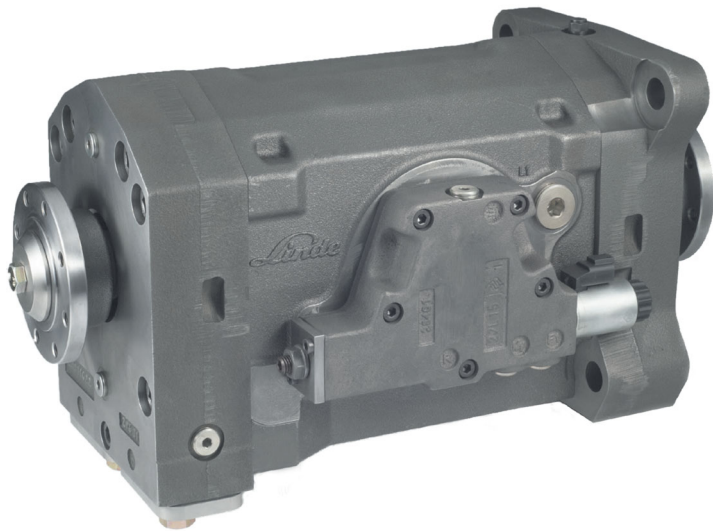


HMV-02 D

Variable displacement double motor

Linde Hydraulics

This new axial piston motor has been developed by Linde Hydraulics to achieve maximum speeds higher than conventional swash plate designs. Additionally, a large displacement volume in a compact design means wider transmission speed ranges, normally achieved with modular transmissions, are possible. The HMV-02 D is about 30 % lighter than a motor combined with transfer gear box, and has a smaller footprint.

The increased power density was achieved through the innovative design of two in-line swash plate rotating groups in a "face-to-face" arrangement. As a result, only one control is needed to adjust the displacement volume of the two motors. The inner lateral forces are compensated so that only one drive shaft and two (instead of four) bearings are required for both rotating groups.

Design Characteristics

- >> Axial piston double motor in swashplate design for high pressure open and closed circuit systems
- >> Two rotating groups in face-to-face arrangement with common control
- >> PTO through-drive motor
- >> Positive control (default=Vmin)

Advantages

- >> High power density
- >> High starting torque
- >> High speed capability
- >> Compact dimensions
- >> Low weight
- >> Increased average efficiency

General technical data

Nominal size			105	165
Displacement	Maximum displacement	cc/rev	210	331.2
	Max. operating speed at Vmax	rpm	3300	2900
Speed	Maximum speed at Vmax ¹	rpm	3400	3100
	Max. operating speed at Vmin	rpm	4100	3500
	Maximum speed at Vmin ¹	rpm	4400	3700
	Nominal pressure	bar	450	450
Pressure	Maximum pressure ²	bar	500	500
	Max. housing pressure	bar	2.5	2.5
Torque	Output torque at Δp= 430 bar and Vmax	Nm	1437	2267
Corner power (theoretical)		kW	677	878
Weight (without oil) approx.		kg	98	149

¹ highest transient speed, that can temporarily occur

² highest transient pressure, that can temporarily occur

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Customer interfaces

Shafts

- >> **Nominal size 105**
 - ANSI B92.1, 16/32 - 23 teeth (coupling flange optional)
- >> **Nominal size 165**
 - ANSI B92.1, 16/32 - 27 teeth (coupling flange optional)
- >> More shafts upon request

Flanges

- >> **Nominal size 105**
 - 4-hole (customized)
Ø 152.4 / 200 mm
- >> **Nominal size 165**
 - 4-hole ISO 3019-1
Ø 165.1 / 224.5 mm
- >> More flanges upon request

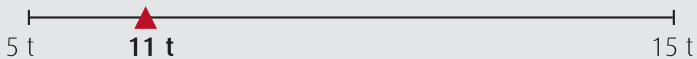
Ports

- >> **Nominal size 105**
 - Radial working ports, size 32
- >> **Nominal size 165**
 - Radial working ports, size 38
- >> More ports upon request

Application examples



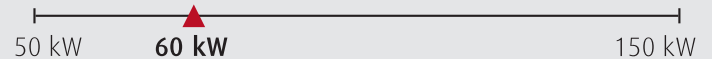
Category



Equipment

- A** 1 x iCon
- B** 1 x HPV 105-02 E2
- C** 1 x HMV 165-02 D E6

Category



Equipment

- A** 1 x iCon
- B** 1 x HPV 75-02 E2
- C** 1 x HMV 105-02 D E6