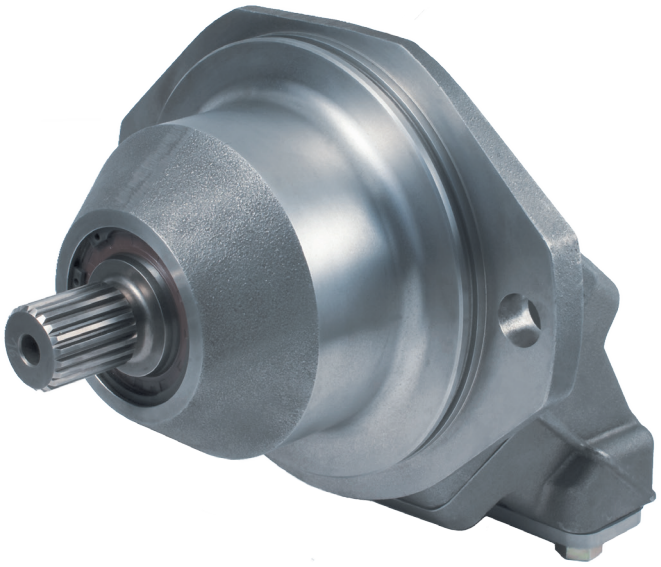
CMF Fixed displacement Bent axis motor

Linde Hydraulics



With the next generation of the bent axis motors, Linde Hydraulics expands its customer oriented portfolio of high-quality components for hydraulic systems.

The fixed displacement motor CMF is characterized by its high external load and speed capacity. Due to its standardized interfaces, e.g. the plug-in flange according to ISO, the CMF fits a high variety of applications, without the need of adaptors.

Low windage losses in combination with the low weight of the motor support the cost-effective operation of the application.

Design features

>> Fixed displacement bent axis motor
>> Standardized interfaces
>> Speed sensor optional

Advantages

>> High power density
>> High speeds
>> Low windage losses

General technical data

Nominal size			80
Displacement		cc/rev	80
Speed	Maximum operating speed	rev/min	4500
	Maximum speed[1]	rev/min	5000
Pressure	Nominal pressure	bar	450
	Maximum pressure[2]	bar	500
	Maximum housing pressure	bar	2.5
Torque	Output torque at Δp= 430 bar	Nm	547
Corner power (theoretical)		kW	258
Weight (without oil) approx.		kg	23.0

[1] highest transient speed, that can temporarily occur
[2] highest transient pressure, that can temporarily occur

CMF

Fixed displacement
Bent axis motor

Linde Hydraulics

Customer interfaces

Shafts

>> **ANSI** B92.1 – 1970 SAE 16/32, 21 T

>> **DIN** 5480 – W40x2x30x18x9g

>> More shafts upon request

Flanges

>> **ISO** 3019 – 1/127 – 4
(SAE J744; SAE C)

>> **ISO** 3019 – 2 - 140B4HL

>> **Plug-in ISO** 3019 – 2/190 – 2

>> More flanges upon request

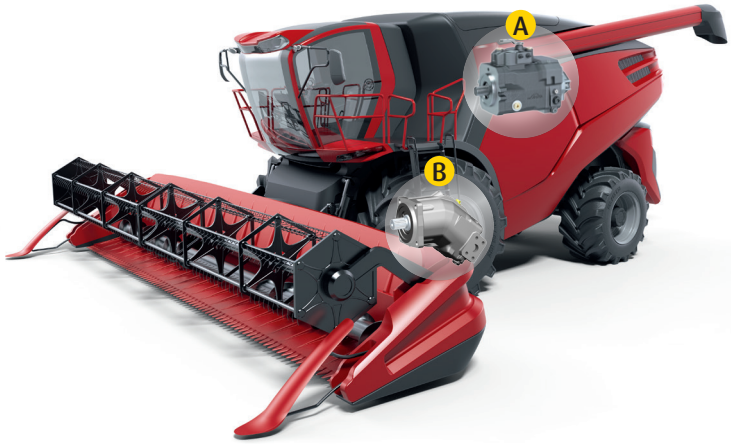
Ports

>> **Work ports** ISO 6162 – 2
- Side Ports
- Twin Ports

>> **Threaded ports** ISO 6149 – 1

>> More ports upon request

Application examples



Category

200 kW — **450 kW** — 900 kW

Category

100 kW — **155 kW** — 500 kW

Equipment

A	1 x HPV 105-02 E2
B	1 x HMV 210-02
C	1 x HMV 135-02
D	1 x CMF 80

Equipment

A	1 x HPV 105-02 M1R
B	2 x CMF 80

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CMF Fixed displacement Bent axis motor

