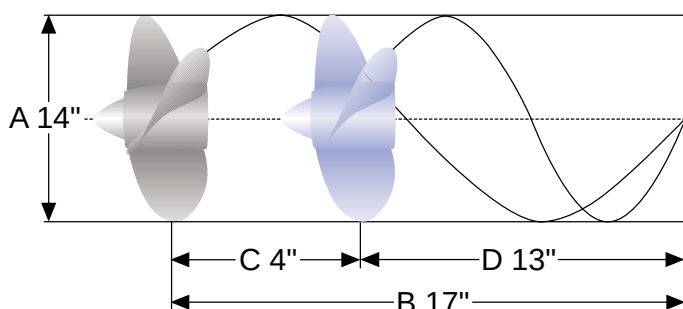




Propeller dimensions

The dimensions of a propeller are usually stated with two measurements, for example, 14 x 17 (this does not apply to DP propellers, the dimensions of which are stated by means of a special sizing code). The first of these two measurements refers to the diameter of the propeller – 14" (A). The second measurement refers to the pitch of the propeller – 17" (B).

Diameter

A rotating propeller describes a circle (A) – the diameter of this circle is also the diameter of the propeller.

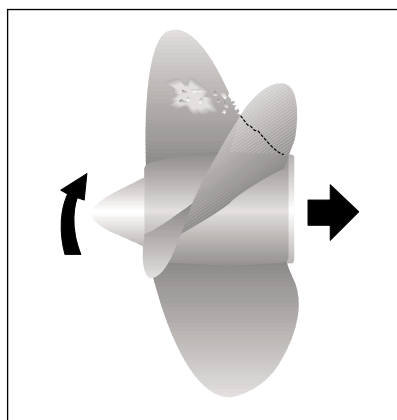
Pitch

The pitch of the propeller refers to the distance (forwards or backwards) the propeller moves in describing one complete rotation – this can simply be likened to a screw being screwed into a piece of wood! As water is not a solid substance the propeller will move some 70 to 90% of this distance, D. The remaining 10 to 30% difference is known as "slip", C.

Right hand or left hand propeller?

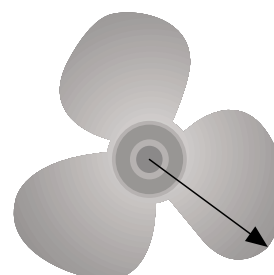
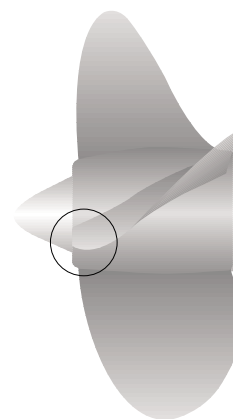
When replacing a propeller it is absolutely essential to choose the correct type of propeller. Should the propeller rotate clockwise or anti-clockwise?

The illustration shows the difference between the two.



Cavitation and cavitation corrosion

When a propeller moves through water, the water is forced against the pressure side of the propeller. The faster the propeller blades cut through the water the lower the pressure on the reverse side of the blades. At a certain speed, which varies from case to case, the pressure on the reverse side of the blade becomes so low that the water begins to "boil" – and bubbles of steam mixed with air are formed. The effect of cavitation can then be felt as the bubbles make the blades of the propeller "thicker" and increases the resistance of the water to the propeller blades thus reducing their effective performance. The bubbles of steam and air "ambulate" about the blade and when they reach a area where the water pressure is higher, they are forced together and they implode. The energy released can be compared with a water hammer that chips away fragments of the propeller blade. The resulting damage is similar to corrosion and is therefore known as cavitation corrosion. The reasons for cavitation can be many; an unevenness of the propellers leading edge, exaggerated cupping, blade edges that are too sharp or poor surface finish are a few such reasons.



Cupping

Cupping means that the trailing edges of the propeller blades have been bent in order to increase its pitch. Cupping is most suited to propellers for powerful engines and gives them a better "grip" in the water.

Measuring the diameter of a propeller

It may sometimes be difficult to find the size number on a propeller. In such cases, measure from the centre of the propeller hub to the tip of one of the blades and then multiply this figure by two.



45.1
DUOPROP, TYPE A ALUMINIUM
PROPELLERS FOR DP280, 290
Note! Propellers with different size codes must never be mounted on the same drive!

Propeller cone, kit for DP.

Part no.	Shaft, mm
872549-1	20
872614-3	16



DIM				DIM			
A 0	872270-4	872259-7	872264-7	A 6	854769-7	854779-6	854789-5
A 1	854764-8	854774-7	854784-6	A 7	854770-5	854780-4	854790-3
A 2	854765-5	854775-4	854785-3	A 8	854771-3	854781-2	854791-1
A 3	854766-3	854776-2	854786-1	A 9	854772-1	854782-0	854792-9
A 4	854767-1	854777-0	854787-9	A 10	854773-9	852271-6	852273-2
A 5	854768-9	854778-8	854788-7				



AQAD30 3600–3800 RPM Ratio 2.30:1 110 HP			A4	A5	A6	A7	A8	A9	A10				
AQAD31, AD31 3000–3250 RPM Ratio 2.30:1 110 HP			A3	A4	A5	A6	A7	A8	A9				
AQAD40 3400–3600 RPM Ratio 1.95:1 155 HP			A3	A4	A5	A6	A7	A8	A9	A10			
AQD40 3400–3600 RPM Ratio 2.30:1 130 HP			A5	A6	A7	A8	A9	A10					
AD41P 147CSKW/138PSKW 3700-3900 RPM Ratio 1.78:1			A0	A1	A2	A3	A4	A5	A6	A7	A8		
AD41P 147CSKW/138PSKW 3800-3900 RPM Ratio 1.95:1			A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	
AD41L 121CSKW/113PSKW 3400-3600 RPM Ratio 1.95:1		A1	A2	A3	A4	A5	A6	A7	A8	A9	A10		
D41L 111CSKW/103PSKW 3800-3900 RPM Ratio 1.95:1			A0	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10
AD31P 110CSKW/101PSKW 3900-4100 RPM Ratio 2.32:1		A2	A3	A4	A5	A6	A7	A8	A9	A10			
AD31L 95CSKW/88PSKW 3700-3900 RPM Ratio 2.32:1	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10			
KAD32 125CSKW/118PSKW 3700-3900 RPM Ratio 1.95:1		A0	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	



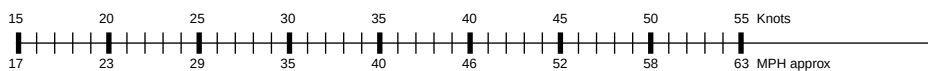
45.2

**DUOPROP TYPE B ALUMINIUM
PROPELLERS FOR DP280, 290**

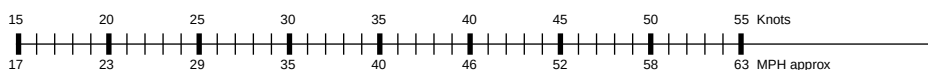
Note! Propellers with different size codes must never be mounted on the same drive!



DIM				DIM			
B 1	854814-1	854822-4	854830-7	B 5	854818-2	854826-5	854834-9
B 2	854815-8	854823-2	854831-5	B 6	854819-0	854827-3	854835-6
B 3	854816-6	854824-0	854832-3	B 7	854820-8	854828-1	854836-4
B 4	854817-4	854825-7	854833-1	B 8	854821-6	854829-9	854837-2



AQ175 Ratio 2.30:1 4400-4800 RPM				B2	B3	B4	B5	B6	B7	B8		
AQ205/DP, 431/DP Ratio 2.30:1 4400-4800 RPM		B1	B2	B3	B4	B5	B6	B7	B8			
AQ200/DP Ratio 1.95:1 4000-4400 RPM				B1	B2	B3	B4	B5	B6	B7	B8	
AQ211/DP, 500/DP Ratio 1.95:1 4000-4400 RPM				B1	B2	B3	B4	B5	B6	B7	B8	
AQ225/DP Ratio 1.95:1 4000-4400 RPM				B1	B2	B3	B4	B5	B6	B7	B8	
AQ231/DP, 501/DP Ratio 1.95:1 4200-4600 RPM				B1	B2	B3	B4	B5	B6	B7	B8	
AQ260 Ratio 1.95:1 4000-4400 RPM				B1	B2	B3	B4	B5	B6	B7	B8	
AQ271/DP, 570/DP Ratio 1.95:1 4200-4600 RPM				B1	B2	B3	B4	B5	B6	B7	B8	
4.3 GI* 159GSKW/145PSKW Ratio 1.95:1 4400-4800 RPM					B1	B2	B3	B4	B5	B6	B7	B8
4.3 GI* 159GSKW/145PSKW Ratio 2.30:1 4400-4800 RPM		B1	B2	B3	B4	B5	B6	B7	B8			
4.3 GS 159GSKW/145PSKW Ratio 1.95:1 4400-4800 RPM					B1	B2	B3	B4	B5	B6	B7	B8
4.3 GS 159GSKW/145PSKW Ratio 2.30:1 4400-4800 RPM		B1	B2	B3	B4	B5	B6	B7	B8			
4.3 GL 144GSKW/131PSKW Ratio 1.95:1 4200-4600 RPM					B1	B2	B3	B4	B5	B6	B7	B8
4.3 GL 144GSKW/131PSKW Ratio 2.30:1 4200-4600 RPM	B1	B2	B3	B4	B5	B6	B7	B8				
5.0 FL Ratio 1.95:1 4000-4400 RPM					B1	B2	B3	B4	B5	B6	B7	B8
5.0 FI/DP Ratio 1.95:1 4200-4600 RPM					B1	B2	B3	B4	B5	B6	B7	
5.8 FL Ratio 1.95:1 4000-4400 RPM				B1	B2	B3	B4	B5	B6	B7	B8	
5.8 FSI/DP Ratio 1.78:1 4200-4600 RPM					B1	B2	B3	B4	B5	B6	B7	B8
5.7 GL 169CSKW/154PSKW Ratio 1.95:1 4200-4600 RPM					B1	B2	B3	B4	B5	B6	B7	
7.4 GL 224CSKW/204PSKW Ratio 1.78:1 4200-4600 RPM					B1	B2	B3	B4	B5			
5.7 GSI 227GSKW/210PSKW Ratio 1.95:1 4600-5000 RPM					B1	B2	B3	B4	B5	B6	B7	B8
5.7 GI* 180GSKW/164PSKW Ratio 1.95:1 4200-4600 RPM				B1	B2	B3	B4	B5	B6	B7	B8	
5.7 GS 185GSKW/169PSKW Ratio 1.95:1 4200-4600 RPM				B1	B2	B3	B4	B5	B6	B7	B8	
740/DP Ratio 1.78:1 4000-4400 RPM		B1	B2	B3	B4	B5						
KAD42/DP 170CSKW/159PSKW Ratio 1.78:1 3800-3900 RPM			B2	B3	B4	B5	B6	B7	B8	*		
KAD43 170CSKW/159PSKW Ratio 1.78:1 3800-3900 RPM			B2	B3	B4	B5	B6	B7	B8	*		
KAD44 191CSKW/181PSKW Ratio 1.68:1 3800-3900 RPM				B1	B2	B3	B4	B5	B6	B7	B8	*



* For KAD engines stainless steel propellers, type C, are recommended.

