

Blades for AM-1

REV 1 07/22/2013

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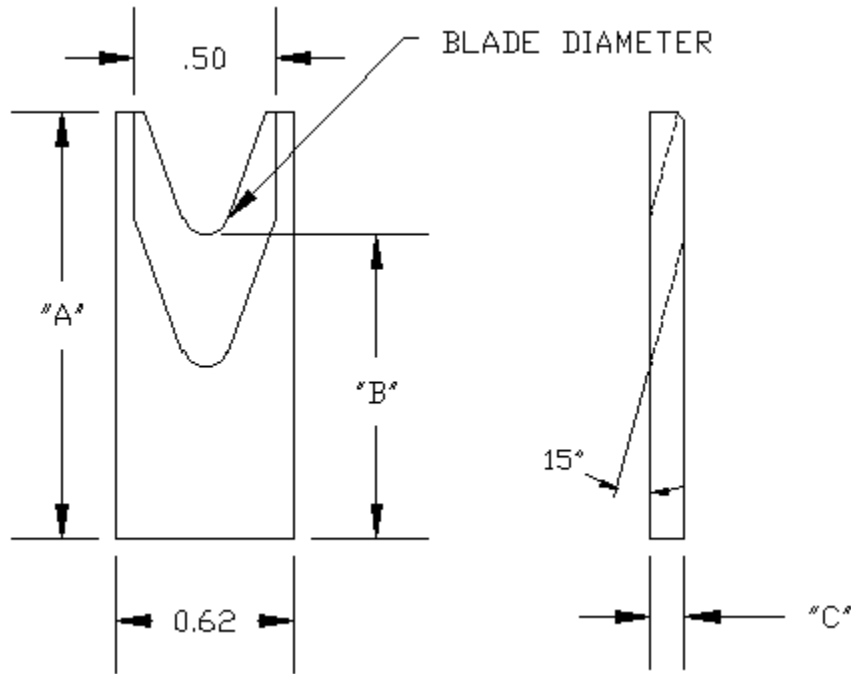
Dimensions on blade sketches are in inches and are only approximate overall dimensions.

Universal Tangent radius strip blades, 15 degree cut angle.

The sharp edge is ground to an arc whose radius approximates awg wire size. The entry angle lines meet the arc at a tangent point. This type of blade, when closed, presents a diamond shaped edge profile. For 1.875 inch (47.6 mm) long blades, the entry angle is wider than the 2.000 inch (50.8 mm) blades, this will accommodate a wider range of wires but it also means that more of the insulation has to be torn rather than cut. For very hard or thinner insulations the 2.000 inch (50.8 mm) length should be chosen.

Advantages: by adjusting cutter head shut height, (if insulation material and wall thickness allow), you can process adjacent wire extrusions.

Disadvantages: inadequate for processing thin wall and/or hard insulations such as cross-link or fiberglass jackets.



Part number	Dia. in	Dia. mm	"A" in	"A" In.	"B" In.	"B" mm	"C" In.	"C" mm
67940-20	0.012	0.30	1.875	47.6	0.912	23.16	0.062	1.57
67940-21	0.012	0.30	2.000	50.8	0.912	23.16	0.125	3.18
67940-22	0.022	0.56	1.875	47.6	0.907	23.04	0.062	1.57
67940-23	0.022	0.56	2.000	50.8	0.907	23.04	0.125	3.18
67940-24	0.034	0.86	1.875	47.6	0.901	22.89	0.062	1.57
67940-25	0.034	0.86	2.000	50.8	0.901	22.89	0.125	3.18
67940-26	0.042	1.07	1.875	47.6	0.897	22.78	0.062	1.57
67940-27	0.042	1.07	2.000	50.8	0.897	22.78	0.125	3.18
67940-28	0.052	1.32	1.875	47.6	0.892	22.66	0.062	1.57
67940-29	0.052	1.32	2.000	50.8	0.892	22.66	0.125	3.18
67940-30	0.062	1.57	1.875	47.6	0.887	22.53	0.062	1.57
67940-31	0.062	1.57	2.000	50.8	0.887	22.53	0.125	3.18
67940-32	0.076	1.93	1.875	47.6	0.880	22.35	0.062	1.57
67940-33	0.076	1.93	2.000	50.8	0.880	22.35	0.125	3.18
67940-34	0.096	2.44	1.875	47.6	0.870	22.10	0.062	1.57
67940-35	0.096	2.44	2.000	50.8	0.870	22.10	0.125	3.18
67940-36	0.112	2.84	1.875	47.6	0.862	21.89	0.062	1.57
67940-37	0.112	2.84	2.000	50.8	0.862	22.89	0.125	3.18
67940-38	0.172	4.37	1.875	47.6	0.832	21.13	0.125	3.18
67940-39	0.172	4.37	2.000	50.8	0.832	21.13	0.125	3.18
67940-40	0.222	5.64	1.875	47.6	0.807	20.50	0.125	3.18

