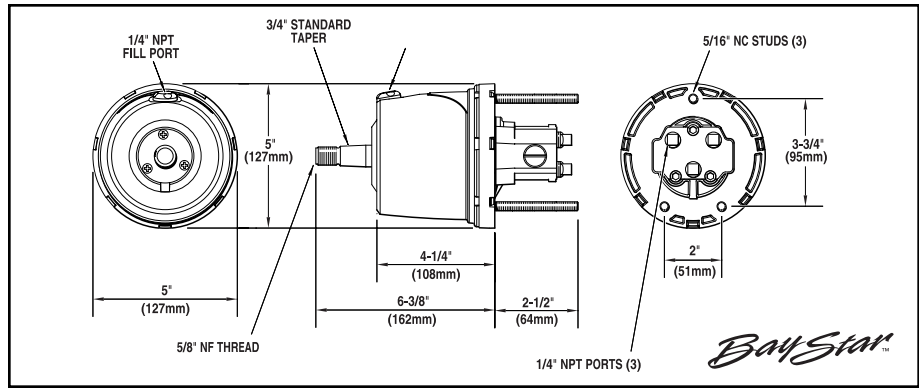


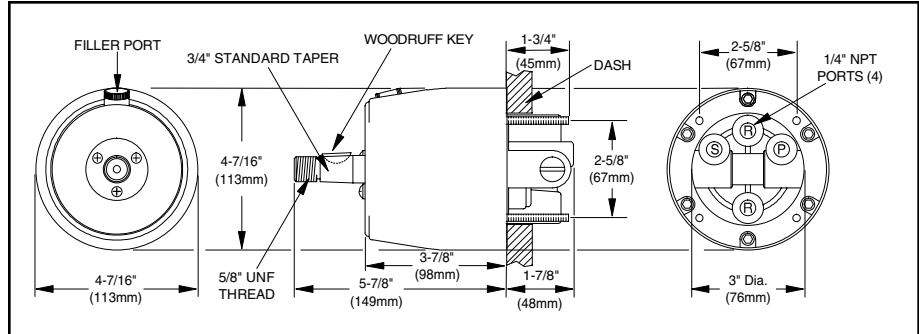
SeaStar steering dimensions

Helms:

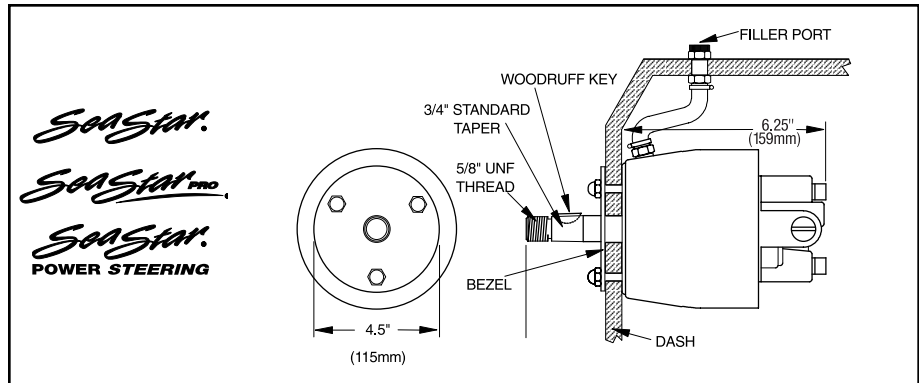
BayStar



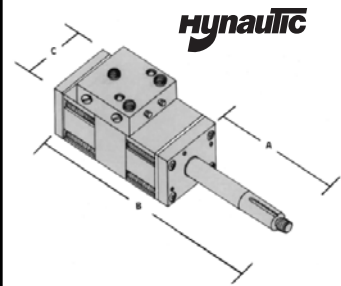
SeaStar & SeaStar PRO Front Mount



SeaStar Rear Mount

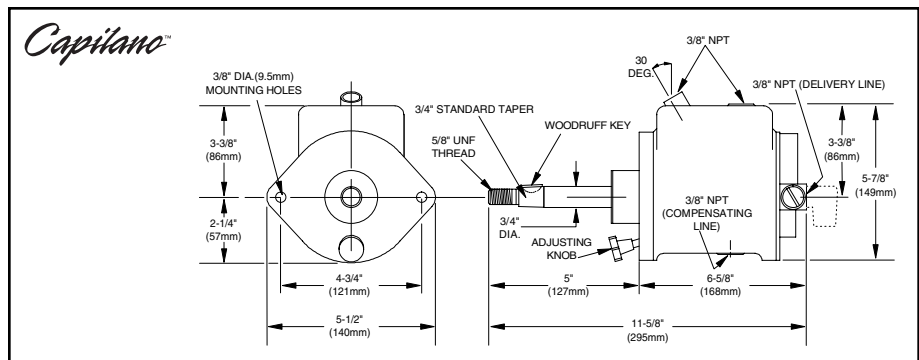


Hynautic Rear Mount



HELM SERIES	HELM MODEL/ PART NO.	DIMENSIONS (INCHES)			SHAFT KEY TYPE
		A	B	C	
H-20	H-21	6.125	10.75	3.5	1/4" square
	H-25	5.5	10.125	3.5	#9 Woodruff
	H-26	5.5	10.125	3.5	#9 Woodruff
H-40	H-41	6.125	13.625	5.125	1/4" square
	H-41-02	5.5	13.0	5.125	#9 Woodruff
	H-41	6.125	13.625	5.125	1/4" square
	H-42-02	5.5	13.0	5.125	#9 Woodruff