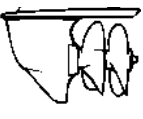
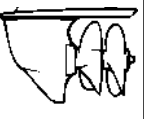
45.3
DUOPROP, TYPE C STAINLESS STEEL
PROPELLERS FOR DP280, 290

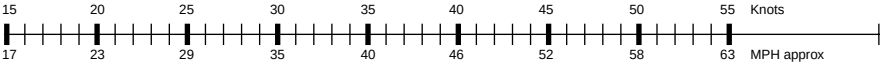
Note! Propellers with different size codes
must never be mounted on the same drive!
The cone is black in reality.

Propeller cone, kit for DP.

Part no.	Shaft, mm
872549-1	20
872614-3	16



DIM				DIM			
C 2	3860877-4	3860602-6	3860603-4	C 5	3857496-8	3857462-0	3857466-1
C 3	3860878-2	3860604-2	3860605-9	C 6	3857497-6	3857463-8	3857467-9
C 4	3857495-0	3857461-2	3857465-3	C 7	3857498-4	3857464-6	3857468-7



431/DP, AQ205DP Ratio 2.30:1 4400-4800 RPM	C4	C5	C6	C7
500/DP, AQ211DP Ratio 1.95:1 4000-4400 RPM	C4	C5	C6	C7
501/DP, AQ231/DP 4200-4600 RPM	C4	C5	C6	C7
570/DP, AQ271DP Ratio 1.95:1 4200-4600 RPM	C4	C5	C6	C7
740/DP Ratio 1.78:1 4000-4400 RPM	C4	C5	C6	C7
AD31L 95CSKW/88PSKW Ratio 2.3:1 3700-3900 RPM	C4	C5	C6	C7
D41 L 111CSKW/103PSKW Ratio 1.95:1 3800-3900 RPM	C4	C5	C6	C7
AD41 P 147CSKW/138PSKW Ratio 1.78:1 3700-3900 RPM	C4	C5	C6	C7
AD41 L 121CSKW/113PSKW Ratio 1.95:1 3400-3600 RPM	C4	C5	C6	C7
AD41 P 147CSKW/138PSKW Ratio 1.95:1 3800-3900 RPM	C4	C5	C6	C7
KAD42 170CSKW/179PSKW Ratio 1.78:1 3800-3900 RPM	C4	C5	C6	C7
4.3 Gi* 159CSKW/145PSKW 4400-4800 RPM Ratio 1.95:1	C4	C5	C6	C7
4.3 Gi* 159CSKW/145PSKW Ratio 2.3:1 4400-4800 RPM	C4	C5	C6	C7
4.3 GL 144CSKW/131PSKW Ratio 1.95:1 4200-4600 RPM	C4	C5	C6	C7
4.3 GL 144CSKW/131PSKW Ratio 2.3:1 4200-4600 RPM	C4	C5	C6	C7
4.3 GS 159CSKW/145PSKW Ratio 1.95:1 4400-4800 RPM	C4	C5	C6	C7
4.3 GS 159CSKW/145PSKW Ratio 2.3:1 4400-4800 RPM	C4	C5	C6	C7
5.0 FI/DP 220 SHP Ratio 1.95:1 4200-4600 RPM	C4	C5	C6	C7
5.0 FL/DP 190 SHP Ratio 1.95:1 4200-4600 RPM	C4	C5	C6	C7
5.7 Gi* 180CSKW/164PSKW Ratio 1.95:1 4200-4600 RPM	C4	C5	C6	C7
5.7 GL 169CSKW/154PSKW Ratio 1.95:1 4200-4600 RPM	C4	C5	C6	C7
5.7 GS 185CSKW/169PSKW Ratio 1.95:1 4200-4600 RPM	C4	C5	C6	C7
5.7 GSi 227CSKW/210PSKW Ratio 1.95:1 4600-5000 RPM	C4	C5	C6	C7
5.8 FI/DP 235 SHP Ratio 1.95:1 4000-4400 RPM	C4	C5	C6	C7
5.8 FS/DP 275 SHP Ratio 1.78:1 4600-5000 RPM	C4	C5	C6	
7.4 Gi* 242CSKW/218PSKW Ratio 1.68:1 4200-4600 RPM	C4	C5	C6	C7
7.4 Gi* 242CSKW/218PSKW Ratio 1.78:1 4200-4600 RPM	C4	C5	C6	C7
7.4 GL 224CSKW/204PSKW Ratio 1.78:1 4200-4600 RPM	C4	C5	C6	C7
AD31 P 110CSKW/101PSKW Ratio 2.3:1 3800-4000 RPM	C4	C5	C6	C7
KAD32 125CSKW/118PSKW Ratio 1.95:1 3800-3900 RPM	C4	C5	C6	C7
KAD43 170CSKW/159PSKW Ratio 1.78:1 3800-3900 RPM	C4	C5	C6	C7
KAD44 191CSKW/181PSKW Ratio 1.68:1 3800-3900 RPM	C4	C5	C6	C7



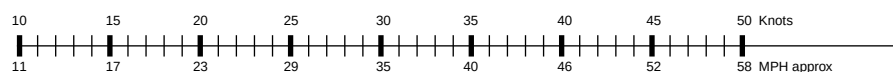
45.22

**DUOPROP TYPE D, ALUMINIUM
PROPELLERS FOR DP-S DRIVES**

45.22

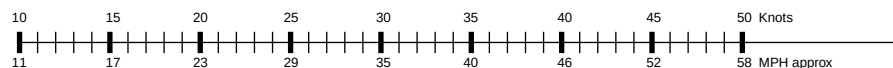
6033

DIM				DIM			
D 0	3851480-8	3851420-4	3851440-2	D 5	3856365-6	3856345-8	3856355-7
D 1	3851481-6	3851421-2	3851441-0	D 6	3856366-4	3856346-6	3856356-5
D 2	3851482-4	3851422-0	3851442-8	D 7	3856367-2	3856347-2	3856357-3
D 3	3851483-2	3851423-8	3851443-6				
D 4	3851484-0	3851424-6	3851444-4				



4.3 GL Ratio 2.32:1 144CSKW/131PSKW	D0	D1	D2	D3	D4	D5	D6	D7	
4.3GS Ratio 2.32:1 159CSKW/145PSKW	D0	D1	D2	D3	D4	D5	D6	D7	
4.3 Gi Ratio 2.32:1 159CSKW/145PSKW	D0	D1	D2	D3	D4	D5	D6	D7	
4.3 Gi Ratio 1.95:1 4400-4800 RPM 205 SHP					D0	D1	D2	D3	D4
4.3 GS Ratio 1.95:1 4400-4800 RPM 205 SHP					D0	D1	D2	D3	D4
5.0 FL Ratio 1.95:1 4200-4600 RPM 190 SHP				D1	D2	D3	D4		
5.0 Fi Ratio 1.95:1 4200-4600 RPM 220 SHP			D1	D2	D3	D4	D5		
5.0Gi Ratio 1.95:1 4600-5000 RPM 201CSKW/186PSKW				D0	D1	D2	D3		
5.0GL Ratio 1.95:1 440-4800 RPM 179CSKW/164PSKW				D0	D1	D2	D3	D4	
5.7 GL Ratio 1.95:1 4200-4600 RPM 215 SHP				D2	D3	D4	D5	D6	
5.7GS Ratio 1.95:1 4400-4800 RPM 205CSKW/191PSKW			D0	D1	D2	D3	D4	D5	
5.8 FL Ratio 1.95:1 4000-4400 RPM 235 SHP				D2	D3	D4	D5	D6	
5.7 Gi Ratio 1.95:1 4200-4600 RPM 250 SHP				D2	D3	D4	D5		
5.8 Fi Ratio 1.78:1 4200-4600 RPM 255 SHP				D2	D3	D4	D5		
5.8 FSj Ratio 1.95:1 4200-4600 RPM 255 SHP				D2	D3	D4	D5		
5.8 FSj Ratio 1.95:1 4600-5000 RPM 275 SHP				D1	D2	D3	D4		
5.7 GSi Ratio 1.95:1 4600-5000 RPM 280 SHP				D0	D1	D2	D3	D4	
5.7 GSi Ratio 1.78:1 4600-5000 RPM 227CSKW/210PSKW					D0	D1	D2	D3	
7.4GL Ratio 1.78:1 4200-4600 RPM 300 SHP		D1	D2	D3	D4	D5			
7.4 Gi Ratio 1.78:1 4200-4600 RPM 235CSKW/210PSKW			D0	D1	D2	D3	D4		
7.4 Gi Ratio 1.68:1 4200-4600 RPM 235CSKW/210PSKW				D0	D1	D2	D3		
KAD32 Ratio 1.95:1 3700-3900 RPM 125CSKW/118PSKW	D0	D1	D2	D3	D4	D5	D6	D7	

Note: Aluminium propellers are not approved above 48 mph on big-block engines



D0, D1, D2, D3, D4 are recommended for all engines.

D5, D6, D7 are recommended for following installations:

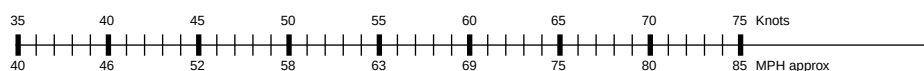
- V6 engines with gear ratio 2,3:1.
- V6 engines with gear ratio 1,95:1 and speed below 35 knots.
- V8 engines with speed below 35 knots.

For installations where D propellers are not recommended, the F propellers should be used. See page 75.

