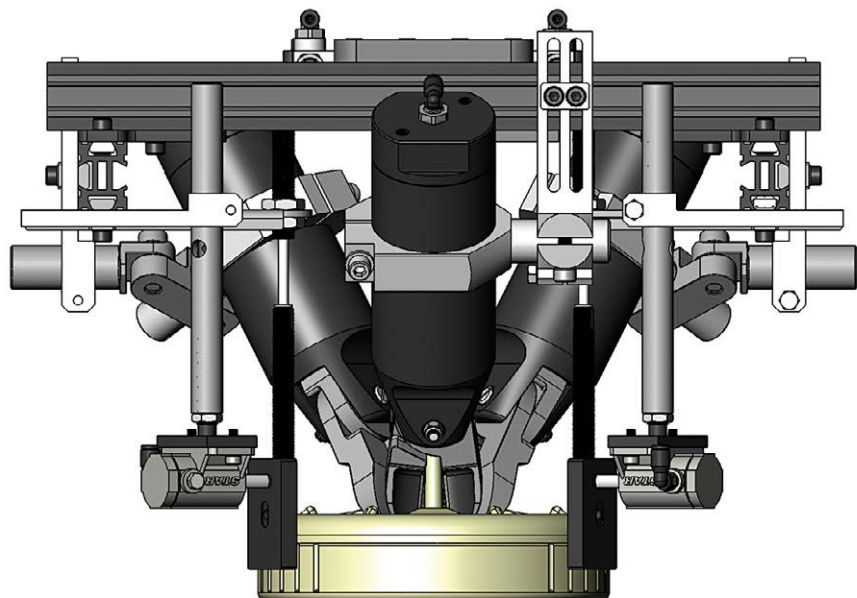
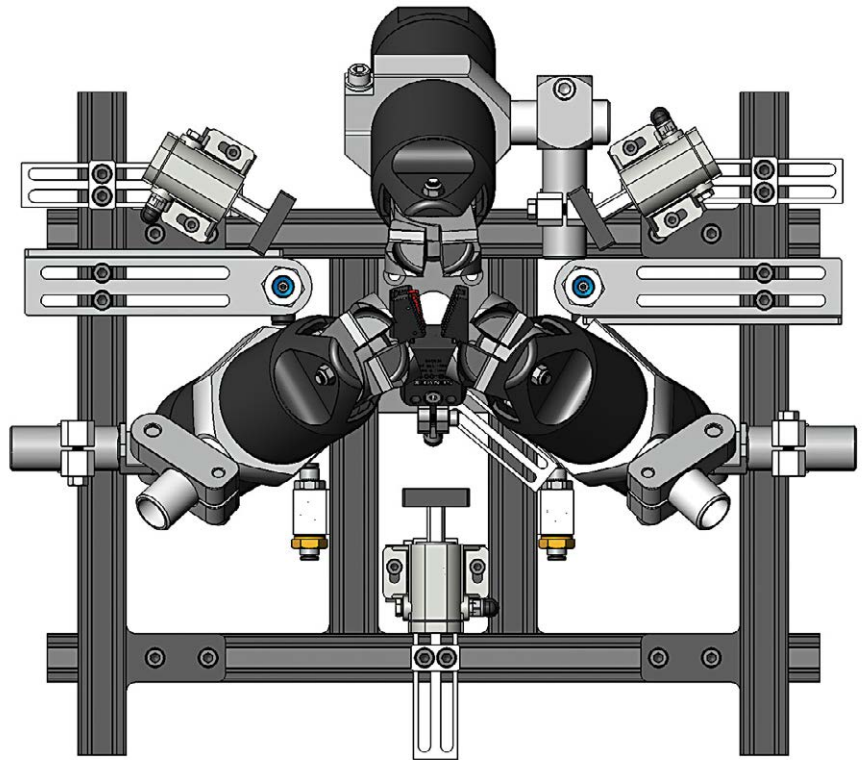
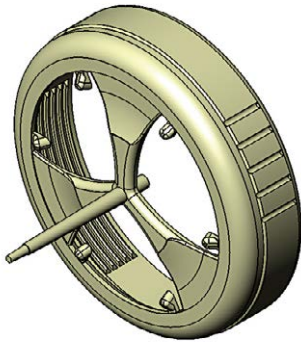


EOAT Design and Build Service

From the simplest to the most complex EOAT, EMI specializes in designing and building customized End-of-Arm-Tooling— **Priced Competitively.**

Get started by sending us a sample part or 3D part file and a completed datasheet (see page 972). Our EOAT engineers will design a tool for you and provide you 3D CAD renderings. We'll also provide pricing for the tool should you want to purchase the completely assembled EOAT from EMI. Whether or not you purchase the tool from EMI, there's no cost or obligation to you for the engineering design service.