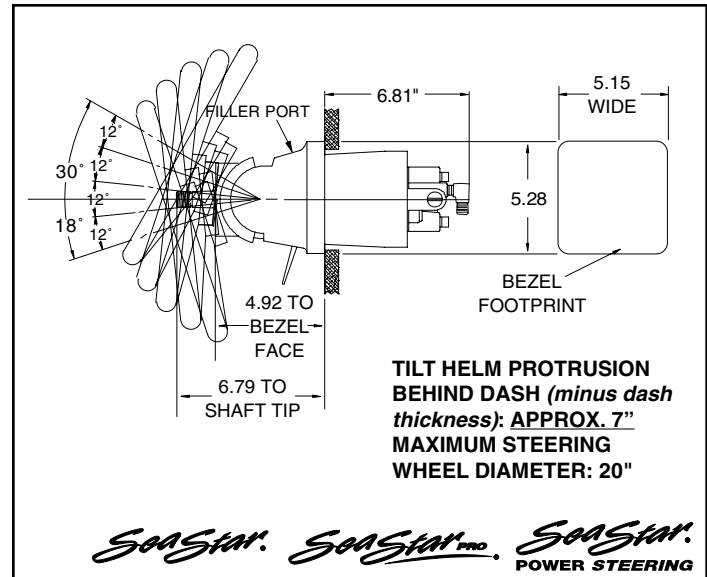
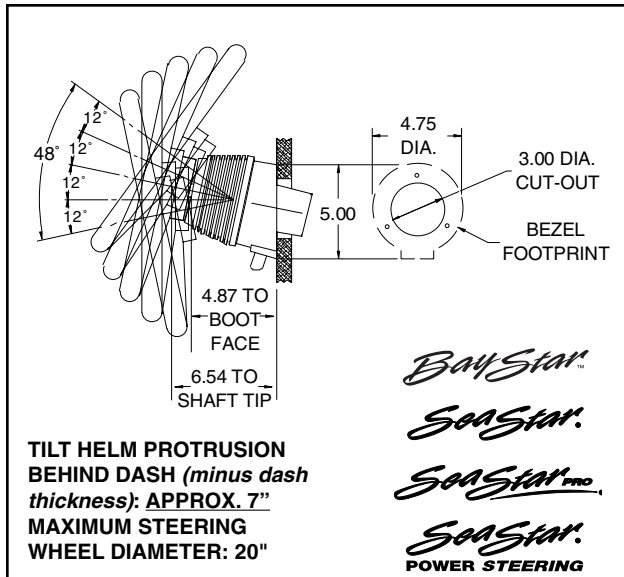
Capilano



HYDRAULIC STEERING dimensions

Performance Tilt:

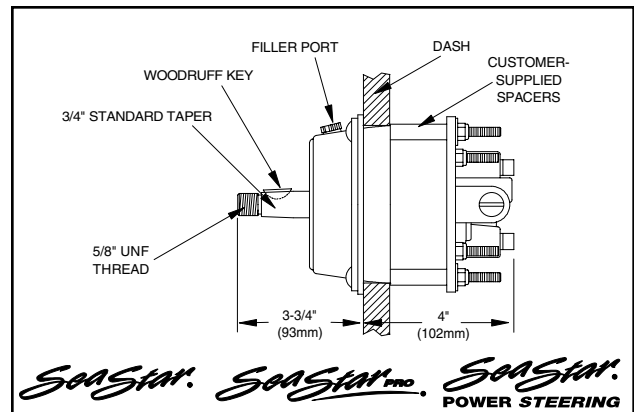
Traditional Tilt:



SeaStar Helm Mounting Options:

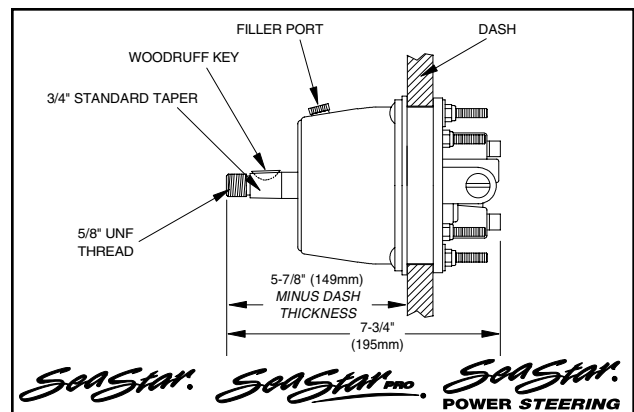
(for SeaStar front mount helms only)

Round Bezel Kit HA5417



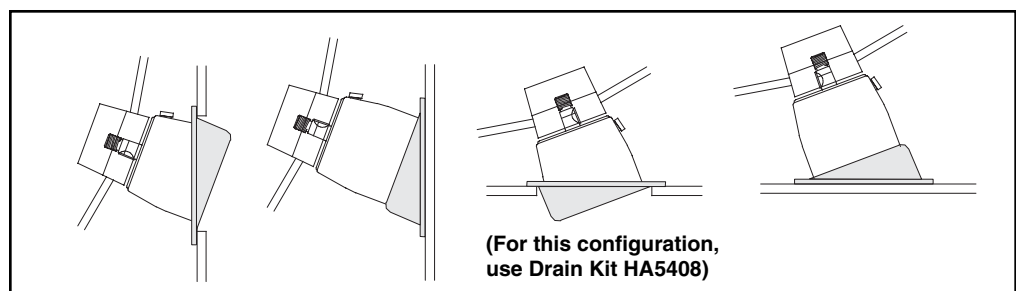
Square Backplate kit HA5418

Required when retrofitting SeaStar front mount helms into dashboard holes from the following steering systems:
Teleflex Mechancial steering: Big-T, Safe-T and most other rotary.
Teleflex Hydraulic steering: SyTen
Hynautic Hydraulic steering helms: H-50, H60, H-80, H-300.



