Ordnance 650 CP3

- 650 L/h flow rate at 6,000 RPM
- Billet flange with integrated gForce Block
- Modified IMV for high-speed efficiency
- Cerakote® finish to prevent corrosion
- New Bosch CP3

OPTIONS

- Duramax | Cummins | Reverse Rotation
- SP3000 mechanical supply pump
- Gear Pump Delete plate

The Ordnance 650 is designed as a max-effort, high-RPM competition pump, delivering an impressive 650 L/h flow at 6,000 RPM. Increased flow past 6,000 RPM is possible (see page 3).

This pump begins as a brand-new Bosch CP3, is modified by S&S Diesel Motorsport® and then receives a durable Cerakote finish to protect against corrosion. It's assembled with a patent pending billet aluminum flange featuring and integrated gForce block, which eliminates g-force effects during launch and simplifies the design.

The Ordnance 650 is available in Duramax, Cummins, and reverse-rotation configurations. Customers can also opt for the Gen2 SP3000 low-pressure supply pump or a Gear Pump Delete plate, depending on the application.

The S&S Regulated Filter Head (FDS-RFH-ASM) is the recommended supply pressure regulator for the Ordnance 650 CP3.

Application

High-pressure fueling for max-effort, max-rpm competition

Technical Specifications

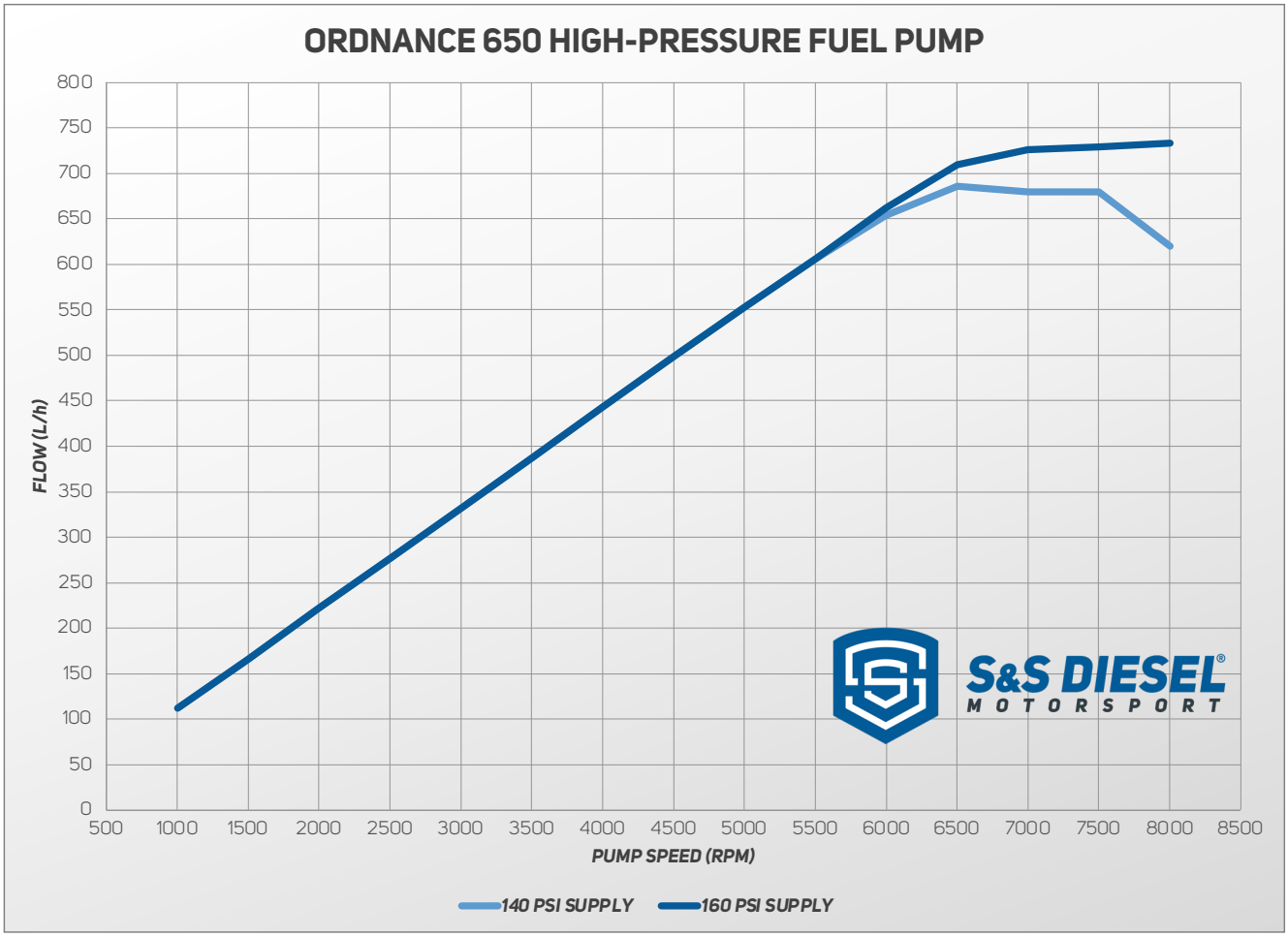
Fuel Compatibility	Diesel
Weight (with SP3000)	8.6 kg (19 lbs)
Protrusion from Front Cover (SP3000)	171 mm (6.73 in)
Weight (Gear Pump Delete)	7.4 kg (16.3 lbs)
Protrusion from Front Cover (Gear Pump Delete)	107 mm (4.21 in)
Displacement	1,850 mm^3/rev
Flow Rate	650 L/h (2.86 GPM)
Max Speed	8,000 RPM (tested) 7,000 RPM (recommended)
Fuel Temperature	-40°C (-40°F) to 70°C (158°F)
High-Pressure Outlet Port	M14x1.5(M)
Feed and Return Ports	M12x1.5(F)
Recommended Supply Pressure	9.65 bar (140 psi)
Required Supply Flow (6,000 RPM)	820 L/h (3.61 GPM)
Required Supply Flow (850 RPM)	120 L/h (0.53 GPM)

Quick Start

Keys to Success

- The Ordnance 650 does not have a stock pump curve
    - Refer to the data sheet included with each pump for the correct IMV curve data
    - Required amperage to completely close IMV is 2,200 mA
- The M12x1.5 **feed port** is on the billet aluminum flange
- Use -6AN hose for the low-pressure feed
- The M12x1.5 **return port** is on the forged pump body
- Each pump return should have a dedicated -6AN hose back to the fuel cell under fluid level
- Use the S&S Regulated Filter Head (FDS-RFH-ASM) to regulate supply pressure
- If moving a high-pressure outlet fitting, make sure that exactly **one** ceramic check ball remains in each outlet valve port.

Flow Data


ORDNANCE 650 HIGH-PRESSURE FUEL PUMP
FLOW (L/h)
800
750
700
650
600
550
500
450
400
350
300
250
200
150
100
50
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000
6500
7000
7500
8000
8500
PUMP SPEED (RPM)
140 PSI SUPPLY
160 PSI SUPPLY