Screw Length / Bracket Thickness Chart

>ASS< 25mm L & X profile
(18/10, 18/18, 25/10, 25/18, 25/25, 25/50)

Screw Length	Lock Washer	Min Bracket	Max Bracket
10	0.6		4.4
	1.6		3.4
12	0.6	4.2	6.4
	1.6	3.2	5.4
14	0.6	6.2	8.4
	1.6	5.2	7.4
16	0.6	8.2	10.4
	1.6	7.2	9.4
18	0.6	10.2	12.4
	1.6	9.2	11.4
20	0.6	12.2	14.4
	1.6	11.2	13.4
22	0.6	14.2	16.4
	1.6	13.2	15.4
25	0.6	17.2	19.4
	1.6	16.2	18.4
30	0.6	22.2	24.4
	1.6	21.2	23.4
35	0.6	27.2	29.4
	1.6	26.2	28.4
40	0.6	32.2	34.4
	1.6	31.2	33.4
45	0.6	37.2	39.4
	1.6	36.2	38.4

>ASS< 40mm J profile
(40/40, 80/40)

Screw Length	Lock Washer	Min Bracket	Max Bracket
12	0.6		4.7
	1.6		3.7
14	0.6	1.7	6.7
	1.6	0.7	5.7
16	0.6	3.7	8.7
	1.6	2.7	7.7
18	0.6	5.7	10.7
	1.6	4.7	9.7
20	0.6	7.7	12.7
	1.6	6.7	11.7
22	0.6	9.7	14.7
	1.6	8.7	13.7
25	0.6	12.7	17.7
	1.6	11.7	16.7
30	0.6	17.7	22.7
	1.6	16.7	21.7
35	0.6	22.7	27.7
	1.6	21.7	26.7
40	0.6	27.7	32.7
	1.6	26.7	31.7
45	0.6	32.7	37.7
	1.6	31.7	36.7
50	0.6	37.7	42.7
	1.6	36.7	41.7

These charts indicate the screw length required to fasten a given bracket thickness to the various profiles.

See Next Page for General Fasteners.

How to use these charts

1. What profile are you using?
Go to that chart.
2. What is the thickness of the bracket you want to use?
Find it within the range between Min and Max.
3. Will you be using a 0.6mm lock washer only, or a lock washer and flat washer combination (1.6mm)?
Make sure you are reading the Min/Max range for the washer thickness line.
4. The required screw length is found in the left column.

① Profile Type

Screw Length	Lock Washer	Min Bracket	Max Bracket
④ 10	③ 0.6	3.3	5.4
	1.6	2.3	② 4.4

Gimatic 25mm L & X profile
(18/10, 18/18, 25/10, 25/18, 25/25, 25/50)

Screw Length	Lock Washer	Min Bracket	Max Bracket
10	0.6		4.4
	1.6		3.4
12	0.6	4.2	6.4
	1.6	3.2	5.4
14	0.6	6.2	8.4
	1.6	5.2	7.4
16	0.6	8.2	10.4
	1.6	7.2	9.4
18	0.6	10.2	12.4
	1.6	9.2	11.4
20	0.6	12.2	14.4
	1.6	11.2	13.4
22	0.6	14.2	16.4
	1.6	13.2	15.4
25	0.6	17.2	19.4
	1.6	16.2	18.4
30	0.6	22.2	24.4
	1.6	21.2	23.4
35	0.6	27.2	29.4
	1.6	26.2	28.4
40	0.6	32.2	34.4
	1.6	31.2	33.4
45	0.6	37.2	39.4
	1.6	36.2	38.4

Gimatic 40mm J profile
(40/40, 80/40)

