

CONTROL

CONTROL CABLE

1 x 19 NON FLEXIBLE CABLE

One strand of 19 wires. It has more metallic area than 7 x 7 or 7 x 19 cable which makes it the strongest but also the least flexible. Generally used for bracing purposes. Can be used for controls. **VERY STIFF**



1X19



7X7



7X19

7 x 7 FLEXIBLE CONTROL CABLE

Seven strands of seven wires each.

Used for control purposes where extreme flexibility is not required, but where abrasion is a factor.

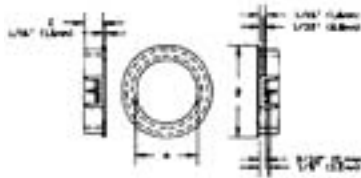
7 x 19 EXTRA FLEXIBLE CONTROL CABLE

Seven strands of 19 wires each. Its greater metallic area makes it stronger than 7 x 7 cable. Because of its fine wires, the best service is obtained with 7 x 19 wire where abrasion is not too severe. These same fine wires, however, make it the most flexible to meet severe bending.

CABLE BREAK DIA	WEIGHT STRENGTH	WEIGHT P/100 FT	MIL SPEC	PART NUMBER	PRICE P/FOOT
GALVANIZED					
1/8	2100 lb	3.50 lb	MIL-DTL-S3420	1/8x1x19-GV	0.59
1/16	480 lb	0.75 lb	MIL-DTL-S3420	1/16x7x7-GV	0.47
3/32	920 lb	1.60 lb	MIL-DTL-S3420	3/32x7x7-GV	0.35
3/32	1000 lb	1.74 lb	MIL-DTL-S3420	3/32x7x19-GV	0.75
1/8	2000 lb	2.90 lb	MIL-DTL-S3420	1/8x7x19-GV	0.60
5/32	2800 lb	4.50 lb	MIL-DTL-S3420	5/32x7x19-GV	0.75
3/16	4200 lb	6.50 lb	MIL-DTL-S3420	3/16x7x19-GV	1.17
1/4	7000 lb	11.00lb	MIL-DTL-S3420	1/4x7x19-GV	1.80
STAINLESS					
1/8	2100 lb	3.50 lb	MIL-DTL-S3420	1/8x1x19-SS	1.15
1/16	480 lb	0.75 lb	MIL-DTL-S3420	1/16x7x7-SS	0.83
3/32	920 lb	1.60 lb	MIL-DTL-S3420	3/32x7x7-SS	0.37
3/32	920 lb	1.74 lb	MIL-DTL-S3420	3/32x7x19-SS	0.71
1/8	1760 lb	2.90 lb	MIL-DTL-S3420	1/8x7x19-SS	0.83
5/32	2400 lb	4.50 lb	MIL-DTL-S3420	5/32x7x19-SS	1.50
3/16	3700 lb	6.50 lb	MIL-DTL-S3420	3/16x7x19-SS	1.25
1/4	6400 lb	11.00 lb	MIL-DTL-S3420	1/4x7x19-SS	2.85
NYLON COATED STAINLESS - 1/32" thick nylon					
5/32	2400 lb		MIL-W-83420	5/32x7x19-NCSS	1.50
(7/32" with coating)					

SNAP BUSHING

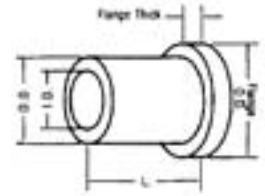
Snap bushings are ideal for abrasion and cutting protection of wiring, antenna leads, tubing, cables, etc. that are routed through bulkheads, ribs and other internal aircraft structures. Converts raw-edged holes to smooth neat, insulated ones. The locking fingers "snap" into holes with fingertip pressure, and will withstand a push back force of 35 pounds. Insulates and mechanically protects electrical and telecommunications cables, tubing, hose, rope and utility lines. Made of hard nylon, black or white depending on stock. Install by drilling a hole 1/8" larger than bushing i.d.



CHASSIS DIM. THICK-NESS	HOLE DIA.	PART DIMENSIONS INSIDE DIA.	HEAD DIA.	TOTAL HGHT.	PART NUMBER	PRICE EACH
.062	.250	1/8	5/16	5/16	2000	0.25
.062	.312	3/16	3/8	5/16	2011	0.39
.125	.375	1/4	15/32	13/32	2030	0.21
.125	.437	1/4	17/32	13/32	2038	0.23
.125	.500	3/8	37/64	13/32	2054	0.19
.125	.500	1/4	37/64	13/32	2059	0.22
.125	.625	1/4	23/32	13/32	2075	0.45
.125	.625	1/2	23/32	13/32	2073	0.19
.125	.750	3/8	27/32	13/32	2091	0.48
.125	.750	9/16	27/32	13/32	2093	0.21
.125	1.00	3/4	1-1/8	29/64	2140	0.27
.125	1.93	.937	1.218	.4530	2163	0.35
.125	1.093	15/16	1-7/32	29/64	2166	0.27
.250	.625	.625	7/8	17/32	2840	0.25

FLANGE BUSHING

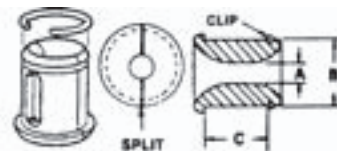
Oilite bronze bushings are highly wear resistant, ductile, comformable and corrosion-resistant.



HOLE I.D.	LENGTH O.D.	FLANGE O.D.	MATERIAL THICK.	PART NUMBER	PRICE EACH		
1/4	3/8	1/4	1/2	3/64	Oilite bronze	FB46-02	0.65
1/2	5/8	1/2	7/8	1/8	Oilite bronze	FB810-04	0.85
1/2	5/8	1	7/8	1/8	Oilite bronze	FB810-08	0.99
1/2	3/4	1	1	1/8	Oilite bronze	FB812-08	1.70
5/8	3/4	1/2	1	1/8	Oilite bronze	FB1012-04	0.65
5/8	3/4	1	1	1/8	Oilite bronze	FB1012-08	0.88
5/8	3/4	1-1/4	1	1/8	Oilite bronze	FB1012-10	0.99
.6270	.8150	1	1-1/16	5/32	Oilite bronze	FB1013-08	1.50
3/4	7/8	3/4	1-1/8	5/32	Oilite bronze	FB1214-06	1.00
1	1-1/4	3/4	1-1/2	3/16	Oilite bronze	FB1620-06	1.85
1	1-1/4	1-1/4	1-1/2	3/16	Oilite bronze	FB1620-10	2.50
3/16	5/16	3/16	7/16	1/16	Oilite bronze	FF303-01	0.75
.252	.3775	1/2	15/32	1/16	Oilite bronze	FF312-02	0.70
1/4	7/16	1/2	1/2	1/16	Oilite bronze	FF435-01	1.25
.3765	.5030	5/8	5/8	3/32	Oilite bronze	FF512-03	1.25
3/8	1/2	3/8	5/8	1/16	Oilite bronze	FF520-10	0.65
3/8	1/2	1/4	5/8	1/16	Oilite bronze	FF520-15	0.65
.5020	.6270	1/2	7/8	1/16	Oilite bronze	FF620-01	0.88
5/8	3/4	5/8	1	3/32	Oilite bronze	FF703-03	1.67
.750	.9393	.350	1.125	.062	Alloy steel	NAS77A-12-35	4.85
3/16	5/15	3/16	7/16	1/16	USE FF303-01	SF610-3	-
3/16	5/16	3/8	7/16	1/16	Oil impregnated sintered bronze	SF610-6	0.99
.252	.377	3/16	15/32	1/16	Oil impregnated sintered bronze	SF812-3	0.55
3/16	7/16	3/8	9/16	1/16	Oil impregnated sintered bronze	SF1014-6	0.89
.627	.753	1/2	1	3/32	Oil impregnated sintered bronze	SF2024-8	0.75
1.252	1.503	1-1/4	1-11/16	1/8	Oil impregnated sintered bronze	SF4048-20	2.50

CABLE FAIRLEADS

Nylon construction for internal or external use. Made in two halves with circular wire retaining clip. Can be installed or removed with cable in position.



DIMENSIONS A	B	C	PART NUMBER	PRICE EACH
1/4"	3/4"	3/4"	40701-00	2.65
1/2"	3/4"	1/2"	40071-00	2.44

CONTROL CABLE FAIRING

White plastic oval shaped fairing, makes neat, attractive entry for cable. 4-1/2" long, sold as a pair.

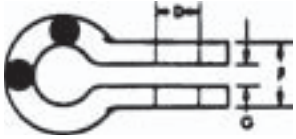


DESCRIPTION	PART NUMBER	PRICE EACH
Fairing (pair)	CCF-1	4.77

CONTROL

AN115 CABLE SHACKLES

AN115 Shackles listed are cadmium plated steel.



DIMENSIONS IN INCHES			PART NUMBER	PRICE EACH
A	F	G		
3/16	1/4	.109	AN115-8	13.75
3/16	5/16	.150	AN115-21	14.50
1/4	7/16	.203	AN115-32	22.50

AN100 THIMBLES

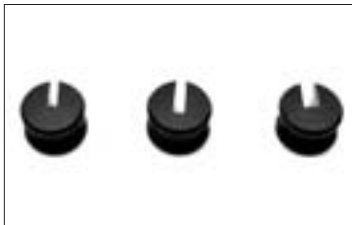
Available in cadmium-plated steel or in corrosion-resisting steel. Thimbles are manufactured in conformance with Government procurement specification MIL-T-5677 and standard drawing AN100. When ordering thimbles use AN number plus dash number for thimble desired. Example: AN100-6 (Carbon-steel thimble for 3/16 inch cable).



FITS CABLE SIZE	DIMENSION		CARBON		STAINLESS STEEL	
	A	B	PART NUMBER	PRICE EA.	PART NUMBER	PRICE EA.
1/16-5/64	.35	.70	AN100-3	0.18	AN100-C3	0.41
3/32-7/64-1/8	.35	.70	AN100-4	0.24	AN100-C4	0.43
5/32	.40	.80	AN100-5	0.35	AN100-C5	0.44
3/16	.50	1.00	AN100-6	0.32	AN100-C6	0.48
1/4	.70	1.40	AN100-8	0.39		

THIMBLE BUSHING INSERTS

Thimble bushing inserts help eliminate thimble elongation when under load, thus maintaining correct cable length & tension. Their slotted design is intended for use with anchoring tangs commonly found on ultralights. Simply open up the thimble, insert the bushing (w/tang), & then close. Made from Supertough nylon for superior high temperature & impact load resistance. For 1/16", 3/32", & 1/8" cable (AN100-3 or 4 thimbles). Sized by tang thickness & edge-to-hole measurement.



