BA180E Diesel Driven

Dewatering and Sewage Pump

Max. 780 m^3/hour, Max. 50 mwc

Pump specifications:

Type	BA180E D328
Max. flow	780 m^3/hour (3430 US gpm)
Max. pressure	50 mwc (165 ft.)
Connections	DN200 (8")
Solids handling	80 mm (3,15")
Impeller type	Semi-open impeller
Priming system	BBA MP50
Engine	Perkins 1104D-44TA
Emission standard	Stage IIIA
Canopy	M10-25
Sound level L_{PA}	76 dB(A) at 10 m
Dry weight	2150 kg (4730 lbs)

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”.

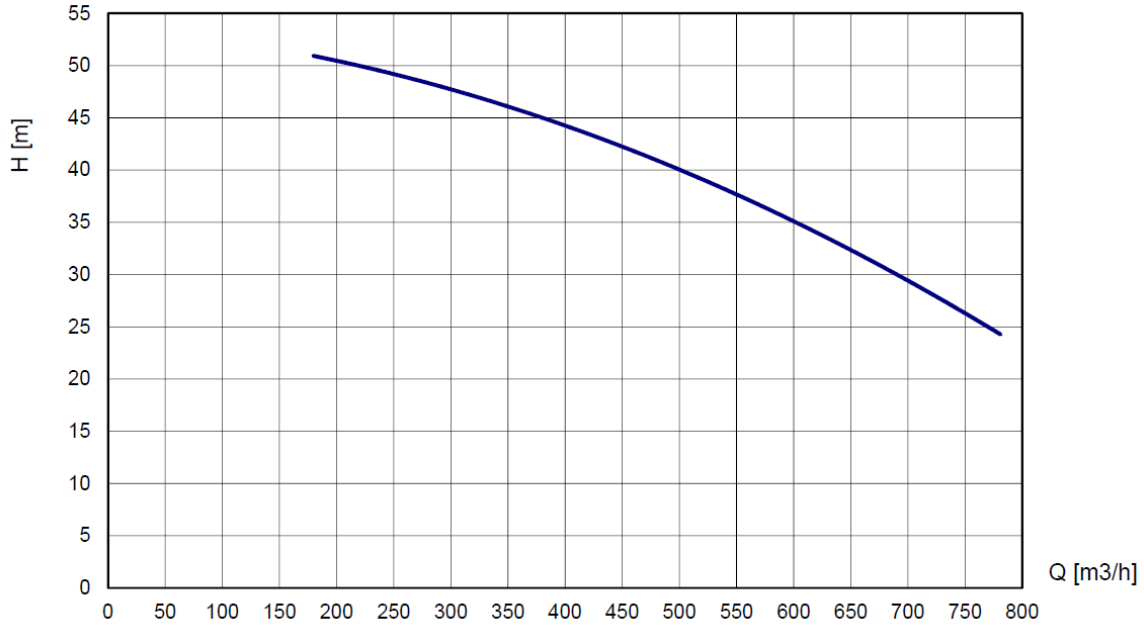
Sustainability
- High efficiency pumps minimising fuel consumption
- Corrosion free hot dip galvanised canopy
- Corrosion free composite door panels
- 100% Oil-spill free priming system
- Fully bunded unit eliminating fuel/oil spills at all times

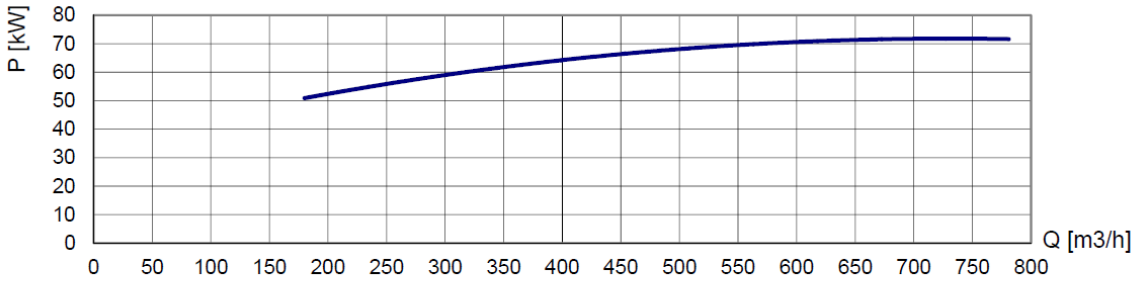
Complete package designed & built by BBA Pumps
- Complete in-house design & production
- Over 70 years of experience in the market
- Complete testing facility in-house
- Contemporary & functional design
- Durable & eco-friendly materials
- Custom builds available

