

**Pump specifications:**

Type.....	6TBE80D320
Max. flow	320 m ³ /hour (1408 US GPM)
Max. pressure	25 mwc (89 ft.)
Connections.....	DN 150 (6")
Solids handling	80 mm (3,15")
Impeller type	Semi-open impeller
Engine	Perkins 404D-22
Basic frame.....	BF10-23
Weight (net)	1220 kg (2684 lb.)

FEATURES**TBE self priming centrifugal pump**

The TBE range of pumps have been designed with a clear focus on reliability, efficiency and durability. Featuring an open impeller configuration with a changeable wear plate, facilitating servicing and minimising costs of spares. All TBE range of pumps are fitted with a non return valve in the suction port, eliminating the need for a foot valve in suction line and allowing priming and re-priming.

Design features

- Uncomplicated construction
- Large free passage
- Capable of handling hot fluids
- Wet self-priming
- Cooled shaft seal
- Extended life due to pump design

Possible applications

- Shipping
- Industry
- Construction
- Waste water
- Emergency pump units
- Irrigation
- Agriculture

Complete package designed & built by Tsurumi

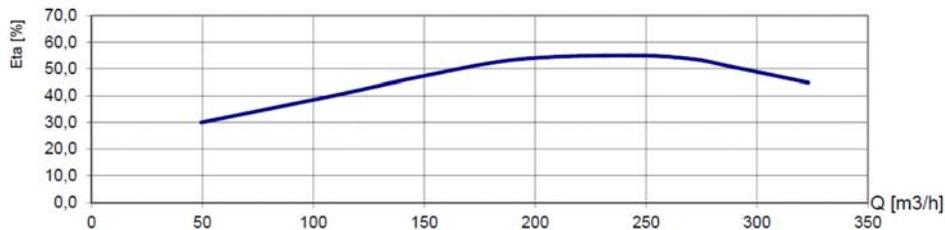
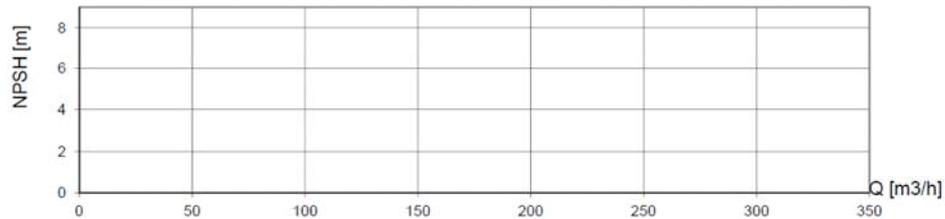
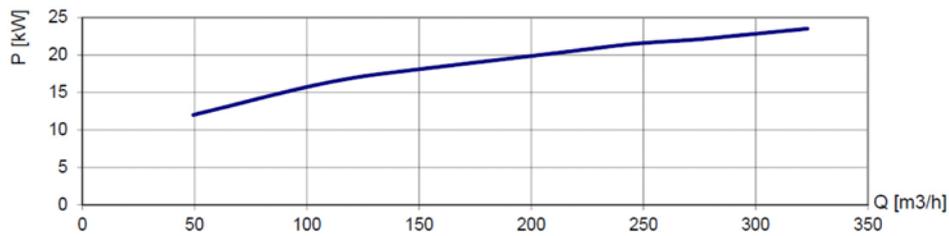
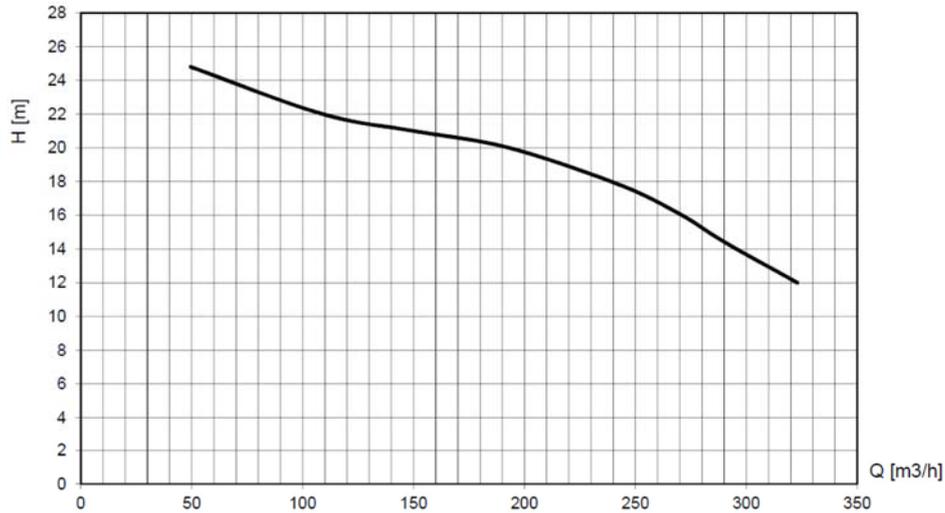
- Complete in-house design & production
- Extensive testing facility in-house
- Contemporary & functional design
- Durable & eco-friendly materials
- Custom builds available

