

BA180E Diesel Driven Dewatering and Sewage Pump Max. 720 m³/hour, Max. 41 mwc



Pump specifications:

Type.....BA180E D315
 Max. flow 720 m³/hour (3168 US GPM)
 Max. pressure..... 41 mwc (135 ft.)
 Connections..... DN200 (8")
 Solids handling 80 mm (3,15")
 Impeller type Semi-open impeller
 Priming system BBA MP50
 Engine Perkins 854E-E34TA
 Emission standard.. Stage IIIB / Tier 4i
 Canopy M10-25
 Weight (net) 2090 kg (4600 lb)
 Sound level..... Approx. 67 dB(A) at 10m

FEATURES

BA auto prime pump

The BA range of pumps has been designed with a clear focus on reliability, efficiency and durability. Featuring a 100% mechanical priming system, the BA series pumps quickly prime and re-prime, even from dry conditions. The heavy build style of both pump and canopy make the BA range perfect for use in the strenuous contractor market.

World-class performance

The BA range is built to be deployed on the most demanding dewatering and sewage bypassing applications. Using high efficiency pumps and state-of-the-art diesel engines, the pumps offer maximum performance at minimal cost, fully in-sync with the company philosophy of "Lowest cost of ownership".

Sustainability

- High efficiency pumps minimising fuel consumption
- Emissions in accordance with EU Stage & US EPA Tier regulations
- Corrosion free hot dip galvanised canopy
- Corrosion free composite door panels
- 100% Oil-spill free priming system
- Fully bunded unit eliminating fuel/oil spills at all times

Complete package designed & built by BBA Pumps

- Complete in-house design & production
- Over 60 years of experience in the market
- Complete testing facility in-house
- Contemporary & functional design
- Durable & eco-friendly materials
- Custom builds available