67940-41	0.222	5.64	2.000	50.8	0.807	20.50	0.125	3.18
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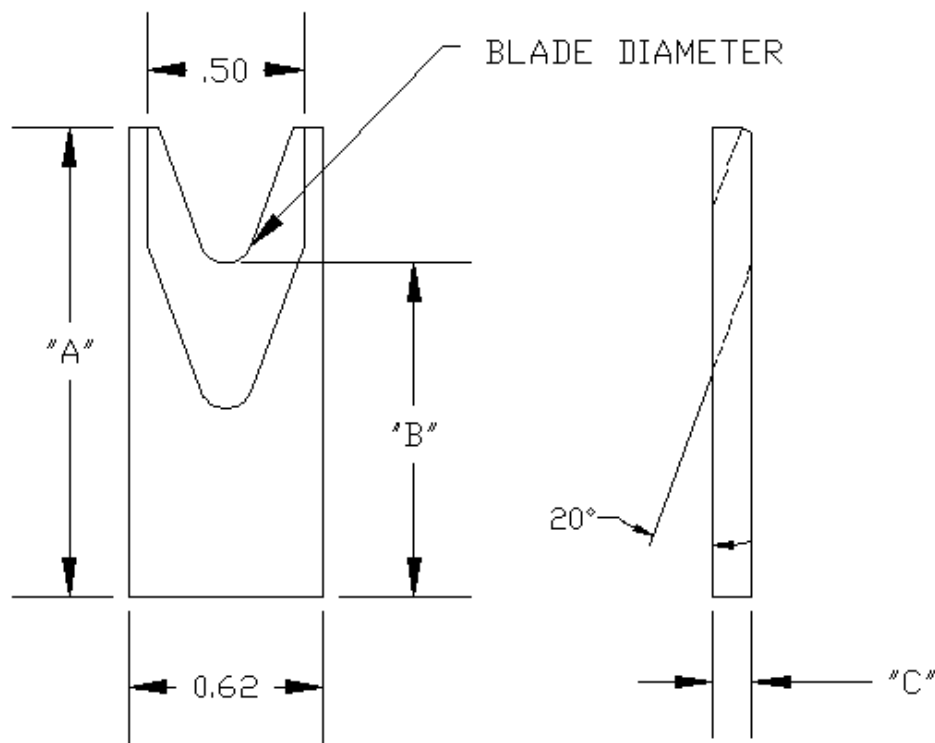
Universal Tangent radius strip blades, 20 degree cut angle.

The sharp edge is ground to an arc whose radius approximates awg wire size. The entry angle lines meet the arc at a tangent point. This type of blade, when closed, presents a diamond shaped edge profile. For 1.875 inch (47.6 mm) long blades, the entry angle is wider than the 2.000 inch (50.8 mm) blades, this will accommodate a wider range of wires but it also means that more of the insulation has to be torn rather than cut. For very hard or thinner insulations the 2.000 inch (50.8 mm) length should be chosen.

The cutting edge of the 20 degree style will stay sharp longer than the 15 degree style but for wire with very thick insulation the tip of the wire may bend more than when using the 15 degree blade.

Advantages: by adjusting cutter head shut height, (if insulation material and wall thickness allow), you can process adjacent wire extrusions.

Disadvantages: inadequate for processing thin wall and/or hard insulations such as cross-link or fiberglass jackets.

