



# HELIX V BOOSTER SETS



# Introduction

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A new range of one, two and three pump booster sets available through BSS, the BOSS™ Helix V Booster offers a number of technical advantages and is suitable for a wide range of system requirements. Supplied as complete units they provide easy installation and accurate supply with automatic flow controls.

Available in 1, 2 and 3 pump versions the range offers extensive duty ranges and flexibility for most applications.

- Single pump booster
- Twin pump booster with duty/assist or duty/standby mode
- Three pump booster with duty/assist/assist or duty/assist/standby mode
- Volt-free contact for general fault condition
- Easy to read 2 line back lit LCD display
- Easy set-up
- Auto rotation, hour run counter, alarm counter
- Stainless steel pumps and pipe work
- 2 year guarantee (from date of manufacture)
- Fully WRAS approved
- Dry running protection
- Duty range 0.4l/s to 10.8 l/s- 6.2 bar max static head
- Manifold connection either 2 1/2", 2" or 1 1/4" BSP
- Vessel Connection 3/4" BSP



# BOSS Helix V Booster Product Information

All units are fully automatic self-contained pump sets designed to provide reliable water supplies. The sets are quiet running, making them suitable for use in hotels and commercial buildings. The control systems are based on proven electronic technology giving reliability and simple on-site adjustment. Sets are manufactured with either one, two or three pumps. The pumps, manifolds and controls are carefully arranged on a steel base frame to ensure that floor space used is minimal, yet maintenance is easily undertaken.



**Integrated electronic controls**  
Simplified installation



## Operational Cycle

System pressure is maintained by a hydraulic accumulator and monitored by integrated pressure sensor, keeping the system ready for instant draw off. When demand causes pressure to drop the duty pump starts, and will ramp up in speed to match the system demand. The pump will continue to run, varying its speed to match the varying demand of the system. If the demand exceeds capacity of the duty pump the assist pump will ramp up in speed ensuring duty point is maintained. When the system demand reduces to zero, the pumps will ramp down until they stop. If the duty pump should fail, the standby will start and run until pressure is restored. The duty pump is rotated between pumps after each operational cycle to ensure even wear (on multi-pump sets only).

# BOSS Helix V Booster Product Specification

## Pumps

Vertical multistage design of stainless steel construction, WRAS approved.

## Motor

Totally endorsed fan cooled (TEFC), IP55, class F, 230v, 3~, Direct online (DOL), starting via pipe mounted inverter.

## Inverter

Each pump has a dedicated pipe mounted inverter, giving maximum reliability and flexibility.

## Pipework

304 stainless steel, sized in accordance with the overall hydraulic performance of the unit. Manifold connections 2½", 2" or 1¼" BSP.

## Valves

BOSS™ Nickel-plated brass full bore isolation valves and non-return valves.



**BOSS-1 HELIX V**  
Booster

## Accumulator

1x 8L MWP 8bar, WRAS Approved C/W through flow shut-off valve for testing and draining.

## Control Panel

Volt free contact for general fault condition. 230v termination box with MCB protection per pump all mounted on base frame with anti-vibration mounts along with alarms as stated below.

## Inverter alarm

Dry running, over current, high water tem. frost protection, short circuit, over/under voltage.

## Display

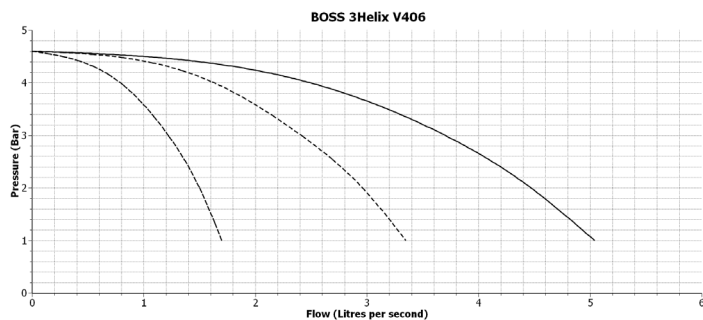
System pressure, set point.

BSS Code	Booster Description
80460601	BOSS 1HELIX V406
80460612	BOSS 1HELIX V408
80460623	BOSS 1HELIX V605
80460634	BOSS 1HELIX V608
80460645	BOSS 1HELIX V1004
80460656	BOSS 1HELIX V1006
80460667	BOSS 2HELIX V406
80460678	BOSS 2HELIX V408
80460689	BOSS 2HELIX V605
80460708	BOSS 2HELIX V608
80460719	BOSS 2HELIX V1004
80460730	BOSS 2HELIX V1006
80460741	BOSS 3HELIX V406
80460752	BOSS 3HELIX V408
80460763	BOSS 3HELIX V605
80460774	BOSS 3HELIX V608
80460785	BOSS 3HELIX V1004
80460796	BOSS 3HELIX V1006
ADD ON BOOSTER ANCILLARIES	
BOSS Booster Set Commissioning Codes	
80418398	BOSS Single Pump Booster First Set
80418406	BOSS Single Pump Booster Additional Set
80418417	BOSS 2 & 3 Pump Booster First Set
80418428	BOSS 2 & 3 Pump Booster Additional Set
Optional CAVSA Valve	
80470075	BOSS CAVSA Anti-VAC Valve
Optional Tank Float Switches	
83080098	BOSS Float Switch with 5mtr Cable
83080109	BOSS Float Switch with 10mtr Cable
Braided Flexible Connectors	
48028157	32NB ANTB 304SS, 300mm Long
48028360	50NB ANTB 304SS 300mm Long
48028371	65NB ANTB 304SS 400mm Long

