) | D (in.)

OD	LOAD 1	LOAD 2	LOAD 3	A	B	C	D
1/4"	400	50	50	1.11	.22	.075	.62
3/8"	400	50	50	1.24	.28	.075	.75
1/2"	400	50	50	1.36	.34	.075	.87
5/8"	400	50	50	1.50	.41	.075	1.00
3/4"	600	75	75	1.78	.53	.075	1.33
7/8"	600	75	75	1.91	.58	.075	1.45
1-1/8"	600	75	75	2.16	.72	.075	1.79
1-3/8"	600	75	75	2.75	.91	.119	2.22
1-5/8"	600	75	75	3.03	1.03	.119	2.47
2-1/8"	800	125	125	3.53	1.28	.119	2.97
2-5/8"	800	125	125	4.03	1.53	.119	3.47
3-1/8"	800	125	125	4.52	1.78	.119	3.97
4-1/8"	1000	200	150	5.66	2.34	.119	5.09

Engineering Notes: Dimensions are nominal and subject to manufacturing tolerances. Design load values apply under defined test conditions and should not be interpreted as system working-load limits without consideration of installation geometry, vibration, temperature, tube material and mounting conditions. Final product selection should be validated for the intended application.

Clamp Material: Carbon Steel / Stainless Steel 304

Cushion Material: Thermoplastic Elastomer / application-specific compound

Mounting: Rail-mounted

Applications: Hydraulic, pneumatic, fuel, coolant and industrial fluid lines

Available Sizes: 1/4" to 4-1/8" based on the current table

Surface Treatment: Customer/application specific

Temperature Range: Insert your validated cushion temperature range

Custom Sizes: Available on request