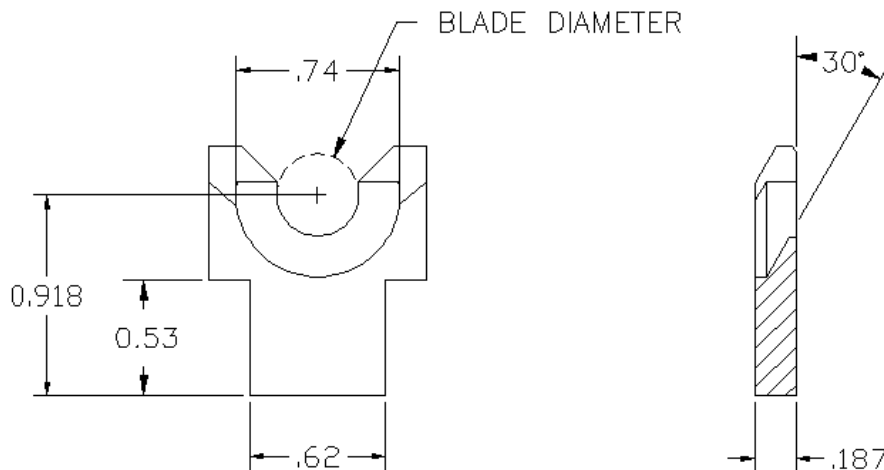


Part number	Dia. in	Dia. mm	"A" in	"A" In.	"B" In.	"B" mm	"C" In.	"C" mm
123724-1	0.012	0.30	1.875	47.6	0.912	23.16	0.062	1.57
123724-2	0.012	0.30	2.000	50.8	0.912	23.16	0.125	3.18
123724-3	0.022	0.56	1.875	47.6	0.907	23.04	0.062	1.57
123724-4	0.022	0.56	2.000	50.8	0.907	23.04	0.125	3.18

123724-5	0.034	0.86	1.875	47.6	0.901	22.89	0.062	1.57
123724-6	0.034	0.86	2.000	50.8	0.901	22.89	0.125	3.18
123724-7	0.042	1.07	1.875	47.6	0.897	22.78	0.062	1.57
123724-8	0.042	1.07	2.000	50.8	0.897	22.78	0.125	3.18
123724-9	0.052	1.32	1.875	47.6	0.892	22.66	0.062	1.57
123724-10	0.052	1.32	2.000	50.8	0.892	22.66	0.125	3.18
123724-11	0.062	1.57	1.875	47.6	0.887	22.53	0.062	1.57
123724-12	0.062	1.57	2.000	50.8	0.887	22.53	0.125	3.18
123724-13	0.076	1.93	1.875	47.6	0.880	22.35	0.062	1.57
123724-14	0.076	1.93	2.000	50.8	0.880	22.35	0.125	3.18
123724-15	0.096	2.44	1.875	47.6	0.870	22.10	0.062	1.57
123724-16	0.096	2.44	2.000	50.8	0.870	22.10	0.125	3.18
123724-17	0.112	2.84	1.875	47.6	0.862	21.89	0.062	1.57
123724-18	0.112	2.84	2.000	50.8	0.862	22.89	0.125	3.18
123724-19	0.172	4.37	1.875	47.6	0.832	21.13	0.125	3.18
123724-20	0.172	4.37	2.000	50.8	0.832	21.13	0.125	3.18
123724-21	0.222	5.64	1.875	47.6	0.807	20.50	0.125	3.18
123724-22	0.222	5.64	2.000	50.8	0.807	20.50	0.125	3.18

True radius blades – (sold in pairs)

The sharp edge is ground to a half circle whose radius approximates awg wire size. The entry angle lines intersect the half circle at the quadrant points. This type of blade, when closed, presents a true circle profile. Advantages: this type of blade is excellent for precise and clean jacket removal because it combines the scissor-like shearing action of the by-pass blade with the exact hole profile matching a conductor gauge. Excellent for thin wall cross-link PVC and most rubbery or elastic insulations (thin or thick wall). Disadvantages: shut height cannot be modified to process adjacent wire sizes. Off center wire condition has to be considered when choosing blade size.