TANG THICKNESS	EDGE TO HOLE	PART NUMBER	PRICE
.074	.190"	7419	0.59
.074"	.260"	7426	0.59
.092"	.260"	9226	0.65
.092"	.308"	92308	0.65
.125"	.190"	12519	0.85
.125"	.260"	12526	0.80

AN111 CABLE BUSHING

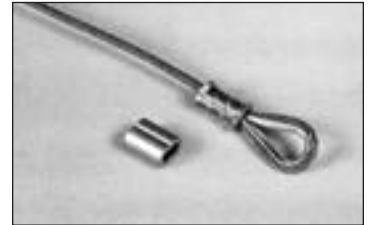
Made of cadmium plated steel. Used in same manner as AN 100 cable thimble.



CABLE SIZE	I.D.	PART NUMBER	PRICE EA
1/16, 3/32	3/16	AN111-C3	2.12
1/8	3/16	AN111-C4	2.30
5/32	1/4	AN111-C5	2.60
3/16	5/16	AN111-C6	2.74

NICOPRESS OVAL SLEEVES

Use zinc and nickel plated copper with stainless cable, copper with galvanized cable. Meets MS51844 mil-spec. Nickel plated copper also meets Milspec 51844-Rev B



CABLE DIA.	COPPER PART NO.	PRICE EA.	ZINC PART NO.	PRICE EA.	NICKEL PART NO.	PRICE EACH
1/16	18-1-C	0.16	28-1-C	0.23		
3/32	18-2-G	0.21	28-2-G	0.24		
1/8	18-3-M	0.45	28-3-M	0.36		
5/32	18-4-P	0.55	28-4-P	0.49	28-5-V	0.67
3/16	18-6-X	0.96	28-6-X	0.88		
1/4	18-10-F6	1.49			28-8-V	3.16

TINNED OVAL SLEEVES

Use zinc and tin plated copper with stainless cable, copper with galvanized cable. Meets MS51844. Tin plated copper meets MS51844 REV C.



CABLE DIAMETER	USE WITH	PART NUMBER	PRICE EACH
1/16	STAINLESS CABLE	428-2-VM	0.32
3/32	STAINLESS CABLE	428-3-VM	0.45
1/8	STAINLESS CABLE	428-4-VM	0.60
5/32	STAINLESS CABLE	428-5-VM	0.51
3/16	STAINLESS CABLE	428-6-VM	1.19
1/4	STAINLESS CABLE	428-8-VM	1.53

NICOPRESS STOP SLEEVES

Copper stop sleeves to be used on ends of cables.

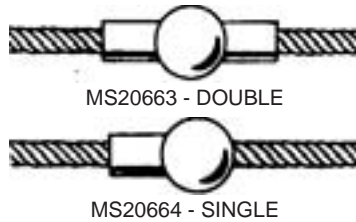


CABLE DIAMETER	PART NUMBER	PRICE EACH
1/16	871-1-C	0.21
3/32	871-17-J	0.29
1/8	871-18-J	0.31
5/32	871-19-M	0.48

CONTROL

BALL & DOUBLE SHANK BALL & SINGLE SHANK

Must use special swaging tool. Material: corrosion resistant steel.



WICKS CANNOT
Swage your ball ends

CABLE DIA	MIN BREAK STRENGTH	SPHERE DIA. AFTER SWAGE	PART NUMBER	PRICE EACH
DOUBLE SHANK				
1/16	480 lb	.190	MS20663-C2	1.99
3/32	920 lb	.253	MS20663-C3	1.65
1/8	2000 lb	.315	MS20663-C4	1.85
SINGLE SHANK				
1/16	480 lb	.190	MS20664-C2	0.89
3/32	920 lb	.253	MS20664-C3	1.50
1/8	2000 lb	.315	MS20664-C4	1.55
5/32	2800 lb	.379	MS20664-C5	1.60
3/16	4200 lb	.442	MS20664-C6	1.05

RAPIDE LINKS

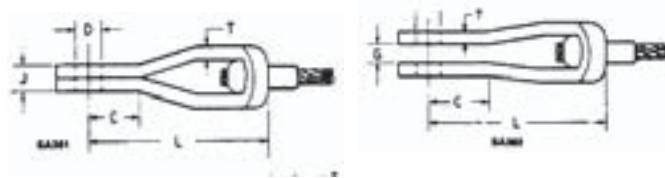
Made of 316L stainless steel, these links are used for parachutes, mountain climbers, hang gliders, and powered parachutes. Each link is built to exacting standard then hand tested for alignment and ease of operation. Imported from France.



STRENGTH WORK	DIA	A	B	D	E	F	PART NUMBER	PRICE EACH
990	4,960	3/16	1-7/8	1-1/2	1/2	1/4	9/32	N-050-SS 3.50
1,430	7,160	1/4	2-1/4	1-3/4	9/16	9/32	3/8	N-060-SS 4.75

SA361 STRAP EYE SA362 STRAP FORK

NAS1435E series strap eye end and NAS1435K strap fork end withstands minimum breaking strength of applicable size cable per MIL-W-1511 when used with MS20664 ball end. Stainless steel material 301 or 302, MIL-S-5059 condition annealed, with passivate MIL-S-5002 finish

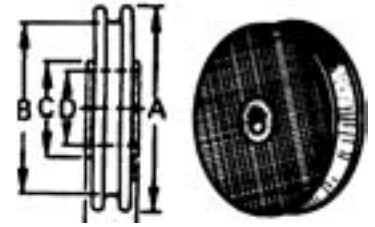


WIRE DIA.	DIMENSIONS						PART NUMBER	PRICE EACH
	L	C	D	U	T	J		
STRAP EYE END								
1/16	1-1/16	.454	.188	3/8	.042	.093	SA361-2	2.31
3/32	1-1/2	.616	.188	7/16	.049	.108	SA361-3	2.50
1/8	1-5/8	.638	.188	1/2	.093	.195	SA361-4	4.80
STRAP FORK END								
1/16	1-1/16	.454	.188	3/8	.042	.088	SA362-2	1.78
3/32	1-1/2	.616	.188	7/16	.049	.103	SA362-3	1.99
1/8	1-5/8	.638	.188	1/2	.093	.190	SA362-4	2.78

PULLEYS PHENOLIC CABLE

All three types are nonmetallic (phenolic). A223/A224 -Plain phenolic bore are used as guide and secondary control pulley in production aircraft.

AN210: Similar to MS24566, but have metal shielded bearings rather than removable composition seal type bearings. **MS20219:** Nonmetallic sheave and fixed ball bearing. **MS20220:** Flight control pulley, nonmetallic sheave and fixed ball bearing with contact seal. **MS24566:** Anti-friction bearing pulley.

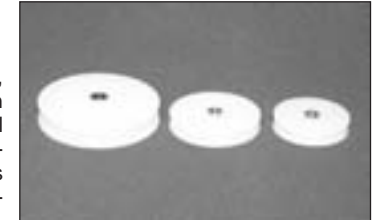


CABLE SIZE (IN.)	A Dia.	B Dia.	C Dia.	(Bore) Dia.	E Dia.	LBS Load Limit (Allowable)	PART NO.	PRICE EACH
1/16, 3/32	1/81.000	.2500	.2500	.250			A-223	4.72
1/16, 3/32	1/81.750	1.375	.2500	.281			A-224	6.25
1/16, 3/32	1.312	1.000	.423	.2500	.438	480	MS20219-1	16.85
1/16, 3/32	1.750	1.438	.423	.2500	.438	480	MS20219-2	14.99
1/16, 3/32	1.750	1.438	.769	.6250	.438	480	MS20219-3	16.60
1/16, 3/32	2.625	2.312	.423	.2500	.438	920	MS20219-4	14.99
1/8, 5/32, 3/16	1.755	1.255	.465	.3125	.625	500	MS20220-1	16.95
1/8, 5/32, 3/16	3.005	2.505	.475	.3125	.625	1680	MS20220-2	18.50
1/8, 5/32, 3/16	3.255	3.755	.475	.3125	.625	2500	MS20220-3	21.59
1/8, 5/32, 3/16	5.005	5.005	.475	.3125	.625	2500	MS20220-4	25.09
1/16, 5/64, 3/32	1.250	.972	.625	.1900	.297	185	MS24566-1B	12.88
1/16, 5/64, 3/32	2.222	.777	.1900	.297	.500		MS24566-2B	13.95
1/8, 5/32, 3/16	2.000	1.510	.901	.2500	.484	450	MS24566-3B	15.75
1/8, 5/32, 3/16	3.010	.901	.2500	.484	1200		MS24566-4B	17.90

POLYETHYLENE CABLE PULLEYS

Made from UHMW polyethylene, these cable pulleys offer low friction and high resistance to abrasion. All use stainless steel bushing with minimum lubrication required. Bushing is clamped into pulley bracket. Pulley rotates on the bushing.

93-210 weight .23 oz., 93-209 weight .26 oz., 93-33 weight .5 oz.



CABLE SIZE INCHES	A	B	C	BUSHING SIZE	PART NUMBER	PRICE EACH
1/16", 3/32"	1-1/4"	1"	.283"	1/4"od x 3/16" id x .32"	93-210	4.79
1/16", 3/32"	1-1/2"	1-1/4"	.283"	1/4"od x 3/16" id x .32"	93-209	4.75
3/32", 1/8"						
5/32", 3/16"	2"	1-1/2"	.470"	5/16" od x 1/4" id x .487"	93-303	10.50

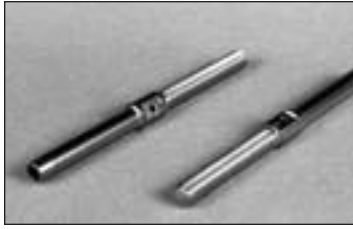
FORK	TURNBUCKLE FORK & CLEVIS PIN SIZES		
	CLEVIS PIN	WASHER	COTTER PIN
AN161-8	MS20392-2C9	AN960-10L	MS24665-132
AN161-16	MS20392-2C13	AN960-10	MS24665-132
AN161-22	MS20392-2C13	AN960-10	MS24665-132
AN161-32	MS20392-3C17	AN960-416	MS24665-132
AN161-46	MS20392-4C21	AN960-516	MS24665-281
AN161-61	MS20392-5C23	AN960-616	MS24665-283
AN161-80	MS20392-5C25	AN960-616	MS24665-283

If no washer is used - use next shorter clevis pin size

CONTROL

STUD END

R = Right hand. L = Left hand.
(Supersedes AN666) Can be used with AN155 barrel as it is not slotted on end, swage on to cable by using a special tool.



CABLE SWAGE END

R = Right hand. L = Left hand.
(Supersedes AN669) Has safety slot on end, can be used with MS21251 barrel. Can be swaged on to cable with a special tool.



