The best solution for underwater equipment industry

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Underwater Equipment | 2024

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Products Catalog

Thruster

HaoYe Technology

Thruster

RIM thruster

Rotary actuator

AUV thruster

Products code & Accessories

HaoYe Technology

Thruster

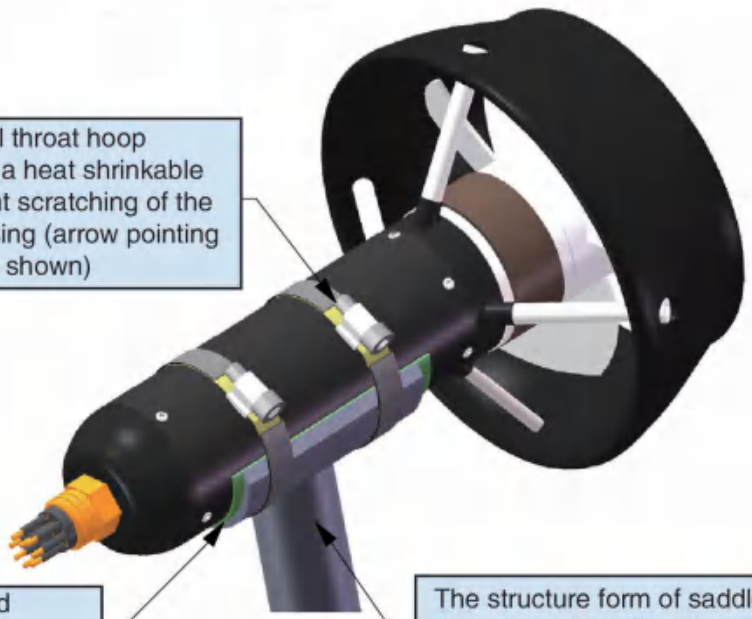
The best solution for underwater equipment industry

Mounting

Thruster

Mounting

Saddle Mount

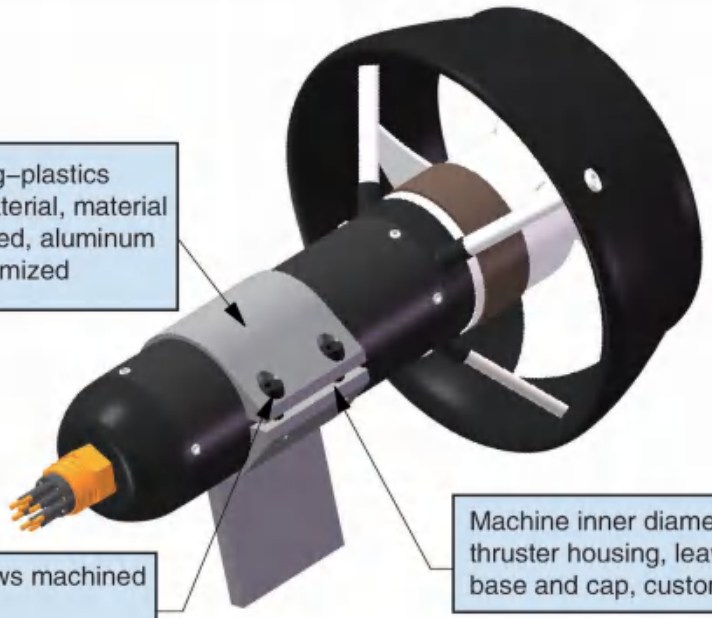


Stainless steel throat hoop is coated with a heat shrinkable tube to prevent scratching of the propeller housing (arrow pointing to the position shown)

Thin 1mm hard rubber pad between saddle and thruster to prevent slipping & damage of thruster housing(arrow pointing to green rubber pad)

The structure form of saddle fixture can be customized. In order not to affect thrust, it is advisable to minimize the size of saddle fixture to meet the requirement of fixed strength.

Clamp Mount



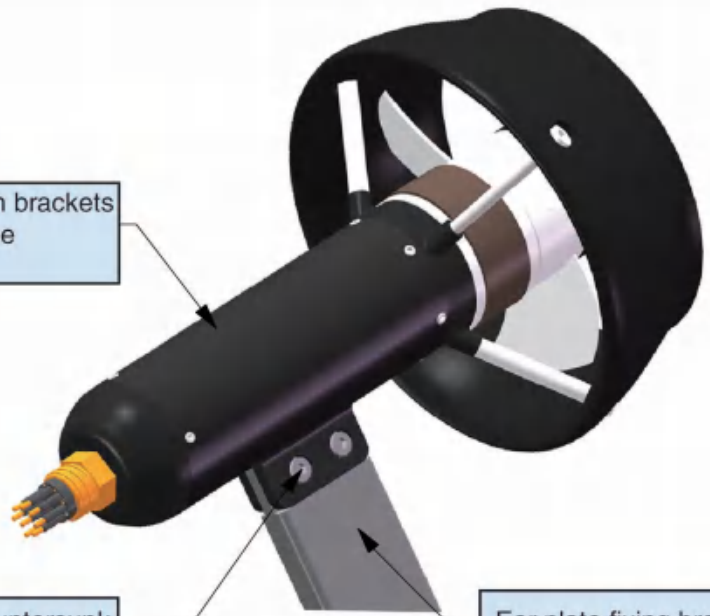
Aluminum and engineering–plastics are available for clamp material, material strength must be considered, aluminum should be anodized, customized

Socket head cap screws machined
Standard: M5
Material: 316SS

Machine inner diameter accurately matched with thruster housing, leave 1.0–1.5mm between clamp base and cap, customized

Mounting

Blade Mount



Thruster housing with brackets of blade mount can be customized

Cross recessed countersunk head screw
Standard: M5
Material: 316SS

Ear plate fixing bracket is customized. This structure is strong in fixing in order not to affect thrust. Under the requirement of degree, the size should be as small as possible.

Nozzle Mount

Nozzle mount pillar fixed mode refers to nozzle dimensions, reasonably structured, customer furnished

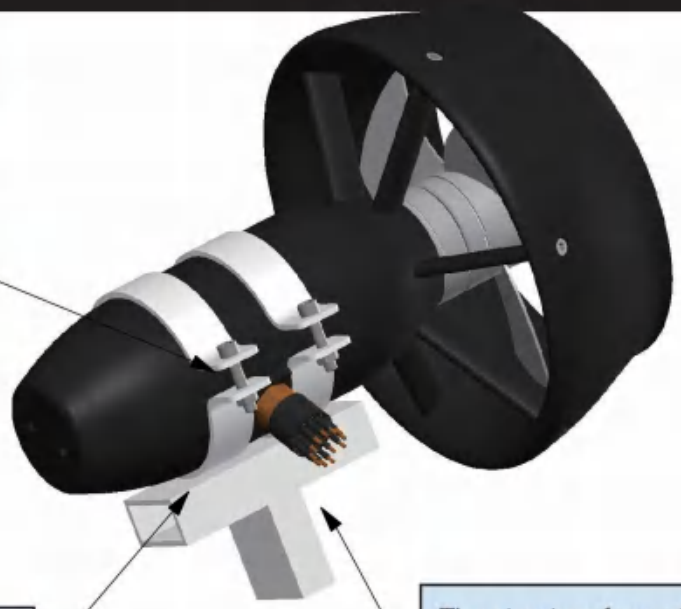
Aluminum alloy and engineering–plastics are available for nozzle fixed pillar, material strength must be considered, aluminum alloy should be anodized, customized

Mounting

Thruster

Mounting

Saddle Base Mount

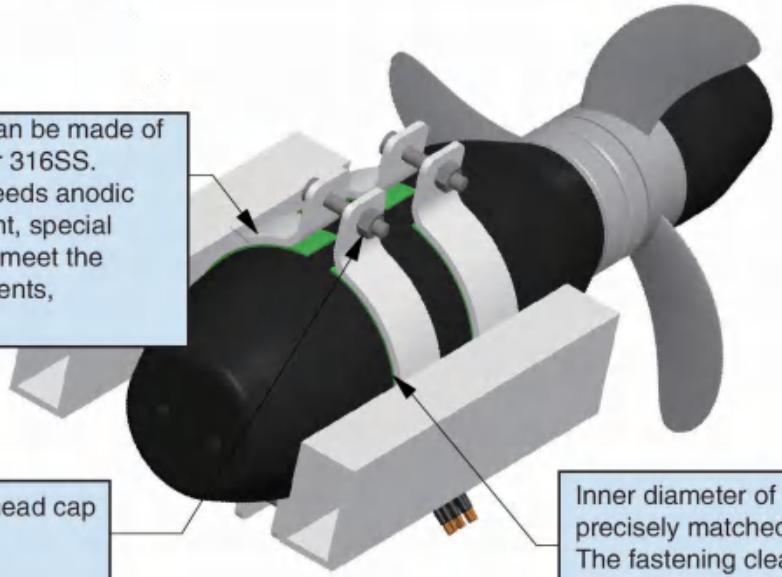


Inside hexagonal cylindrical head screw
Standard: M5
Material: 316SS

Rubber pad 1 mm thick between saddle and propeller to prevent scratching thruster shell

The structure form of saddle fixture can be customized. In order not to affect thrust, it is advisable to minimize the size of saddle fixture to meet the requirement of fixed strength.

Saddle Side Mount



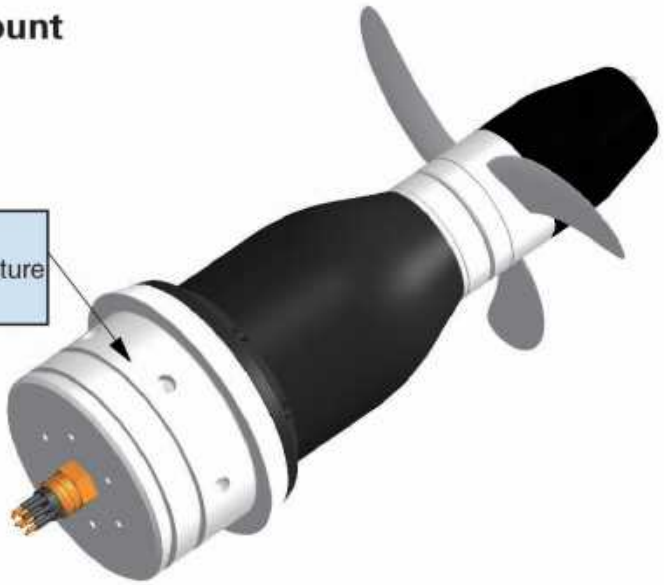
Saddle material can be made of aluminium alloy or 316SS. Aluminum alloy needs anodic oxidation treatment, special materials need to meet the strength requirements, customized

Hexagon socket head cap screws
Standard: M6
Material: 316SS

Inner diameter of the saddle needs to be precisely matched with the propeller shell. The fastening clearance should be "1–1.5mm". Customized

Mounting

Inlaid Flange Mount



Flange Mount

Technical information

Thruster

Thruster illustration

Features

- The thruster applies advanced magnetic coupling driving technology, which greatly reduces the impact and vibration during the operation of the thruster and prolongs the service life of the propeller. All electrical components are absolutely sealed in a sealed cabin, reducing the risk of leakage. In view of the deep water ultra-high pressure working environment, the special oil-filled self-compensation structure is applied to the thruster. On the one hand, the thruster independently overcomes the risk of leakage of the sealed cabin under the ultra-high pressure working environment, on the other hand, it greatly reduces the maintenance difficulty of the thruster. The integration design and precision process of mechanical, electrical and propeller make the product efficiency, noise, power density and other parameters reach the maximum. Excellent functions of overtemperature protection and overcurrent protection ensure the reliability of product operation. Special metal surface treatment technology ensures the mechanical strength and corrosion resistance of products.

Advantages

- Magnetically coupled seal
- Oil-filled pressure compensation structure can adapt to different ocean depths
- Large thrust, small volume, light weight and high efficiency
- Over-temperature protection, over-current protection signal zero-crossing protection
- Internal isolation between power supply and signal power supply system

Underwater thruster

forward 1.4KG, reverse 0.9KG
182w

T150 thruster

Technical parameters

1	Rated power	182w				
2	Rated voltage	12VDC	24VDC	48VDC		
3	Max RPM	4000r/min				
4	Thrust	thrust forward 1.4 KG		thrust reverse 0.9 KG		
5	Nozzle	black				
6	Propeller handing	left ↺	right ↻			
7	Material of propeller	stainless steel				
8	Housing	Aluminum alloy	Titanium alloy			
9	Seal	leakless, magneically coupled				
10	Depth rating	0–850m	0–1500m	0–3000m	0–6000m	full ocean depth
11	Signal power	supply voltage is 12VDC(±5%),≤250mA				
12	Control mode	analog voltage control (0V~+5V forward, 0V~–5V reverse)				CAN
13	RPM control	pulse feedback	analog voltage feedback	CAN		
14	Temperature	storage temperature: –40~70℃		service temperature: –5~40℃		
15	Electronics	built in	external			

service depth >850m, oil filled seal

Mechanical parameters

Service depth: 0–850m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)			common model
1	Aluminum alloy	built in	ø78.9	239.8	1.1	0.8	MCBH6M	12	24	48	
2	Aluminum alloy	built in	ø78.9	227.8	1.1	0.8	MCBHRA6M	12	24	48	
3	Aluminum alloy	external	ø78.9	209.5	1.0	0.7	MCBH8M	12	24	48	
4	Aluminum alloy	external	ø78.9	197.5	1.0	0.7	MCBHRA8M	12	24	48	
5	Titanium alloy	built in	ø78.9	239.8	1.2	0.9	MCBH6MSS	12	24	48	
6	Titanium alloy	built in	ø78.9	227.8	1.2	0.9	MCBHRA6MSS	12	24	48	
7	Titanium alloy	external	ø78.9	209.5	1.1	0.8	MCBH8MSS	12	24	48	
8	Titanium alloy	external	ø78.9	197.5	1.1	0.8	MCBHRA8MSS	12	24	48	

Service depth: 0–1500m & 0–3000m & 0–6000m

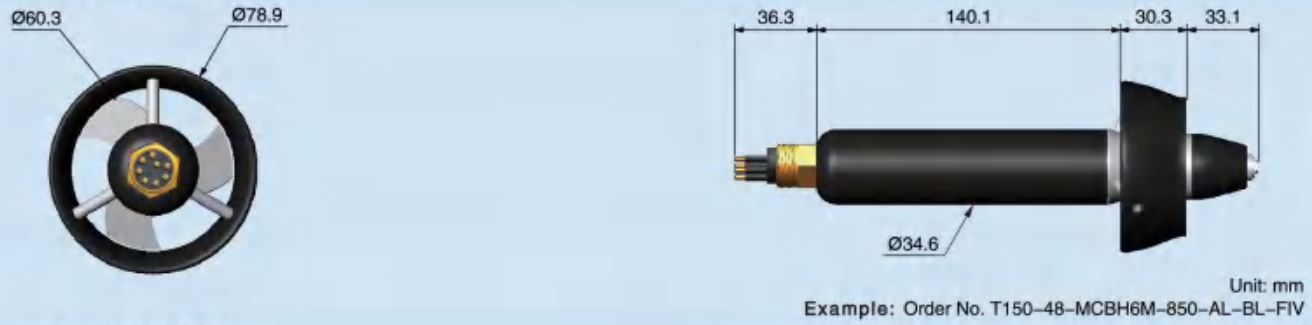
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø78.9	231.5	1.4	1.0	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	external	ø78.9	201.5	1.2	0.9	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Titanium alloy	built in	ø78.9	231.5	1.5	1.1	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
4	Titanium alloy	external	ø78.9	201.5	1.3	1.0	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water

Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø78.9	231.5	1.4	1.0	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	external	ø78.9	201.5	1.2	0.9	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Titanium alloy	built in	ø78.9	231.5	1.5	1.1	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
4	Titanium alloy	external	ø78.9	201.5	1.3	1.0	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water

Dimension

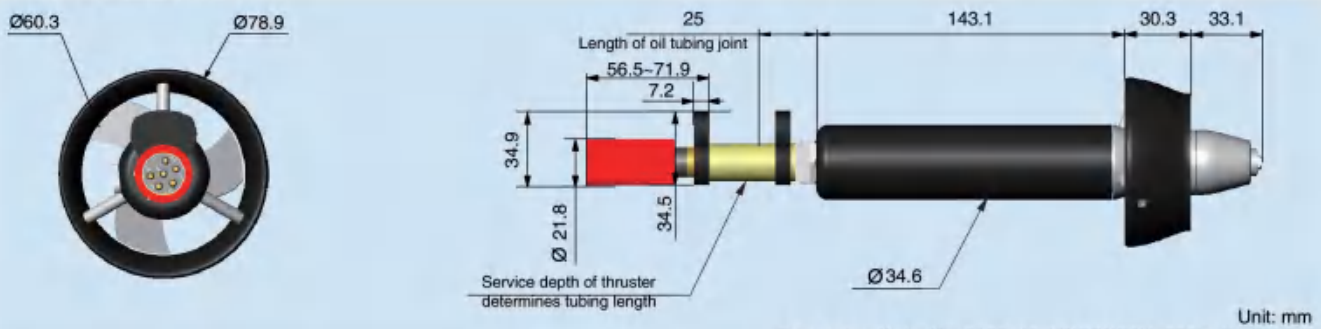
Service depth: 0–850m



Unit: mm

Example: Order No. T150–48–MCBH6M–850–AL–BL–FIV

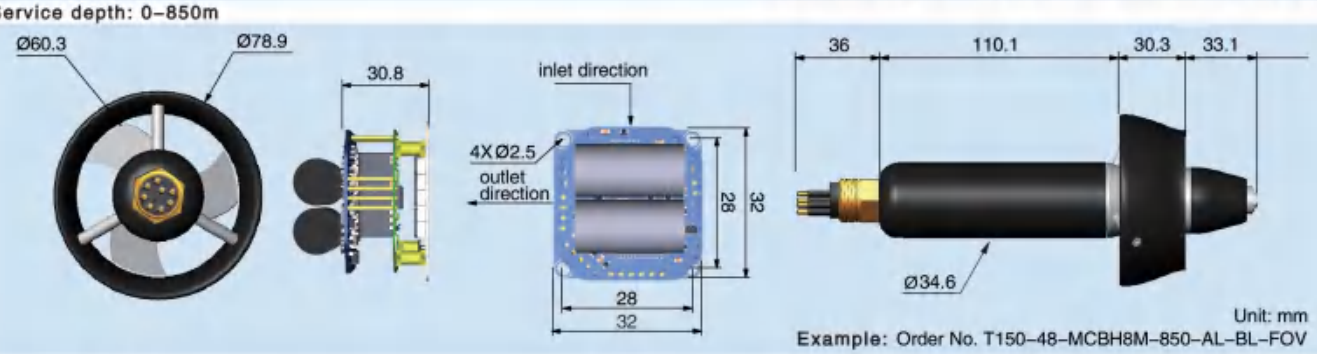
Service depth: 0–3000m



Unit: mm

Example: Order No. T150–48–MCPBOF6M–3000–AL–BL–FIV

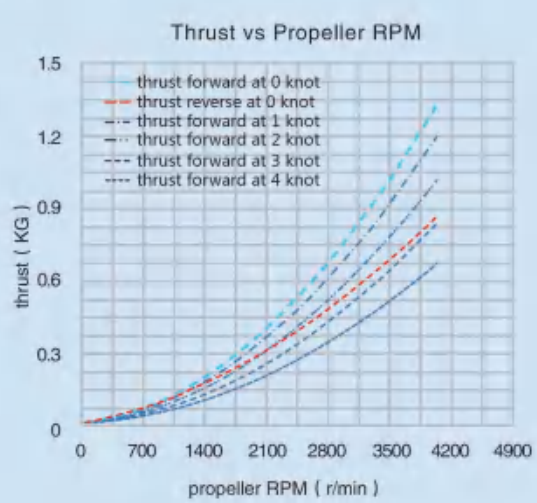
Service depth: 0–850m

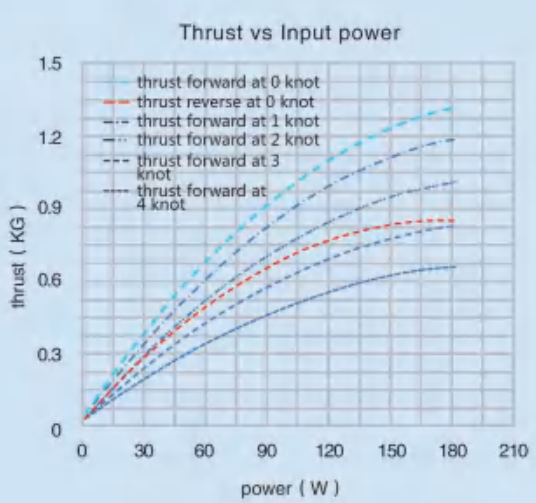


Unit: mm

Example: Order No. T150–48–MCBH8M–850–AL–BL–FOV

Thrust curve





Underwater thruster

forward 6.5KG, reverse 3KG
530W

T260 thruster

Technical parameters

1	Rated power	530W
2	Rated voltage	32VDC 48VDC 60VDC 72VDC 96VDC 110VDC 140VDC 180VDC 220VDC 300VDC
3	Max RPM	2000r/min
4	Thrust	Thrust forward 6.5 KG Thrust reverse 3 KG
5	Nozzle	Black
6	Propeller handing	left O right C
7	Material of propeller	Stainless steel
8	Housing	Aluminum alloy Titanium alloy
9	Seal	Leakless, magnetically coupled
10	Depth rating	0-850m 0-1500m 0-3000m 0-6000m full ocean depth service depth>1500m, oil filled seal
11	Signal power	Supply voltage is 12VDC(±5%) ≤210mA
12	Control mode	analog voltage control (0V-+5V forward, 0V--5V reverse) CAN
13	RPM feedback	pulse feedback analog voltage feedback CAN
14	Temperature	storage temperature: -40~70℃ service temperature: -5~40℃
15	Electronics	built-in external

Mechnical parameters

Service depth: 0-850m & 0-1500m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)						common model
1	Aluminum alloy	built in	ø100	249	1.2	0.8	MCBH6M	90	110	140	180	220	300	
2	Aluminum alloy	built in	ø100	249	1.2	0.8	MCBH8M	32	48	60	72			
3	Aluminum alloy	built in	ø100	237	1.2	0.8	MCBHRA6M	90	110	140	180	220	300	
4	Aluminum alloy	built in	ø100	237	1.2	0.8	MCBHRA8M	32	48	60	72			
5	Aluminum alloy	external	ø100	221	1.1	0.7	MCBH8M	110	140	180	220	300		
6	Aluminum alloy	external	ø100	231	1.1	0.7	MCBH12M	48	60	72	90			
7	Aluminum alloy	external	ø100	231	1.1	0.7	MCBH16M	32						
8	Aluminum alloy	external	ø100	209	1.1	0.7	MCBHRA8M	110	140	180	220	300		
9	Aluminum alloy	external	ø100	217	1.1	0.7	MCBHRA12M	48	60	72	90			
10	Aluminum alloy	external	ø100	217	1.1	0.7	MCBHRA16M	32						
11	Titanium alloy	built in	ø100	249	1.3	0.9	MCBH6MSS	90	110	140	180	220	300	
12	Titanium alloy	built in	ø100	249	1.3	0.9	MCBH8MSS	32	48	60	72			
13	Titanium alloy	built in	ø100	237	1.3	0.9	MCBHRA6MSS	90	110	140	180	220	300	
14	Titanium alloy	built in	ø100	237	1.3	0.9	MCBHRA8MSS	32	48	60	72			
15	Titanium alloy	external	ø100	221	1.2	0.8	MCBH8MSS	110	140	180	220	300		
16	Titanium alloy	external	ø100	231	1.3	0.9	MCBH12MSS	48	60	72	90			
17	Titanium alloy	external	ø100	231	1.3	0.9	MCBH16MSS	32						
18	Titanium alloy	external	ø100	209	1.2	0.8	MCBHRA8MSS	110	140	180	220	300		
19	Titanium alloy	external	ø100	217	1.3	0.9	MCBHRA12MSS	48	60	72	90			
20	Titanium alloy	external	ø100	217	1.3	0.9	MCBHRA16MSS	32						

Service depth: 0-3000m & 0-6000m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø100	245	1.7	1.1	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø100	245	1.7	1.1	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø100	215	1.6	1.0	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Aluminum alloy	external	ø100	215	1.6	1.0	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
5	Aluminum alloy	external	ø100	215	1.6	1.0	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water
6	Titanium alloy	built in	ø100	245	1.9	1.2	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
7	Titanium alloy	built in	ø100	245	1.9	1.2	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
8	Titanium alloy	external	ø100	215	1.8	1.1	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
9	Titanium alloy	external	ø100	215	1.9	1.2	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
10	Titanium alloy	external	ø100	215	1.9	1.2	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water

Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø100	245	1.7	1.1	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	external	ø100	215	1.6	1.0	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Titanium alloy	built in	ø100	245	1.9	1.2	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
4	Titanium alloy	external	ø100	215	1.8	1.1	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water

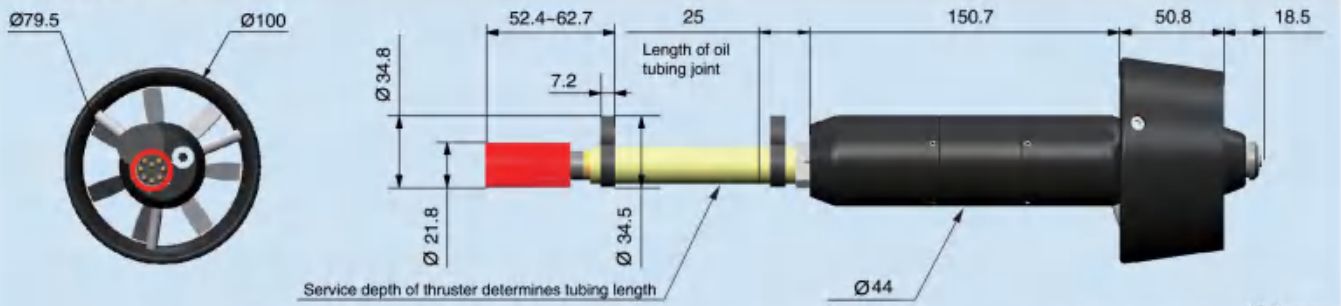
Dimension

Service depth: 0–850m

Unit: mm

Example: Order No. T260–32–MCBH8M–850–AL–BL–FIV

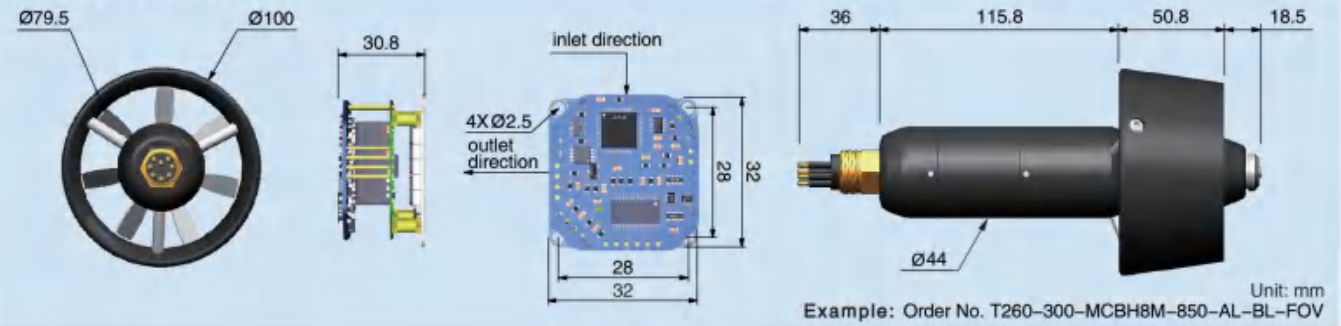
Service depth: 0–3000m



Unit: mm

Example: Order No. T260–32–MCPBOF8M–3000–AL–BL–FIV

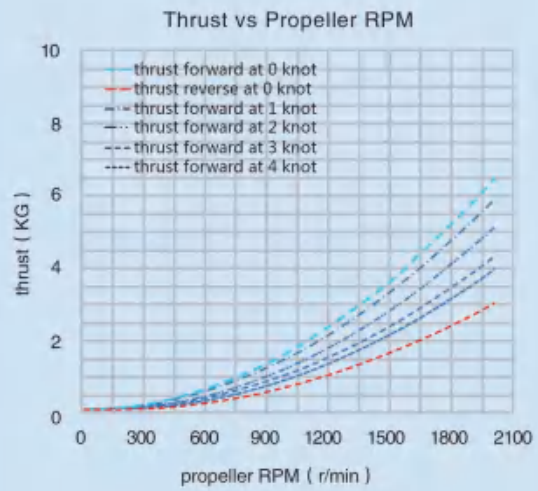
Service depth: 0–850m

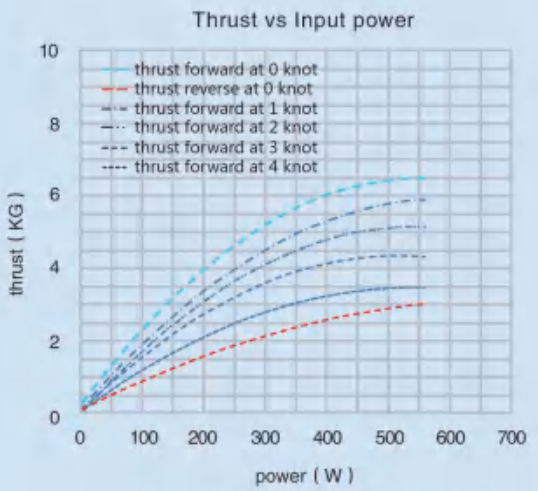


Unit: mm

Example: Order No. T260–300–MCBH8M–850–AL–BL–FOV

Thrust curve





Underwater thruster

forward 6.7KG, reverse 6.7KG
490W

T280 thruster

Technical parameters

1 Rated power	490W							
2 Rated voltage	32VDC	48VDC	65VDC	80VDC	100VDC	130VDC	150VDC	200VDC
	250VDC	300VDC						
3 Max RPM	2300r/min							
4 Thrust	thrust forward 6.7 KG		thrust reverse 6.7 KG					
5 Nozzle	none							
6 Propeller handing	Left O	Right C						
7 Materical of propeller	stainless steel							
8 Housing	Aluminum alloy	Titanium alloy						
9 Seal	leakless, magnetically coupled							
10 Depth rating	0-850m	0-1500m	0-3000m	0-6000m	full ocean depth		service depth >1500m, oil filled seal	
11 Signal power	supply voltage is 12VDC(±5%),≤210mA							
12 Control mode	analog voltage control (0V-+5V forward, 0V-—5V reverse)						CAN	
13 RPM feedback	pulse feedback	analog voltage feedback		CAN				
14 Temperature	storage temperature: -40~70℃		service temperature: -5~40℃					
15 Electronics	built in	external						

Mechnical parameters

Service depth: 0-850m & 0-1500m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)					common model
1	Aluminum alloy	built in	ø115	249	1.2	0.8	MCBH6M	130	150	200	250	300	
2	Aluminum alloy	built in	ø115	249	1.2	0.8	MCBH8M	32	48	65	80	100	
3	Aluminum alloy	built in	ø115	237	1.2	0.8	MCBHRA6M	130	150	200	250	300	
4	Aluminum alloy	built in	ø115	237	1.2	0.8	MCBHRA8M	32	48	65	80	100	
5	Aluminum alloy	external	ø115	221	1.1	0.7	MCBH8M	130	150	200	250	300	
6	Aluminum alloy	external	ø115	231	1.1	0.7	MCBH12M	65	80	100			
7	Aluminum alloy	external	ø115	231	1.1	0.7	MCBH16M	32	48				
8	Aluminum alloy	external	ø115	209	1.1	0.7	MCBHRA8M	130	150	200	250	300	
9	Aluminum alloy	external	ø115	217	1.1	0.7	MCBHRA12M	65	80	100			
10	Aluminum alloy	external	ø115	217	1.1	0.7	MCBHRA16M	32	48				
11	Titanium alloy	built in	ø115	249	1.3	0.9	MCBH6MSS	130	150	200	250	300	
12	Titanium alloy	built in	ø115	249	1.3	0.9	MCBH8MSS	32	48	65	80	100	
13	Titanium alloy	built in	ø115	237	1.3	0.9	MCBHRA6MSS	130	150	200	250	300	
14	Titanium alloy	built in	ø115	237	1.3	0.9	MCBHRA8MSS	32	48	65	80	100	
15	Titanium alloy	external	ø115	221	1.2	0.8	MCBH8MSS	130	150	200	250	300	
16	Titanium alloy	external	ø115	231	1.3	0.9	MCBH12MSS	65	80	100			
17	Titanium alloy	external	ø115	231	1.3	0.9	MCBH16MSS	32	48				
18	Titanium alloy	external	ø115	209	1.2	0.8	MCBHRA8MSS	130	150	200	250	300	
19	Titanium alloy	external	ø115	217	1.3	0.9	MCBHRA12MSS	65	80	100			
20	Titanium alloy	external	ø115	217	1.3	0.9	MCBHRA16MSS	32	48				

Service depth: 0-3000m & 0-6000m

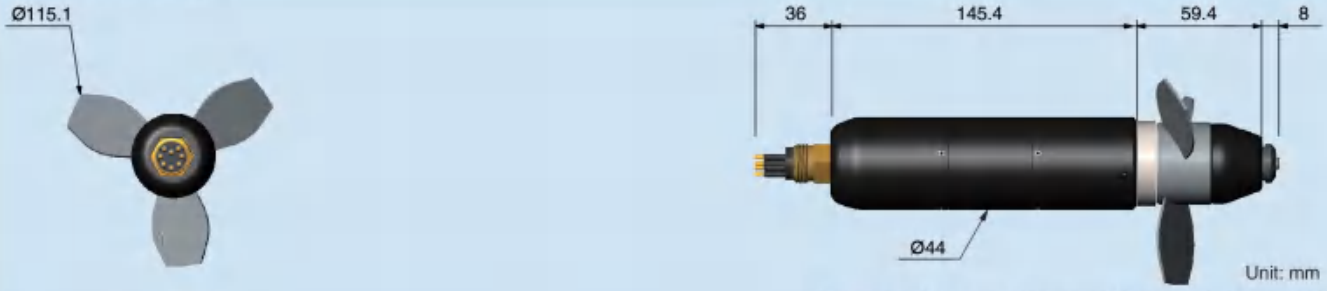
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø115	245	1.7	1.1	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø115	245	1.7	1.1	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø115	215	1.6	1.0	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Aluminum alloy	external	ø115	215	1.6	1.0	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
5	Aluminum alloy	external	ø115	215	1.6	1.0	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water
6	Titanium alloy	built in	ø115	245	1.9	1.2	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
7	Titanium alloy	built in	ø115	245	1.9	1.2	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
8	Titanium alloy	external	ø115	215	1.8	1.1	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
9	Titanium alloy	external	ø115	215	1.9	1.2	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
10	Titanium alloy	external	ø115	215	1.9	1.2	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water

Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø115	245	1.7	1.1	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	external	ø115	215	1.6	1.0	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Titanium alloy	built in	ø115	245	1.9	1.2	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
4	Titanium alloy	external	ø115	215	1.8	1.1	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water

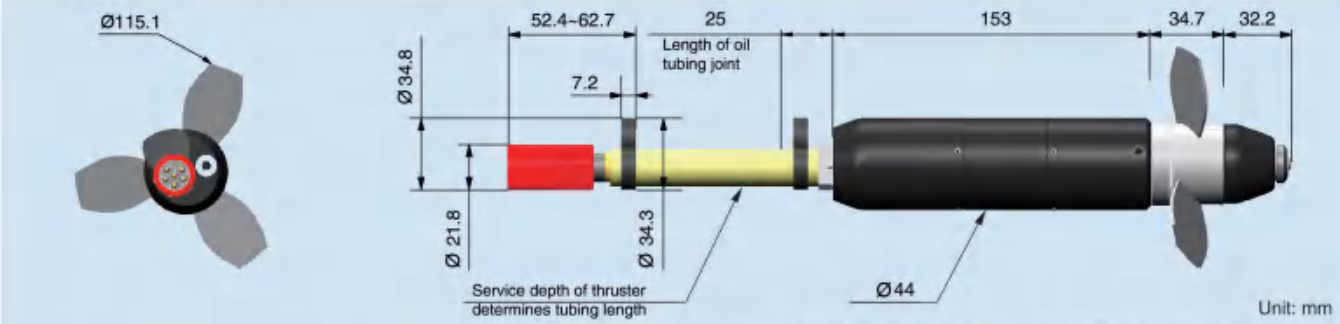
Dimension

Service depth: 0–850m



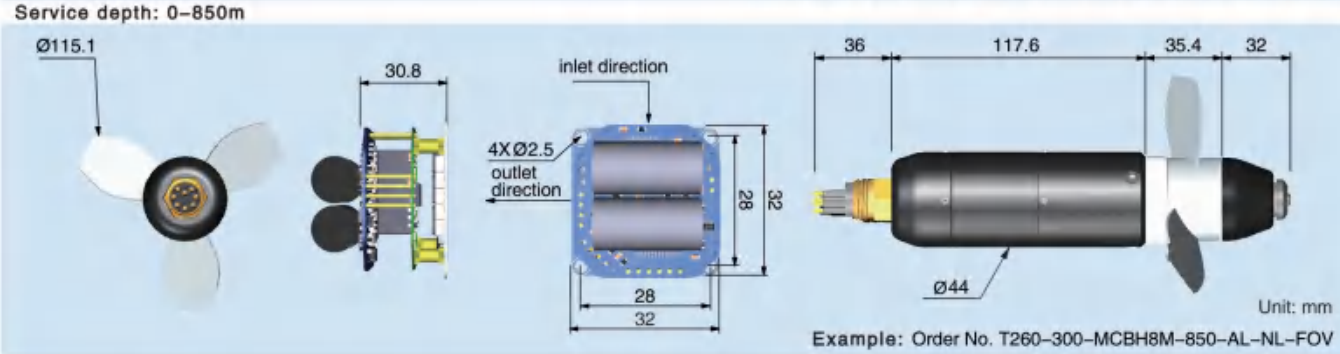
Example: Order No. T280–32–MCBH8M–850–AL–NL–FIV

Service depth: 0–3000m



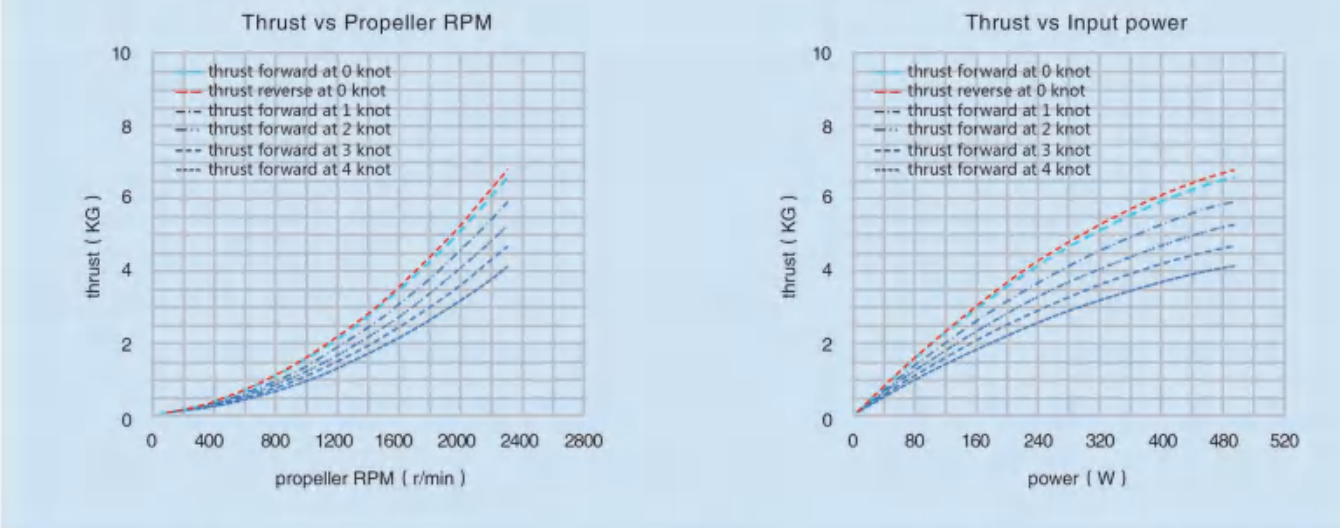
Example: Order No. T280–32–MCPBOF8M–3000–AL–NL–FIV

Service depth: 0–850m



Example: Order No. T260–300–MCBH8M–850–AL–NL–FOV

Thrust curve



Underwater thruster

forward 7.3KG, reverse 7.3KG
400W

T280S thruster

Technical parameters

1 Rated power	400W							
2 Rated voltage	32VDC	48VDC	65VDC	80VDC	100VDC	130VDC	150VDC	200VDC
	250VDC	300VDC						
3 Max RPM	2480r/min							
4 Thrust	thrust forward 7.3 KG		thrust reverse 7.3 KG					
5 Nozzle	black							
6 Propeller handing	left ↺	right ↻						
7 Material of propeller	stainless steel							
8 Housing	Aluminum alloy	Titanium alloy						
9 Seal	leakless, magnetically coupled							
10 Depth rating	0–850m	0–1500m	0–3000m	0–6000m	full ocean depth		service depth >1500m, oil filled seal	
11 Signal power	supply voltage is 12VDC(±5%),≤210mA							
12 Control mode	analog voltage control (0V~+5V forward, 0V~−5V reverse)						CAN	
13 RPM feedback	pulse feedback	analog voltage feedback		CAN				
14 Temperature	storage temperature: −40–70℃		service temperature: −5–40℃					
15 Electronics	built-in	external						

