

# Yanmar type 6SY-720

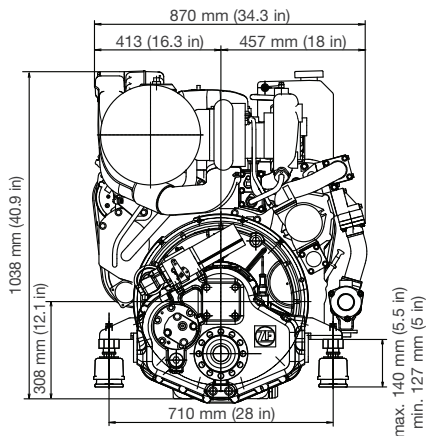


|   |   |
|---|---|
| <b>Configuration</b>                          | 4-stroke, vertical, water cooled diesel engine  |
| <b>Maximum output at crankshaft</b>           | * 530 kW (720 mhp) / 2300 rpm   |
| <b>Continuous rating output at crankshaft</b> | 405 kW (550 mhp) / 2100 rpm   |
| <b>Displacement</b>                           | 11.7 L (714 cu in)  |
| <b>Bore x stroke</b>                          | 127 mm x 154 mm (5.0 in x 6.1 in)   |
| <b>Cylinders</b>                              | 6 in line   |
| <b>Combustion system</b>                      | Direct injection  |
| <b>Aspiration</b>                             | Turbocharged with charge air cooler   |
| <b>Starting system</b>                        | Electric starting 24 V - 6.7 kW (2 pole)  |
| <b>Alternator</b>                             | 24 V - 65 A (2 pole)  |
| <b>Cooling system</b>                         | Fresh water cooling by centrifugal fresh water pump and rubber impeller seawater pump |
| <b>Lubrication system</b>                     | Enclosed, forced lubricating system   |
| <b>Direction of rotation (crankshaft)</b>     | Counter clockwise viewed from flywheel side   |
| <b>Dry weight without gear</b>                | 1150 kg (2536 lbs)  |
| <b>Environmental</b>                          | EU RCD, US EPA Tier 2, BSO II & EMC   |
| <b>Engine mounting</b>                        | Rubber type flexible mounting   |

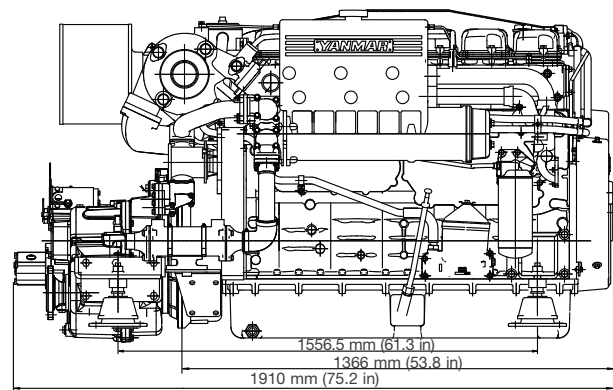
NOTE: Fuel condition: Density at 15°C = 0.84 g/cm<sup>3</sup>; 1 mhp = 1PS = 0.7355 kW = 0.9863 bhp  
 \* Fuel temperature 40°C at the inlet of the fuel injection pump (ISO 8665 : 2006)

**Dimensions** (For detailed line-drawings, please refer to our web-site: [www.yanmarmarine.com](http://www.yanmarmarine.com))

