

BBA BA150KS - 6" Sewage and Trash Pump Proposal

Based on FSA Contract # FSA20-EQU18.0 for Heavy Equipment

1 piece - BBA model # <u>BA150KS D285</u>, 6" pumps, sound attenuated, skid mounted, diesel driven Hatz 3H50TIC. Includes:

- Max. flow 2150 US gpm (490 m3/hour)
- Max. pressure 135 ft. / 58 PSI (41 mwc)
- Connections 6" (DN150)
- Solids handling 3.94" (100 mm)
- Impeller type Screw channel impeller
- Priming system BBA MP50
- Engine Hatz 3H50TIC
- Emission standard Tier 4 final
- Canopy M10-23X
- Sound level Approx. 64 dB(A) at 33 ft.
- Dry weight 3575 lbs. (1625 kg)

Please see attached spec sheet for more information.

1 Day of Commissioning Services Included Freight is included.

Items not specifically listed above, are NOT included. Exceptions:

Taxes not included

<u>Pricing</u>

• With M10-23UTI DOT approved trailer, including electric jack and toolbox (Just Like the Demo Model) = \$65,950.00

Lead Time / 16-18 weeks

Approved By / Date: _





FEATURES

BA auto prime pump

The BA range of pumps has been designed with a clear focus on reliability, efficiency and durability. Featuring a fully automatic 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 demanding construction market.

World-class performance

The BA range is built to be deployed on the most demanding 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 galvanized canopy
- Corrosion free composite door panels and powder coated plating
- 100% Oil-spill free priming system
- Fully self-contained unit featuring a double wall fuel containment tank and fluid containment system eliminating fuel/oil spills at all times

Pump specifications:

| Туре | BA150KS D285 |
|-------------------|----------------------------|
| Max. flow | 2150 US gpm (490 m3/hour) |
| Max. pressure | 135 ft. / 58 PSI (41 mwc) |
| Connections | |
| Solids handling | 3.94" (100 mm) |
| Impeller type | Screw channel impeller |
| Priming system | BBA MP50 |
| Engine | Hatz 3H50TIC |
| Emission standard | |
| Canopy | M10-23X |
| | Approx. 64 dB(A) at 33 ft. |
| Dry weight | |
| | |

Complete package designed & built by BBA Pumps

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

After sales service & product support

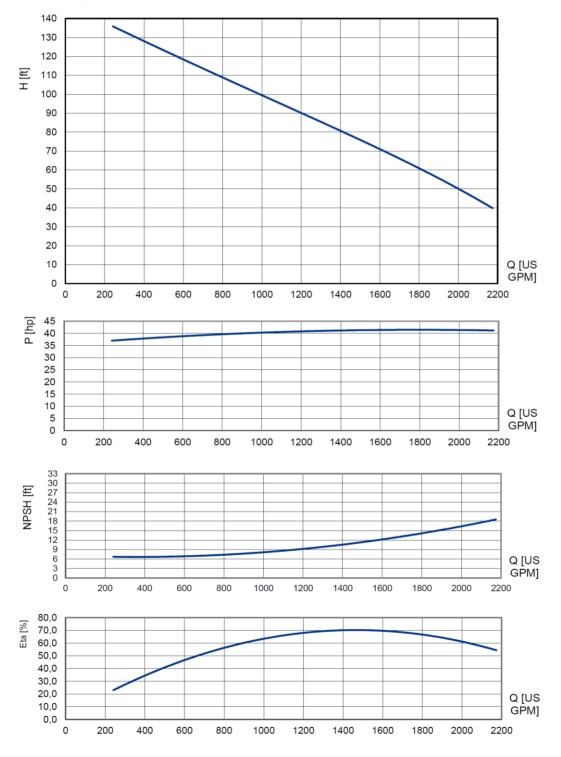
- Single supplier for parts, spares & accessories
- Dedicated customer help-desk (24h service)
- Dedicated service department in-house
- Global parts distribution network
- Optional global on-site servicing
- Extensive training options available (technical & commercial), on-site or in-house





PERFORMANCE CURVES (2100 RPM)

Continuous duty according ISO 9906







STANDARD TECHNICAL SPECIFICATIONS

BBA auto prime pump

| Pump type | .BA150KS D285 |
|-----------------------------|---|
| Max. flow | .2150 US GPM (490 m ³ /hour) |
| Max. head | .135 feet / 58 PSI (41 mwc) |
| Impeller type | .Screw channel impeller |
| Solids handling | .3.94 inch (100 mm) |
| Pump casing | .Cast iron GG20 |
| Impeller w/ cutter slots | . Chrome Moly 42CrM04 |
| Suction piece | . Chrome Moly 42CrM04 |
| Backplate w/ cutting edges. | .GG25 |
| Pump shaft | .42CrV6 |
| Shaft seal | .Mechanical seal |
| Seal faces | .Tung/Sic |
| Seal rubbers | .Viton |

BBA priming system

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

Engine

| Engine brand | .Hatz |
|-----------------------|------------------------|
| Engine type | |
| Max. power output | .59 Hp (43.7 kW) |
| Variable engine speed | .1300 - 2100 RPM |
| Fuel consumption | .225 g/kWh |
| Displacement | .1.464 cm ³ |
| Number of cylinders | .3 |
| Aftertreatment | .EGR, DOC |
| Exhaust emission US | .Tier 4 Final |

BBA control panel LC40

- Auto start/stop system
- Two float switches included (10m cable)
- Key switch
- Rpm. control with push buttons
- Warning lights
- 4.3" LCD display

Fuel system

- PE fuel tank 80 US Gallon (300 L.) net
- Fuel tank cap Ø 4" (100 mm)
- Electronic fuel injection system