Mechnical parameters

Service depth: 0–850m & 0–1500m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)					common model
1	Aluminum alloy	built in	ø130	249	1.3	1.0	MCBH6M	130	150	200	250	300	
2	Aluminum alloy	built in	ø130	249	1.3	1.0	MCBH8M	32	48	65	80	100	
3	Aluminum alloy	built in	ø130	237	1.3	1.0	MCBHRA6M	130	150	200	250	300	
4	Aluminum alloy	built in	ø130	237	1.3	1.0	MCBHRA8M	32	48	65	80	100	
5	Aluminum alloy	external	ø130	221	1.2	0.9	MCBH8M	130	150	200	250	300	
6	Aluminum alloy	external	ø130	231	1.2	0.9	MCBH12M	65	80	100			
7	Aluminum alloy	external	ø130	231	1.2	0.9	MCBH16M	32	48				
8	Aluminum alloy	external	ø130	209	1.2	0.9	MCBHRA8M	130	150	200	250	300	
9	Aluminum alloy	external	ø130	217	1.2	0.9	MCBHRA12M	65	80	100			
10	Aluminum alloy	external	ø130	217	1.2	0.9	MCBHRA16M	32	48				
11	Titanium alloy	built in	ø130	249	1.5	1.0	MCBH6MSS	130	150	200	250	300	
12	Titanium alloy	built in	ø130	249	1.5	1.0	MCBH8MSS	32	48	65	80	100	
13	Titanium alloy	built in	ø130	237	1.5	1.0	MCBHRA6MSS	130	150	200	250	300	
14	Titanium alloy	built in	ø130	237	1.5	1.0	MCBHRA8MSS	32	48	65	80	100	
15	Titanium alloy	external	ø130	221	1.3	1.1	MCBH8MSS	130	150	200	250	300	
16	Titanium alloy	external	ø130	231	1.3	1.1	MCBH12MSS	65	80	100			
17	Titanium alloy	external	ø130	231	1.3	1.1	MCBH16MSS	32	48				
18	Titanium alloy	external	ø130	209	1.3	1.1	MCBHRA8MSS	130	150	200	250	300	
19	Titanium alloy	external	ø130	217	1.3	1.1	MCBHRA12MSS	65	80	100			
20	Titanium alloy	external	ø130	217	1.3	1.1	MCBHRA16MSS	32	48				

Service depth: 0–3000m & 0–6000m

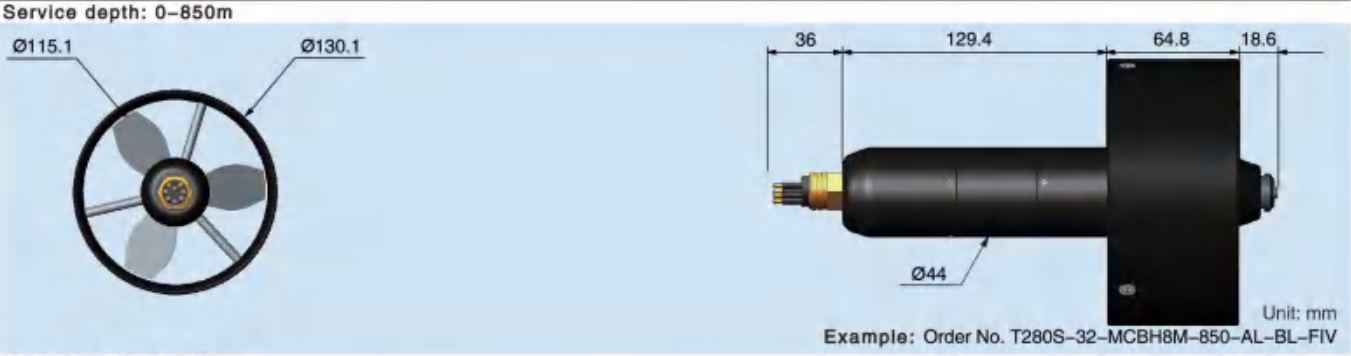
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø130	245	1.8	1.3	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø130	245	1.8	1.3	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø130	215	1.7	1.2	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Aluminum alloy	external	ø130	215	1.7	1.2	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
5	Aluminum alloy	external	ø130	215	1.7	1.2	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water
6	Titanium alloy	built in	ø130	245	2.1	1.4	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
7	Titanium alloy	built in	ø130	245	2.1	1.4	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
8	Titanium alloy	external	ø130	215	1.8	1.3	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
9	Titanium alloy	external	ø130	215	1.8	1.3	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
10	Titanium alloy	external	ø130	215	1.8	1.3	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water

Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø130	245	1.8	1.3	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	external	ø130	215	1.7	1.2	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Titanium alloy	built in	ø130	245	2.1	1.4	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
4	Titanium alloy	external	ø130	215	1.9	1.4	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water

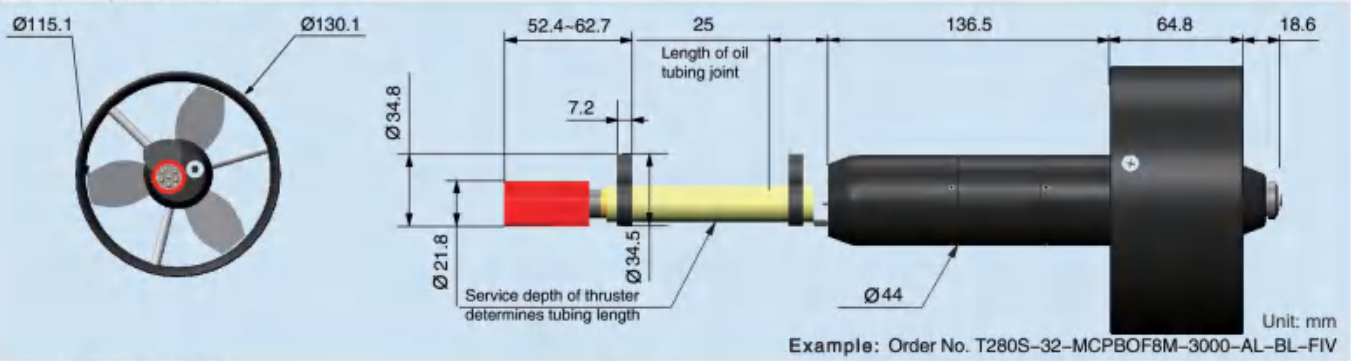
Dimension

Service depth: 0–850m



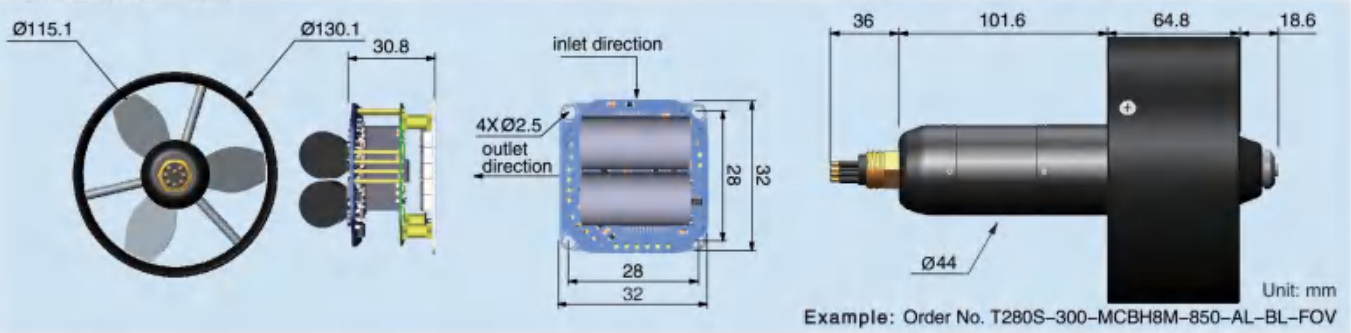
Example: Order No. T280S–32–MCBH8M–850–AL–BL–FIV

Service depth: 0–3000m



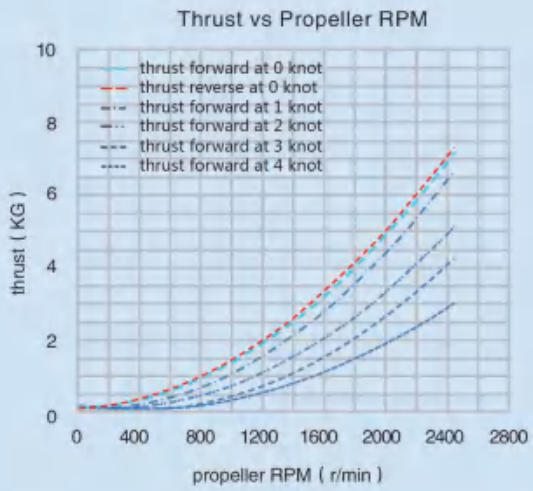
Example: Order No. T280S–32–MCPBOF8M–3000–AL–BL–FIV

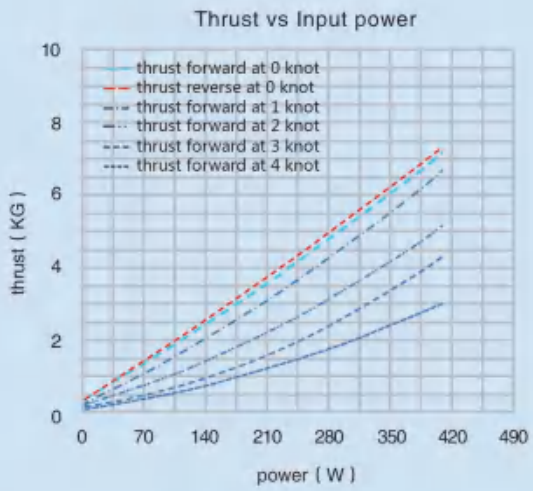
Service depth: 0–850m



Example: Order No. T280S–300–MCBH8M–850–AL–BL–FOV

Thrust curve





Underwater thruster

forward 8.3KG, reverse 5.1KG
580W

T300 thruster

Technical parameters

1 Rated power	580W							
2 Rated voltage	32VDC	48VDC	60VDC	72VDC	90VDC	110VDC	140VDC	180VDC
	220VDC	300VDC						
3 Max RPM	2080r/min							
4 Thrust	thrust forward 8.3 KG		thrust reverse 5.1 KG					
5 Nozzle	black							
6 Propeller handing	Left O	Right O						
7 Material of propeller	stainless steel							
8 Housing	Aluminum alloy	Titanium alloy						
9 Seal	leakless, magnetically coupled							
10 Depth rating	0-850m	0-1500m	0-3000m	0-6000m	full ocean depth	service depth >1500m, oil filled seal		
11 Signal power	supply voltage is 12VDC(±5%), ≤210mA							
12 Control mode	analog voltage control (0V-+5V forward, 0V—5V reverse)					CAN		
13 RPM feedback	pulse feedback	analog voltage feedback	CAN					
14 Temperature	storage temperature: -40~70℃		service temperature: -5~40℃					
15 Electronics	built in	external						

Mechnical parameters

Service depth: 0-850m & 0-1500m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)						common model
1	Aluminum alloy	built in	ø116	249	1.3	0.9	MCBH6M	140	180	220	300			
2	Aluminum alloy	built in	ø116	249	1.3	0.9	MCBH8M	32	48	60	72	90	110	
3	Aluminum alloy	built in	ø116	237	1.3	0.9	MCBHRA6M	140	180	220	300			
4	Aluminum alloy	built in	ø116	237	1.3	0.9	MCBHRA8M	32	48	60	72	90	110	
5	Aluminum alloy	external	ø116	221	1.1	0.8	MCBH8M	140	180	220	300			
6	Aluminum alloy	external	ø116	231	1.1	0.8	MCBH12M	60	72	90	110			
7	Aluminum alloy	external	ø116	231	1.1	0.8	MCBH16M	32	48					
8	Aluminum alloy	external	ø116	209	1.1	0.8	MCBHRA8M	140	180	220	300			
9	Aluminum alloy	external	ø116	217	1.1	0.8	MCBHRA12M	60	72	90	110			
10	Aluminum alloy	external	ø116	217	1.1	0.8	MCBHRA16M	32	48					
11	Titanium alloy	built in	ø116	249	1.5	1.1	MCBH6MSS	140	180	220	300			
12	Titanium alloy	built in	ø116	249	1.5	1.1	MCBH8MSS	32	48	60	72	90	110	
13	Titanium alloy	built in	ø116	237	1.5	1.1	MCBHRA6MSS	140	180	220	300			
14	Titanium alloy	built in	ø116	237	1.5	1.1	MCBHRA8MSS	32	48	60	72	90	110	
15	Titanium alloy	external	ø116	221	1.4	1.0	MCBH8MSS	140	180	220	300			
16	Titanium alloy	external	ø116	231	1.4	1.0	MCBH12MSS	60	72	90	110			
17	Titanium alloy	external	ø116	231	1.4	1.0	MCBH16MSS	32	48					
18	Titanium alloy	external	ø116	209	1.4	1.0	MCBHRA8MSS	140	180	220	300			
19	Titanium alloy	external	ø116	217	1.4	1.0	MCBHRA12MSS	60	72	90	110			
20	Titanium alloy	external	ø116	217	1.4	1.0	MCBHRA16MSS	32	48					

Service depth: 0-3000m & 0-6000m

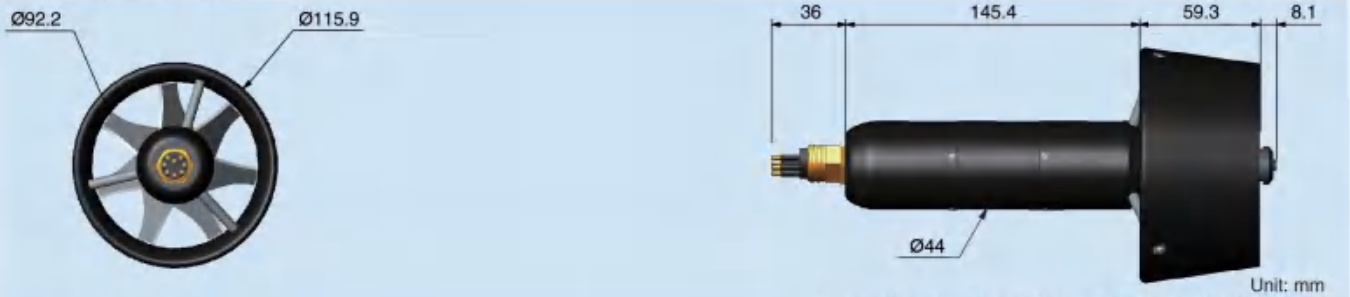
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø116	245	1.8	1.2	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø116	245	1.8	1.2	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø116	215	1.6	1.1	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Aluminum alloy	external	ø116	215	1.6	1.1	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
5	Aluminum alloy	external	ø116	215	1.6	1.1	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water
6	Titanium alloy	built in	ø116	245	2.1	1.4	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
7	Titanium alloy	built in	ø116	245	2.1	1.4	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
8	Titanium alloy	external	ø116	215	1.9	1.3	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
9	Titanium alloy	external	ø116	215	1.9	1.3	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
10	Titanium alloy	external	ø116	215	1.9	1.3	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water

Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø116	245	1.8	1.2	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	external	ø116	215	1.6	1.1	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Titanium alloy	built in	ø116	245	2.1	1.4	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
4	Titanium alloy	external	ø116	215	2.0	1.4	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water

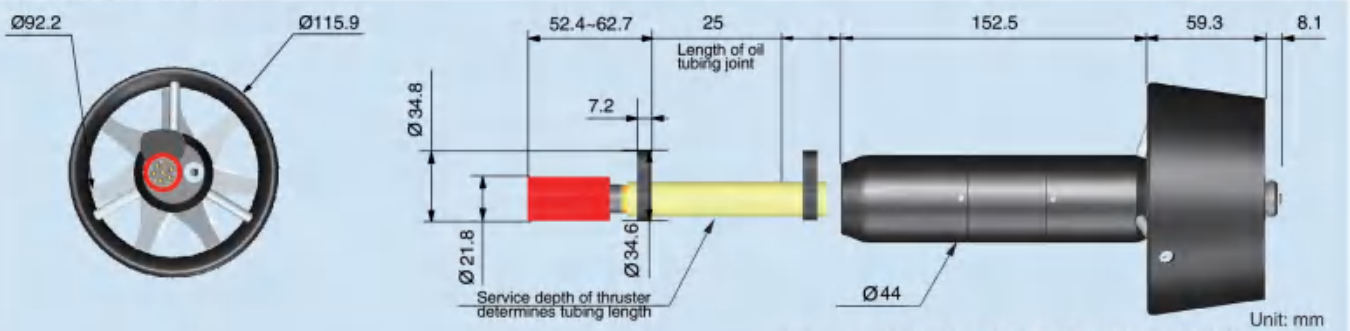
Dimension

Service depth: 0–850m



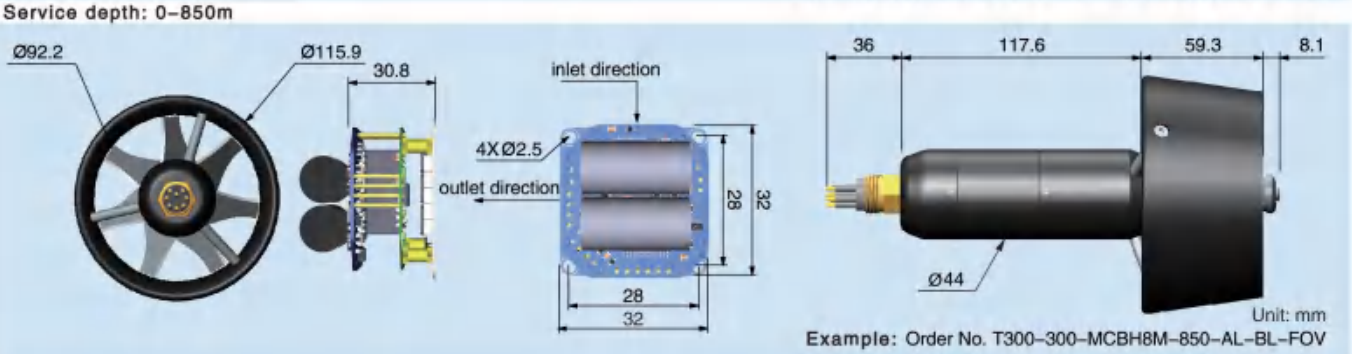
Example: Order No. T300–32–MCBH8M–850–AL–BL–FIV

Service depth: 0–3000m



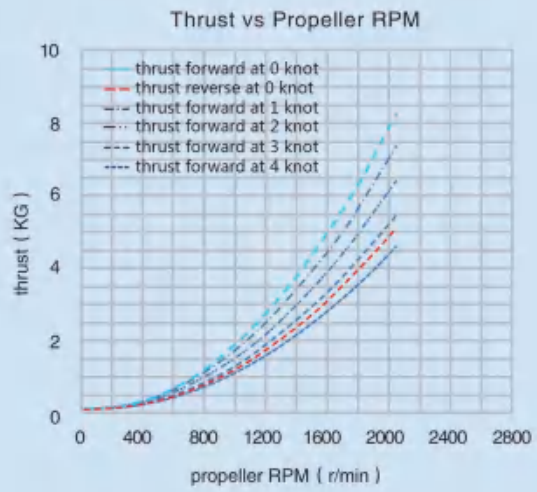
Example: Order No. T300–32–MCPBOF8M–3000–AL–BL–FIV

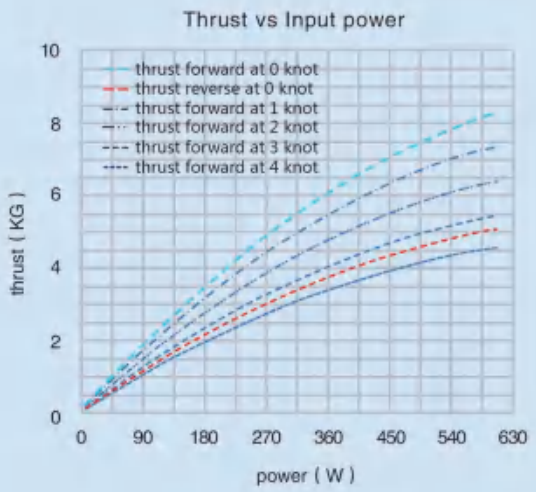
Service depth: 0–850m



Example: Order No. T300–300–MCBH8M–850–AL–BL–FOV

Thrust curve





Underwater thruster

forward 10.5KG, reverse 6.6KG
500W

T400 thruster

Technical parameters

1 Rated power	500W							
2 Rated voltage	24VDC	36VDC	48VDC	65VDC	80VDC	100VDC	130VDC	150VDC
	200VDC	250VDC	300VDC					
3 Max RPM	2940r/min							
4 Thrust	thrust forward 10.5 KG		thrust reverse 6.6 KG					
5 Nozzle	black							
6 Propeller handing	left ○	right ○						
7 Material of propeller	stainless steel							
8 Housing	Aluminum alloy	Titanium alloy						
9 Seal	leakless, magnetically coupled							
10 Depth rating	0-850m	0-1500m	0-3000m	0-6000m	full ocean depth		service depth >1500m, oil filled seal	
11 Signal power	supply voltage is 12VDC(±5%) ≤250mA							
12 Control mode	analog voltage control (0V-+5V forward, 0V-—5V reverse)						CAN	
13 RPM feedback	pulse feedback		analog voltage feedback		CAN			
14 Temperature	storage temperature: -40~70℃				service temperature: -5~40℃			
15 Electronics	built in	external						

Mechnical parameters

Service depth: 0-850m & 0-1500m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)					
1	Aluminum alloy	built in	ø134	264	1.7	1.1	MCBH6M	130	150	200	250	300	
2	Aluminum alloy	built in	ø134	264	1.7	1.1	MCBH8M	24	36	48	65	80	100
3	Aluminum alloy	built in	ø134	252	1.7	1.1	MCBHRA6M	130	150	200	250	300	
4	Aluminum alloy	built in	ø134	252	1.7	1.1	MCBHRA8M	24	36	48	65	80	100
5	Aluminum alloy	external	ø134	227	1.6	1.1	MCBH8M	130	150	200	250	300	
6	Aluminum alloy	external	ø134	236	1.6	1.1	MCBH12M	65	80	100			
7	Aluminum alloy	external	ø134	236	1.6	1.1	MCBH16M	24	36	48			
8	Aluminum alloy	external	ø134	215	1.6	1.1	MCBHRA8M	130	150	200	250	300	
9	Aluminum alloy	external	ø134	222	1.6	1.1	MCBHRA12M	65	80	100			
10	Aluminum alloy	external	ø134	222	1.6	1.1	MCBHRA16M	24	36	48			
11	Titanium alloy	built in	ø134	264	2.0	1.4	MCBH6MSS	130	150	200	250	300	
12	Titanium alloy	built in	ø134	264	2.0	1.4	MCBH8MSS	24	36	48	65	80	100
13	Titanium alloy	built in	ø134	252	2.0	1.4	MCBHRA6MSS	130	150	200	250	300	
14	Titanium alloy	built in	ø134	252	2.0	1.4	MCBHRA8MSS	24	36	48	65	80	100
15	Titanium alloy	external	ø134	227	1.9	1.4	MCBH8MSS	130	150	200	250	300	
16	Titanium alloy	external	ø134	236	1.9	1.4	MCBH12MSS	65	80	100			
17	Titanium alloy	external	ø134	236	1.9	1.4	MCBH16MSS	24	36	48			
18	Titanium alloy	external	ø134	215	1.9	1.4	MCBHRA8MSS	130	150	200	250	300	
19	Titanium alloy	external	ø134	222	1.9	1.4	MCBHRA12MSS	65	80	100			
20	Titanium alloy	external	ø134	222	1.9	1.4	MCBHRA16MSS	24	36	48			

common model

Service depth: 0-3000m & 0-6000m

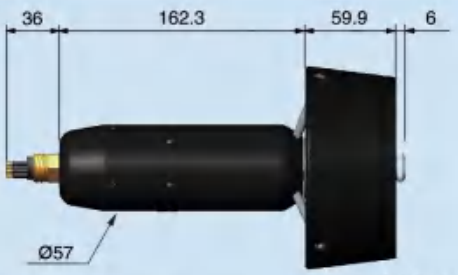
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø134	251	2.0	1.2	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø134	251	2.0	1.2	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø134	214	1.6	1.2	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Aluminum alloy	external	ø134	214	1.6	1.2	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
5	Aluminum alloy	external	ø134	214	1.6	1.2	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water
6	Titanium alloy	built in	ø134	251	2.3	1.5	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
7	Titanium alloy	built in	ø134	251	2.3	1.5	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
8	Titanium alloy	external	ø134	214	1.9	1.5	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
9	Titanium alloy	external	ø134	214	1.9	1.5	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
10	Titanium alloy	external	ø134	214	1.9	1.5	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water

Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø134	251	2.0	1.2	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	external	ø134	214	1.6	1.2	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Titanium alloy	built in	ø134	251	2.3	1.5	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
4	Titanium alloy	external	ø134	214	1.9	1.5	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water

Dimension

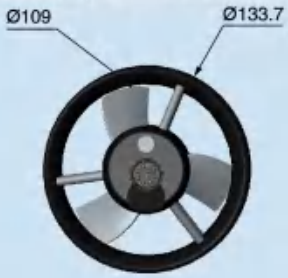
Service depth: 0–850m

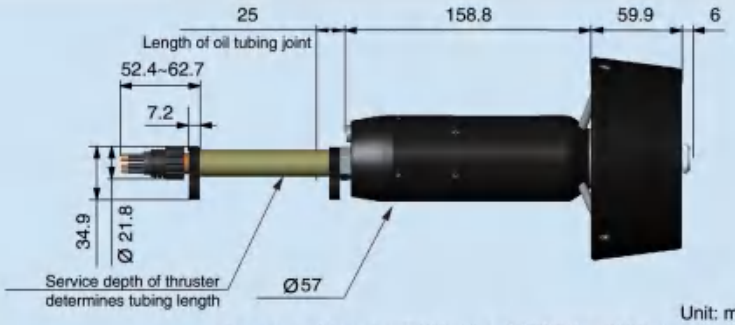


Unit: mm

Example: Order No. T400–48–MCBH8M–850–AL–BL–FIV

Service depth: 0–3000m

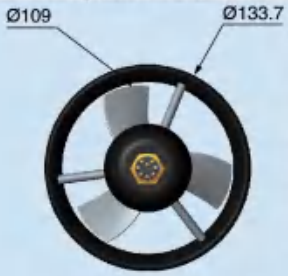


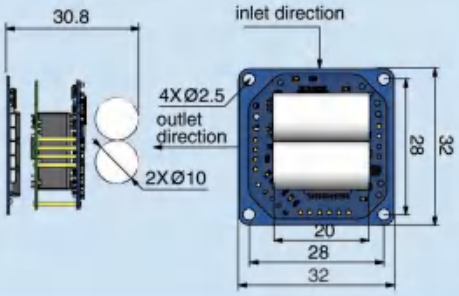


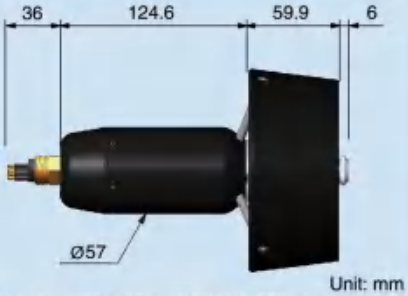
Unit: mm

Example: Order No. T400–48–MCPBOF8M–3000–AL–BL–FIV

Service depth: 0–850m



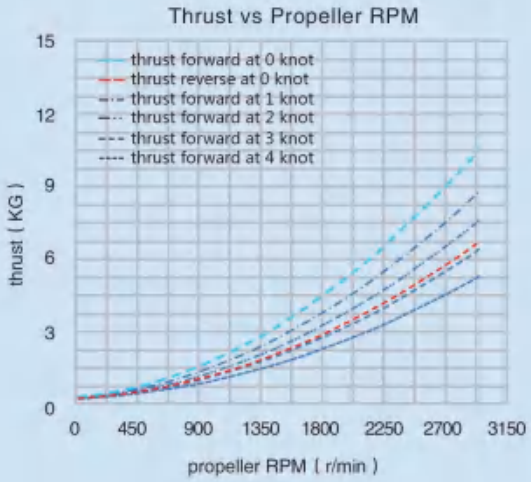


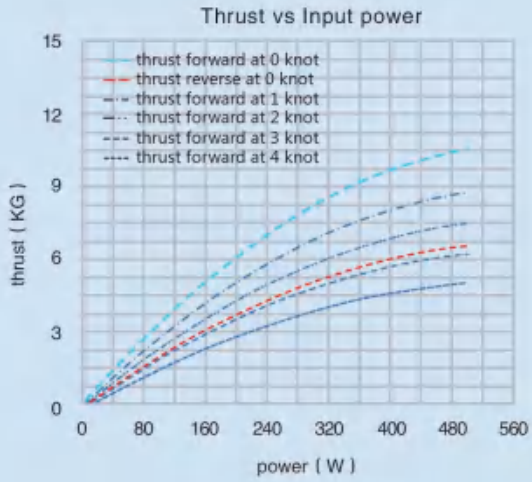


Unit: mm

Example: Order No. T400–300–MCBH8M–850–AL–BL–FOV

Thrust curve





Underwater thruster

forward 8KG, reverse 8KG
500W

T430 thruster

Technical parameters

1 Rated power	500W							
2 Rated voltage	24VDC	36VDC	48VDC	65VDC	80VDC	100VDC	130VDC	150VDC
	200VDC	250VDC	300VDC					
3 Max RPM	2700r/min							
4 Thrust	thrust forward 8 KG		thrust reverse 8 KG					
5 Nozzle	black							
6 Propeller handing	Left ↺	Right ↻						
7 Material of propeller	stainless steel							
8 Housing	Aluminum alloy	Titanium alloy						
9 Seal	leakless, magnetically coupled							
10 Depth rating	0-850m	0-1500m	0-3000m	0-6000m	full ocean depth		service depth >1500m, oil filled seal	
11 Signal power	supply voltage is 12VDC(±5%) , ≤250mA							
12 Control mode	analog voltage control (0V-+5V forward, 0V-—5V reverse)						CAN	
13 RPM feedback	pulse feedback	analog voltage feedback		CAN				
14 Temperature	storage temperature: -40~70℃		service temperature: -5~40℃					
15 Electronics	built in	external						

Mechnical parameters

Service depth: 0-850m & 0-1500m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)					
1	Aluminum alloy	built in	ø135	264	1.8	1.2	MCBH6M	130	150	200	250	300	
2	Aluminum alloy	built in	ø135	264	1.8	1.2	MCBH8M	24	36	**48**	65	80	100
3	Aluminum alloy	built in	ø135	252	1.8	1.2	MCBHRA6M	130	150	200	250	300	
4	Aluminum alloy	built in	ø135	252	1.8	1.2	MCBHRA8M	24	36	48	65	80	100
5	Aluminum alloy	external	ø135	227	1.7	1.2	MCBH8M	130	150	200	250	300	
6	Aluminum alloy	external	ø135	236	1.7	1.2	MCBH12M	65	80	100			
7	Aluminum alloy	external	ø135	236	1.7	1.2	MCBH16M	24	36	48			
8	Aluminum alloy	external	ø135	215	1.7	1.2	MCBHRA8M	130	150	200	250	300	
9	Aluminum alloy	external	ø135	222	1.7	1.2	MCBHRA12M	65	80	100			
10	Aluminum alloy	external	ø135	222	1.7	1.2	MCBHRA16M	24	36	48			
11	Titanium alloy	built in	ø135	264	2.1	1.5	MCBH6MSS	130	150	200	250	300	
12	Titanium alloy	built in	ø135	264	2.1	1.5	MCBH8MSS	24	36	**48**	65	80	100
13	Titanium alloy	built in	ø135	252	2.1	1.5	MCBHRA6MSS	130	150	200	250	300	
14	Titanium alloy	built in	ø135	252	2.1	1.5	MCBHRA8MSS	24	36	48	65	80	100
15	Titanium alloy	external	ø135	227	1.9	1.4	MCBH8MSS	130	150	200	250	300	
16	Titanium alloy	external	ø135	236	1.9	1.4	MCBH12MSS	65	80	100			
17	Titanium alloy	external	ø135	236	1.9	1.4	MCBH16MSS	24	36	48			
18	Titanium alloy	external	ø135	215	1.9	1.4	MCBHRA8MSS	130	150	200	250	300	
19	Titanium alloy	external	ø135	222	1.9	1.4	MCBHRA12MSS	65	80	100			
20	Titanium alloy	external	ø135	222	1.9	1.4	MCBHRA16MSS	24	36	48			

common model

Service depth: 0-3000m & 0-6000m

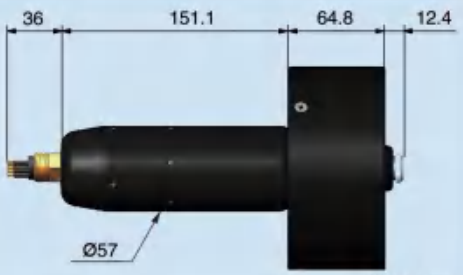
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø135	251	2.1	1.3	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø135	251	2.1	1.3	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø135	214	1.7	1.3	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Aluminum alloy	external	ø135	214	1.7	1.3	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
5	Aluminum alloy	external	ø135	214	1.7	1.3	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water
6	Titanium alloy	built in	ø135	251	2.4	1.6	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
7	Titanium alloy	built in	ø135	251	2.4	1.6	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
8	Titanium alloy	external	ø135	214	2.0	1.6	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
9	Titanium alloy	external	ø135	214	2.0	1.6	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
10	Titanium alloy	external	ø135	214	2.0	1.6	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water

Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø135	251	2.1	1.3	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	external	ø135	214	1.7	1.3	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Titanium alloy	built in	ø135	251	2.4	1.6	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
4	Titanium alloy	external	ø135	214	2.0	1.6	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water

Dimension

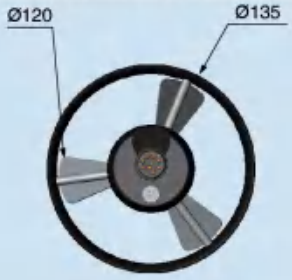
Service depth: 0–850m

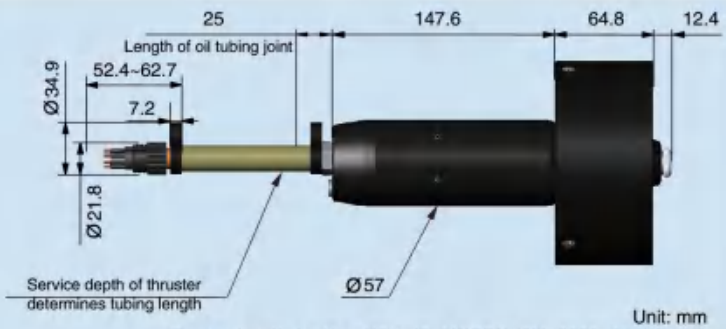


Unit: mm

Example: Order No. T430–48–MCBH8M–850–AL–BL–FIV

Service depth: 0–3000m

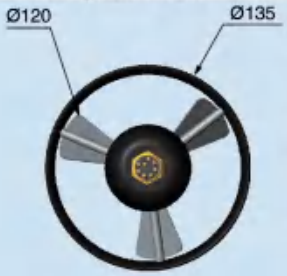


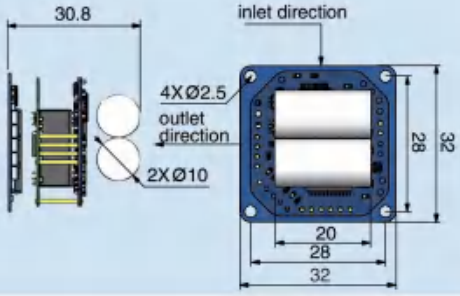


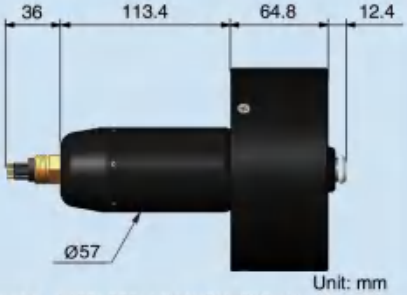
Unit: mm

Example: Order No. T430–48–MCPBOF8M–3000–AL–BL–FIV

Service depth: 0–850m



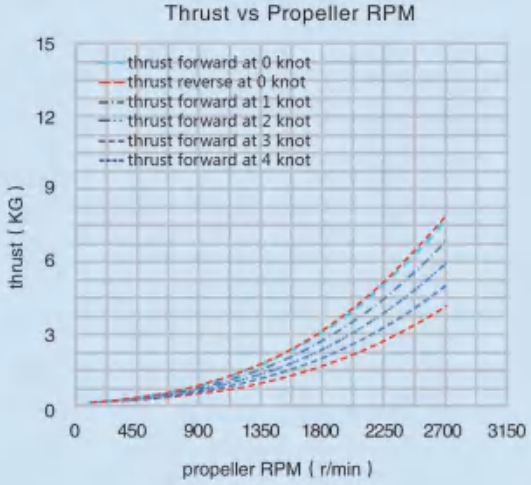


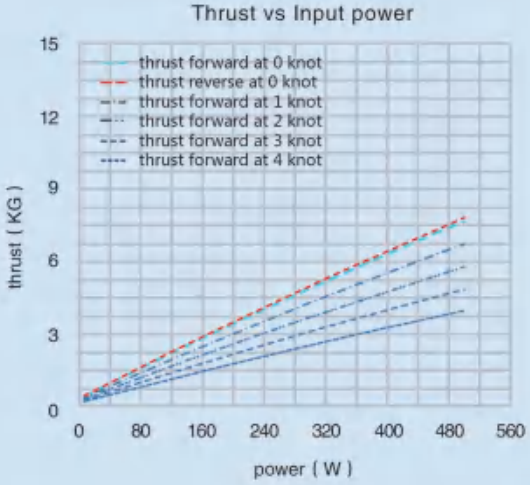


Unit: mm

Example: Order No. T430–300–MCBH8M–850–AL–BL–FOV

Thrust curve





Underwater thruster

forward 15KG, reverse 15KG
1kw

T530 thruster

Technical parameters

1	Rated power	1kw						
2	Rated voltage	48VDC	60VDC	75VDC	90VDC	120VDC	150VDC	200VDC	240VDC
		300VDC							
3	Max RPM	2500r/min							
4	Thrust	thrust forward 15 KG		thrust reverse 15 KG					
5	Nozzle	black							
6	Propeller handing	left ○	right ○						
7	Material of propeller	stainless steel							
8	Housing	Aluminum alloy	Titanium alloy						
9	Seal	leakless, magnetically coupled							
10	Depth rating	0–850m	0–1500m	0–3000m	0–6000m	full ocean depth		service depth >1500m, oil filled seal	
11	Signal power	supply voltage is 12VDC(± 5%) ,≤250mA							
12	Control mode	analog voltage control (0V~+5V forward, 0V—5V reverse)						CAN	
13	RPM feedback	pulse feedback	analog voltage feedback	CAN					
14	Temperature	storage temperature: –40–70℃		service temperature: –5–40℃					
15	Electronics	built in	external						

Mechnical parameters

Service depth: 0–850m & 0–1500m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)						common model
1	Aluminum alloy	built in	ø158	316	2.3	1.5	MCBH6M	200	240	300				
2	Aluminum alloy	built in	ø158	316	2.3	1.5	MCBH8M	48	60	75	90	120	150	
3	Aluminum alloy	built in	ø158	304	2.3	1.5	MCBHRA6M	200	240	300				
4	Aluminum alloy	built in	ø158	304	2.3	1.5	MCBHRA8M	48	60	75	90	120	150	
5	Aluminum alloy	external	ø158	277	2.2	1.4	MCBH8M	200	240	300				
6	Aluminum alloy	external	ø158	287	2.2	1.4	MCBH12M	90	120	150				
7	Aluminum alloy	external	ø158	287	2.2	1.4	MCBH16M	48	60	75				
8	Aluminum alloy	external	ø158	265	2.2	1.4	MCBHRA8M	200	240	300				
9	Aluminum alloy	external	ø158	274	2.2	1.4	MCBHRA12M	90	120	150				
10	Aluminum alloy	external	ø158	274	2.2	1.4	MCBHRA16M	48	60	75				
11	Titanium alloy	built in	ø158	316	2.6	1.7	MCBH6MSS	200	240	300				
12	Titanium alloy	built in	ø158	316	2.6	1.7	MCBH8MSS	48	60	75	90	120	150	
13	Titanium alloy	built in	ø158	304	2.6	1.7	MCBHRA6MSS	200	240	300				
14	Titanium alloy	built in	ø158	304	2.6	1.7	MCBHRA8MSS	48	60	75	90	120	150	
15	Titanium alloy	external	ø158	277	2.8	1.8	MCBH8MSS	200	240	300				
16	Titanium alloy	external	ø158	287	2.8	1.8	MCBH12MSS	90	120	150				
17	Titanium alloy	external	ø158	287	2.8	1.8	MCBH16MSS	48	60	75				
18	Titanium alloy	external	ø158	265	2.8	1.8	MCBHRA8MSS	200	240	300				
19	Titanium alloy	external	ø158	274	2.9	1.9	MCBHRA12MSS	90	120	150				
20	Titanium alloy	external	ø158	274	2.9	1.9	MCBHRA16MSS	48	60	75				