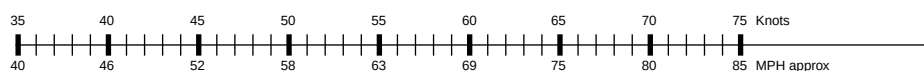
45.4 DUOPROP, TYPE E STAINLESS STEEL PROPELLERS FOR DPX DRIVES



DIM			
E 2	3860065-6	872422-1	3860011-0
E 3	3860066-4	872423-9	3860012-8
E 4	3860067-2	872424-7	3860013-6



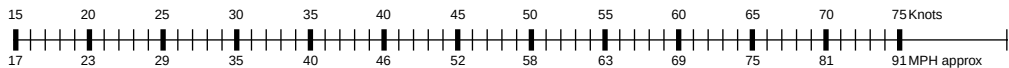
KAD42 169CSKW/159PSKW Ratio 1.78:1 3800-3900RPM		E2	E3	E4						
KAD42 169CSKW/159PSKW Ratio 1.68:1 3800-3900RPM		E2	E3	E4						
KAD43 170CSKW/159PSKW Ratio 1.59:1 3800-3900 RPM			E2	E3	E4					
KAD43 170CSKW/159PSKW Ratio 1.68:1 3800-3900 RPM		E2	E3	E4						
KAD43 170CSKW/159PSKW Ratio 1.78:1 3800-3900 RPM		E2	E3	E4						
KAD44 191CSKW/181PSKW Ratio 1.59:1 3800-3900 RPM			E2	E3	E4					
KAD44 191CSKW/181PSKW Ratio 1.68:1 3800-3900 RPM		E2	E3	E4						
7.4 GSI/DPX Ratio 1.68:1 4800-5200RPM					E2	E3	E4			
7.4 GSI/DPX Ratio 1.78:1 4800-5200RPM					E2	E3	E4			
8.2 GL /DPX Ratio 1.78:1 4700-5000 RPM					E2	E3	E4			
8.2 GL /DPX Ratio 1.68:1 4700-5000 RPM					E2	E3	E4			
DPX415301CSKW/271PSKW Ratio 1.59:1 4600-5000 RPM						E2	E3	E4		
DPX415301CSKW/271PSKW Ratio 1.68:1 4600-5000 RPM						E2	E3	E4		
DPX415301CSKW/271PSKW Ratio 1.78:1 4600-5000 RPM						E2	E3	E4		
DPX385292CSKW/262PSKW Ratio 1.59:1 4800-5200 RPM							E2	E3	E4	
DPX385292CSKW/262PSKW Ratio 1.68:1 4800-5200 RPM							E2	E3	E4	
DPX385292CSKW/262PSKW Ratio 1.78:1 4800-5200 RPM							E2	E3	E4	
DPX300230CSKW/212PSKW Ratio 1.59:1 4600-5000 RPM							E2	E3	E4	
DPX300230CSKW/212PSKW Ratio 1.68:1 4600-5000 RPM							E2	E3	E4	
DPX300230CSKW/212PSKW Ratio 1.78:1 4600-5000 RPM							E2	E3	E4	



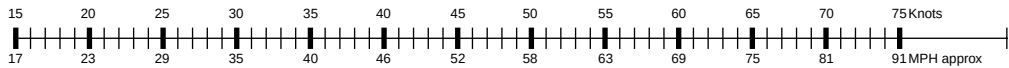
45.23
DUOPROP TYPE F, STAINLESS STEEL
PROPELLERS FOR DP-S DRIVES



DIM				DIM			
F 2	3857563-5	3857557-7	3857558-5	F 6	3851496-4	3851466-7	3851476-6
F 3	3857564-3	3857559-3	3857560-1	F 7	3851497-2	3851467-5	3851477-4
F 4	3851494-9	3851464-2	3851474-1	F 8	3851498-0	3851468-3	3851478-2
F 5	3851495-6	3851465-9	3851475-8	F 9	3851499-8	3851469-1	3851479-0



4.3 Gi* 159CSKW/145PSKW Ratio 2.32:1 4400-4800 RPM		F2	F3	F4	F5	F6	F7	F8	F9					
4.3 Gi* 159CSKW/145PSKW Ratio 1.95:1 4400-4800 RPM					F2	F3	F4	F5	F6	F7	F8	F9		
4.3 GL 144CSKW/131PSKW Ratio 1.95:1 4200-4600 RPM				F2	F3	F4	F5	F6	F7	F8	F9			
4.3 GL 144CSKW/131PSKW Ratio 2.32:1 4200-4600 RPM		F2	F3	F4	F5	F6	F7	F8	F9					
4.3 GS 159CSKW/145PSKW Ratio 2.32:1 4400-4800 RPM			F2	F3	F4	F5	F6	F7	F8	F9				
4.3 GS 159CSKW/145PSKW Ratio 1.95:1 4400-4800 RPM					F2	F3	F4	F5	F6	F7	F8	F9		
5.0 FL 4200-4600 RPM Ratio 1.95:1 190 SHP						F4	F5	F6	F7	F8	F9			
5.0 Fi 4200-4600 RPM Ratio 1.95:1 220 SHP						F4	F5	F6	F7	F8	F9			
5.0 Gi 201CSKW/186PSKW Ratio 1.78:1 4600-5000 RPM						F2	F3	F4	F5	F6	F7	F8		
5.0 Gi 201CSKW/186PSKW Ratio 1.95:1 4600-5000 RPM							F4	F5	F6	F7	F8	F9		
5.0 GL 179CSKW/164PSKW Ratio 1.78:1 4400-4800 RPM						F2	F3	F4	F5	F6	F7	F8		
5.0 GL 179CSKW/164PSKW Ratio 1.95:1 4400-4800 RPM				F2	F3	F4	F5	F6	F7	F8	F9			
5.7 GL 4200-4600 RPM Ratio 1.95:1 215 SHP						F4	F5	F6	F7	F8	F9			
5.7 Gi 4200-4600 RPM Ratio 1.95:1 250 SHP						F4	F5	F6	F7	F8	F9			
5.7 GS 205CSKW/191PSKW Ratio 1.78:1 4600-4800 RPM					F2	F3	F4	F5	F6	F7	F8			
5.7 GS 185CSKW/169PSKW Ratio 1.95:1 4200-4600 RPM					F4	F5	F6	F7	F8	F9				
5.7 GSi 4600-5000 RPM Ratio 1.95:1 280 SHP					F2	F3	F4	F5	F6	F7	F8	F9		
5.7 GSi 4600-5000 RPM Ratio 1.78:1 300 SHP								F4	F5	F6	F7	F8	F9	
5.7 GSi 227CSKW/210PSKW Ratio 1.78:1 4600-5000 RPM						F2	F3	F4	F5	F6	F7	F8	F9	
5.7 GS 205CSKW/191PSKW Ratio 1.95:1 4600-4800 RPM						F4	F5	F6	F7	F8	F9			
5.8 Fi 4200-4600 RPM Ratio 1.95:1 255 SHP						F4	F5	F6	F7	F8	F9			
5.8 FL 4000-4400 RPM Ratio 1.95:1 235 SHP						F4	F5	F6	F7	F8	F9			
5.8 FSi 4200-4600 RPM Ratio 1.95:1 255 SHP						F4	F5	F6	F7	F8	F9			
5.8 FSi 4600-5000 RPM Ratio 1.95:1 275 SHP								F4	F5	F6	F7	F8	F9	
7.4 GL 4200-4600 RPM Ratio 1.78:1 300 SHP							F4	F5	F6	F7	F8	F9		
7.4 Gi 4200-4600 RPM Ratio 1.78:1 320 SHP					F2	F3	F4	F5	F6	F7	F8	F9		
7.4 Gi 4200-4600 RPM Ratio 1.68:1 320 SHP						F2	F3	F4	F5	F6	F7	F8	F9	
7.4 GSi 292CSKW/262PSKW Ratio 1.68:1 4800-5200 RPM							F2	F3	F4	F5	F6	F7	F8	F9
7.4 GSi 292CSKW/262PSKW Ratio 1.78:1 4800-5200 RPM							F2	F3	F4	F5	F6	F7	F8	F9
8.2 GSi 301CSKW/271PSKW Ratio 1.68:1 4600-5000 RPM							F2	F3	F4	F5	F6	F7	F8	F9
8.2 GSi 301CSKW/271PSKW Ratio 1.78:1 4600-5000 RPM							F2	F3	F4	F5	F6	F7	F8	F9
KAD32 125CSKW/118PSKW Ratio 1.95:1 3700-3900 RPM		F2	F3	F4	F5	F6	F7	F8	F9					



* SAV certified models have same performance as non-certified models.



45.5

SINGLEPROP, PROPELLERS FOR SX DRIVES

Aluminium.



45.6

SINGLEPROP, PROPELLERS FOR SX DRIVES**SX DRIVES**

Stainless steel, polished.

ØxPITCH	ALUMINIUM	
		
14,25x21	—	3850302-5
14,25x23	—	3850303-3
14,5x19	3855481-2	3850301-7
15x15	—	—
15x16	—	—
15x17	3855480-4	3850300-9
15,5x12	3855476-2	—
15,5x13	3855477-0	3850298-5
15,5x14	3855478-8	—
15,5x15	3855479-6	3850299-3

ØxPITCH	STAINLESS STEEL POLISHED	
		
14,75x17	3858029-6	3858026-2
14,75x19	3858030-4	3858027-0
14,75x21	3858031-2	3858028-8
14,25x23	3850323-1	3850314-0