Dash 20° Wedge Kit HA5419

SeaStar. **SeaStar PRO.**
SeaStar.
POWER STEERING



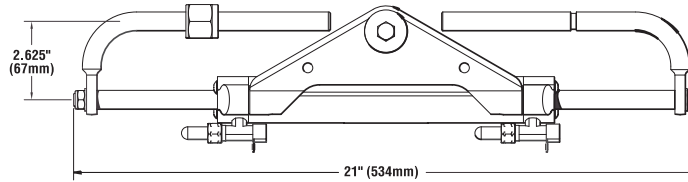
SeaStar steering dimensions

Cylinders: Outboard

HYDRAULIC STEERING dimensions

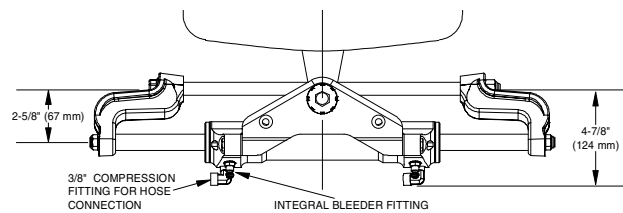
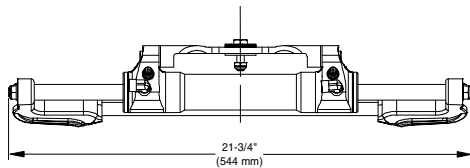
BayStar
(HC4645,
HC4647,
HC4648,
HC4658)

BayStar



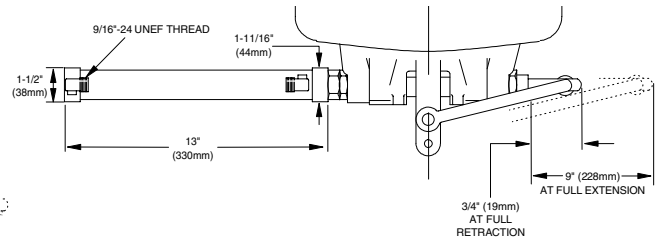
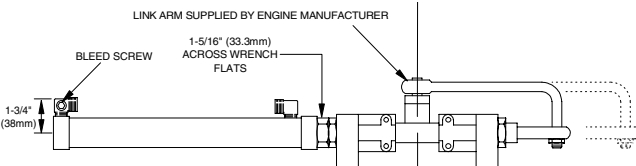
SeaStar Pivot Mount (includes PRO & Tournament)
(HC5345 shown)

SeaStar



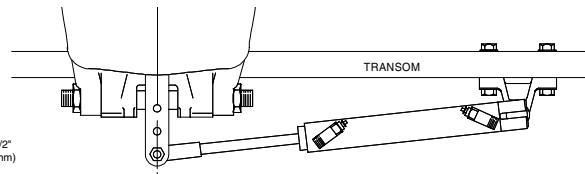
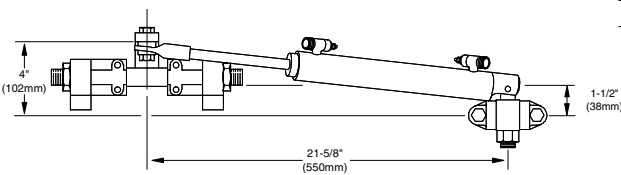
SeaStar Side Mount
(HC5370)

SeaStar

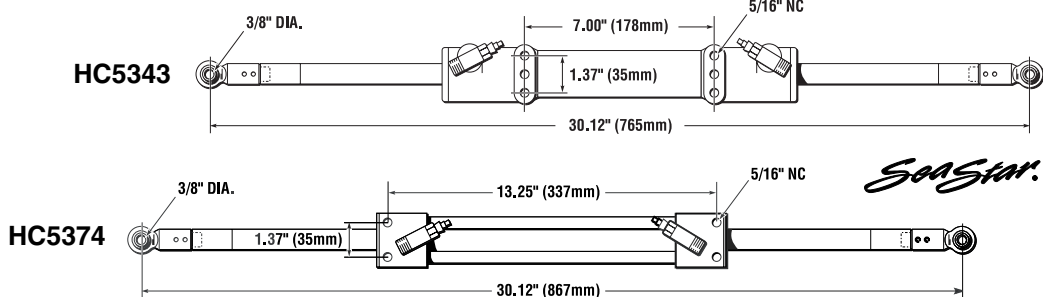


SeaStar Splashwell Mount
(HC5380)

SeaStar

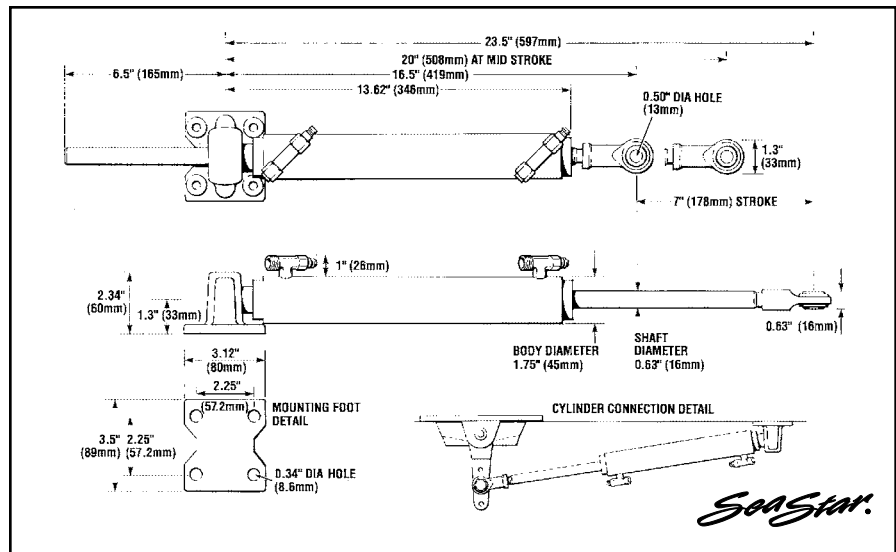


SeaStar
Catamaran/
Pontoon
(HC5343 &
HC5374)