Service depth: 0–3000m & 0–6000m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø158	299	2.7	1.8	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø158	299	2.7	1.8	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø158	260	2.6	1.7	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Aluminum alloy	external	ø158	260	2.6	1.7	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
5	Aluminum alloy	external	ø158	260	2.6	1.7	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water
6	Titanium alloy	built in	ø158	299	3.3	2.2	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
7	Titanium alloy	built in	ø158	299	3.3	2.2	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
8	Titanium alloy	external	ø158	260	3.2	2.1	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
9	Titanium alloy	external	ø158	260	3.2	2.1	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
10	Titanium alloy	external	ø158	260	3.2	2.1	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water

Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø158	299	2.7	1.8	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø158	299	2.7	1.8	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø158	260	2.6	1.7	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Titanium alloy	built in	ø158	299	3.3	2.2	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
5	Titanium alloy	built in	ø158	299	3.3	2.2	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
6	Titanium alloy	external	ø158	260	3.3	2.2	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water

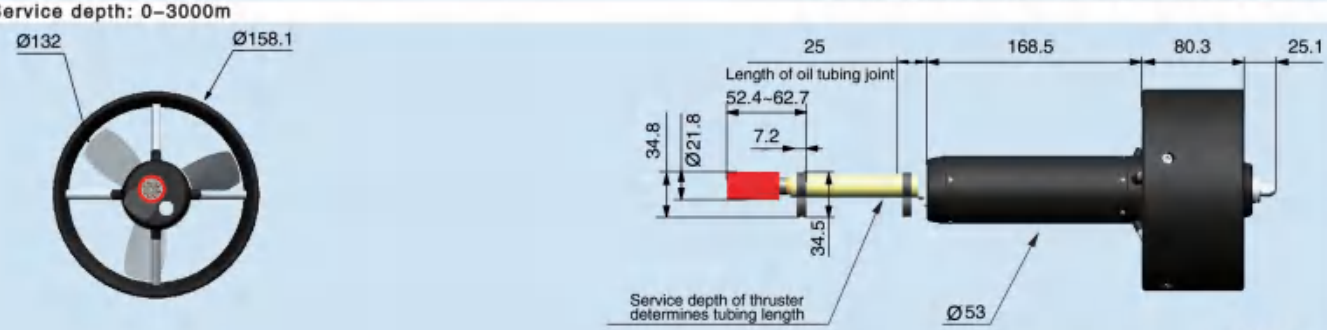
Dimension

Service depth: 0–850m

Unit: mm

Example: Order No. T530–48–MCBH8M–850–AL–BL–FIV

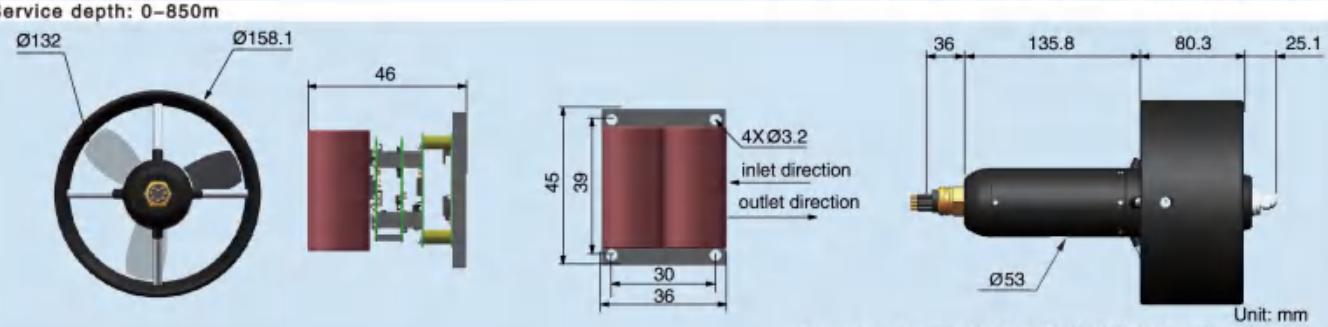
Service depth: 0–3000m



Unit: mm

Example: Order No. T530–48–MCPBOF8M–3000–AL–BL–FIV

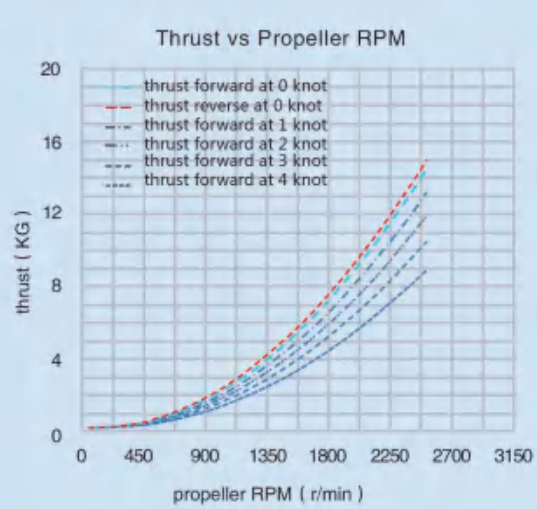
Service depth: 0–850m

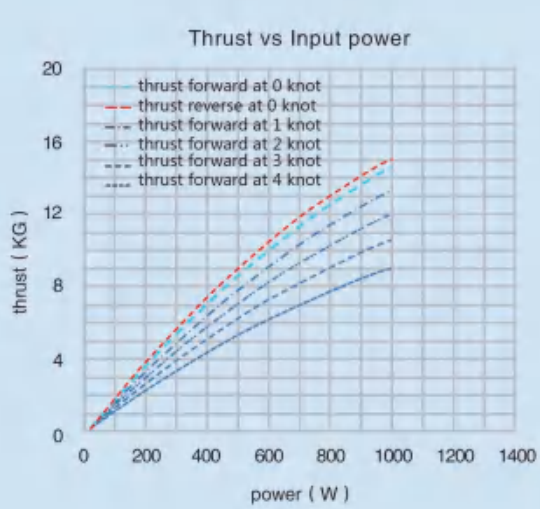


Unit: mm

Example: Order No. T530–300–MCBH8M–850–AL–BL–FOV

Thrust curve





Underwater thruster

forward 12.7KG, reverse 12.7KG
950W

T540thruster

Technical parameters

1 Rated power	950W								
2 Rated voltage	48VDC	60VDC	72VDC	100VDC	120VDC	160VDC	200VDC	250VDC	300VDC
3 Max RPM	1600r/min								
4 Thrust	thrust forward 12.7 KG		thrust reverse 12.7 KG						
5 Nozzle	none								
6 Propeller handing	left ↺	right ↻							
7 Material of propeller	stainless steel								
8 Housing	Aluminum alloy	Titanium alloy							
9 Seal	leakless, magneically coupled								
10 Depth rating	0-850m	0-1500m	0-3000m	0-6000m	full ocean depth		service depth >1500m, oil filled seal		
11 Signal power	supply voltage is 12VDC(±5%), ≤250mA								
12 Control mode	analog voltage control (0V~+5V forward, 0V~-5V reverse)						CAN		
13 RPM feedback	pulse feedback	analog voltage feedback	CAN						
14 Temperature	storage temperature: -40-70℃	service temperature: -5-40℃							
15 Electronics	built in	external							

Mechnical parameters

Service depth: 0-850m & 0-1500m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)						common model
1	Aluminum alloy	built in	ø150	306	2.4	1.4	MCBH6M	200	250	300				
2	Aluminum alloy	built in	ø150	306	2.4	1.4	MCBH8M	48	60	72	100	120	160	
3	Aluminum alloy	built in	ø150	294	2.4	1.4	MCBHRA6M	200	250	300				
4	Aluminum alloy	built in	ø150	294	2.4	1.4	MCBHRA8M	48	60	72	100	120	160	
5	Aluminum alloy	external	ø150	269	2.2	1.2	MCBH8M	200	250	300				
6	Aluminum alloy	external	ø150	279	2.2	1.2	MCBH12M	100	120	160				
7	Aluminum alloy	external	ø150	279	2.2	1.2	MCBH16M	48	60	72				
8	Aluminum alloy	external	ø150	257	2.2	1.2	MCBHRA8M	200	250	300				
9	Aluminum alloy	external	ø150	265	2.2	1.2	MCBHRA12M	100	120	160				
10	Aluminum alloy	external	ø150	265	2.2	1.2	MCBHRA16M	48	60	72				
11	Titanium alloy	built in	ø150	306	2.5	1.6	MCBH6MSS	200	250	300				
12	Titanium alloy	built in	ø150	306	2.5	1.6	MCBH8MSS	48	60	72	100	120	160	
13	Titanium alloy	built in	ø150	294	2.5	1.6	MCBHRA6MSS	200	250	300				
14	Titanium alloy	built in	ø150	294	2.5	1.6	MCBHRA8MSS	48	60	72	100	120	160	
15	Titanium alloy	external	ø150	269	2.4	1.3	MCBH8MSS	200	250	300				
16	Titanium alloy	external	ø150	279	2.4	1.3	MCBH12MSS	100	120	160				
17	Titanium alloy	external	ø150	279	2.4	1.3	MCBH16MSS	48	60	72				
18	Titanium alloy	external	ø150	257	2.4	1.3	MCBHRA8MSS	200	250	300				
19	Titanium alloy	external	ø150	265	2.4	1.3	MCBHRA12MSS	100	120	160				
20	Titanium alloy	external	ø150	265	2.4	1.3	MCBHRA16MSS	48	60	72				

Service depth: 0-3000m & 0-6000m

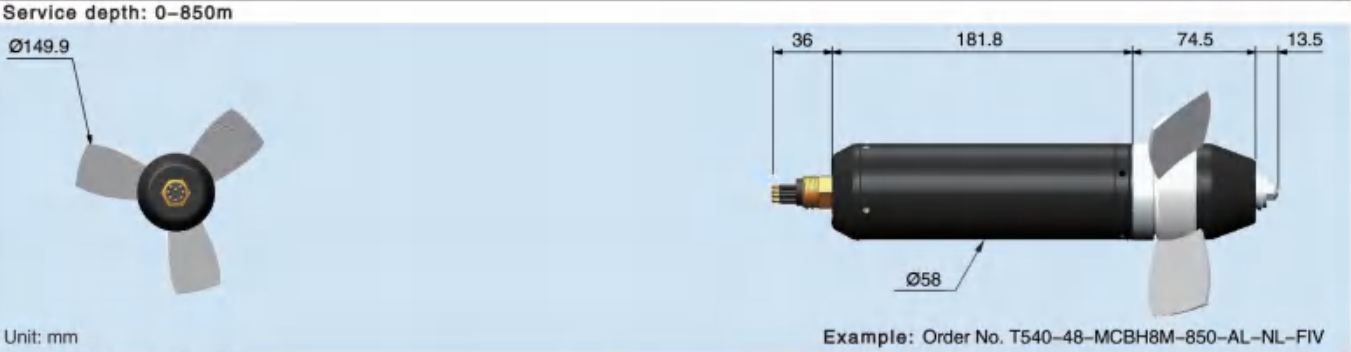
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø150	295	2.8	1.7	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø150	295	2.8	1.7	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø150	258	2.7	1.5	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Aluminum alloy	external	ø150	258	2.7	1.5	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
5	Aluminum alloy	external	ø150	258	2.7	1.5	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water
6	Titanium alloy	built in	ø150	295	3.1	2.1	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
7	Titanium alloy	built in	ø150	295	3.1	2.1	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
8	Titanium alloy	external	ø150	258	2.8	1.6	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
9	Titanium alloy	external	ø150	258	2.8	1.6	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
10	Titanium alloy	external	ø150	258	2.8	1.6	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water

Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø150	295	2.8	1.7	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø150	295	2.8	1.7	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø150	258	2.7	1.5	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Titanium alloy	built in	ø150	295	3.1	2.1	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
5	Titanium alloy	built in	ø150	295	3.1	2.1	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
6	Titanium alloy	external	ø150	258	2.9	1.7	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water

Dimension

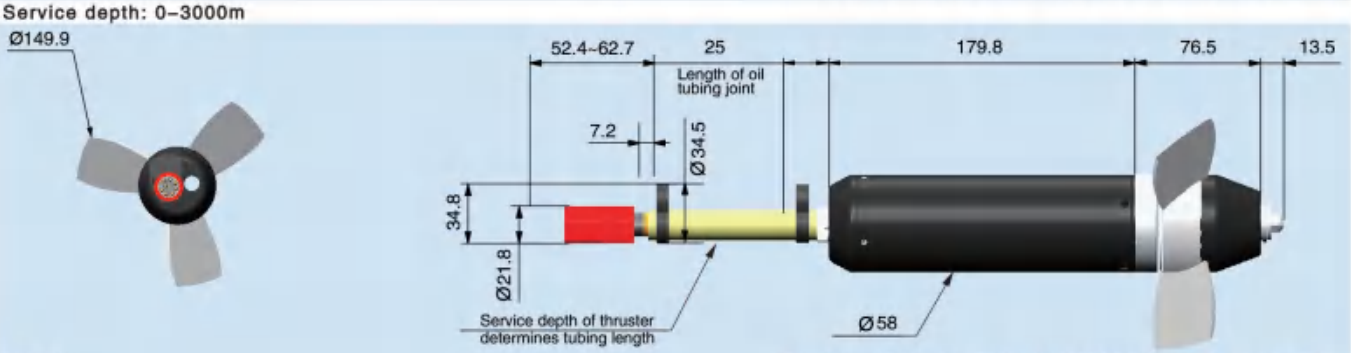
Service depth: 0–850m



Unit: mm

Example: Order No. T540–48–MCBH8M–850–AL–NL–FIV

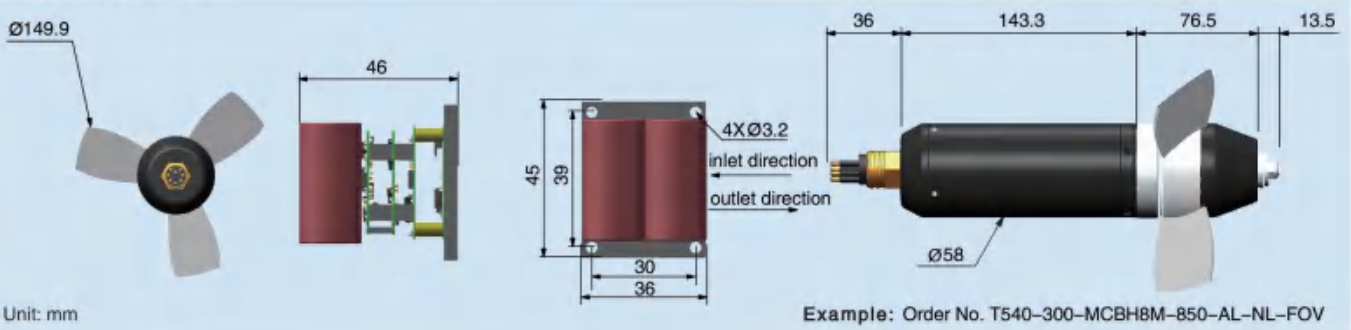
Service depth: 0–3000m



Unit: mm

Example: Order No. T540–48–MCPBOF8M–3000–AL–NL–FIV

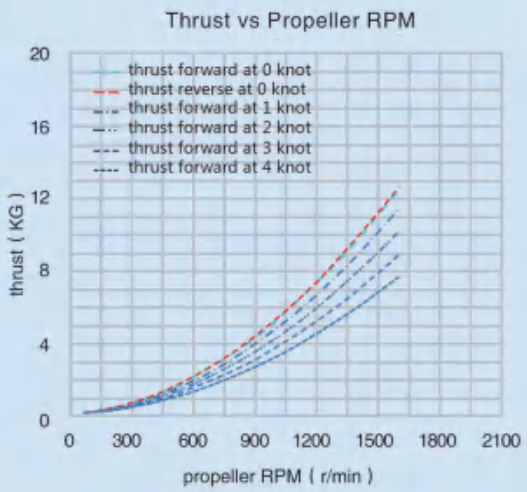
Service depth: 0–850m

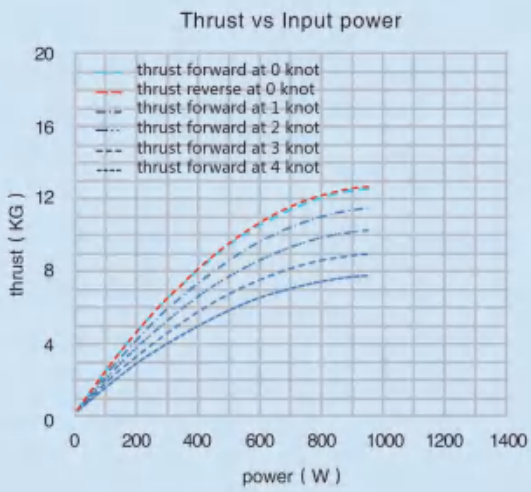


Unit: mm

Example: Order No. T540–300–MCBH8M–850–AL–NL–FOV

Thrust curve





Underwater thruster

forward 19KG, reverse 19KG
980W

T540S thruster

Technical parameters

1 Rated power	980W								
2 Rated voltage	48VDC	60VDC	72VDC	100VDC	120VDC	160VDC	200VDC	250VDC	300VDC
3 Max RPM	1900r/min								
4 Thrust	thrust forward 19 KG		thrust reverse 19 KG						
5 Nozzle	black								
6 Propeller handing	left ↺	right ↻							
7 Material of propeller	stainless steel								
8 Housing	Aluminum alloy	Titanium alloy							
9 Seal	leakless, magnetically coupled								
10 Depth rating	0-850m	0-1500m	0-3000m	0-6000m	full ocean depth		service depth >1500m, oil filled seal		
11 Signal power	supply voltage is 12VDC(±5%), ≤250mA								
12 Control mode	analog voltage control (0V~+5V forward, 0V~-5V reverse)						CAN		
13 RPM feedback	pulse feedback	analog voltage feedback	CAN						
14 Temperature	storage temperature: -40~70℃		service temperature: -5~40℃						
15 Electronics	built in	external							

Mechnical parameters

Service depth: 0-850m & 0-1500m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)						common model
1	Aluminum alloy	built in	ø173	306	2.9	1.7	MCBH6M	200	250	300				
2	Aluminum alloy	built in	ø173	306	2.9	1.7	MCBH8M	48	60	72	100	120	160	
3	Aluminum alloy	built in	ø173	294	2.9	1.7	MCBHRA6M	200	250	300				
4	Aluminum alloy	built in	ø173	294	2.9	1.7	MCBHRA8M	48	60	72	100	120	160	
5	Aluminum alloy	external	ø173	269	2.7	1.6	MCBH8M	200	250	300				
6	Aluminum alloy	external	ø173	279	2.7	1.6	MCBH12M	100	120	160				
7	Aluminum alloy	external	ø173	279	2.7	1.6	MCBH16M	48	60	72				
8	Aluminum alloy	external	ø173	257	2.7	1.6	MCBHRA8M	200	250	300				
9	Aluminum alloy	external	ø173	265	2.7	1.6	MCBHRA12M	100	120	160				
10	Aluminum alloy	external	ø173	265	2.7	1.6	MCBHRA16M	48	60	72				
11	Tilanium alloy	built in	ø173	306	3.1	2.0	MCBH6MSS	200	250	300				
12	Titanium alloy	built in	ø173	306	3.1	2.0	MCBH8MSS	48	60	72	100	120	160	
13	Titanium alloy	built in	ø173	294	3.1	2.0	MCBHRA6MSS	200	250	300				
14	Tilanium alloy	built in	ø173	294	3.1	2.0	MCBHRA8MSS	48	60	72	100	120	160	
15	Titanium alloy	external	ø173	269	2.9	1.8	MCBH8MSS	200	250	300				
16	Tilanium alloy	external	ø173	279	2.9	1.8	MCBH12MSS	100	120	160				
17	Titanium alloy	external	ø173	279	2.9	1.8	MCBH16MSS	48	60	72				
18	Tilanium alloy	external	ø173	257	2.9	1.8	MCBHRA8MSS	200	250	300				
19	Titanium alloy	external	ø173	265	2.9	1.8	MCBHRA12MSS	100	120	160				
20	Titanium alloy	external	ø173	265	2.9	1.8	MCBHRA16MSS	48	60	72				

Service depth: 0-3000m & 0-6000m

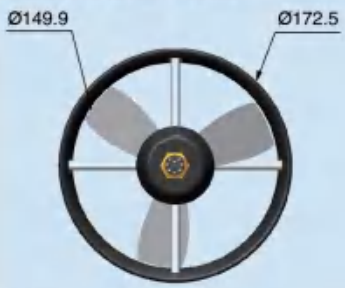
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø173	295	3.2	1.9	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø173	295	3.2	1.9	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø173	258	2.6	1.5	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Aluminum alloy	external	ø173	258	2.6	1.5	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
5	Aluminum alloy	external	ø173	258	2.6	1.5	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water
6	Titanium alloy	built in	ø173	295	3.3	2.1	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
7	Titanium alloy	built in	ø173	295	3.3	2.1	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
8	Titanium alloy	external	ø173	258	3.0	1.9	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
9	Titanium alloy	external	ø173	258	3.0	1.9	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
10	Titanium alloy	external	ø173	258	3.0	1.9	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water

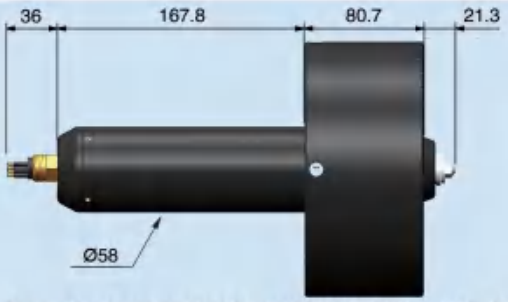
Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø173	295	3.2	1.9	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø173	295	3.2	1.9	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø173	258	2.6	1.5	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Titanium alloy	built in	ø173	295	3.3	2.1	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
5	Titanium alloy	built in	ø173	295	3.3	2.1	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
6	Titanium alloy	external	ø173	258	3.1	2.0	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water

Dimension

Service depth: 0–850m

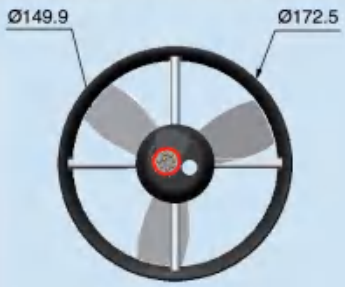


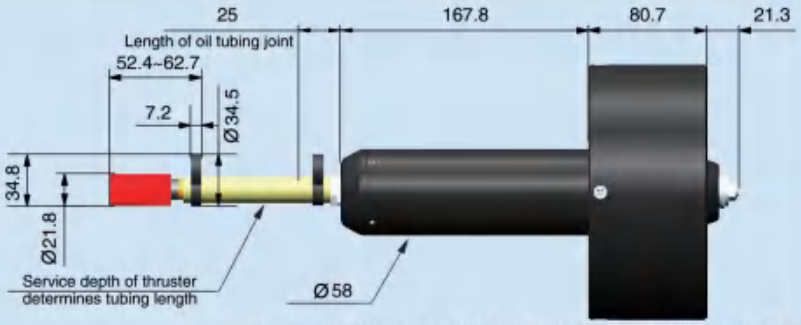


Unit: mm

Example: Order No. T540S–48–MCBH8M–850–AL–BL–FIV

Service depth: 0–3000m

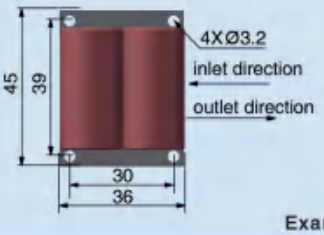


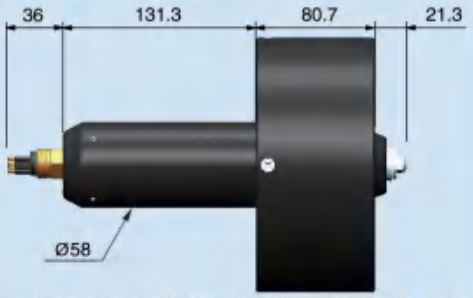


Unit: mm

Example: Order No. T540S–48–MCPBOF8M–3000–AL–BL–FIV

Service depth: 0–850m

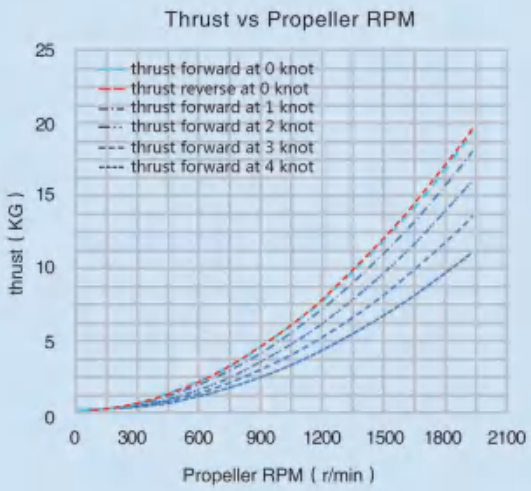


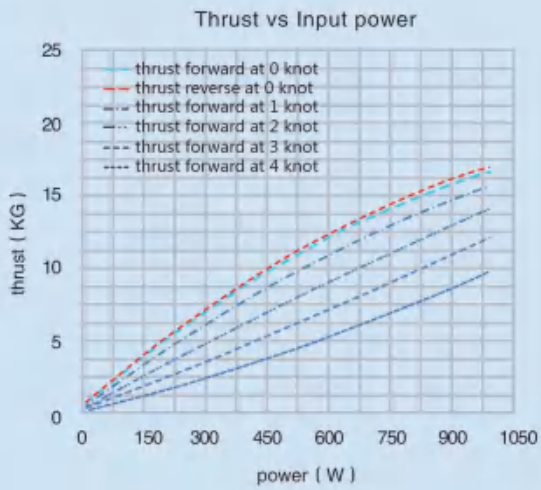


Unit: mm

Example: Order No. T540S–300–MCBH8M–850–AL–BL–FOV

Thrust curve





Underwater thruster

forward 17.3KG, reverse 10KG
1.1kw

T561 thruster

Technical parameters

1 Rated power	1.1kw								
2 Rated voltage	48VDC	60VDC	75VDC	90VDC	120VDC	150VDC	200VDC	240VDC	300VDC
3 Max RPM	2600r/min								
4 Thrust	thrust forward 17.3 KG		thrust reverse 10 KG						
5 Nozzle	black								
6 Propeller handing	left ↺	right ↻							
7 Material of propeller	stainless steel								
8 Housing	Aluminum alloy	Titanium alloy							
9 Seal	leakless, magneically coupled								
10 Depth rating	0–850m	0–1500m	0–3000m	0–6000m	full ocean depth		service depth >1500m, oil filled seal		
11 Signal power	supply voltage is 12VDC(±5%),≤250mA								
12 Control mode	analog voltage control (0V~+5V forward, 0V—5V reverse)						CAN		
13 RPM control	pulse feedback	analog voltage feedback		CAN					
14 Temperature	storage temperature: -40~70℃		service temperature: -5~40℃						
15 Electronics	built in	external							

Mechanical parameters

Service depth: 0–850m & 0–1500m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)						common model
1	Aluminum alloy	built in	ø158	316	2.3	1.5	MCBH6M	200	240	300				
2	Aluminum alloy	built in	ø158	316	2.3	1.5	MCBH8M	48	60	75	90	120	150	
3	Aluminum alloy	built in	ø158	304	2.3	1.5	MCBHRA6M	200	240	300				
4	Aluminum alloy	built in	ø158	304	2.3	1.5	MCBHRA8M	48	60	75	90	120	150	
5	Aluminum alloy	external	ø158	277	2.2	1.4	MCBH8M	200	240	300				
6	Aluminum alloy	external	ø158	287	2.2	1.4	MCBH12M	90	120	150				
7	Aluminum alloy	external	ø158	287	2.2	1.4	MCBH16M	48	60	75				
8	Aluminum alloy	external	ø158	265	2.2	1.4	MCBHRA8M	200	240	300				
9	Aluminum alloy	external	ø158	274	2.2	1.4	MCBHRA12M	90	120	150				
10	Aluminum alloy	external	ø158	274	2.2	1.4	MCBHRA16M	48	60	75				
11	Titanium alloy	built in	ø158	316	2.6	1.7	MCBH6MSS	200	240	300				
12	Titanium alloy	built in	ø158	316	2.6	1.7	MCBH8MSS	48	60	75	90	120	150	
13	Titanium alloy	built in	ø158	304	2.6	1.7	MCBHRA6MSS	200	240	300				
14	Titanium alloy	built in	ø158	304	2.6	1.7	MCBHRA8MSS	48	60	75	90	120	150	
15	Titanium alloy	external	ø158	277	2.8	1.8	MCBH8MSS	200	240	300				
16	Titanium alloy	external	ø158	287	2.8	1.8	MCBH12MSS	90	120	150				
17	Titanium alloy	external	ø158	287	2.8	1.8	MCBH16MSS	48	60	75				
18	Titanium alloy	external	ø158	265	2.8	1.8	MCBHRA8MSS	200	240	300				
19	Titanium alloy	external	ø158	274	2.9	1.9	MCBHRA12MSS	90	120	150				
20	Titanium alloy	external	ø158	274	2.9	1.9	MCBHRA16MSS	48	60	75				

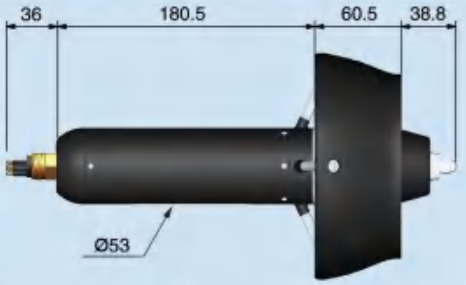
Service depth: 0–3000m & 0–6000m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø158	299	2.7	1.8	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø158	299	2.7	1.8	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø158	260	2.6	1.7	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Aluminum alloy	external	ø158	260	2.6	1.7	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
5	Aluminum alloy	external	ø158	260	2.6	1.7	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water
6	Titanium alloy	built in	ø158	299	3.3	2.2	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
7	Titanium alloy	built in	ø158	299	3.3	2.2	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
8	Titanium alloy	external	ø158	260	3.2	2.1	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
9	Titanium alloy	external	ø158	260	3.2	2.1	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
10	Titanium alloy	external	ø158	260	3.2	2.1	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water

Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø158	299	2.7	1.8	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø158	299	2.7	1.8	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø158	260	2.6	1.7	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Titanium alloy	built in	ø158	299	3.3	2.2	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
5	Titanium alloy	built in	ø158	299	3.3	2.2	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
6	Titanium alloy	external	ø158	260	3.3	2.2	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water

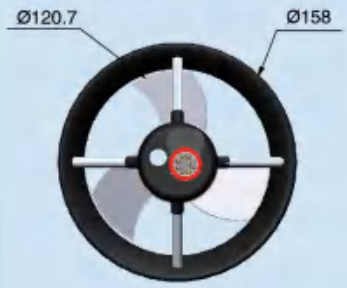
Dimension

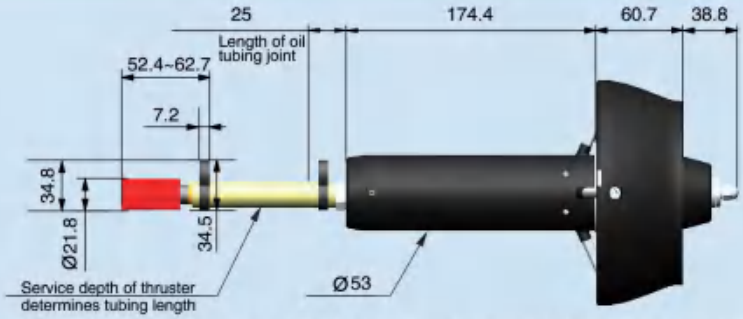


Unit: mm

Example: Order No. T561-48-MCBH8M-850-AL-BL-FIV

Service depth: 0-3000m

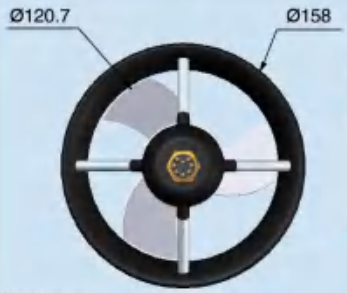


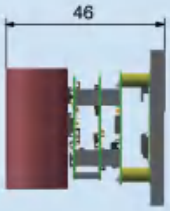


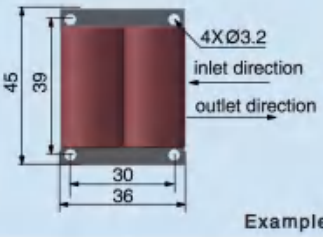
Unit: mm

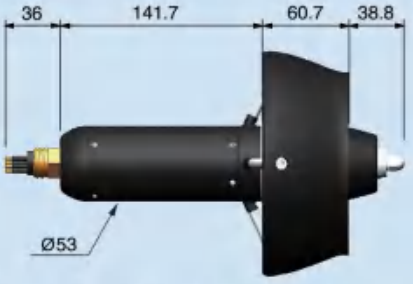
Example: Order No. T561-48-MCPBOF8M-3000-AL-BL-FIV

Service depth: 0-850m





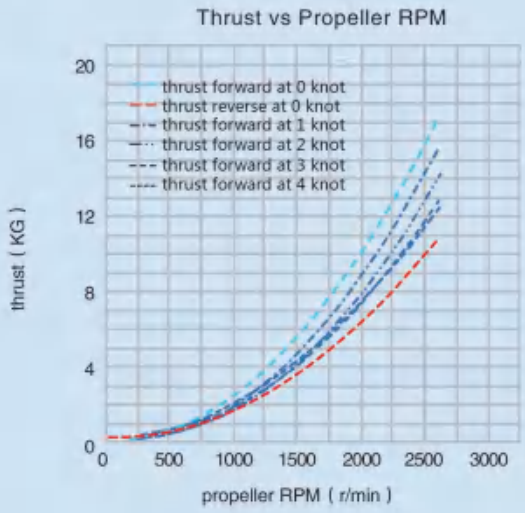


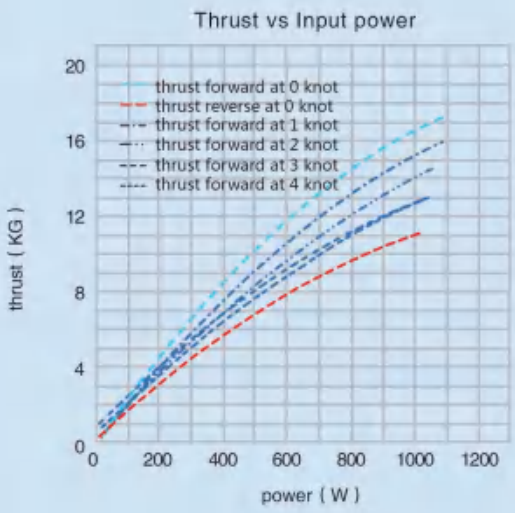


Unit: mm

Example: Order No. T561-300-MCBH8M-850-AL-BL-FOV

Thrust curve





Underwater thruster

forward 19KG, reverse 12KG
1.1kw

T570 thruster

Technical parameters

1 Rated power	1.1kW								
2 Rated voltage	48VDC	60VDC	72VDC	100VDC	120VDC	160VDC	200VDC	250VDC	300VDC
3 Max RPM	2300r/min								
4 Thrust	thrust forward 19 KG		thrust reverse 12 KG						
5 Nozzle	black								
6 Propeller handing	left ↺	right ↻							
7 Material of propeller	stainless steel								
8 Housing	Aluminum alloy	Titanium alloy							
9 Seal	leakless, magnetically coupled								
10 Depth rating	0–850m	0–1500m	0–3000m	0–6000m	full ocean depth		service depth >1500m, oil filled seal		
11 Signal power	supply voltage is 12VDC(±5%), ≤250mA								
12 Control mode	analog voltage control (0V~+5V forward, 0V~-5V reverse)						CAN		
13 RPM feedback	pulse feedback		analog voltage feedback		CAN				
14 Temperature	storage temperature: -40-70℃		service temperature: -5-40℃						
15 Electronics	built in	external							

Mechanical paramters

Service depth: 0–850m & 0–1500m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)						
														common model
1	Aluminum alloy	built in	ø158	316	2.3	1.5	MCBH6M	200	250	300				
2	Aluminum alloy	built in	ø158	316	2.3	1.5	MCBH8M	48	60	72	100	120	160	
3	Aluminum alloy	built in	ø158	304	2.3	1.5	MCBHRA6M	200	250	300				
4	Aluminum alloy	built in	ø158	304	2.3	1.5	MCBHRA8M	48	60	72	100	120	160	
5	Aluminum alloy	external	ø158	277	2.2	1.4	MCBH8M	200	250	300				
6	Aluminum alloy	external	ø158	287	2.2	1.4	MCBH12M	100	120	160				
7	Aluminum alloy	external	ø158	287	2.2	1.4	MCBH16M	48	60	72				
8	Aluminum alloy	external	ø158	265	2.2	1.4	MCBHRA8M	200	250	300				
9	Aluminum alloy	external	ø158	274	2.2	1.4	MCBHRA12M	100	120	160				
10	Aluminum alloy	external	ø158	274	2.2	1.4	MCBHRA16M	48	60	72				
11	Titanium alloy	built in	ø158	316	2.6	1.7	MCBH6MSS	200	250	300				
12	Titanium alloy	built in	ø158	316	2.6	1.7	MCBH8MSS	48	60	72	100	120	160	
13	Titanium alloy	built in	ø158	304	2.6	1.7	MCBHRA6MSS	200	250	300				
14	Titanium alloy	built in	ø158	304	2.6	1.7	MCBHRA8MSS	48	60	72	100	120	160	
15	Titanium alloy	external	ø158	277	2.8	1.8	MCBH8MSS	200	250	300				
16	Titanium alloy	external	ø158	287	2.8	1.8	MCBH12MSS	100	120	160				
17	Titanium alloy	external	ø158	287	2.8	1.8	MCBH16MSS	48	60	72				
18	Titanium alloy	external	ø158	265	2.8	1.8	MCBHRA8MSS	200	250	300				
19	Titanium alloy	external	ø158	274	2.9	1.9	MCBHRA12MSS	100	120	160				
20	Titanium alloy	external	ø158	274	2.9	1.9	MCBHRA16MSS	48	60	72				

Service depth: 0–3000m & 0–6000m

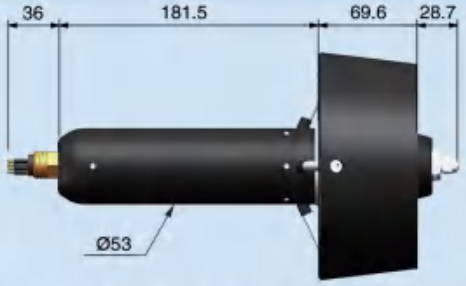
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø158	299	2.7	1.8	MCPBOF6M	3/4"	3'	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø158	299	2.7	1.8	MCPBOF8M	3/4"	3'	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø158	260	2.6	1.7	MCPBOF8M	3/4"	3'	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Aluminum alloy	external	ø158	260	2.6	1.7	MCPBOF12M	3/4"	3'	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
5	Aluminum alloy	external	ø158	260	2.6	1.7	MCPBOF16M	3/4"	3'	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water
6	Titanium alloy	built in	ø158	299	3.3	2.2	MCPBOF6M	3/4"	3'	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
7	Titanium alloy	built in	ø158	299	3.3	2.2	MCPBOF8M	3/4"	3'	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
8	Titanium alloy	external	ø158	260	3.2	2.1	MCPBOF8M	3/4"	3'	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
9	Titanium alloy	external	ø158	260	3.2	2.1	MCPBOF12M	3/4"	3'	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
10	Titanium alloy	external	ø158	260	3.2	2.1	MCPBOF16M	3/4"	3'	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water

Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø158	299	2.7	1.8	PBOF6M	3/4"	3'	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø158	299	2.7	1.8	PBOF8M	3/4"	3'	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø158	260	2.6	1.7	PBOF8M	3/4"	3'	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Titanium alloy	built in	ø158	299	3.3	2.2	PBOF6M	3/4"	3'	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
5	Titanium alloy	built in	ø158	299	3.3	2.2	PBOF8M	3/4"	3'	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
6	Titanium alloy	external	ø158	260	3.3	2.2	PBOF8M	3/4"	3'	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water