													
3.0 GL	4200-4600 RPM			15x13	15x15	15x17	14x19	14x21	14x23				
Ratio 1.85:1	120 SHP												
3.0 GS	98CSKW/88PSKW			15x13	15x15	15x17	14x19	14x21	14x23				
Ratio 1.97:1	4200-4600 RPM												
3.0 GS	98CSKW/88PSKW	15x13	15x15	15x17	14x19	14x21	14x23						
Ratio 2.18:1	4200-4600 RPM												
3.0 GS	4400-4800 RPM			15x13	15x15	15x17	14x19	14x21	14x23				
Ratio 1.85:1	135 SHP												
4.3 GL	144CSKW/131PSKW				15x13	13x15	15x17	14x19	14x21	14x23			
Ratio 1.66:1	4400-4800 RPM												
4.3 GL	144CSKW/131PSKW					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.79:1	4200-4600 RPM												
4.3 GL	144CSKW/131PSKW					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.85:1	4200-4600 RPM												
4.3 GL	144CSKW/131PSKW			15x13	15x15	15x17	14x19	14x21	14x23				
Ratio 1.89:1	4200-4600 RPM												
4.3 GS	159CSKW/145PSKW					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.66:1	4400-4800 RPM												
4.3 GS	159CSKW/145PSKW					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.79:1	4400-4800 RPM												
4.3 GS	159CSKW/145PSKW					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.85:1	4400-4800 RPM												
4.3 Gi*	159CSKW/145PSKW					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.85:1	4400-4800 RPM												
4.3 Gi*	159CSKW/145PSKW					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.79:1	4400-4800 RPM												
4.3 Gi*	159CSKW/145PSKW					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.66:1	4400-4800 RPM												
5.0 Gi	201CSKW/186PSKW					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.51:1	4600-5000 RPM												
5.0 FL	4200-4600 RPM			15x13	15x15	15x17	14x19	14x21	14x23				
Ratio 1.60:1	190 SHP												
5.0 Fi	4200-4800 RPM					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.60:1	220 SHP												
5.0 GL	179CSKW/164PSKW					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.51:1	4400-4800 RPM												
5.0 Gi	201CSKW/186PSKW					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.60:1	4600-5000 RPM												
5.0 GL	179CSKW/164PSKW					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.60:1	4400-4800 RPM												
5.0 Fi	4200-4800 RPM			15x13	15x15	15x17	14x19	14x21	14x23				
Ratio 1.66:1	220 SHP												
5.7 GS	205CSKW/191PSKW					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.43:1	4400-4800 RPM												
5.7 Gi	180CSKW/164PSKW					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.51:1	4200-4600 RPM												
5.7 GL	169CSKW/154PSKW					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.60:1	4200-4600 RPM												
5.7 GS	185CSKW/169PSKW					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.51:1	4200-4600 RPM												
5.7 GS	205CSKW/191PSKW					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.51:1	4400-4800 RPM												
5.7 GSi	227CSKW/210PSKW			15x13	15x15	15x17	14x19	14x21	14x23				
Ratio 1.51:1	4600-5000 RPM												
5.7 GSi	227CSKW/210PSKW					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.43:1	4600-5000 RPM												
5.7 GSi	230CSKW/212PSKW					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.43:1	4600-5000 RPM												
5.8 FL	4000-4400 RPM					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.51:1	235 SHP												
5.8 Fi	4200-4600 RPM					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.51:1	255 SHP												
5.8 FSi	4600-5000 RPM					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.51:1	275 SHP												
7.4 GL	224CSKW/204PSKW					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.43:1	4200-4600 RPM												
7.4 Gi*	235CSKW/210PSKW					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.43:1	4200-4600 RPM												
7.4 Gi	242CSKW/218PSKW					15x13	15x15	15x17	14x19	14x21	14x23		
Ratio 1.43:1	4200-4600 RPM												

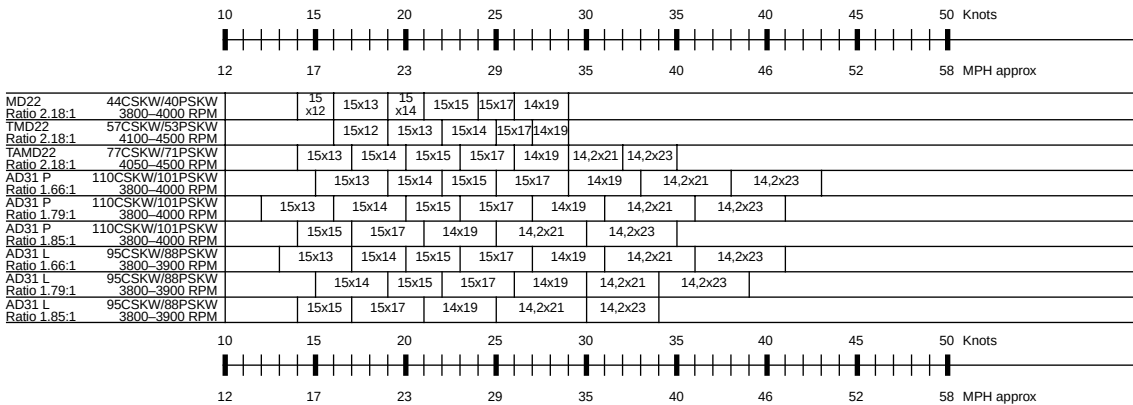
* SAV certified models have same performance as non-certified models.

To save space the decimals have been removed in the table, the complete figures are found in the upper table.

45.5-7

SINGLE PROP, PROPELLERS FOR SX DRIVES

Continued.



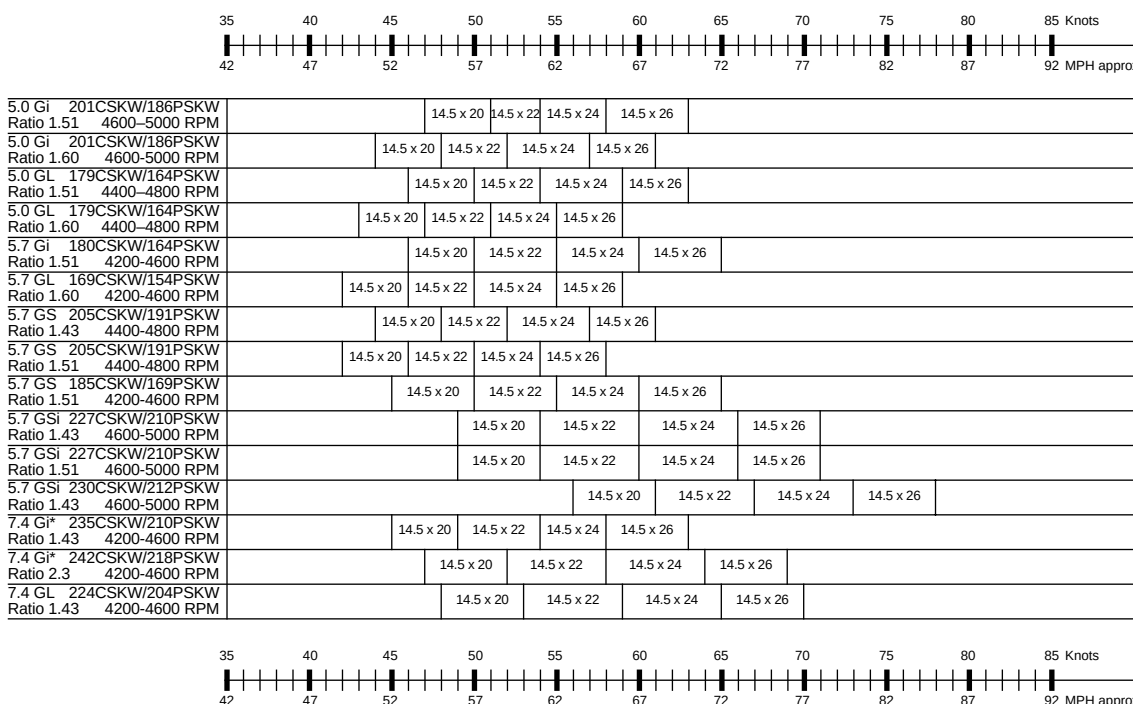
45.27

SINGLE HIGH-PERFORMANCE PROPELLER FOR SX DRIVES

Polished stainless steel.

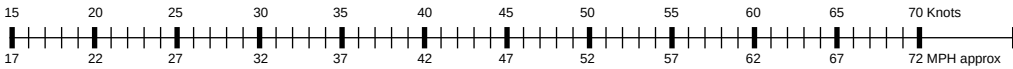


Ø x PITCH	Left Rotation	Right Rotation
14.5 x 20	3855152-9	3855142-0
14.5 x 22	3855154-5	3855144-6
14.5 x 24	3855156-0	3855146-1
14.5 x 26	3855158-6	3855148-7

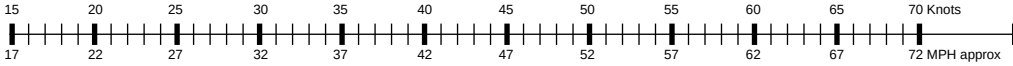


* SAV certified models have same performance as non-certified models.

45.27
SINGLE HIGH-PERFORMANCE
PROPELLER FOR SX DRIVES
Continued. SP propellers.



3.0 GS 135CSKW/88PSKW Ratio 1.97 4200-4600 RPM					14.5 x 20	14.5 x 22	14.5 x 24	14.5 x 26											
3.0 GS 135CSKW/88PSKW Ratio 2.18 4200-4600 RPM			14.5 x 20	14.5 x 22	14.5 x 24	14.5 x 26													
4.3 Gi* 159CSKW/145PSKW Ratio 1.66 4400-4800 RPM							14.5 x 20	14.5 x 22	14.5 x 24	14.5 x 26									
4.3 Gi* 159CSKW/145PSKW Ratio 1.79 4400-4800 RPM							14.5 x 20	14.5 x 22	14.5 x 24	14.5 x 26									
4.3 Gi 159CSKW/145PSKW Ratio 1.85 4400-4800 RPM							14.5 x 20	14.5 x 22	14.5 x 24	14.5 x 26									
4.3 GL 144CSKW/131PSKW Ratio 1.66 4200-4600 RPM							14.5 x 20	14.5 x 22	14.5 x 24	14.5 x 26									
4.3 GL 144CSKW/131PSKW Ratio 1.69 4200-4600 RPM						14.5 x 20	14.5 x 22	14.5 x 24	14.5 x 26										
4.3 GL 144CSKW/131PSKW Ratio 1.79 4200-4600 RPM							14.5 x 20	14.5 x 22	14.5 x 24	14.5 x 26									
4.3 GL 144CSKW/131PSKW Ratio 1.85 4200-4600 RPM							14.5 x 20	14.5 x 22	14.5 x 24	14.5 x 26									
4.3 GL 144CSKW/131PSKW Ratio 1.89 4200-4600 RPM						14.5 x 20	14.5 x 22	14.5 x 24	14.5 x 26										
4.3 GS 159CSKW/145PSKW Ratio 1.66 4400-4800 RPM									14.5 x 20	14.5 x 22	14.5 x 24	14.5 x 26							
4.3 GS 159CSKW/145PSKW Ratio 1.79 4400-4800 RPM							14.5 x 20	14.5 x 22	14.5 x 24	14.5 x 26									
4.3 GS 159CSKW/145PSKW Ratio 1.85 4400-4800 RPM							14.5 x 20	14.5 x 22	14.5 x 24	14.5 x 26									
AD31L 95CSKW/88PSKW Ratio 1.79 3800-3900 RPM		14.5 x 20	14.5 x 22	14.5 x 24	14.5 x 26														
AD31P 110CSKW/101PSKW Ratio 1.79 3800-4000 RPM		14.5 x 20	14.5 x 22	14.5 x 24	14.5 x 26														
TAMD22 77CSKW/71PSKW Ratio 2.18 4050-4500 RPM		14.5 x 20	14.5 x 22	14.5 x 24	14.5 x 26														



SP PROPELLERS

The increased blade area of the high speed propeller makes it most suitable for use with high power engines and at high revs. In a fast boat this not only means increased speed, it also means that a heavily loaded boat will

plane more quickly and enjoy better fuel economy. The high speed propeller's excellent reversing characteristics also mean faster and safer quayside manoeuvring.

