



# SYKES

PUMP SPECIFICATION SHEET

▶ HH160i-456-PR



# Built Tough

## HIGH HEAD PR



Mining &  
Quarries



Construction  
& Civil



Sewage &  
Waste Water



Rental



Industrial



Agriculture



Oil & Gas

### ▶ HEAVY DUTY

Automatic self-priming  
single stage end  
suction pump

### ▶ SOLIDS HANDLING

Large solids capacity  
while maintaining  
hydraulic efficiencies

### ▶ CORROSION RESISTANT

Stainless steel 316  
(CF8M) internals  
as standard

# TECHNICAL DATA

## DESIGN DETAILS

Auto self priming, centrifugal single stage, end suction, 2 vane semi open impeller

### PRODUCT SPECIFICATIONS

|                            |                            |
|----------------------------|----------------------------|
| Suction Flange             | 200mm [8"]                 |
| Delivery Flange            | 150mm [6"]                 |
| Solids Handling            | 65mm [2.55"]               |
| Maximum Head               | 140m [459ft]               |
| Maximum Flow               | 185L/sec [2,932 USgal/min] |
| Engine Type                | Perkins 1106D-E70TA 186kW  |
| Engine Adaptor             | SAE #1                     |
| Shaft Diameter*            | 75mm [2.95"]               |
| Fuel Rate @ BEP 2,000rpm** | 40.7L/hr [0.18 USgal/min]  |
| Fuel Rate @ BEP 1,600rpm** | 24.2L/hr [0.11 USgal/min]  |
| Fuel Tank Capacity         | 2,100L [554 USgal]         |

\* The nominated shaft diameter is the critical working diameter of the shaft, used for calculation of the shaft stiffness ratio L3/D4.

\*\* Based on standard engine brake specific fuel consumption.

### PREMIUM RANGE (PR) INCLUSIONS

- Structural Steel base.
- Galvanised steel, two-point lifting frame complete with engine canopy.
- Manual diesel fuel fill (lockable).
- Pump and engine control panel with emergency stop as standard.
- Heavy duty battery with battery box enclosure.
- Vacuum (suction inlet) and Pressure (discharge outlet) gauges.
- Pump operating range sign for optimum pump life and reliability.
- Galvanised steel sled, complete with tyne pockets and tie down points for transportation.
- Safety inclusions such as heat shields, work lights, lockable battery isolator and fire extinguisher.
- Rear discharge pipe work, complete with geared butterfly valve.