Screw Length	Lock Washer	Min Bracket	Max Bracket
12	0.6		4.7
	1.6		3.7
14	0.6	1.7	6.7
	1.6	0.7	5.7
16	0.6	3.7	8.7
	1.6	2.7	7.7
18	0.6	5.7	10.7
	1.6	4.7	9.7
20	0.6	7.7	12.7
	1.6	6.7	11.7
22	0.6	9.7	14.7
	1.6	8.7	13.7
25	0.6	12.7	17.7
	1.6	11.7	16.7
30	0.6	17.7	22.7
	1.6	16.7	21.7
35	0.6	22.7	27.7
	1.6	21.7	26.7
40	0.6	27.7	32.7
	1.6	26.7	31.7
45	0.6	32.7	37.7
	1.6	31.7	36.7
50	0.6	37.7	42.7
	1.6	36.7	41.7

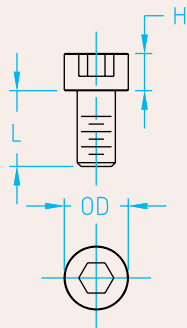
80/20 1" Profile
(1010, 1020, 1030)

Screw Length	Lock Washer	Min Bracket	Max Bracket
10	0.6		5.1
	1.6		4.1
12	0.6	3.6	7.1
	1.6	2.6	6.1
14	0.6	5.6	9.1
	1.6	4.6	8.1
16	0.6	7.6	11.1
	1.6	6.6	10.1
18	0.6	9.6	13.1
	1.6	8.6	12.1
20	0.6	11.6	15.1
	1.6	10.6	14.1
22	0.6	13.6	17.1
	1.6	12.6	16.1
25	0.6	16.6	20.1
	1.6	15.6	19.1
30	0.6	21.6	25.1
	1.6	20.6	24.1
35	0.6	26.6	30.1
	1.6	25.6	29.1
40	0.6	31.6	35.1
	1.6	30.6	34.1
45	0.6	36.6	40.1
	1.6	35.6	39.1

General Fasteners

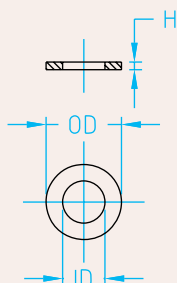
Dimensional Information

Socket Head Cap Screws



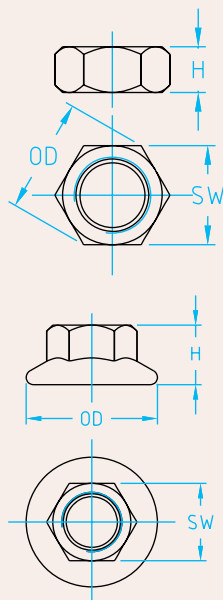
	OD	H
M2.5 x 0.45	4.5	2.5
M3 x 0.5	5.5	3
M3.5 x 0.6	5.7	3.5
M4 x 0.7	7	4
M5 x 0.8	8.5	5
M5 x 0.8 Low head	8.5	3.5
M6 x 1	10	6
M8 x 1.25	13	8
M10 x 1.5	16.5	10

Washers



	ID	OD	H
M2.5 Washer	2.7	5	0.5
M2.5 Fender washer	2.7	8	0.8
M2.5 Lock washer	2.7	4.8	0.45
M3 Washer	3.2	6	0.5
M3 Fender washer	3.2	9	0.8
M3 Lock washer	3.2	5.5	0.45
M4 Washer	4.3	8	0.5
M4 Fender washer	4.3	12	1.0
M4 Lock washer	4.3	7	0.5
M5 Washer	5.3	9.5	1.0
M5 Fender washer	5.3	15	1.2
M5 Thin lock washer	5.3	9	0.6
M5 Thick lock washer	5.3	9	1.0
M6 Washer	6.4	11	1.6
M6 Fender washer	6.4	18	1.6
M6 Lock washer	6.4	10	0.7
M6 Thick lock washer	6.4	10	1.0
M8 Washer	8.4	15	1.6
M8 Fender washer	8.4	24	2.0
M8 Lock washer	8.4	13	0.8
M8 Thick lock washer	8.4	13	1.2