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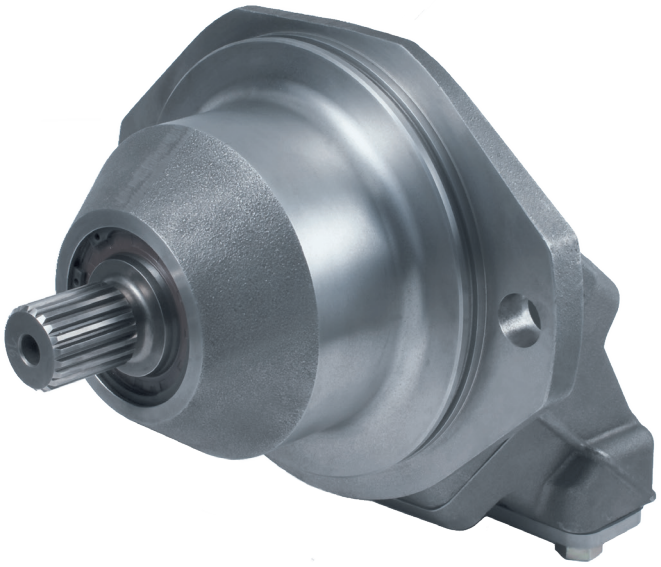

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CMF

Fixed displacement
Bent axis motor

Linde Hydraulics

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>> **DIN** 5480 – W40x2x30x18x9g

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(SAE J744; SAE C)

>> **ISO** 3019 – 2 - 140B4HL

>> **Plug-in ISO** 3019 – 2/190 – 2

>> More flanges upon request

Ports

>> **Work ports** ISO 6162 – 2
- Side Ports
- Twin Ports

>> **Threaded ports** ISO 6149 – 1

>> More ports upon request

Application examples

Category

8 t — **22 t** — 70 t

Category

100 t — **700 t** — 3000 t

Equipment

A	2 x HPV 135-02 E1
B	1 x HPR 75-02 LP
C	1 x VW14 M3
D	1 x HMV 280-02 E1
E	1 x CMF 80

Equipment

A	2 x HPR 210-02
B	1 x VT8
C	1 x CMF 80
D	1 x HMR 135-02

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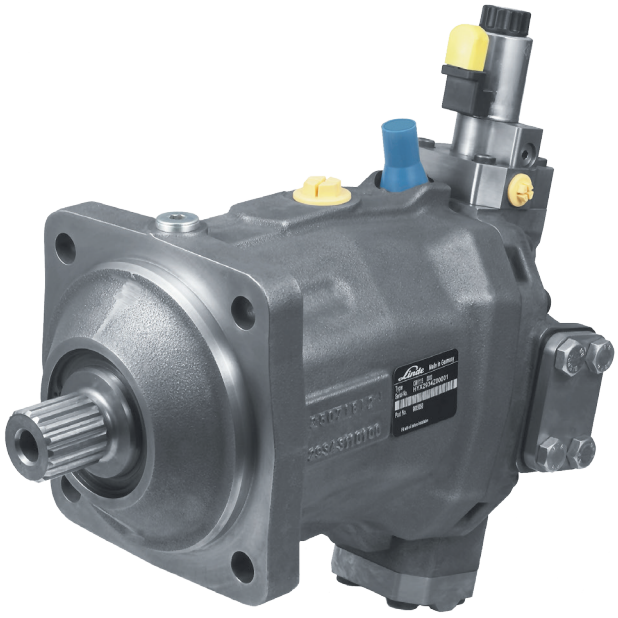
CMV Variable displacement Bent axis motor



With the next generation of the bent axis motors, Linde Hydraulics expands its customer oriented portfolio of high-quality components for hydraulic systems.

The variable displacement motor CMV is characterized by its high external load and speed capacity. Due to its standardized interfaces, e.g. the plug-in flange according to ISO, the CMF fits a high variety of applications, without the need of adaptors.

Low windage losses in combination with the low weight of the motor support the cost-effective operation of the application.

Design features

>> Variable displacement bent axis motor
>> Standardized interfaces
>> Speed sensor optional

Advantages

>> High power density
>> High speeds
>> Low windage losses

General technical data

sizes at development stage – Contact us!