### MATERIALS OF CONSTRUCTION

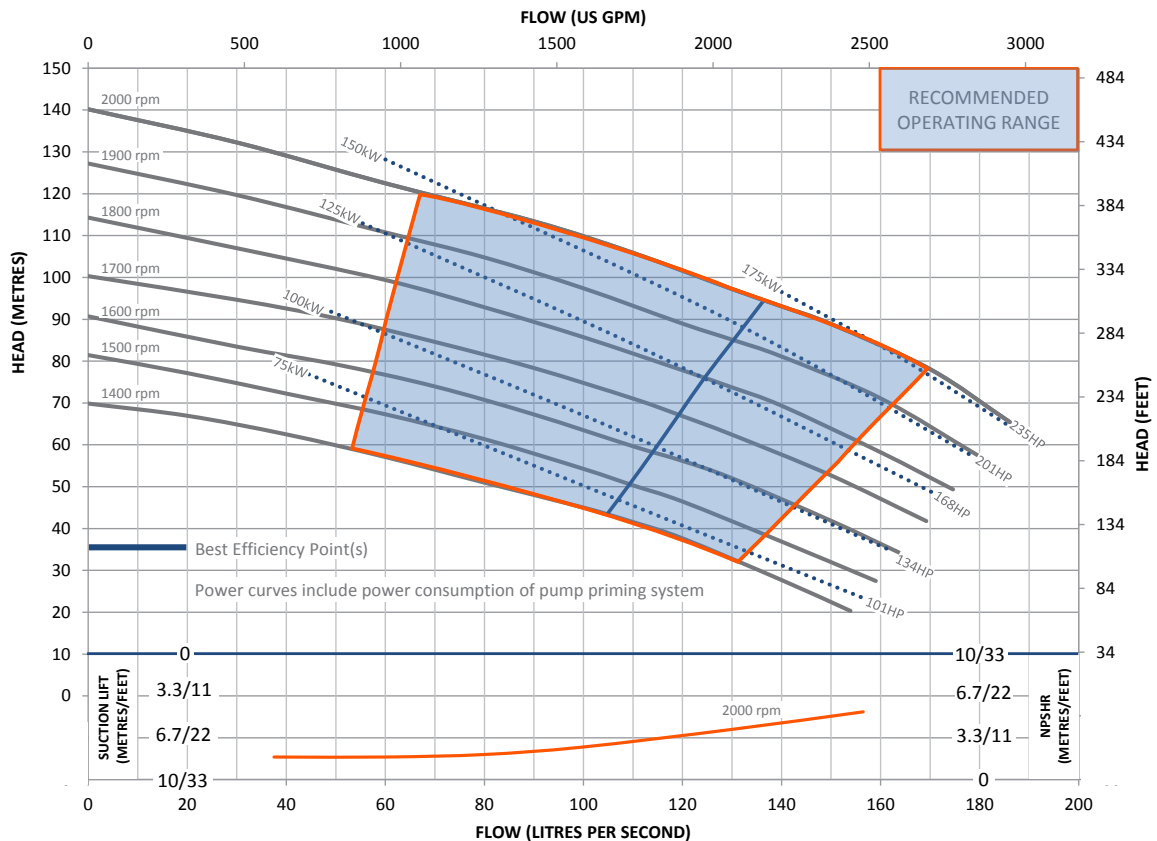
| PART                 | MATERIAL                             | MATERIAL STANDARDS |      |          |      |
|----------------------|--------------------------------------|--------------------|------|----------|------|
|                      |                                      | GRADE              | AS   | GRADE    | ASTM |
| Tee Piece            | SG Iron                              | 400/12             | 1831 | 65-45-12 | A536 |
| Front Adaptor Plate  | SG Iron                              | 400/12             | 1831 | 65-45-12 | A536 |
| Pump Casing (Volute) | SG Iron                              | 400/12             | 1831 | 65-45-12 | A536 |
| Front Wear Plate     | Stainless                            | 316/H6B            | 2074 | CF8M     | A351 |
| Impeller             | Stainless                            | 316/H6B            | 2074 | CF8M     | A351 |
| Rear Wear Plate      | Stainless                            | 316/H6B            | 2074 | CF8M     | A351 |
| Rear Adaptor Plate   | SG Iron                              | 400/12             | 1831 | 65-45-12 | A536 |
| Pump Shaft           | Stainless                            | 431                | 2074 | 98b-431  | A276 |
| Bearing Bracket      | SG Iron                              | 400/12             | 1831 | 65-45-12 | A536 |
| Bearing Covers       | SG Iron                              | 400/12             | 1831 | 65-45-12 | A536 |
| Mechanical Seal†     | Multi-spring balanced cartridge type |                    |      |          |      |

† Multi-spring balanced double hard faced cartridge type mechanical seal complete with oil lubrication and pumping ring. Seal faces are silicon carbide vs. tungsten carbide.