45.8

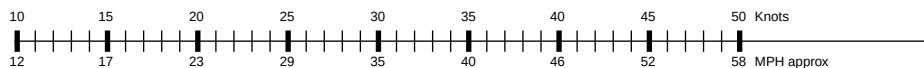
HIGH SPEED LONG HUB, ALUMINIUM

V6 and V8 engines should always be fitted with the long hub (L) which is also suitable for 4 cylinder petrol engines.

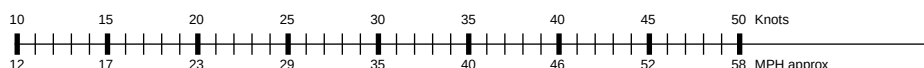
Propeller cone, long hub: Part no. 854045-2

Drives 200, 250, 270, 280, 290, SP

Ø x PITCH		
14x17	854977-6	854992-5
14x19	854978-4	854993-3
14x21	854979-2	854994-1
14x23	854980-0	854995-8
15x15	854981-8	854996-6
15x17	854982-6	854997-4
15x19	854983-4	854998-2
15x21	854984-2	854999-0
16x 9	854985-9	
16x13	854986-7	872000-5
16x15	854987-5	872001-3
16x17	854988-3	872002-1
16x19	854989-1	872003-9
16x21	854990-9	872004-7
16x23	854991-7	872005-4



AQ175A/290 Ratio 1.61:1 4400-4800 RPM	14x21	15x15	15x17	15x19	16x13	16x15	16x17
AQ205/290, 431/SP Ratio 1.61:1 4400-4800 RPM	14x21	14x19	15x15	15x17	15x19	15x21	16x13
AQ200/290 Ratio 1.61:1 4000-4400 RPM	14x21	14x19	15x15	15x17	15x19	15x21	16x13
AQ211/290, 500/SP Ratio 1.61:1 4000-4400 RPM	14x21	15x15	15x17	15x19	15x21	16x13	16x15
AQ225/290 Ratio 1.61:1 4000-4400 RPM	14x21	14x19	15x15	15x17	15x19	15x21	16x13
AQ231/290, 501/SP Ratio 1.61:1 4000-4400 RPM	14x21	14x19	15x15	15x17	15x19	15x21	16x13
AQ260/DP Ratio 1.61:1 4000-4400 RPM	14x21	14x19	15x15	15x17	15x19	15x21	16x13
AQ271/290 Ratio 1.61:1 4000-4600 RPM	14x21	14x19	15x15	15x17	15x19	15x21	16x13
AQ290/290 Ratio 2.61:1 4700-5200 RPM	14x21	14x19	15x15	15x17	15x19	15x21	16x13
AQ311/290, 571/SP Ratio 1.61:1 4600-5200 RPM	14x21	14x19	15x15	15x17	15x19	15x21	16x13
AQAD40B/290 Ratio 1.61:1 3400-3600 RPM	15x15	15x17	15x19	15x21	16x13	16x15	16x17
AQAD31/290, AD31/SP Ratio 1.61:1 3600-3800 RPM	15x15	15x17	15x19	15x21	16x13	16x15	16x17
AQD41/290, D41/SP Ratio 1.61:1 3600-3800 RPM	15x15	15x17	15x19	15x21	16x13	16x15	16x17
AQAD41/290, AD41/SP Ratio 1.61:1 3600-3800 RPM	15x15	15x17	15x19	15x21	16x13	16x15	16x17
AQAD41/290, AD41/SP Ratio 1.61:1 3400-3600 RPM	15x15	15x17	15x19	15x21	16x13	16x15	16x17



45.9

HIGH SPEED STANDARD PROPELLER, ALUMINIUM

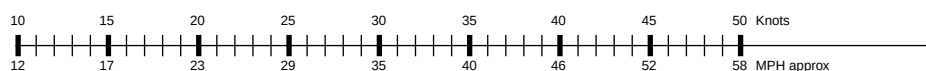
Std=Standard propeller
HS = High speed propeller

Propeller cone, short hub: Part no. 854045-2
Washer: Part no. 854047-8

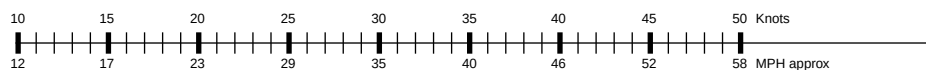


Drives 200, 250, 270, 275, 280, 290, SP

Ø x PITCH		
14x13	813284-7 STD	813285-4 STD
14x15	814626-8 HS	814631-8 HS
14x17	814627-6 HS	814632-6 HS
14x19	814628-4 HS	814633-4 HS
15x11	813296-1 STD	813297-9 STD
15x13	813316-7 STD	813317-5 STD
15x15	814611-0 HS	814615-1 HS
15x17	814612-8 HS	814616-9 HS

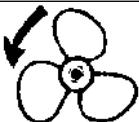
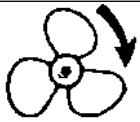


AQ125B/270	14x13	14x15	14x17	14x19	14x21
Ratio 2.15:1 4600-5000 RPM	15x11	15x13	15x15	15x17	
AQ131/275, 230/SP MT		14x15	14x17	14x19	14x21
Ratio 2.15:1 4600-5000 RPM	15x13	15x15	15x17	15x19	
AQ131/290, 230/SP		14x15	14x17	14x19	14x21
Ratio 2.15:1 4600-5000 RPM		15x13	15x15	15x17	15x19
AQ145B/290			14x17	14x19	14x21
Ratio 2.15:1 4800-5500 RPM		15x15	15x17		
	16x13				
AQ151/290, 250/SP		14x15	14x17	14x19	14x21
Ratio 2.15:1 4800-5500 RPM		15x13	15x15	15x17	15x19
AQ171/290, 251DOHC/SP			14x17	14x19	14x21
Ratio 2.15:1 5000-5700 RPM			15x17	15x19	14x23

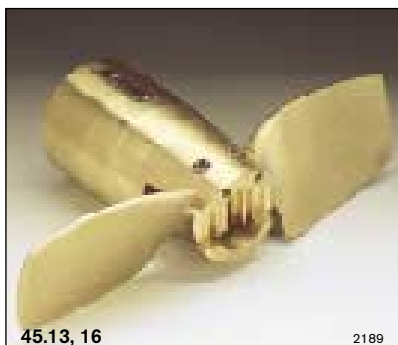


45.10

SP PROPELLERS FOR 100 DRIVES WITH CYLINDRICAL SHAFT AND LOCKING PIN

Ø x PITCH		
13x13	813224-3	813233-4
13x15	839186-4 HS	
14x11	813227-6	
14x11	804449-7 *	
14x13	813229-2	
14x15	832992-2	

*) For splined shafts (3/16")



45.13-15
PROPELLERS FOR S DRIVES 110S, 120S
 Volvo Penta's S drive propellers are manufactured of aluminium or bronze alloys.

They have been developed to withstand salt water and cavitation damage. The propellers are manufactured to a high and consistent

quality under rigid quality controls. The hub is fitted with a rubber bush.

DRIVES 110S, 120S, MS25S, MS25SR

	Ø PITCH			
MD2010	14x 8	3858507-1	853346-5	
MD2020	15x 9	3858508-9	850342-7	851419-2
	16x11			
MD2030	14x11	3858510-5	852116-3	850659-4
	16x11			
MD2040	16x13	3858512-1	852510-7	873369-3
	14x12			
MD22L	17x14		853583-3	873368-5
	17x12			
MD22	17x16		852510-7	873369-3
	17x15			
MD5A	14x 6	3858506-3	850261-9	
	14x 7			
MD5C, 2001	14x 8	3858507-1	853346-5	
	14x 9			
MD7A	14x 8	3855562-9	850341-9	850658-6
	14x 9			
MD7B, 2002	15x 9	3858508-9	850342-7	851419-2
	16x11			
MD11C	14x11	3858508-9	850342-7	850659-4
	14x12			
MD11D, 2003	16x11	3858510-5	850342-7	850672-7
	16x13			
MD17C	15x13	3858510-5	852116-3	850672-7
	17x13			
MD17D	17x14	3858511-3	852510-7	852117-1
	15x12			
MD21	16x11		853583-3	851988-6
	17x16			
2003T	17x14			853588-2

45.16-17

PROPELLERS FOR 50S, 100S S DRIVES

	Ø PITCH	
MB2A	11x 8	855095-6
MD5A	12x 8	
MD6A	14x 7	
MB10A, MD11C	14x 8	
	16x11	



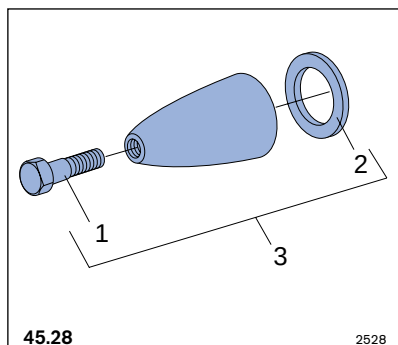
45.18-19

2193



45.20-21

2194



45.28

2528

45.28 PARTS FOR LOCKING S-DRIVE PROPELLERS

No	Part no.	Part
1	851773-2	Bolt
2	850888-9	Washer
3	850396-3	Kit (complete)

45.18-19

DRIVE EXTENSION FOR S DRIVES

For the installation of S drives in vessels with a deeper hull form.

Pos.no.	Part no.	Height
45.18	3858780-4	2"
45.19	3858781-2	4"

45.20-21, 25-26, 60

DRIVE EXTENSION FOR AQ DRIVES

For installations that require a longer drive to ensure improved propeller "grip" and thereby reduce cavitation.

Pos.no.	Part no.	Height	Drive type
45.20	854686-3	1"	DP-E
45.21	872090-6	4"	DP-E 1)
45.25	3855667-6	1"	SX/DP-S
45.26	3858596-4	1"	DPX-R,-S
45.60	3858596-4	1"	DPX-R
45.61	3858618-6	4"	DP-E
45.62	3858617-8	1"	DP-E

1) Not for 42/43/44-engines.

45.53

AQUAMATIC ADAPTER PLATE

Part no. 3851718-1. Complete adapter kit for replacing older Volvo Penta drives with SX or DP-S drives.

Adapter plate for replacing engine and drive with an engine package from Volvo Penta, or for replacing an older Volvo Penta drive with the new generation Aquamatic drive. The adapter plate minimises difficult and time-consuming glass fibre work. The adapter plate is mounted on the transom together with a rubber seal. The adapter plate is manufactured from cast aluminium and painted in the same colour as SX and DP-S drives, not for 280T.

The adapter package is suitable when replacing 250, 270, 275, 280, 285, 290 and Duoprop drives, not for 280T.