CABLE DIA	MIN BREAK STRENGTH	THREAD SIZE	PART NUMBER	PRICE EACH
1/16	480-lb	6-40	MS21259-2LH	2.86
			MS21259-2RH	3.00
3/32	920-lb	10-32	MS21259-3LH	3.80
			MS21259-3RH	4.20
1/8	2000-lb	1/4-28	MS21259-4LH	4.77
			MS21259-4RH	4.77

CABLE DIA	MIN BREAK STRENGTH	THREAD SIZE	PART NUMBER	PRICE EACH
1/16	480-lb	6-40	MS21260-S2LH	6.50
			MS21260-S2RH	6.50
3/32	920-lb	10-32	MS21260-S3LH	6.50
			MS21260-S3RH	6.50
			MS21260-L3LH	4.65
			MS21260-L3RH	4.35
1/8	2000-lb	1/4-28	MS21260-S4LH	8.25
			MS21260-S4RH	5.85
			MS21260-L4LH	6.92
			MS21260-L4RH	6.92
			MS21260-S5LH	4.99
			MS21260-S5RH	4.80
5/32	2800-lb	1/4-28	MS21260-L5LH	5.99

FORK END & EYE END

FORK END (Supersedes AN667) Can be swaged onto cable with a special tool. Corrosion resistant steel.

EYE END Supersedes AN668) Can be swaged on to cable with a special tool. Corrosion resistant steel.

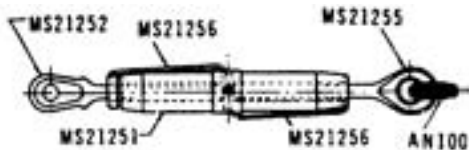


CABLE DIA	MIN BREAK STRENGTH	CENTER HOLE TO END	PIN HOLE	FORK WIDTH	PART NUMBER	PRICE EACH
FORK ENDS						
1/16	480-lb	1-9/16	.190	.093	MS20667-2	9.50
3/32	920-lb	1-15/16	.190	.108	MS20667-3	8.80
1/8	2000-lb	2-5/8	.190	.195	MS20667-4	12.81
5/32	2800-lb		.250	.202	MS20667-5	13.99
EYE ENDS						
1/16	480-lb	1-5/8	.190	.088	MS20668-2	4.28
3/32	920-lb	2-1/16	.190	.103	MS20668-3	4.85
1/8	2000-lb	2-5/16	.190	.190	MS20668-4	6.92
5/32	2800-lb	2-11/16	.250	.197	MS20668-5	7.75

Fork, eye, stud and cable ends must be swaged with a special tool.

CLIP LOCKING TURNBUCKLES

Clip-Locking Turnbuckles utilize two locking clips instead of lockwire for safetying. The turnbuckle barrel and terminals are slotted lengthwise to accommodate the locking clips. After the proper cable tension is reached the barrel slots are aligned with the terminal slots and the clips are inserted. The curved end of the locking clips expand and latch in the vertical slot in the center of the barrel.



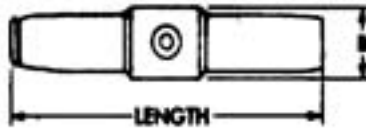
Refer to AN Turnbuckle on preceding page for measurements.

ITEM	CABLE DIAMETER	THREAD SIZE	MIN. BREAK STRENGTH	OLD EQUIVALENT NO.	PART NUMBER	PRICE EACH
Barrel	1/16	6-40	800	AN155-8S	MS21251-B2S	7.25
Barrel	3/32	10-32	1600	AN155-16S	MS21251-B3S	6.85
Barrel	1/8-5/32	1/4-28	3200	AN155-32S	MS21251-B5S	8.25
Barrel	1/16	6-40	800	AN155-8L	MS21251-B2L	10.75
Barrel	3/32	10-32	1600	AN155-16L	MS21251-B3L	7.99
Barrel	1/8-5/32	1/4-28	3200	AN155-32L	MS21251-B5L	9.50
Fork End	1/16	6-40L	800	AN161-8LS	MS21252-2LS	10.50
Fork End	1/16	6-40R	800	AN161-8RS	MS21252-2RS	8.02
Fork End	3/32	10-32L	1600	AN161-16LS	MS21252-3LS	12.85
Fork End	3/32	10-32R	1600	AN161-16RS	MS21252-3RS	13.50
Fork End	1/8	1/4-28L	2200	AN161-22LS	MS21252-4LS	14.65
Fork End	1/8	1/4-28R	2200	AN161-22RS	MS21252-4RS	14.50
Fork End	5/32	1/4-28R	3200	AN161-32RL	MS21252-5RL	17.16
Fork End	5/32	1/4-28R	3200	AN161-32RS	MS21252-5RS	14.85
Fork End		5/16-24r			MS21252-6RS	15.90
Fork End	5/32	1/4-28L	3200	AN161-32LS	MS21252-5LS	14.10
Pin Eye End	1/16	6-40L	800	AN165-8LS	MS21254-2LS	7.16
Pin Eye End	1/16	6-40R	800	AN165-8RS	MS21254-2RS	9.99
Pin Eye End	3/32	10-32L	1600	AN165-16LS	MS21254-3LS	7.89
Pin Eye End	3/32	10-32R	1600	AN165-16RS	MS21254-3RS	8.75
Pin Eye End	1/8-5/32	1/4-28L	3200	AN165-32LS	MS21254-5LS	10.98
Pin Eye End	1/8-5/32	1/4-28R	3200	AN165-32RS	MS21254-5RS	10.98
Cable Eye End	1/16	6-40L	800	AN170-8LS	MS21255-2LS	8.66
Cable Eye End	1/16	6-40R	800	AN170-8RS	MS21255-2RS	12.00
Cable Eye End	3/32	10-32L	1600	AN170-16LS	MS21255-3LS	9.90
Cable Eye End	3/32	10-32R	1600	AN170-16RS	MS21255-3RS	\$9.75
Cable Eye End	1/8-5/32	1/4-28L	3200	AN170-22LS	MS21255-5LS	10.98
Cable Eye End	1/8-5/32	1/4-28R	3200	AN170-22RS	MS21255-5RS	12.50
Short Clip Lock		.176			MS21256-1	0.50
Long Clip Lock					MS21256-2	0.75

CONTROL

AN155 BARREL

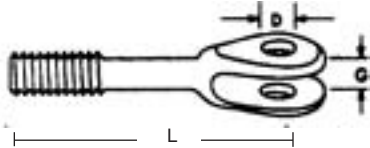
Turnbuckle barrels are made of brass and conform to Procurement Spec. MIL-T-5685. Barrels are available in long or short version. Each barrel has left threads on one end and right threads on the other.



THREAD SIZE	DIMENSION L	DIMENSION B	PART NUMBER	PRICE EACH
6-40	2-1/4	.250	AN155-8S	8.20
6-40	4	.250	AN155-8L	12.00
10-32	2-1/4	.344	AN155-16S	6.75
10-32	4	.344	AN155-16L	7.42
1/4-28	2-1/4	.438	AN155-32S	6.75
1/4-28	4	.438	AN155-32L	9.14
5/16-24	2-1/4	.500	AN155-46S	9.48
5/16-24	4	.500	AN155-46L	9.20
3/8-24	4	.625	AN155-80L	13.36

AN161 FORK

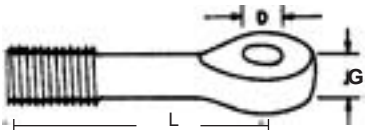
Made of cadmium plated steel. All parts conform to Procurement Spec. MIL-T-5685. Forks have right or left threads.



THREAD SIZE	LENGTH L	DIMENSION		PART NO. RIGHT	PRICE EACH	PART NO. LEFT	PRICE EACH
		G	D				
6-40	1.50	.109	.188	AN161-8RS	11.89	AN161-8LS	11.66
10-32	1.625	.156	.188	AN161-16RS	13.42	AN161-16LS	13.42
10-32	2.50	.156	.188	AN161-16RL	13.94	AN161-16LL	13.99
1/4-28	1.844	.187	.188	AN161-22RS	15.04	AN161-22LS	13.50
1/4-28	2.734	.187	.188	AN161-22RL	15.93	AN161-22LL	13.55
1/4-28	1.844	.218	.250	AN161-32RS	13.59	AN161-32LS	15.59
1/4-28	2.734	.218	.250	AN161-32RL	18.72	AN161-32LL	18.05
5/16-24	2.031	.250	.313	AN161-46RS	16.07	AN161-46LS	24.40
5/16-24	2.906	.250	.313	AN161-46RL	21.70		

AN165 PIN EYE

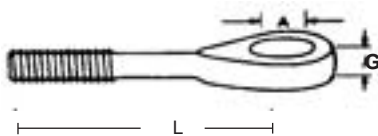
Made of cadmium plated steel. All parts conform to Procurement Spec. MIL-T-5685. Pin eyes have right or left threads.



THREAD SIZE	LENGTH L	DIMENSION		PART NO. RIGHT	PRICE EACH	PART NO. LEFT	PRICE EACH
		G	D				
6-40	1.50	.125	.188	AN165-8RS	9.93	AN165-8LS	9.93
10-32	1.625	.188	.188	AN165-16RS	9.87	AN165-16LS	9.50
10-32	2.5	.188	.188	AN165-16RL	10.59	AN165-16LL	10.99
1/4-28	1.75	.188	.188	AN165-22RS	9.99	AN165-22LS	9.44
1/4-28	2.625	.188	.188	AN165-22RL	11.95	AN165-22LL	12.95
1/4-28	1.75	.219	.250	AN165-32RS	10.98	AN165-32LS	11.25
1/4-28	2.625	.219	.250	AN165-32RL	11.64	AN165-32LL	13.98

AN170 CABLE EYE

Made of cadmium plated steel. All parts conform to Procurements Spec. MIL-T-5685. Cable eyes have right or left threads.



THREAD SIZE	LENGTH L	DIMENSION		PART NO. RIGHT	PRICE EACH	PART NO. LEFT	PRICE EACH
		G	D				
6-40	1.50	.125	.188	AN170-8RS	9.75	AN170-8LS	9.75
10-32	1.625	.188	.219	AN170-16RS	8.97	AN170-16LS	9.23
10-32	2.5	.188	.219	AN170-16RL	12.58	AN170-16LL	11.58
1/4-28	1.75	.188	.219	AN170-22RS	9.43	AN170-22LS	9.43
1/4-28	2.625	.188	.219	AN170-22RL	11.27	AN170-22LL	13.95
1/4-28	1.75	.219	.281	AN170-32RS	9.98	AN170-32LS	11.75
1/4-28	2.625	.219	.281	AN170-32RL	11.87	AN170-32LL	13.80
5/16-24	2.750	.281	.313	AN170-46RL	16.05	AN170-46LL	18.98

Turnbuckles consist of a brass barrel, and two steel ends, one having a right-hand thread and the other a left-hand thread. Turnbuckle assemblies are made to Procurement Spec. AN-T-19. Designate desired turnbuckle assembly by proper AN number. Length of assembly is measured with threads flush with end of barrel.