Dimension

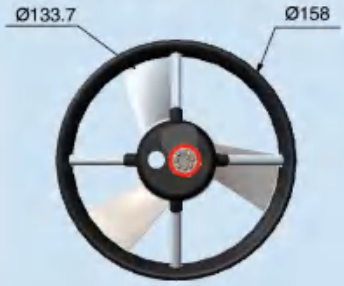
Service depth: 0–850m

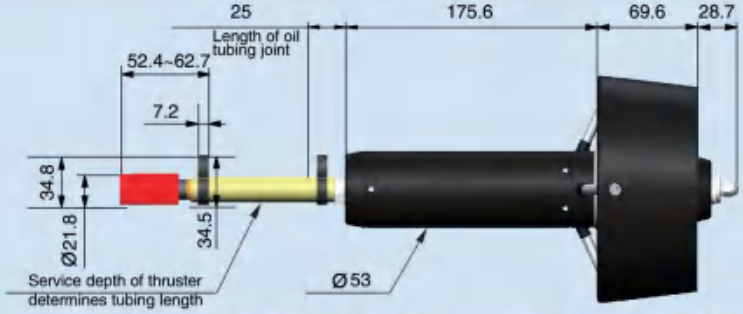


Unit: mm

Example: Order No. T570–48–MCBH8M–850–AL–BL–FIV

Service depth: 0–3000m

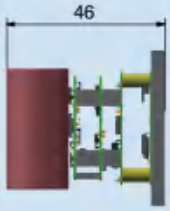


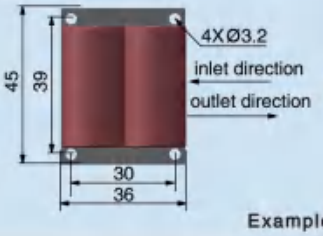


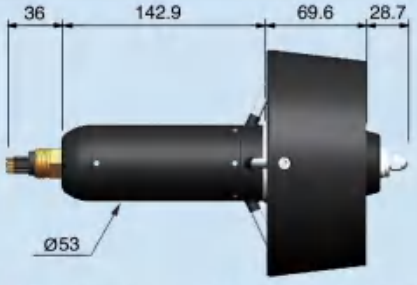
Unit: mm

Example: Order No. T570–48–MCPBOF8M–3000–AL–BL–FIV

Service depth: 0–850m



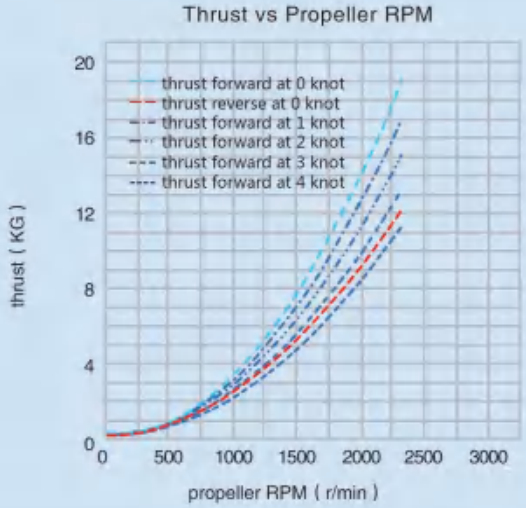


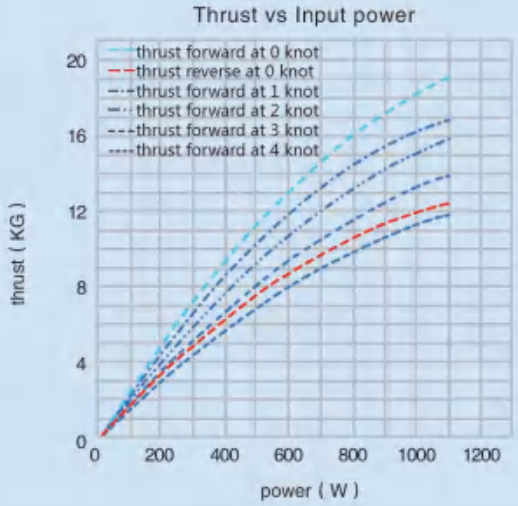


Unit: mm

Example: Order No. T570–300–MCBH8M–850–AL–BL–FOV

Thrust curve





Underwater thruster

forward 20KG, reverse 10KG
900W

T590 thruster

Technical parameters

1 Rated power	900W								
2 Rated voltage	48VDC	60VDC	75VDC	90VDC	120VDC	150VDC	200VDC	240VDC	300VDC
3 Max RPM	2600r/min								
4 Thrust	thrust forward: 20 KG		thrust reverse: 10 KG						
5 Nozzle	black								
6 Propeller handing	left ○	right ○							
7 Material of propeller	stainless steel								
8 Housing	Aluminum alloy	Titanium alloy							
9 Seal	leakless, magneically coupled								
10 Depth rating	0-850m	0-1500m	0-3000m	0-6000m	full ocean depth		service depth >1500m, oil filled seal		
11 Signal power	supply voltage is 12VDC ± 5%, ≤250mA								
12 Control mode	analog voltage control (0V—+5V forward, 0V—-5V reverse)						CAN		
13 RPM feedback	pulse feedback	analog voltage feedback	CAN						
14 Temperature	Storage temperature: -40~70℃		service temperature: -5~40℃						
15 Electronics	built in	external							

Mechanical parameters

Service depth: 0-850m & 0-1500m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)						common model
1	Aluminum alloy	built in	ø174.6	292.5	2.8	2.1	MCBH6M	200	240	300				
2	Aluminum alloy	built in	ø174.6	292.5	2.8	2.1	MCBH8M	48	60	75	90	120	150	
3	Aluminum alloy	built in	ø174.6	280.5	2.8	2.1	MCBHRA6M	200	240	300				
4	Aluminum alloy	built in	ø174.6	280.5	2.8	2.1	MCBHRA8M	48	60	75	90	120	150	
5	Aluminum alloy	external	ø174.6	271.5	2.7	2.0	MCBH8M	200	240	300				
6	Aluminum alloy	external	ø174.6	280.5	2.7	2.0	MCBH12M	90	120	150				
7	Aluminum alloy	external	ø174.6	280.5	2.7	2.0	MCBH16M	48	60	75				
8	Aluminum alloy	external	ø174.6	259.5	2.7	2.0	MCBHRA8M	200	240	300				
9	Aluminum alloy	external	ø174.6	267.5	2.7	2.0	MCBHRA12M	90	120	150				
10	Aluminum alloy	external	ø174.6	267.5	2.7	2.0	MCBHRA16M	48	60	75				
11	Titanium alloy	built in	ø174.6	292.5	3.1	2.4	MCBH6MSS	200	240	300				
12	Titanium alloy	built in	ø174.6	292.5	3.1	2.4	MCBH8MSS	48	60	75	90	120	150	
13	Titanium alloy	built in	ø174.6	280.5	3.1	2.4	MCBHRA6MSS	200	240	300				
14	Titanium alloy	built in	ø174.6	280.5	3.1	2.4	MCBHRA8MSS	48	60	75	90	120	150	
15	Titanium alloy	external	ø174.6	271.5	3.0	2.3	MCBH8MSS	200	240	300				
16	Titanium alloy	external	ø174.6	280.5	3.0	2.3	MCBH12MSS	90	120	150				
17	Titanium alloy	external	ø174.6	280.5	3.0	2.3	MCBH16MSS	48	60	75				
18	Titanium alloy	external	ø174.6	259.5	3.0	2.3	MCBHRA8MSS	200	240	300				
19	Titanium alloy	external	ø174.6	267.5	3.0	2.3	MCBHRA12MSS	90	120	150				
20	Titanium alloy	external	ø174.6	267.5	3.0	2.3	MCBHRA16MSS	48	60	75				

Service depth: 0-3000m & 0-6000m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø174.6	281.5	3.2	2.4	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø174.6	281.5	3.2	2.4	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø174.6	257.5	3.1	2.3	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Aluminum alloy	external	ø174.6	257.5	3.1	2.3	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
5	Aluminum alloy	external	ø174.6	257.5	3.1	2.3	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water
6	Titanium alloy	built in	ø174.6	281.5	3.5	2.7	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
7	Titanium alloy	built in	ø174.6	281.5	3.5	2.7	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
8	Titanium alloy	external	ø174.6	257.5	3.4	2.6	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
9	Titanium alloy	external	ø174.6	257.5	3.4	2.6	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
10	Titanium alloy	external	ø174.6	257.5	3.4	2.6	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water

Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø174.6	281.5	3.2	2.4	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø174.6	281.5	3.2	2.4	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø174.6	257.5	3.1	2.3	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Aluminum alloy	external	ø174.6	257.5	3.1	2.3	PBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
5	Titanium alloy	built in	ø174.6	281.5	3.5	2.7	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
6	Titanium alloy	built in	ø174.6	281.5	3.5	2.7	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
7	Titanium alloy	external	ø174.6	257.5	3.4	2.6	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
8	Titanium alloy	external	ø174.6	257.5	3.4	2.6	PBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water

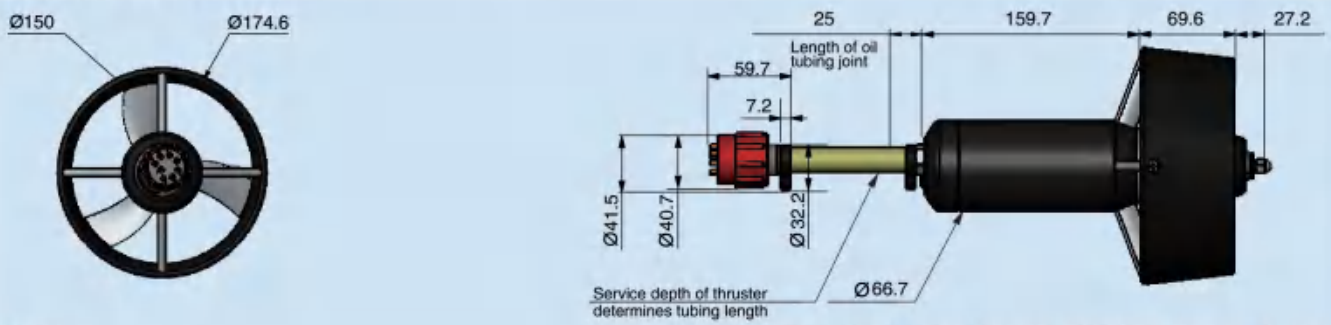
Dimension

Service depth: 0–850m

Unit: mm

Example: Order No. T590–48–MCBH8M–850–AL–BL–FIV

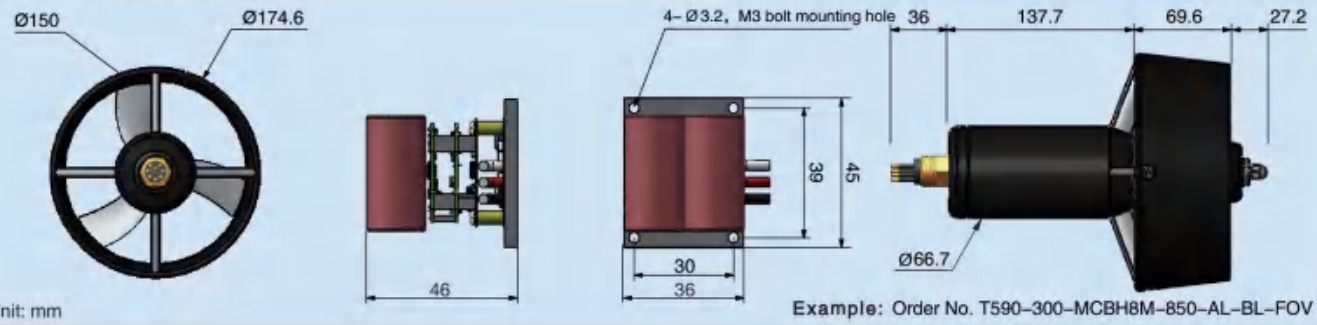
Service depth: 0–3000m



Unit: mm

Example: Order No. T590–48–MCPBOF8M–3000–AL–BL–FIV

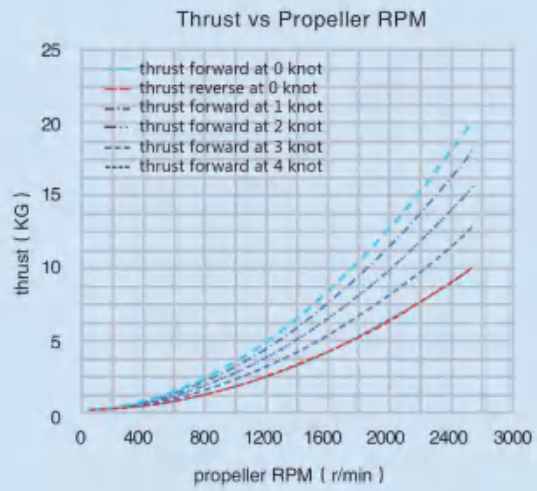
Service depth: 0–850m

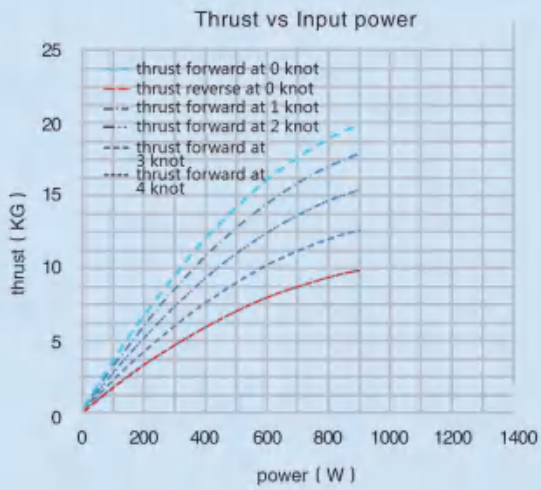


Unit: mm

Example: Order No. T590–300–MCBH8M–850–AL–BL–FOV

Thrust curve





Underwater thruster

forward 32KG, reverse 32KG
1.4kw

T650 thruster

Technical parameters

1	Rated power	1.4kw
2	Rated voltage	110VDC 140VDC 160VDC 230VDC 300VDC
3	Max RPM	1260r/min
4	Thrust	thrust forward 32 KG thrust reverse 32 KG
5	Nozzle	black
6	Propeller handing	left ↺ right ↻
7	Material of propeller	stainless steel
8	Housing	Aluminum alloy Titanium alloy
9	Seal	leakless, magnetically coupled
10	Depth rating	0-850m 0-1500m 0-3000m 0-6000m full ocean deph service depth >1500m, oil filled seal
11	Signal power	supply voltage is 12VDC ± 5%, ≤250mA
12	Control mode	analog voltage control (0V~+5V forward, 0V~-5V reverse) CAN
13	RPM feedback	pulse feedback analog voltage feedback CAN
14	Temperature	storage temperature: -40-70℃ service temperature: -5-40℃
15	Electronics	built-in external

Mechanical parameters

Service depth: 0-850m & 0-1500m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC) (common model)
1	Aluminum alloy	built in	ø217	337	5.3	3.8	MCBH6M	300
2	Aluminum alloy	built in	ø217	337	5.3	3.8	MCBH8M	110 140 160 230
3	Aluminum alloy	built in	ø217	323	5.4	3.9	MCBHRA6M	300
4	Aluminum alloy	built in	ø217	323	5.4	3.9	MCBHRA8M	110 140 160 230
5	Aluminum alloy	external	ø217	303	5.0	3.5	MCBH8M	300
6	Aluminum alloy	external	ø217	313	5.0	3.5	MCBH12M	110 140 160 230
7	Aluminum alloy	external	ø217	291	5.1	3.6	MCBHRA8M	300
8	Aluminum alloy	external	ø217	304	5.1	3.6	MCBHRA12M	110 140 160 230
9	Titanium alloy	built in	ø217	337	6.1	4.5	MCBH6MSS	300
10	Titanium alloy	built in	ø217	337	6.1	4.5	MCBH8MSS	110 140 160 230
11	Titanium alloy	built in	ø217	323	6.2	4.6	MCBHRA6MSS	300
12	Titanium alloy	built in	ø217	323	6.2	4.6	MCBHRA8MSS	110 140 160 230
13	Titanium alloy	external	ø217	303	5.7	4.2	MCBH8MSS	300
14	Titanium alloy	external	ø217	313	5.7	4.2	MCBH12MSS	110 140 160 230
15	Titanium alloy	external	ø217	291	5.8	4.3	MCBHRA8MSS	300
16	Titanium alloy	external	ø217	304	5.8	4.3	MCBHRA12MSS	110 140 160 230

Service depth: 0-3000m & 0-6000m

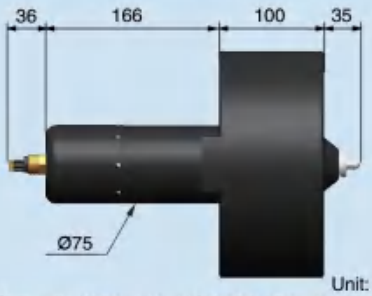
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø217	331	5.6	4.1	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø217	331	5.6	4.1	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø217	298	5.3	3.7	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Aluminum alloy	external	ø217	298	5.3	3.7	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
5	Aluminum alloy	built in	ø217	331	6.3	4.8	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds331g in air, adds 46g in water
6	Titanium alloy	built in	ø217	331	6.3	4.8	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
7	Titanium alloy	external	ø217	298	6.0	4.3	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
8	Titanium alloy	external	ø217	298	6.0	4.3	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water

Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Titanium alloy	built in	ø217	331	6.3	4.8	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
2	Titanium alloy	external	ø217	298	6.0	4.3	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water

Dimension

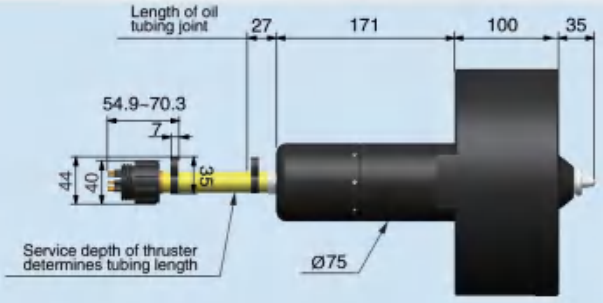
Service depth: 0–850m



Unit: mm

Example: Order No. T650–110–MCBH8M–850–AL–BL–FIV

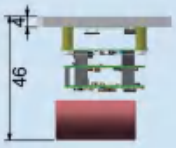
Service depth: 0–3000m

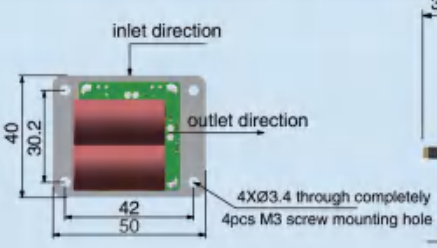


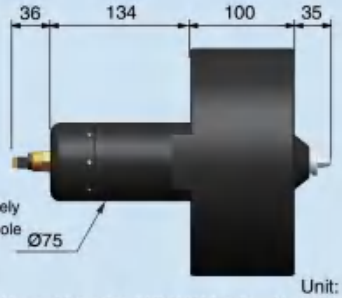
Unit: mm

Example: Order No. T650–110–MCPBOF8M–3000–AL–BL–FIV

Service depth: 0–850m



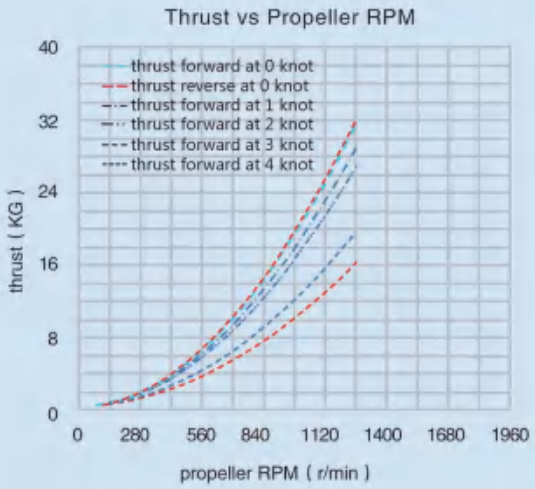


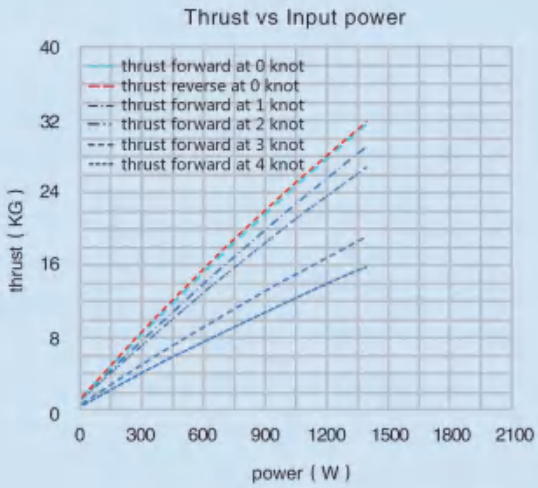


Unit: mm

Example: Order No. T650–300–MCBH8M–850–AL–BL–FOV

Thrust curve





Underwater thruster

forward 42KG, reverse 42KG
1.4kw

T660 thruster

Technical parameters

1 Rated power	1.4kw						
2 Rated voltage	80VDC	100VDC	120VDC	160VDC	200VDC	260VDC	320VDC
3 Max RPM	830r/min						
4 Thrust	thrust forward 42 KG		thrust reverse 42 KG				
5 Nozzle	black						
6 Propeller handing	left ↺	right ↻					
7 Material of propeller	stainless steel						
8 Housing	Aluminum alloy	Titanium alloy					
9 Seal	leakless, magneically coupled						
10 Depth rating	0-850m	0-1500m	0-3000m	0-6000m	full ocean depth		service depth >1500m, oil filled seal
11 Signal power	supply voltage is 12VDC ± 5%, ≤250mA						
12 Control mode	analog voltage control (0V~+5V forward, 0V~-5V reverse)						CAN
13 RPM feedback	pulse feedback	analog voltage feedback	CAN				
14 Temperature	storage temperature: -40~70℃		service temperature: -5~40℃				
15 Electronics	built in	external					

Mechanical parameters

Service depth: 0-850m & 0-1500m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC) (■ common model)
1	Aluminum alloy	built in	ø284	341	7.8	4.6	MCBH6M	**260** 320
2	Aluminum alloy	built in	ø284	341	7.8	4.6	MCBH8M	80 100 120 160 200
3	Aluminum alloy	built in	ø284	329	7.9	4.7	MCBHRA6M	**260** 320
4	Aluminum alloy	built in	ø284	329	7.9	4.7	MCBHRA8M	80 100 120 160 200
5	Aluminum alloy	external	ø284	309	7.5	4.3	MCBH8M	260 320
6	Aluminum alloy	external	ø284	309	7.5	4.3	MCBH12M	80 100 120 160 200
7	Aluminum alloy	external	ø284	297	7.6	4.4	MCBHRA8M	260 320
8	Aluminum alloy	external	ø284	305	7.6	4.4	MCBHRA12M	80 100 120 160 200
9	Titanium alloy	built in	ø284	341	9.3	6.1	MCBH6MSS	**260** 320
10	Titanium alloy	built in	ø284	341	9.3	6.1	MCBH8MSS	80 100 120 160 200
11	Titanium alloy	built in	ø284	329	9.4	6.2	MCBHRA6MSS	**260** 320
12	Titanium alloy	built in	ø284	329	9.4	6.2	MCBHRA8MSS	80 100 120 160 200
13	Titanium alloy	external	ø284	309	9.0	5.8	MCBH8MSS	260 320
14	Titanium alloy	external	ø284	309	9.0	5.8	MCBH12MSS	80 100 120 160 200
15	Titanium alloy	external	ø284	297	9.1	5.9	MCBHRA8MSS	260 320
16	Titanium alloy	external	ø284	305	9.1	5.9	MCBHRA12MSS	80 100 120 160 200

Service depth: 0-3000m & 0-6000m

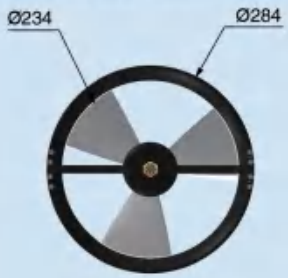
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø284	332	8.4	4.7	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø284	332	8.4	4.7	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø284	300	8.1	4.4	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Aluminum alloy	external	ø284	300	8.1	4.4	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
5	Aluminum alloy	built in	ø284	332	9.1	5.4	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds331g in air, adds 46g in water
6	Titanium alloy	built in	ø284	332	9.1	5.4	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
7	Titanium alloy	external	ø284	300	8.8	5.1	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
8	Titanium alloy	external	ø284	300	8.8	5.1	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water

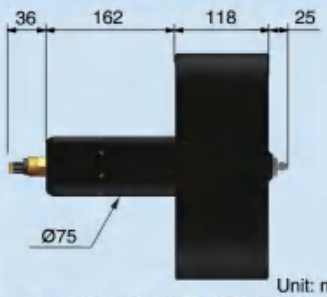
Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Titanium alloy	built in	ø284	332	9.1	5.4	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
2	Titanium alloy	external	ø284	300	8.8	5.1	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water

Dimension

Service depth: 0–850m

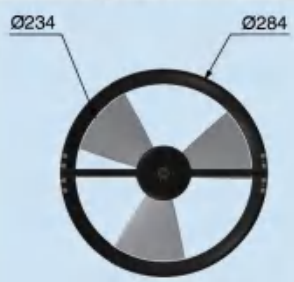


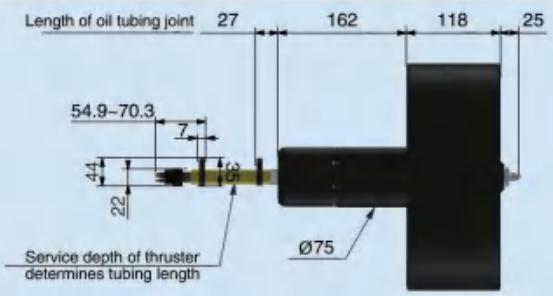


Unit: mm

Example: Order No. T660–200–MCBH6M–850–AL–BL–FIV

Service depth: 0–3000m

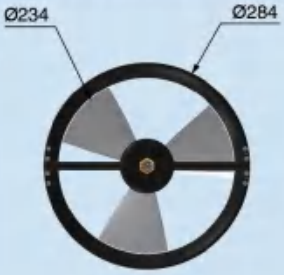


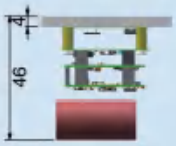


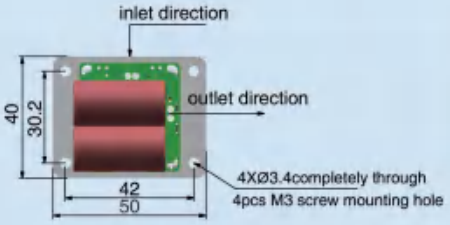
Unit: mm

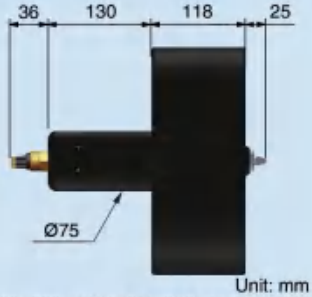
Example: Order No. T660–200–MCPBOF8M–3000–AL–BL–FIV

Service depth: 0–850m





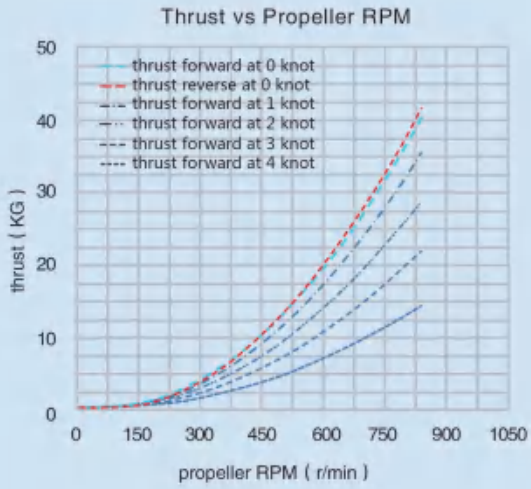


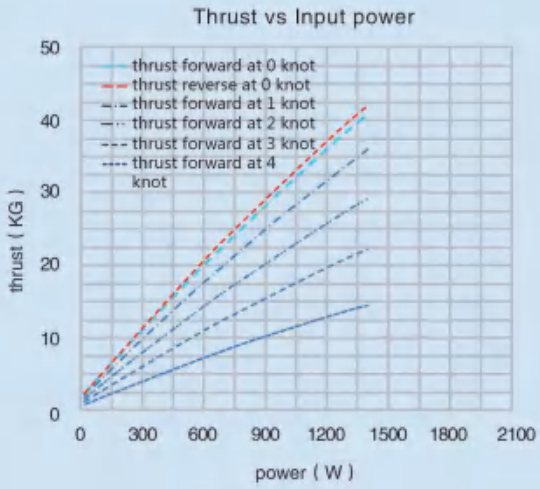


Unit: mm

Example: Order No. T660–260–MCBH8M–850–AL–BL–FOV

Thrust curve





Underwater thruster

forward 38KG, reverse 22KG
1.2kw

T680 thruster

Technical parameters

1	Rated power	1.2kw							
2	Rated voltage	60VDC	72VDC	80VDC	110VDC	140VDC	180VDC	220VDC	280VDC	350VDC
3	Max RPM	760r/min								
4	Thrust	thrust forward 38 KG		thrust reverse 22 KG						
5	Nozzle	black								
6	Propeller handing	left ↺	right ↻							
7	Material of propeller	stainless steel								
8	Housing	Aluminum alloy	Titanium alloy							
9	Seal	leakless, magnetically coupled								
10	Depth rating	0-850m	0-1500m	0-3000m	0-6000m	full ocean depth		service depth >1500m, oil filled seal		
11	Signal power	supply voltage is 12VDC ± 5%, ≤250mA								
12	Control made	analog voltage control (0V~+5V forward, 0V~-5V reverse)						CAN		
13	RPM feedback	pulse feedback	analog voltage feedback	CAN						
14	Temperature	storage temperature: -40-70℃				service temperature: -5-40℃				
15	Electronics	built in	external							

Mechanical parameters

Service depth: 0-850m & 0-1500m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)					common model
1	Aluminum alloy	built in	ø284	341	7.6	4.4	MCBH6M	140	180	220	280	350	
2	Aluminum alloy	built in	ø284	341	7.6	4.4	MCBH8M	60	72	80	110		
3	Aluminum alloy	built in	ø284	329	7.7	4.5	MCBHRA6M	140	180	220	280	350	
4	Aluminum alloy	built in	ø284	329	7.7	4.5	MCBHRA8M	60	72	80	110		
5	Aluminum alloy	external	ø284	309	7.3	4.1	MCBH8M	140	180	220	280	350	
6	Aluminum alloy	external	ø284	309	7.3	4.1	MCBH12M	60	72	80	110		
7	Aluminum alloy	external	ø284	297	7.4	4.2	MCBHRA8M	140	180	220	280	350	
8	Aluminum alloy	external	ø284	305	7.4	4.2	MCBHRA12M	60	72	80	110		
9	Titanium alloy	built in	ø284	341	9.1	5.9	MCBH6MSS	140	180	220	280	350	
10	Titanium alloy	built in	ø284	341	9.1	5.9	MCBH8MSS	60	72	80	110		
11	Titanium alloy	built in	ø284	329	9.2	6.0	MCBHRA6MSS	140	180	220	280	350	
12	Titanium alloy	built in	ø284	329	9.2	6.0	MCBHRA8MSS	60	72	80	110		
13	Titanium alloy	external	ø284	309	8.8	5.6	MCBH8MSS	140	180	220	280	350	
14	Titanium alloy	external	ø284	309	8.8	5.6	MCBH12MSS	60	72	80	110		
15	Titanium alloy	external	ø284	297	8.9	5.7	MCBHRA8MSS	140	180	220	280	350	
16	Titanium alloy	external	ø284	305	8.9	5.7	MCBHRA12MSS	60	72	80	110		

Service depth: 0-3000m & 0-6000m

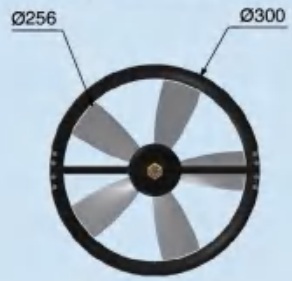
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø284	332	8.2	4.5	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø284	332	8.2	4.5	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø284	300	7.9	4.2	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Aluminum alloy	external	ø284	300	7.9	4.2	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
5	Aluminum alloy	built in	ø284	332	9.7	5.2	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds331g in air, adds 46g in water
6	Titanium alloy	built in	ø284	332	9.7	5.2	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
7	Titanium alloy	external	ø284	300	9.4	4.9	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
8	Titanium alloy	external	ø284	300	9.4	4.9	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water

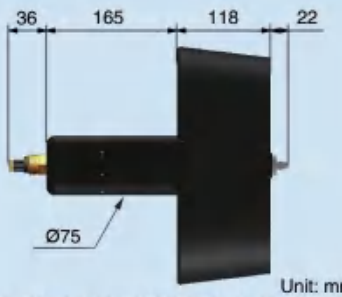
Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Titanium alloy	built in	ø284	332	9.7	5.2	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
2	Titanium alloy	external	ø284	300	9.4	4.9	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water

Dimension

Service depth: 0–850m

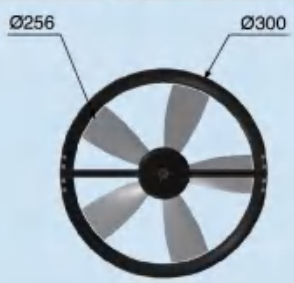


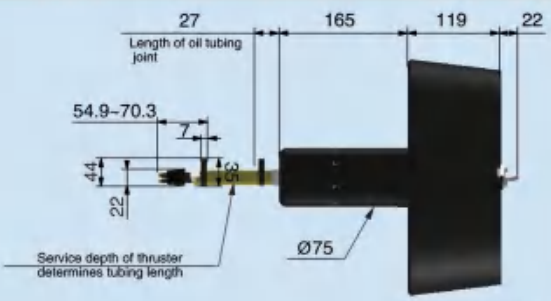


Unit: mm

Example: Order No. T680–110–MCBH8M–850–AL–BL–FIV

Service depth: 0–3000m

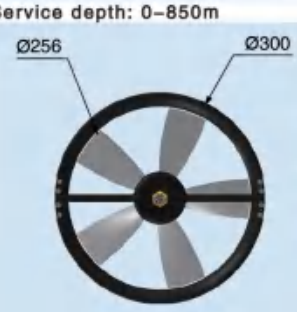


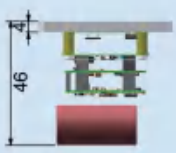


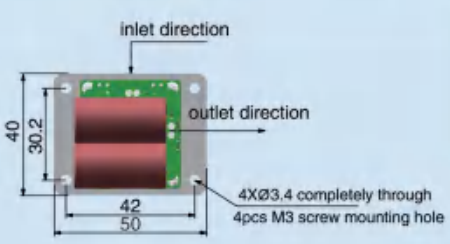
Unit: mm

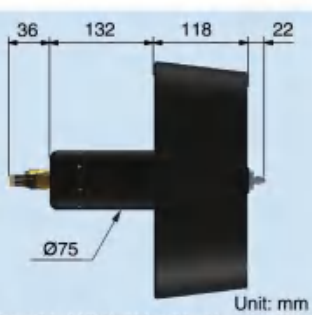
Example: Order No. T680–110–MCPBOF8M–3000–AL–BL–FIV

Service depth: 0–850m





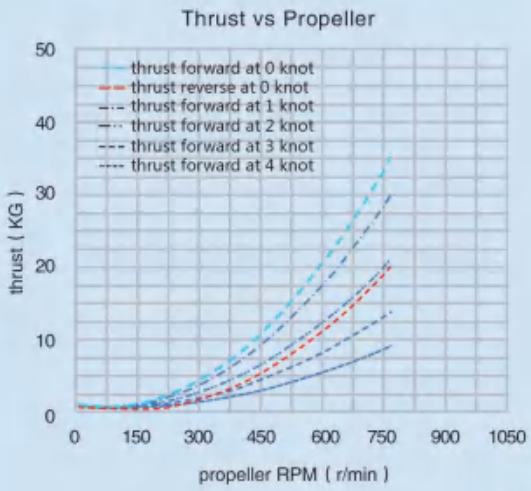


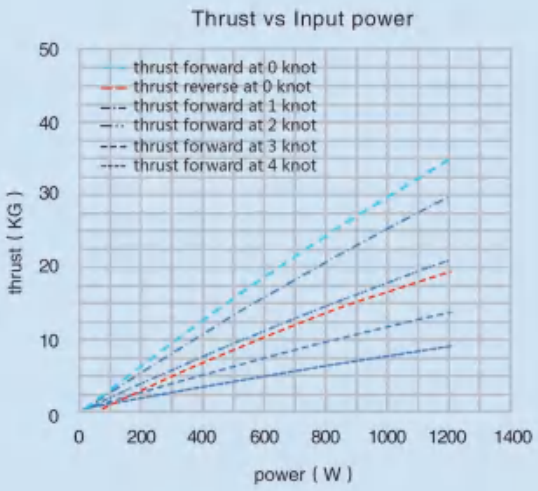


Unit: mm

Example: Order No. T680–220–MCBH8M–850–AL–BL–FOV

Thrust curve





Underwater thruster

forward 25KG, reverse 14KG
1.25kw

T1020 thruster

Technical parameters

1 Rated power	1.25kw								
2 Rated voltage	48VDC	60VDC	95VDC	120VDC	150VDC	175VDC	200VDC	260VDC	330VDC
3 Max RPM	1850r/min								
4 Thrust	thrust forward 25 KG		thrust reverse 14 KG						
5 Nozzle	black								
6 Propeller handing	left ↺	right ↻							
7 Material of propeller	stainless steel								
8 Housing	Aluminum alloy	Titanium alloy							
9 Seal	leakless, magnetically coupled								
10 Depth rating	0-850m	0-1500m	0-3000m	0-6000m	full ocean depth		service depth >1500m, oil filled seal		
11 Signal power	supply voltage is 12VDC ± 5%, ≤250mA								
12 Control mode	analog voltage control (0V~+5V forward, 0V~-5V reverse)						CAN		
13 RPM feedback	pulse feedback	analog voltage feedback	CAN						
14 Temperature	storage temperature: -40~70℃		service temperature: -5~40℃						
15 Electronics	built in	external							

Mechanical parameters

Service depth: 0-850m & 0-1500m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)						common model
1	Aluminum alloy	built in	ø191	351	3.7	2.2	MCBH6M	220	260	330				
2	Aluminum alloy	built in	ø191	351	3.7	2.2	MCBH8M	48	60	95	120	150	175	
3	Aluminum alloy	built in	ø191	339	3.8	2.3	MCBHRA6M	220	260	330				
4	Aluminum alloy	built in	ø191	339	3.8	2.3	MCBHRA8M	48	60	95	120	150	175	
5	Aluminum alloy	external	ø191	323	3.5	2.0	MCBH8M	220	260	330				
6	Aluminum alloy	external	ø191	323	3.5	2.0	MCBH12M	95	120	150	175			
7	Aluminum alloy	external	ø191	323	3.5	2.0	MCBH16M	48	60					
8	Aluminum alloy	external	ø191	311	3.6	2.1	MCBHRA8M	220	260	330				
9	Aluminum alloy	external	ø191	319	3.6	2.1	MCBHRA12M	95	120	150	175			
10	Aluminum alloy	external	ø191	319	3.6	2.1	MCBHRA16M	48	60					
11	Titanium alloy	built in	ø191	351	4.4	2.9	MCBH6MSS	220	260	330				
12	Titanium alloy	built in	ø191	351	4.4	2.9	MCBH8MSS	48	60	95	120	150	175	
13	Titanium alloy	built in	ø191	339	4.5	3.0	MCBHRA6MSS	220	260	330				
14	Titanium alloy	built in	ø191	339	4.5	3.0	MCBHRA8MSS	48	60	95	120	150	175	
15	Titanium alloy	external	ø191	323	4.2	2.7	MCBH8MSS	220	260	330				
16	Titanium alloy	external	ø191	323	4.2	2.7	MCBH12MSS	95	120	150	175			
17	Titanium alloy	external	ø191	323	4.2	2.7	MCBH16MSS	48	60					
18	Titanium alloy	external	ø191	311	4.3	2.8	MCBHRA8MSS	220	260	330				
19	Titanium alloy	external	ø191	319	4.3	2.8	MCBHRA12MSS	95	120	150	175			
20	Titanium alloy	external	ø191	319	4.3	2.8	MCBHRA16MSS	48	60					

Service depth: 0-3000m & 0-6000m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø191	342	4	2.4	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø191	342	4	2.4	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø191	314	3.8	2.2	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Aluminum alloy	external	ø191	314	3.8	2.2	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
5	Aluminum alloy	external	ø191	314	3.8	2.2	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water
6	Titanium alloy	built in	ø191	342	4.8	3.2	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
7	Titanium alloy	built in	ø191	342	4.8	3.2	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
8	Titanium alloy	external	ø191	314	4.6	3.0	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
9	Titanium alloy	external	ø191	314	4.6	3.0	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
10	Titanium alloy	external	ø191	314	4.6	3.0	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water

Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Titanium alloy	built in	ø191	342	4.8	3.2	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Titanium alloy	built in	ø191	342	4.8	3.2	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Titanium alloy	external	ø191	314	4.6	3.0	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Titanium alloy	external	ø191	314	4.6	3.0	PBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water

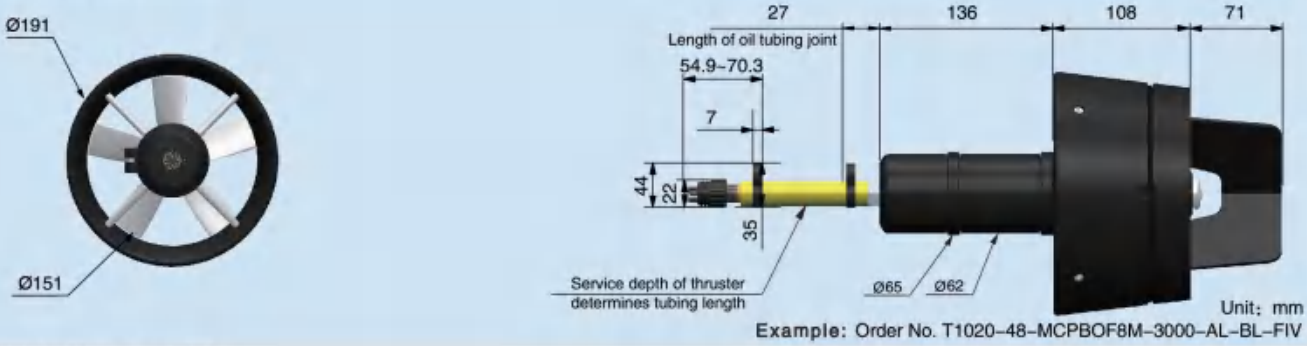
Dimension

Service depth: 0–850m

Unit: mm

Example: Order No. T1020–48–MCBH8M–850–AL–BL–FIV

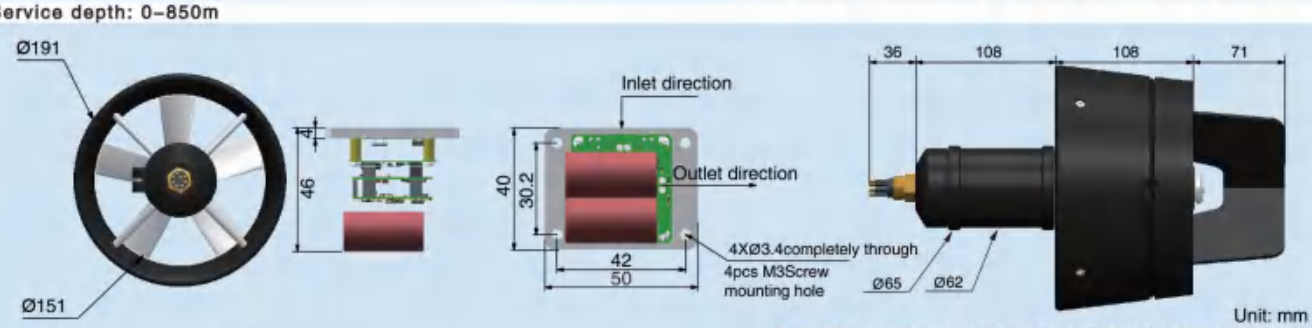
Service depth: 0–3000m



Unit: mm

Example: Order No. T1020–48–MCPBOF8M–3000–AL–BL–FIV

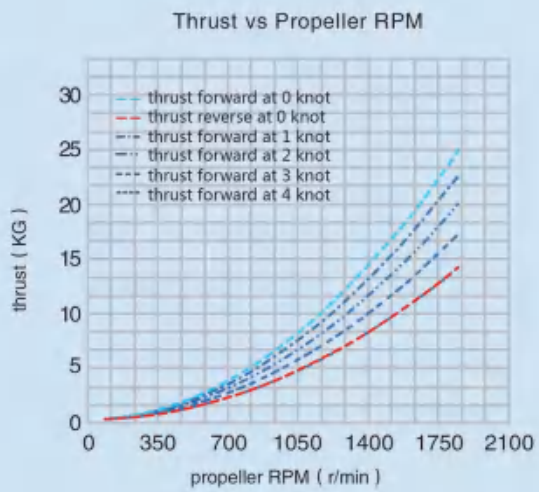
Service depth: 0–850m

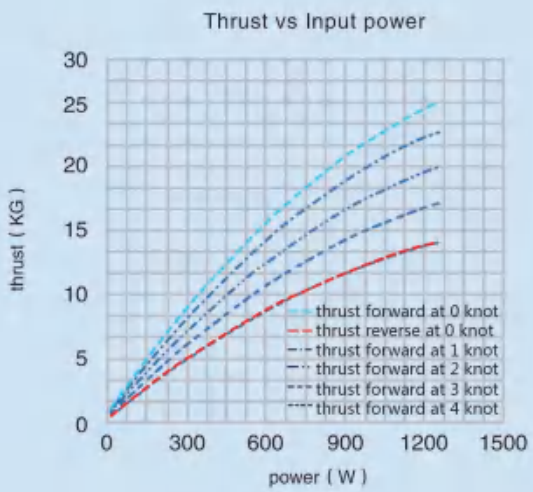


Unit: mm

Example: Order No. T1020–260–MCBH8M–850–AL–BL–FOV

Thrust curve





Underwater thruster

forward 48KG, reverse 24KG
2.3kw

T1060 thruster

Technical parameters

1	Rated power	2.3kw
2	Rated voltage	72VDC 100VDC 120VDC 150VDC 260VDC 300VDC
3	Max RPM	1880r/min
4	Thrust	thrust forward 48 KG thrust reverse 24 KG
5	Nozzle	black
6	Propeller handing	left ↺ right ↻
7	Material of propeller	stainless steel
8	Housing	Aluminum alloy Titanium alloy
9	Seal	leakless, magnetically coupled
10	Depth rating	0-850m 0-1500m 0-3000m 0-6000m full ocean deph service depth >1500m, oil filled seal
11	Signal power	none
12	Control made	analog voltage control (0V—+5V forward, 0V—-5V reverse) CAN
13	RPM feedback	pulse feedback analog voltage feedback CAN
14	Temperature	storage temperature: -40-70℃ service temperature: -5-30℃
15	Electronics	built-in external

Mechnical parameters

Service depth: 0-850m & 0-1500m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)	common model
1	Aluminum alloy	built in	ø235	356	6.5	4.1	MCBH8M	150 260 300	
2	Aluminum alloy	built in	ø235	356	6.5	4.1	MCBH12M	72 100 120	
3	Aluminum alloy	external	ø235	294	6.0	4.0	BH12M	72 100 120	
4	Aluminum alloy	external	ø235	294	6.0	4.0	MCBH12M	260 300	
5	Aluminum alloy	external	ø235	294	6.0	4.0	MCBH16M	150	
6	Titanium alloy	built in	ø235	356	7.5	5.1	MCBH8MSS	150 260 300	
7	Titanium alloy	built in	ø235	356	7.5	5.1	MCBH12MSS	72 100 120	
8	Titanium alloy	external	ø235	302	7.1	5.0	BH12MSS	72 100 120	
9	Titanium alloy	external	ø235	294	7.0	5.0	MCBH12MSS	260 300	
10	Titanium alloy	external	ø235	294	7.0	5.0	MCBH16MSS	150	

Service depth: 0-3000m & 0-6000m

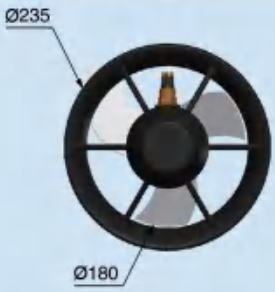
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø235	356	7.3	4.1	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
2	Aluminum alloy	built in	ø235	356	7.3	4.1	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
3	Aluminum alloy	external	ø235	294	6.8	4.0	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
4	Aluminum alloy	external	ø235	294	6.8	4.0	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water
5	Aluminum alloy	external	ø235	294	7.3	4.0	PBOF12M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 880g in air, adds 88g in water
6	Titanium alloy	built in	ø235	356	8.3	5.1	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
7	Titanium alloy	built in	ø235	356	8.3	5.1	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
8	Titanium alloy	external	ø235	294	7.8	5.0	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
9	Titanium alloy	external	ø235	294	7.8	5.0	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water
10	Titanium alloy	external	ø235	294	8.3	5.0	PBOF12M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 880g in air, adds 88g in water

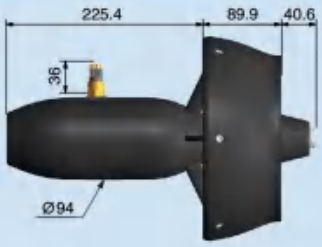
Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø235	356	7.3	4.1	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø235	356	7.3	4.1	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø235	294	6.8	4.0	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Aluminum alloy	external	ø235	294	7.3	4.0	PBOF12M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 880g in air, adds 88g in water
5	Titanium alloy	built in	ø235	356	8.3	5.1	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
6	Titanium alloy	built in	ø235	356	8.3	5.1	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
7	Titanium alloy	external	ø235	294	7.8	5.0	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
8	Titanium alloy	external	ø235	294	8.3	5.0	PBOF12M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 880g in air, adds 88g in water

Dimension

Service depth: 0–850m

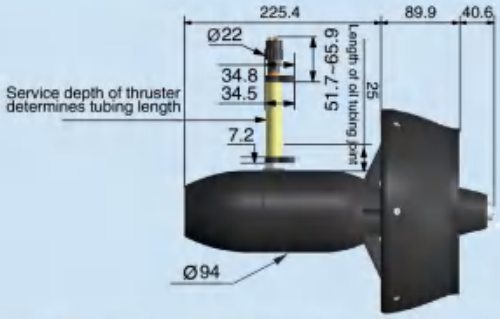




Unit: mm

Example: Order No. T1060–150–MCBH8M–850–AL–BL–FIV

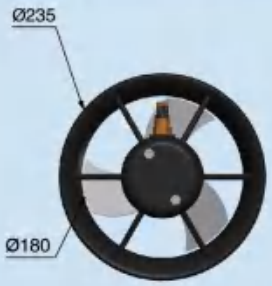
Service depth: 0–3000m

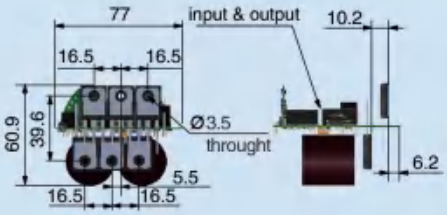


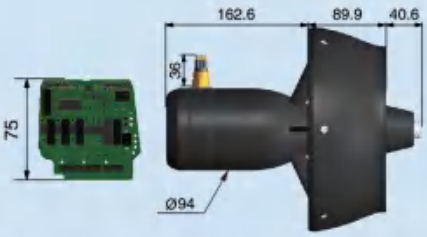
Unit: mm

Example: Order No. T1060–150–MCPBOF8M–3000–AL–BL–FIV

Service depth: 0–850m



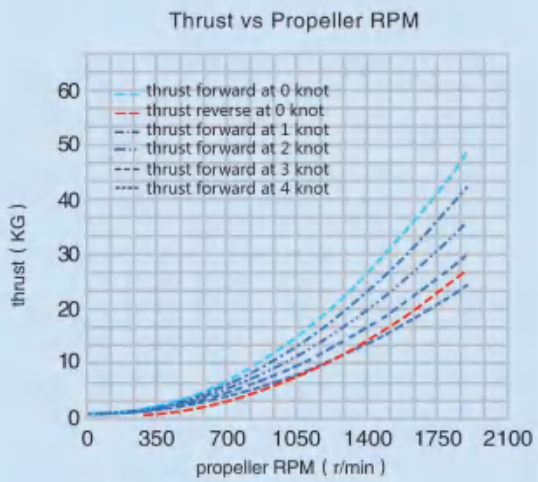


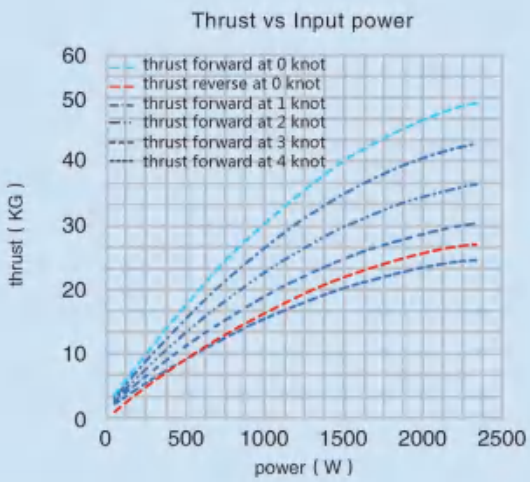


Unit: mm

Example: Order No. T1060–150–MCBH12M–850–AL–BL–FOV

Thrust curve





Underwater thruster

forward 48KG, reverse 48KG
2.4kw

T1080 thruster

Technical parameters

1 Rated power	2.4kw					
2 Rated voltage	72VDC	100VDC	120VDC	150VDC	260VDC	300VDC
3 Max RPM	1730r/min					
4 Thrust	thrust forward 48 KG		thrust reverse 48 KG			
5 Nozzle	black					
6 Propeller handing	left ↺	right ↻				
7 Material of propeller	stainless steel					
8 Housing	Aluminum alloy	Titanium alloy				
9 Seal	leakless, magnetically coupled					
10 Depth rating	0–850m	0–1500m	0–3000m	0–6000m	full ocean depth	service depth >1500m, oil filled seal
11 Signal power	none					
12 Control mode	analog voltage control (0V—+5V forward, 0V—-5V reverse)					CAN
13 RPM feedback	pulse feedback	analog voltage feedback	CAN			
14 Temperature	storage temperature: -40–70℃		service temperature: -5–40℃			
15 Electronics	built in	external				

Mechnical parameters

Service depth: 0–850m & 0–1500m

Item Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)	common model
1 Aluminum alloy	built in	ø242	356	7.3	4.2	MCBH8M	150 260 300	
2 Aluminum alloy	built in	ø242	356	7.3	4.2	MCBH12M	72 100 120	
3 Aluminum alloy	external	ø242	294	6.8	3.7	MCBH12M	260 300	
4 Aluminum alloy	external	ø242	294	6.8	3.7	MCBH16M	150	
5 Aluminum alloy	external	ø242	294	6.8	3.7	BH12M	72 100 120	
6 Titanium alloy	built in	ø242	356	8.3	5.2	MCBH8MSS	150 260 300	
7 Titanium alloy	built in	ø242	356	8.3	5.2	MCBH12MSS	72 100 120	
8 Titanium alloy	external	ø242	294	7.8	4.7	MCBH12MSS	260 300	
9 Titanium alloy	external	ø242	294	7.8	4.7	MCBH16MSS	150	
10 Titanium alloy	external	ø242	302	7.8	4.7	BH12MSS	72 100 120	

Service depth: 0–3000m & 0–6000m

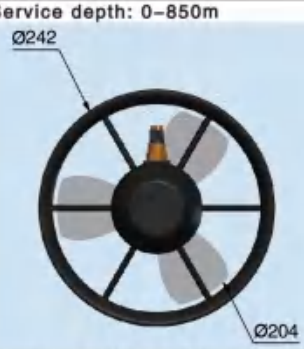
Item Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1 Aluminum alloy	built in	ø242	356	8.1	4.2	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
2 Aluminum alloy	built in	ø242	356	8.1	4.2	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
3 Aluminum alloy	external	ø242	294	7.6	3.7	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
4 Aluminum alloy	external	ø242	294	7.6	3.7	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water
5 Aluminum alloy	external	ø242	294	8.1	3.7	PBOF12M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 880g in air, adds 88g in water
6 Titanium alloy	built in	ø242	356	9.1	5.2	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
7 Titanium alloy	built in	ø242	356	9.1	5.2	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
8 Titanium alloy	external	ø242	294	8.6	4.7	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
9 Titanium alloy	external	ø242	294	8.6	4.7	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water
10 Titanium alloy	external	ø242	294	9.1	4.7	PBOF12M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 880g in air, adds 88g in water

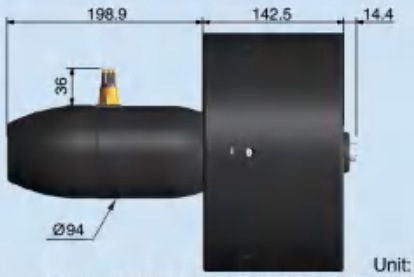
Service depth: full ocean depth

Item Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1 Aluminum alloy	built in	ø242	356	8.1	4.2	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2 Aluminum alloy	built in	ø242	356	8.1	4.2	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3 Aluminum alloy	external	ø242	294	7.6	3.7	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4 Aluminum alloy	external	ø242	294	8.1	3.7	PBOF12M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 880g in air, adds 88g in water
5 Titanium alloy	built in	ø242	356	9.1	5.2	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
6 Titanium alloy	built in	ø242	356	9.1	5.2	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
7 Titanium alloy	external	ø242	294	8.6	4.7	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
8 Titanium alloy	external	ø242	294	9.1	4.7	PBOF12M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 880g in air, adds 88g in water

Dimension

Service depth: 0–850m

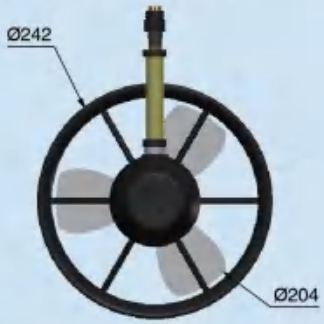


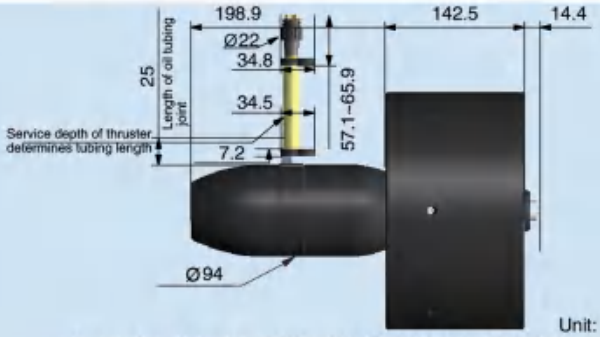


Unit: mm

Example: Order No. T1080–150–MCBH8M–850–AL–BL–FIV

Service depth: 0–3000m

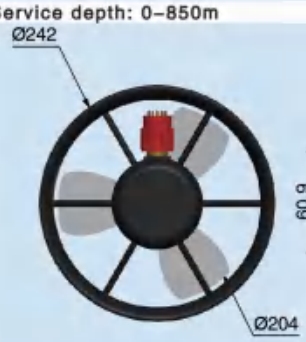


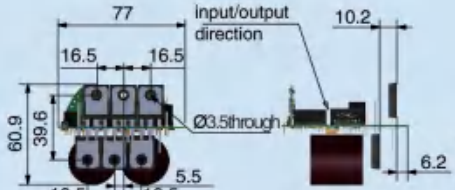


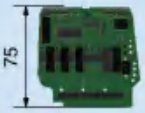
Unit: mm

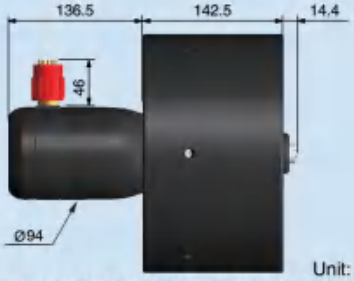
Example: Order No. T1080–150–MCPBOF8M–3000–AL–BL–FIV

Service depth: 0–850m





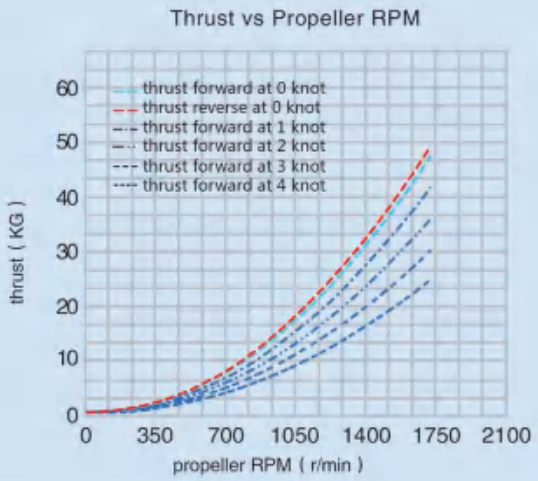


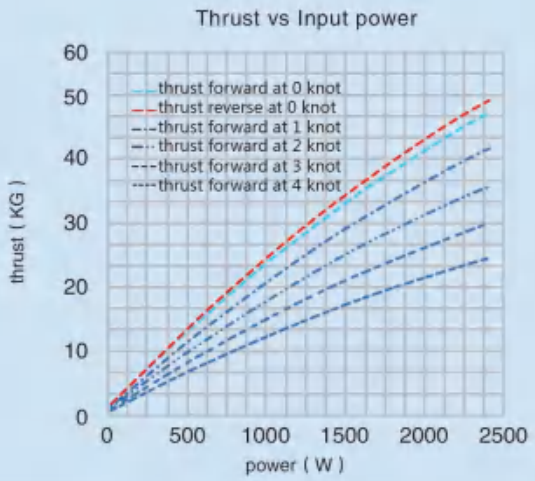


Unit: mm

Example: Order No. T1080–150–MCBH8M–850–AL–BL–FOV

Thrust curve





Underwater thruster

forward 120KG, reverse 60KG
6.5kw

T2020 thruster

Technical parameters

1 Rated power	6.5kw					
2 Rated voltage	260VDC	300VDC	330VDC	600VDC		
3 Max RPM	1600r/min					
4 Thrust	thrust forward 120 KG		thrust reverse 60 KG			
5 Nozzle	black					
6 Propeller handing	left ○	right ○				
7 Material of propeller	stainless steel					
8 Housing	Aluminum alloy	Titanium alloy				
9 Seal	leakless, magnetically coupled					
10 Depth rating	0–850m	0–1500m	0–3000m	0–6000m	full ocean depth	service depth >850m, oil filled seal
11 Signal power	none					
12 Control made	analog voltage control (0V~+5V forward, 0V~–5V reverse)				CAN	
13 RPM feedback	pulse feedback	analog voltage feedback	CAN			
14 Temperature	storage temperature: –40~70℃		service temperature: –5~40℃			
15 Electronics	built–in	external				

Mechanical parameters

Service depth: 0–850m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)			
								common model			
1	Aluminum alloy	built in	ø322.8	533	14.8	8.9	MCBH12M	260	300	330	600
2	Aluminum alloy	built in	ø322.8	520	14.8	8.9	MCBHRA12M	260	300	330	600
3	Aluminum alloy	external	ø322.8	422.4	12.9	8.6	BH16M	260	300	330	600
4	Titanium alloy	built in	ø322.8	533	16.3	10.4	MCBH12MSS	260	300	330	600
5	Titanium alloy	built in	ø322.8	520	16.3	10.4	MCBHRA12MSS	260	300	330	600
6	Titanium alloy	external	ø322.8	422.4	13.7	9.4	BH16MSS	260	300	330	600

Service depth: 0–1500m & 0–3000m & 0–6000m

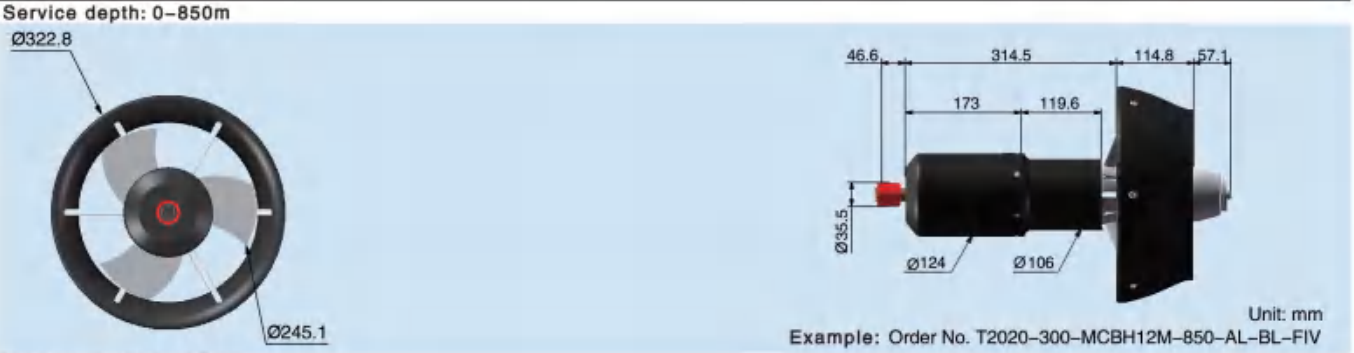
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø322.8	511.4	16.4	10.2	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
2	Titanium alloy	built in	ø322.8	511.4	18.1	11.9	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water

Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø322.8	511.4	16.4	10.2	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
2	Aluminum alloy	external	ø322.8	393.4	14.3	9.3	PBOF16M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 925g in air, adds 133g in water
3	Titanium alloy	built in	ø322.8	511.4	18.1	11.9	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Titanium alloy	external	ø322.8	393.4	15.1	10.1	PBOF16M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 925g in air, adds 133g in water

Dimension

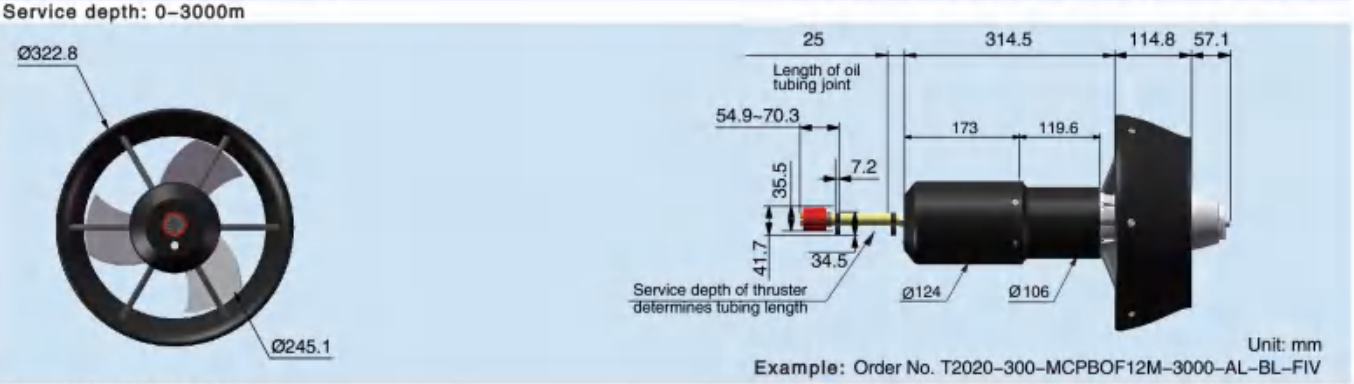
Service depth: 0–850m



Unit: mm

Example: Order No. T2020–300–MCBH12M–850–AL–BL–FIV

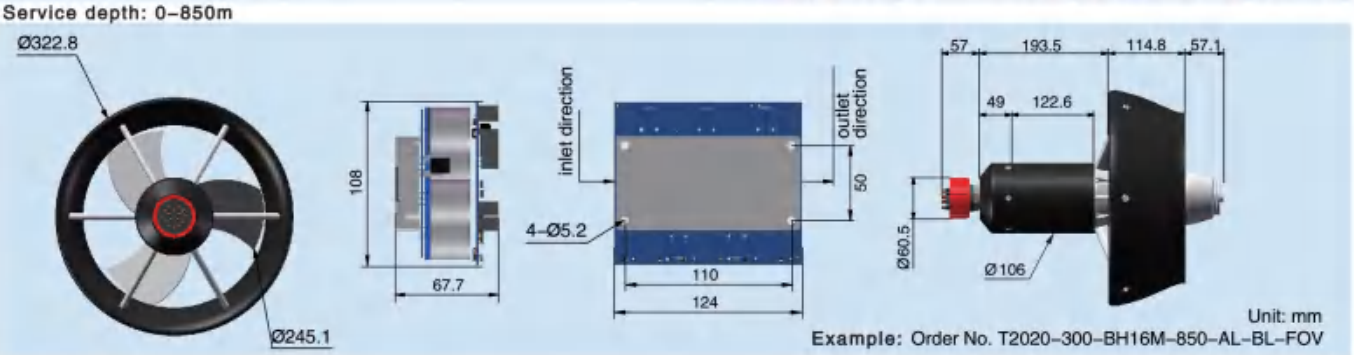
Service depth: 0–3000m



Unit: mm

Example: Order No. T2020–300–MCPBOF12M–3000–AL–BL–FIV

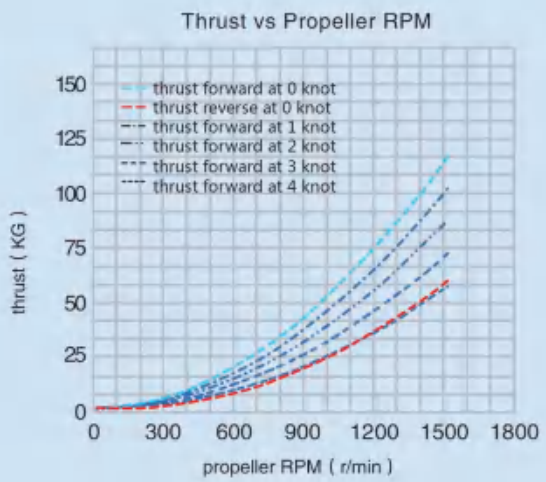
Service depth: 0–850m

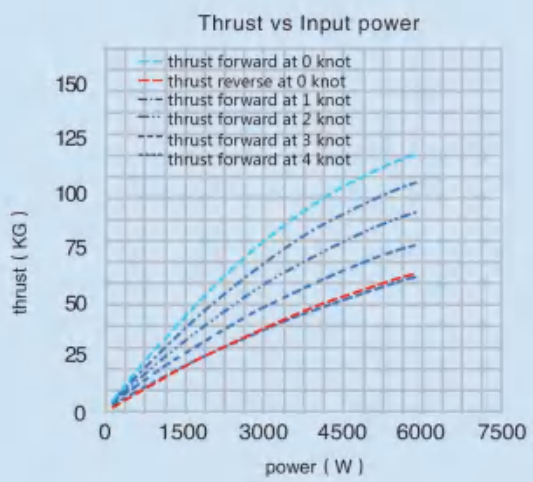


Unit: mm

Example: Order No. T2020–300–BH16M–850–AL–BL–FOV

Thrust curve





Underwater thruster

forward 130KG, reverse 70KG
6.5kw

T2030 thruster

Technical parameters

1 Rated power	6.5kw					
2 Rated voltage	260VDC	300VDC	330VDC			
3 Max RPM	1600r/min					
4 Thrust	thrust forward 130 KG		thrust reverse 70 KG			
5 Nozzle	black					
6 Propeller handing	left ↺	right ↻				
7 Material of propeller	stainless steel					
8 Housing	Aluminum alloy	Titanium alloy				
9 Seal	leakless, magnetically coupled					
10 Depth rating	0–850m	0–1500m	0–3000m	0–6000m	full ocean depth	service depth >850m, oil filled seal
11 Signal power	none					
12 Control made	analog voltage control (0V–+5V forward, 0V—5V reverse)					CAN
13 RPM feedback	pulse feedback	analog voltage feedback		CAN		
14 Temperature	storage temperature: -40~70℃		service temperature: -5~40℃			
15 Electronics	built-in	external				

Mechanical parameters

Service depth: 0–850m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)			common model
1	Aluminum alloy	built in	ø358	533	15.9	9.2	MCBH12M	260	**300**	330	
2	Aluminum alloy	built in	ø358	520	15.9	9.2	MCBHRA12M	260	300	330	
3	Aluminum alloy	external	ø358	411.4	14	8.9	MCBH16M	260	300	330	
4	Aluminum alloy	external	ø358	397.2	14	8.9	MCBHRA16M	260	300	330	
5	Titanium alloy	built in	ø358	533	17.4	10.7	MCBH12MSS	260	**300**	330	
6	Titanium alloy	built in	ø358	520	17.4	10.7	MCBHRA12MSS	260	300	330	
7	Titanium alloy	external	ø358	411.4	14.8	9.7	MCBH16MSS	260	300	330	
8	Titanium alloy	external	ø358	397.2	14.8	9.7	MCBHRA16MSS	260	300	330	

Service depth: 0–1500m & 0–3000m & 0–6000m

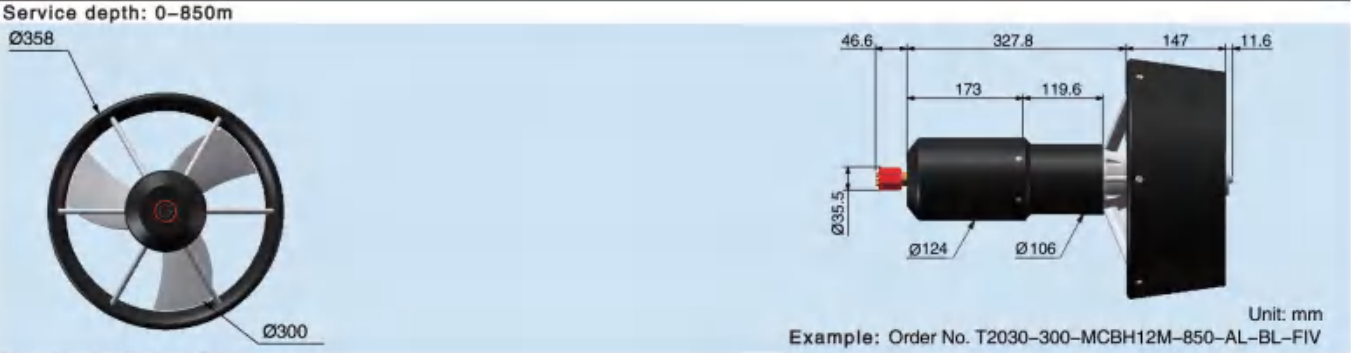
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø358	511.4	17.5	10.5	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
2	Aluminum alloy	external	ø358	390.4	14.8	9.5	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water
3	Titanium alloy	built in	ø358	511.4	19.2	12.2	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
4	Titanium alloy	external	ø358	390.4	15.6	10.3	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water

Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø358	511.4	17.5	10.5	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
2	Aluminum alloy	external	ø358	393.4	15.4	9.6	PBOF12M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 880g in air, adds 88g in water
3	Titanium alloy	built in	ø358	511.4	19.2	12.2	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Titanium alloy	external	ø358	393.4	16.2	10.4	PBOF12M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 880g in air, adds 88g in water

Dimension

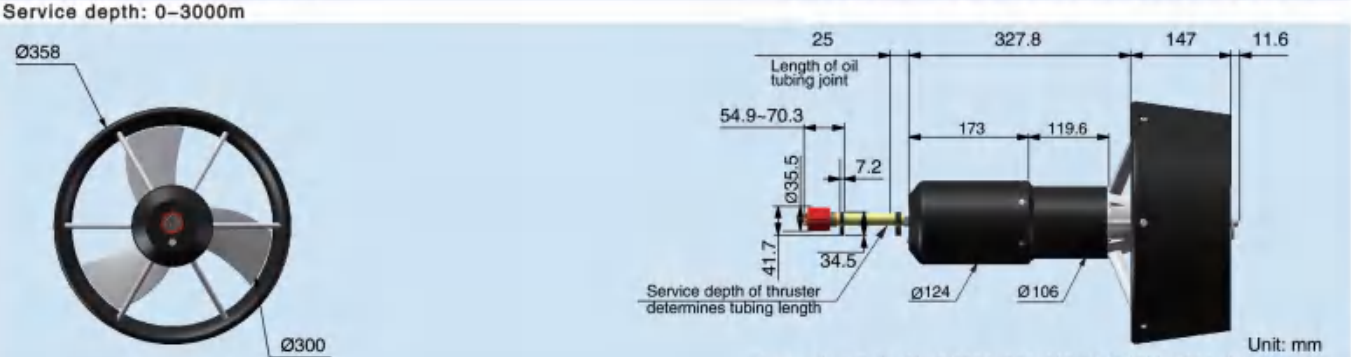
Service depth: 0–850m



Unit: mm

Example: Order No. T2030–300–MCBH12M–850–AL–BL–FIV

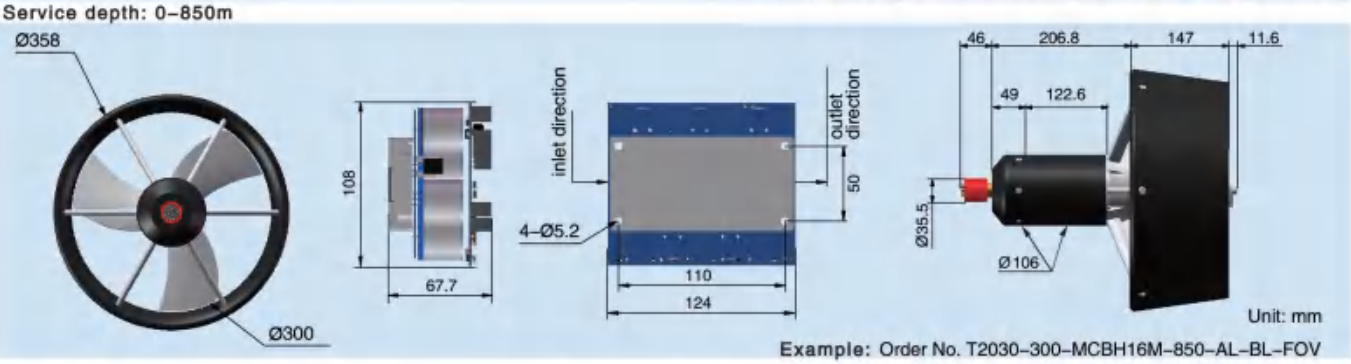
Service depth: 0–3000m



Unit: mm

Example: Order No. T2030–300–MCPBOF12M–3000–AL–BL–FIV

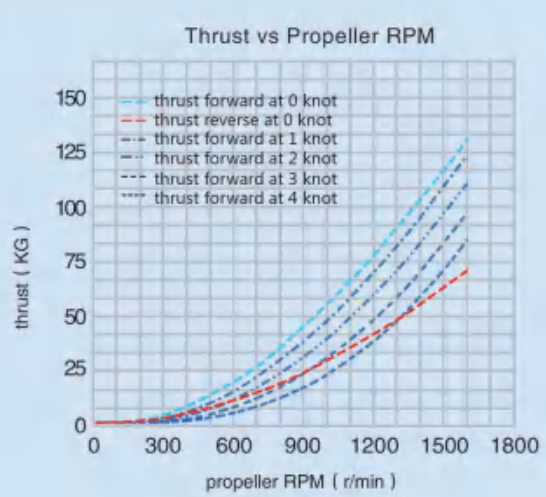
Service depth: 0–850m

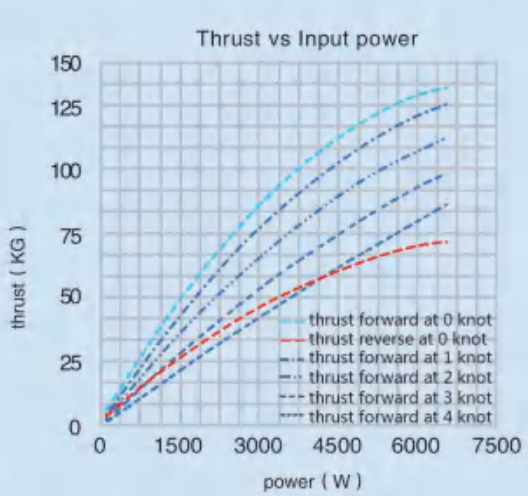


Unit: mm

Example: Order No. T2030–300–MCBH16M–850–AL–BL–FOV

Thrust curve





Underwater thruster

forward 86KG, reverse 86KG
6.5kw

T2040 thruster

Technical parameters

1 Rated power	6.5kw					
2 Rated voltage	260VDC	300VDC	330VDC			
3 Max RPM	1600r/min					
4 Thrust	thrust forward 86 KG		thrust reverse 86 KG			
5 Nozzle	none					
6 Propeller handing	left ↺	right ↻				
7 Material of propeller	stainless steel					
8 Housing	Aluminum alloy	Titanium alloy				
9 Seal	leakless, magnetically coupled					
10 Depth rating	0–850m	0–1500m	0–3000m	0–6000m	full ocean depth	service depth >850m, oil filled seal
11 Signal power	none					
12 Control made	analog voltage control (0V–+5V forward, 0V––5V reverse)					CAN
13 RPM feedback	pulse feedback	analog voltage feedback	CAN			
14 Temperature	storage temperature: –40–70℃		service temperature: –5–40℃			
15 Electronics	built–in	external				

Mechanical parameters

Service depth: 0–850m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)			common model
1	Aluminum alloy	built in	ø254	533	12.3	8.1	MCBH12M	260	**300**	330	
2	Aluminum alloy	built in	ø254	520	12.3	8.1	MCBHRA12M	260	300	330	
3	Aluminum alloy	external	ø254	422.4	10.4	7.8	BH16M	260	300	330	
4	Titanium alloy	built in	ø254	533	13.8	9.6	MCBH12MSS	260	**300**	330	
5	Titanium alloy	built in	ø254	520	13.8	9.6	MCBHRA12MSS	260	300	330	
6	Titanium alloy	external	ø254	422.4	11.2	8.6	BH16MSS	260	300	330	