The kit contains: adapter plate, rubber seal, bolts, washers and locking nuts.

Note! Can only be combined with active electronic anti-corrosion protection kit mounted on the stern. See 30.58.

17.17

ZINC ANODES

Zinc and magnesium anodes protect the drive and propeller against galvanic corrosion. If 50% or more of the anode has been eaten away, the anode must be replaced. Scrape the contact surface clean to ensure good contact. Zinc and magnesium anodes must not be painted over, otherwise they will cease to function.

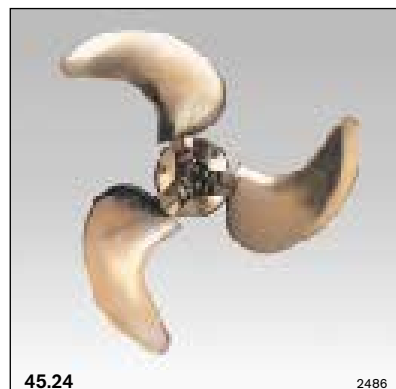
Note! Not for folding bronze propellers.

Anodes	Part no.	Drive
Zinc	852018-1	110S, 120S, 120SB
Magnesium	853430-7	110S, 120S, 120SB



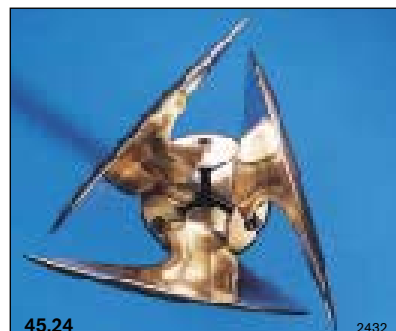
45.24

2429



45.24

2486



45.24

2432

45.24**THREE-BLADE FOLDING PROPELLER**

Volvo Penta's three-blade folding propeller is a completely new type of propeller for sailboats. It combines the folding propeller's low drag under sail with reverse thrust and speed which are fully comparable with fixed propellers. We are awaiting a patent for the new design. The propeller's special features include a large blade area and unique elliptical blade profile, known as high skew, which contributes to its outstanding performance.

Safe design

Safe, simple design is another feature. A conical toothed section ensures that the propeller blades are in the correct position. With no complicated machinery or mechanisms to cause trouble, the propeller

provides superb reliability. The folding propellers are manufactured by Volvo Penta and produced according to our exacting standards. They are manufactured from a special bronze and fitted with a bushing at the hub. This absorbs the shock which the propeller and shaft are subjected to during quick shifts forwards and backwards. The three-blade folding propellers are available as Right Hand and Left Hand rotating propellers for both S drive and different shaft diameters.

Less drag

The folding propeller's greatest advantage is its low drag under sail. The three-blade folding propeller reduces drag by up to 10 times compared with a three-blade fixed propeller. It provides 4.5 times less drag than two-blade fixed propellers.

Greater Speed

The three-blade folding propeller produces an increase in speed of up to 0.6 knots compared with a two-blade folding propeller. Do you already have a fixed three-blade propeller? You don't need to worry about a loss in speed if you switch to the three-blade folding propeller. Its speed is largely comparable across the full range of revs. And what's more, the unique blade profile produces an extremely quiet and vibration-free propeller.

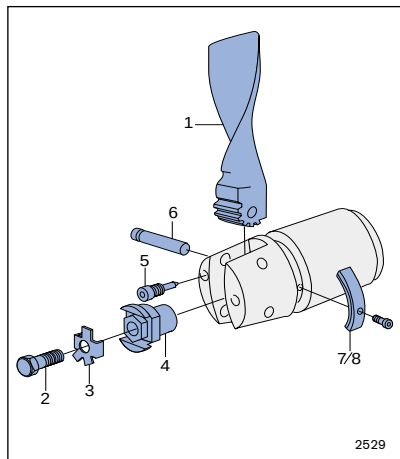
More Power

The three-blade folding propeller offers outstanding manoeuvrability. Despite being a folding propeller, reverse thrust is fully comparable with that of a fixed propeller. Compared with a two-blade folding propeller, it produces approximately twice as much reverse thrust at full throttle. At 2,000 rpm it produces nearly 30% more power.

BLADE KIT LH Part no.	BLADE KIT RH Part no.	Size D x P	HUB KIT S drive MS25S/SR 110/S, 120/S 3858284-7	HUB KIT Shaft 25 mm cone ratio 1:10, 6 mm wedge, 3581262-7	HUB KIT Shaft 30 mm cone ratio 1:10, 8 mm wedge, 3581263-5	HUB KIT Shaft 1" cone ratio 1:16, 1/4" wedge, 3581484-7	HUB KIT * Shaft 1 1/4" cone ratio 1:16, 5/16" wedge, 3581485-4
	3581805-3	14 x 7	MD5A, B				
	3581806-1	14 x 8					
3581249-4	3581807-9	14 x 9	2001, MD5C, MD6B, MD7A	2010, 2001, MD5A/B		2010, 2001, MD5A/B	
3581250-2	3581808-7	15 x 9	2010				
3581251-0	3581809-5	15 x 10	2002	MD7A, MD6B		MD7A, MD6B	
3581252-8	3581810-3	16 x 10	MD7B, MD11C	2020		2020	
3581253-6	3581811-1	16 x 11	2020	2002, MD7B		2002, MD7B	
3581254-4	3581812-9	17 x 11	2003, MD11D, MD17C	2030, MD11C		2030, MD11C	
3581255-1	3581813-7	17 x 12	2030, MD22	2003		2003	
3581256-9	3581814-5	18 x 12	2003T	2040, MD11D	2040, MD22	2040, MD11D	2040, MD22
3581257-7	3581815-2	18 x 13	2040, MD17D	MD17C	MD17C	MD17C	MD17C
3581258-5	3581816-0	18 x 14		2003T, MD17D	2003T, MD17D	2003T, MD17D	2003T, MD17D
3581259-3	3581817-8	18 x 15	MD22L				
	3581818-6	18 x 16					
3581260-1	3581819-4	19 x 16		MD22L			MD22L

* Hub kit for other shaft sizes: 3581486-2, pre-drilled 16 mm diam.

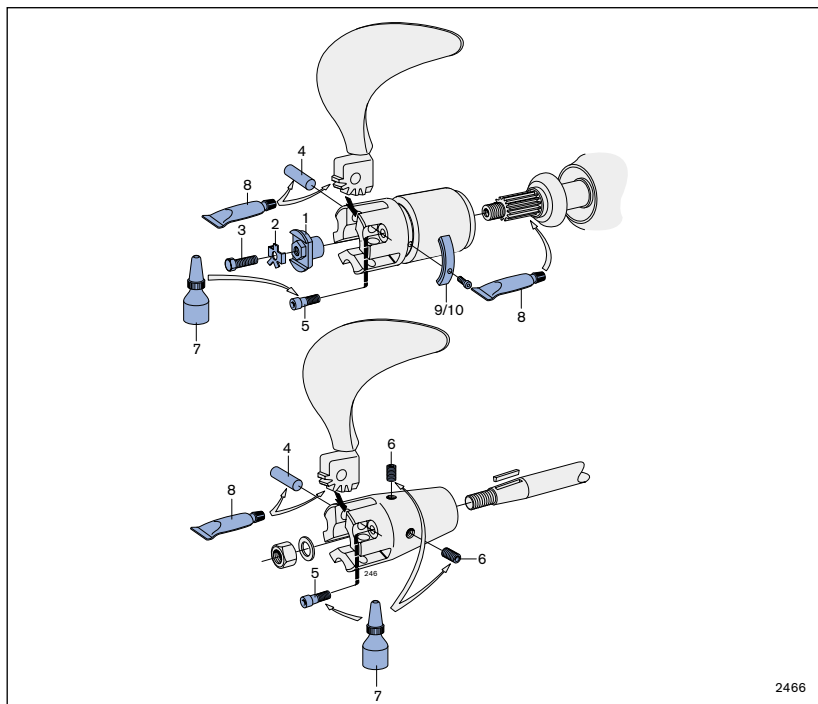
Boat length, weight, engine and gear ratio affect propeller selection. For a complete propeller, order both blade kit and hub kit. Contact your Volvo Penta dealer for advice.



Parts for 2-blade folding propeller 45.13

1. Set of blades	
14 x 6	872876-8
14 x 8	872877-6
15 x 9	872878-4
16 x 11	872880-0
17 x 13	872881-8
17 x 14	873536-7
17 x 15	872882-6
17 x 17	873537-5
2. Screw	946730-9 1)
3. Lock washer	3851994-8 1)
4. Propeller nut	3851993-0 1)
5. Locking screw	3855529-8 2)
6. Shaft	3855528-0 2)
7. Zinc kit (set of 3)	3858399-3
8. Mg kit (set of 3, for fresh water)	3858400-9

1) Fits all bronze folding propellers
2) Fits all folding propellers with part no. 3855561-3855569



Parts for 3-blade folding propeller (45.24)

1. 3851993-0	Propeller nut
	(same as 2-blade)
2. 3851994-8	Lock washer
	(same as 2-blade)
3. 946730-9	Screw (same as 2-blade)
4. 3581243-7	Shaft
5. 963695-2	Screw
6. 3581246-0	Lock screw
7. 1161053-2	Locking fluid
8. 828250-1	Grease
9. 3858399-3	Zinc kit (set of 3)
10. 3858400-9	Mg kit (set of 3, for fresh water)

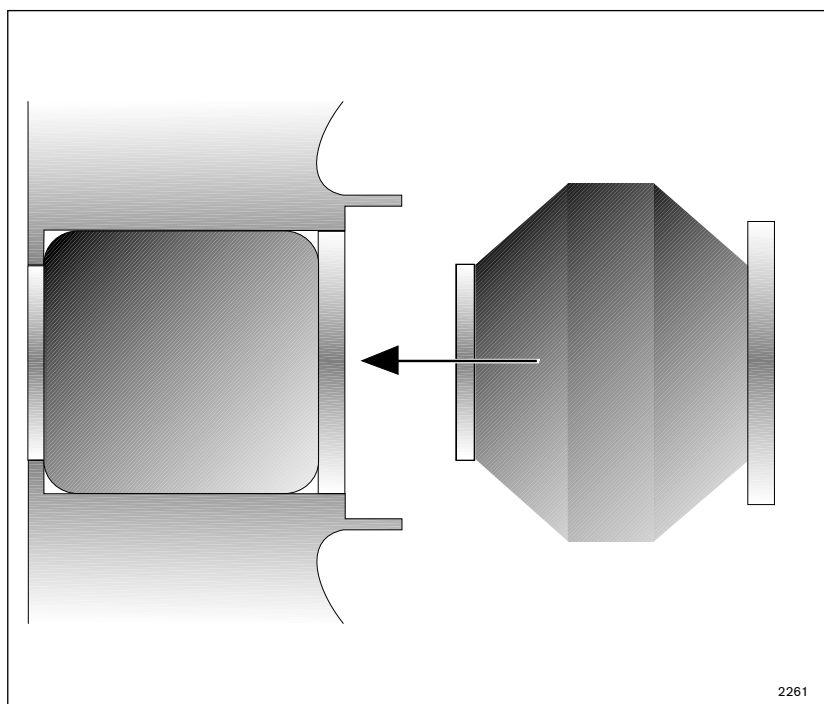


45.12 RUBBER BUSHING FOR SP AND DP TYPE A AND TYPE B AND FOLDING BRONZE PROPELLER

Replaceable reinforced bushings are the latest example of Volvo Penta product development in propeller technology. The replaceable bushings are manufactured of high-tech rubber material with extremely high elasticity. The bushing absorbs the shock load that occurs should the propeller leave the water at speed, with rapid forward/reverse manoeuvring or when the vessel runs aground. The bushing gives a certain intentional "slip" under heavy load without any reduction in the grip of the material. Contact your dealer for more information.