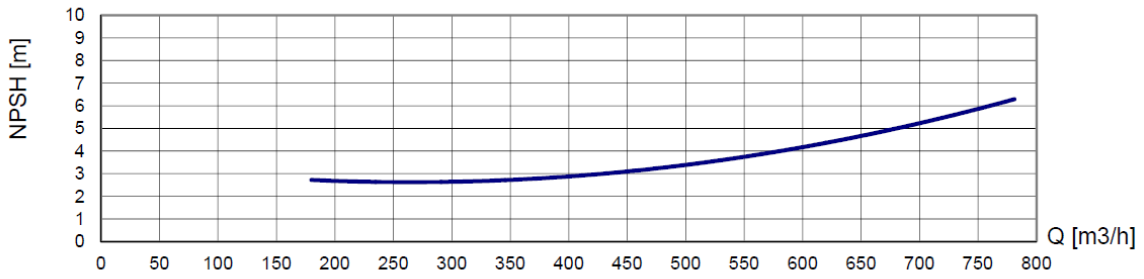
After sales service & product support
- Single supplier for parts, spares & accessories
- Dedicated customer help-desk (24h service)
- Dedicated service department in-house
- Global parts distribution network
- Optional global on-site servicing available
- Extensive training options available (technical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

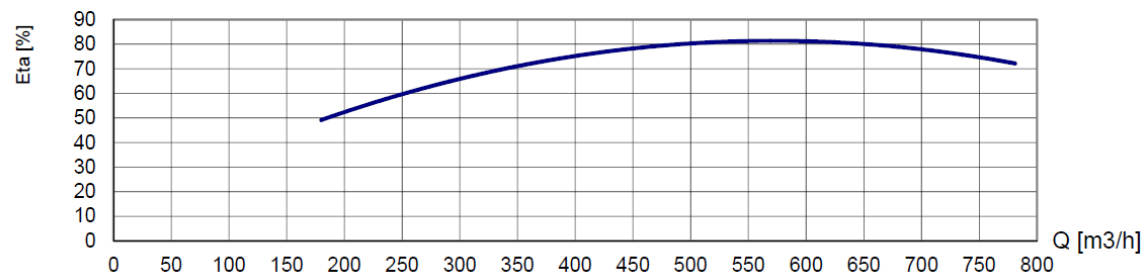
PERFORMANCE CURVES (1800-1900 RPM)

Continuous duty according ISO 9906









STANDARD TECHNICAL SPECIFICATIONS

BBA Pumps auto prime pump

Pump type	BA180E D328
Max. flow	780 m3/hour (3430 US gpm)
Max. head	50 mwc (165 feet)
Impeller type	Semi-open impeller
Solids handling	80 mm (3.15 inch)
Pump casing	Cast iron GG25
Impeller	Chrome Moly 42CrM04
Self-cleaning wear plate	Chrome Moly 42CrM04 (cutter slots)
Pump shaft	42CrMo4 heat treated
Shaft seal	Mechanical seal
Seal faces	Tung/Sic
Seal rubbers	Viton

BBA Pumps priming system

Pump type	BBA MP50 diaphragm pump
Air handling capacity	50 m³/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	1104D-44TA
Gross power	80 kW (108 Hp)
Max. engine speed	1800-1900 RPM
Fuel consumption	230 g/kWh
Displacement	4.4 l
Number of cylinders	4
Cooling system	Water cooled
Emission level	Stage IIIA

BBA Pumps dashboard LC20

- Auto start/stop system
- Two float switches included (10m cable)
- Switch Manual-0-Auto
- Tachometer
- Hour counter
- Warning lights “oil and engine temperature”
- Warning light “auto stand-by”