Part number	Dia. in	Dia. mm	Part number	Dia. in	Dia. mm
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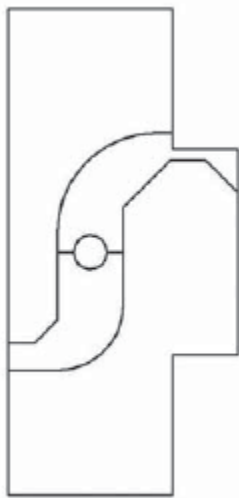
67941-1	0.156	3.96	67941-8	0.343	8.71
67941-2	0.187	4.75	67941-9	0.358	9.09
67941-3	0.205	5.21	67941-10	0.366	9.30
67941-18	0.228	5.79	67941-11	0.375	9.53
67941-4	0.234	5.94	67941-12	0.386	9.80
67941-20	0.250	6.35	67941-13	0.397	10.08
67941-5	0.266	6.76	67941-14	0.406	10.31
67941-6	0.281	7.14	67941-15	0.421	10.69
67941-17	0.290	7.37	67941-16	0.437	11.10
67941-7	0.312	7.92	67941-19	0.484	12.29

Drilled die type blades

The die-type blade has a fixed shut height. The cutting edge is precisely drilled to an exact radius dimension for the conductor diameter. The insulation wall is contained in a counter-bore drilled around cutting edge.

This type of blade is the most exactly matched blade to the wire specification, giving a very precise insulation removal. This is excellent for removal of extremely thin insulation walls or where the outer jacket is oval shaped, and is also very useful for processing solid conductor insulated wire. Normally this is the blade of choice for sjt, svt, sjo, coaxial cable outer jacket removal, and many round multi-conductor wires.

Die blades are manufactured to the exact wire specifications. Blades can be produced for most any wire. For a specific blade size contact Artos Engineering.

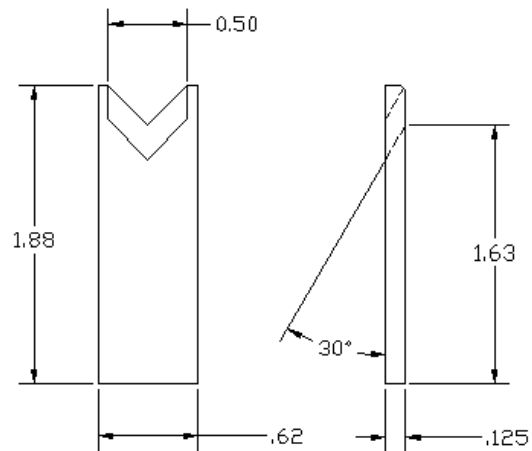


A1-XXX-XXX Die Type Blade

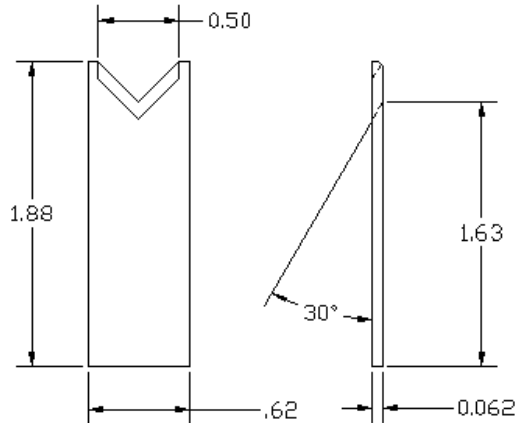
Tangent angle cut off blades

The sharp edge is ground to a radius size. The entry angle lines meet the radius at a tangent point. This type of blade, presents a diamond shaped profile as it closes.

Characteristics: Sharp edges cut by slicing, creating a gradual cut. This produces less deformation of the material being cut. Cutting edges must be able to by-pass each other. This type of cut-off is best used with circular shaped wire.