AN130 TURNBUCKLE ASSEMBLY

Consists of AN161 Fork, AN170 Cable Eye & AN155 Barrel.

LENGTH INCHES	STRENGTH POUNDS	PART NUMBER	PRICE EACH
4-1/2	800	AN130-8S	\$17.97
4-1/2	1600	AN130-16S	\$17.23
8	1600	AN130-16L	\$22.90
4-17/32	2200	AN130-22S	\$19.60
8-1/32	2200	AN130-22L	\$24.43
4-19/32	3200	AN130-32S	\$21.00
8-7/64	3200	AN130-32L	\$26.76
8-5/32	4600	AN130-46L	\$36.02

AN135 TURNBUCKLE ASSEMBLY

Consists of AN165 Pin Eye, AN170 Cable and AN155 Barrel.

LENGTH INCHES	STRENGTH POUNDS	PART NUMBER	PRICE EACH
4-1/2	800	AN135-8S	\$17.16
4-1/2	1600	AN135-16S	\$16.52
8	1600	AN135-16L	\$21.78
4-1/2	2200	AN135-22S	\$19.47
4-1/2	3200	AN135-32S	\$20.06
8	3200	AN135-32L	\$25.59
8	4600	AN135-46L	\$36.35
		AN135-21S	7.25
		AN135-22L	25.55

AN140 TURNBUCKLE ASSEMBLY

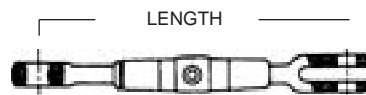
Consists of two AN170 Cable Eyes and one AN155 Barrel.

LENGTH INCHES	STRENGTH POUNDS	PART NUMBER	PRICE EACH
4-1/2	800	AN140-8S	24.99
4-1/2	1600	AN140-16S	20.97
8	1600	AN140-16L	24.90
4-1/2	2200	AN140-22S	22.64
8	2200	AN140-22L	25.55
4-1/2	3200	AN140-32S	23.27
8	3200	AN140-32L	33.50
8	4600	AN140-46L	38.54

AN150 TURNBUCKLE ASSEMBLY

Consists of two AN161 Forks and one AN155 Barrel.

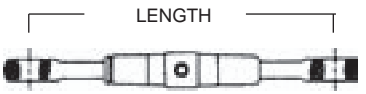
LENGTH INCHES	STRENGTH POUNDS	PART NUMBER	PRICE EACH
4-1/2	800	AN150-8S	30.20
4-1/2	1600	AN150-16S	31.03
8	1600	AN150-16L	26.47
4-1/2	2200	AN150-22S	34.31
8-1/32	2200	AN150-22L	29.11
4-1/2	3200	AN150-32S	23.43
8	3200	AN150-32L	29.62
8	4600	AN150-46L	37.83
		AN150-21S	4.24



AN130



AN135



AN140



AN150

CONTROL

AN490 ROD END - THREADED

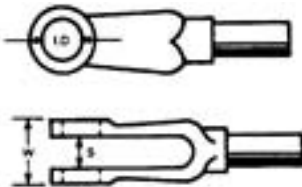
Manufactured of 4130 steel, heat-treated cadmium plated. Minimum tensile strength 125,000 PSI. For welding to steel tubing or riveting to aluminum tubing. Right hand thread.



THREAD SIZE	USED WITH TUBE SIZE	PART NUMBER	PRICE EACH
1/4-28	5/16" x .035	AN490HT5P	15.29
1/4-28	3/8" x .035	AN490HT6P	14.40
1/4-28	1/2" x .035	AN490HT8P	9.25
5/16-24	5/8" x .035	AN490HT10P	13.99
5/16-24	3/4" x .035	AN490HT11P	19.71
3/8-24	3/4" x .035	AN490HT14P	15.50
5/16-24	1/2" x .058	AN490HT15P	15.04
3/8-24	1/2" x .058	AN490HT16P	15.82

AN481 ROD END - FORKED (MS27976)

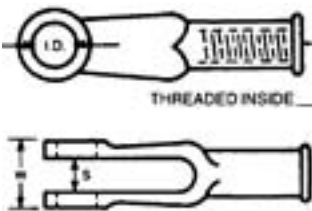
For welding to steel tubing or riveting to aluminum tubing. All sizes fit inside 3/8 x .035 wall tubing. Manufactured from 1035 or 1042 steel and cadmium plated.



CLEVIS I.D.	WIDTH W	ID WIDTH S	B	PART NUMBER	PRICE EACH
1/4"	1/2"	17/64"	.305	AN481-1P	11.75
1/4"	5/16"	9/64"	.305	AN481-2P	13.88
3/16"	1/2"	17/64"	.305	AN481-3P	13.83
3/16"	5/16"	9/64"	.305	AN481-4P	13.80
3/16"	5/16"	9/64"	.430	AN481-12P	8.00

AN486 ROD END - FORKED (MS27975)

Are internally threaded 1/4"-28 to fit 1/4" rod. Manufactured from 1035 or 1042 steel and cadmium plated.



CLEVIS I.D.	WIDTH W	ID WIDTH S	PART NUMBER	PRICE EACH
1/4"	1/2"	17/64"	AN486-1P	11.50
1/4"	5/16"	9/64"	AN486-2P	12.88
3/16"	1/2"	17/64"	AN486-3P	15.99
3/16"	5/16"	9/64"	AN486-4P	12.99

FORK ROD END

Fork rod end with clevis pin and key included. 10-32 internal thread, 1/4" id clevis.



DESCRIPTION	PART NUMBER	PRICE EACH
Fork rod end	486-1032	11.89

BALL JOINT ASSEMBLY

Male & female ends both either 1/4-28 or 10-32. Body of low carbon steel, cad plated, The ball is sintered steel, oil impregnated, with 45° ball rotation. Stud is of low carbon steel, coated black oxide.



DESCRIPTION	PART NUMBER	PRICE EACH
10-32	CW-3S	6.25
1/4-28	CW-4S	6.77
5/16-24	CW-5S	6.28
3/8-24	CW-6S	6.76

HEAVY DUTY UNIVERSAL JOINT

MS20271- Built to conform with and exceed requirements of MIL-J-6193B, Class 2 to meet MIL-Spec drawing MS20271 (old AN271). The universal have high axial and torsional strengths and high strength-weight ratio. The flexible covers are filled with lubricant and sealed to provide trouble-free operation that normally exceeds the normal service life. This flexible cover also serves as a vibration dampener and helps inhibit corrosion. SURPLUS: MS20271-B8S NO CERTS - Manufactured from 4150 steel



OD. INCHES	ID. INCHES	PART NUMBER	PRICE EACH
3/8	1/4	MS20271-B6	185.00
1/2	3/8	MS20271-B8	83.97
5/8	1/2	MS20271-B10	101.86
3/4	5/8	MS20271-B12	95.97
7/8	3/4	MS20271-B14	110.00

276-1032 BALL JOINT

Male & female ends both 10-32 thread size. No certs available.



THREAD SIZE	PART NUMBER	PRICE
10-32	276-1032	6.25

AN276-6 NON CERTIFIED

Male & female ends both 1/4-28. Body & Stud of low carbon steel. Inexpensive go-cart style.



THREAD SIZE	PART NUMBER	PRICE
1/4"-28	AN276-6	9.50

CONTROL

BELLCRANK BEARING

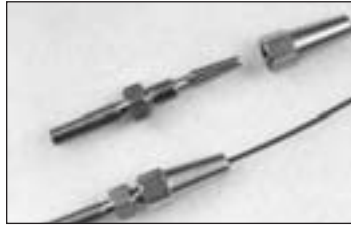
Newly manufactured. BB designates bronze bushing, others 2011-T3 aluminum. Military number AN218P4. Inspection per MIL I 45208A, prepacked with lubricant conforming to MIL-G-23827. Operating temp range -60° - +300° F. BCP-4W10 certified by FAA, Dec. 1996.



ID	OD	W	PART NUMBER	PRICE EACH
.250	1.625	.625	BC4W10	16.50
.312	1.735	.630	BC5W11	22.99

WIRE GRIP

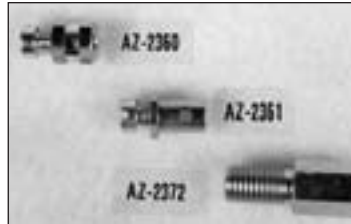
This device, with its' unique 'in vice' gripping action, attaches securely to the core wire of any std push/pull control. The 5/8" long 10-32 threaded end is screwed onto a clevis, ball joint or other hardware used for linkage to mixture, carb air heat, cabin air, etc., resulting in a secure, clean looking job. 125 lb rating. Sizes for 2 wire dia ranges available. .062 & .050



DESCRIPTION	PART NUMBER	PRICE EACH
Wire-grip	WG-1	16.50
Wire-grip	WG-2	15.24

CABLE STOP SWIVEL & RETAINER

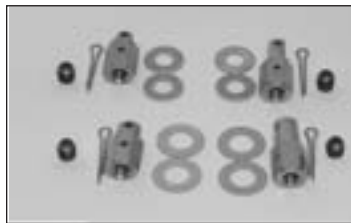
Can be used for cable ends on mechanical brakes and push-pull solid wire control cable. Used separately stop, swivel threads all the way through and attaches with another screw. AZ-2372 holds cable in place.



DESCRIPTION	PART NUMBER	PRICE EACH
Stop - 1/4" long	AZ-2360	\$.45
Wire swivel - 1/2" long	AZ-2361	\$.70
Retainer w/5/16-24 threads	AZ-2372	\$1.16

CABLE END NUTS

These cable ends eliminate broken push-pull control cables caused by smashed or kinked cables. The cable sits in a machined channel; therefore, tightening the set screw down secures the cable without kinking. Made from 5/16" hex stainless steel. Comes complete with washers, cotter pin and set screw. 4 models available. .062 hole size.



DESCRIPTION	DIA	LENGTH	PART NUMBER	PRICE EACH
Throttle cable nut	3/16"	1/4"	CE1	7.75
Mixture cable nut	1/4"	1/4"	CE2	7.75
Cabin heat nut	1/4"	1/8"	CE3	7.75
Carb heat nut	3/16"	1/8"	CE4	7.75

CABLE SAFE MODELS 1&2

Using a compression nut, cable safe fittings provide a no-slip grip to any rigid throttle mixture, or control cable housing that passes through a fire-wall/bulkhead. Made of anodized aluminum. For use with 1/4" and 7/32" od housing. For 3/16" od housing, use adapter: Sold separately. Requires 9/16" mounting hole.



