

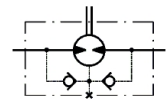
# MMS50CP

## PRODUCT FEATURE SUMMARY

DATE: 08.03.2024  
MODEL TYPE: MMS50CP

Username: Evelin Badic

<b>CNSORDERNO</b> (Order number)	MMS50CP
<b>AO</b> (Adjustment Option)	omit: without valve
<b>MF</b> (Mounting Flange)	omit: Three bolts mount
<b>PT</b> (Port type)	S: Side ports
<b>DC</b> (Displacement code)	50: 50,0 cm <sup>3</sup> /rev [3.05 in <sup>3</sup> /rev]
<b>SE</b> (Shaft Extensions)	C: $\varnothing$ 16 straight, Parallel key A5x5x16 DIN6885
<b>P</b> (Ports)	omit: BSPP (ISO 228)
<b>LC</b> (Line to control)	-
<b>VPR</b> (Valve Rated Pressurebar)	-
<b>SFMS</b> (Special Features Measure speed)	omit: no special features
<b>SFGWS</b> (Special Features of gear wheel set)	omit: no special features
<b>SFDR</b> (Special Features - Direction of rotation)	omit: Standard
<b>OP</b> (Option (Paint))	P: Paint
<b>INFO</b> (Info)	PDF catalog
<b>L</b> (mm)	122.5
<b>L1</b> (mm)	21



## DATA SHEET

Type		
<b>Displacement, cm<sup>3</sup>/rev [in<sup>3</sup>/rev]</b>		50[3.05]
<b>Max. Speed, [RPM]</b>	cont.	400
	Int.*	500
<b>Max. Torque, daNm [lb-in]</b>	cont.	4,5 [398]
	Int.*	5,8 [513]
<b>Max. Output, kW [HP]</b>	cont.	1,7 [2.48]
	Int.*	2,1 [2.8]
<b>Max. Pressure Drop, bar [PSI]</b>	cont.	70 [1015]
	Int.*	90 [1300]
<b>Max. Oil Flow, lpm [GPM]</b>	cont.	20 [5.5]
	Int.*	25 [6.6]
<b>Max. Inlet Pressure, bar [PSI]</b>	cont.	140 [2030]
	Int.*	175 [2540]
	peak**	225 [3260]
<b>Max. Return Pressure with Drain Line bar [PSI]</b>	cont.	140 [2030]
	Int.*	175 [2540]
	peak**	225 [3260]
<b>Pressure with Unloaded Shaft, bar [PSI]</b>		4 [60]
<b>Min Starting Torque, daNm [lb-in]</b>	at max. press. drop cont.	3,7 [330]
	at max. press. drop Int.*	4,8 [425]
<b>Min. Speed***, [RPM]</b>		20
<b>Weight, kg [lb]</b>		2,5 [5.51]

\* Intermittent operation: the permissible values may occur for max. 10% of every minute.

\*\* Peak load: the permissible values may occur for max. 1% of every minute.

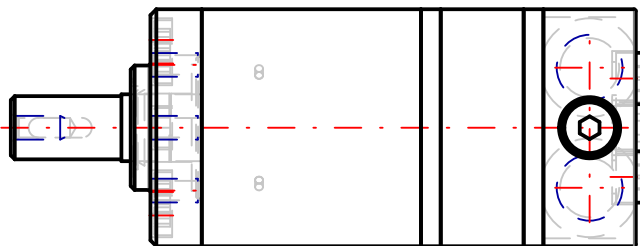
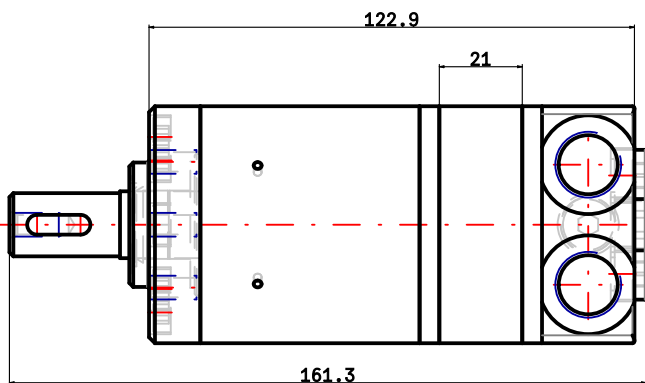
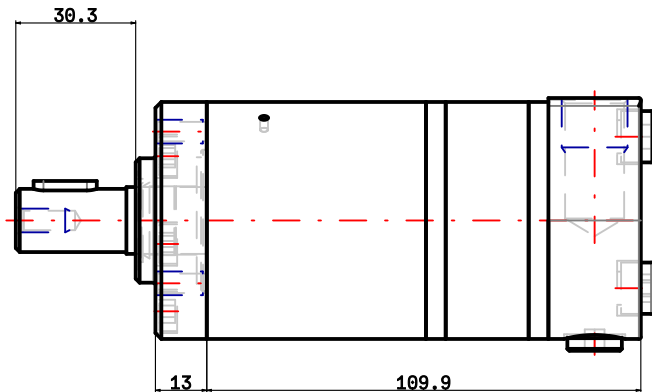
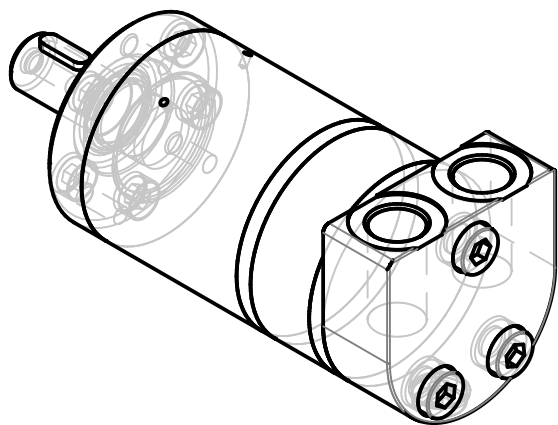
\*\*\* For speeds lower than given, consult factory or your regional manager.