67940-8 Thick cutoff blade CLA

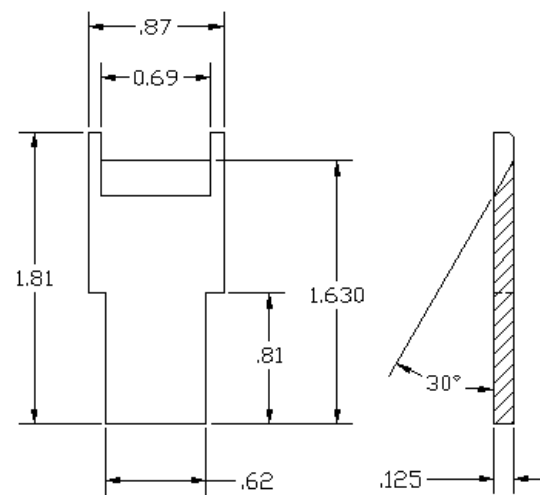


67940-11 Thin cutoff blade CL

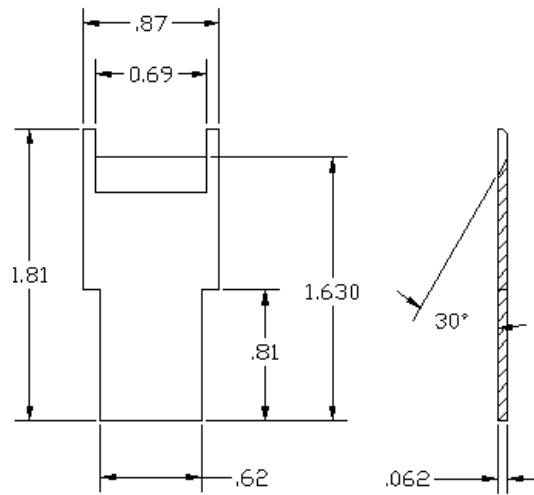
Collinear angle cut off blades

Sharp edge is ground to a flat collinear angle.

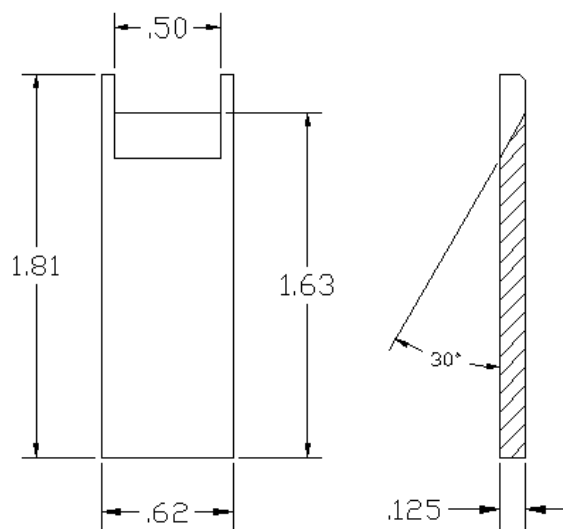
Characteristics: Sharp edges cut by shearing action. This class of blade was designed to allow multiple conductor wire to be processed without deforming the wire. The main advantage of this class is the ability to process many wire gauges with the same blades.



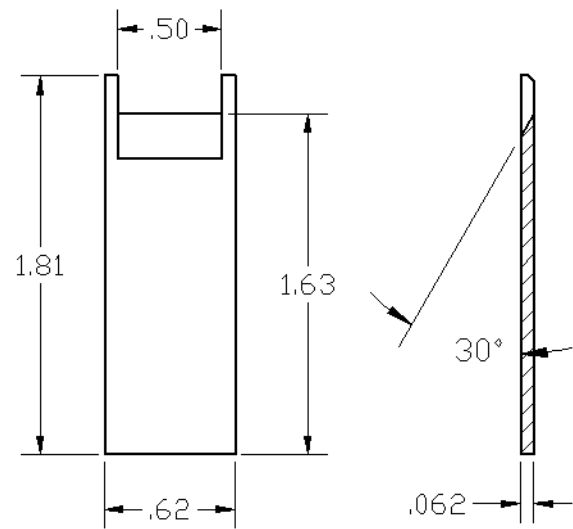
67940-9 Thick cut off blade WSCA



67940-12 Thin cut off blade WSC



67940-10 Thick cut off blade SCA

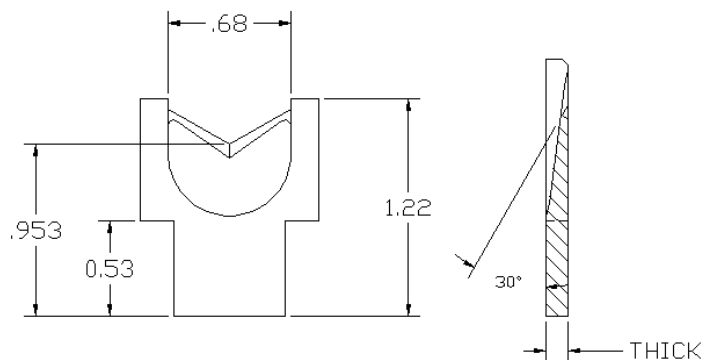


67940-13 Thin cut off blade SC

Wide entry cut off blades

The sharp edge is ground to a radius size. The entry angle lines meet the radius at a tangent point. This type of blade, presents a diamond shaped profile as it closes.