After sales service & product support

- Single supplier for parts, spares & accessories
- Dedicated service department in-house
- Extensive training options available

PERFORMANCE CURVES (1800 RPM)

Continuous duty according ISO 9906



Engine speed rpm	H mwc	Capacity Q in m ³ /h				Fuel consumption (BEP)
		50	150	250	320	l/h
1800		25	21	17	12	7
1700		22	18	15	10	6
1600		19	16	13	9	5
1500		16	14	10	6	4

STANDARD TECHNICAL SPECIFICATIONS

Self-priming pump

Pump type.....	TBE160 D254
Max. flow.....	320 m ³ /hour (1408 US GPM)
Max. head.....	25 mwc (83 feet)
Impeller type.....	Semi open impeller
Solids handling.....	80 mm (3.15 inch)
Pump casing.....	Cast iron GG20
Impeller.....	Cast iron GG25
Wear plate.....	Cast iron GG25
Pump shaft.....	C45
Shaft seal.....	Mechanical seal 45 mm (1.77 inch)
Seal faces.....	Sic/Sic
O-ring.....	Viton



Engine

Engine brand.....	Perkins
Engine type.....	404D-22
Flywheel power.....	26 kW (35 Hp)
Max. engine speed.....	1500 – 1800 RPM
Fuel consumption.....	243 g/kWh
Displacement.....	2.2 l
Number of cylinders.....	4
Cooling system.....	Water cooled
Exhaust emission EU.....	Stage IIIB
Exhaust emission US.....	Tier 4i



Control panel

- Composite panel IP66
- Key switch
- Tachometer
- Hour counter
- Warning light "engine failure"
- Warning light "alternator"



Fuel system

- PE fuel tank 130 L. net (34 US Gallon)
- Fuel tank cap Ø 60 mm
- Mechanical fuel injection system
- Fitted with water separator & extra in-line fuel filter

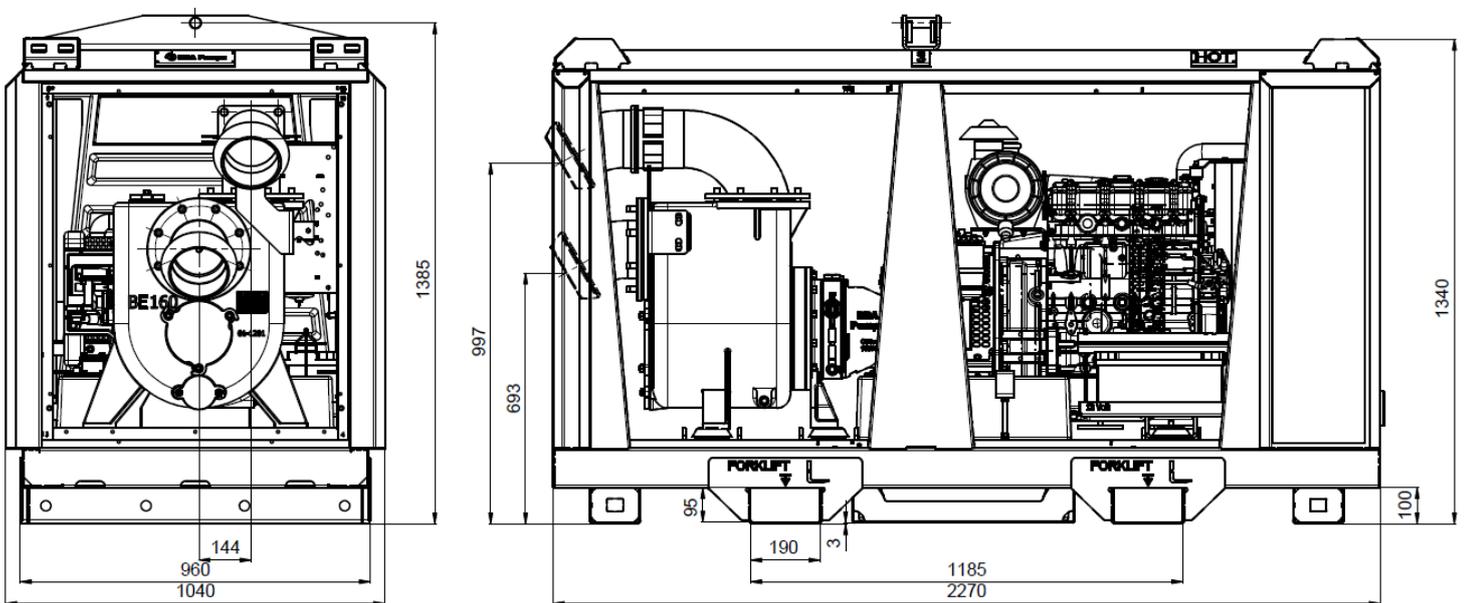
Electrical system & safety features

- Nominal voltage 12 Volt
- Premium quality battery 92 amp.
- Low oil pressure shut down
- High temperature shut down

