

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 needs in vehicle, appliance and industrial use.

UniClamp[®]

Part Series	ard instance			Max Clamp Diameter (free)		Min Clamp Diameter (expanded)		Material Width Thickness		255	
	Pack	Inches	ММ	Inches	ММ	Inches	ММ	Inches	ММ	Inches	ММ
5503	40,000	0.230	5.8	0.210	5.3	0.250	6.4	.250	6.3	.020	.51
3173	18,000	0.280	7.1	0.240	6.1	0.300	7.6	.250	6.3	.020	.51
6044	40,000	0.280	7.1	0.240	6.1	0.300	7.6	.250	6.3	.015	.38
5005	25,000	0.310	7.9	0.301	7.6	0.345	8.8	.312	7.9	.030	.76
5006	15,000	0.380	9.7	0.321	8.2	0.405	10.3	.312	7.9	.020	.51
2562	18,000	0.380	9.7	0.335	8.5	0.410	10.4	.312	7.9	.020	.51
5073	20,000	0.410	10.4	0.375	9.5	0.450	11.4	.312	7.9	.025	.64
5007	15,000	0.440	11.2	0.405	10.3	0.485	12.3	.312	7.9	.025	.64
5075	10,000	0.470	11.9	0.430	10.9	0.515	13.1	.312	7.9	.025	.64
4720	15,000	0.490	12.2	0.450	11.4	0.520	13.2	.312	7.9	.040	1.02
5173	20,000	0.410	10.4	0.375	9.5	0.450	11.4	.312	7.9	.025	.64
5008	8,000	0.500	12.7	0.460	11.7	0.545	13.8	.312	7.9	.030	.76
5077	8,000	0.530	13.5	0.490	12.4	0.573	14.6	.312	7.9	.030	.76
5078	8,500	0.560	14.2	0.500	12.7	0.621	15.8	.312	7.9	.030	.76
5009	8,000	0.560	14.2	0.520	13.2	0.605	15.4	.312	7.9	.030	.76
5079	7,000	0.590	15.0	0.540	13.7	0.650	16.5	.312	7.9	.030	.76
5279	11,000	0.590	15.0	0.540	13.7	0.650	16.5	.312	7.9	.030	.76
5010	7,000	0.630	16.0	0.583	14.8	0.668	17.0	.312	7.9	.030	.76
5082	8,500	0.690	17.5	0.583	14.8	0.720	18.3	.312	7.9	.030	.76
5281	5,000	0.660	16.8	0.620	15.7	0.725	18.4	.312	7.9	.045	1.14
5081	8,000	0.660	16.8	0.620	15.7	0.725	18.4	.312	7.9	.030	.76
5084	5,000	0.750	19.1	0.645	16.4	0.828	21.0	.375	9.5	.030	.76
5011	6,000	0.690	17.5	0.655	16.6	0.750	19.1	.312	7.9	.030	.76
4320	6,000	0.720	18.3	0.685	17.4	0.775	19.7	.375	9.5	.050	1.27
5012	7,000	0.720	18.3	0.685	17.4	0.775	19.7	.375	9.5	.030	.76
5013	3,500	0.810	20.6	0.750	19.1	0.900	22.9	.375	9.5	.030	.76

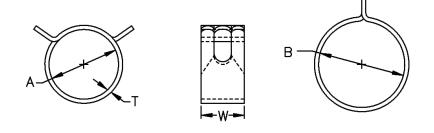


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Part Series	Stand- ard Pack	Hose OD Installed		Max Clamp Diameter (free) "A"		Min Clamp Diameter (expanded) "B"		Mat Width		terial Thickness	
		Inches	ММ	Inches	ММ	Inches	ММ	Inches	ММ	Inches	ММ
5014	3,000	.880	22.2	.810	20.58	.970	24.64	.375	9.5	.040	1.02
5015	2,500	.940	23.8	.860	21.84	1.03	26.16	.375	9.5	.045	1.14
5016	2,500	1.00	25.4	.910	23.11	1.08	27.43	.375	9.5	.045	1.14
5093	3,600	1.03	26.2	.950	24.13	1.13	28.70	.375	9.5	.035	.89
5017	2,500	1.06	27.0	.970	24.64	1.18	29.98	.375	9.5	.045	1.14
5018	3,000	1.13	28.6	1.04	26.42	1.24	31.50	.375	9.5	.045	1.14
5019	2,500	1.19	30.2	1.10	27.94	1.28	32.51	.375	9.5	.045	1.14
5098	3,400	1.19	39.2	1.10	27.90	1.28	32.51	.312	7.9	.040	1.00
5020	2,500	1.25	31.8	1.18	29.97	1.45	36.83	.375	9.5	.045	1.14
5024	2,000	1.50	38.1	1.35	34.29	1.67	42.42	.375	9.5	.045	1.14
4073	1,800	1.63	41.3	1.45	36.83	1.80	45.72	.375	9.5	.045	1.14
7401	5	Hose Clamp Pliers (manual expansion tool)*									

*For automated installation applications, we request to be consulted to ensure proper expansion, feeding and handling techniques. UMP will not warrant hose clamps in applications where we have not been consulted in the development process due to potential for misuse.







The UniClamp[®] is available in a variety of finishes designed for your specific corrosion performance requirements. Ask your UMP Sales Representative for the finish that best meets your application needs.

Universal Metal Part Numbers

Base P/N		<u>Finish</u>
XXXX	-	XXX

Finish	Description	Advantages	SS Corrosion Rating		
1XX	Phosphate, 2 coats paint	Cost effective, Moderate SS	96 Hours		
327	Magni 565 (Gray)	High SS resistance, hex-free	840 Hours		
326	Magni 565 (Black)	High SS resistance, hex-free	840 Hours		

*Custom finish options are available on request. Contact your UMP Sales Representative for available options and unit pricing. For 100% sorted parts, add an "S" to the suffix of our part number at the time of your request for quote and sorting will be included in the unit selling price.







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.