DESCRIPTION	PART NUMBER	PRICE EACH
Cable safe Model 1	CBSF-1	8.71
Cable safe Model 2	CBSF-2	16.75
3/16" adapter	CBSF-AD	3.70

CABLE CONNECTORS ADJUSTABLE

Stronger, smaller & lighter than AN turnbuckles, ACC cable connectors are used in place of the longer turnbuckle assemblies, especially where accessibility is limited. 2 stainless steel allen screws & tube-nuts with interlocking threads, tightened in tandem, provide secure, non-loosening cable tension. Cable attachment may be made using AN111 cable bushings (anchored by 2-SS pins), MS20664C ball & single shanks, or a custom bracket. CNC machined from 7075 aluminum & anodized. Min length: 1.25" (hardware not incl) Each sold Separately.



DESCRIPTION	PART NUMBER	PRICE
3/32" ADJUSTABLE	ACC3	27.74
1/8" ADJUSTABLE	ACC4	29.17
5/32" ADJUSTABLE	ACC5	32.49

CABLE HOUSING

Black vinyl with metal insert, for throttles, will not kink. Use with flexible cable or music wire. 50 ft rolls, sold by the foot. 739-100 and 739-300 have teflon inner lining.



DESCRIPTION	PART NUMBER	PRICE EACH
3/16 od x 1/16 id	739-100	0.53 ft
7/32 od x 3/32 id	739-300	0.62 ft

MUSIC WIRE

Made of high carbon which is very high in tensile strength. Must be capable of wrapping around itself without showing signs of cracking. Used for springs for tools and die makers, factory and machine shops. Meets specification spring temper MIL-W-6101.



GAUGE NO.	DECIMAL DIA.	FEET P/LB	PART NO	PRICE P/FT
10	.024	300	21024	0.35
24	.055	123	21055	0.35
29	.075	67	21075	0.35
32	.090	46	21090	0.55

CONTROL

DELUXE THROTTLE QUADRANTS

These smooth operating throttle quadrants are accurate reproductions of WWII quadrants. Connecting levers have 3 predrilled holes for 3/16" clevis pins. Units are side mounted using four 3/16" mounting hose. Mounting dimensions are identical to military types. Made of highly machined aluminum. Weights:

1 lever - 1 lb 3-1/2 oz., 2 lever - 1 lb. 12 oz. 3 lever - 2 lbs 2-1/2 oz.



DESCRIPTION	PART NUMBER	PRICE EACH
1 lever	TQ1	209.28
2-lever	TQ2	249.00
3-lever	TQ3	259.00

BLACK THROTTLE QUADRANTS

All quadrants are made from aircraft quality anodized aluminum for long life and corrosion resistance. Brass friction plates are adjustable to fit individual preferences. Black anodized top plates are machined and engraved on a CNC mill to exacting tolerances for an excellent finish. Side plates are laser cut ensuring a perfect fit and feel. All hardware used meets AN standards. Note: All throttle quadrants require a AN665-21R clevis with an AN393-11 clevis pin. The side mount style quadrants are intended for use in tandem airplanes such as the RV4, RV8, Stardusters, Baby Great Lakes, One Design, Acro Sport and Sonerai. The center mount style is intended for use in side-by-side aircraft such as RV's, Sonex, Thorp T18, and Pulsars.



SIZE	WEIGHT	PART NUMBER	PRICE
7-3/4"X4-3/4"X1-1/2"	8 OZ	SMCT2L	145.00
7-3/4"X4-3/4"X2"	10 OZ	SMCT3L	178.70
7-3/4"X7"X2"	10 OZ	CMCT2L	142.95
7-3/4"X7"X2"	12OZ	CMCT3L	178.70

THROTTLE QUADRANTS FOR RV'S

All quadrants are made from aircraft quality anodized aluminum for long life and corrosion resistance. Brass friction plates are adjustable to fit individual preferences. Black anodized top plates are machined and engraved on a CNC mill to exacting tolerances for an excellent finish. Side plates are laser cut ensuring a perfect fit and feel. All hardware used meets AN standards. Note: All throttle quadrants require a AN665-21R clevis with an AN393-11 clevis pin. The side mount style quadrants are intended for use in tandem airplanes such as the RV4, RV8, Stardusters, Baby Great Lakes, One Design, Acro Sport and Sonerai. The center mount style is intended for use in side-by-side aircraft such as RV's, Sonex, Thorp T18, and Pulsars.



SIZE	WEIGHT	PART NUMBER	PRICE
7-3/4"X4-3/4"X1-1/2"	8 OZ	CT82F	142.95
7-3/4"X4-3/4"X2"	10 OZ	CT83F	178.70

THROTTLE QUADRANTS

Levers have 2-1/2" travel; fits on left or right side of cockpit and can be used in tandem. Each has aluminized mylar knob inserts and built-in friction lock. Ends of throttle and prop levers have 3/16" dia. holes for attachment of push-pull control with clevis terminals. End of mixture lever has .076" dia. hole to accept solid wire control. May be connected with AZ-2361 or AN665 tie rod terminal.

2 Lever - plastic knob - Black-throttle, Red mixture
3 Lever - plastic knob - Black-throttle, Red-mixture, Blue-prop



DESCRIPTION	PART NUMBER	PRICE EACH
2-lever	A-1340	35.95
3-lever	A-1340-1	45.95

NON REVERSING INTERNAL QUADRANT

Internal non-reversing hook-up. These functional quadrants offer small body size (4" x 4"), light weight (12 oz) and adjustable friction settings. Access holes in body permit easy attachment of rod ends using 3/16" diameter clevis pins. Made of 1/8" - 2024T3 or 6061T6 aluminum. As used on RV-4.



DESCRIPTION	PART NUMBER	PRICE EACH
1 lever	NF1	52.85
2-lever	NF2	57.14
3-lever	NF3	64.28

INTERNAL REVERSING QUADRANT

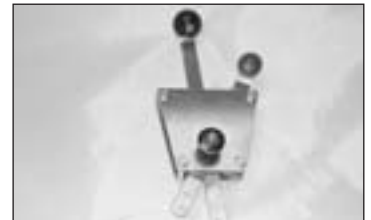
Internal reversing hook-up. These functional quadrants are only 10 oz in weight, 2-3/4" x 4-3/4" in size, and have adjustable friction setting. Access holes in body permit easy attachment of rod ends using 3/16" diameter clevis pins. Made of 1/8" - 2024T3 or 6061T6 aluminum.



DESCRIPTION	PART NUMBER	PRICE EACH
1 lever	NRF1	52.85
2-lever	NRF2	57.14
3-lever	NRF3	64.28

EXTERNAL REVERSING QUADRANT

External reversing; hook-up. Functional quadrants have small body size of 2-3/4" x 4-3/4" weighs only 10 oz and has adjustable friction settings. 3/16" holes for clevis pins. May be used in tandem. Made of 1/8" - 2024T3 or 6061T6.



DESCRIPTION	PART NUMBER	PRICE EACH
1 lever	XRF1	55.00
2-lever	XRF2	59.00
3-lever	XRF3	66.00

CONTROL

T-LOCKING

New positive action control for small to mid-size engine throttles, governors, chokes fuel shut-offs and more. Aluminum body assures rust free performance, with acetal locking bushing to provide setting with one third operator effort. Has a 2" knob with travel length of 3", thread size 7/16"-20, length 3/4", galvanized 3/16" steel conduit with black vinyl covering. Wire size: .054" with 6" length past cover.



Not FAA approved - for experimental use only*

LENGTH	PART NUMBER	PRICE EACH
126" from nut to wire end	8370	24.95

T-HOOD

Non locking positive action control for small to mid-size engine throttles, governors, chokes fuel shut-offs and more. Aluminum body assures rust free performance, with acetal locking bushing to provide setting with one third operator effort. Has a 2" knob with travel length of 2-1/2", thread size 3/8"-24, length 1/2", galvanized 3/16" steel conduit with black vinyl covering. Wire size: .054" with 5" length past cover.



Not FAA approved - for experimental use only*

LENGTH	PART NUMBER	PRICE EACH
180" from nut to wire end	8367	25.44

T-HANDLE BUTTON LOCK CONTROL

Provides a 10-lb. locking force for light and medium service application. Controls have chrome face plate, 7/16"-20 UNF-2A threads with .062" diameter stainless steel wire core in flexible metal casing. Controls are 96" long, customer cuts to length desired. Available only with black powder coated T-handle and aluminum color button. Maximum travel 3". Polyethylene lined cable.



Not FAA approved - for experimental use only*

DESCRIPTION	PART NUMBER	PRICE EACH
96" T-handle control	A1840-BLACK	46.00

*MEASURE - from nut to end of thread. Mounts in dash to end of control

THROTTLE STOP

Throttle stop used with T-locking and T-hood controls. Accepts up to .075 diameter.

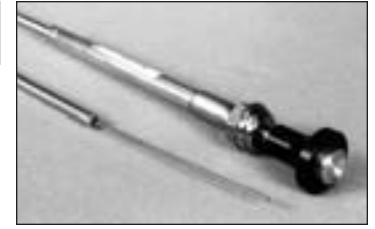


LENGTH	PART NUMBER	PRICE EACH
Stop	1548	1.25

*MEASURE - from nut to end of thread. Mounts in dash to end of control

A700 BUTTON LOCK CONTROL

Provides a 10-lb. locking force for light and medium service application. Controls have chrome face plate, 7/16"-20 UNF-2A threads with .062" diameter stainless steel wire core in flexible metal casing. Controls are 96" long, customer cuts to length desired. Available in black or red anodized release button. Maximum travel 3". Polyethylene lined cable.



Not FAA approved - for experimental use only

KNOB COLOR	PART NUMBER	PRICE EACH
Red - 96" long	A700-RED	45.16
Black - 96" long	A700-BLACK	48.99

A730 PUSH PULL

3/8"-24 UNF threads and a .050" diameter straight stainless steel solid wire end features simple design for push-pull operation with low friction characteristics. Wire end has 3/16" id. Controls are 96" long, customer cuts to length desired. Maximum travel 3". Available in black or red plastic knob. Polyethylene lined cable.



Not FAA approved - for experimental use only

KNOB COLOR	PART NUMBER	PRICE EACH
Red - 96"	A730-RED	27.99
Black - 96"	A730-BLACK	29.45

A740 RATCHET CONTROL

Simple push-pull ratchet design provides detented positions under vibration conditions. Control has 3/8"-24 UNF threads with a .050" diameter stainless steel straight wire end which may be shortened as desired. Controls are 96" long, customer cuts to length. Maximum travel 3". Available in black or red plastic knob. Polyethylene lined cable.



Not FAA approved - for experimental use only

KNOB COLOR	PART NUMBER	PRICE EACH
Red - 96"	A740-RED	26.25
Black - 96"	A740-BLACK	31.03

A750 VERNIER CONTROL

10-32 threaded shaft for use with ball joint or AN665-21R threaded terminal. Unique ball-socket construction permits the threaded end to swivel 8° in any direction. Available in black, red, or blue knob colors in various lengths. Teflon lined cable.