- Intermittent speed and intermittent pressure drop must not occur simultaneously.
- Recommended filtration is per ISO cleanliness code 20/16. A nominal filtration of 25 micron or better.
- Recommend using a premium quality, anti-wear type mineral based hydraulic oil HLP(DIN51524) or HM ( ISO 6743/4).  
If using synthetic fluids consult the factory for alternative seal materials.
- Recommended minimum oil viscosity 13 mm<sup>2</sup>/s [70 SUS] at 50°C [122°F].
- Recommended maximum system operating temperature is 82°C [180°F].
- To assure optimum motor life fill with fluid prior to loading and run at moderate load and speed for 10-15 minutes.

# MMS50CP

3d generated view

To see model in 3D you should use Acrobat Reader with enable 3D view



NOTE: Showed dimensions are in nominal, for maximal values see table.

NOTE: For additional dimensions and information about flange , shaft , endcover , etc. see next page.

L max	LS max
122.5	

Confidential property of M+S Hydraulic, Bulgaria.  
Please note that this drawing is automatically generated based on the selection. In case of possible changes or revisions in the drawing specifications, the selection process should be repeat. M+S is not responsible for any possible errors on the drawings.

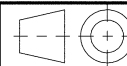


**MMS50CP**

Design: M+S

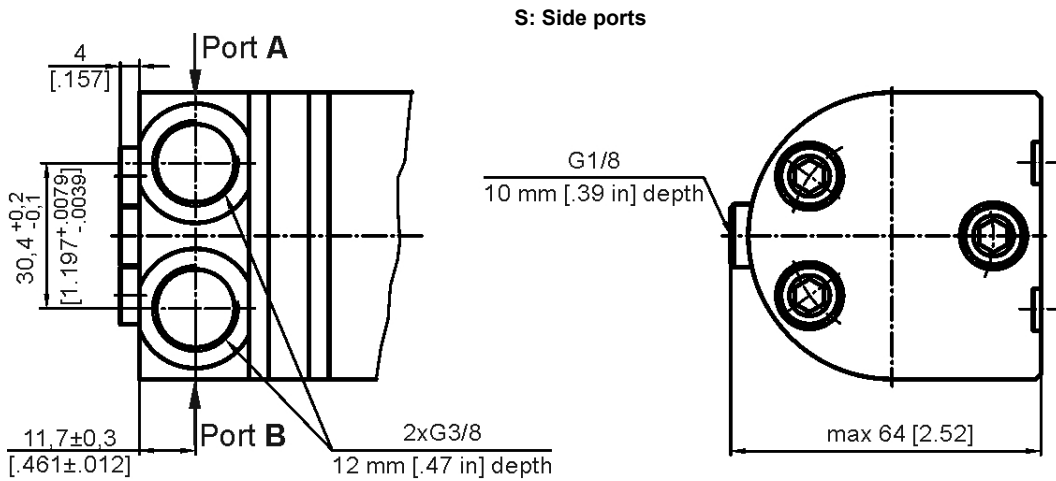
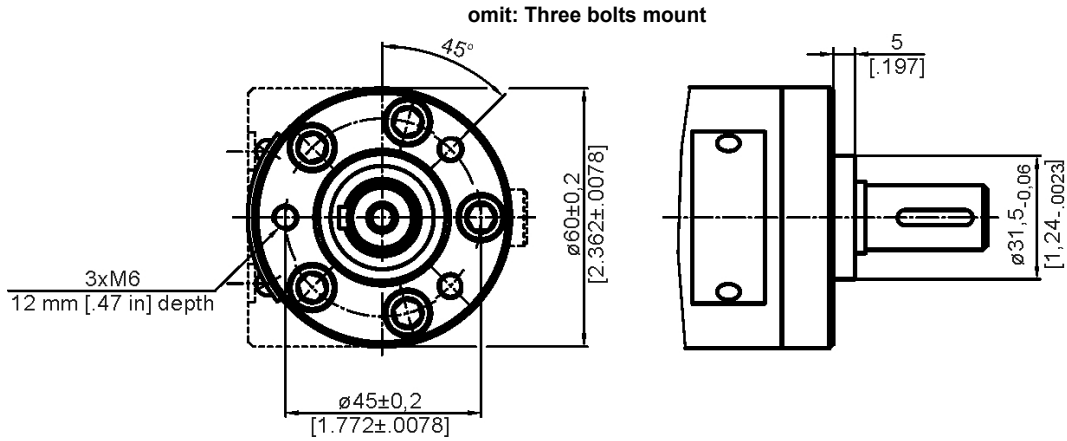
Check:

Scale	Sheet	Rev.	Weight
Date 08.03.2024			2,5 [5.51]

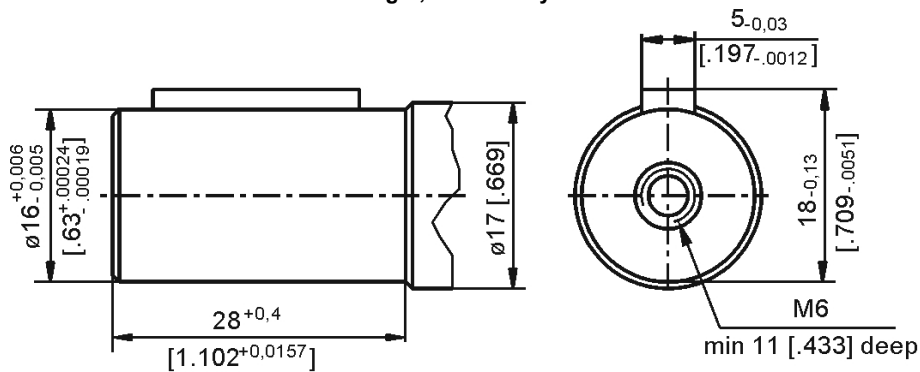


**Standard Rotation**  
Viewed from Shaft End

Port A Pressurized - **CW**  
Port B Pressurized - **CCW**



**C: ø16 straight, Parallel key A5x5x16 DIN6885**

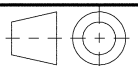


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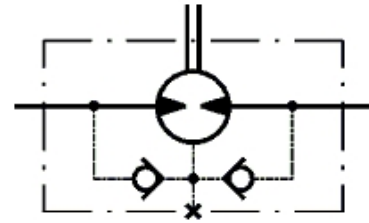


**MMS50CP**

Scale	Sheet	Rev.	Weight
Date 08.03.2024			2,5 [5.51]