Nuts



	OD	H	SW
M2.5x0.45 Nut	5.8	2	5
M3x0.5 Nut	6.4	2.4	5.5
M4x0.7 Nut	8.1	3.2	7
M5x0.8 Nut	9.3	4	8
M5x0.8 Lock nut	11.2	4.3	8
M6x1 Nut	11.6	5	10
M6x1 Lock nut	14.2	5.5	10
M8x1.25 Nut	15.0	6.5	13
M8x1.25 Lock nut	18.2	7	13
G1/8" Nut thin	13.7	3.6	12
M10x1 Nut thin	14.5	5	17
M16x1 Nut thin	25.2	5.2	22

M2.5

Quick #	Part #	Description	Price
801	GSC-M2.5-4	M2.5 x 4mm	\$0.20
802	GSC-M2.5-5	M2.5 x 5mm	\$0.14
803	GSC-M2.5-6	M2.5 x 6mm	\$0.14
804	GSC-M2.5-8	M2.5 x 8mm	\$0.15
805	GSC-M2.5-10	M2.5 x 10mm	\$0.15
806	GSC-M2.5-12	M2.5 x 12mm	\$0.17
807	GSC-M2.5-14	M2.5 x 14mm	\$0.30
808	GSC-M2.5-16	M2.5 x 16mm	\$0.20
809	GSC-M2.5-LW	Lock washer	\$0.10
810	GSC-M2.5-W	Washer	\$0.10
811	GSC-M2.5-FW	Fender washer	\$0.10
812	GSC-M2.5-N	Nut	\$0.10

M3

Quick #	Part #	Description	Price
813	GSC-M3-5	M3 x 5mm	\$0.10
814	GSC-M3-6	M3 x 6mm	\$0.10
815	GSC-M3-8	M3 x 8mm	\$0.10
816	GSC-M3-10	M3 x 10mm	\$0.10
817	GSC-M3-12	M3 x 12mm	\$0.10
818	GSC-M3-14	M3 x 14mm	\$0.10
819	GSC-M3-16	M3 x 16mm	\$0.10
820	GSC-M3-18	M3 x 18mm	\$0.11
821	GSC-M3-20	M3 x 20mm	\$0.10
822	GSC-M3-22	M3 x 22mm	\$0.23
823	GSC-M3-25	M3 x 25mm	\$0.23
824	GSC-M3-30	M3 x 30mm	\$0.15
825	GSC-M3-35	M3 x 35mm	\$0.18
826	GSC-M3-40	M3 x 40mm	\$0.46
827	GSC-M3-LW	Lock washer	\$0.10
828	GSC-M3-W	Washer	\$0.10
829	GSC-M3-FW	Fender washer	\$0.10
830	GSC-M3-N	Nut	\$0.10
901	GSC-M3-LN-ZP-NI	Zinc plated Lock-Nut	\$0.10

M3.5

Quick #	Part #	Description	Price
912	GSC-M3.5-6	M3.5 x 6mm	\$0.50
942	GSC-M3.5-10	M3.5 x 10mm	\$0.60
943	GSC-M3.5-16	M3.5 x 16mm	\$0.60
965	GSC-M3.5-20	M3.5 x 20mm	\$0.60
796	GSC-M3.5-LW	M3.5 Lock washer	\$0.10

Tap Plugs

Quick #	Part #	Description	Price
910	GSC-TAP-G8P	G1/8" Tap plug	\$23.00
911	GSC-TAP-G8B	G1/8" Tap bottoming	\$23.75
963	GSC-TAP-G4P	G1/4" Tap plug	\$35.90
964	GSC-TAP-G4B	G1/4" Tap bottoming	\$35.75

#910 G1/8" Plug Tap



#911 G1/8" Bottoming Tap



Note: G1/8" major diameter is .3830" minor diameter is .3372"