Characteristics: Sharp edges cut by slicing, creating a gradual cut. This produces less deformation of the material being cut. Cutting edges must be able to by-pass each other. This type of cut-off is best used with circular shaped wire.

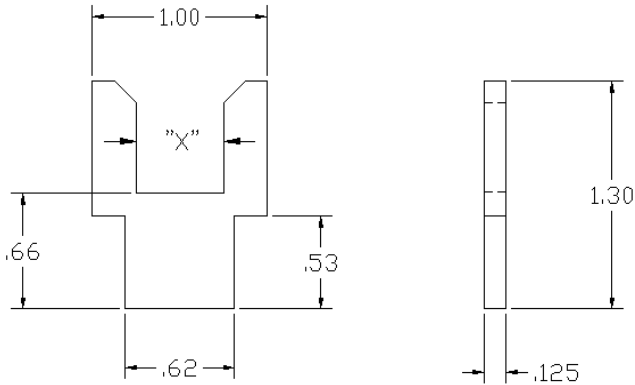


67942-1 0.125 inch (3.18mm) THICK cut off blade

67942-2 0.188 inch (4.76mm) THICK cut off blade

Wide guides

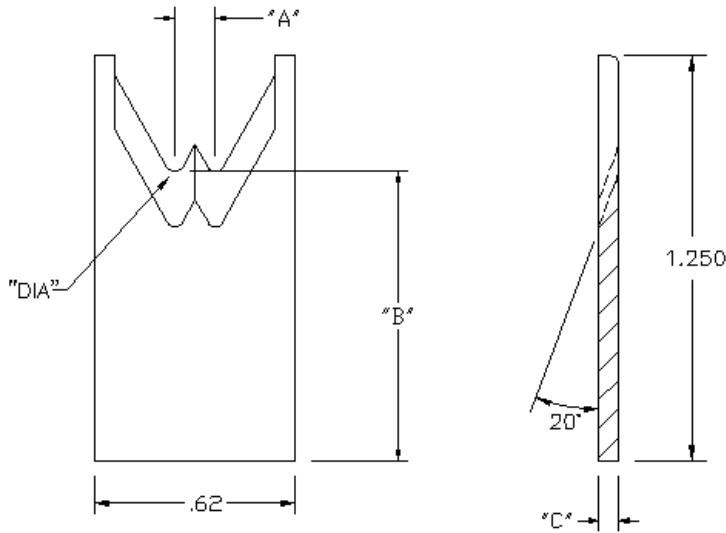
Wire guides are used in conjunction with cut and strip blades to precisely guide the conductor into the strip area of the blade. This will help prevent the conductor from coming in contact with the cutting edges of the strip blades, preventing premature blade wear.



Part Number	X inches	X mm	Part number	X inches	X mm
122236-36	0.130	3.30	122236-17	0.345	8.76
122236-35	0.160	4.06	122236-18	0.355	9.02
122236-1	0.175	4.45	122236-19	0.365	9.27
122236-2	0.185	4.70	122236-20	0.375	9.53
122236-3	0.195	4.95	122236-21	0.385	9.78
122236-4	0.205	5.21	122236-22	0.395	10.03
122236-5	0.215	5.46	122236-23	0.405	10.29
122236-6	0.225	5.72	122236-24	0.415	10.54
122236-7	0.235	5.97	122236-25	0.425	10.80
122236-8	0.245	6.22	122236-26	0.435	11.05
122236-9	0.255	6.48	122236-27	0.445	11.30
122236-10	0.265	6.73	122236-28	0.455	11.56
122236-11	0.275	6.99	122236-29	0.465	11.81
122236-12	0.285	7.24	122236-30	0.475	12.07
122236-13	0.295	7.49	122236-31	0.485	12.32
122236-14	0.305	7.75	122236-32	0.495	12.57
122236-15	0.315	8.00	122236-33	0.505	12.83
122236-16	0.325	8.26	122236-34	0.546	13.87

Tangent radius style 2 conductor stripping blades

Generally these blades must be custom sized to the wire. The charts given for each blade below are given for reference and are orderable numbers. If you are unsure how to size the blade, provide a wire samples to Artos Engineering for determination of the blade sizing.

