

**Data Sheet** 

# **D1 High Power Open Circuit Pumps** 145/193/260 cm<sup>3</sup>

For more than 40 years, Danfoss has been developing state-of-the-art components and systems for mobile machinery used in off-highway operations around the world. We have become a preferred supplier by offering the best of what really matters: The hardware inside your vehicle application.

D1 - our new generation of servo-controlled high power open circuit pump. It is designed for quality and reliability and offers a wide variety of control options, greater total efficiency, and easy installation

The D1 pump is well suited for heavy duty applications: Concrete machinery, Mining machinery, Crane, Drilling machinery, Marine and Off-shore machinery, etc.

The D1 is PLUS+1® Compliant. PLUS+1® allows you to rapidly develop and customize electronic machine control. It opens up the future by combining machine controls and diagnostics in an integrated operating network.



### **Features**

# Designed for quality and reliability

- Proven and optimized 9 piston rotating group
- Angled bore cylinderblock design improves self-priming capability
- The spherical valve plate and cylinderblock surface provide stable cylinderblock rotation, thus achieve high efficiency

### Installation and packaging benefits

- Mainstream installation
- Standardized connector interface
- High power density

# **Expanded functionality**

- Integral charge pump allows the pump to run with higher speed
- PLUS+1<sup>®</sup> compliant control
- Full power through drive capability
- The electric displacement control features with manual override fuction for diagnosis

### **Control options**

- TPE2: Power Control + Pressure compensated control + Electric displacement control
- TPSN: Power control + Pressure compensated control + Load sensing control

Comprehensive technical literature online at *powersolutions.danfoss.com* 

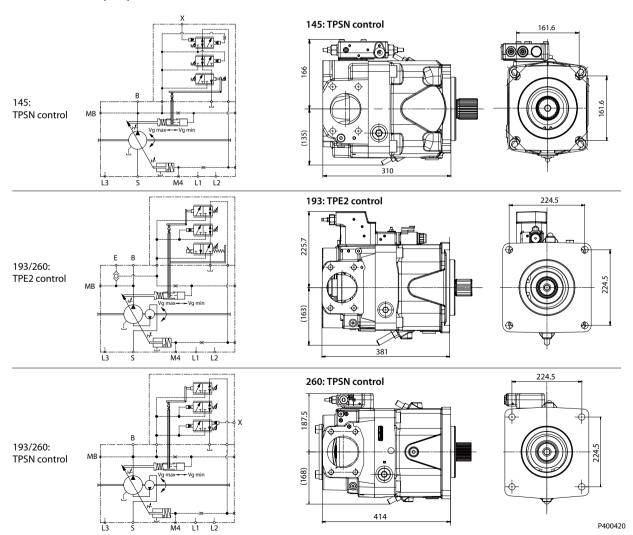


# **Technical Specifications**

Features		Unit	145 (Without Charge Pump)	193 (With Charge Pump)	260 (With Charge Pump)
Displacement		cm <sup>3</sup>	145	193	260
Weight (approx.)		kg	77	107.5	144
Input Speed	Rated	min <sup>-1</sup>	2200	2500	2300
	Max.		2500	2500	2300
Theoretical Flow		l/min	319	483	598
System Pressure	Max. Working Pressure*	bar	350	350	350
	Max. Pressure		400	400	400
Inlet Pressure (Abs)	Min.	bar	0.8	0.6	0.6
	Max.	bar	30	2	2
Case Pressure (Abs)	Max.	bar	2	2	2

<sup>\*</sup> Applied pressures above maximum working pressure requires Danfoss application approval.

### Schematics/Dimensions (mm)



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