



UniClamp™



The UniClamp® provides constant, leak proof prevention for low pressure applications. The wide band width insures improved clamping action without hose damage. This is a true low cost solution for high volume production..

Part Series	Standard Pack	Clamp Size		Hose OD Installed		Max Clamp Diameter (free)		Min Clamp Diameter (expanded)	
		Inches	MM	Inches	MM	Inches	MM	Inches	MM
5503	40,000	0.21	5.3	0.230	5.8	0.210	5.3	0.250	6.4
3173	18,000	0.24	6.1	0.280	7.1	0.240	6.1	0.300	7.6
6044	40,000	0.25	6.4	0.280	7.1	0.240	6.1	0.300	7.6
5005	25,000	0.30	7.6	0.310	7.9	0.301	7.6	0.345	8.8
5006	15,000	0.32	8.1	0.380	9.7	0.321	8.2	0.405	10.3
2562	18,000	0.34	8.6	0.380	9.7	0.335	8.5	0.410	10.4
5073	20,000	0.38	9.7	0.410	10.4	0.375	9.5	0.450	11.4
5007	15,000	0.41	10.4	0.440	11.2	0.405	10.3	0.485	12.3
5075	10,000	0.43	10.9	0.470	11.9	0.430	10.9	0.515	13.1
4720	15,000	0.45	11.4	0.490	12.2	0.450	11.4	0.520	13.2
5173	13,000	0.38	9.7	0.410	10.4	0.375	9.5	0.450	11.4
5008	8,000	0.46	11.7	0.500	12.7	0.460	11.7	0.545	13.8
5077	8,000	0.49	12.4	0.530	13.5	0.490	12.4	0.573	14.6
5078	8,500	0.50	12.7	0.560	14.2	0.500	12.7	0.621	15.8
5009	8,000	0.52	13.2	0.560	14.2	0.520	13.2	0.605	15.4
5079	7,000	0.54	13.7	0.590	15.0	0.540	13.7	0.650	16.5
5279	11,000	0.54	13.7	0.590	15.0	0.540	13.7	0.650	16.5
5010	7,000	0.58	14.7	0.630	16.0	0.583	14.8	0.668	17.0
5082	8,500	0.58	14.7	0.690	17.5	0.583	14.8	0.720	18.3
5281	5,000	0.61	15.5	0.660	16.8	0.620	15.7	0.725	18.4
5081	8,000	0.62	15.7	0.660	16.8	0.620	15.7	0.725	18.4
5084	5,000	0.65	16.5	0.750	19.1	0.645	16.4	0.828	21.0
5011	6,000	0.66	16.8	0.690	17.5	0.655	16.6	0.750	19.1
4320	6,000	0.69	17.5	0.720	18.3	0.685	17.4	0.775	19.7
5012	7,000	0.69	17.5	0.720	18.3	0.685	17.4	0.775	19.7
5013	3,500	0.75	19.1	0.810	20.6	0.750	19.1	0.900	22.9



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		Inches	MM	Inches	MM	Inches	MM	Inches	MM
5014	3,000	0.81	20.6	0.880	22.4	0.810	20.6	0.970	24.6
5015	2,500	0.86	21.8	0.940	23.9	0.860	21.8	1.030	26.2
5016	2,500	0.91	23.1	1.000	25.4	0.910	23.1	1.080	27.4
5093	3,600	0.95	24.1	1.030	26.2	0.950	24.1	1.130	28.7
5017	2,500	0.97	24.6	1.060	26.9	0.970	24.6	1.180	30.0
5018	3,000	1.04	26.4	1.130	28.7	1.040	26.4	1.240	31.5
5019	2,500	1.10	27.9	1.190	30.2	1.100	27.9	1.280	32.5
5098	3,400	1.10	27.9	1.280	32.5	1.100	27.9	1.280	32.5
5020	2,500	1.18	30.0	1.250	31.8	1.180	30.0	1.450	36.8
5024	2,000	1.44	36.6	1.500	38.1	1.350	34.3	1.670	42.4
4073	1,800	1.45	36.8	1.630	41.4	1.450	36.8	1.800	45.7
7401	5	Clamp pliers							