**Rear view**

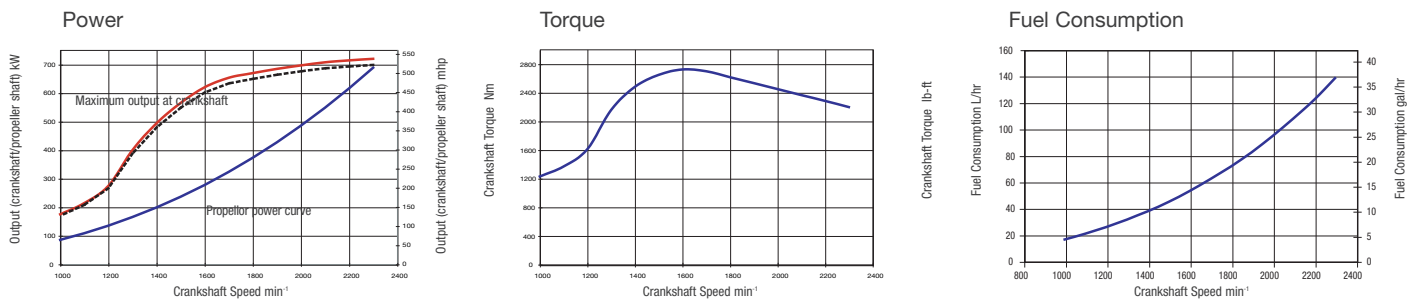


**Right side view**



6SY-720 with ZF 325-1 marine gear

## Performance Curves (Output is according ISO 8665)

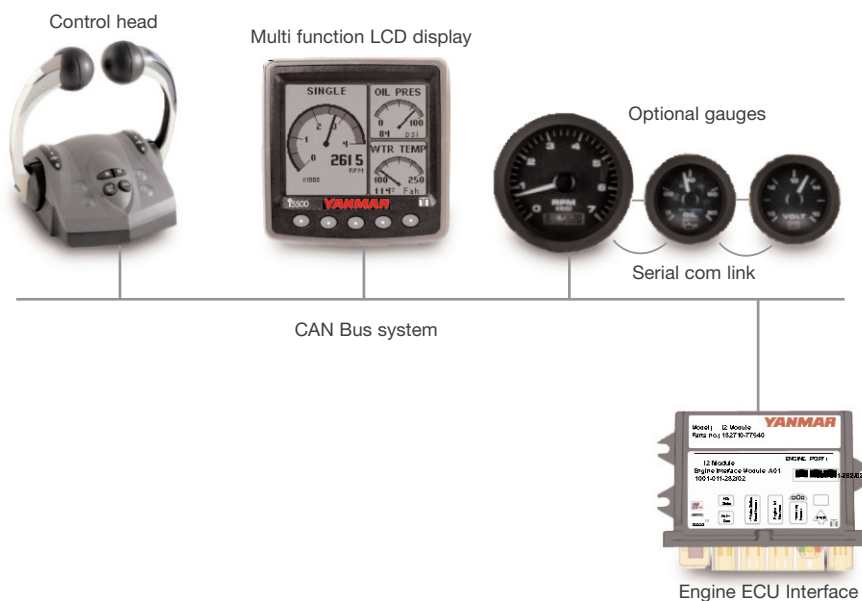


## Marine gear (example) \*\*\*

| Model   | ZF 325-1  |      |      |      | ZF 325-1A   |      |      |      | TD MG 5095SC  |      |      |      | TD MG 5095A   |      |      |      |
|---|---|------|------|------|---|------|------|------|---|------|------|------|---|------|------|------|
| Type  | hydraulic   |      |      |      | hydraulic   |      |      |      | hydraulic   |      |      |      | hydraulic   |      |      |      |
| Dry weight                                    | 130 kg (286 lbs)  |      |      |      | 130 kg (286 lbs)  |      |      |      | 175 kg (385 lbs)  |      |      |      | 177 kg (390 lbs)  |      |      |      |
| Reduction ratio (fwd)                         | 1.46  | 1.73 | 2.03 | 2.25 | 1.49  | 1.73 | 2.04 | 2.24 | 1.47  | 1.71 | 2.0  | 2.46 | 1.52  | 1.81 | 2.04 | 2.48 |
| Propeller speed (fwd)                         | 1575  | 1329 | 1133 | 1022 | 1544  | 1329 | 1127 | 1027 | 1565  | 1345 | 1150 | 935  | 1513  | 1271 | 1127 | 927  |
| Direction of rotation (propeller shaft - fwd) | Clockwise & counter clockwise viewed from flywheel side |      |      |      | Clockwise & counter clockwise viewed from flywheel side |      |      |      | Clockwise & counter clockwise viewed from flywheel side |      |      |      | Clockwise & counter clockwise viewed from flywheel side |      |      |      |
| Dry weight engine and gear/drive              | 1280 kg (2822 lbs)                                      |      |      |      | 1280 kg (2822 lbs)                                      |      |      |      | 1325 kg (2921 lbs)                                      |      |      |      | 1327 kg (2926 lbs)                                      |      |      |      |
| Length engine and gear/drive                  | 1910 mm (75 in)   |      |      |      | 1910 mm (75 in)   |      |      |      | 1982 mm (78 in)   |      |      |      | 1987 mm (78 in)   |      |      |      |

\*\*\* Gear also available in; ZF325-IV (V-drive) reduction ratio: 1.73 & 2.04, TD MG 5114 IV (V-drive) reduction ratio: 1.52, 1.80 & 1.97  
 \*\*\* Other marine gearboxes and configurations available upon request. Contact your local supplier for more information.

## Electronic Control System (NMEA 2000 Canbus System)



## Engine Accessories

### Standard Engine Package System

- Alternator
- Protection cover for belt transmission
- Transmission oil cooler
- Water level sensor
- Engine control harness

### Optional Engine Package System

- Electric oil draining pump
- Engine heater
- Extra rear PTO
- Hydraulic pump
- Exhaust mixing elbow
- Crankshaft pulley
- Additional alternator

## Electronic Control System

### Standard Electronic Control

- Electronic Control Head
- LCD display
- Back-up throttle control system

### Optional Electronic Control

- Second station control system
- Various engine Monitoring gauges
- Various engine Control heads