Nominal size			60	**85**	115	**140**	170	215
Displacement	Maximum displacement	cc/rev	60	85	115	140	170	215
Speed	Maximum operating speed at Vmax	rev/min	4450	3900	3550	3350	3100	2900
	Maximum operating speed at Vmin	rev/min	7200	6800	6150	5800	4900	4600
Pressure	Nominal pressure	bar	450	450	450	450	450	450
	Maximum pressure[1]	bar	500	500	500	500	500	500
	Maximum housing pressure	bar	2.5	2.5	2.5	2.5	2.5	2.5
Torque	Output torque at Δp= 430 bar and Vmax	Nm	411	582	787	958	1163	1471
Corner power (theoretical)		kW	191	238	293	336	378	447
Weight (without oil) approx.		kg	27.7	36.3	44.8	59.2	62.1	76.4

[1] highest transient pressure, that can temporarily occur

CMV Variable displacement Bent axis motor

Linde Hydraulics

Customer interfaces

Shafts

>> **DIN** 5480

>> **ANSI** B92.1 – 1970

>> More shafts upon request

Flanges

>> **ISO** 3019 – 1 (SAE J744)

>> **ISO** 3019 – 2 (metric)

>> **Plug-in ISO** 3019 – 2

>> More flanges upon request

Ports

>> **Work ports** ISO 6162 – 2
- Side Ports
- Twin Ports

>> **Threaded ports** ISO 6149 – 1

>> More ports upon request

Application examples

Category

75 kW **155 kW** 200 kW

Equipment

A 1 x HPV 210-02 E2
B 4 x CMV 60 plug-in

Category

100 kW **155 kW** 500 kW

Equipment

A 1 x HPV 105-02 M1R
B 1 x CMV 115 plug-in

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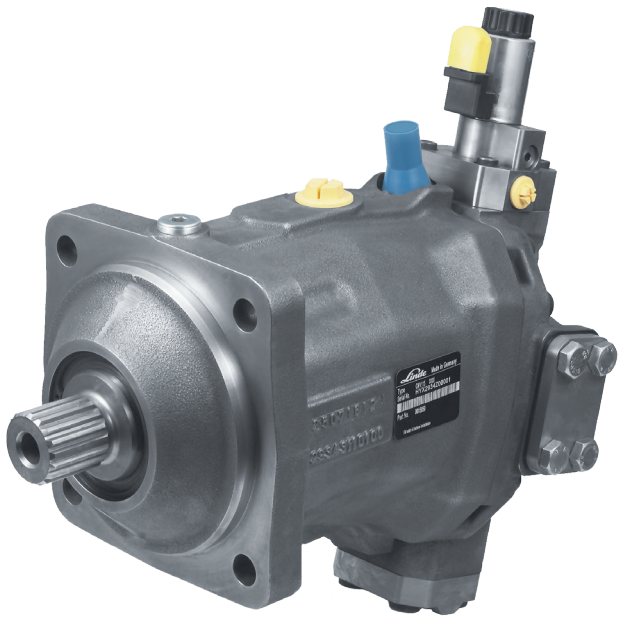

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Low windage losses in combination with the low weight of the motor support the cost-effective operation of the application.

Design features

>> Variable displacement bent axis motor
>> Standardized interfaces
>> Speed sensor optional

Advantages

>> High power density
>> High speeds
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Sizes at development stage – Contact us!

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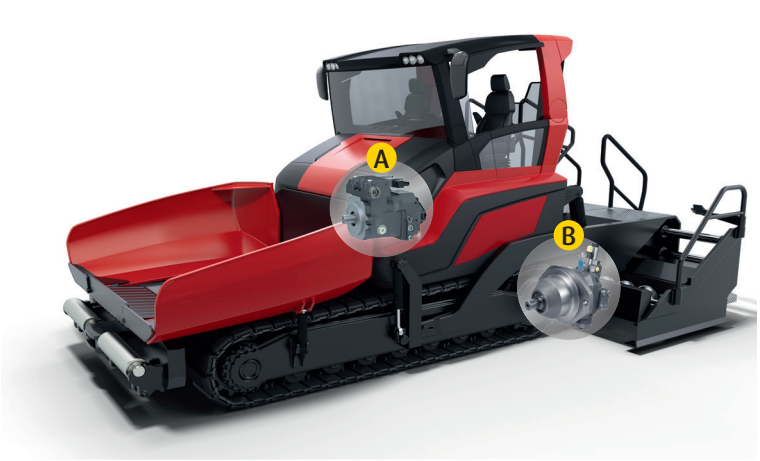

Category

10 t | **15 t** | 25 t

Equipment

A	1 x HPV 105-02 E1 + 1x HPV 55-02 E5
B	1 x CMV 115
C	1 x HMF 35-02
D	1 x CMV 60 Plug-in

Category

5 m | **9 m** | 13 m

Equipment

A	2 x HPV 55-02 E1P
B	2 x CMV 60 Plug-in

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