Service depth: 0–1500m & 0–3000m & 0–6000m

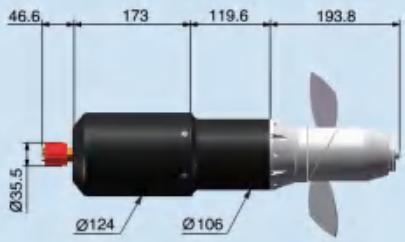
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø254	511.4	13.9	9.4	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
2	Titanium alloy	built in	ø254	511.4	15.6	11.1	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water

Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø254	511.4	13.9	9.4	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
2	Aluminum alloy	external	ø254	393.4	11.8	8.5	PBOF16M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 925g in air, adds 133g in water
3	Titanium alloy	built in	ø254	511.4	15.6	11.1	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Titanium alloy	external	ø254	393.4	12.6	9.3	PBOF16M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 925g in air, adds 133g in water

Dimension

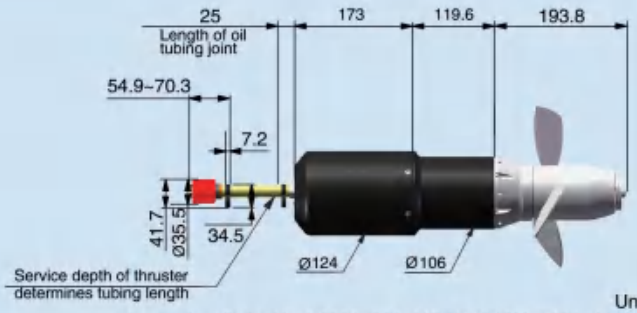
Service depth: 0–850m



Unit: mm

Example: Order No. T2040–300–MCBH12M–850–AL–NL–FIV

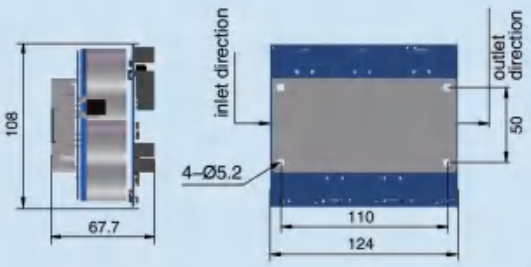
Service depth: 0–3000m

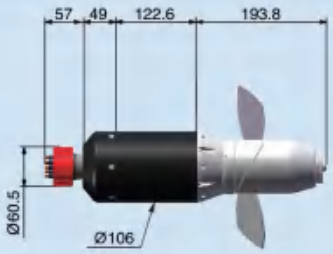


Unit: mm

Example: Order No. T2030–300–MCPBOF12M–3000–AL–NL–FIV

Service depth: 0–850m

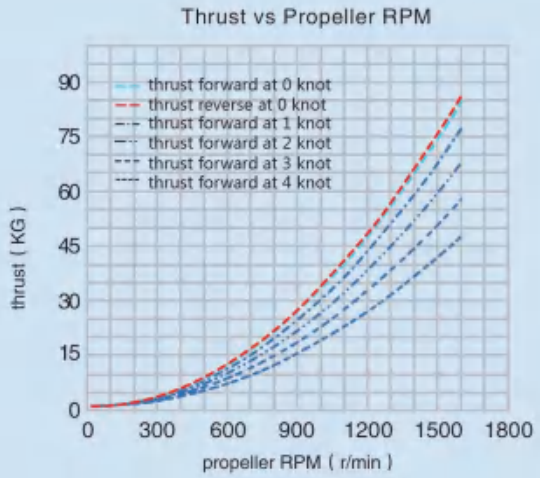


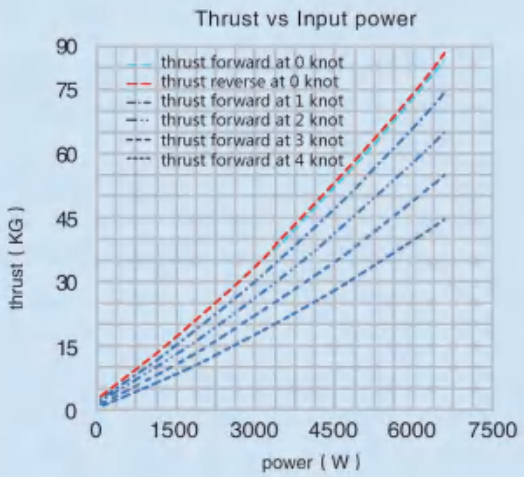


Unit: mm

Example: Order No. T2040–300–BH16M–850–AL–NL–FOV

Thrust curve





Underwater thruster

forward 95KG, reverse 95KG
6.5kw

T2040S thruster

Technical parameters

1 Rated power	6.5kw					
2 Rated voltage	260VDC	300VDC	330VDC			
3 Max RPM	1600r/min					
4 Thrust	thrust forward 95 KG		thrust reverse 95 KG			
5 Nozzle	black					
6 Propeller handing	left ↺	right ↻				
7 Material of propeller	stainless steel					
8 Housing	Aluminum alloy	Titanium alloy				
9 Seal	leakless, magnetically coupled					
10 Depth rating	0–850m	0–1500m	0–3000m	0–6000m	full ocean depth	service depth >850m, oil filled seal
11 Signal power	none					
12 Control made	analog voltage control (0V~+5V forward, 0V~–5V reverse)					CAN
13 RPM feedback	pulse feedback	analog voltage feedback		CAN		
14 Temperature	storage temperature: –40~70℃			service temperature: –5~40℃		
15 Electronics	built–in	external				

Mechanical parameters

Service depth: 0–850m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)			common model
1	Aluminum alloy	built in	ø296.2	533	15.2	8.8	MCBH12M	260	**300**	330	
2	Aluminum alloy	built in	ø296.2	520	15.2	8.8	MCBHRA12M	260	300	330	
3	Aluminum alloy	external	ø296.2	422.4	13.3	8.5	BH16M	260	300	330	
4	Titanium alloy	built in	ø296.2	533	16.7	10.3	MCBH12MSS	260	**300**	330	
5	Titanium alloy	built in	ø296.2	520	16.7	10.3	MCBHRA12MSS	260	300	330	
6	Titanium alloy	external	ø296.2	422.4	14.1	9.3	BH16MSS	260	300	330	

Service depth: 0–1500m & 0–3000m & 0–6000m

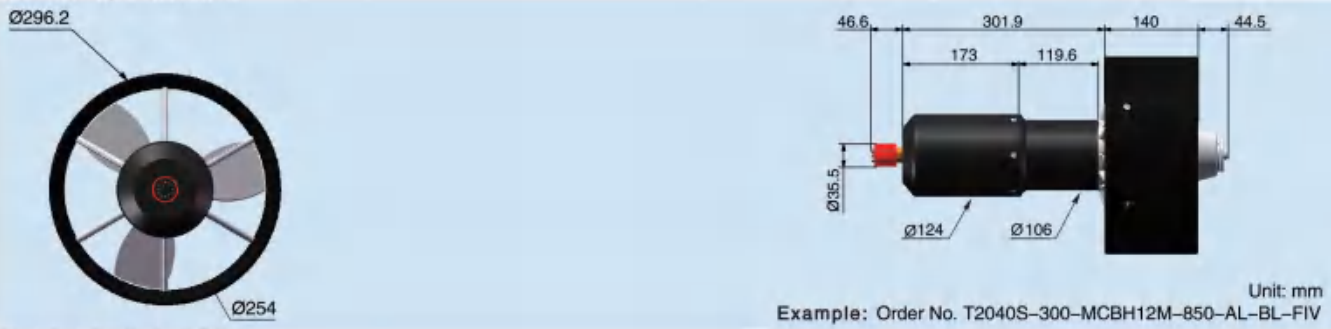
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø296.2	511.4	16.8	10.1	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
2	Titanium alloy	built in	ø296.2	511.4	18.5	11.8	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water

Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø296.2	511.4	16.8	10.1	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
2	Aluminum alloy	external	ø296.2	393.4	14.7	9.2	PBOF16M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 925g in air, adds 133g in water
3	Titanium alloy	built in	ø296.2	511.4	18.5	11.8	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Titanium alloy	external	ø296.2	393.4	15.5	10	PBOF16M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 925g in air, adds 133g in water

Dimension

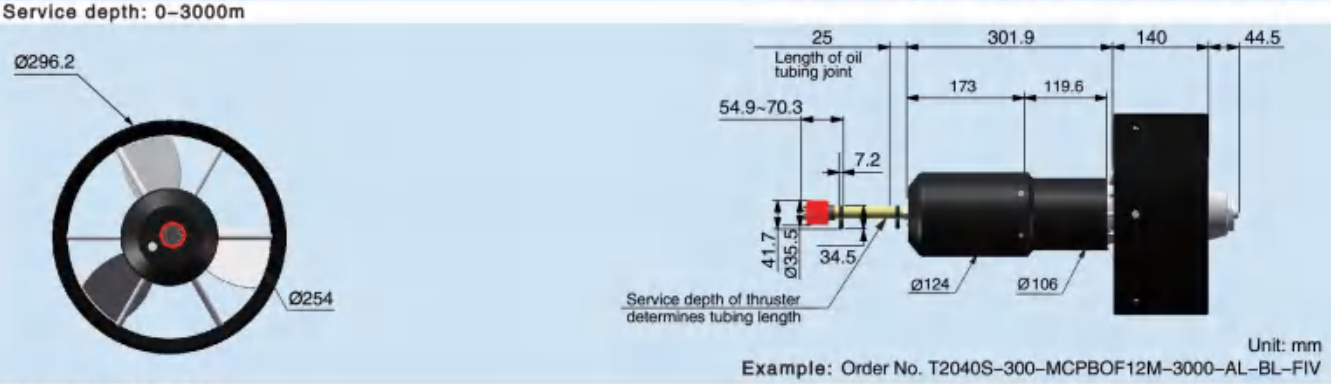
Service depth: 0–850m



Unit: mm

Example: Order No. T2040S–300–MCBH12M–850–AL–BL–FIV

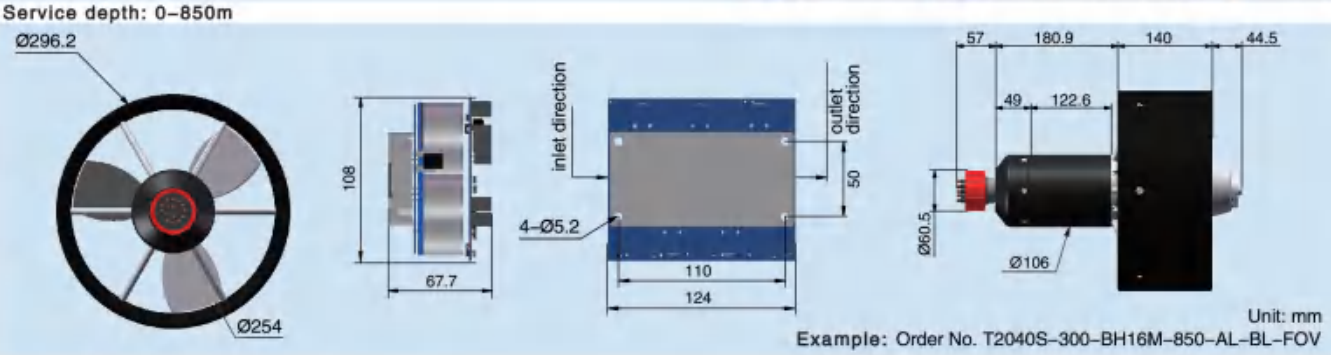
Service depth: 0–3000m



Unit: mm

Example: Order No. T2040S–300–MCPBOF12M–3000–AL–BL–FIV

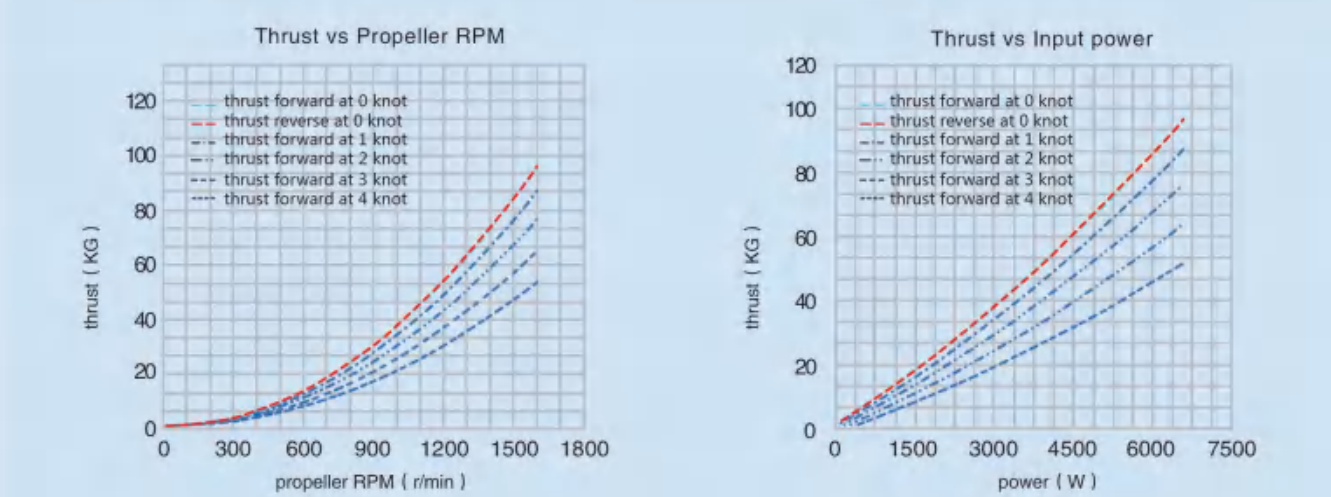
Service depth: 0–850m



Unit: mm

Example: Order No. T2040S–300–BH16M–850–AL–BL–FOV

Thrust curve



Underwater thruster

forward 115KG, reverse 53KG
6.5kw

TD2020 thruster

Technical parameters

1 Rated power	6.5kw					
2 Rated voltage	260VDC	300VDC	330VDC			
3 Max RPM	1400r/min					
4 Thrust	thrust forward 115 KG		thrust reverse 53 KG			
5 Nozzle	black					
6 Propeller handing	left ↺	right ↻				
7 Material of propeller	stainless steel					
8 Housing	Aluminum alloy	Titanium alloy				
9 Seal	leakless, magnetically coupled					
10 Depth rating	0–850m	0–1500m	0–3000m	0–6000m	full ocean depth	service depth >850m, oil filled seal
11 Signal power	none					
12 Control made	analog voltage control (0V~+5V forward, 0V~–5V reverse)					CAN
13 RPM feedback	pulse feedback	analog voltage feedback	CAN			
14 Temperature	storage temperature: –40~70℃	service temperature: –5~40℃				
15 Electronics	built–in	external				

Mechanical parameters

Service depth: 0–850m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)	common model
1	Aluminum alloy	built in	ø292	548.2	21.1	12.1	MCBH12M	260 **300** 330	
2	Aluminum alloy	built in	ø292	535.2	21.1	12.1	MCBHRA12M	260 300 330	
3	Aluminum alloy	external	ø292	436.2	15.2	10	BH16M	260 300 330	
4	Titanium alloy	built in	ø292	548.2	26.7	22.7	MCBH12MSS	260 **300** 330	
5	Titanium alloy	built in	ø292	535.2	26.7	22.7	MCBHRA12MSS	260 300 330	
6	Titanium alloy	external	ø292	436.2	17.8	12.6	BH16MSS	260 300 330	

Service depth: 0–1500m & 0–3000m & 0–6000m

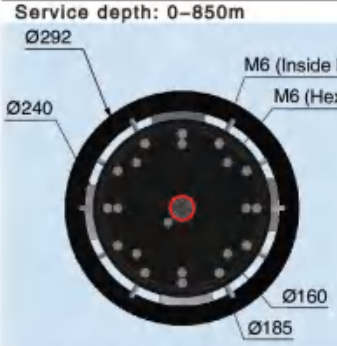
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø292	526.7	23.3	14.1	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
2	Titanium alloy	built in	ø292	526.7	29	19.8	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water

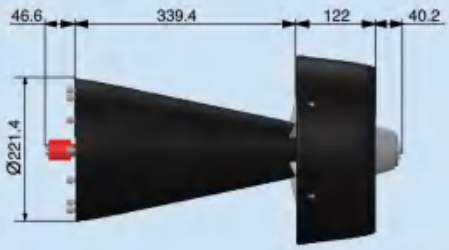
Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø292	526.7	23.3	14.1	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
2	Aluminum alloy	external	ø292	407.2	17	11.1	PBOF16M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 925g in air, adds 133g in water
3	Titanium alloy	built in	ø292	526.7	29	19.8	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Titanium alloy	external	ø292	407.2	19.6	13.9	PBOF16M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 925g in air, adds 133g in water

Dimension

Service depth: 0–850m

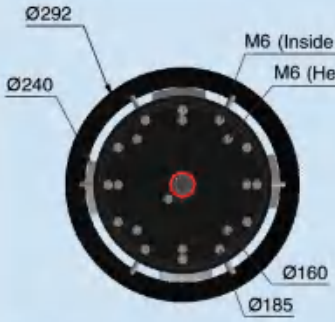


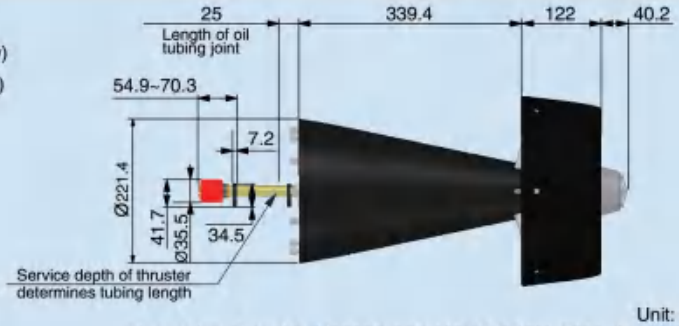


Unit: mm

Example: Order No. TD2020–300–MCBH12M–850–AL–BL–FIV

Service depth: 0–3000m

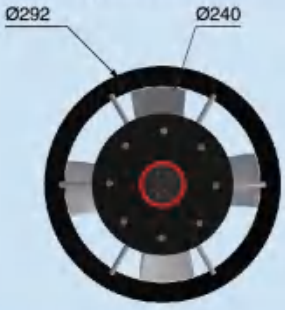


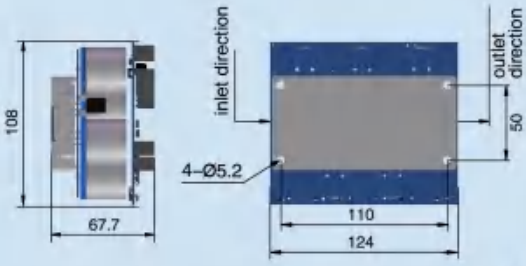


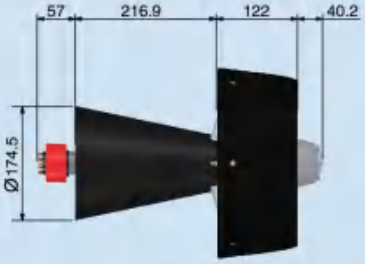
Unit: mm

Example: Order No. TD2020–300–MCPBOF12M–3000–AL–BL–FIV

Service depth: 0–850m



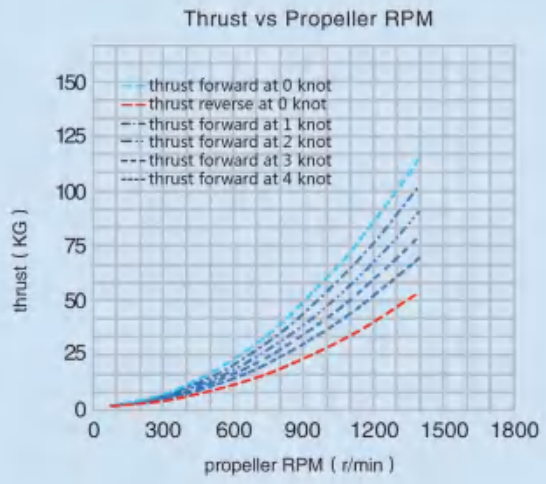


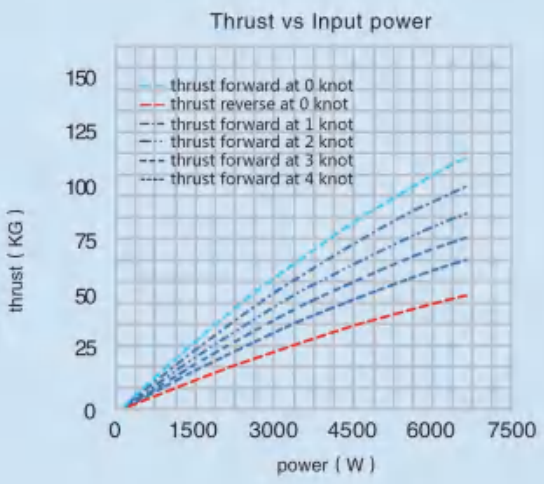


Unit: mm

Example: Order No. TD2020–300–BH16M–850–AL–BL–FOV

Thrust curve





Underwater thruster

forward 97KG, reverse 51KG
4.3kw

TZ2030 thruster

Technical parameters

1	Rated power	4.3kw				
2	Rated voltage	36VDC	260VDC	300VDC	330VDC	
3	Max RPM	1400r/min				
4	Thrust	thrust forward 97 KG		thrust reverse 51 KG		
5	Nozzle	black				
6	Propeller handing	left ↺	right ↻			
7	Material of propeller	stainless steel				
8	Housing	Aluminum alloy	Titanium alloy			
9	Seal	leakless, magnetically coupled				
10	Depth rating	0-850m	0-1500m	0-3000m	0-6000m	full ocean depth
11	Signal power	none				
12	Control made	analog voltage control (0V~+5V forward, 0V~-5V reverse)				CAN
13	RPM feedback	pulse feedback	analog voltage feedback		CAN	
14	Temperature	storage temperature: -40-70℃		service temperature: -5-40℃		
15	Electronics	built-in	external			

Mechanical parameters

Service depth: 0-850m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)			common model
1	Aluminum alloy	built in	ø358	512.7	16.9	10.3	HPBH4M+MCBH4M	36			
2	Aluminum alloy	built in	ø358	536.8	16.8	10.2	MCBH12M	260	300	330	
3	Aluminum alloy	built in	ø358	523.8	16.8	10.2	MCBHRA12M	260	300	330	
4	Aluminum alloy	external	ø358	409.2	15.4	9.7	MCBH16M	260	300	330	
5	Aluminum alloy	external	ø358	395	15.4	9.7	MCBHRA16M	260	300	330	
6	Titanium alloy	built in	ø358	512.7	18	11.4	HPBH4MSS+MCBH4MSS	36			
7	Titanium alloy	built in	ø358	536.8	17.9	11.3	MCBH12MSS	260	300	330	
8	Titanium alloy	built in	ø358	523.8	17.9	11.3	MCBHRA12MSS	260	300	330	
9	Titanium alloy	external	ø358	409.2	16.3	10.6	MCBH16MSS	260	300	330	
10	Titanium alloy	external	ø358	395	16.3	10.6	MCBHRA16MSS	260	300	330	

Note: Rated voltage 36VDC only for built-in non oil-filled thrusters

Service depth: 0-1500m & 0-3000m & 0-6000m

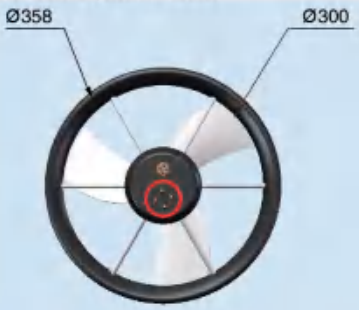
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø358	515.2	18.1	11.3	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
2	Aluminum alloy	external	ø358	391.2	15.9	9.9	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water
3	Titanium alloy	built in	ø358	515.2	19.2	12.4	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
4	Titanium alloy	external	ø358	391.2	17	11	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water

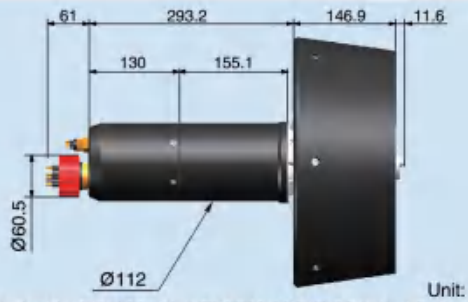
Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø358	515.2	18.1	11.3	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
2	Aluminum alloy	external	ø358	394.2	16.6	10.2	PBOF12M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 880g in air, adds 88g in water
3	Titanium alloy	built in	ø358	515.2	19.2	12.4	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Titanium alloy	external	ø358	394.2	17.5	11.1	PBOF12M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 880g in air, adds 88g in water

Dimension

Service depth: 0–850m

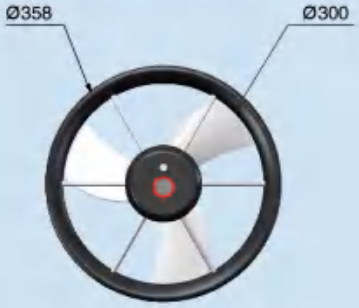


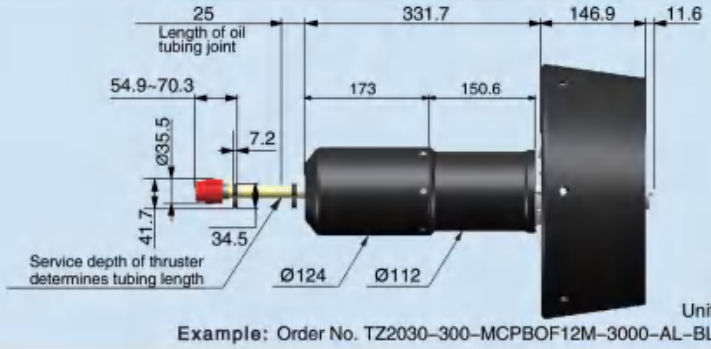


Unit: mm

Example: Order No. TZ2030–36–HPBH4M+MCBH4M–850–AL–BL–FIV

Service depth: 0–3000m

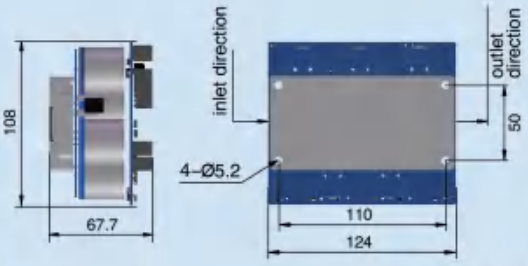


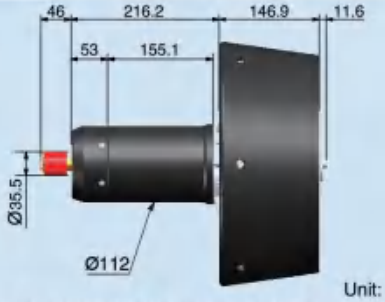


Unit: mm

Example: Order No. TZ2030–300–MCPBOF12M–3000–AL–BL–FIV

Service depth: 0–850m

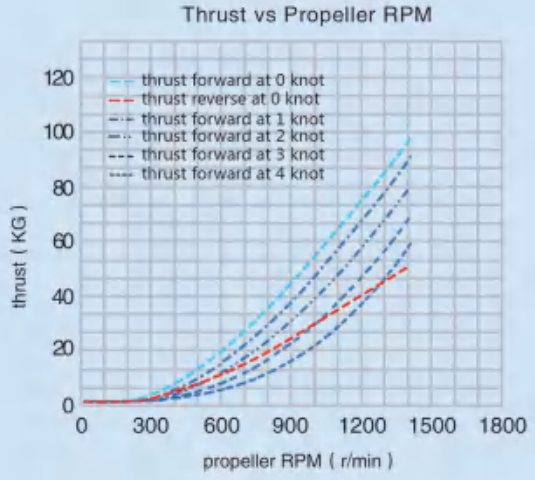


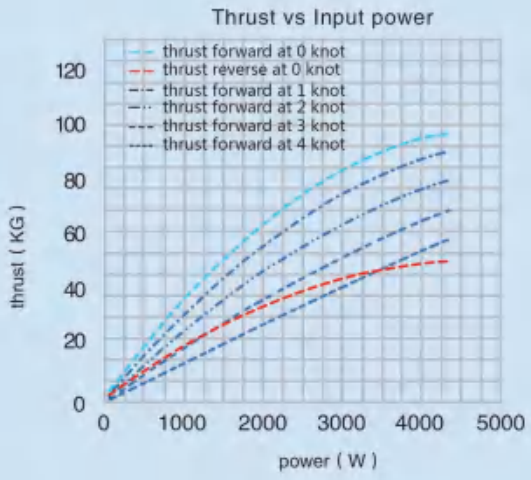


Unit: mm

Example: Order No. TZ2030–300–MCBH16M–850–AL–BL–FOV

Thrust curve





Underwater thruster

forward 230KG, reverse 130KG
14.5kw

T8020 thruster

Technical parameters

1 Rated power	14.5kw					
2 Rated voltage	300VDC					
3 Max RPM	1150r/min					
4 Thrust	thrust forward 230 KG	thrust reverse 130 KG				
5 Nozzle	black					
6 Propeller handing	left ↺	right ↻				
7 Material of propeller	stainless steel					
8 Housing	Aluminum alloy	Titanium alloy				
9 Seal	leakless, magnetically coupled					
10 Depth rating	0–850m	0–1500m	0–3000m	0–6000m	full ocean depth	service depth>850m, oil filled seal
11 Signal power	none					
12 Control made	analog voltage control (0V~+5V forward, 0V~–5V reverse)					CAN
13 RPM feedback	pulse feedback	analog voltage feedback	CAN			
14 Temperature	storage temperature: –40~70℃	service temperature: –5~40℃				
15 Electronics	built in	external				

Mechanical parameters

Service depth: 0–850m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)
1	Aluminum alloy	built in	ø409	658	28.1	17.5	BH12M	300
2	Aluminum alloy	external	ø409	529	24.9	16.9	BH16M	300
3	Titanium alloy	built in	ø409	658	35.8	25.2	BH12MSS	300
4	Titanium alloy	external	ø409	529	26.9	18.9	BH16MSS	300

common model

Service depth: 0–1500m & 0–3000m & 0–6000m

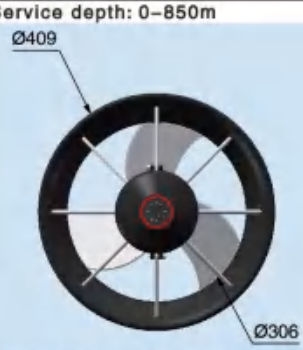
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø409	636	30.3	17.6	PBOF12M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 880g in air, adds 88g in water
2	Titanium alloy	built in	ø409	636	38	25.3	PBOF12M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 880g in air, adds 88g in water

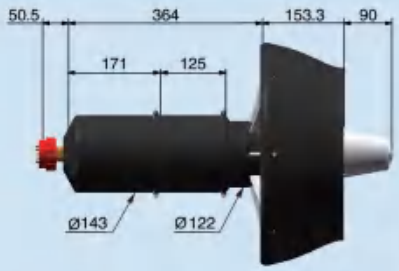
Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	external	ø409	500	26.1	17	PBOF16M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 925g in air, adds 133g in water
2	Titanium alloy	external	ø409	500	28.2	19	PBOF16M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 925g in air, adds 133g in water

Dimension

Service depth: 0–850m

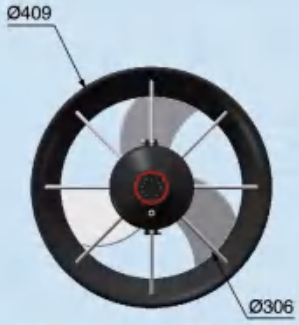


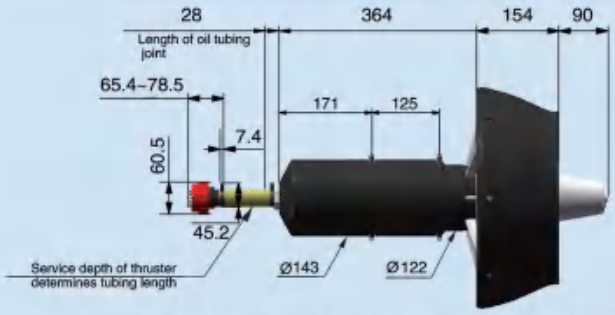


Unit: mm

Example: Order No. T8020–300–BH12M–850–AL–BL–FIV

Service depth: 0–3000m

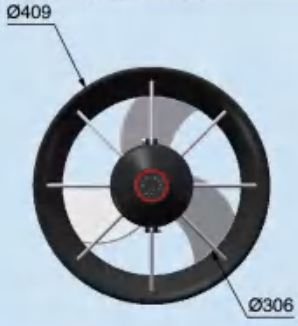


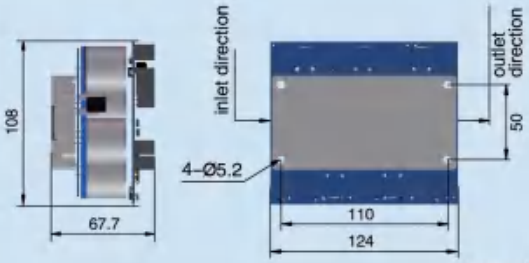


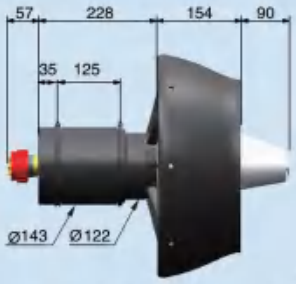
Unit: mm

Example: Order No. T8020–300–PBOF12M–3000–AL–BL–FIV

Service depth: 0–850m



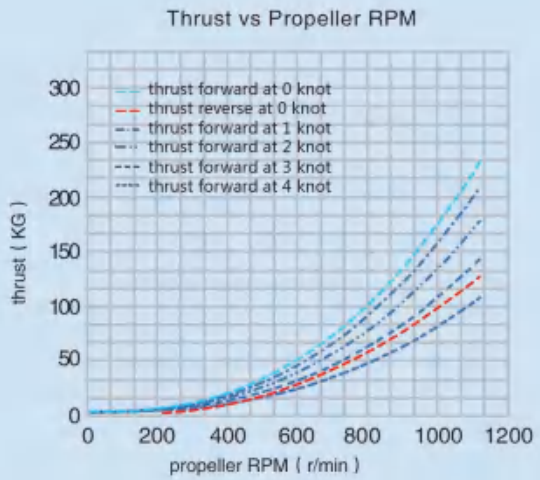


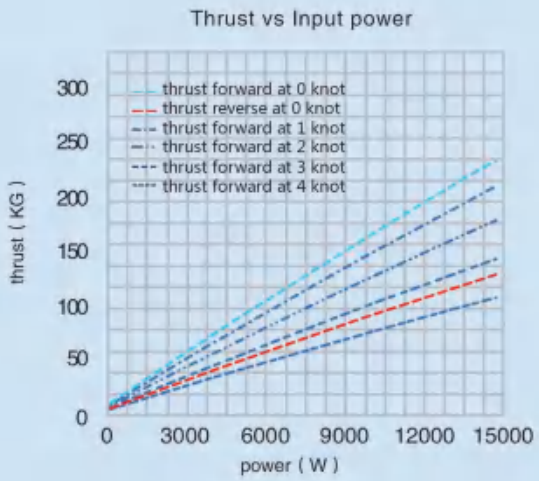


Unit: mm

Example: Order No. T8020–300–BH16M–850–AL–BL–FOV

Thrust curve





Underwater thruster

forward 165KG, reverse 165KG
14.5kw

T8040 thruster

Technical parameters

1 Rated power	14.5kw					
2 Rated voltage	300VDC					
3 Max RPM	1150r/min					
4 Thrust	thrust forward 165 KG	thrust reverse 165 KG				
5 Nozzle	none					
6 Propeller handing	left ↺	right ↻				
7 Material of propeller	stainless steel					
8 Housing	Aluminum alloy	Titanium alloy				
9 Seal	leakless, magnetically coupled					
10 Depth rating	0–850m	0–1500m	0–3000m	0–6000m	full ocean depth	service depth >850m, oil filled seal
11 Signal power	none					
12 Control made	analog voltage control (0V–+5V forward, 0V––5V reverse)					CAN
13 RPM feedback	pulse feedback	analog voltage feedback		CAN		
14 Temperature	storage temperature: –40~70℃	service temperature: –5~40℃				
15 Electronics	built in	external				

Mechanical parameters

Service depth: 0–850m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)
1	Aluminum alloy	built in	ø340	658	20.8	14.1	BH12M	300
2	Aluminum alloy	external	ø340	529	18.3	13.3	BH16M	300
3	Titanium alloy	built in	ø340	658	23	16.2	BH12MSS	300
4	Titanium alloy	external	ø340	529	20	15	BH16MSS	300

common model

Service depth: 0–1500m & 0–3000m & 0–6000m

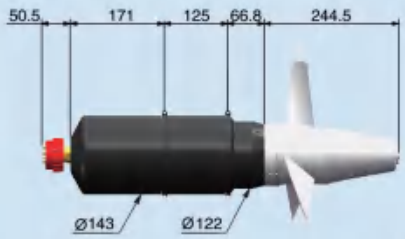
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø340	636	23	14.2	PBOF12M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 880g in air, adds 88g in water
2	Titanium alloy	built in	ø340	636	25	16.3	PBOF12M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 880g in air, adds 88g in water

Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	external	ø340	500	19.5	13.4	PBOF16M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 925g in air, adds 133g in water
2	Titanium alloy	external	ø340	500	21.2	15.1	PBOF16M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 925g in air, adds 133g in water

Dimension

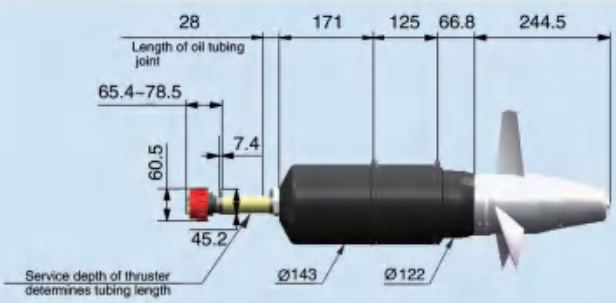
Service depth: 0–850m



Unit: mm

Example: Order No. T8040–300–BH12M–850–AL–NL–FIV

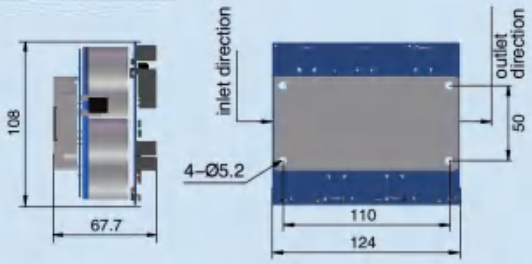
Service depth: 0–3000m

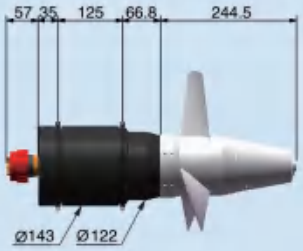


Unit: mm

Example: Order No. T8040–300–PBOF12M–3000–AL–NL–FIV

Service depth: 0–850m

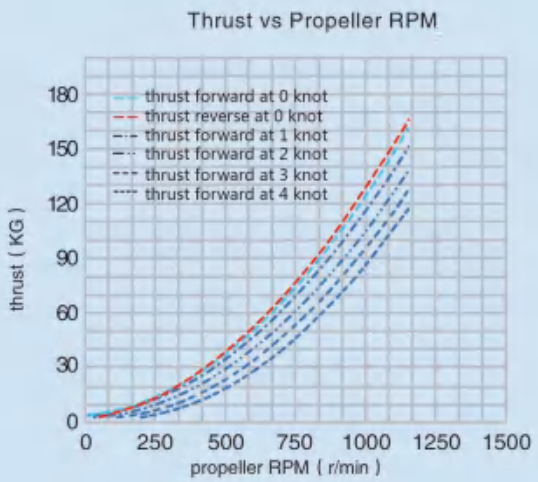


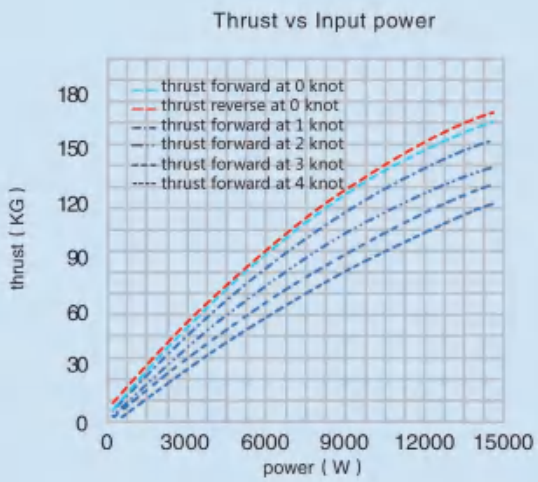


Unit: mm

Example: Order No. T8040–300–BH16M–850–AL–NL–FOV

Thrust curve





Underwater thruster

forward 236KG, reverse 236KG
12.5kw

T8060 thruster

Technical parameters

1 Rated power	12.5kw					
2 Rated voltage	300VDC					
3 Max RPM	1127r/min					
4 Thrust	thrust forward 236 KG	thrust reverse 236 KG				
5 Nozzle	black					
6 Propeller handing	left ↺	right ↻				
7 Material of propeller	stainless steel					
8 Housing	Aluminum alloy	Titanium alloy				
9 Seal	leakless, magnetically coupled					
10 Depth rating	0–850m	0–1500m	0–3000m	0–6000m	full ocean depth	service depth >850m, oil filled seal
11 Signal power	none					
12 Control made	analog voltage control (0V~+5V forward, 0V~–5V reverse)					CAN
13 RPM feedback	pulse feedback	analog voltage feedback			CAN	
14 Temperature	storage temperature: –40–70℃	service temperature: –5–40℃				
15 Electronics	built in	external				