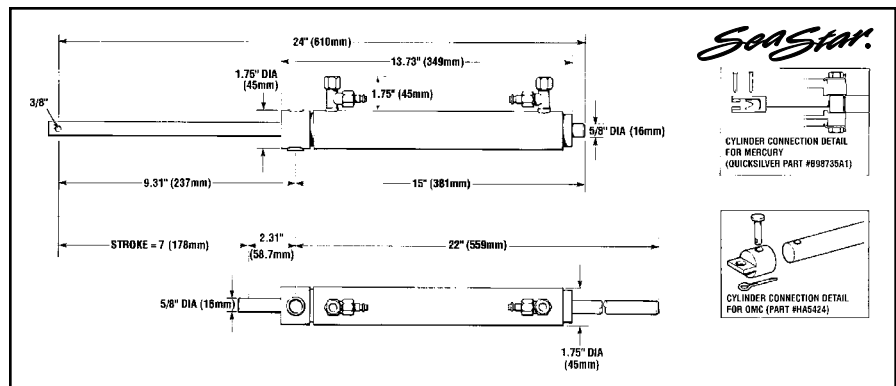


Cylinders: Stern Drive (I/O) Internal Mount

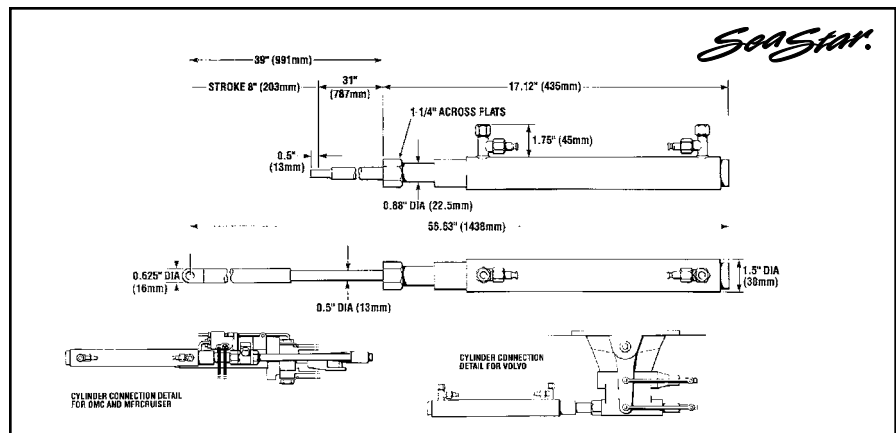
STERN DRIVE CYLINDER:
P/N HC5314
(MODEL BA150-7ATM)
Marine Drive Systems®
Series 1000
(Non Power Assisted, TO DATE)
Volvo® 275
(Non Power Assisted TO DATE)



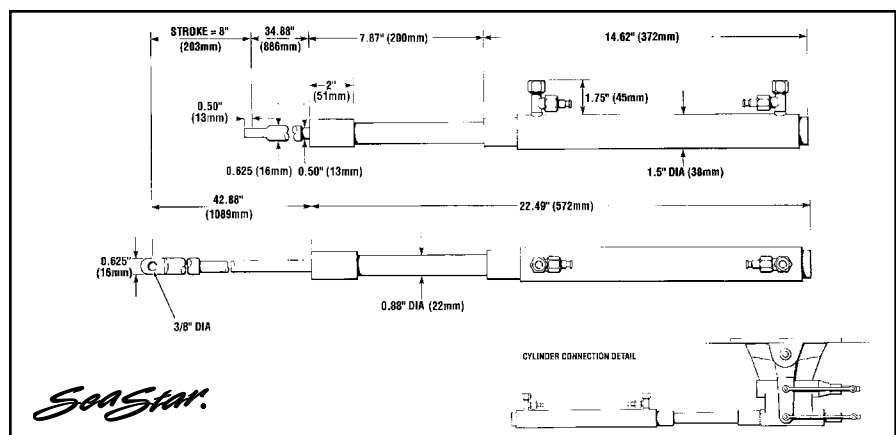
STERN DRIVE CYLINDER:
P/N HC5326
(MODEL BA150-7EM)
MerCruiser® ALPHA I;
MerCruiser® BRAVO I & II
(Non Power Assisted, 1984-DATE)
OMC® King Cobra
(Non Power Assisted; 1986-DATE)



STERN DRIVE CYLINDER:
P/N HC5328 (MODEL 125-8EM)
BMW® All Models
(Power Assisted, TO DATE)
MerCruiser® MERCRUISER I
(Power Assisted TO 1983)
MerCruiser® ALPHA I;
MerCruiser® BRAVO I & II
Power Assisted (1984-DATE)
OMC® King Cobra
(Power Assisted 1986-DATE)
Volvo® 280, 290
(Power Assisted TO DATE)
Yamaha® All Models
(Power Assisted 1989-DATE)



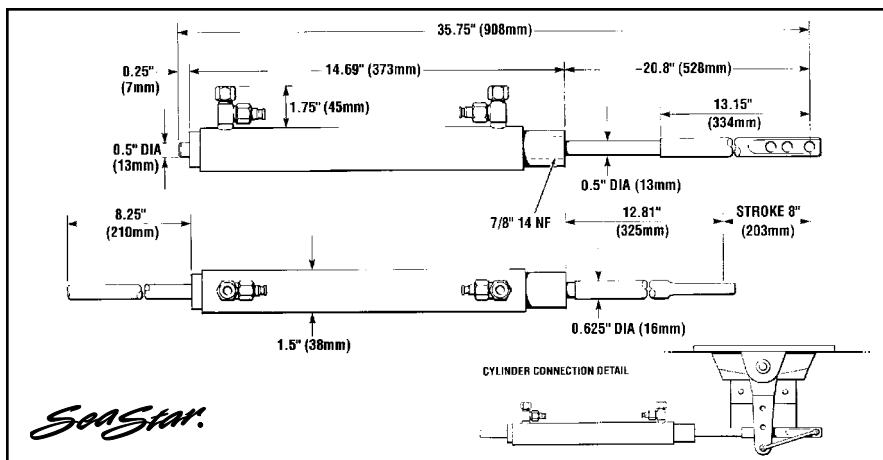
STERN DRIVE CYLINDER:
P/N HC5329
(MODEL 125-8VEM)
Volvo® Diesel
(Power Assisted, TO DATE)