Fuel system

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

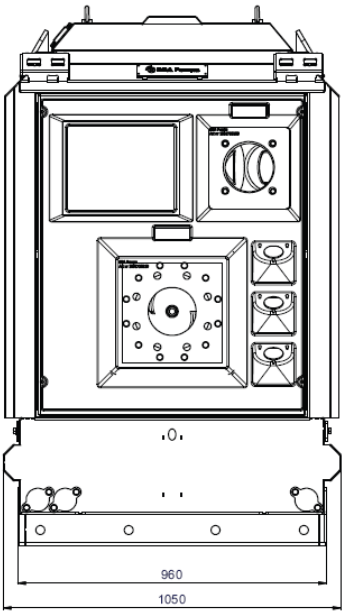
Electrical system & safety features

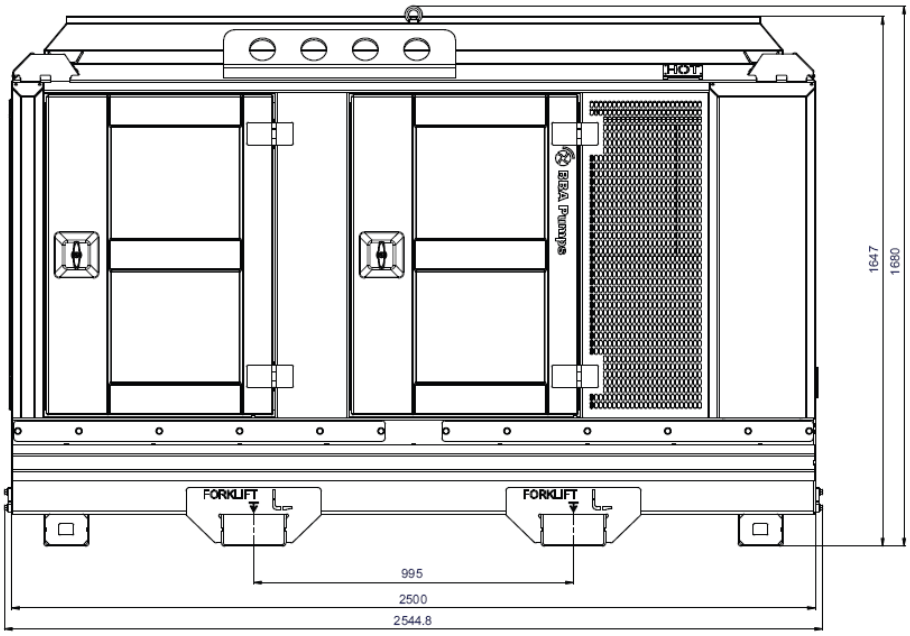
- Premium quality battery
- Nominal voltage 12 Volt
- Engine safety features like overload shutdown

CANOPY M10-25

BBA Pumps 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	15 hours (at 1800 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 lifting points
Connections	Please consult “auxiliary items” in overleaf
Exhaust system	Fully integrated in canopy
Additional	Fitted with oil-water separator
Sound power level (L_{WA})	105 dB(A) according ISO 3744:2010
Documentation box	BBA Pumps 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.

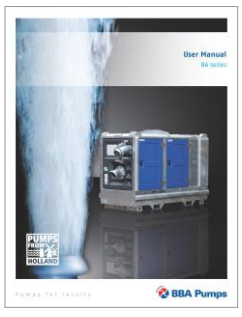
Easy inspection
Oil glasses, drain valves and fill plugs all easily accessible.

Priming system
Diaphragm pump, air-cooled, water-resistant and oil-spillage free.
Air capacity of
50 m^3 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	
5080899	30° flange ANSI	8	200	Flange	
5080913	30° female (cup)	8	200	System B	
5080909	30° male (ball/lever)	8	200	System B	
5080895	30° male (ball/ring)	8	200	System IT	
5080898	30° female (cup/lever)	8	200	System IT	

Suction connections

Art.nr.		Ø inch	Ø mm	Connection	
17160297	0° flange K295 x K350	8-10	200-250	DIN Flange	
3611467	0° female (cup)	8	200	System B	
3811501	0° male (ball/ring)	8	200	System IT	
3811511	0° female (cup/lever)	8	200	System IT	
3111232	0° male (ball/ring)	10	250	System IT	
3111228	0° female (cup/lever)	10	250	System IT	

Suction hose with strainer L=5 metre

Art.nr.	Ø inch	Ø mm	Connection	
7047042	8	200	System IT female (cup/lever)	
7047057	8	200	Flange K295	
7047062	10	250	Flange K350	

Suction hose with strainer L=6 metre

Art.nr.	Ø inch	Ø mm	Connection	
7047043	8	200	System IT female (cup/lever)	
7047058	8	200	Flange K295	
7047063	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

PUMPS FROM HOLLAND