Mechanical parameters

Service depth: 0–850m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)
1	Aluminum alloy	built in	ø400	697	39.4	22.4	BH12M	300
2	Aluminum alloy	external	ø400	556	37	21	BH16M	300
3	Titanium alloy	built in	ø400	697	44	27	BH12MSS	300
4	Titanium alloy	external	ø400	556	41.5	25.5	BH16MSS	300

common model

Service depth: 0–1500m & 0–3000m & 0–6000m

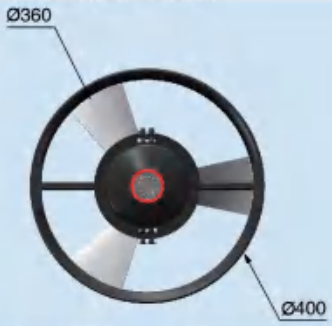
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø400	675	41.6	22.5	PBOF12M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 880g in air, adds 88g in water
2	Titanium alloy	built in	ø400	675	46.2	27.2	PBOF12M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 880g in air, adds 88g in water

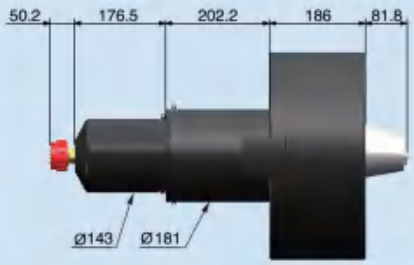
Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	external	ø400	526	38.5	21.2	PBOF16M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 925g in air, adds 133g in water
2	Titanium alloy	external	ø400	526	43	25.7	PBOF16M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 925g in air, adds 133g in water

Dimension

Service depth: 0–850m

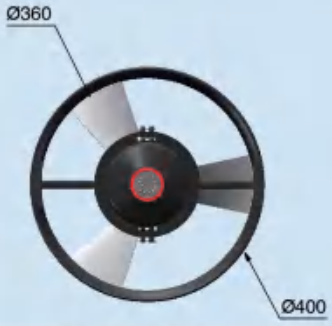


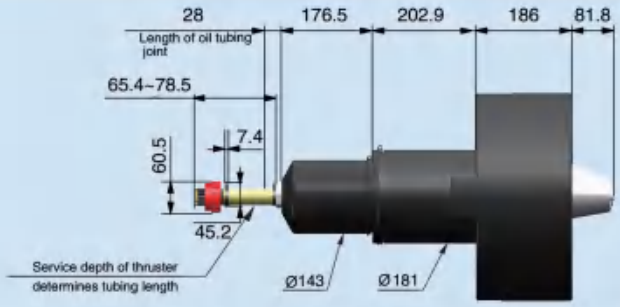


Unit: mm

Example: Order No. T8060–300–BH12M–850–AL–BL–FIV

Service depth: 0–3000m

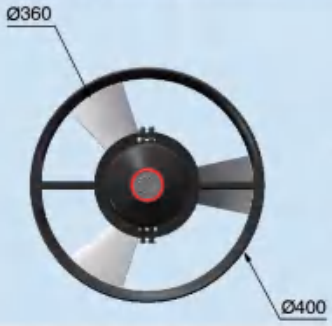


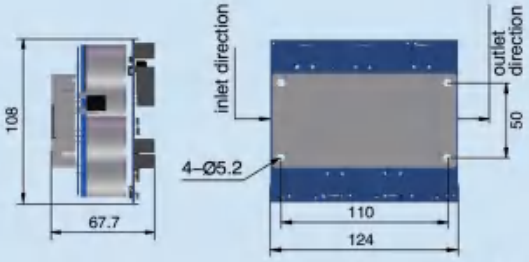


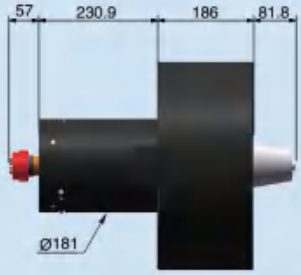
Unit: mm

Example: Order No. T8060–300–PBOF12M–3000–AL–BL–FIV

Service depth: 0–850m



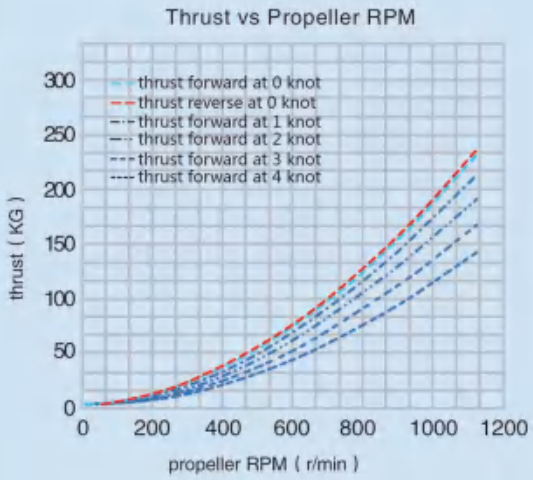


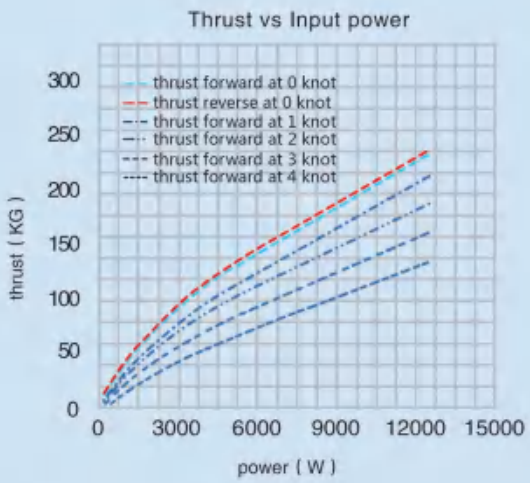


Unit: mm

Example: Order No. T8060–300–BH16M–850–AL–BL–FOV

Thrust curve





RIM thruster

The best solution for underwater equipment industry

RIM thruster

forward 5.5KG, reverse 5.5KG
350w

R21 RIM thruster

Technical parameters

1 Rated power	350W						
2 Rated voltage	48VDC	72VDC	100VDC	150VDC	200VDC	240VDC	300VDC
3 Max RPM	2300r/min						
4 Thrust	thrust forward 5.5 KG		thrust reverse 5.5 KG				
5 Nozzle	none						
6 Propeller handing	left ↺	right ↻					
7 Material of propeller	stainless steel						
8 Housing	Aluminum alloy	Titanium alloy					
9 Seal	leakless, magnetically coupled						
10 Depth rating	0–850m	0–1500m	0–3000m	0–6000m	full ocean depth	service depth >1500m, oil filled seal	
11 Signal power	supply voltage is 12VDC(±5%,≤250mA)						
12 Control made	analog voltage control (0V~+5V forward, 0V~-5Vreverse)					CAN	
13 RPM feedback	pulse feedback	analog voltage feedback	CAN				
14 Temperature	storage temperature: -40~70℃		service temperature: -5~40℃				
15 Electronics	external						

Mechanical parameters

Service depth: 0–850m & 0–1500m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)						
1	Aluminum alloy	external	ø131.5	63	2.0	1.5	MCBH8M	**48**	72	100	150	200	240	300
2	Aluminum alloy	external	ø131.5	63	2.1	1.6	MCBHRA8M	48	72	100	150	200	240	300
3	Titanium alloy	external	ø131.5	63	2.4	1.9	MCBH8MSS	**48**	72	100	150	200	240	300
4	Titanium alloy	external	ø131.5	63	2.5	2.0	MCBHRA8MSS	48	72	100	150	200	240	300

Service depth: 0–3000m & 0–6000m

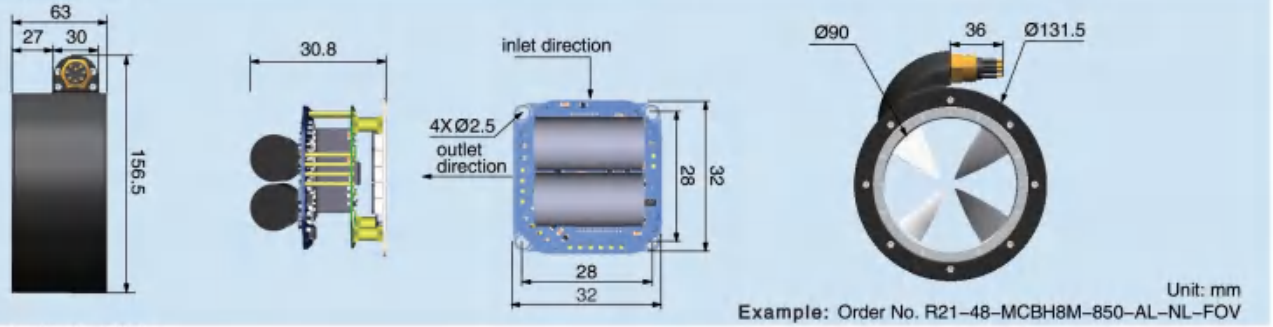
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Titanium alloy	external	ø156.5	63	2.7	2.1	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water

Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change

Dimension

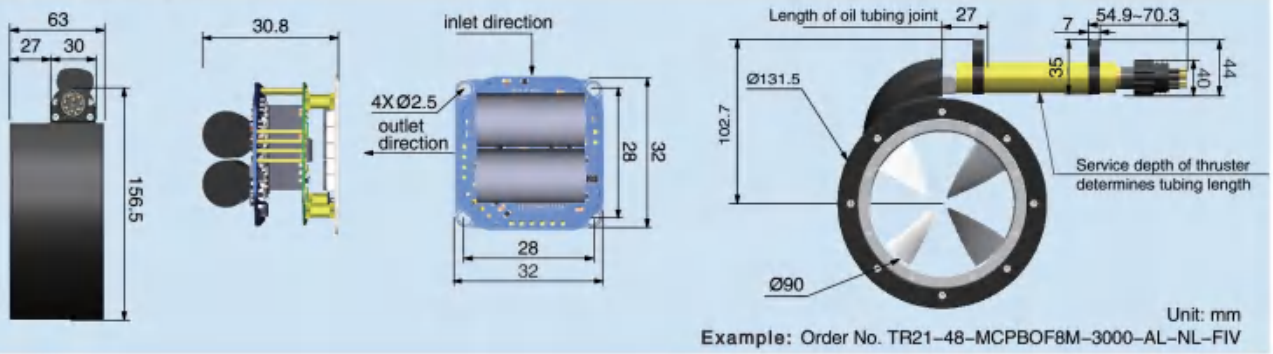
Service depth: 0–850m



Unit: mm

Example: Order No. R21–48–MCBH8M–850–AL–NL–FOV

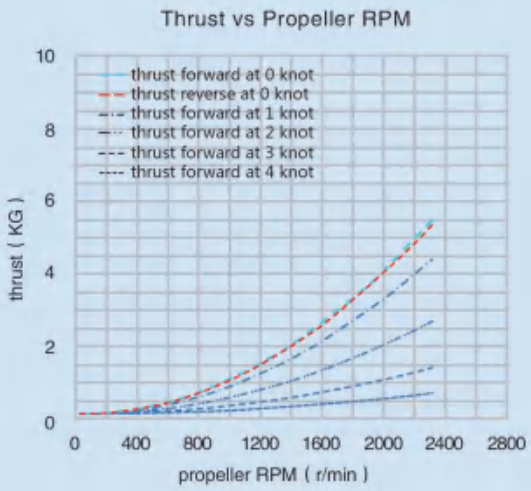
Service depth: 0–3000m

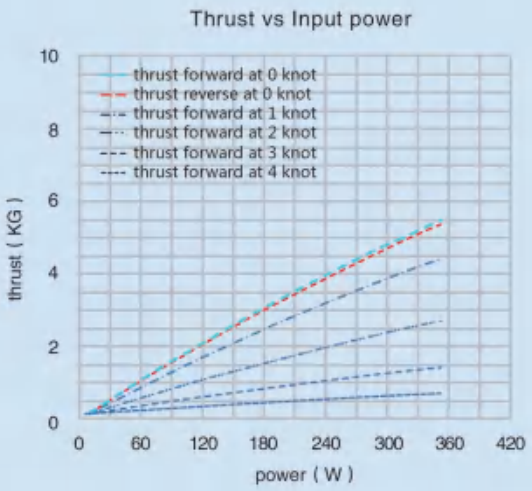


Unit: mm

Example: Order No. TR21–48–MCPBOF8M–3000–AL–NL–FIV

Thrust curve





Rotary actuator

The best solution for underwater equipment industry

Rotary actuator

300w

Z20 Rotary actuator

Technical parameters

1 Rated power	300w							
2 Rated voltage	48VDC	70VDC	85VDC	100VDC	150VDC	200VDC	250VDC	300VDC
3 Max RPM–rated torque	100r/min–10N.m 29r/min–40N.m		70r/min–17N.m 20r/min–47N.m		43r/min–27N.m		35r/min–34N.m	
4 Housing	Aluminum alloy	Titanium alloy						
5 Depth rating	0–50m	full ocean depth						
6 Signal power	supply voltage is 12VDC(±5%),≤220mA							
7 Control made	analog voltage control (0V–+5V forward, 0V—5V reverse)						CAN	
8 RPM feedback	pulse feedback	analog voltage feedback			CAN			
9 Electronics	built in							
10 Temperature	storage temperature: –40–70℃		service temperature: –5–40℃					

Mechanical parameters

Service depth: 0–50m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Voltage level							
1	Aluminum alloy	built in	ø79	208	2.2	1.8	MCPBOF8M	3/4"	3"	48	70	85	100	150	200	250	300
2	Titanium alloy	built in	ø79	208	2.8	2.3	MCPBOF8M	3/4"	3"	48	70	85	100	150	200	250	300

Note: for oil tube of connector MCPBOF8M, each additional 1m increase, its weight adds 353g in air, adds 68g in water;

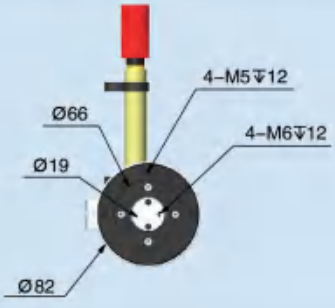
Service depth: full ocean depth

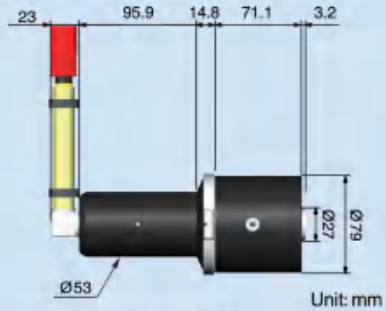
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change							
1	Aluminum alloy	built in	ø79	208	2.2	1.8	PBOF8M	3/4"	3"	48	70	85	100	150	200	250	300
2	Titanium alloy	built in	ø79	208	2.8	2.3	PBOF8M	3/4"	3"	48	70	85	100	150	200	250	300

Note: for oil tube of connector PBOF8M, each additional 1m increase, its weight adds 353g in air, adds 68g in water;

Dimension

Service depth: 0–50m

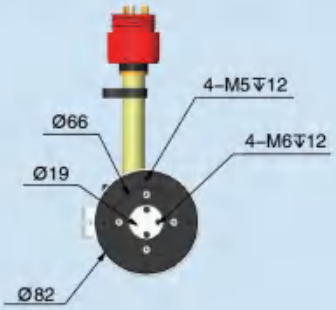


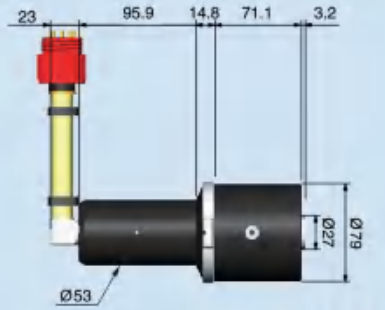


Unit: mm

Example: Order No. Z20–48–MCPBOF8M–50–AL–BL–FIV

Service depth: full ocean depth





Unit: mm

Example: Order No. Z20–48–PBOF8M–FOD–AL–BL–FIV

400w

Z61 Rotary actuator

Technical parameters

1 Rated power	400w								
2 Rated voltage	24VDC	48VDC	70VDC	85VDC	100VDC	150VDC	200VDC	250VDC	300VDC
3 Max RPM–rated torque	80r/min–25N.m 25r/min–80N.m		50r/min–40N.m		40r/min–50N.m		30r/min–60N.m		
4 Housing	Aluminum alloy	Titanium alloy							
5 Depth rating	0–50m	full ocean depth							
6 Signal power	supply voltage is 12VDC (±5%) , current ≤250mA								
7 Control made	analog voltage control (0V–+5V forward, 0V—5V reverse)						CAN		
8 RPM feedback	pulse feedback	analog voltage feedback			CAN				
9 Encoder	12–bit accuracy, absolute 0–5V analog angle feedback								
10 Electronics	built in								
11 Temperature	storage temperature: –40~70℃			service temperature: –5~40℃					

Mechanical parameters

Service depth: 0–50m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Voltage level				
1	Aluminum alloy	built in	ø106	225	4.8	3.2	MCPBOF8M	3/4"	3"	150	200	250	300	
2	Aluminum alloy	built in	ø106	225	4.8	3.2	MCPBOF12M	3/4"	3"	24	48	70	85	100
3	Titanium alloy	built in	ø106	225	6.0	4.4	MCPBOF8M	3/4"	3"	150	200	250	300	
4	Titanium alloy	built in	ø106	225	6.0	4.4	MCPBOF12M	3/4"	3"	24	48	70	85	100

Note: for oil tube of connector MCPBOF8M, each additional 1m increase, its weight adds 353g in air, adds 68g in water;
for oil tube of connector MCPBOF12M, each additional 1m increase, its weight adds 398g in air, adds 113g in water

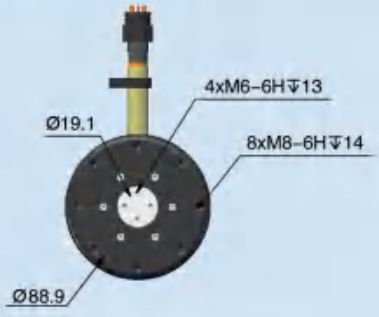
Service depth: full ocean depth

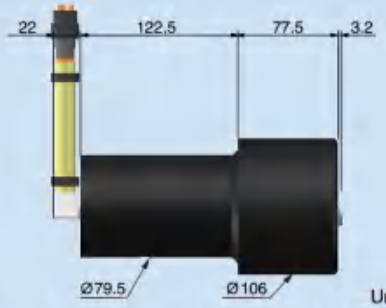
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Voltage level							
1	Aluminum alloy	built in	ø106	225	4.8	3.2	PBOF8M	3/4"	3"	48	70	85	100	150	200	250	300
2	Titanium alloy	built in	ø106	225	6.0	4.4	PBOF8M	3/4"	3"	48	70	85	100	150	200	250	300

Note: for oil tube of connector PBOF8M, each additional 1m increase, its weight adds 353g in air, adds 68g in water;

Dimension

Service depth: 0–50m

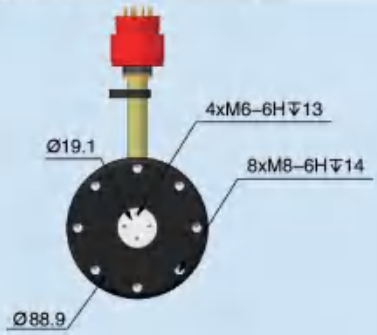


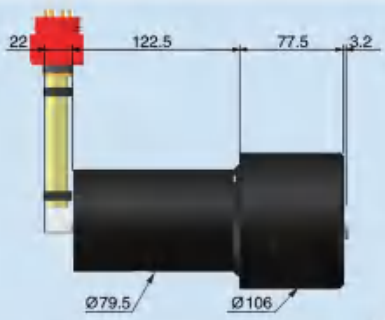


Unit: mm

Example: Order No. Z61–48–MCPBOF12M–50–AL–BL–FIV

Service depth: full ocean depth





Unit: mm

Example: Order No. Z61–48–PBOF8M–FOD–AL–BL–FIV

AUV thruster

The best solution for underwater equipment industry

AUV thruster

forward 13.5KG, reverse 8.5KG
900W

T550 AUV thruster

Technical parameters

1 Rated power	900W								
2 Rated voltage	48VDC	60VDC	72VDC	100VDC	120VDC	160VDC	200VDC	260VDC	300VDC
3 Max RPM	2000r/min								
4 Thrust	thrust forward 13.5 KG		thrust reverse 8.5 KG						
5 Nozzle	none								
6 Propeller handing	left ↺	right ↻							
7 Material of propeller	stainless steel								
8 Housing	Aluminum alloy	Titanium alloy							
9 Seal	leakless, magnetically coupled								
10 Depth rating	0-850m	0-1500m	0-3000m	0-6000m	full ocean depth		service depth >1500m, oil filled seal		
11 Signal power	supply voltage is 12VDC(±5%), ≤250mA								
12 Control mode	analog voltage control (0V~+5V forward, 0V~-5V reverse)						CAN		
13 RPM feedback	pulse feedback	analog voltage feedback	CAN						
14 Temperature	storage temperature: -40-70℃		service temperature: -5-40℃						
15 Electronics	built in	external							

Mechnical parameters

Service depth: 0-850m & 0-1500m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)						common model
1	Aluminum alloy	built in	ø152	316	2.0	1.4	MCBH6M	200	250	300				
2	Aluminum alloy	built in	ø152	316	2.0	1.4	MCBH8M	48	60	72	100	120	160	
3	Aluminum alloy	built in	ø152	304	2.0	1.4	MCBHRA6M	200	250	300				
4	Aluminum alloy	built in	ø152	304	2.0	1.4	MCBHRA8M	48	60	72	100	120	160	
5	Aluminum alloy	external	ø152	277	1.8	1.3	MCBH8M	200	250	300				
6	Aluminum alloy	external	ø152	287	1.8	1.3	MCBH12M	100	120	160				
7	Aluminum alloy	external	ø152	287	1.8	1.3	MCBH16M	48	60	72				
8	Aluminum alloy	external	ø152	265	1.8	1.3	MCBHRA8M	200	250	300				
9	Aluminum alloy	external	ø152	274	1.8	1.3	MCBHRA12M	100	120	160				
10	Aluminum alloy	external	ø152	274	1.8	1.3	MCBHRA16M	48	60	72				
11	Titanium alloy	built in	ø152	316	2.6	1.7	MCBH6MSS	200	250	300				
12	Titanium alloy	built in	ø152	316	2.6	1.7	MCBH8MSS	48	60	72	100	120	160	
13	Titanium alloy	built in	ø152	304	2.6	1.7	MCBHRA6MSS	200	250	300				
14	Titanium alloy	built in	ø152	304	2.6	1.7	MCBHRA8MSS	48	60	72	100	120	160	
15	Titanium alloy	external	ø152	277	2.5	1.8	MCBH8MSS	200	250	300				
16	Titanium alloy	external	ø152	287	2.5	1.8	MCBH12MSS	100	120	160				
17	Titanium alloy	external	ø152	287	2.5	1.8	MCBH16MSS	48	60	72				
18	Titanium alloy	external	ø152	265	2.5	1.8	MCBHRA8MSS	200	250	300				
19	Titanium alloy	external	ø152	274	2.6	1.9	MCBHRA12MSS	100	120	160				
20	Titanium alloy	external	ø152	274	2.6	1.9	MCBHRA16MSS	48	60	72				

Service depth: 0-3000m& 0-6000m

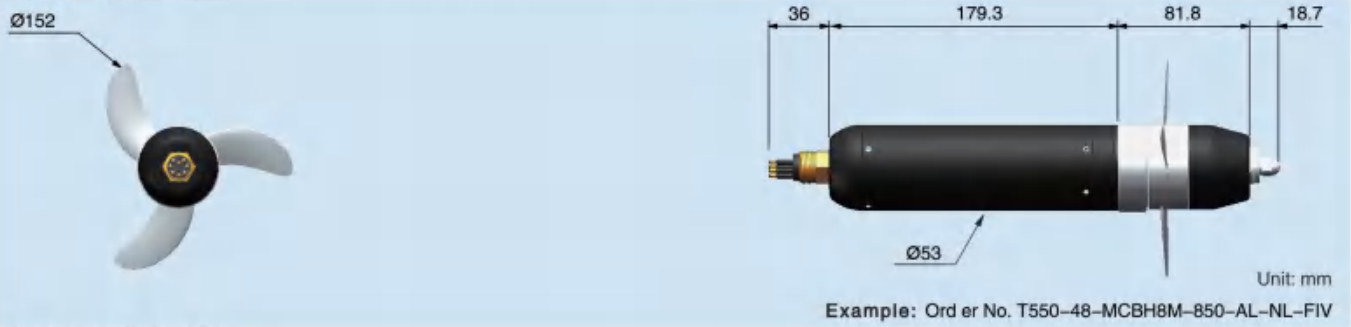
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø152	299	2.6	2.0	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø152	299	2.6	2.0	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø152	260	2.2	1.4	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Aluminum alloy	external	ø152	260	2.2	1.4	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
5	Aluminum alloy	external	ø152	260	2.2	1.4	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water
6	Titanium alloy	built in	ø152	299	3.0	2.2	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
7	Titanium alloy	built in	ø152	299	3.0	2.2	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
8	Titanium alloy	external	ø152	260	2.8	2.0	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
9	Titanium alloy	external	ø152	260	2.8	2.0	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
10	Titanium alloy	external	ø152	260	2.8	2.0	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water

Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø152	299	2.6	2.0	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø152	299	2.6	2.0	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø152	260	2.2	1.4	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Titanium alloy	built in	ø152	299	3.0	2.2	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
5	Titanium alloy	built in	ø152	299	3.0	2.2	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
6	Titanium alloy	external	ø152	260	2.9	2.1	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water

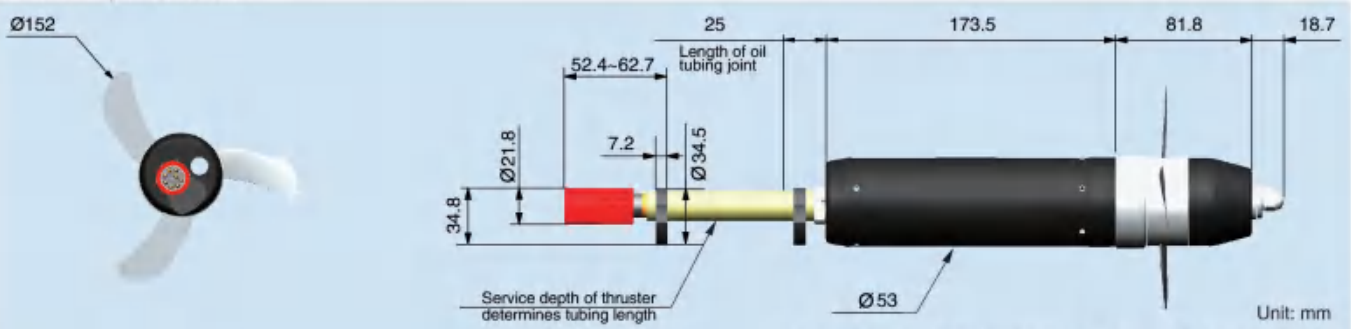
Dimension

Service depth: 0–850m



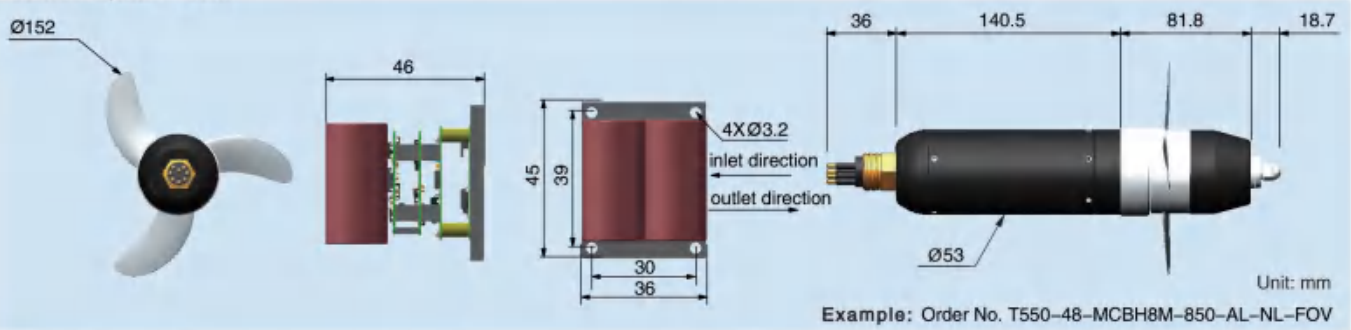
Example: Ord er No. T550–48–MCBH8M–850–AL–NL–FIV

Service depth: 0–3000m



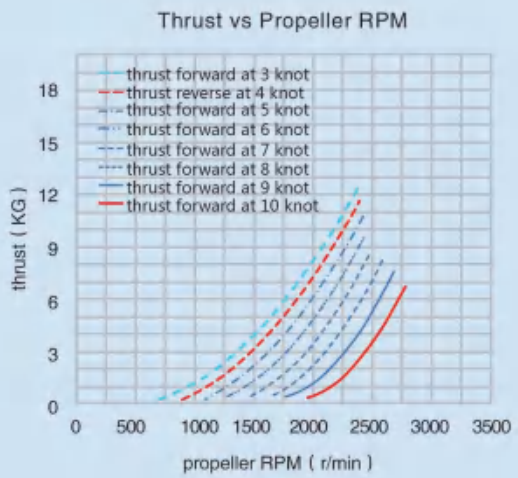
Example: Order No. T550–48–MCPBOF8M–3000–AL–NL–FIV

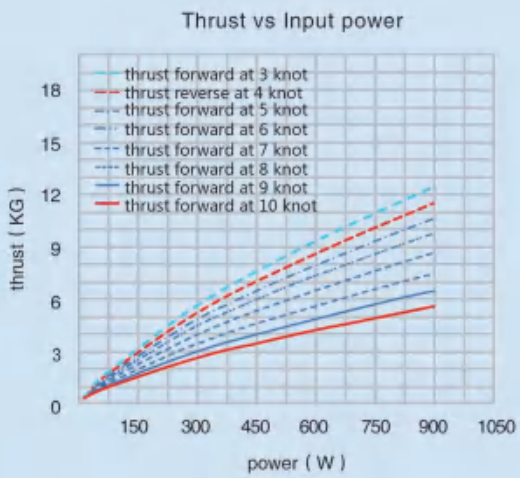
Service depth: 0–850m



Example: Order No. T550–48–MCBH8M–850–AL–NL–FOV

Thrust curve





AUV thruster

forward 14.5KG, reverse 7.5KG
650W

T550S AUV thruster

Technical parameters

1 Rated power	650w								
2 Rated voltage	48VDC	60VDC	72VDC	100VDC	120VDC	160VDC	200VDC	260VDC	300VDC
3 Max RPM	1900r/min								
4 Thrust	thrust forward 14.5 KG		thrust reverse 7.5 KG						
5 Nozzle	black								
6 Propeller handing	left ○	right ○							
7 Material of propeller	stainless steel								
8 Housing	Aluminum alloy	Titanium alloy							
9 Seal	leakless, magneically coupled								
10 Depth rating	0-850m	0-1500m	0-3000m	0-6000m	full ocean depth		service depth >1500m, oil filled seal		
11 Signal power	supply voltage is 12VDC(±5%),≤250mA								
12 Control mode	analog voltage control (0V~+5V forward, 0V~-5V reverse)						CAN		
13 RPM control	pulse feedback	analog voltage feedback		CAN					
14 Temperature	storage temperature: -40~70℃		service temperature: -5~40℃						
15 Electronics	built in	external							

Mechnical parameters

Service depth: 0-850m & 0-1500m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)						common model
1	Aluminum alloy	built in	ø177	316	2.4	1.7	MCBH6M	200	250	300				
2	Aluminum alloy	built in	ø177	316	2.4	1.7	MCBH8M	48	60	72	100	120	160	
3	Aluminum alloy	built in	ø177	304	2.4	1.7	MCBHRA6M	200	250	300				
4	Aluminum alloy	built in	ø177	304	2.4	1.7	MCBHRA8M	48	60	72	100	120	160	
5	Aluminum alloy	external	ø177	277	2.0	1.4	MCBH8M	200	250	300				
6	Aluminum alloy	external	ø177	287	2.0	1.4	MCBH12M	100	120	160				
7	Aluminum alloy	external	ø177	287	2.0	1.4	MCBH16M	48	60	72				
8	Aluminum alloy	external	ø177	265	2.0	1.4	MCBHRA8M	200	250	300				
9	Aluminum alloy	external	ø177	274	2.0	1.4	MCBHRA12M	100	120	160				
10	Aluminum alloy	external	ø177	274	2.0	1.4	MCBHRA16M	48	60	72				
11	Titanium alloy	built in	ø177	316	2.8	2.1	MCBH6MSS	200	250	300				
12	Titanium alloy	built in	ø177	316	2.8	2.1	MCBH8MSS	48	60	72	100	120	160	
13	Titanium alloy	built in	ø177	304	2.8	2.1	MCBHRA6MSS	200	250	300				
14	Titanium alloy	built in	ø177	304	2.8	2.1	MCBHRA8MSS	48	60	72	100	120	160	
15	Titanium alloy	external	ø177	277	2.6	1.8	MCBH8MSS	200	250	300				
16	Titanium alloy	external	ø177	287	2.6	1.8	MCBH12MSS	100	120	160				
17	Titanium alloy	external	ø177	287	2.6	1.8	MCBH16MSS	48	60	72				
18	Titanium alloy	external	ø177	265	2.6	1.8	MCBHRA8MSS	200	250	300				
19	Titanium alloy	external	ø177	274	2.6	1.9	MCBHRA12MSS	100	120	160				
20	Titanium alloy	external	ø177	274	2.6	1.9	MCBHRA16MSS	48	60	72				

Service depth: 0-3000m& 0-6000m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø177	299	2.8	2.2	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø177	299	2.8	2.2	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø177	260	2.3	1.6	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Aluminum alloy	external	ø177	260	2.3	1.6	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
5	Aluminum alloy	external	ø177	260	2.3	1.6	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water
6	Titanium alloy	built in	ø177	299	3.1	2.3	MCPBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
7	Titanium alloy	built in	ø177	299	3.1	2.3	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
8	Titanium alloy	external	ø177	260	2.9	2.1	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
9	Titanium alloy	external	ø177	260	2.9	2.1	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
10	Titanium alloy	external	ø177	260	2.9	2.1	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water

Service depth: full ocean depth

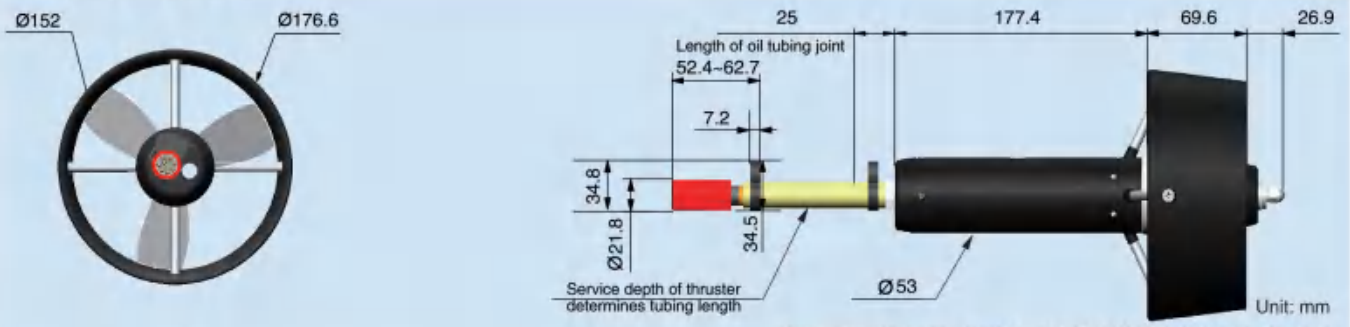
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø177	299	2.8	2.2	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	built in	ø177	299	2.8	2.2	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø177	260	2.3	1.6	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Titanium alloy	built in	ø177	299	3.1	2.3	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
5	Titanium alloy	built in	ø177	299	3.1	2.3	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
6	Titanium alloy	external	ø177	260	3.0	2.2	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water

Dimension

Service depth: 0–850m

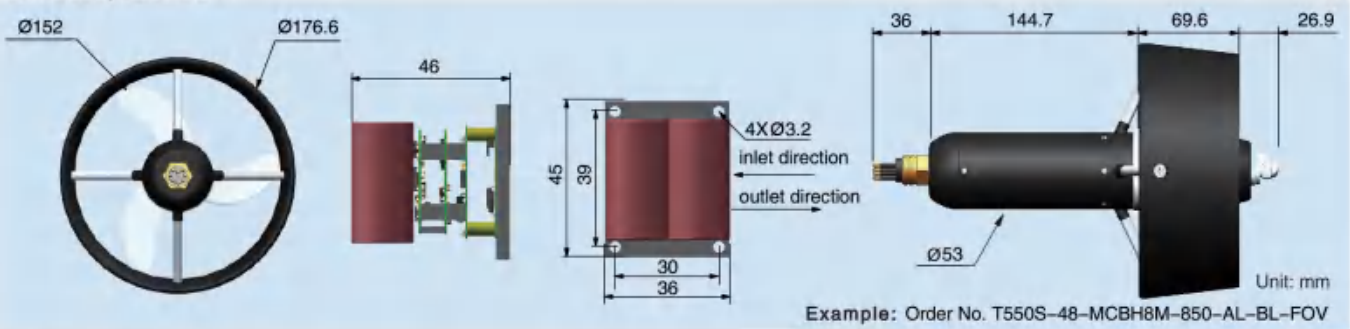
Example: Order No. T550S–48–MCBH8M–850–AL–BL–FIV

Service depth: 0–3000m



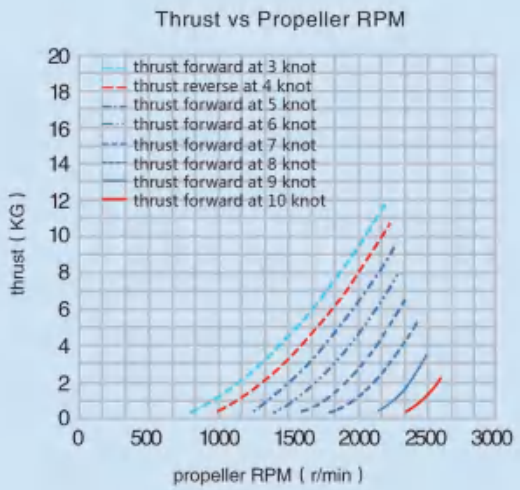
Example: Order No. T550S–48–MCPBOF8M–3000–AL–BL–FIV

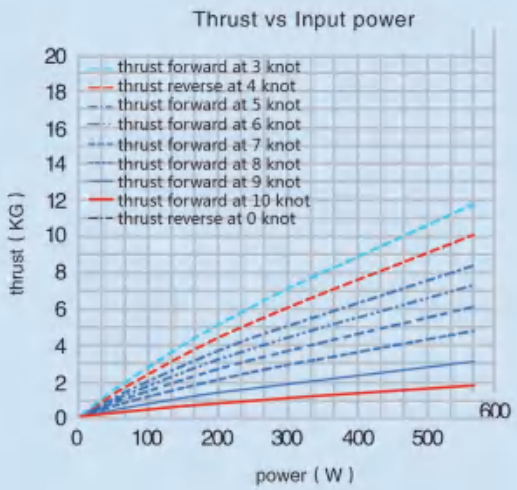
Service depth: 0–850m



Example: Order No. T550S–48–MCBH8M–850–AL–BL–FOV

Thrust curve





AUV thruster

forward 27KG
1.5kw

T1050 AUVthruster

Technical parameters

1 Rated power	1.5kw					
2 Rated voltage	72VDC	100VDC	120VDC	150VDC	260VDC	300VDC
3 Max RPM	1400r/min					
4 Thrust	thrust forward 27 KG					
5 Nozzle	none					
6 Propeller handing	left ↺	right ↻				
7 Material of propeller	stainless steel					
8 Housing	Aluminum alloy	Titanium alloy				
9 Seal	leakless, magnetically coupled					
10 Depth rating	0-850m	0-1500m	0-3000m	0-6000m	full ocean depth	service depth >1500m, oil filled seal
11 Signal power	supply voltage is 12VDC(±5%,210mA)					
12 Control mode	analog voltage control (0V~+5V forward, 0V~-5V reverse)					CAN
13 RPM feedback	pulse feedback	analog voltage feedback	CAN			
14 Temperature	storage temperature: -40~70℃			service temperature: -5~40℃		
15 Electronics	built-in	external				