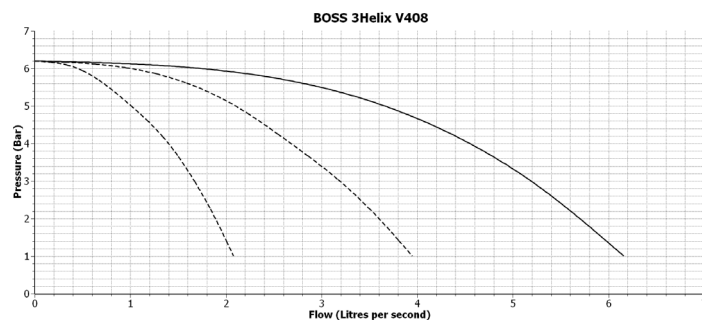


# BOSS Helix V Booster System Curves

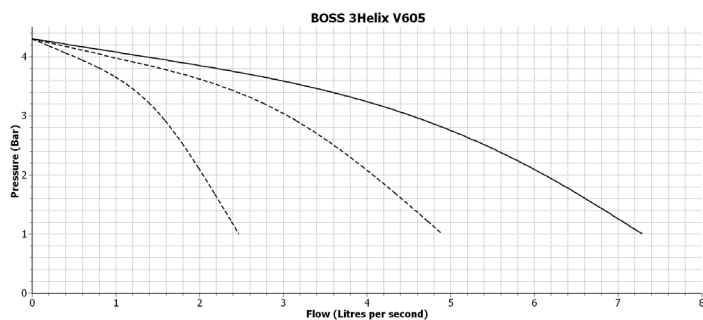
BOSS 406 Models:



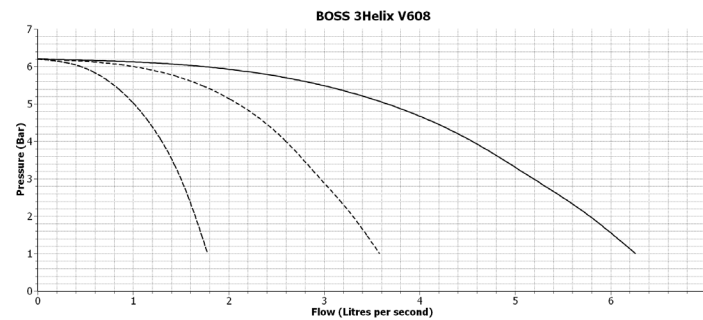
BOSS 408 Models:



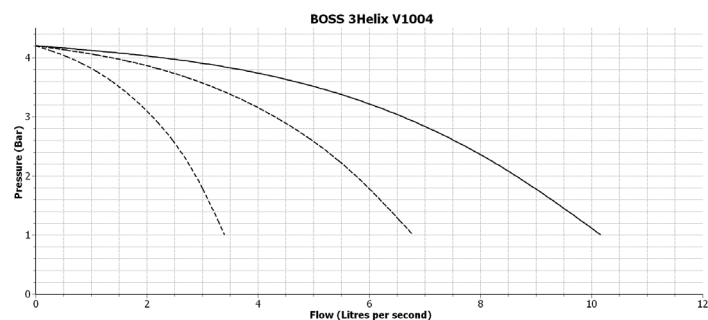
BOSS 605 Models:



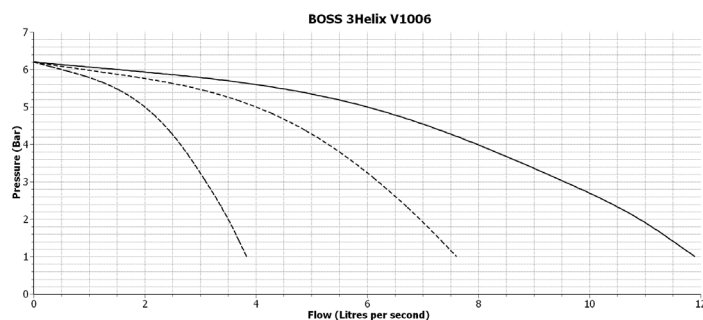
BOSS 608 Models:



BOSS 1004 Models:



BOSS 1006 Models:



## Contact Us

For any further details, please contact us via the below:

### General enquiries BOSS Technical team

Email: [bosstechnicalteam@bssgroup.com](mailto:bosstechnicalteam@bssgroup.com)

Tel: 01162455940

### Spares & Aftersales/Commissioning

Email: [aftersales@bssgroup.com](mailto:aftersales@bssgroup.com)

Tel: 0870 8503886



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