Electrical system & safety features

- Nominal voltage 12 Volt
- Premium quality battery
- Low oil pressure shut down





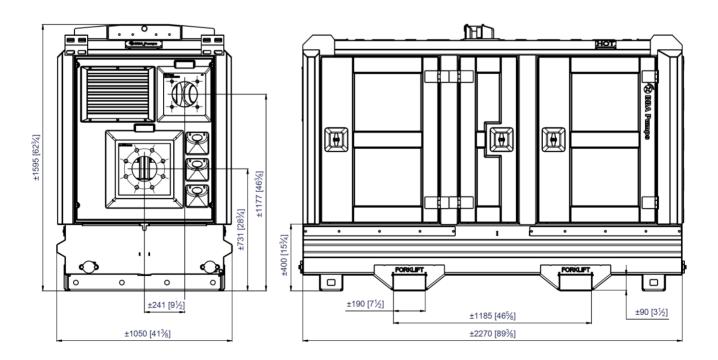
CANOPY M10-23X

BBA sound attenuating canopy

| Canopy type | M10-23X |
|----------------------|---|
| Dimensions L x W x H | 89.4 x 41.3 x 62.8 inch |
| Dimensions L x W x H | 2270 x 1050 x 1595 mm |
| Basic frame | Hot dip galvanized |
| Doors | 6 lockable composite doors |
| Fuel tank | PE net 80 US Gallon (300 ltr) |
| Fuel tank autonomy | 30-35 hours (at 2100 rpm BEP) |
| Fuel tank cap | 4 inch (100mm) |
| Forklift pockets | . Fitted with 2 forklift pockets |
| Lifting point | . Fitted with single lifting point |
| Stackable | Canopy is stackable |
| Exhaust system | Fully integrated in canopy |
| Additional | . Fitted with oil-water separator and battery isolator switch |
| Connections | Please consult "auxiliary items" in overleaf |
| Documentation box | .BBA user manual and warranty book |

BBA E-lift[©] system

The M10-23X canopy has been fitted with the BBA E-lift[©] system. By removing the roof panel, the pump and diesel engine as a whole can be removed from the canopy effortlessly allowing easy preventative maintenance on the pump and diesel engine. In addition, as the canopy is not fitted with padding or insulation materials, it can be cleaned quickly using a pressure washer.



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







Screw channel impeller This special designed closed screw impeller is a real waste warrior. Even at higher speed, or with pumping air bubbles, the pump runs vibration-free. The best choice for your sewer bypass jobs.



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



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



Fuel tank

Fully bunded, corrosion-free, 80 US Gallon, high-density polyethylene (HDPE) fuel tank, located in base of canopy.



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.





AUXILIARY ITEMS

Discharge connections

| Art.nr. | | Ø inch | Ømm | Connection | |
|---------|-----------------------|--------|-----|-----------------|--|
| 5080873 | 30° | 6 | 150 | ANSI/DIN Flange | A |
| 5080899 | 30° | 8 | 200 | ANSI Flange | 1 1 1 1 Co |
| 5080876 | 30° female (cup) | 6 | 150 | system B | A SAD |
| 5080881 | 30° male (ball/lever) | 6 | 150 | system B | The second secon |
| 5080813 | 30° female (cup) | 8 | 200 | system B | |
| 5080809 | 30° male (ball/lever) | 8 | 200 | system B | |

Suction connections

| Art.nr. | | Ø inch | Ømm | Connection | |
|---------|-----------------------|--------|-----|-----------------|---------|
| 5080884 | 30° | 6 | 150 | ANSI/DIN Flange | A |
| 5080897 | 0° | 8 | 200 | ANSI Flange | |
| 5080889 | 30° female (cup) | 6 | 150 | system B | STON ST |
| 5080890 | 30° male (ball/lever) | 6 | 150 | system B | |
| 5080914 | 0° female (cup) | 8 | 200 | system B | |
| 5080911 | 0° male (ball/lever) | 8 | 200 | system B | |

Suction hose with strainer L=6 metre

| Art.nr. | Ø inch | Ømm | connection | Pro To Data and |
|---------|--------|-----|-----------------------------|-----------------|
| 7047055 | 6 | 150 | ANSI/DIN Flange | 1 Total |
| 7047058 | 8 | 200 | Flange K295 | |
| 7047008 | 6 | 150 | System B male (ball/lever) | |
| 7047038 | 6 | 150 | System C female (cup/lever) | |

Recommended suction pipe diameter (maximum velocity = 4 m/sec)

| | | | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | |
|---------------|------|-----------------|-----------|-----------|---|-----------|------------|------------|
| US gallons | M3/H | FLOW (L/sec) | 4" 100 | 5" 125 | 6" 150 | 8" 200 | 10" 250 | 12" 300 |
| 1110 | 252 | 70 | 8.91 | 5.70 | 3.96 | 2.23 | 1.43 | 0.99 |
| 1268 | 288 | 80 | 10.19 | 6.52 | 4.53 | 2.55 | 1.63 | 1.13 |
| 1427 | 324 | 90 | 11.46 | 7.33 | 5.09 | 2.86 | 1.83 | 1.27 |
| 1585 | 360 | 100 | 12.73 | 8.15 | 5.66 | 3.18 | 2.04 | 1.41 |
| 1775 | 403 | 112 | 14.26 | 9.13 | 6.34 | 3.57 | 2.28 | 1.58 |
| 1902 | 432 | 120 | 15.28 | 9.78 | 6.79 | 3.82 | 2.44 | 1.70 |
| 2061 | 468 | 130 | 16.55 | 10.59 | 7.36 | 4.14 | 2.65 | 1.84 |
| 2219 | 504 | 140 | 17.83 | 11.41 | 7.92 | 4.46 | 2.85 | 1.98 |