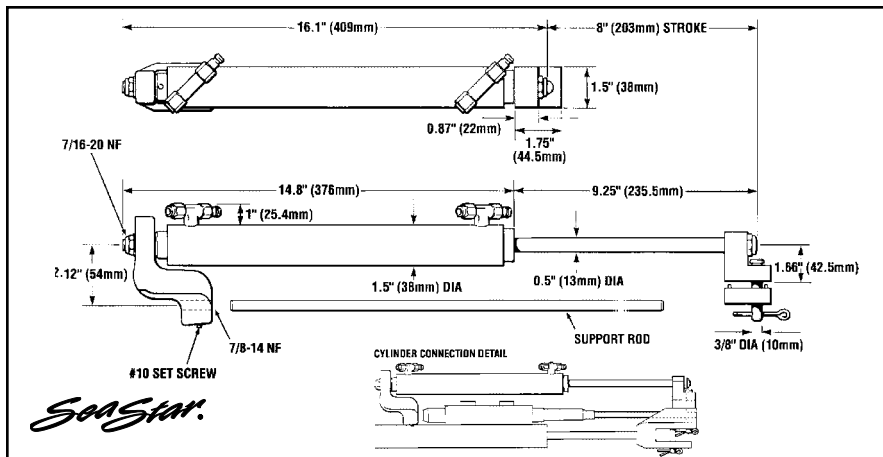
SeaStar steering dimensions

Stern Drive (I/O): Internal Mount

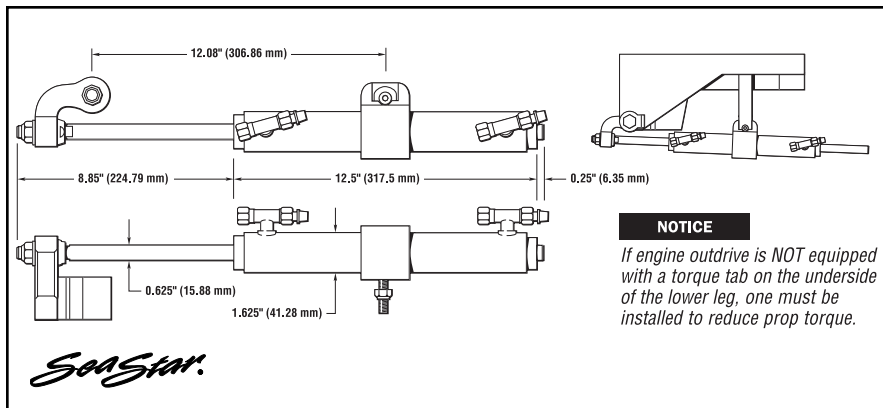
STERN DRIVE CYLINDER:
P/N HC5330
(MODEL BA125-8EMV)
BMW® All Models
(Non Power Assisted, TO DATE)
MerCruiser®, MerCruiser I
(Non Power Assisted, TO 1983)
Volvo® 280, 290 & Volvo® Diesel
(Non Power Assisted, TO DATE)



STERN DRIVE CYLINDER:
P/N HC5331
(MODEL 92-VPS)
Volvo® All Models
(Power Assisted, 1992)

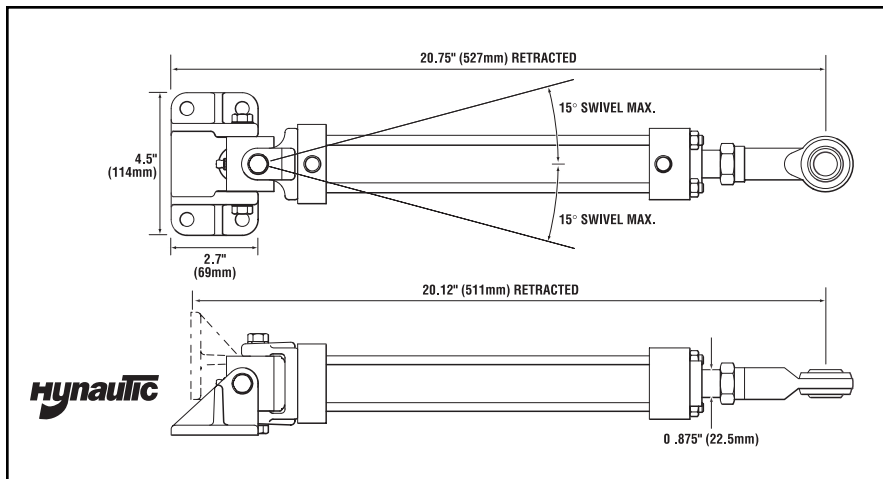
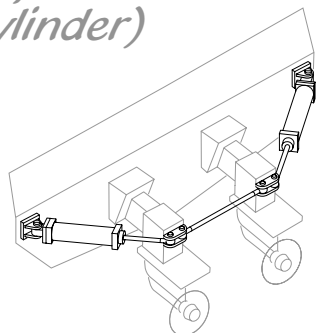


STERN DRIVE CYLINDER:
P/N HC5332
(MODEL 135-7EM)
MerCruiser® Alpha 1;
MerCruiser® Bravo I, II, III
(Non Power Assisted, TO DATE)
Volvo® 280, 290, Diesel
(Non Power Assisted, TO DATE)
NOTE: If engine outdrive is not equipped with a torque tab on the underside of the lower leg, one must be installed to reduce prop torque.



NOTICE
If engine outdrive is NOT equipped with a torque tab on the underside of the lower leg, one must be installed to reduce prop torque.

Heavy Duty External Mount (Hynautic K-5 cylinder)



Cylinders:

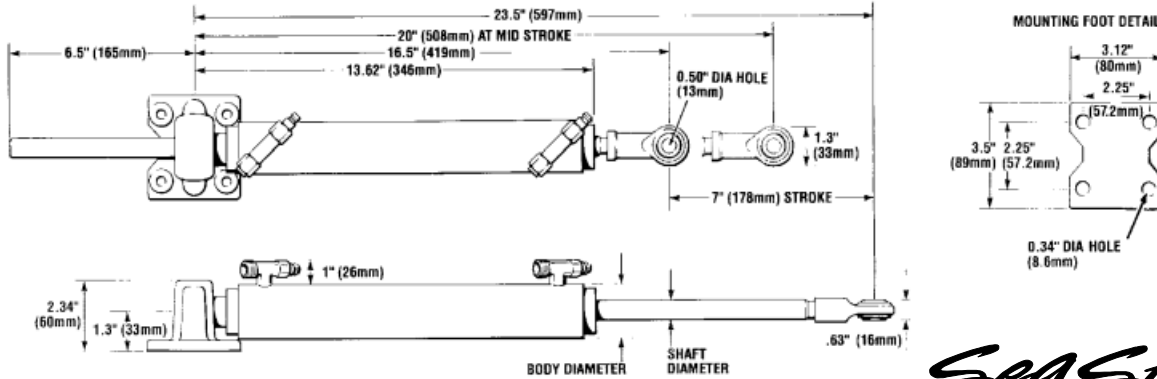
Inboard - Manual

Aluminum

DIMENSIONS

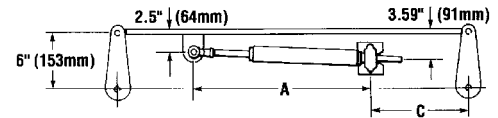
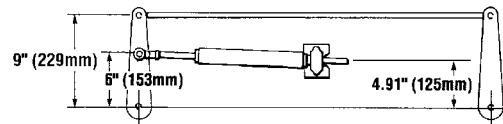
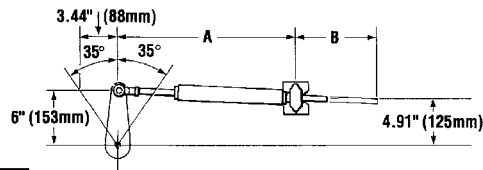
ATM (ALUMINUM BODY) INBOARD CYLINDERS
P/N HC5312/HC5313/HC5314 (MODEL BA1__-7ATM):

CYLINDER DIMENSIONS SPECIFIC TO MODEL			
CYLINDER MODEL	PART #	BODY DIAMETER	SHAFT DIAMETER
BA125-7ATM	HC5312	1.38" (35mm)	0.50" (12.7mm)
BA135-7ATM	HC5313	1.50" (38mm)	0.625" (15.9mm)
BA150-7ATM	HC5314	1.75" (45mm)	0.625" (15.9mm)



MOUNTING CONFIGURATION DIMENSIONS

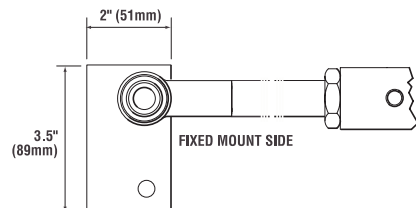
ATM (ALUMINUM BODY) INBOARD CYLINDERS
P/N HC5312/HC5313/HC5314 (MODEL BA1__-7ATM):



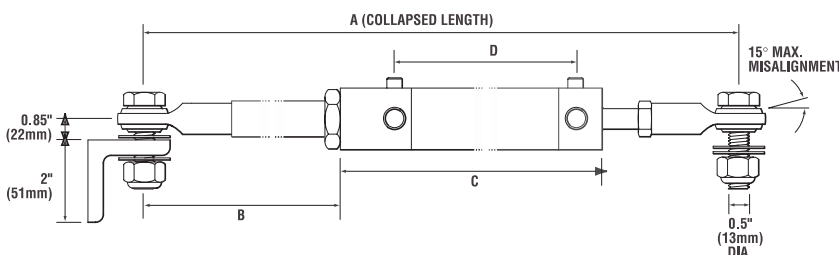
CYLINDER MODEL	PART #	MOUNTING DIMENSIONS		
		A	B	C
BA125-7ATM	HC5312	20" (508)	6.5" (165)	8.5" (216)
BA135-7ATM	HC5313	20" (508)	6.5" (165)	8.5" (216)
BA150-7ATM	HC5314	20" (508)	6.5" (165)	8.5" (216)

(Figures in parenthesis are in millimeters)

BALL JOINT MOUNT CYLINDERS (K-18/K-19)



CYL MODEL	DIMENSIONS						
	A	B	C	D	BORE	STROKE	DISP
K-18	24.5" (622)	9.31" (237)	11.75" (299)	9.875" (251)	1.25" (32)	7" (178)	6.4 (105.6)
K-19	28.5" (724)	11.31" (287)	13.75" (350)	11.875" (302)	1.25" (32)	9" (229)	8.3 (135.7)



HYDRAULIC STEERING dimensions

SeaStar steering dimensions

Cylinders:

Inboard - Manual

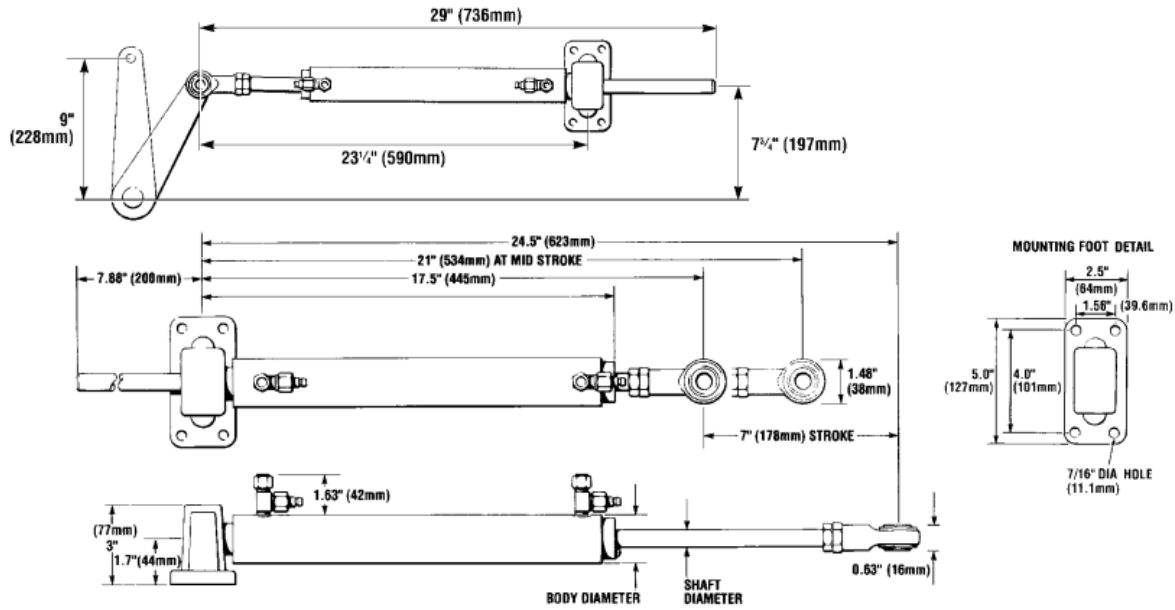
Brass - SeaStar



CYLINDER DIMENSIONS SPECIFIC TO MODEL			
CYLINDER MODEL	PART #	BODY DIAMETER	SHAFT DIAMETER
BA150-7TM	HC5318	1.75" (45mm)	0.625" (15.9mm)
BA150-9TM	HC5369	1.75" (45mm)	0.625" (15.9mm)
BA175-7TM	HC5319	2.00" (51mm)	0.75" (19.0mm)