Not FAA approved - for experimental use only

LENGTH	RED PART NO.	BLACK PART NO.	BLUE PART NO.	PRICE EACH
36"	A750-RED 36	A750-BLACK 36	A750-BLUE 36	59.16
48"	A750-RED 48	A750-BLACK 48	A750-BLUE 48	65.48
60"	A750-RED 60	A750-BLACK 60	A750-BLUE 60	73.59
72"	A750-RED 72	A750-BLACK 72	A750-BLUE 72	79.93
84"	A750-RED 84	A750-BLACK 84	A750-BLUE 84	79.41
96"	A750-RED 96	A750-BLACK 96	A750-BLUE 96	64.66

CONTROL

A790 VERNIER CONTROL

Control has 3/4-16 UNF -2A thread and .078" diameter stainless steel wire core. Controls are 96" long, customer cuts to length. Available in black, red or blue knobs. Has internal extruded teflon lines.



Not FAA approved - for experimental use only

KNOB COLOR	PART NUMBER	PRICE EACH
Black - 96"	A790-BLACK	57.48
Red - 96"	A790-RED	59.48
Blue - 96"	A790-BLUE	57.48

A800 & A810 FRICTION LOCK CONTROL

Provides positive lock throughout selected power settings by turning the chrome collet locking nut. Maximum travel 3". Available in 10-32, 1/4-28 thread sizes and .078 wire. Drill 1/2" hole to panel mount. Black knob only. Teflon lined cable.



Not FAA approved - for experimental use only

LENGTH	PART NUMBER	PRICE EACH
10-32 THREAD		
36"	A800-BLACK 36	54.46
48"	A800-BLACK 48	63.00
60"	A800-BLACK 60	60.21
72"	A800-BLACK 72	64.50
84"	A800-BLACK 84	65.71
96"	A800-BLACK 96	74.87
1/4-28 THREAD:		
36"	A810-BLACK 36	65.71
48"	A810-BLACK 48	65.00
60"	A810-BLACK 60	70.52
72"	A810-BLACK 72	73.85
84"	A810-BLACK 84	69.35
96"	A810-BLACK 96	69.59

A820 FRICTION LOCK CONTROL

Provides positive lock throughout selected power settings by turning the chrome collet locking nut. Maximum travel is 3". Requires 1/2" panel mounting hole. Stainless steel .078 inner core with teflon lined outer casing. Comes either 36" or 96" length. Customer cuts to desired finished length. Black knob.



Not FAA approved - for experimental use only

KNOB COLOR	PART NUMBER	PRICE EACH
Black - 96"	A820-BLACK	51.76

A970 VERNIER CONTROL

1/4-28 threaded non-swiveling end has black heat shrunk cover over casing. Teflon lined cable.



Not FAA approved - for experimental use only

LENGTH	RED PART NO.	BLACK PART NO.	BLUE PART NO.	PRICE EA
36"	A970-RED 36	A970-BLACK 36	A970-BLUE 36	68.65
48"	A970-RED 48	A970-BLACK 48	A970-BLUE 48	63.90
60"	A970-RED 60	A970-BLACK 60	A970-BLUE 60	65.10
72"	A970-RED 72	A970-BLACK 72	A970-BLUE 72	71.00
84"	A970-RED 84	A970-BLACK 84	A970-BLUE 84	72.99
96"	A970-RED 96	A970-BLACK 96	A970-BLUE 96	72.25

A920 PUSH PULL CONTROLS FOR QUADRANTS

0-32 threaded ends with 8° swivel, 3-3/8" stroke, this control has flexible metal casing designed for use with throttle quadrants. Teflon lined cable.



Not FAA approved - for experimental use only

LENGTH	PART NUMBER	PRICE EACH
36"	A920-36	34.51
48"	A920-48	36.94
60"	A920-60	39.63
72"	A920-72	39.99
84"	A920-84	49.90
96"	A920-96	45.50
108"	A920-108	49.67
120"	A920-120	46.18
132"	A920-132	42.82
144"	A920-144	48.45

A930 PUSH PULL CONTROLS FOR QUADRANTS

1/4-28 threaded ends with non-swivel, 3-3/8" stroke, this control has flexible metal casing designed for use with throttle quadrants. Teflon lined cable.

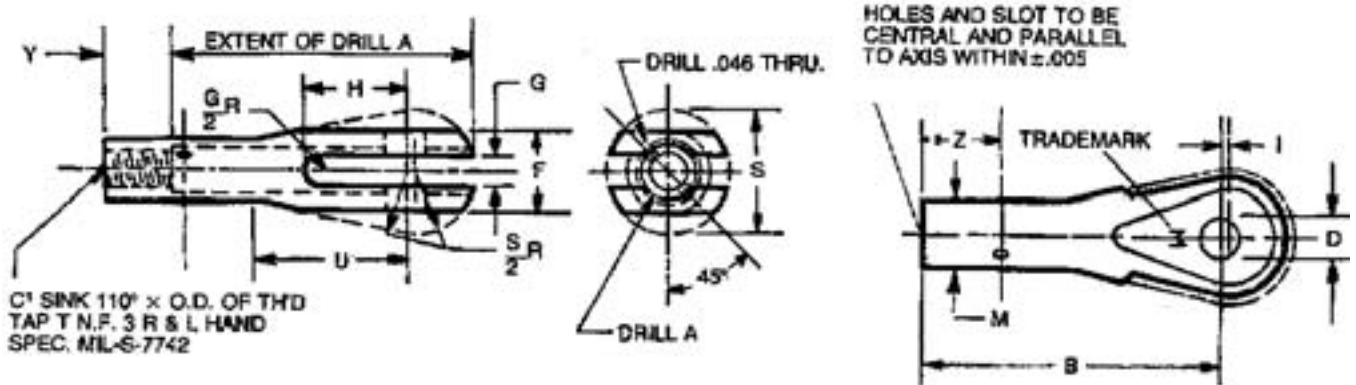


Not FAA approved - for experimental use only

LENGTH	PART NUMBER	PRICE EACH
36"	A930-36	42.50
48"	A930-48	43.68
60"	A930-60	42.50
72"	A930-72	45.68
84"	A930-84	52.50
96"	A930-96	46.75
108"	A930-108	45.50
120"	A930-120	45.53
132"	A930-132	46.75
144"	A930-144	47.98

CONTROL

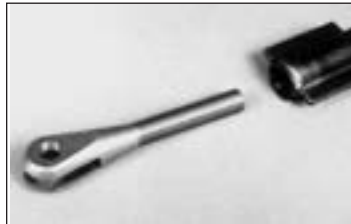
AN665 TIE ROD TERMINALS



RATED TIE ROD STRENGTH	TAP T	DRILL A	B ±.015	D DIA. +.003 - .000	F +.010 - .005	G +.010 - .000	H	i +.010 - .000	M DIA. +.010 - .000	S DIA	U	Y ±.047	Z	PART NUMBER	PRICE EACH
1200 lb.	6-40	.147	1.313	.190	.250	.109	.375	.031	.250	.375	.625	.250	.313	AN665-10L	9.97
1200	6-40	.147	1.313	.190	.250	.109	.375	.031	.250	.375	.625	.250	.313	AN665-10R	13.00
2400	10-32	.199	1.531	.190	.313	.150	.469	.031	.281	.500	.719	.313	.375	AN665-21L	34.33
2400	10-32	.199	1.531	.190	.313	.150	.469	.031	.281	.500	.719	.313	.375	AN665-21R	12.96
4200	1/4-28	.261	1.813	.250	.438	.203	.625	.047	.375	.625	.875	.438	.500	AN665-34L	30.00
4200	1/4-28	.261	1.813	.250	.438	.203	.625	.047	.375	.625	.875	.438	.500	AN665-34R	22.28
(a)4600	5/16-24	.323	1.875	.313	.500	.203	.656	.047	.438	.688	.938	.563	.625	AN665-46L	24.98
(a)4600	5/16-24	.323	1.875	.313	.500	.203	.656	.047	.438	.688	.938	.563	.625	AN665-46R	24.98
6900	5/16-24	.323	2.000	.375	.563	.203	.844	.063	.453	.750	1.000	.563	.625	AN665-61L	28.37
6900	5/16-24	.323	2.000	.375	.563	.203	.844	.063	.453	.750	1.000	.563	.625	AN665-61R	28.89
10000	3/8-24	.386	2.250	.375	.625	.266	.875	.063	.547	.875	1.125	.688	.750	AN665-80LA	38.51

WING STRUT FORK WING STRUT BARREL

Precision machined part, heat treated and magnafluxed. Applicability - Piper PA12, PA14, PA16, PA18, PA19, PA20, PA22, J5, L-14, L-18, L-21, AE-1, HE-1. 7/16" x 20 NF3, fork space 1/4", Inside diameter 3/8", 7/16-20 NF3 thread. Build your own struts using these weldable barrels. Fits strut fork.



DESCRIPTION	PART NUMBER	PRICE EACH
Wing strut fork - stainless	14481-00	91.01
Wing strut barrel	12521-00	59.85

BEARING SELECTION BASICS

In the selection of a bearing for a given application, many conditions must be considered in addition to bearing size, speed and capacity. Included among these conditions are the type of load - whether imposed by oscillatory or rotating motion, very high or very low operating temperatures or a wide range of operating temperatures, exposure to dirt and dust, and excessive humidity or extremely wet operating conditions. The success of the application and the life expectancy of the bearing depend on how well provision has been made to meet the conditions. If it becomes necessary on occasion to use a full type bearing in rotational service, certain factors must be taken into account. Torque increases sharply as the moment load increases. In addition, thrust and overturning moment loads promote excessive ball abrasion, resulting in shorter as well as unpredictable bearing life. This abrasion occurs

because, without a retainer or separator, the balls are in contact with each other. It is strongly recommended that designers consult the Fafnir Engineering Department before selecting a full type bearing for rotational service. (Fafnir Bearing Division of Textron Inc., New Britain, CT. 06050) The Fafnir Bearing Company was first to develop a complete line of ball bearing to meet the exacting requirements of the aircraft industry. Fafnir bearings have the following characteristics: 1. Dimensioned in inches rather than in metric. 2. Corrosion resistant - exposed surfaces, as mounted, are cadmium plated or are stainless steel. 3. Most sizes incorporate the Fafnir Plyo-seal illustrated to insure retention of lubricant and exclusion of contaminants and moisture. 4. Bearings are pre-packed with lubricant conforming to specification MIL-G-81322 (MIL-G-3278). 5. Rings are made of bearing quality chromium-alloy high carbon steel, except for rod ends and bellcranks. 6. Inner rings extend beyond outer ring faces to eliminate need for spacers. 7. Most self-aligning sizes permit bearing misalignment of 10 degrees in either direction. 8. Conform to Government Specifications.