General Fasteners

M4

Quick #	Part #	Description	Price
831	GSC-M4-5	M4 x 5mm	\$0.11
832	GSC-M4-6	M4 x 6mm	\$0.10
833	GSC-M4-8	M4 x 8mm	\$0.10
834	GSC-M4-10	M4 x 10mm	\$0.10
835	GSC-M4-12	M4 x 12mm	\$0.10
836	GSC-M4-14	M4 x 14mm	\$0.10
837	GSC-M4-16	M4 x 16mm	\$0.10
838	GSC-M4-18	M4 x 18mm	\$0.11
839	GSC-M4-20	M4 x 20mm	\$0.10
840	GSC-M4-22	M4 x 22mm	\$0.20
841	GSC-M4-25	M4 x 25mm	\$0.13
842	GSC-M4-30	M4 x 30mm	\$0.14
843	GSC-M4-35	M4 x 35mm	\$0.16
844	GSC-M4-40	M4 x 40mm	\$0.17
845	GSC-M4-50	M4 x 50mm	\$0.20
846	GSC-M4-LW	Lock washer	\$0.10
847	GSC-M4-W	Washer	\$0.10
848	GSC-M4-FW	Fender washer	\$0.10
849	GSC-M4-N	Nut	\$0.10
902	GSC-M4-LN-ZP-NI	Zinc plated Lock-Nut	\$0.10

M5

Quick #	Part #	Description	Price
850	GSC-M5-6	M5 x 6mm	\$0.12
851	GSC-M5-8	M5 x 8mm	\$0.11
852	GSC-M5-10	M5 x 10mm	\$0.10
971	GSC-M5-10LH	M5 x 10 Low head	\$0.20
853	GSC-M5-12	M5 x 12mm	\$0.10
972	GSC-M5-12LH	M5 x 12 Low head	\$0.20
854	GSC-M5-14	M5 x 14mm	\$0.12
855	GSC-M5-16	M5 x 16mm	\$0.11
973	GSC-M5-16LH	M5 x 16 Low head	\$0.25
856	GSC-M5-18	M5 x 18mm	\$0.13
857	GSC-M5-20	M5 x 20mm	\$0.12
974	GSC-M5-20LH	M5 x 20 Low head	\$0.23
858	GSC-M5-22	M5 x 22mm	\$0.16
859	GSC-M5-25	M5 x 25mm	\$0.12
860	GSC-M5-30	M5 x 30mm	\$0.13
861	GSC-M5-35	M5 x 35mm	\$0.16
862	GSC-M5-40	M5 x 40mm	\$0.19
863	GSC-M5-45	M5 x 45mm	\$0.24
864	GSC-M5-50	M5 x 50mm	\$0.26
904	GSC-M5-60	M5 x 60mm	\$0.40
865	GSC-M5-LW	Lock washer 0.6	\$0.10
866	GSC-M5-LWT	Lock washer 1.0	\$0.15
867	GSC-M5-W	Washer	\$0.10
868	GSC-M5-FW	Fender washer	\$0.10
869	GSC-M5-N	Nut	\$0.10
870	GSC-M5-LN	Lock nut	\$0.50
903	GSC-M5-LN-ZP-NI	Zinc plated Lock-Nut	\$0.10

M6

Quick #	Part #	Description	Price
871	GSC-M6-10	M6 x 10mm	\$0.11
872	GSC-M6-12	M6 x 12mm	\$0.11
873	GSC-M6-14	M6 x 14mm	\$0.14
874	GSC-M6-16	M6 x 16mm	\$0.12
875	GSC-M6-18	M6 x 18mm	\$0.16
876	GSC-M6-20	M6 x 20mm	\$0.12
877	GSC-M6-22	M6 x 22mm	\$0.20
878	GSC-M6-25	M6 x 25mm	\$0.13
879	GSC-M6-30	M6 x 30mm	\$0.15
880	GSC-M6-LW	Lock washer	\$0.15
881	GSC-M6-LWT	Thick lock washer	\$0.15
882	GSC-M6-W	Washer	\$0.15
883	GSC-M6-FW	Fender washer	\$0.15
884	GSC-M6-N	Nut	\$0.15
885	GSC-M6-LN	Lock nut	\$0.55

M8

Quick #	Part #	Description	Price
886	GSC-M8-10	M8 x 10mm	\$0.27
887	GSC-M8-12	M8 x 12mm	\$0.27
888	GSC-M8-16	M8 x 16mm	\$0.20
889	GSC-M8-18	M8 x 18mm	\$0.30
890	GSC-M8-20	M8 x 20mm	\$0.27
891	GSC-M8-22	M8 x 22mm	\$0.32
892	GSC-M8-25	M8 x 25mm	\$0.30
893	GSC-M8-30	M8 x 30mm	\$0.33
894	GSC-M8-LW	Lock Washer	\$0.15
895	GSC-M8-LWT	Thick lock washer	\$0.20
896	GSC-M8-W	Washer	\$0.15
897	GSC-M8-FW	Fender washer	\$0.15
898	GSC-M8-N	Nut	\$0.15
899	GSC-M8-LN	Lock nut	\$1.00