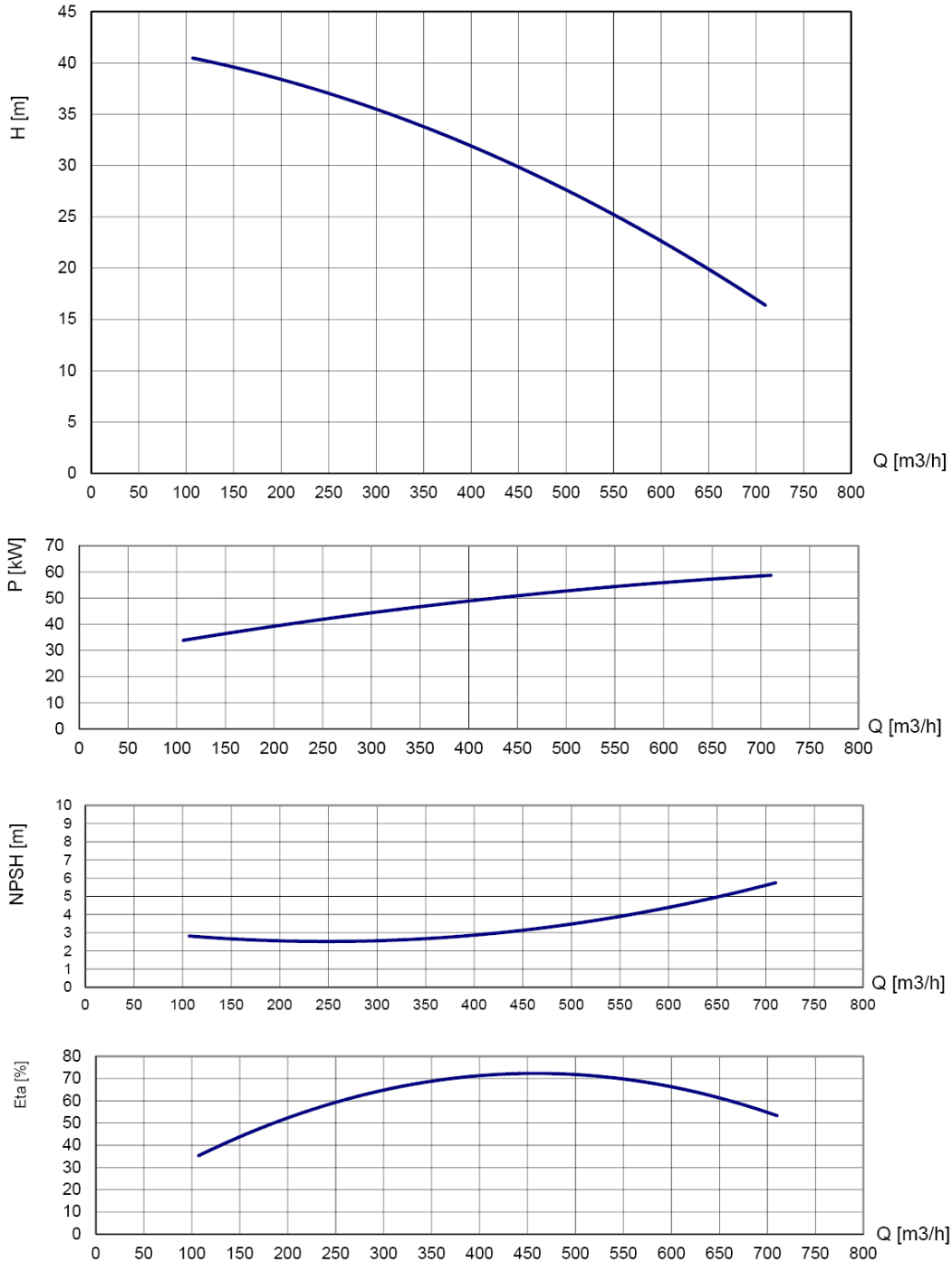
After sales service & product support

- Single supplier for parts, spares & accessories
- Dedicated customer help-desk (24h service)
- Dedicated service department in-house
- Global parts distribution network
- Optional global on-site servicing available
- Extensive training options available (technical & commercial), on-site or in-house



PERFORMANCE CURVES (1900 RPM)

Continuous duty according ISO 9906



Please consult www.bbapumps.com for variable speed curves.

Engine speed rpm		Capacity Q in m³/h					Fuel consumption (BEP) l/h
		300	400	500	600	700	
1900	H	35	32	27	22	17	15
1700	mwc	27	24	20	15	-	
1500		23	17	13	-	-	

STANDARD TECHNICAL SPECIFICATIONS

BBA auto prime pump

Pump type.....	BA180E D315
Max. flow.....	720 m ³ /hour (3168 US GPM)
Max. head.....	41 mwc (135 feet)
Impeller type.....	Semi-open impeller
Solids handling.....	80 mm (3.15 inch)
Pump casing.....	Cast iron GG20
Impeller.....	Chrome Moly 42CrM04
Wear plate.....	Chrome Moly 42CrM04
Pump shaft.....	C45
Shaft seal.....	Mechanical seal
Seal faces.....	Tung/Sic
Seal rubbers.....	Viton

BBA priming system

Pump type.....	BBA MP50 Diaphragm pump
Air handling capacity.....	50 m ³ /h (30 CFM)
Max. vacuum.....	8.5 m (29 inHg)
Drive.....	Toothed belt (continuous drive)
Float box.....	Aluminium
Non return valve.....	Cast iron GG25
Check valve disc.....	Buna-N

Engine

Engine brand.....	Perkins
Engine type.....	854E-E34TA
Max. power @ 2500 rpm.....	86 kW (117 Hp)
Variable engine speed.....	1300 - 1900 RPM
Fuel consumption.....	216 g/kWh
Displacement.....	3.4 litres
Number of cylinders.....	4
Aftertreatment.....	DOC, DPF (3000 hours service interval)
Exhaust emission EU.....	Stage IIIB
Exhaust emission US.....	Tier 4i

BBA control panel LC30

- Auto start/stop system
- Two float switches included (10m cable)
- Switch Manual-0-Auto
- RAMP-UP/DOWN function
- Rpm. control with push buttons
- Warning lights
- 4.3" LCD monitor

