

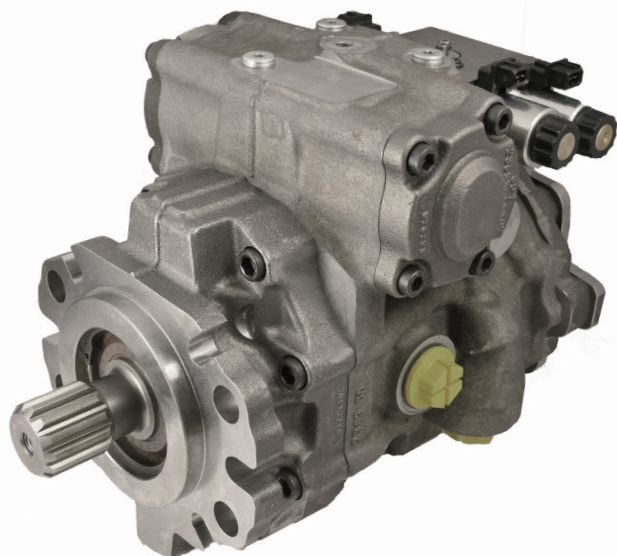


CPV

Variable Displacement Pump

Swashplate Design

Closed Circuit Operation



With the new generation of swash plate pumps for the closed hydraulic circuit, LHY Powertrain combines the many years of experience of the 02 series with today's diverse market requirements for a closed circuit pump.

With its modular concept, it offers a wide range of options and globally standardised interfaces with minimum space requirements. Thanks to the robust and proven rotative group of the 02 series and its optimised flow concept, the pump specifically reduces flow losses and noise emissions and thus achieves a very high level of efficiency in relation to the market without compromising on durability.

In terms of efficiency, the CPV has, among others, a new assembly concept that allows wear parts to be replaced individually without dismantling the pump.

Design Characteristics

- >> Modularity (e.g. controller, peripheral parts, etc.)
- >> High integration
- >> Maintenance and repair friendliness
- >> Controller with and without position feedback
- >> Interfaces meet common understanding of global market standards (mechanical, hydraulic, electric)

Advantages

- >> Highly flexible compilation of individual configurations
- >> Extremely compact pump
- >> Cost-effective repair and conversions
- >> Suitability for load dependent & independent applications
- >> Versatile applications

General technical data*

Nominal size			
Displacement	Max. Displacement	cc/rev	
	Internal gear pump (standard size)		
Speed	Nom. speed at V_{gmax}	rpm	
	Max. speed at V_{gmax}^3		
	Min. speed		
Pressure	Nominal pressure	Main pump	bar
		IGP(standard)	
	Maximum pressure ²	Main pump	
		IGP (standard)	
Power	Corner Power (at $\Delta p=430 \text{ bar}/V_{gmax}/n_{nom}$)	kW	

65	85	100	115	145	175
66.6	85.6	100.5	115.4	149	175
15	19	19	23	31	38
3900	3600	3450	3300	3100	2900
4100	3800	3650	3500	3300	3050
500					
450	450	420	450	450	450
25	25	25	25	25	25
500	500	470	500	500	500
40	40	40	40	40	40
186	221	248	273	322	364

¹ theoretical data of a single unit without efficiency effects

² highest transient pressure, that can temporarily occur

³ highest transient speed, that can temporarily occur

* These data correspond to the current development status and may deviate in the case of the series-ready product



CPV

Variable Displacement Pump

Swashplate Design

Closed Circuit Operation



Customer interfaces

Shafts & Power take-off (PTO)

Shafts

- >> ISO 3019-1/SAE J744
- >> DIN5480
- >> SAE J1946 (Companion flange)

Power take-off (PTO)

- >> SAE A
- >> SAE B
- >> SAE C
- >> SAE D
- >> SAE E

Flanges

- >> SAE C - 2-hole / 4-hole
- >> SAE D - 2-hole / 4-hole
- >> SAE E - 4-hole

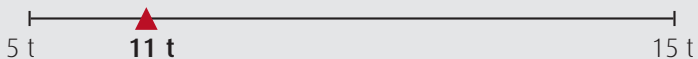
Ports

- >> Work ports according to ISO 6162-2 / radial
- >> Auxiliary ports according to ISO 6149-1 / iso metric

Application examples



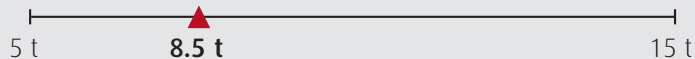
Category



Equipment

- A** 1 x iCon CD88-01
- B** 1 x CPV 115
- C** 1 x HMV 165-02 D

Machine Weight



Equipment

- A** 1 x iCon CD88-01
- B** 1 x CPV 115
- C** 1 x HMV 165-02 D E6

LHY Powertrain GmbH & Co. KG

Wailandtstraße 13

63741 Aschaffenburg

Fon +49 6021 150 00

Email info@lhy.com

Web <https://www.lhy.com>