Universal Metal Part Numbers

Base P/N Finish
 XXXX - XXX

Finish	Description	Advantages	SS Corrosion Rating
103	Phosphate, 2 coats Olive Drab	Cost effective, Moderate SS	96 Hours
131	Phosphate, 2 coats Black Paint	Cost effective, Moderate SS	96 Hours
132	Phosphate, 2 coats Metallic Paint	Cost effective, Moderate SS	96 Hours
133	Phosphate, 2 coats Green Paint	Cost effective, Moderate SS	96 Hours
134	Phosphate, 2 coats Red Paint	Cost effective, Moderate SS	96 Hours
136	Phosphate & Yellow Paint	Cost effective, Moderate SS	40 Hours
327	Magni 565 (Black finish)	High SS resistance, hex-free	720 Hours
395	Magni 567 (Gray finish)	High SS resistance, hex-free	1500 Hours



UniClamp™



UniClamp Terms & Conditions

Universal Metal Products, Inc. (Universal) disclaims liability for any clamp and/or finish failures created by the use of a supplemental surfactant; any outside chemicals or solutions used to aid in the installation process or which could become trapped between the ID of the UNI-CLAMP® and the OD of the application. Surfactant usage can also be the cause of delayed fractures after the clamp has been expanded and returned, but remains in contact with the surfactant. Known surfactants include, but are not limited to: detergents, acetone, chlorine, fluorine, “vanishing oils”. It should be assumed that any liquid used in the installation application can become trapped between the ID of the UNI-CLAMP® and the OD of the application, and that this condition can result in clamp failure due to hydrogen embitterment or other factors.

New fire retardant hoses have been designed to replace existing hose products. The compositions within these fire retardant hoses can potentially have an adverse affect on several of our UNI-CLAMP® standard finishes. Universal has experienced situations ranging from poor and lost finish adhesion, to finish breakdown and inability to pass environmental performance requirements. Universal does not take responsibility for our clamps ability to continue to perform as designed within these known degrading environments. Finish specifications are listed on our blueprint and tested as dry and clean from outside solutions.

Universal is not always privy to knowledge of use and application. Over expansion or misuse of the UNI-CLAMP® is done at the customer’s risk. Many expansion techniques are available; but, the only technique these clamps were originally designed for were hand pliers. Other expansion techniques constitute misuse and over expansion of the clamp beyond its designed parameters. We understand many nipples and/or hose coupling designs are available and used in the industry, but we cannot guarantee the fit with every one. Over expansion and poor assembly techniques can cause an over stress situation and create a potential breakage issue. Universal can not ensure the UNI-CLAMP® will fit, hold and perform for the recommended, specifically designed, final assembly diameter; when used within the specified expansion parameters listed on the Universal blueprint. An updated charted drawing and CAD representation will be attached with this letter.

Precision Metalforming Association (PMA) is a monitoring body, which gathers data from participating metal stampers and fabricators. Universal is a longstanding member of this association and uses “PMA” data and benchmarks to gage itself within the industry. One such pertinent statistic is Parts Per Million (PPM). Fabrication of the UNI-CLAMP® involves multiple batch processes in which other parts and foreign objects are likely to mix with the current product lot in process; i.e. batch belt heat treating and finishing. When purchasing the UNI-CLAMP®, you are agreeing to an acceptable PPM level of 3,000 PPM. A 100% manual sort operation can be added to the piece price to reduce the PPM level to 100 PPM. However, if purchased off the shelf, with no mention of your PPM requirements, and associated pricing not addressed; you are defaulting to our batch processing PPM level of 3,000 PPM. The industry standard for this type of stamping commodity is 6,508 PPM, as stated by PMA.

The UNI-CLAMP® is a custom line of flat stock; constant compression hose clamps and is a registered trademark and design of Universal. When purchased, you are buying the UNI-CLAMP®, produced to Universal’s specifications, and Universal blueprint. Universal has the right to change manufacturing factors to properly ensure the specified expansion and hose size recommendations, without notification.