Aurora offers a complete line of standard and spherical bearings with the following characteristics: 1. Body - Low carbon steel, cadmium or zinc plated at manufacturer's option, dichromate treated. Number 16 series standard body is 4130 steel, not heat treated. 2. Race - Low carbon steel, cadmium or zinc plated (manufacturer's option), chromate treated. 3. Ball - Alloy steel, heat treated, hard chrome plated. Heim is the original producer of Unibal self-contained spherical bearing and spherical bearing rod ends. These unique bearings were developed in the early part of World War II to fulfill a desperate need for reliable plain self-aligning bearings for aircraft control linkages. Heim has the following characteristics: 1. Outer member is aircraft steel, cadmium plated. 2. Ball is SAE 52100 Steel, heat treated. 3. Inserts are naval bronze. 4. L in rod end number designated left hand thread. 5. D in rod end number (MD35-14) denotes drilled hole in the shank. 6. G in suffix indicated lubricator is required (HM-5G)

CONTROL

RADIAL BALL BEARING

Single row radial ball bearing with shield on both sides. As used on Bearhawk aircraft.



BORE	OD.	WIDTH	PART NUMBER	PRICE EACH
.25	.625	.196	R4FF	14.88

GREASE FITTINGS

Cadmium plated steel Conform to MIL-F-3541, surface check fittings of MS15001 series have spring-loaded ball check in the tip.



TAPEREDSHANK THREAD	OD.	WIDTH	OVERALL LENGTH	TIP ANGLE	PART NUMBER	PRICE EACH
1/4-28	3/16"	.109	1/2"	0°	MS15001-1	0.36
1/4-28	3/16"	.109	13/16"	45°	MS15001-3	0.85
1/4-28	3/16"	.109	25/32"	90°	MS15001-4	1.10

PUSHROD BALL ROLLER GUIDES

Unit contains 4 nylon roller balls providing a 3.5" pushrod travel that is almost frictionless push-pull and rotary movement of aileron and elevator push rods. Aluminum case 1.25" x 3.0" and fits 5/8" diameter pushrods. Pushrod ball roller guide



DESCRIPTION	PART NUMBER	PRICE EACH
Pushrod ball roller guide	PBRG-5/8	11.99

THRUST BEARING

Made of oil-impregnated sintered bronze, thrust bearing is used on the Sonex aircraft.



ID	OD	THICKNESS	PART NUMBER	PRICE EACH
5/16"	5/8"	1/16	ST1020-2	0.55

SWIVEL BEARINGS

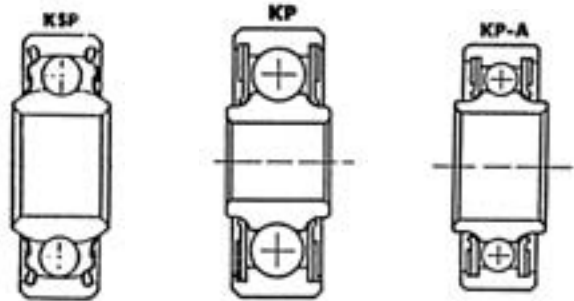
Galvanized side flange bearing assembly. 5/8" id bearing, 1.125" od. Mounting plate is .063" thick 2.313" long. Hole centers are 1.750" with .281" diameter hole.



DESCRIPTION	PART NUMBER	PRICE EACH
swivel bearing	FMN10	0.95

KSP SERIES

Single row ball, self aligning bonded seals. The letter P designates new manufacture with Plyoseals. KSP: Single row ball, self aligning bonded seals
 KP: Single row heavy duty ball sealed
 KP-A: Single row ball deep groove sealed



BORE	OD	RING INNER	RING OUTER	WIDTH	LIMIT LOAD RADIAL	RATING LBS THRUST	PART NUMBER	PRICE EACH
.250	.9014	.484	.335	.335	1230	300	KSP4	21.00
.250	.9014	.484	.335	.335	2680	1200	KP4	15.98
.375	1.4375	.620	.469	.469	7910	3500	KP6	21.15
.190	.625	.297	.234	.234	1560	700	KP3A	17.60
.250	.750	.281	.219	.219	1880	900	KP4A	14.34
.190	.625	.245	.203	.203	550	100	KSP3L	18.26

CM SERIES

Both ends are 1/4-28 male threads. Body of low carbon steel, cad plated. The ball is sintered steel, oil impregnated, with 45 Degree ball rotation. Stud is of low carbon steel, black oxide coated.



THREAD	TYPE	PART NUMBER	PRICE
1/4"-28	MALE/MALE	CM-4S	5.99

CONTROL

FEMALE ROD END BEARINGS

Manufactured by Fafnir, Aurora or Heim, some magnafluxed aviation approved.



FEMALE

FEMALE THREAD OR DRILL SIZE	BORE B	HEAD WIDTH D	HOUSING WIDTH H	BALL WIDTH W	BORE CENTER TO END OF SHANK A	OUTSIDE K	WT.	MFG	FEMALE PART NUMBER	PRICE EACH
.272	.1900	.781	.328	.437	1.375	.43H	.0609	Fafnir	REP3H5	58.22
6-32	.1250	.500	.187	.250	.812	.312	.019	Aurora	MW-2	6.10
10-32	.1900	.625	.250	.312	1.062	.406	.028	Aurora	MW-3	5.75
10-32LH	.1900	.625	.250	.312	1.062	.406	.038	Aurora	MG-3	5.95
1/4-28	.1900	.812	.375	.500	1.375	.468	.080	Aurora Magnaflux*	GMW-3M-480	17.96
1/4-28	.1900	.781	.328	.437	1.375	.375	.050	Fafnir	REPB3N	45.80
1/4-28	.1900	.781	.328	.500	1.375	.376	.060	Fafnir	REP3F4	52.50
1/4-28	.1900	.750	.328	.437	1.375	.468	.060	Heim	F34-14M	32.36
1/4-28	.1900	.750	.286	.435	1.325	.375	.063	Aurora	CW-3B-14	8.85
1/4-28	.1900	.750	.286	.435	1.325	.375	.071	Aurora	MW-3M-8	19.49
1/4-28	.1900	.750	.328	.437	1.375	.468	.060	Aurora Magnaflux*	GMW-3M-470	13.97
1/4-28	.2500	.812	.437	.304	1.375	.468	.080	Aurora Magnaflux*	GMW-4M-470	27.74
1/4-28	.2500	.750	.281	.375	1.312	.468	.059	Aurora	MW-4	6.25
1/4-28-LH	.2500	.750	.281	.375	1.312	.468	.059	Aurora	MG-4	6.84
5/16-24	.1900	.781	.328	.437	1.375	.438	.060	Fafnir	REPB3N-2	58.55
SOLID	.1900	.781	.328	.437	1.375	430S	.070	Fafnir	REP3S7	51.45
5/16-24	.1900	.750	.328	.437	1.375	.500	.07	Heim	F35-14M	39.06
5/16-24	.2500	.938	.438	.593	1.469	.438	.070	Fafnir	REP4F5	51.65
5/16-24	.2500	.938	.406	.593	1.469	.500	.100	Aurora Magnaflux*	GMW-4M-595	17.99
5/16-24	.3125	.875	.344	.437	1.375	.500	.080	Heim	HF-5M	20.39
5/16-24	.3125	.875	.344	.437	1.375	.500	.092	Aurora	MW-5	\$7.25
5/16-24-LH	.3125	.875	.344	.437	1.375	.500	.092	Aurora	MG-5	6.50
5/16-24	.2500	.938	.438	.593	1.469	.500	.110	Heim	F45-19M	39.98
3/8-24-LH	.3125	1.00	.344	.437	1.625	.500	.152	Aurora	MG-6	7.55
3/8-24	.3750	1.00	.406	.500	1.625	.687	.152	Aurora	MW-6	7.40
1/2-20	.500	1.312	.500	.625	2.125	.875	.329	Aurora	MW-8	11.52
5/16-24	.1900	.750	.328	.437	1.375	.500	.070	Aurora Magnaflux*	GMW-3M-570	14.75
5/8	.2500	.928	.438	.593	1.875	.625	.120	Fafnir	REP4H6	62.35

SPHERICAL METAL GROMMETS

The SPHERICAL METAL GROMMET is a plated-steel bulkhead grommet offering superior firewall protection and cable & line clamping ability. The 2-pc eyeball clamp swivels up to 50° to allow for oblique, angled installations. It mounts on either side



of the bulkhead using 4-40 screws (incl) or two 1/8" blind rivets (not incl). Template for fastener & grommet (1-1/8" OD) mounting holes incl. Grommet clamp hole may be easily enlarged up to .260 as needed. Backplate size: 2-1/6"x 1-7/16" STC approval pending. SE188S typical application for standard Bowden cables, SE260S typical application for standard tach cables.

CABLE/LINE OD	PART NUMBER	PRICE
.125"	SE125S	27.74
.188" BOWDEN CABLES	SE188S	27.74
.250"	SE250S	27.74
.260" TACH CABLES	SE260S	27.74

SPHERICAL GROMMETS

The 'One Hole Eyeball' spherical bulkhead grommet installs quickly using just one 1.115" mounting hole. The grommet clamps onto lines, cables, etc by means of a 50° eyeball swivel that permits oblique, angled line installation. The grommet hole may be easily drilled to accept larger sizes of cable/line. All aluminum construction. Size: 1.359W. Front bulkhead protrusion: 3/4"; rear protrusion: 1/4".

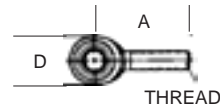


CABLE/LINE OD	PART NUMBER	PRICE
1/8"	TTP125	31.50
3/16"	TTP188	31.50
1/4"	TTP250	31.50
3/8"	TTP375	31.50

CONTROL

MALE ROD END BEARINGS

Manufactured by Fafnir, Aurora or Heim, some magnafluxed aviation approved.