Mechanical parameters

Service depth: 0-850m & 0-1500m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)						common model
1	Aluminum alloy	built in	ø203	356	5.5	3.9	MCBH8M	72	100	120	150	260	300	
2	Aluminum alloy	external	ø203	294	5.0	3.8	MCBH8M	260	300					
3	Aluminum alloy	external	ø203	294	5.0	3.8	MCBH12M	100	120	150				
4	Aluminum alloy	external	ø203	294	5.0	3.8	MCBH16M	72						
5	Titanium alloy	built in	ø203	356	6.5	5.2	MCBH8MSS	72	100	120	150	260	300	
6	Titanium alloy	external	ø203	294	6.0	5.1	MCBH8MSS	260	300					
7	Titanium alloy	external	ø203	294	6.0	5.1	MCBH12MSS	100	120	150				
8	Titanium alloy	external	ø203	294	6.0	5.1	MCBH16MSS	72						

Service depth: 0-3000m& 0-6000m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø203	356	6.3	3.9	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
2	Aluminum alloy	external	ø203	294	5.8	3.8	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø203	294	5.8	3.8	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
4	Aluminum alloy	external	ø203	294	5.8	3.8	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water
5	Titanium alloy	built in	ø203	356	7.3	5.2	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
6	Titanium alloy	external	ø203	294	6.8	5.1	MCPBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
7	Titanium alloy	external	ø203	294	6.8	5.1	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
8	Titanium alloy	external	ø203	294	6.8	5.1	MCPBOF16M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 443g in air, adds 158g in water

Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø203	356	6.3	3.9	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
2	Aluminum alloy	external	ø203	294	5.8	3.8	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
3	Aluminum alloy	external	ø203	294	6.3	3.8	PBOF12M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 880g in air, adds 88g in water
4	Titanium alloy	built in	ø203	356	7.3	5.2	PBOF6M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 331g in air, adds 46g in water
5	Titanium alloy	external	ø203	294	6.8	5.1	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
6	Titanium alloy	external	ø203	294	7.3	5.1	PBOF12M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 880g in air, adds 88g in water

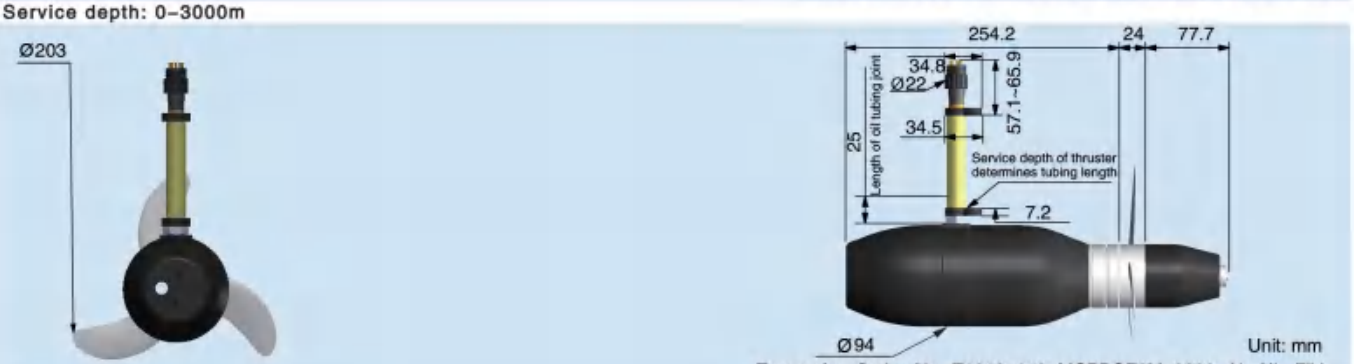
Dimension

Service depth: 0–850m

Unit: mm

Example: Order No. T1050–150–MCBH8M–850–AL–NL–FIV

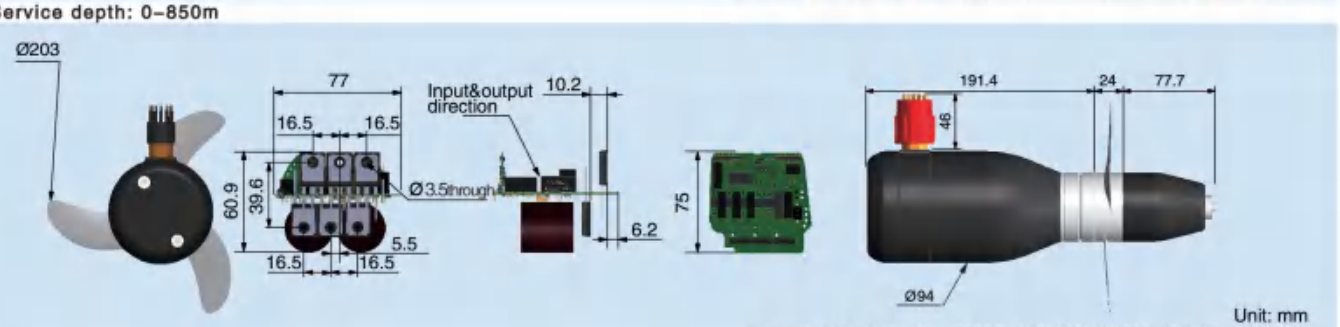
Service depth: 0–3000m



Unit: mm

Example: Order No. T1050–150–MCPBOF8M–3000–AL–NL–FIV

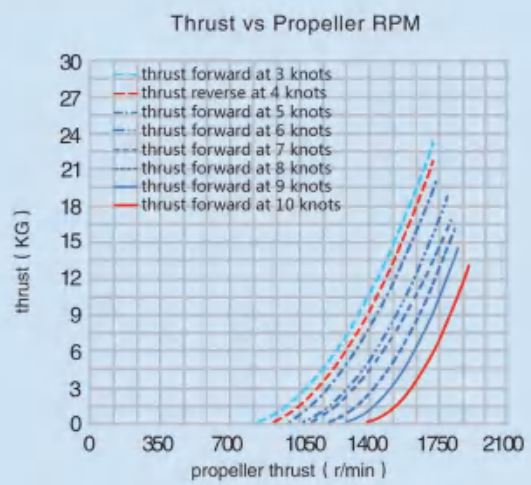
Service depth: 0–850m

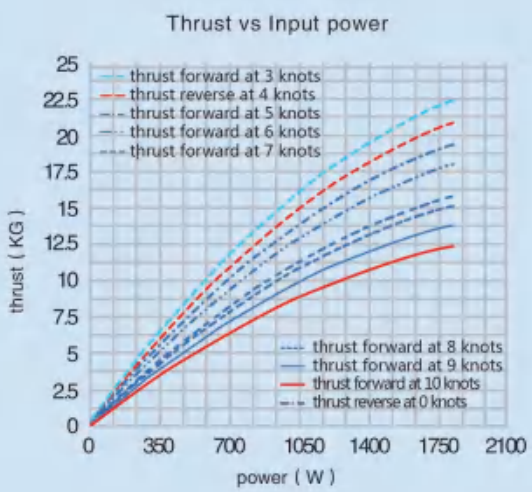


Unit: mm

Example: Order No. T1050–150–MCBH12M–850–AL–NL–FOV

Thrust curve





AUV thruster

forward 80KG, reverse 46KG
5.4kw

T2050 AUVthruster

Technical parameters

1 Rated power	5.4kw					
2 Rated voltage	260VDC	300VDC	330VDC			
3 Max RPM	1230r/min					
4 Thrust	thrust forward 80 KG		thrust reverse 46 KG			
5 Nozzle	none					
6 Propeller handing	left ↺	right ↻				
7 Material of propeller	stainless steel					
8 Housing	Aluminum alloy	Titanium alloy				
9 Seal	leakless, magnetically coupled					
10 Depth rating	0–850m	0–1500m	0–3000m	0–6000m	full ocean depth	service depth >850m, oil filled seal
11 Signal power	none					
12 Control mode	analog voltage control (0V~+5V forward, 0V~–5V reverse)					CAN
13 RPM feedback	pulse feedback	analog voltage feedback			CAN	
14 Temperature	storage temperature: –40~70℃			service temperature: –5~40℃		
15 Electronics	built–in	external				

Mechanical parameters

Service depth: 0–850m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)			common model
1	Aluminum alloy	built in	ø300	533	13	8.8	MCBH12M	260	**300**	330	
2	Aluminum alloy	built in	ø300	520	13	8.8	MCBHRA12M	260	300	330	
3	Aluminum alloy	external	ø300	422.4	11.1	8.6	BH16M	260	300	330	
4	Titanium alloy	built in	ø300	533	14.5	10.4	MCBH12MSS	260	**300**	330	
5	Titanium alloy	built in	ø300	520	14.5	10.4	MCBHRA12MSS	260	300	330	
6	Titanium alloy	external	ø300	422.4	11.9	9.4	BH16MSS	260	300	330	

Service depth: 0–1500m& 0–3000m & 0–6000m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø300	511.4	14.6	10.2	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
2	Titanium alloy	built in	ø300	511.4	16.3	11.9	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water

Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø300	511.4	14.6	10.2	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
2	Aluminum alloy	external	ø300	393.4	12.5	9.3	PBOF16M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 925g in air, adds 133g in water
3	Titanium alloy	built in	ø300	511.4	16.3	11.9	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Titanium alloy	external	ø300	393.4	13.3	10.1	PBOF16M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 925g in air, adds 133g in water

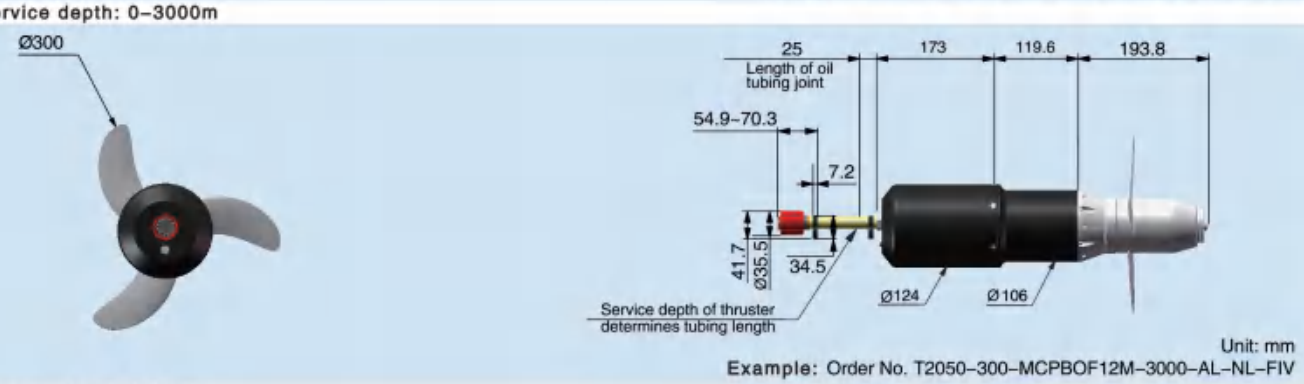
Dimension

Service depth: 0–850m

Unit: mm

Example: Order No. T2050–300–MCBH12M–850–AL–NL–FIV

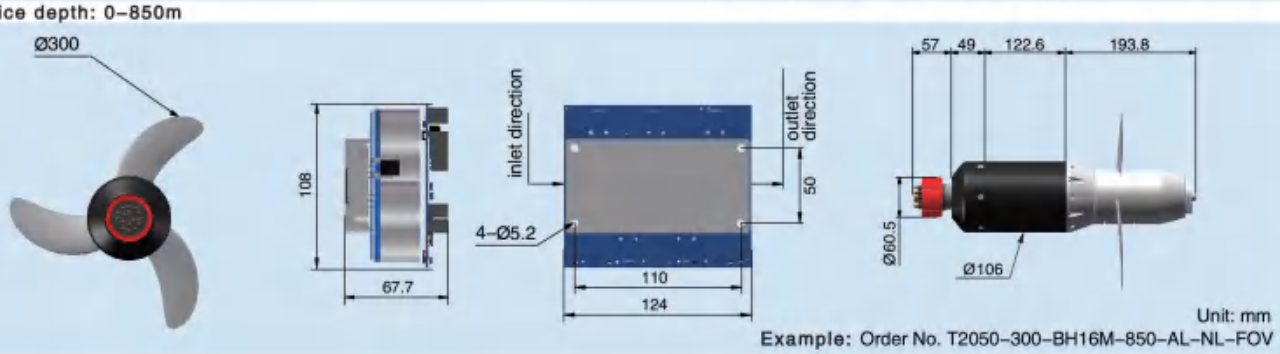
Service depth: 0–3000m



Unit: mm

Example: Order No. T2050–300–MCPBOF12M–3000–AL–NL–FIV

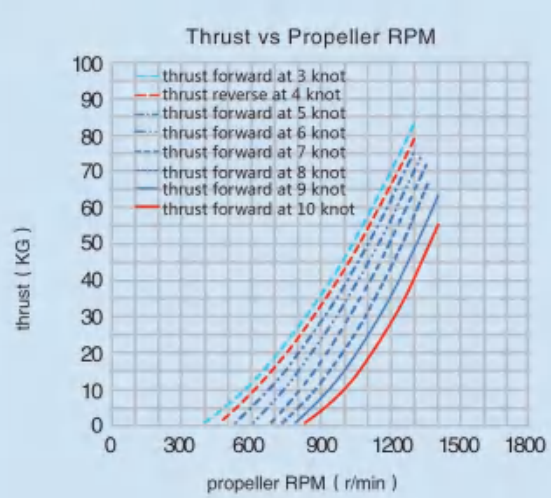
Service depth: 0–850m

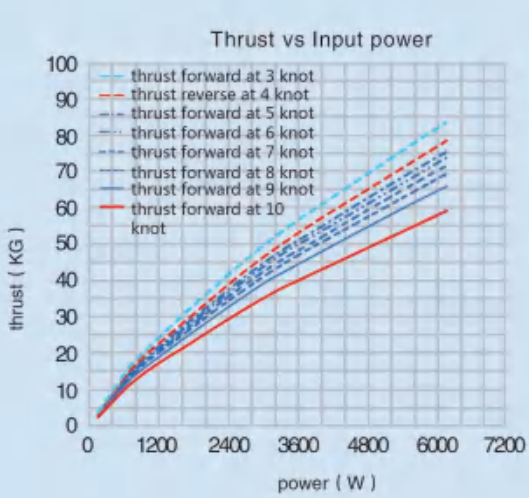


Unit: mm

Example: Order No. T2050–300–BH16M–850–AL–NL–FOV

Thrust curve





AUV thruster

forward 135KG, reverse 60KG
6.5kw

T2060 AUV thruster

Technical parameters

1	Rated power	6.5kw				
2	Rated voltage	260VDC	300VDC	330VDC		
3	Max RPM	900r/min				
4	Thrust	thrust forward 135 KG		thrust reverse 60 KG		
5	Nozzle	black				
6	Propeller handing	left ↺	right ↻			
7	Material of propeller	stainless steel				
8	Housing	Aluminum alloy	Titanium alloy			
9	Seal	leakless, magnetically coupled				
10	Depth rating	0–850m	0–1500m	0–3000m	0–6000m	full ocean depth	service depth >850m, oil filled seal
11	Signal power	none				
12	Control mode	analog voltage control (0V~+5V forward, 0V~–5V reverse)				CAN
13	RPM feedback	pulse feedback	analog voltage feedback	CAN		
14	Temperature	storage temperature: –40~70℃	service temperature: –5~40℃			
15	Electronics	built–in	external			

Mechanical parameters

Service depth: 0–850m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)			common model
1	Aluminum alloy	built in	ø386.5	533	18.3	9.6	MCBH12M	260	**300**	330	
2	Aluminum alloy	built in	ø386.5	520	18.3	9.6	MCBHRA12M	260	300	330	
3	Aluminum alloy	external	ø386.5	422.4	16.4	9.3	BH16M	260	300	330	
4	Titanium alloy	built in	ø386.5	533	19.8	11.1	MCBH12MSS	260	**300**	330	
5	Titanium alloy	built in	ø386.5	520	19.8	11.1	MCBHRA12MSS	260	300	330	
6	Titanium alloy	external	ø386.5	422.4	17.2	10.1	BH16MSS	260	300	330	

Service depth: 0–1500m& 0–3000m & 0–6000m

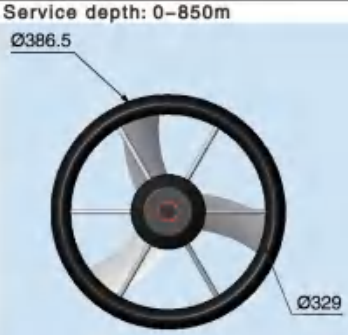
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø386.5	511.4	19.9	10.9	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water
2	Titanium alloy	built in	ø386.5	511.4	21.6	12.6	MCPBOF12M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 398g in air, adds 113g in water

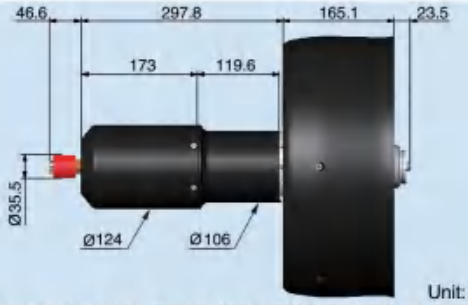
Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø386.5	511.4	19.9	10.9	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
2	Aluminum alloy	external	ø386.5	393.4	17.8	10	PBOF16M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 925g in air, adds 133g in water
3	Titanium alloy	built in	ø386.5	511.4	21.6	12.6	PBOF8M	3/4"	3"	for oil tube, each additional 1m increase, its weight adds 353g in air, adds 68g in water
4	Titanium alloy	external	ø386.5	393.4	18.6	10.8	PBOF16M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 925g in air, adds 133g in water

Dimension

Service depth: 0–850m

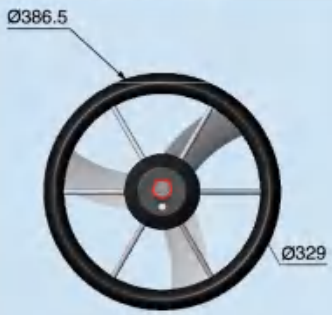


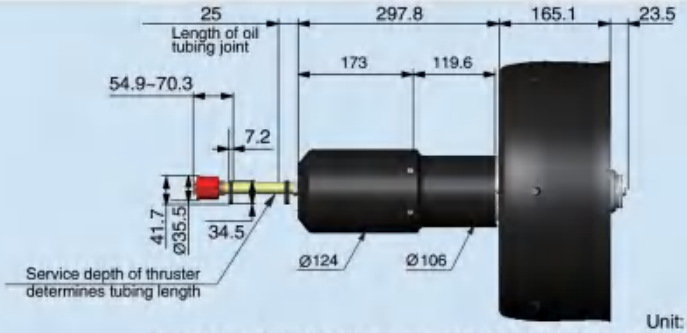


Unit: mm

Example: Order No. T2060–300–MCBH12M–850–AL–BL–FIV

Service depth: 0–3000m

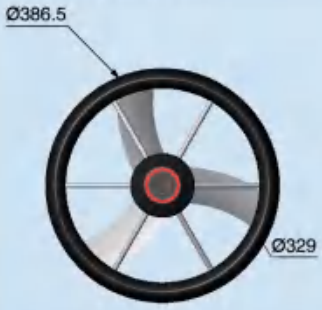


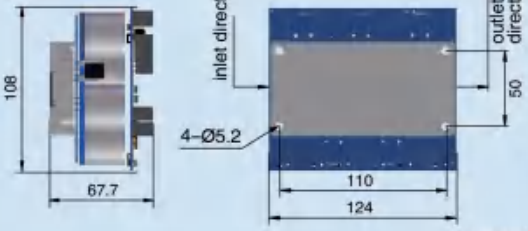


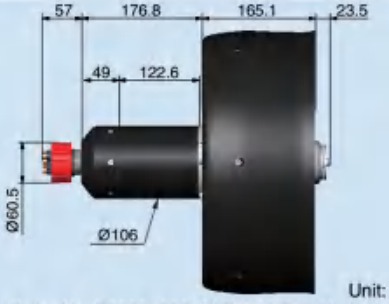
Unit: mm

Example: Order No. T2060–300–MCPBOF12M–3000–AL–BL–FIV

Service depth: 0–850m



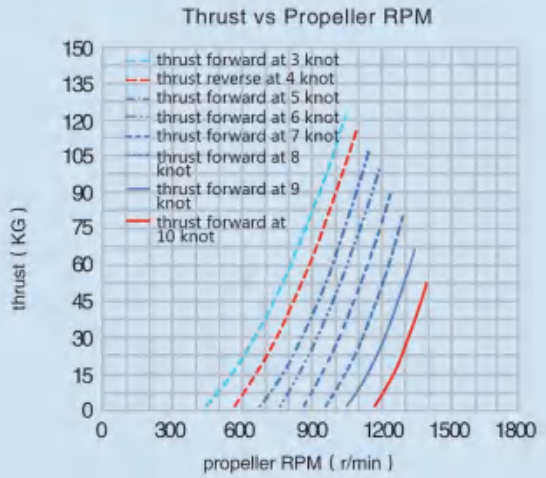


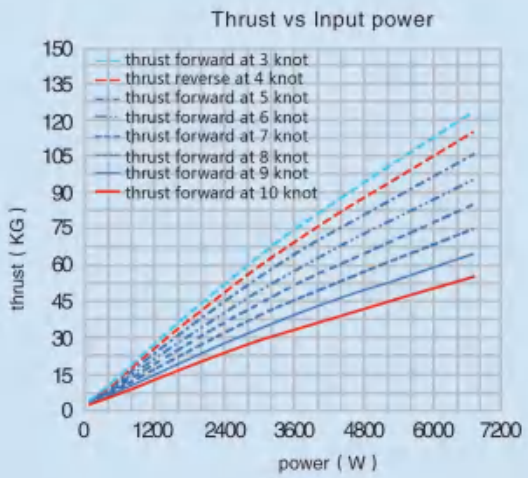


Unit: mm

Example: Order No. T2060–300–BH16M–850–AL–BL–FOV

Thrust curve





AUV thruster

forward 240KG, reverse 98KG
14kw

T8050 AUVthruster

Technical parameters

1 Rated power	14kw					
2 Rated voltage	300VDC					
3 Max RPM	750r/min					
4 Thrust	thrust forward 240 KG	thrust reverse 98 KG				
5 Nozzle	none					
6 Propeller handing	left ↺	right ↻				
7 Material of propeller	stainless steel					
8 Housing	Aluminum alloy	Titanium alloy				
9 Seal	leakless, magnetically coupled					
10 Depth rating	0–850m	0–1500m	0–3000m	0–6000m	full ocean depth	service depth >850m, oil filled seal
11 Signal power	none					
12 Control mode	analog voltage control (0V~+5V forward, 0V~–5V reverse)	CAN				
13 RPM feedback	pulse feedback	analog voltage feedback	CAN			
14 Temperature	storage temperature: –40~70℃	service temperature: –5~40℃				
15 Electronics	built in	external				

Mechanical parameters

Service depth: 0–850m

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Optional voltage(VDC)
1	Aluminum alloy	built in	ø500	758	33.7	25.2	BH12M	300
2	Aluminum alloy	external	ø500	629	30.9	24.2	BH16M	300
3	Titanium alloy	built in	ø500	758	36.7	28.2	BH12MSS	300
4	Titanium alloy	external	ø500	629	33.5	26.8	BH16MSS	300

common model

Service depth: 0–1500m& 0–3000m & 0–6000m

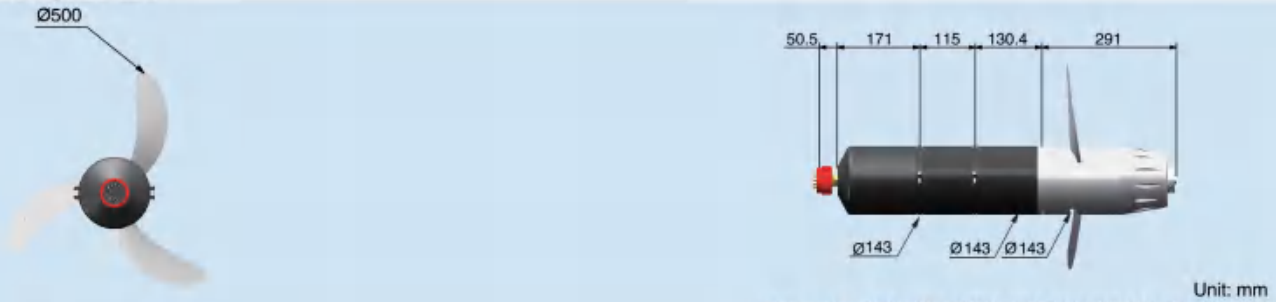
Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	built in	ø500	736	36.2	25.3	PBOF12M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 880g in air, adds 88g in water
2	Titanium alloy	built in	ø500	736	39.2	28.3	PBOF12M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 880g in air, adds 88g in water

Service depth: full ocean depth

Item	Housing	Driving position	Outer dia(mm)	Length (mm)	Weight in air(KG)	Weight in water(KG)	Connector model	Oil tube dia	Oil tube bending outer dia	Weight change
1	Aluminum alloy	external	ø500	600	32.9	24.3	PBOF16M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 925g in air, adds 133g in water
2	Titanium alloy	external	ø500	600	35.5	26.9	PBOF16M	1.25"	4.75"	for oil tube, each additional 1m increase, its weight adds 925g in air, adds 133g in water

Dimension

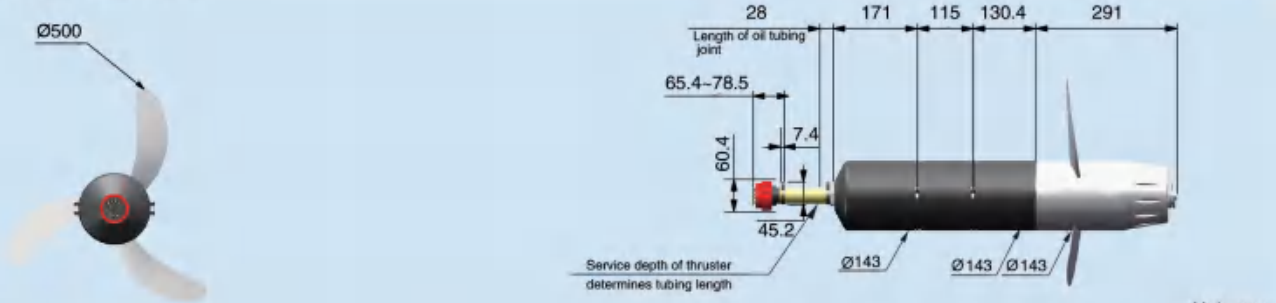
Service depth: 0–850m



Unit: mm

Example: Order No. T8050–300–BH12M–850–AL–NL–FIV

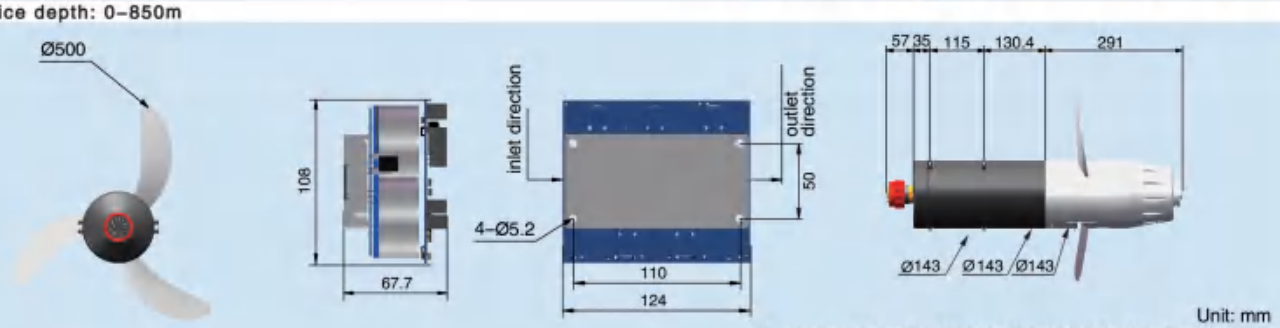
Service depth: 0–3000m



Unit: mm

Example: Order No. T8050–300–PBOF12M–3000–AL–NL–FIV

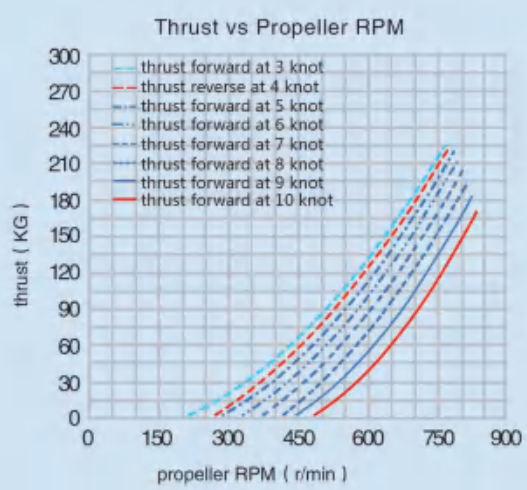
Service depth: 0–850m

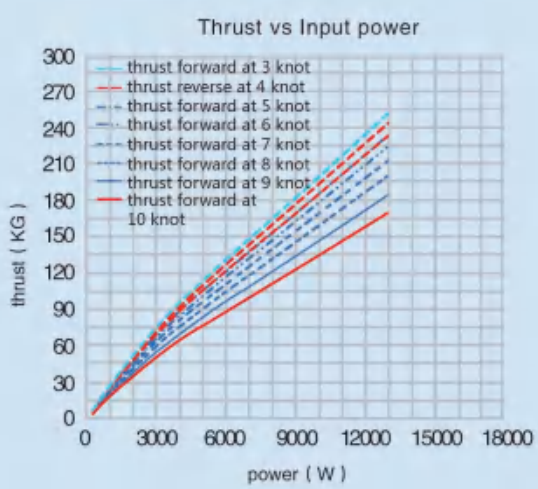


Unit: mm

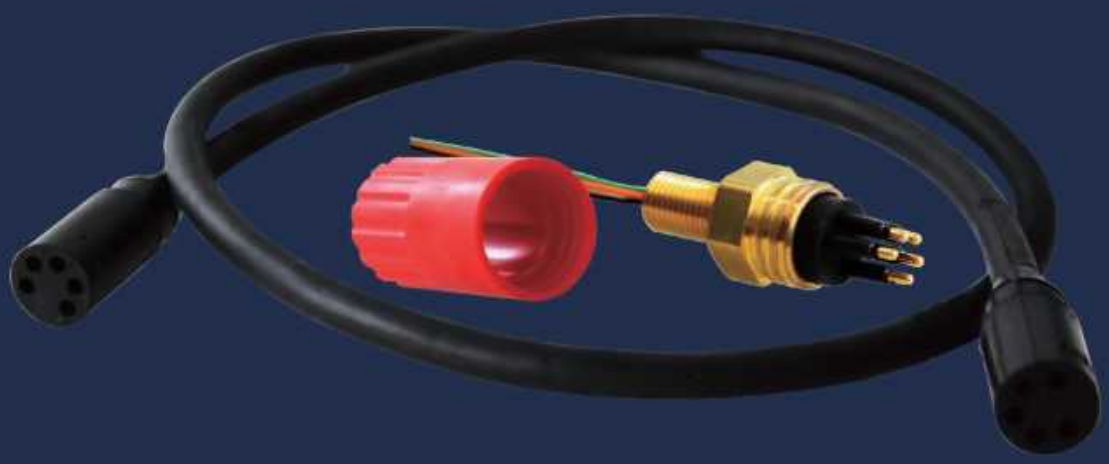
Example: Order No. T8050–300–BH16M–850–AL–NL–FOV

Thrust curve





Accessories



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Mounting Instruction

Accessories

Mounting Instruction of Accessories Option

①MCDLS–F – Miniature locking cover

②MCIL6F – Miniature 6–core female plug

③MCBH6M – Miniature 6–core male socket

④O–Ring – O–ring

Features

- Water–tight connector is waterproof plug, waterproof grade is high, safety is more convenient; the back cover uses thread to tighten fixed cable, the female head has a small screw, safety is more convenient; anti–electric shock, high–performance plastic is not conductive; corrosion resistance is good, water use is not easy to aging; shell surface anti–slip design, strong connection head Reliable, using reasonable keys and compact structure design.

Advantages

- Long service life; High efficiency;customizable
- Core connection is accurate, positioning accuracy is high, connection is firm
- Anti–electronic shock&seawater corrosion resistance, anti–aging
- Multi–models connectors avaliable
- Cable length can be customized

6–core wiring for thruster

6–core female joint

6–core male joint

Built in driver

Item	Definition (analog voltage control)	Instruction	Definition (PPM control)	Instruction
1	PGND	Negative power supply	PGND	Negative power supply
2	+VDC	Positive power supply	+VDC	Positive power supply
3	SGND	Negative signal power	SGND	Negative signal power
4	+12VDC	Positive signal power	+12VDC	Positive signal power
5	± 5VDC	Analog voltage adjust speed	PPM	PPM adjust speed
6	FB	RPM feedback	FB	RPM feedback

Built in driver

Item	Definition (CAN control)	Instruction
1	PGND	Negative power supply
2	+VDC	Positive power supply
3	SGND	Negative signal power
4	+12VDC	Positive signal power
5	CANH	CAN
6	CANL	VAN

8–core wiring for thruster

8–core female joint

8–core male joint

Built in driver

Item	Definition (analog voltage control)	Instruction	Definition (PPM control)	Instruction
1&7	PGND	Negative power supply	PGND	Negative power supply
2&8	+VDC	Positive power supply	+VDC	Positive power supply
3	SGND	Negative signal power	SGND	Negative signal power
4	+12VDC	Positive signal power	+12VDC	Positive signal power
5	± 5VDC	Analog voltage adjust speed	PPM	PPM adjust speed
6	FB	RPM feedback	FB	RPM feedback

Built in driver

Item	Definition (CAN control)	Instruction
1&7	PGND	Negative power supply
2&8	+VDC	Positive power supply
3	SGND	Negative signal power
4	+12VDC	Positive signal power
5	CANH	CAN
6	CANL	VAN

External driver

Item	Definition	Instruction
1	U	Motor phase line
2	V	Motor phase line
3	W	Motor phase line
4	+5VDC	Hoare, positive
5	Ha	Hoare
6	Hb	Hoare
7	Hc	Hoare
8	GND	Hoare, negative

Wiring instruction

Accessories

12–core wiring for thruster

12–core female joint

Built in driver

Item	Definition (analog voltage control)	Instruction	Definition (PPM control)	Instruction
1、2、3&4	PGND	Negative power supply	PGND	Negative power supply
5、6、7&8	+VDC	Positive power supply	+VDC	Positive power supply
9	±5VDC	Analog voltage adjust speed	±5VDC	Analog voltage adjust speed
10	NC	Suspend in midair	NC	Suspend in midair
11	FB	RPM feedback	PPM	PPM adjust speed
12	SGND	Signal reference	SGND	Signal reference

Built in driver

Item	Definition (CAN control)	Instruction
1、2、3&4	PGND	Negative power supply
5、6、7&8	+VDC	Positive power supply
9	CANH	CAN
10	CANL	CAN
11	FB	RPM feedback
12	SGND	Signal reference

12–core male joint

External driver

Item	Definition	Instruction
1&2	U	Motor phase line
3&4	V	Motor phase line
5&6	W	Motor phase line
7	+5VDC	Hoare, positive
8	Ha	Hoare signal
9	Hb	Hoare signal
10	Hc	Hoare signal
11	GND	Hoare, negative
12	NC	Suspend in midair

16–core wiring for thruster

16–core female joint

16–core male joint

External driver

Item	Definition	Instruction
1&2&3	U	Motor phase line
4&5&6	V	Motor phase line
7&8&9	W	Motor phase line
10	+5VDC	Hoare, positive
11	Ha	Hoare signal
12	Hb	Hoare signal
13	Hc	Hoare signal
14	GND	Hoare, negative
15	NTC1	heat sensitive sensor signal
16	NTC2	heat sensitive sensor signal

Customized parameter collection table for thruster (technical)

No.:

performance requirement						
parameter 1	performance criteria 1	parameter 2	performance criteria 2	parameter 3	performance criteria 3	reverse moor–ing performance
navigational speed (kn)		navigational speed (kn)		navigational speed (kn)		
thrust (kg)		thrust (kg)		thrust (kg)		
power		power		power		

other requirement

general performance requirement					
Rated steady voltage		Voltage fluctuation range		Rotating speed control feedback	
working depth		thruster weight	in air: in water:	thruster dimension	outer dia: length:

other requirement

special performance requirement					
operating temperature		noise indicator		special install	
thruster material		rotational direction		motor house material and size	
application environment					
power system					
propulsion type					
spare parts requirement					
other requirement					

Products Code

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Thruster options

Overview

A	—	B	—	C	—	D	—	E	—	F_1	+	F_2	—	G_1	+	G_2
Thruster model	—	Rated voltage	—	Connector type	—	Depth rating	—	Housing material	—	Nozzle color	+	Propeller handing	—	RPM feedback	+	Control mode
T260		48		MCBH8M		850		AL				B L				F I V

A – Thruster product code

T150	- T150 thruster	**T260**	- T260 thruster	**T280**	- T280 thruster
T280S	- T280S thruster	**T300**	- T300 thruster	**T530**	- T530 thruster
T540	- T540 thruster	**T540S**	- T540S thruster	**T550**	- T550 thruster
T550S	- T550S thruster	**T561**	- T561 thruster	**T570**	- T570 thruster
T590	- T590 thruster	**T1020**	- T1020 thruster	**T1050**	- T1050 thruster
T1060	- T1060 thruster	**T1080**	- T1080 thruster	**T2020**	- T2020 thruster
T2030	- T2030 thruster	**T2040**	- T2040 thruster	**T2040S**	- T2040S thruster
T2050	- T2050 thruster	**T2060**	- T2060 thruster	**TD2020**	- TD2020 thruster
TZ2030	- TZ2030 thruster	**T8020**	- T8020 thruster	**T8040**	- T8040 thruster
T8050	- T8050 thruster	**T8060**	- T8060 thruster	**Z20**	- T20 rotary actuator
Z61	- Z61 rotary actuator	**R21**	- R21 RIM thruster		

B – Rated voltage

12	- 12VDC	**24**	- 24VDC	**32**	- 32VDC
36	- 36VDC	**48**	- 48VDC	**60**	- 60VDC
65	- 65VDC	**70**	- 70VDC	**72**	- 72VDC
75	- 75VDC	**80**	- 80VDC	**85**	- 85VDC
90	- 90VDC	**95**	- 95VDC	**100**	- 100VDC
110	- 110VDC	**120**	- 120VDC	**130**	- 130VDC
140	- 140VDC	**150**	- 150VDC	**160**	- 160VDC
175	- 175VDC	**180**	- 180VDC	**200**	- 200VDC
220	- 220VDC	**230**	- 230VDC	**240**	- 240VDC
250	- 250VDC	**260**	- 260VDC	**280**	- 280VDC
300	- 300VDC	**320**	- 320VDC	**330**	- 330VDC
350	- 350VDC				

C – Connector type

MCBH6M	- Miniature 6–core male socket	MCBHRA6M	- Miniature elbow 6–core male socket
MCBH8M	- Miniature 8–core male socket	MCBHRA8M	- Miniature elbow 8–core male socket
MCBH12M	- Miniature 12–core male socket	MCBHRA12M	- Miniature elbow 12–core male socket
MCBH16M	- Miniature 16–core male socket	MCBHRA16M	- Miniature elbow 16–core male socket
BH12M	- Standard 12–core socket	BH16M	- Standard 16–core socket
MCPBOF6M	- Miniature oil filled 6–core male socket	PBOF6M	- Standard oil filled 6–core male socket
MCPBOF8M	- Miniature oil filled 8–core male socket	PBOF8M	- Standard oil filled 8–core male socket
MCPBOF12M	- Miniature oil filled 12–core male socket	PBOF12M	- Standard oil filled 12–core male socket
MCPBOF16M	- Miniature oil filled 16–core male socket	PBOF16M	- Standard oil filled 16–core male socket
HPBH4M	- Miniature 4–core male socket	MCBH4M	- Miniature 4–core male socket

D – Depth rating

850	- 850m underwater penetration	1500	- 1500m underwater penetration
3000	- 3000m underwater penetration	6000	- 6000m underwater penetration
FOD	- full ocean depth		

E – Housing material

AL	- Aluminium	TI	- Titanium

F_1 – Nozzle

B	- Black	N	- None

F_2 – Propeller handing

L	- Left ↺	R	- Right ↻

G_1 – RPM feedback

F	- Pulse feedback	V	- Analog voltage feedback

G_2 – Control mode

IV	- Built in analogue	OV	- External analogue
IP	- Built in PPM	OP	- External PPM
IC	- Built in CAN	OC	- External CAN