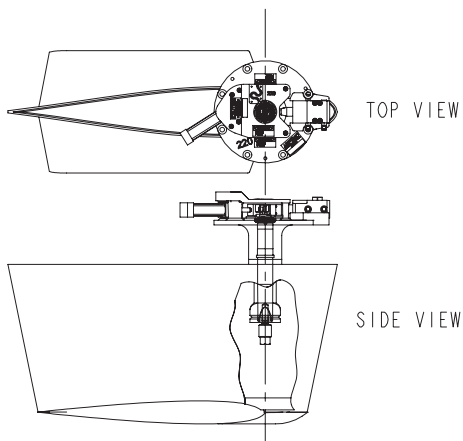


ACTUATOR - FIN SIZE COMPATIBILITY 1

FIN	220	250	300	370	440	540	640
4.5	°	°					
6.0	°	°					
7.5	°	°	°				
9.0		°	°	°			
12.0			°	°			
16.0				°	°	°	
20.0				°	°	°	
26.0					°	°	
4.5X	°						
6.0X	°	°					
6.0X-9%	°						
7.5X		°	°				
9.0X			°	°			
12.0X				°			
16.0X				°	°	°	
16.0X-9%				°			
20.0X					°	°	
20.0X-9%					°	°	
26.0X						°	
34.0X							°

ASSEMBLY OVERVIEW

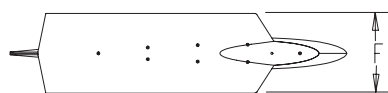
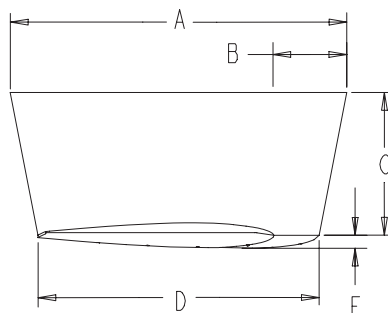


WINGLET FASTENERS 3

FASTENER CODE	FASTENER	QTY.	TIGHTEN TO FT-LB / (Nm)	REQUIRED THREAD LOCK COATING
A	3/8"-16	4	24 / (33)	MEDIUM STRENGTH
B	1/2"-13	4	50 / (50)	MEDIUM STRENGTH
C	1/2"-13	6	50 / (50)	MEDIUM STRENGTH
D	1/2"-13	8	50 / (50)	MEDIUM STRENGTH

FIN DIMENSIONS 2

FIN Size	A		B		C		D		E		F		WINGLET 3 Code
	Inch	(cm)	Inch	(cm)	Inch	(cm)	Inch	(cm)	Inch	(cm)	Inch	(cm)	
4.5	35.1	(89.2)	8.4	(21.6)	20.8	(52.9)	26.7	(67.8)	1.1	(2.9)	12.1	(30.7)	A
4.5X	46.4	(117.8)	10.2	(25.9)	20.8	(52.9)	37.8	(95.9)	1.6	(4.1)	17.2	(43.7)	A
6.0	40.6	(103.0)	9.7	(24.9)	23.9	(60.7)	30.9	(78.6)	1.3	(3.3)	14.0	(35.6)	A
6.0X	53.6	(136.0)	11.7	(29.7)	23.9	(60.7)	43.6	(110.7)	1.9	(4.8)	19.8	(50.3)	A
6.0X-9%	52.5	(133.4)	11.7	(29.7)	23.9	(60.7)	43.6	(110.7)	1.7	(4.3)	12.0	(30.5)	A
7.5	45.9	(116.5)	11.0	(27.8)	26.9	(68.3)	34.7	(88.1)	1.5	(3.7)	15.7	(39.9)	A
7.5X	60.8	(154.5)	13.3	(33.8)	26.9	(68.3)	49.7	(126.2)	2.2	(5.6)	22.6	(57.4)	B
9.0	49.7	(126.2)	11.9	(30.5)	29.2	(74.1)	37.6	(95.6)	1.6	(4.1)	17.2	(43.7)	A
9.0X	68.7	(174.5)	15.1	(38.4)	29.2	(74.1)	56.1	(142.4)	2.5	(6.4)	25.7	(65.3)	B
12.0	57.5	(146.1)	13.7	(35.2)	33.8	(85.9)	43.8	(111.1)	1.9	(4.8)	19.8	(50.3)	A
12.0X	80.0	(203.2)	17.5	(44.5)	33.8	(85.9)	66.9	(169.9)	2.8	(7.1)	29.4	(74.7)	B
16.0	65.9	(167.5)	15.8	(40.1)	38.6	(98.1)	49.4	(125.6)	2.1	(5.3)	22.6	(57.4)	B
16.0X	91.0	(231.0)	19.9	(50.5)	38.6	(98.0)	75.9	(192.9)	3.8	(9.7)	22.6	(57.4)	C
16.0X-9%	91.0	(231.0)	19.9	(50.5)	38.6	(98.0)	75.9	(192.9)	2.8	(7.1)	22.1	(56.1)	C
20.0	75.3	(191.3)	18.0	(45.8)	43.7	(111.0)	56.9	(144.5)	2.4	(6.1)	25.7	(65.3)	B
20.0X	104.1	(264.3)	22.8	(57.9)	43.7	(111.0)	81.5	(207.0)	4.5	(11.4)	25.9	(65.8)	C
20.0X-9%	104.1	(264.3)	22.8	(57.9)	44.2	(112.3)	86.9	(220.7)	4.0	(10.2)	25.2	(64.0)	C
26.0	85.5	(217.2)	20.4	(52.1)	50.3	(127.8)	64.9	(164.8)	2.7	(6.9)	29.4	(74.7)	B
26.0X	118.5	(301.0)	26.0	(66.0)	50.3	(127.8)	99.0	(251.5)	5.9	(15.0)	29.1	(73.9)	D
34.0X	134.9	(342.7)	29.5	(74.9)	57.4	(145.7)	113.5	(288.3)	6.8	(17.4)	33.3	(84.5)	D



NOTES:

- 1 Compatibility shown here is for actuator torque, and for shaft size to fin socket size. This matrix shows the range of fin sizes that can be used with each actuator. Other considerations will determine which fin size will be installed on a given vessel.
- 2 Fins designated with "X" suffix are extended chord fins for use in Stabilization At Rest (STAR [®]) systems.
- 3 Winglet column of Fin Dimension matrix shows fastener size code. Refer to Winglet Fastener Panel (page bottom left) for fastener details.

CONTRACT NO. XX		TITLE: TRAC Stabilizer Fin Dimensions	
APPROVALS	DATE	 <small>STABILIZERS - THRUSTERS - HYDRAULICS</small>	
DRAWN AJM	8/7/09		
CHECKED CE	11/18/13	SIZE C	DWG. NO. 35853
ENGINEER CE	11/18/13		REV. F
APPROVAL		SCALE: 0..067	TRAC_DIMS_SHEET_ASSY
			SHEET: 1 OF 1

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