DIMENSIONS

TM (BRASS BODY) INBOARD CYLINDERS
P/N HC5318/HC5369/HC5319 (MODEL BA1__-7TM):

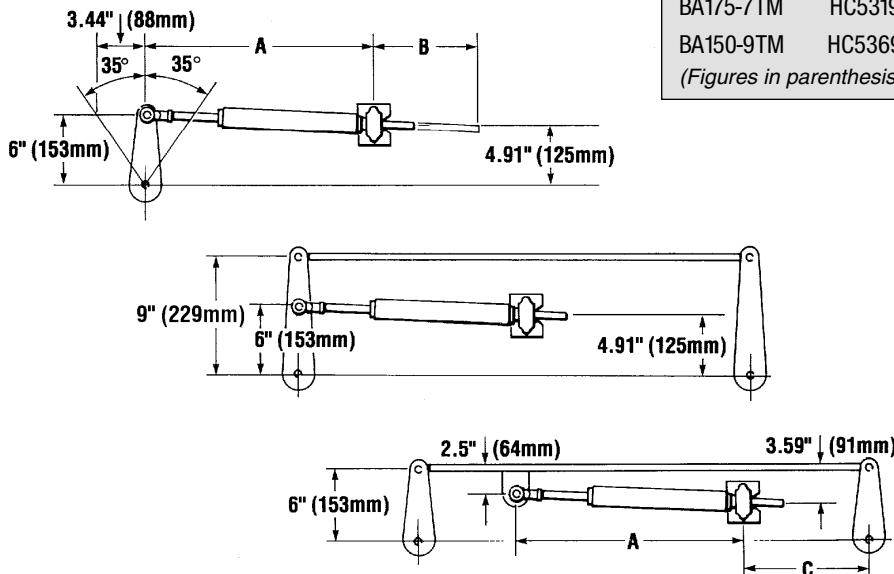


MOUNTING CONFIGURATION DIMENSIONS

TM (BRASS BODY) INBOARD CYLINDERS
P/N HC5318/HC5369/HC5319 (MODEL BA1__-7TM):

CYLINDER MODEL	PART #	MOUNTING DIMENSIONS		
		A	B	C
BA150-7TM	HC5318	21" (534)	8" (204)	10" (254)
BA175-7TM	HC5319	21" (534)	8" (204)	10" (254)
BA150-9TM	HC5369	21" (534)	8" (204)	10" (254)

(Figures in parenthesis are in millimeters)

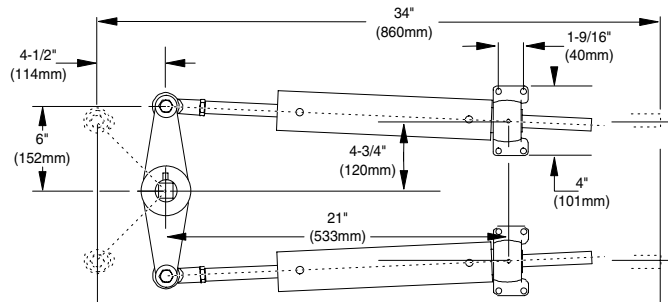
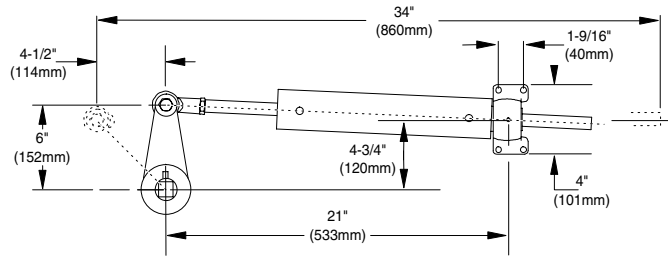


Cylinders:

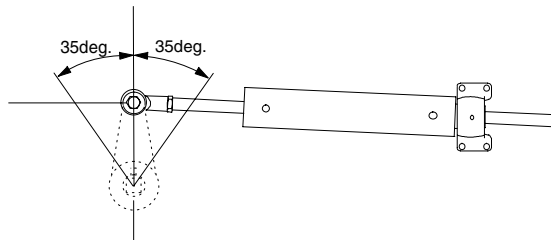
Inboard - Manual

Brass - Capilano

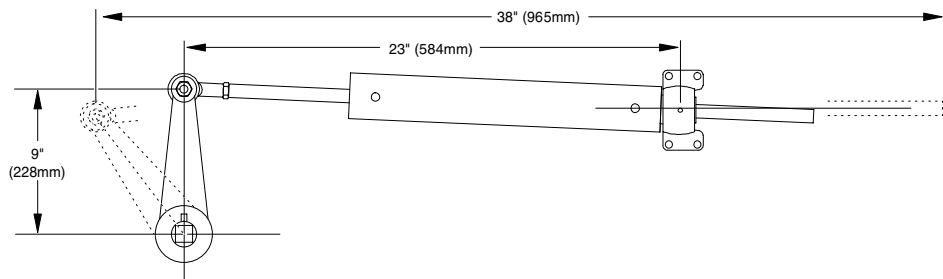
DIMENSIONS & MOUNTING CONFIGURATIONS
CAPILANO (BRASS BODY) INBOARD CYLINDERS
BALANCED 7" STROKE MODELS
 P/N's HC5349/HC5350/HC5351/HC5355/HC5356/HC5357
 (MODEL BA___-7TM_):