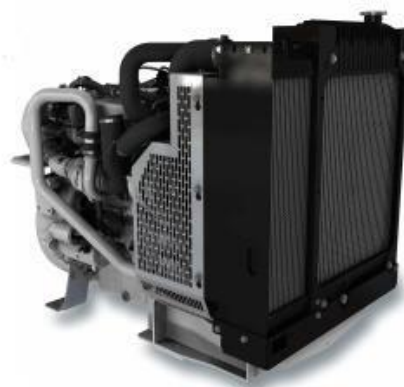
The LCD monitor displays additional engine data, e.g. actual engine speed, working hours, battery voltage, fuel consumption and failures in clear text (10 language support)

Fuel system

- Composite fuel tank 300 L. net (80 US Gallon)
- Fuel tank cap Ø 100 mm
- Electronic fuel injection system

Electrical system & safety features

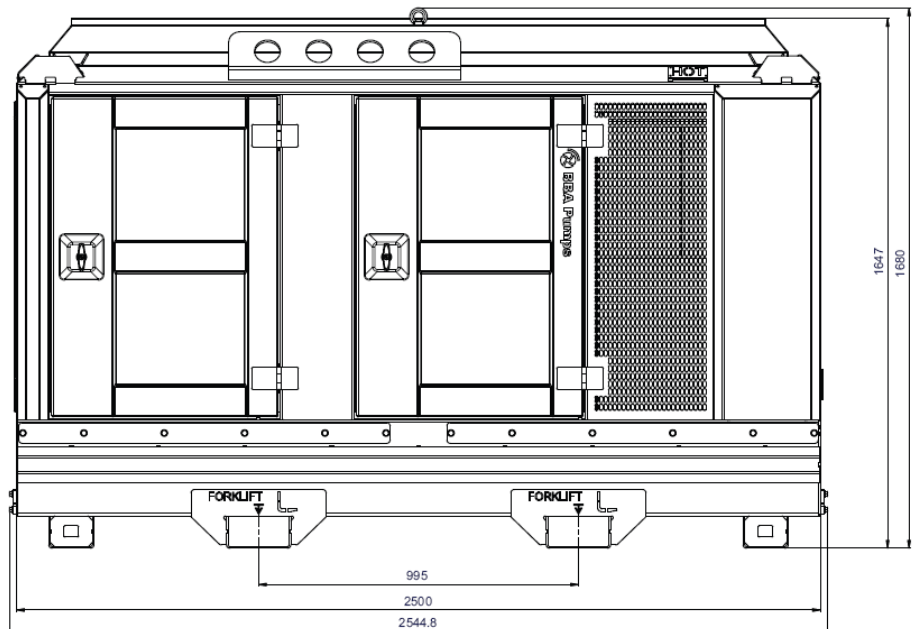
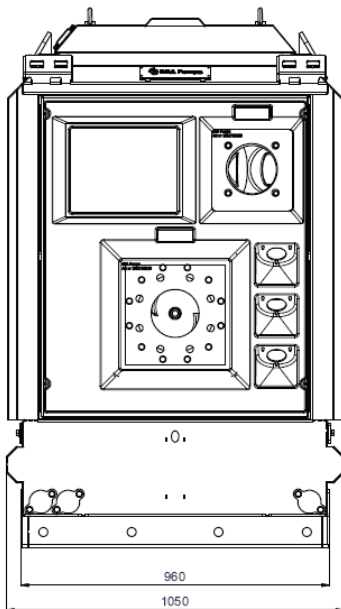
- Premium quality battery
- Nominal voltage 12 Volt
- Engine safety features like overload shutdown



CANOPY M10-25

BBA sound attenuating canopy

Canopy type.....	M10-25
Dimensions L x W x H	2500 x 1050 x 1680 mm
Dimensions L x W x H	100 x 41.3 x 66.1 inch
Basic frame	Hot dip galvanised
Doors	4 easy-access doors (lockable)
Front- and door panels	Composite ABS/ASA
Fuel tank	PE net 300 ltr (80 US Gallon)
Fuel tank autonomy	20 hours (at 1900 rpm BEP)
Fuel tank cap	100 mm (4 inch)
Module (10-23 kit).....	Oil drain pump – battery isolator – external fuel tank connector
Forklift pockets.....	Fitted with 2 forklift pockets
Lifting point	Fitted with 2 lifting points
Connections.....	Please consult “auxiliary items” in overleaf
Exhaust system	Fully integrated in canopy
Additional.....	Fitted with oil-water separator
Documentation box.....	BBA user manual and warranty book



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



Semi-open impeller
Corrosion and abrasion resistant Chrome Moly (42CrM04) alloy.