	Front	Rear
DPA+DPB	3851533-4	3851534-2
DPC	872552-5	872553-3
DPD+DPF	3851258-8	3851259-6
DPE	872176-3	872177-1
Folding	3851532-6	
HS long hub	3851531-8	
SX aluminium	3850324-9	
SX stainless steel	3850325-6	

The illustration shows how much the bushing is compressed when fitted (front).





45.30

PROPELLER SHAFT SYSTEM

45.31

FLEXIBLE PROPELLER SHAFT COUPLING

45.32

PROPELLER SHAFT COUPLING WITH CLAMP

45.33

PROPELLER SHAFT COUPLING WITH TAPERED LOCKING PIN AND KEYWAY

45.34

COMPLETE PROPELLER SHAFT

45.35

SHAFT SLEEVE

45.36

CLAMP ATTACHMENT

45.37

STERN BEARING FOR PLASTIC BONDING

45.38

STERN BEARING FOR BOLTING

45.39

RUBBER BEARING

45.40

RUBBER PACKING BOX

45.41

PACKING BOX

45.42

GREASER

45.43

GREASER HOSE

18.18

LUBRICATING GREASE

45.31

FLEXIBLE PROPELLER SHAFT COUPLING

A flexible propeller shaft coupling must be used when the propeller shaft is rigidly mounted and the engine is suspended on rubber mountings. The coupling also eliminates the risk of a break between the propeller shaft and the engine with rigid engine installations. The coupling must not be combined with suspended rubber packing boxes on propeller shaft sleeves.

Part no.	Engine	Reverse gear	Flange Ø	
833626-5	MD5, MD7	MSB 1,9:1	100 mm	1)
	MD11	MS2, 2,4:1, 3,0:1		
833626-5	2001, 2002, 2003	MS2B 2,4:1,	100 mm	1)
	2010-2030	3,0:1		
833627-3	MD17, 2040	MSB 1,91:1,	100 mm	1)
		MS2 2,4:1, 3,0:1		
819154-6	MD21, MD22, 2003T	RB MS2 2,4:1, 3,0:1	100 mm	1)
819153-8	MD21, 2002	BW 2:1,	4"	1)
	2003	PRM Delta		
	MD32A	2,9:1		
828831-8	MD31, T(A)MD,	MS4A, HS1	5"	2)
	31, (T)MD41, TAMD41	HS1		

1) To connect a shaft to this type of flexible coupling a conventional type of propeller shaft coupling, (45.32-33) is also required.

2) Pre-drilled for shaft connection.

45.32

PROPELLER SHAFT COUPLING WITH CLAMP

The coupling has an in-built coupling clamp which considerably simplifies shaft installation. It makes it possible to cut the propeller shaft to the required length and thereafter, connect it – without the necessity of machining a keyway in the shaft. Supplied complete with nuts and bolts. Propeller shaft tolerance h9 (+0.0 –0.052).

Part no.	Reverse gear	Shaft Ø	Flange Ø
853796-1	PRM 301-401	45 mm	6"
853795-3	PRM 301-401	40 mm	6"
853794-6	PRM 301-401	35 mm	6"
827930-9	PRM Delta	30 mm	4"
853799-5	PRM Delta	25 mm	4"
872945-1	BW, MS3, MS3B, MS3C, MS4, HS1, HS25A, HS45A, HS63A, HS63AE, HS63V, HS63VE	45 mm	5"
872944-4	BW, MS3, MS3B, MS3C, MS4, HS1, HS25A, HS45A, HS63A, HS63AE, HS63V, HS63VE	40 mm	5"
828606-4	MS2(B)	35 mm	100 mm
872943-6	BW, MS3, MS3B, MS3C, MS4, MS25, HS1, HS25A, HS45A, HS63A, HS63AE, HS63V, HS63VE	35 mm	5"
872942-8	BW, MS3, MS3B, MS3C, MS4, HS1, HS25A, HS45A, HS63A, HS63AE, HS63V, HS63VE	30 mm	5"
827927-5	MS, MS2(B), MS10L, MS10A, MS15L, MS15A, MS25, RB	30 mm	100 mm
827924-2	MS, MS2(B), MS10L, MS10A, MS15L, MS15A, MS25, RB	25 mm	100 mm

45.33

PROPELLER SHAFT COUPLING WITH TAPERED LOCKING PIN AND KEYWAY

Conventional propeller shaft. Supplied with nuts, bolts and locking pin.

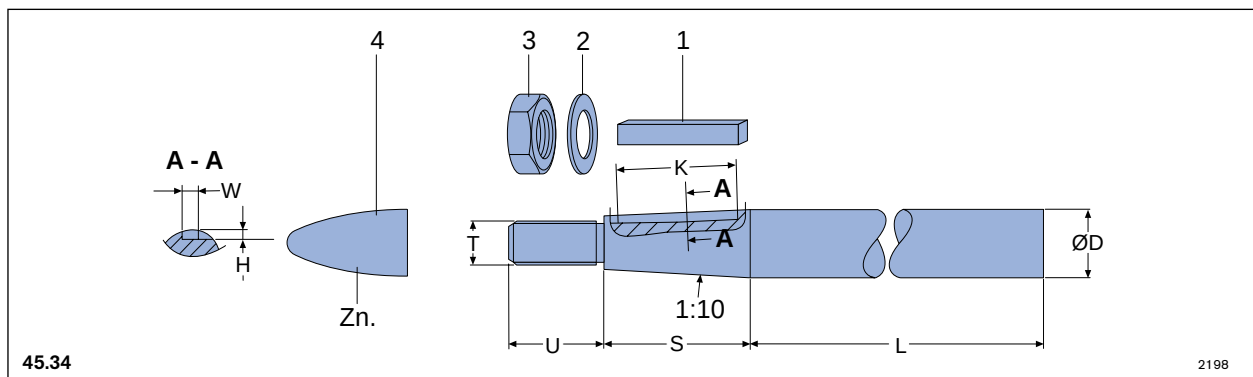
Part no.	Reverse gear	Shaft Ø	Flange Ø	
819105-8	BW, MS3, MS4, HS1	45 mm	5"	1)
829281-5	BW, MS3, MS4, HS1	40 mm	5"	
829279-9	BW, MS3, MS4, HS1	35 mm	5"	
806384-4	RB, MS, MS2B, MS10L, MS10A, MS15L, MS15A, MS25	25 mm	100 mm	
806383-6	RB, MS, MS2B, MS10L, MS10A, MS15L, MS15A, MS25	30 mm	100 mm	1)

1) Pre-drilled for shaft connection

45.34

COMPLETE PROPELLER SHAFT

Supplied with washer, nuts, wedge and zinc anode according to ISO Standard. Material SIS 2324. Propeller shaft tolerance h9 (+0.0–0.052).



Part no.	D	L	U	S	T	K	H	W	1	2	3	4 1)
873476-6	25	908	35	55	M16	45	3.55	6	873474-1	873475-8	873473-3	873411-3
873477-4		1500										
873478-2		2000										
873479-0		2500										
873489-9	30	1500	38	75	M20	63	4.10	8	873487-3	873488-1	873486-5	873412-1
873490-7		2000										
873491-5		2500										
873498-0	35	1500	41	85	M24	70	5.10	10	873496-4	873497-2	873495-6	873413-9
873499-8		2000										
873500-3		2500										
873507-8	40	1500	41	95	M24	80	5.10	12	873505-2	873506-0	873495-6	873413-9
873508-6		2000										
873509-4		2500										
873515-1	45	1500	46	105	M30	90	5.60	14	873513-6	873514-4	873512-8	873415-4
873516-9		2000										

1) Ordered separately

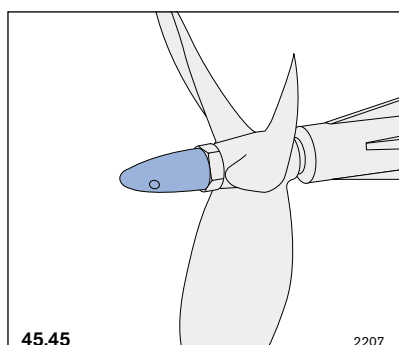
45.35

SHAFT SLEEVE

The shaft sleeve is adapted for use with Volvo Penta's grease packing box. The sleeve is threaded 200 mm at one end in order to fit to Volvo Penta's stern bearings.

Part no.	Shaft Ø, mm	Length, mm	Ext. Ø, mm
815604-4	45	1500	66
828231-1		1000	
828130-5	40	1500	60 1)
828129-7		1000	1)
828205-5	40	1500	60
828204-8		1000	
1140032-2	35	1500	54
1140031-4		1000	
1140030-6		750	
1140029-8	30	1500	48
1140028-0		1000	
827893-9		750	
827894-7		500	
1140027-2	25	1500	42
1140026-4		1000	
827891-3		750	
827892-1		500	

1) Includes water lubricated rubber bearing



45.45

ZINC ANODE, EARLIER DESIGN

Zinc anodes protect the propeller against corrosion. The anode is shaped like a propeller cone and should be fitted after the locking nut on the propeller shaft.

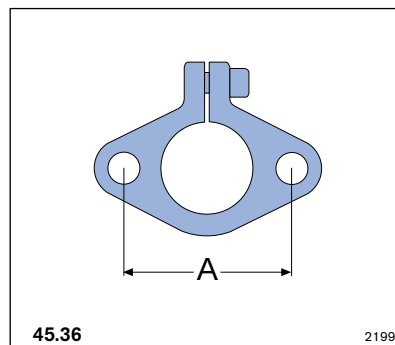
Part no.	Shaft, mm
828140-4	45 W 1"
828140-4	40 W 1"
833915-2	35 W 7/8"
833913-7	30 W 3/4"
833913-7	25 W 3/4"

45.36

CLAMP ATTACHMENT

For attaching shaft sleeve.