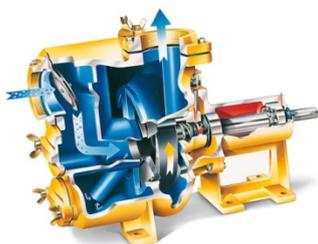
FRAME BF10-23

Open diesel unit

Frame model.....	BF10-23
Dimensions L x W x H	Approx. 2270 x 1040 x 1340 mm (without connections)
Dimensions L x W x H	Approx. 89 x 41 x 53 inch (without connections)
Basic frame.....	Hot dip galvanised
Panel.....	Composite grill panel
Fuel tank.....	Composite tank net 130 ltr (34 US Gallon)
Fuel tank autonomy	18-19 hours (at 1800 rpm BEP)
Fuel tank cap	60mm (2.5 inch)
Forklift pockets	Fitted with 2 forklift pockets
Lifting point	Fitted with single lifting point
Connections.....	Please consult "auxiliary items"
Exhaust system	Exhaust is mounted on the engine
Radiator	Genuine Perkins
Document box.....	Including user manual



Actual dimensions (in mm) may vary depending on selected quick couplings.

**Excellent priming**

The built-in non-return valve at the suction side prevents the pump casing from being siphoned empty when the pump stops. In this way, some liquid will always remain in the pump casing.

**Fuel tank**

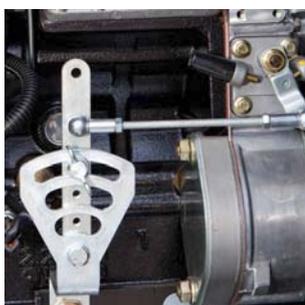
Corrosion-free, 130 litre, high-density polyethylene (HDPE) fuel tank, located in base of frame.

**Easy inspection**

Oil glasses, drain valves and fill plugs are all easily accessible.

**Large inspection covers**

Easy access to impeller and non-return valve. And for filling the casing after the wintertime.

**Speed control**

Variable speed control between 1500 rpm. and 1800 rpm.

**User Manual**

Extensive user manual with important information concerning the pump unit, pump installation and safety warnings.

AUXILIARY ITEMS
Site Trailer Kit

3031720310	Trailer Kit	
	Off-road design	
	Towbar is height-adjustable	
	Not permitted on public road	
	M10-23 / ET10-23 / BF10-23	

Webasto engine heater

5646804565	Webasto Engine Heater	
	- For cold weather conditions	
	- Engine liquid heater	
	- Extra switch on control panel	

Discharge connections

Art.nr.		Ø inch	Ø mm	Connection	
05080873	30°	6	150	Flange K240	
1516604209	30°	8	200	Flange K295	
05080876	30° female (cup)	6	150	system B	
05080881	30° male (ball/lever)	6	150	system B	
05080877	30° male (ball)	6	150	system C	
05080882	30° female (cup/lever)	6	150	system C	

Suction connections

Art.nr.		Ø inch	Ø mm	Connection	
05080884	30°	6	150	Flange K240	
1516604208	30°	8	200	Flange K295	
05080889	30° female (cup)	6	150	System B	
05080890	30° male (ball/lever)	6	150	System B	
05080887	30° male (ball)	6	150	System C	
05080888	30° female (cup/lever)	6	150	System C	

Suction hose with strainer L=5 metre

Art.nr.	Ø inch	Ø mm	connection	
07047054	6	150	Flange K240	
07047057	8	200	Flange K295	
07047007	6	150	System B male (ball/lever)	
07047037	6	150	System C female (cup/lever)	

Suction hose with strainer L=6 metre

Art.nr.	Ø inch	Ø mm	connection	
07047055	6	150	Flange K240	
07047058	8	200	Flange K295	
07047008	6	150	System B male (ball/lever)	
07047038	6	150	System C female (cup/lever)	

We reserve the right to change specifications and designs herein for improvement without prior notice. Our pumps are for professional use only. In the event that Tsurumi (Europe) GmbH have, in exceptional cases taken over, a manufacturer's warranty, this entitles the enduser to assert remedy free of charge against Tsurumi (Europe) GmbH due to any defect to the product occurring during the guarantee period (see below), also then when the warranty claims against the seller do not or no longer exist. In the event of malfunction, which is attributable to the improper handling by the enduser, no guarantee claim shall arise. Further claims shall not result from the warranty, unless if something to the contrary has explicitly been determined. The decision as to whether remedy is effected by way of replacement or repair shall be at the choice of Tsurumi (Europe) GmbH. The claims shall be time barred after a period of three months after expiry of the guarantee period, however, not before expiry of the warranty period which is valid towards the seller. In the event of doubt, the warranty period shall correspond with the warranty period which is valid between the end-user and his seller.

Please refer to our general conditions of supply www.tsurumi.eu/english/gcs.htm

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