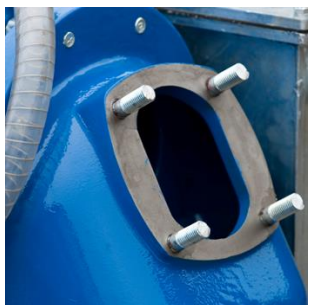
Fuel tank
Fully bunded, corrosion-free, 300 liter, high-density polyethylene (HDPE) fuel tank, located in base of canopy.



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



Priming system
Diaphragm pump, air-cooled, water-resistant and oil-spillage free. Air capacity of 50 m³ per hour.



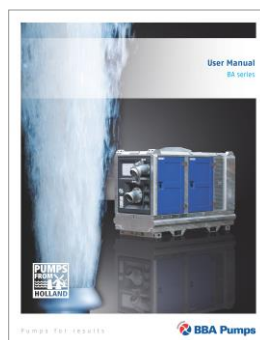
Large inspection covers
Easy access to float box, impeller and non-return valve.



Safety
Extremely durable and lockable T-locks offering perfect grip.



4 Year limited warranty
The BBA limited warranty covers years or operating hours whichever occurs first. For more details please consult the BBA warranty book.




User Manual
Extensive user manual with important information concerning the pump unit, pump installation and safety warnings. Available in several languages.


Pictures used are for illustration purposes only.

AUXILIARY ITEMS


Discharge connections

Art.nr.		Ø inch	Ø mm	Connection	
1516604209	30° flange DIN	8	200	Flange	
05080899	30° flange ANSI	8	200	Flange	
05080813	30° female (cup)	8	200	System B	
05080909	30° male (ball/lever)	8	200	System B	
05080895	30° male (ball/ring)	8	200	System IT	
05080898	30° female (cup/lever)	8	200	System IT	

Suction connections

Art.nr.		Ø inch	Ø mm	Connection	
17160295	0° flange K295 x K350	8-10	200-250	DIN Flange	
05080911	0° male (ball/lever)	8	200	System B	
05080914	0° female (cup)	8	200	System B	
03811500	0° male (ball/ring)	8	200	System IT	
03811510	0° female (cup/lever)	8	200	System IT	
03811505	0° male (ball/ring)	10	250	System IT	
03811506	0° female (cup/lever)	10	250	System IT	

Suction hose with strainer L=5 metre

Art.nr.	Ø inch	Ø mm	Connection	
07047042	8	200	System IT female (cup/lever)	
07047057	8	200	Flange K295	
07047062	10	250	Flange K350	

Suction hose with strainer L=6 metre

Art.nr.	Ø inch	Ø mm	Connection	
07047043	8	200	System IT female (cup/lever)	
07047058	8	200	Flange K295	
07047063	10	250	Flange K350	

Recommended suction pipe ID vs flow rates by pipe dimension (maximum velocity = 4 m/sec)

M3/H	US gallons	FLOW (L/sec)	4" 100	5" 125	6" 150	8" 200	10" 250	12" 300
360	1585	100	12.73	8.15	5.66	3.18	2.04	1.41
403.2	1775	112	14.26	9.13	6.34	3.57	2.28	1.58
432	1902	120	15.28	9.78	6.79	3.82	2.44	1.70
468	2060	130	16.55	10.59	7.36	4.14	2.65	1.84
504	2219	140	17.83	11.41	7.92	4.46	2.85	1.98
540	2337	150	19.10	12.22	8.49	4.77	3.06	2.12
612	2694	170	21.65	13.85	9.62	5.41	3.46	2.41
648	2853	180	22.92	14.67	10.19	5.73	3.67	2.55
684	3011	190	24.19	15.48	10.75	6.05	3.87	2.69
720	3170	200	25.46	16.30	11.32	6.37	4.07	2.83