Part no.	Shaft Ø, mm	Shaft sleeve Ø, mm	A, mm
828320-2	45	66	96
828319-4	40	60	96
828318-6	35	54	96
828317-8	30	48	78
828316-0	25	42	78



45.36

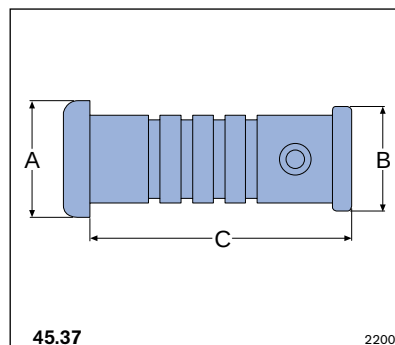
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45.37

STERN BEARING FOR PLASTIC BONDING

Stern bearing with replaceable water-lubricated rubber bearing. Ribbed surface for secure bonding.

Part no.	Shaft Ø mm	A Ø mm	B Ø mm	C length mm
827887-1	35	70	66	168
827886-3	30	64	60	155
827885-5	25	56	52	120



45.37

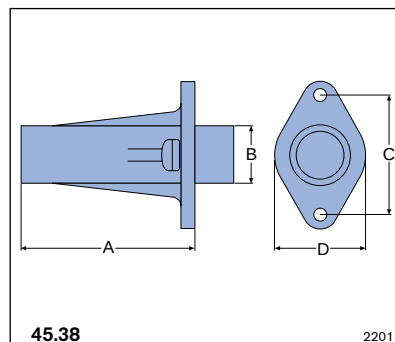
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45.38

STERN BEARING FOR BOLTING

Stern bearing for bolting into wooden or fibre glass hulls. Replaceable water-lubricated rubber bearing. Attached with M8 bolts.

Part no.	Shaft Ø mm	A length mm	B Ø mm	C length mm	D mm
828188-3	45	180	74	126	88
828162-8	40	154	70	118	80
827782-4	35	154	66	108	77
827781-6	30	140	58	100	73
827780-8	25	113	52	96	65



45.38

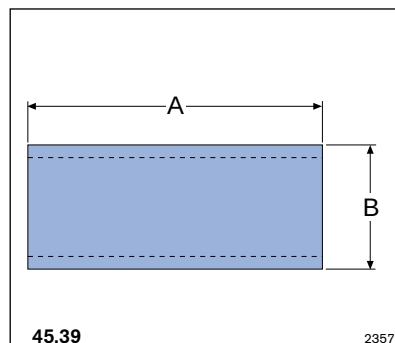
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45.39

RUBBER BEARING

Water-lubricated rubber bearing for stern and support bearings.

Part no.	Shaft Ø mm	A length mm	B Ø mm
828187-5	45	180	60
828131-3	40	160	54
827175-1	35	140	48
812916-5	30	127	44
812914-0	25	100	38



45.39

2357

45.40

RUBBER PACKING BOX

Moulded packing box for effective lubrication/sealing. Simple, time saving installation and compact size. Minimal maintenance work – grease every 200 hours or once a year. The packing box is specifically dimensioned for Volvo Penta's propeller shafts and sleeves. For effective lubrication it is essential that the packing box bearings are water-lubricated at all speeds. Supplied complete with installation tools and grease tube.

Part no.	Shaft Ø mm	A mm	B mm	Ext. dia. shaft sleeve mm 1)
828527-2	40	36	82	60
828526-4	35	36	82	54
828422-6	30	36	72	48
828254-3	25	36	66	42

1) Diameter tolerance +0.5 –0.3 mm. The distance between bearing points must not exceed 1500 mm.

45.41

PACKING BOX

Conventional and effective propeller shaft lubrication/sealing. Supplied complete with hose and hose clips. A greaser (45.42) can be connected (included with the 40 and 45 mm packing boxes). Recommended grease, part no. 1141644-3.

Part no.	Shaft Ø mm	A mm	B mm	C mm
859017-6	45	245	170	72 1)
859016-8	40	230	160	68 1)
859014-3	35	180	132	48
859013-5	30	165	117	48
859012-7	25	150	102	48

1) Greaser and hose included

45.42

GREASER

Part no. 827184-3. Separate greaser for simple filling of packing boxes. Can be connected to Volvo Penta's conventional packing boxes (45.41) (included with 40 and 45 mm packing boxes).

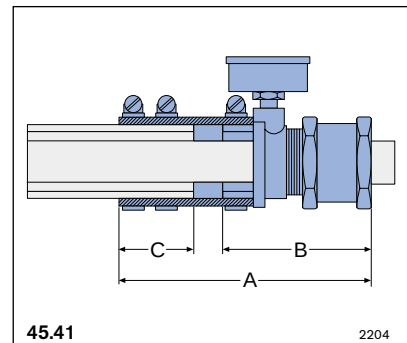
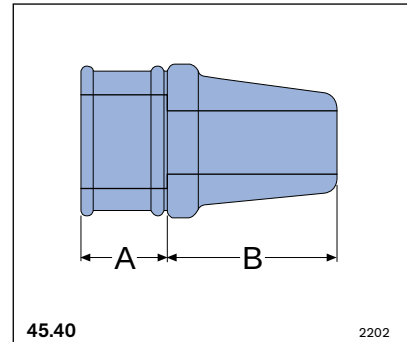
45.43

GREASER HOSE

Part no. 833842-8. Length 1 m.

Grease: 1141644-3.

Volvo Penta original propeller shaft grease. See 18.18.

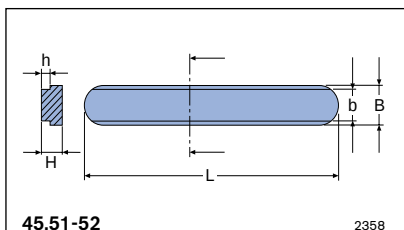


45.46

SAILING BOAT PROPELLER WITH FIXED BLADES

Volvo Penta's twin blade bronze propellers with slender blades are designed in accordance with ocean racing norms and are available in dimensions adapted to Volvo Penta's engine series. The blade/area ratio is 0.23 with a maximum blade width of 1/4 of the propeller diameter. Despite its low resistance under sail, the propeller provides excellent performance when running with the engine. The blade design of the propeller is permitted in accordance with IOR racing rules.

Dimension LH	Part no.
18x13x35	873410-5
18x15x30	873409-7
18x15x25	873408-9
18x13x25	873407-1
17x12x25	873406-3
16x13x25	873405-5
16x11,5x25	873404-8
16x10x25	873394-1
15x11x25	873393-3
15x9x25	873403-0
14x10x25	873402-2
14x8x25	873392-5



45.51-52

2358

45.51-52

KEY FOR OLDER SHAFTS

A new key is now available for older types of shaft with a 10 mm key slot to make them suitable for new ISO standard bronze propellers.

Pos.no.	Part no.	Shaft Ø, mm
45.51	3580804-7	30
45.52	3580805-4	40

Pos.no.	b, mm	h, mm	L, mm	B, mm	H, mm
45.51	8	3,5±0.1	58	10	6±0.1
45.52	10	3±0.1	80	12	6±0.1



45.47-50

2209

45.47

3 BLADE BRONZE PROPELLER, BLADE AREA 0.43

Anode, see 45.34

Dimension LH	Part no.
12X9X25	873382-6
13X9X25	873417-0
14X9X25	873418-8
14X10X25	873419-6
14X11X25	873383-4
14X13X25	873420-4
15X10X25	873384-2
15X11X25	873421-2
15X12X25	873422-0
15X13X25	873423-8
15X14X25	873424-6
16X11X25	873425-3
16X12X25	873426-1
16X13X25	873427-9
16X14X25	873428-7
17X14X25	873429-5
17X15X25	873431-1
18X15X25	873432-9
18X16X25	873433-7

45.49

4 BLADE BRONZE PROPELLER, BLADE AREA 0.57

Anode, see 45.34

Dimension LH	Part no.
16X15X35	873461-8
16X16X35	873462-6
16X17X35	873463-4
16X18X35	873464-2

45.50

4 BLADE BRONZE PROPELLER, BLADE AREA 0.69

Anode, see 45.34

Dimension	Part no. LH	Part no. RH
18X15X30	3856310-2	
18X16X30	3856311-0	
18X17X30	3856312-8	
18X18X30	3856313-6	
18X15X35	3856314-4	3856323-5
18X16X35	3856315-1	3856324-3
18X17X35	3856316-9	3856325-0
18X18X35	3856317-7	3856326-8
18X16X40	3856318-5	3856327-6
18X17X40	873465-9	3856328-4
18X18X40	873466-7	3856329-2
18X19X40	873467-5	3856330-0
18X20X40	873468-3	3856331-8
18X22X35	3856319-3	3856332-6
18X22X40	3856320-1	3856333-4
18X23X35	3856321-9	3856334-2
18X23X40	3856322-7	3856371-4

45.48

3 BLADE BRONZE PROPELLER, BLADE AREA 0.52

Anode, see 45.34

Dimension LH	Part no.
15X12X30	3856279-9
15X13X30	3856280-7
15X14X30	3856281-5
15X15X30	3856282-3
15X16X30	3856283-1
16X11X30	3856284-9
16X12X30	3856285-6
16X13X30	3856286-4
16X14X30	3856287-2
17X11X30	3856288-0
17X12X30	3856289-8
17X13X30	3856290-6
17X14X30	3856291-4
17X15X30	3856292-2
17X16X30	3856293-0
17X17X30	3856294-8
19X13X30	3856295-5
19X14X30	3856296-3
19X15X30	3856297-1
19X16X30	3856298-9
19X17X30	3856299-7
19X19X30	3856300-3
16X11X35	3856301-1
16X12X35	3856302-9
16X13X35	873444-4
16X14X35	3856303-7
16X15X35	873445-1
17X11X35	873446-9
17X12X35	873447-7
17X13X35	873448-5
17X14X35	873449-3
17X15X35	873450-1
17X16X35	873451-9
17X17X35	873452-7
18X13X35	3856304-5
18X14X35	3856305-2
18X15X35	3856306-0
18X16X35	3856307-8
18X17X35	3856308-6
18X18X35	3856309-4
19X17X35	873453-5
19X15X40	873455-0
19X17X40	873456-8
19X19X40	873457-6
19X21X40	873458-4
21X13X40	873459-2
23X15X40	873460-0