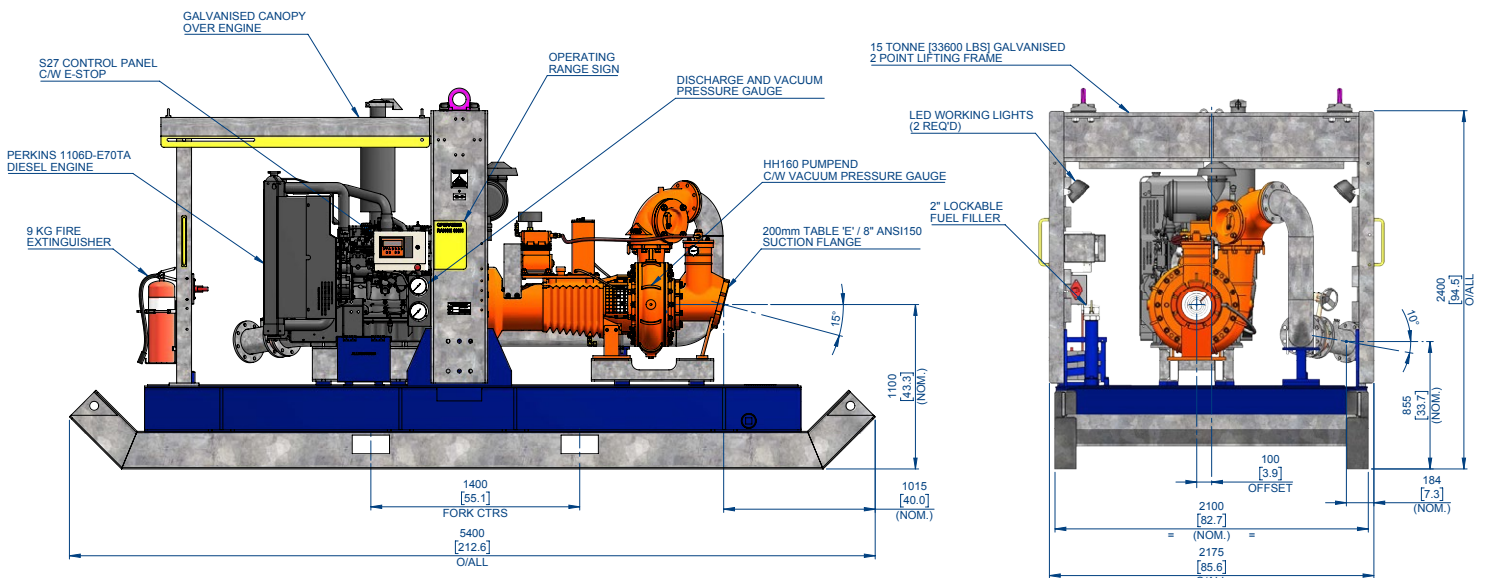
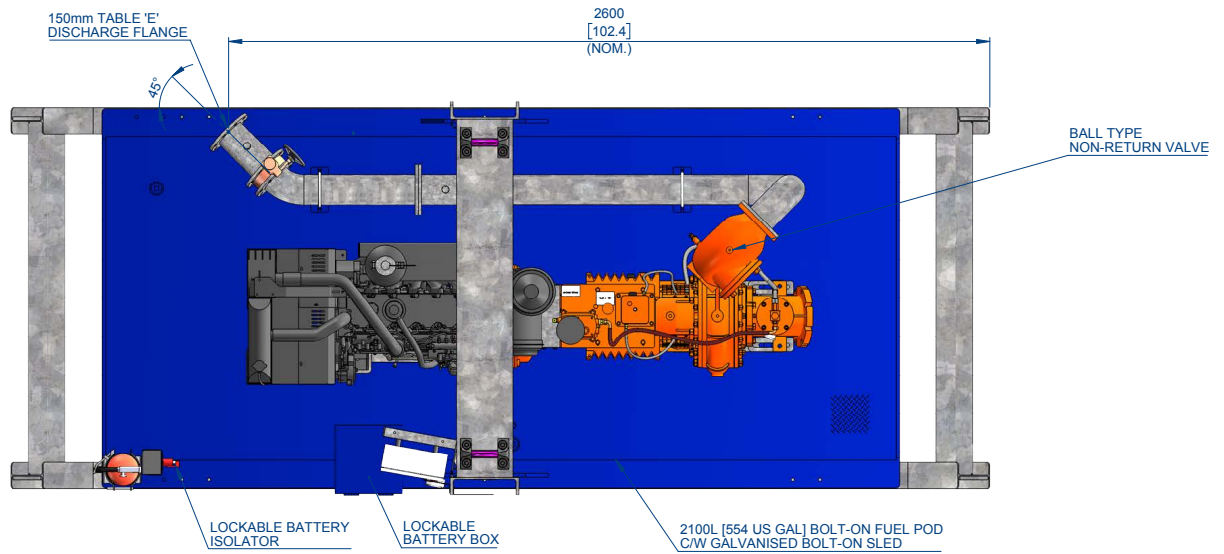
### OPTIONAL EXTRAS

Please contact us to discuss these options:

- Additional operational, mobility and safety extras such as: suction and discharge couplings, strainers, double skin fuel tanks and trailers. These can all be selected and fitted to our Premium Range (PR) pump units.
- Our PR build configuration uses Perkins diesel engines, however, alternative engine brands are available upon request.
- Other pump materials of construction are also available upon request: full 316 stainless steel, CD4MCU, chromium steel, SAF 2205 and SAF 2507.



# TECHNICAL DATA



DRY: 5,591kg [12,326 lb]

WET: 7,331kg [16,162 lb]

**Note:** Final weight and dimensions will depend on completed specifications and options, subject to manufacturing tolerances. All the information in this document is substantially correct at the time of creation and may be altered at the manufacturer's sole discretion. Any quotes and related material provided supersedes the contents hereof.

Copyright © 2019, 2024 Sykes Group Pty Ltd. All rights reserved. Sykes is a trademark and or registered trademark of Sykes Group Pty Ltd.

[www.sykesgroup.com](http://www.sykesgroup.com)