MALE THREAD OR DRILL SIZE	BORE B	HEAD WIDTH D	HOUSING WIDTH H	BALL WIDTH W	BORE CENTER TO END OF SHANK A	OUTSIDE K	WT.	MFG	MALE PART NUMBER	PRICE EACH
6-32	.1250	.500	.187	.250	.937	.013	Aurora		MM-2	6.85
8-32	.1562	.562	.219	.281	1.125	.020	Heim		HM-2AM	25.90
10-32	.1900	.625	.250	.312	1.250	.028	Aurora		MM-3	6.55
10-32	.1900	.625	.250	.312	1.250	.028	Aurora		MM-3Z	6.84
10-32LH	.1900	.625	.250	.312	1.250	.028	Aurora		MB-3	5.99
1/4-28	.750	.750	.281	.437	1.562	.05	Aurora	magnafluxed	GMM-3M-470	11.25
1/4-28	.1900	.750	.286	.435	1.562	.045	Aurora		CM-3B-14	8.35
1/4-28LH	.1900	.750	.286	.435	1.562	.045	Aurora		CB-3BM-14	21.40
1/4-28	.1900	.750	.312	.435	1.562	.043	Aurora		XM-3	9.45
1/4-28	.1900	.750	.328	.437	1.560	.05	Heim		M34-14M	42.96
1/4-28	.1900	.781	.438	.500	1.812	1.00	Fafnir		RAP3M4-2	71.25
1/4-28	.2500	.750	.281	.375	1.562	.043	Aurora		MM-4	6.95
1/4-28	.2500	.812	.304	.437	1.00	.057	Heim		M44-14M	39.06
1/4-28	.2500	.812	.304	.437	1.562	.070	Aurora	magnafluxed	GMM-4M-470	16.95
1/4-28LH	.2500	.750	.281	.375	1.562	.043	Aurora		MB-4	6.99
5/16-24	.1900	.875	.328	.437	1.375	.070	Aurora	magnafluxed	GMM-3M-570	13.99
5/16-24	.2500	.875	.281	.375	1.875	.072	Aurora		XM-4	9.60
5/16-24	.3125	.875	.344	.437	1.875	.072	Aurora		MM-5	7.25
5/16-24	.3125	.875	.344	.437	1.875	.080	Heim		HM-5M	45.69
5/16-24LH	.3125	.875	.344	.437	1.875	.072	Aurora		MB-5	7.99
3/8-24	.1900	.750	.328	.437	1.375	.080	Aurora	magnafluxed	GMM-3M-670	13.75
3/8-24	.1900	.781	.328	.437	1.375	.050	Fafnir		REP3M6-2N	52.54
3/8-24	.1900	.812	.375	.500	1.812	.080	Heim		MD36-16M	45.89
3/8-24	.1900	.833	.375	.500	1.812	.090	Aurora	magnafluxed	GMM-3M-680	13.80
3/8-24	.2500	.875	.385	.484	2.312	.110	Aurora	magnafluxed	GMM-4M-675	18.50
3/8-24	.2500	.938	.438	.593	1.875	.100	Fafnir		REP4M6	48.50
3/8-24	.2500	.850	.335	.484	2.312	.101	Heim		MD46-15M	41.25
3/8-24	.2500	.875	.335	.500	2.062	.100	Aurora	magnafluxed	GMM-4M-680	16.80
3/8-24	.3125	1.00	.334	.437	1.938	.112	Aurora		XM-5	10.04
3/8-24	.3750	1.00	.406	.500	1.938	.112	Aurora		MM-6	8.26
3/8-24LH	.3750	1.00	.406	.500	1.938	.112	Aurora		MB-6	9.25
7/16-20	.3750	1.00	.406	.500	1.938	.136	Heim		HMX6G	35.57
7/16-20	.3750	1.125	.406	.500	2.125	.160	Aurora		XAM-6Z	19.85
1/2-20	.4375	1/125	.437	.562	2.125	.18	Heim		HMX7G	43.50
1/2-20	.500	1.312	.500	.625	2.438	.249	Aurora		MM-8	12.58
5/8-18	.625	1.500	.562	.750	2.625	.382	Aurora		MM-10	15.22
1/2-20	.4375	1.312	.500	.562	2.438	.249	Aurora		XAM-7	22.50
1/2-20	.4375	1.312	.500	.562	2.438	.249	Aurora		XAM-7Z	24.85
1/4-28	.2500	.750	.250	.375	1.562	.040	Aurora	magnafluxed	CM-4M	8.30
6-32	.1250	.469	.187	.250	.937	.020	Heim	magnafluxed	HM-2M	47.21

CONTROL

FELCO CABLE CUTTER

C7 cuts 3/16" and smaller cable. C9 cuts 1/4" cable including steel. Great for cutting control cable. Does not leave frayed ends. Manufactured in Switzerland. 2 sizes: 8" length weighs 10 oz, 13" length weighs 1.5 lbs.



DESCRIPTION	PART NUMBER	PRICE EACH
8" cutter cuts to 3/16"	C7	69.96

CABLE CUTTER

"US Made". Cuts 3/16" and smaller cable. Does not leave frayed ends. Great for cutting control cable. Length: 8", weight: 5-1/2 oz.



DESCRIPTION	PART NUMBER	PRICE EACH
Cable cutter	C632	28.62

NICOPRESS TOOL PRESS & CUT

Combination tool not only presses oval nicopress sleeves but also cuts cable to length. The toggle action of the tool, combined with a specially designed cutter that surrounds & supports the cable when cutting, produces round, clean-cut cable ends with minimal effort. The reversible cutter blades, together with heat treated & hardened work surfaces produce a superior, long life tool. Tool presses 1/16, 3/32, 1/8, & 5/32" sleeves; cable cutting capacity: 7/32".



DESCRIPTION	PART NUMBER	PRICE
NICOPRESS TOOL	C64CGMP	220.00

TENSION GAUGES

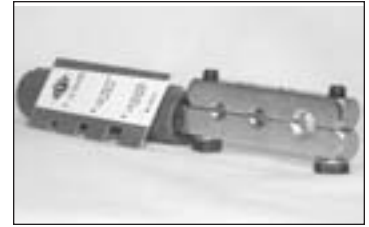
An inexpensive yet accurate method of checking cable tension. Ideal for determining loads on sailboat rigging, guy wires, fences or any application where cable or wires are installed under load. Manufactured of rugged anodized aluminum, this gauge is corrosive resistant and will give years of service. Detailed operating instructions included with each tension gauge. Ranges 3/32: 70-300 lbs, 1/8: 100-500 lbs, 5/32: 140-800 lbs.



DESCRIPTION	PART NUMBER	PRICE EACH
Cable sizes 3/32", 1/8", 5/32"	PT-1	89.99

NICOPRESS TOOL

Inexpensive hand tool useful for a limited number of swages. Comes complete with go-no-go gauge. Swages 1/16", 3/32" and 1/8" cable. For copper and aluminum oval sleeves only. NOT for zinc plated copper.



DESCRIPTION	PART NUMBER	PRICE EACH
Hand swage tool with gauge	HST-2	19.99
Go-no-go gauge	NG54-11	6.25

NICOPRESS TOOL

4 GROOVE Tool has four compression grooves in head. Swages oval sleeves on 1/16", 3/32", 1/8" and 5/32" cable. Length 20". Weight 5 lbs. Replacement jaws available.

5 GROOVE - swages oval sleeves from 1/16" - 3/16". Length 26", Weight 6.5 lbs.

For copper, aluminum & zinc plated copper.



DESCRIPTION	PART NUMBER	PRICE EACH
4 Groove Tool	64CGMP	215.07
Replacement jaws - 4 groove only	64CGMP-JAWS	215.07
5 Groove Tool	S2632H	158.00
Gauge	NG-2930	26.74
Replacement jaws for 5 groove only	BH2632-05	64.28

CABLE DIAMETER GAUGE

Quickly and accurately measure standard cable diameters. Measures 1/16", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4", 9/32", 5/16" and 3/8".

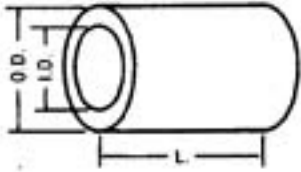


DESCRIPTION	PART NUMBER	PRICE EACH
CABLE DIAMETER GAUGE	ATSGAP4	6.68

CONTROL

STRAIGHT BUSHING OILITE BRONZE BUSHING

The AA304-20 and AA309-5 are made of oilite bronze, the B612-6 and B612-71 are made of oil-impregnated sintered bronze.



ID	OD	LENGTH	PARTNUMBER	PRICE
1/4"	3/8"	1"	AA304-20	0.85
3/16"	5/16"	3/4"	AA309-5	0.65
3/8"	5/8"	3/4"	B610-6	1.15
1/2"	3/4"	3/4"	B812-6	1.35
1/2"	3/4"	7/8"	B812-7	0.90
3/16"	5/16"	3/8"	SS610-6	0.75

CONTROL CABLE MOUNTING CLAMP

Clamp allows you to secure the output end of control cables w/.250" or .438" conduit mounting grooves (incl. ACS & Cablecraft controls w/threaded ends) to a bracket, etc. The clamps cut-out is pushed into the mounting groove (just ahead of the swivel end) & a cap plate is then screwed down onto a bracket to lock the assembly in place. Includes 3/16" bolts & locknuts.



DESCRIPTION	PART NUMBER	PRICE
CLAMP FOR MOUNTING	CMC52	2.42

CONTROL CABLE THREADED ADAPTER

Adapter converts control cables with a 10-32 male threaded output to 1/4-28 male threaded output. Total length: 2.34"



CONVERTS	PART NUMBER	PRICE
1032 TO 1/4"-28 MALE	CA16197	24.49

GREASE FITTING CAPS

Made of low density polyethylene, these caps fit securely over the grease fittings to seal out dirt and moisture. The retaining ring keeps the cap in place during servicing. Sold in packages of 25 only. Available in red or blue. Colors sold separately.



COLOR	PART NUMBER	PRICE
BLUE	GC-BLUE	2.12
RED	GC-RED	2.12

FLIP-FLAP FLAP ACTUATOR

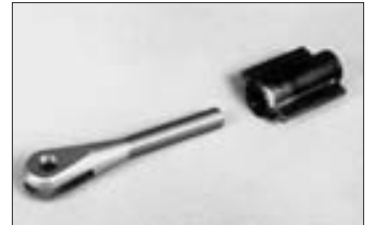
Made of high quality, long lasting materials, the 'Flip-Flap' electromechanical flap actuator can be used on experimental/ultralight aircraft with manual flap or flaperon control. Its continually adjustable, single screw pushrod allows a throw from 1.5-3" with a fixed control lever stroke, producing up to 40 lbs of push/pull flap control force. Installs easily using mounting flanges along all 4 long sides. Max draw: 1 amp @ 12-13V. Overall size: (w/o lever & pushrod) 2.5"x 3.5"x 8.5". Wt: <28 oz.



DESCRIPTION	PART NUMBER	PRICE
FLIP-FLAP FLAP ACTUATOR	FLAPACT	280.99

WING STRUT HARDWARE

Precision machined part, heat treated and magnafluxed. Applicability - Piper PA12, PA14, PA16, PA18, PA19, PA20, PA22, J5, L-14, L-18, L-21, AE-1, HE-1. 7/16" x 20 NF3, fork space 1/4", Inside diameter 3/8", 7/16-20 NF3 thread. Build your own struts using these weldable barrels. Fits strut fork



COLOR	PART NUMBER	PRICE
BARREL	12521-00	59.85
STRUT FORK	14481-00	91.01