M10

Quick #	Part #	Description	Price
945	GSC-M10-20	M10 x 20mm	\$0.40
946	GSC-M10-25	M10 x 25mm	\$0.40
947	GSC-M10-30	M10 x 30mm	\$0.40

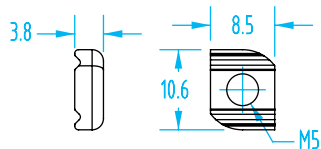
Specialty Fasteners

Quick #	Part #	Description	Price
905	GSC-N-G8	G1/8" Jam nut	\$1.00
914	GSC-M6-TN	M6x1 Jam nut	\$0.15
915	GSC-M8-TN	M8x1.25 Jam nut	\$0.15
948	GSC-M10-LW	G1/8" & M10 Thin lock washer	\$0.20
949	GSC-M10-LWT	G1/8" & M10 Thick lock washer	\$0.29
908	GSC-M10-TN	M10x1 Jam nut	\$0.32
1703	GSV-M12NUT	M12x1 Nut	\$0.37
975	GSC-M12-LW	M12 Thin lock washer	\$0.25
2347	GSC-M14-LW	M14 Thin lock washer	\$0.30
917	GSC-M15x1-TN	M15x1 Jam nut	\$1.25
906	GSC-N-M16	M16x1 Jam nut	\$1.50
939	GSC-M16-LW	M16 Thin lock washer	\$0.30
944	GSC-M16-LWT	M16 Thick lock washer	\$0.50
940	VITE-455	M17x1 Mounting Nut	\$0.98
941	VITE-456	M27x1 Mounting Nut	\$2.25

Special Fasteners

(Dimensioned drawings shown full scale)

Gimatic Fasteners



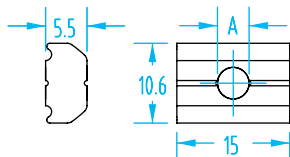
#7115

Drop-In Channel Nut

Quick#	Part#	Price	Wt.
7115	MFI-243	\$1.30	2g

Note: for more info see 141.

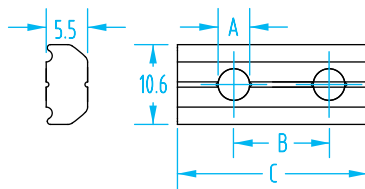
Drop-in & rotate 90° when you need to add to an already assembled EOAT.



#6019

Slotted Nuts

Quick #	Part #	Price	A	Wt.
6058	MFI-177	\$1.25	M4	5g
6019	MFI-025	\$1.25	M5	5g
6059	MFI-178	\$1.25	M6	5g

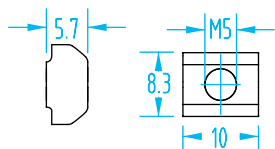


#6030

Slotted Nuts

Quick #	Part #	Price	A	B	C	Wt.
6020	MFI-003	\$1.63	M4	8	16	5g
6021	MFI-006	\$1.63	M5	10	20	7g
6022	MFI-009	\$1.63	M5	15	25	9g
6023	MFI-148	\$1.63	M5	17	25	9g
6024	MFI-016	\$1.73	M5	22	32	11g
6025	MFI-027	\$1.73	M5	25	35	13g
6026	MFI-055	\$1.73	M5	28	38	14g
6027	MFI-050	\$1.90	M5	30	40	15g
6028	MFI-029	\$1.90	M5	35	45	16g
6029	MFI-020	\$1.90	M5	40	50	18g
6030	MFI-043	\$1.94	M5	50	60	22g
6031	MFI-022	\$1.94	M5	60	70	26g
6032	MFI-045	\$2.28	M5	90	100	38g

>ASS< Fasteners

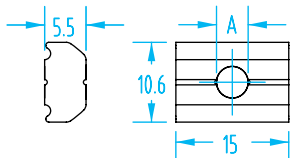


#3032

Drop-In Channel Nut

Quick#	Part#	>ASS< #	Price	Wt.	Use with:
3032	GWP-EX5-U	1-056-52-01	\$3.50	2g	L, X, J profile

Drop-in & rotate 90° when you need to add to an already assembled EOAT.



