Open & Closed Circuit. Variable Displacement Motor. CMV.

Design characteristics

- Axial piston motor in bent axis design _
- Standardized interfaces _
- Speed sensor optional _

Product advantages

High speeds _

СМУ Nom Displ

Compact unit

Shift in Motion

LEARN MORE CMV

- High power density
- Low windage losses _

With the next generation of the bent axis motors, Linde Hydraulics expands its customer oriented portfolio of highquality components for hydraulic systems. Due to their standardized interfaces, e.g. the plug-in flange according to ISO, the CMV and CMF fit a high variety of applications, without the need of adaptors. The motors enable a more cost effective operation of the respective applications thanks to low windage losses and lighter weight.



General technical data

	60	85	115	140	170	215						
Max. displacement	cc/rev	60	85	115	140	170	215					
Max. operating speed at $\ensuremath{V_{max}}$	rpm	4450	3900	3550	3250	3100	2900					
Max. speed at V _{max} *	rpm	on request										
Max. operating speed at $\mathrm{V}_{\mathrm{min}}$	rpm	7200	6800	6150	5600	4900	4600					
Max. speed at V _{min} *	rpm		on request									
Nominal pressure	bar	450	450	450	450	450	450					
Max. pressure**	bar	500	500	500	500	500	500					
Max. housing pressure	bar	2.5	2.5	2.5	2.5	2.5	2.5					
Output torque (Δp =430 bar and Vmax)	Nm	411	582	787	958	1163	1471					
(Vmax x nmax at Vmin x ∆p 430 bar)	kW	191	238	293	336	378	447					
approx. (without oil)	kg	27.7	36.3	44.8	59.2	62.1	76.4					
	Max. displacement Max. operating speed at V_{max} Max. speed at V_{max}^* Max. operating speed at V_{min} Max. speed at V_{min}^* Nominal pressure Max. pressure ^{**} Max. housing pressure Output torque (Δp =430 bar and Vmax) (Vmax x nmax at Vmin x Δp 430 bar) approx. (without oil)	Max. displacement cc/rev Max. operating speed at V _{max} rpm Max. speed at V _{max} * rpm Max. operating speed at V _{min} rpm Max. operating speed at V _{min} rpm Max. speed at V _{min} * rpm Nominal pressure bar Max. housing pressure bar Output torque (Δp=430 bar and Vmax) Nm (Vmax x nmax at Vmin x Δp 430 bar) kW approx. (without oil) kg	60Max. displacementcc/rev 60 Max. operating speed at V_{max} rpm 4450 Max. speed at V_{max}^* rpmMax. operating speed at V_{min} rpmMax. operating speed at V_{min} rpmMax. speed at V_{min}^* rpmNominal pressurebarMax. pressure**barSoloSoloMax. housing pressurebarOutput torque (Δp =430 bar and Vmax)Nm411(Vmax x nmax at Vmin x Δp 430 bar)kWapprox. (without oil)kg27.7	60 85 Max. displacement cc/rev 60 85 Max. operating speed at V_{max} rpm 4450 3900 Max. operating speed at V_{max}^* rpm 4450 3900 Max. operating speed at V_{max}^* rpm 7200 6800 Max. operating speed at V_{min} rpm 7200 6800 Max. speed at V_{min}^* rpm 7200 6800 Max. speed at V_{min}^* rpm 7200 6800 Max. speed at V_{min}^* rpm 7200 500 Max. pressure bar 450 450 Max. pressure** bar 500 500 Max. housing pressure bar 2.5 2.5 Output torque (Δp =430 bar and Vmax) Nm 411 582 (Vmax x nmax at Vmin x Δp 430 bar) kW 191 238 appr0x. (without oil) kg 27.7 36.3	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	60 85 115 140 Max. displacement cc/rev 60 85 115 140 Max. operating speed at V _{max} rpm 4450 3900 3550 3250 Max. speed at V _{max} * rpm 4450 3900 3550 3250 Max. operating speed at V _{max} * rpm 7200 6800 6150 5600 Max. operating speed at V _{min} * rpm 7200 6800 6150 5600 Max. speed at V _{min} * rpm 7200 6800 6150 5600 Max. speed at V _{min} * rpm 7200 6800 6150 5600 Max. speed at V _{min} * rpm 7200 6800 6150 5600 Max. speed at V _{min} * rpm 700 6800 6150 5600 Max. pressure bar 450 450 450 450 Max. housing pressure bar 2.5 2.5 2.5 2.5 Output torque (Δp=430 bar and Vmax) Nm 411 <td>60 85 115 140 170 Max. displacement cc/rev 60 85 115 140 170 Max. operating speed at V_{max} rpm 4450 3900 3550 3250 3100 Max. operating speed at V_{max}* rpm 4450 3900 3550 5600 4900 Max. operating speed at V_{max}* rpm 7200 6800 6150 5600 4900 Max. speed at V_{min}* rpm 7200 6800 6150 5600 4900 Max. speed at V_{min}* rpm 7200 6800 6150 5600 4900 Max. speed at V_{min}* rpm 7200 6800 6150 5600 4900 Max. speed at V_{min}* rpm 7200 6800 6150 5600 4900 Max. speed at V_{min}* rpm 7200 6800 500 500 500 Max. pressure** bar 500 500 500 500 500 500 50</td>	60 85 115 140 170 Max. displacement cc/rev 60 85 115 140 170 Max. operating speed at V _{max} rpm 4450 3900 3550 3250 3100 Max. operating speed at V _{max} * rpm 4450 3900 3550 5600 4900 Max. operating speed at V _{max} * rpm 7200 6800 6150 5600 4900 Max. speed at V _{min} * rpm 7200 6800 6150 5600 4900 Max. speed at V _{min} * rpm 7200 6800 6150 5600 4900 Max. speed at V _{min} * rpm 7200 6800 6150 5600 4900 Max. speed at V _{min} * rpm 7200 6800 6150 5600 4900 Max. speed at V _{min} * rpm 7200 6800 500 500 500 Max. pressure** bar 500 500 500 500 500 500 50					

Customer interfaces

Control options					Sei	Sensors Flanges		Shafts****			Ports****						
	Proportional	2-Position	default = Vmin (positive control)	default = Vmax (negative control)	Pressure override	Speed		ISO 3019-1 (SAE) 744)	ISO 3019 - 2 (metric)	Plug-in ISO 3019 – 2	ISO 3019-1 (SAE) 744) ANSI B92.1-1970	Compagnion flange SAE J 1946 Typ A	DIN 5480		ISO 6162-2 Side ports	ISO 6162-2 Twin ports (rear)	ISO 6149 – 1
Electro-hydraulic	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	Work ports	\checkmark	\checkmark	
Hydraulic	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark									Threaded ports			\checkmark

* highest transient speed, that can temporarily occur | ** highest transient pressure, that can temporarily occur | **** Availability depends on nominal size

SIZE AT DEVELOPMENT **STAGE.** CONTACT US!