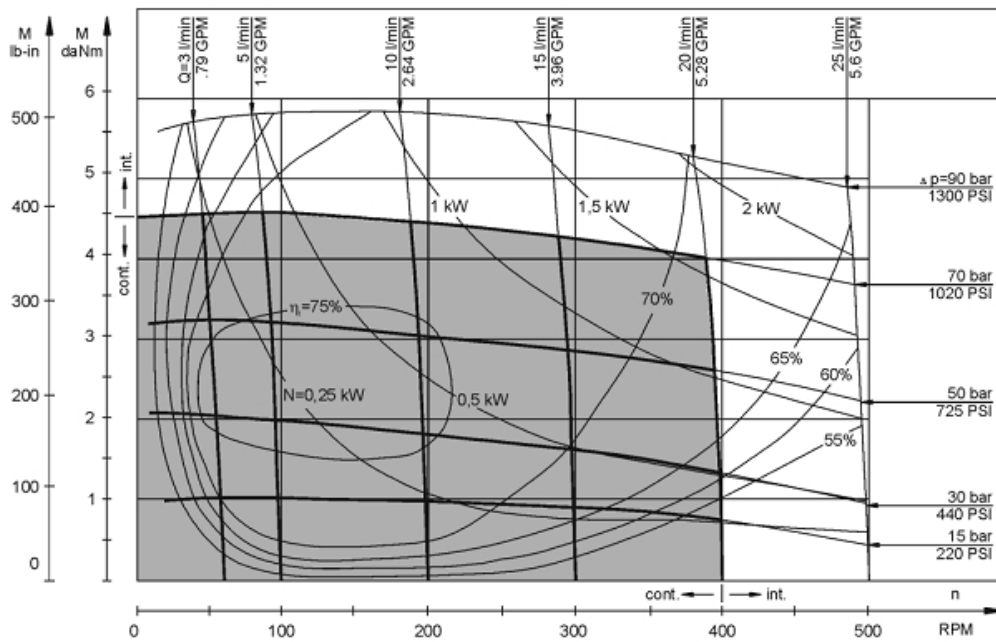


# MMS50CP



Hydraulic scheme with check valves

## FUNCTION DIAGRAMS

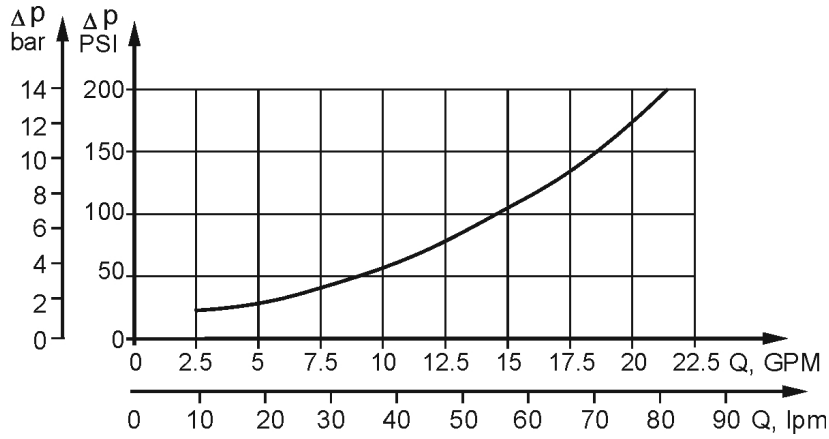


The function diagrams data is for average performance of randomly selected motors at back pressure  $5 \pm 10$  bar [72.5±145 PSI] and oil with viscosity of  $32 \text{ mm}^2/\text{s}$  [150 SUS] at  $50^\circ\text{C}$  [122°F].

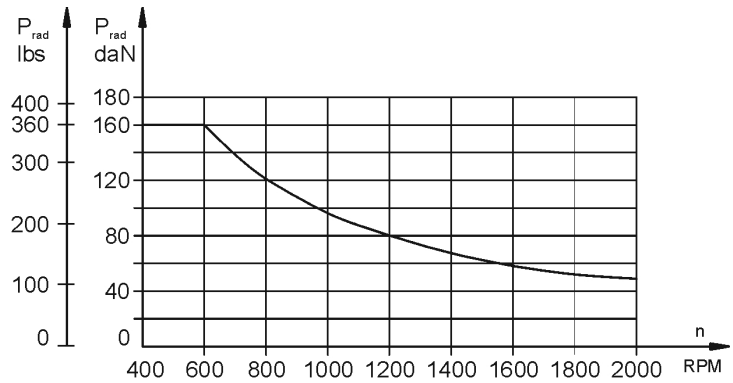
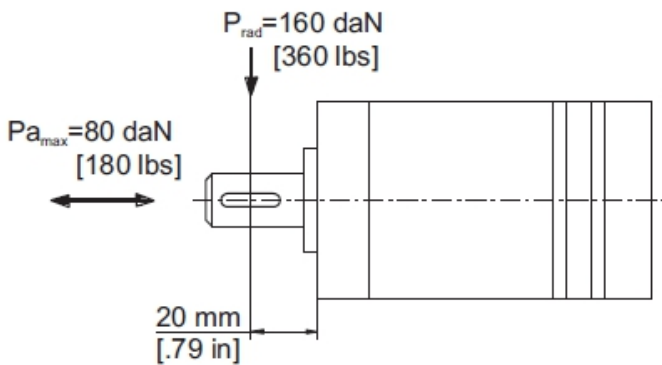
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## DATA SHEET

### Pressure Losses



### PERMISSIBLE SHAFT LOADS



The chart shows the permissible radial load when L=20 mm [.79 in]. If the calculated shaft load exceeds the permissible one, a falexible coupling must be used.

For more detail information about premissible shaft load please check our full catalogue