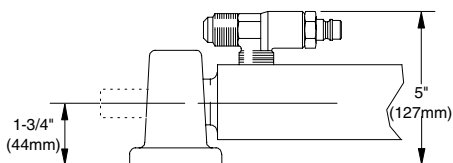
TYPICAL CYLINDER STROKE ARC:



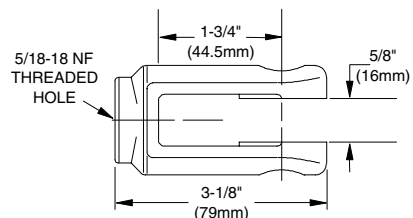
DIMENSIONS & MOUNTING CONFIGURATIONS
CAPILANO (BRASS BODY) INBOARD CYLINDERS
BALANCED 11" STROKE MODELS
 P/N's HC5378/HC5379
 (MODEL BA___-11TM_):



CYLINDER MOUNTING FOOT DETAIL - ALL 7" STROKE MODELS



CYLINDER ROD END CLEVIS DIMENSIONS



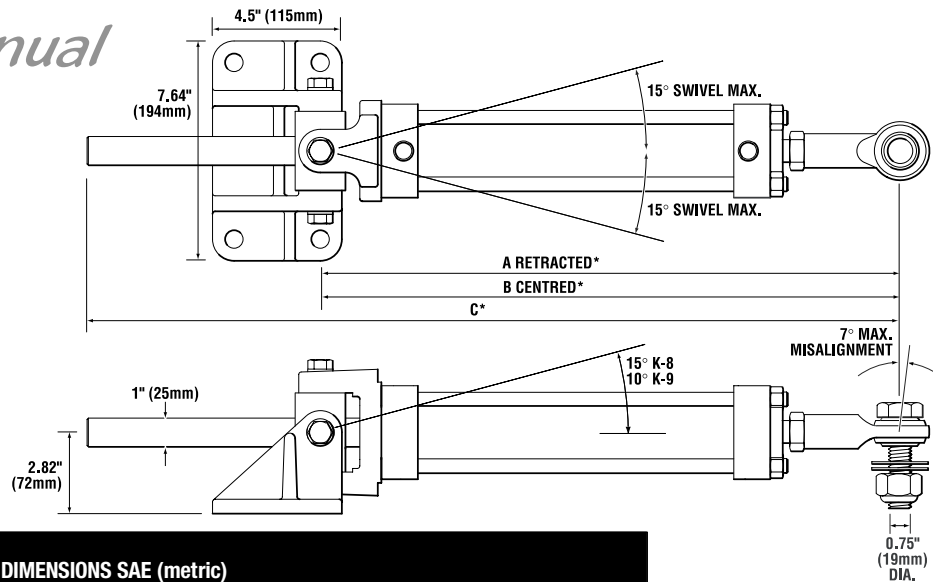
SeaStar steering dimensions

Cylinders:

Inboard - Manual Brass - Hynautic

“UNIVERSAL MOUNT”
MODELS:
P/N K-8/K-9

SeaStar
Capitano
hynautic

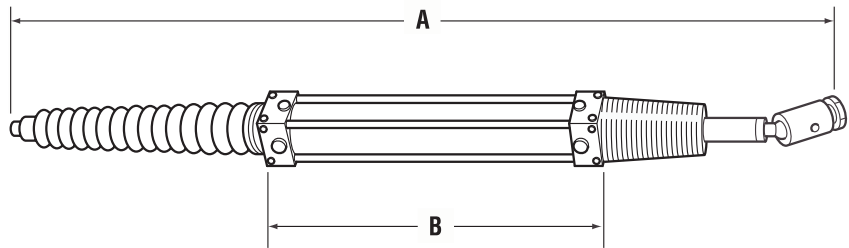


CYL MODEL	DIMENSIONS SAE (metric)					
	A*	B*	C*	BORE	STROKE	DISPLACEMENT
K-8	19.74" (502mm)	24.47" (622mm)	27.92" (710mm)	2.5" (64mm)	9.5" (241mm)	39.2 ci (641.9 cc)
K-9	24.74" (629mm)	31.99" (813mm)	37.92" (350mm)	2.5" (64mm)	14.5" (368mm)	59.8 ci (979.8 cc)

* Clevis option increases length by .44" (12mm)

“UNIVERSAL MOUNT” MODEL: P/N K-5-B (SEE STERN DRIVE CYLINDERS, ON PREVIOUS PAGES)

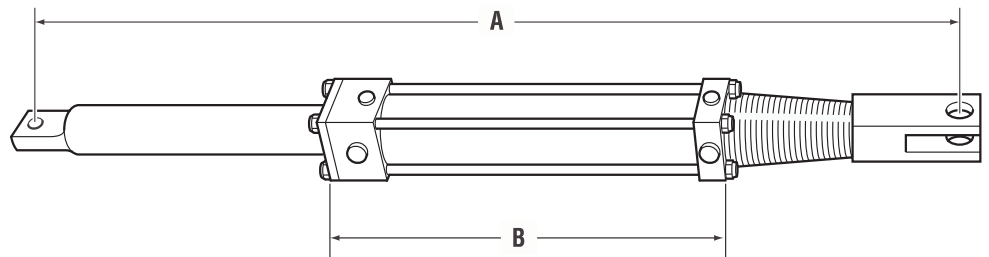
“FIXED MOUNT”
MODELS:
P/N K-22/K-27



CYL MODEL	DIMENSIONS SAE (metric)				
	A	B	BORE	STROKE	DISPLACEMENT
K-22	*34.12" (876mm)	13.25" (337mm)	1.5" (38mm)	10" (254mm)	13.3 ci (217.2 cc)
K-27	*36.75" (934mm)	13.25" (337mm)	1.5" (38mm)	10" (254mm)	13.3 ci (217.2 cc)

* Dimensions are with the cylinder rod centered

“PIVOT MOUNT”
MODEL:
P/N K-31



CYL MODEL	DIMENSIONS SAE (metric)				
	A	B	BORE	STROKE	DISPLACEMENT
K-31	*38.37" (975mm)	14.12" (359mm)	2.0" (51mm)	10" (254mm)	25.4 ci (416.3 cc)*

Dimensions are with the cylinder rod centered