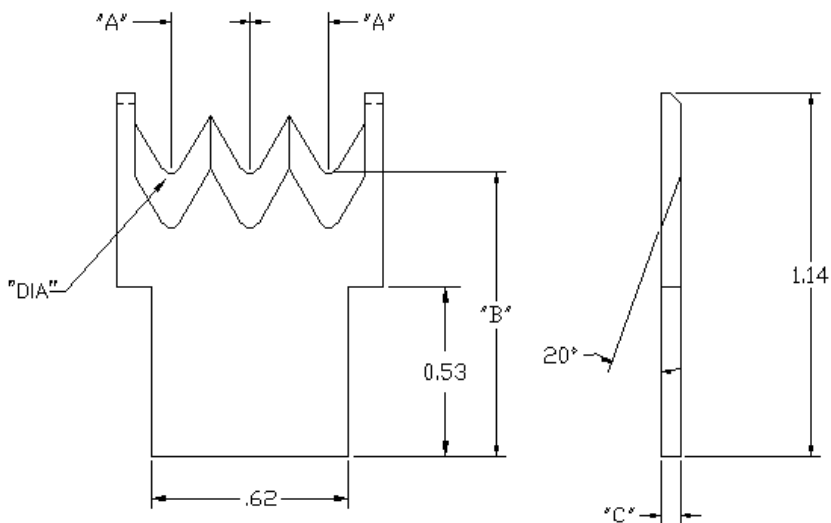


122035-xx

Item Number	Dia. inches	Dia. mm	"A" inches	"A" mm	"B" inches	"C" inches
-6	0.026	0.66	0.093	2.36	0.892	0.125
-1	0.026	0.66	0.125	3.18	0.892	0.062
-2	0.026	0.66	0.140	3.56	0.892	0.062
-3	0.026	0.66	0.140	3.56	0.892	0.125
-4	0.026	0.66	0.187	4.75	0.892	0.125
-5	0.056	1.42	0.110	2.79	0.862	0.125

Tangent radius style 3 conductor stripping blades

For these blades the distance between the conductors must be equal. Generally these blades must be custom sized to the wire. The charts given for each blade below are given for reference and are orderable numbers. If you are unsure how to size the blade, provide a wire samples to Artos Engineering for determination of the blade sizing.

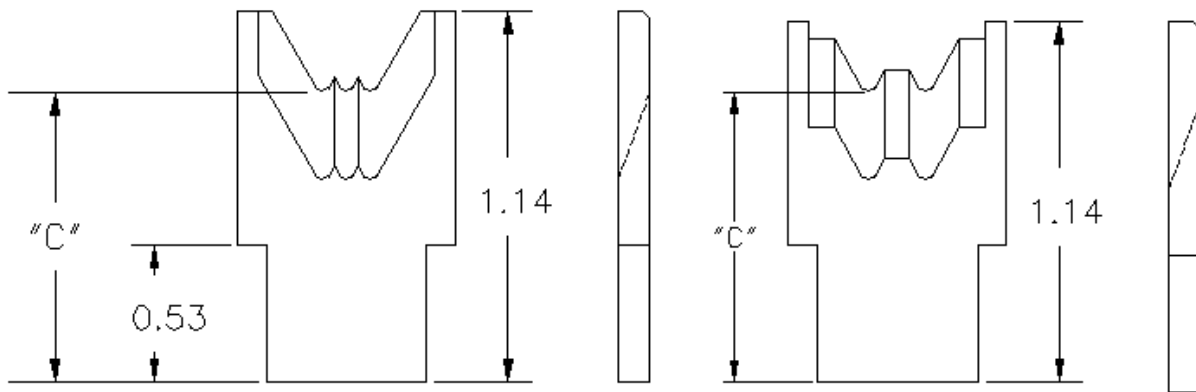


122157-xx

Item Number	Dia. inches	Dia. mm	"A" inches	"A" mm	"B" inches	"C" inches
-3	0.026	0.66	0.093	2.36	0.892	0.125
-4	0.026	0.66	0.093	2.36	0.892	0.062
-1	0.031	0.78	0.250	6.35	0.887	0.062
-5	0.048	1.22	0.093	2.36	0.870	0.062
-2	0.048	1.22	0.140	3.56	0.870	0.125

