# Will the propeller be able to fit (space to the hull)

Unlike the general perception, even as little as 8-10 mm of free space between propeller and hull will be fine. However, this of course depends on the specific hull shape and less clearence will normally increase propulsion noise.

There is a rule of thumb that says 15% of the propeller diameter should be free space depending on the hull of the boat.

If you are unsure whether the propeller will be able to fit you could make a cardboard cut out of the propeller you have your heart set on and hold it on your shaft or saildrive.



Are there any types of hulls that are not suitable for at folding propeller. The answer is yes - fortunately there are very few.

Here are a few example of hulls that because of their design are not a good match for a folding propeller.

Due to the nature of the propeller construction, folding blades are positioned further aft than a fixed propeller (see hub length) and thereby leave more space between shaft and hull.

### How to calculate the total length of the folded propeller. See table for both hub and blades on the next page







# Will the propeller be able to fit (space to the hull)

# **HUB LENGTH (A)**

## ISO standard shaft

#### Hub length (A), 2-blade

22 mm shaft, 1:10 taper = 88 mm 25 mm shaft, 1:10 taper = 110 mm 30 mm shaft, 1:10 taper = 130 mm 30 - 2A mm shaft 1:10 = 137.50 mm 35 - 2A mm shaft 1:10 = 147.50 mm 40 - 2A mm shaft 1:10 = 157.50 mm

#### Hub length (A), 3-blade up to 23"

25 mm shaft, 1:10 taper = 120 mm 30 mm shaft, 1:10 taper = 136 mm 35 mm shaft, 1:10 taper = 146 mm 40 mm shaft, 1:10 taper = 156 mm 45 mm shaft, 1:10 taper = 196 mm

# Hub length (A), 3-blade >22" and 4-blade

35 mm shaft, 1:10 taper = 148 mm 40 mm shaft, 1:10 taper = 157 mm 45 mm shaft, 1:10 taper = 196 mm 50 mm shaft, 1:10 taper = 206 mm

## SAE standard shaft

Hub length (A), 2-blade 3/4" shaft, 1:16 taper = 100 mm 7/8" shaft, 1:16 taper = 115 mm 1" shaft, 1:16 taper = 130 mm 11/8" shaft, 1:16 taper = 142 mm 11/4" shaft, 1:16 taper = 157 mm

#### Hub length (A), 3-blade up to 23"

1" shaft, 1:16 taper = 136 mm 1 1/8 shaft, 1:16 taper = 146 mm 1 1/4" shaft, 1:16 taper = 156 mm 1 1/2" shaft, 1:16 taper = 154 mm 1 3/8" shaft, 1:16 taper = 177 mm 1 3/4" shaft, 1:16 taper = 210 mm

#### Hub length (A), 3-blade >22" & 4-blade

11/2" shaft, 1:16 taper = 202 mm 13/4" shaft, 1:16 taper = 210 mm 2" shaft, 1:16 taper = 275 mm

## IMP standard shaft

Hub length (A), 2-blade 3/4" shaft, 1:12 taper = 96,5 mm 1" shaft, 1:12 taper = 110 mm 11/4" shaft, 1:12 taper = 129 mm

#### Hub length (A), 3-blade up to 23"

1" shaft, 1:12 taper = 116 mm 11/4" shaft, 1:12 taper = 136 mm 11/8 shaft, 1:12 taper = 120 mm

Hub length (A), 3-blade >22" & 4-blade 1 3/4 shaft, 1:12 taper = 196 mm

## Saildrive

Hub for 2-blade propeller = 135 mm Hub for 3-blade propelelr = 135 mm

## **BLADE LENGTH (B)**

#### 2-blade propeller:

12" = 139 mm	
13" = 152 mm	
14" = 165 mm	
15" = 177 mm	
16" = 190 mm	
17" = 203 mm	
18" = 215 mm	
19" = 228 mm	
20" = 241mm	

#### **3-blade propeller:**

14" = 151 mm 15" = 163 mm 16" = 176 mm 17" = 189 mm 18" = 202 mm 19" = 216 mm 20" = 227 mm 22" = 250 mm 23" = 262 mm 4-blade propeller 25" = 275 mm

# **PROPELLER DIAMETER**

#### Propeller diameter:

12" = 305 mm 13" = 330 mm 14" = 356 mm 15" = 381 mm 16" = 406 mm 17" = 432 mm 18" = 457 mm 19" = 485 mm 20" = 508 mm 21" = 533 mm 22" = 559 mm 23" = 585 mm 24" = 610 mm (3-blade propeller) 24" = 625 mm (4-blade propeller) 26" = 660 mm