#3029

#3030

Slotted Nuts

Quick#	Part #	>ASS< #	Price	A	Wt.	Use with:
3029	GWP4L/X	1-058-41-15	\$2.00	M4	5g	L, X, J profile
3030	GWP5X	1-058-51-15	\$2.00	M5	5g	L, X, J profile
3031	GWP6U	1-058-61-18	\$2.00	M6	6g	L, X, J profile

Special Fasteners

80/20

80/20 Fasteners



Quick#	Part#	Description	Price
Nut and Screw Assemblies			(25 per pack)
4934	GSC-8020-4934	1/4"-20 x 1/2" BHSCS & Economy T-Nut (1" long)	\$8.75
4935	GSC-8020-4935	1/4"-20 x 1/2" BHSCS & Standard T-Nut (1/2" long)	\$22.00
4936	GSC-8020-4936	M6 x 12mm BHSCS & Economy T-Nut (1" long)	\$16.50
4937	GSC-8020-4937	M6 x 12mm BHSCS & Economy T-Nut (15mm long)	\$17.25
4938	GSC-8020-4938	M6 x 12mm BHSCS & Standard T-Nut (1/2" long)	\$31.00
Screws			(25 per pack)
4949	GSC-8020-4949	1/4"-20 x 1/2" BHSCS	\$5.75
4939	GSC-8020-4939	M5 x 10mm BHSCS	\$11.00
4940	GSC-8020-4940	M5 x 12mm BHSCS	\$11.00
4941	GSC-8020-6310	M6 x 10mm BHSCS	\$9.25
4942	GSC-8020-6312	M6 x 12mm BHSCS	\$13.25
4943	GSC-8020-6314	M6 x 14mm BHSCS	\$14.00
4944	GSC-8020-6316	M6 x 16mm BHSCS	\$13.75
4945	GSC-8020-6318	M6 x 18mm BHSCS	\$14.50
4946	GSC-8020-6320	M6 x 20mm BHSCS	\$14.00
Economy T-Nuts			(25 per pack)
4947	GSC-8020-4947	1/4"-20 Economy T-Nut (1" long)	\$5.35
4948	GSC-8020-4948	M6 Economy T-Nut (1" long)	\$6.75
4928	GSC-8020-4124	M6 Economy T-Nut (15mm long)	\$8.00
Double / Triple Economy T-Nuts			
4911	GSC-8020-3280	1/4"-20 Economy T-Nut – Double (1" hole spacing)	\$0.69 (each)
4912	GSC-8020-3800	M6 Economy T-Nut – Double (1" hole spacing)	\$0.53 (each)
4913	GSC-8020-3287	1/4"-20 Economy T-Nut – Triple (1" hole spacing)	\$0.79 (each)
4914	GSC-8020-3900	M6 Economy T-Nut – Triple (1" hole spacing)	\$0.84 (each)
Standard T-Nuts			(25 per pack)
4950	GSC-8020-4950	1/4"-20	\$19.75
4951	GSC-8020-4951	M5	\$25.00
4952	GSC-8020-4952	M6	\$25.00
T-Nuts for EOAT Brackets			
4929	GSC-8020-4929	M6 Standard T-Nut (25mm long) (15mm hole spacing)	\$1.60 (each)
4930	GSC-8020-4930	M6 Standard T-Nut (30mm long) (20mm hole spacing)	\$2.00 (each)
4931	GSC-8020-4931	M6 Standard T-Nut (35mm long) (25mm hole spacing)	\$2.00 (each)
4932	GSC-8020-4932	M6 Standard T-Nut (40mm long) (30mm hole spacing)	\$2.00 (each)
4933	GSC-8020-4933	M6 Standard T-Nut (50mm long) (40mm hole spacing)	\$2.00 (each)
Roll-In T-Nuts			
4918	GSC-8020-3376	1/4"-20	\$1.70 (each)
4919	GSC-8020-3875	M5	\$1.75 (each)
4920	GSC-8020-3876	M6	\$1.75 (each)