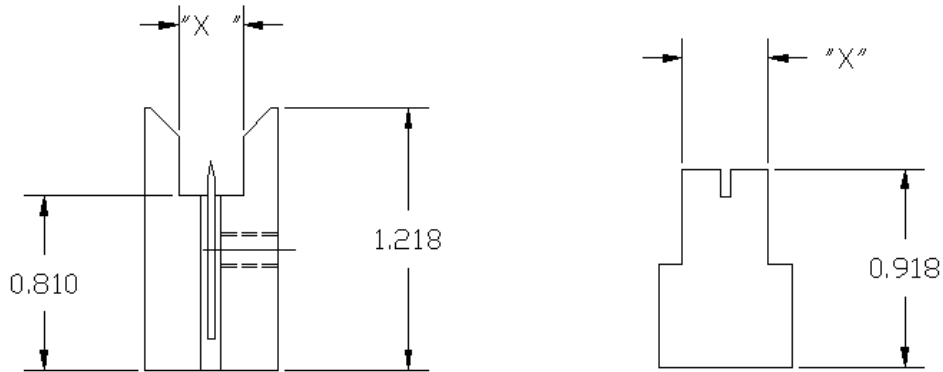
Multi-conductor combination strip and cut blades

This is a 2 piece set that will strip some of the conductors and trim off the others. For blades specific to your needs please contact Artos Engineering.



Slitting blocks and pushers.

This is a 2 piece set that can be installed to cut a slit along the length of the wire. These can be used for slitting a 2 conductor flat cord or single conductor wire.



5-122180-xx

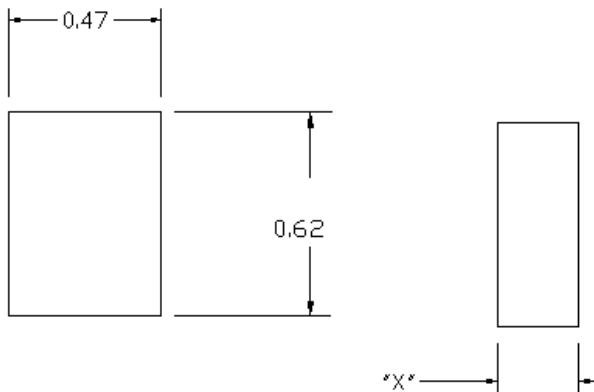
-xx Number	X inches	X mm	-xx number	X inches	X mm
-24	0.078	1.98	-15	0.266	6.76
-1	0.086	2.18	-16	0.281	7.14
-2	0.093	2.36	-26	0.290	7.37
-3	0.104	2.64	-35	0.300	7.62
-4	0.110	2.79	-17	0.312	7.92
-5	0.116	2.95	-23	0.328	8.33
-6	0.125	3.18	-18	0.344	8.74
-7	0.136	3.45	-34	0.360	9.14
-8	0.145	3.68	-19	0.375	9.53
-9	0.156	3.96	-30	0.391	9.93
-25	0.166	4.22	-20	0.406	10.31
-32	0.176	4.47	-33	0.421	10.69
-10	0.187	4.75	-21	0.437	11.10
-11	0.196	4.98	-22	0.468	11.89
-31	0.206	5.23	-27	0.546	13.87
-12	0.218	5.54	-28	0.566	14.38
-13	0.234	5.94	-29	0.732	18.59
-14	0.250	6.35			

Variable spacers

The wire end strip dimension is obtained by physically inserting spacers of different thickness in-between the blade bodies. The assembly is then held in place by fastening devices.

This system involves measurement calculations in order to figure the correct spacer-blade combinations. Because of its inherent cumbersome nature, it is highly recommended that this setup be performed in anticipation to a scheduled production run.

To optimize equipment productivity, it is a good idea to have several sets of pre-assembled blade mounts ready for production schedules.



Part Number	X inches	X mm
120145-1	0.0310	0.787
120145-2	0.0620	1.575
120145-3	0.1245	3.162
120145-4	0.2500	6.350
120145-5	0.5000	12.70
120145-6	1.0000	25.40