

MP500CDP

PRODUCT FEATURE SUMMARY

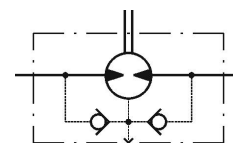
DATE: 10.06.2025

Username: Evelin Badic

MODEL TYPE: MP500CDP

| | |
|--|--|
| CNSORDERNO (Order number) | MP500CDP |
| MF (Mounting Flange) | omit: Oval mount, two holes |
| ONB (Option (needle bearings)) | omit: none |
| PT (Port type) | omit: Side ports |
| DC (Displacement code) | 500: 495,0 cm ³ /rev [30.20 in ³ /rev] |
| SE (Shaft Extensions) | C: Ø25 straight, Parallel key A8x7x32 DIN6885 |
| SSV (Shaft Seal Version) | D: Standard shaft seal |
| DP (Drain Port) | omit: with drain port |
| P (Ports) | omit: BSPP (ISO 228) |
| SFMS (Special Features Measure speed) | omit: no special features |
| SFGWS (Special Features of gear wheel set) | omit: no special features |
| SFDR (Special Features - Direction of rotation) | omit: Standard |
| OP (Option (Paint)) | P: Paint |
| INFO (Info) | PDF catalog |
| L (Total lengthmm) | 195.08 |
| L1 (Length of gear wheel setmm) | 66.63 |
| DIM (Dimension unit) | mm |

DATA SHEET



| Type | |
|--|------------------------------------|
| Displacement, cm³/rev [in³/rev] | 495 [30.2] |
| Max. Speed, [RPM] | cont. 120 Int.* 150 |
| Max. Torque, daNm [lb-in] | cont. 39 [3452] Int.* 57 [5045] |
| Max. Output, kW [HP] | cont. 3,5 [4.7] Int.* 7,2 [9.7] |
| Max. Pressure Drop, bar [PSI] | cont. 60 [870] Int.* 90 [1305] |
| Max. Oil Flow, lpm [GPM] | cont. 60 [15.9] Int.* 75 [19.8] |

| Type | |
|---|--|
| Max. Inlet Pressure, bar [PSI] | cont. 175 [2540] Int.* 200 [2900] peak** 225 [3260] |
| Max. Return Pressure with Drain Line bar [PSI] | cont. 175 [2540] Int.* 200 [2900] peak** 225 [3260] |
| Pressure with Unloaded Shaft, bar [PSI] | 5 [73] |
| Min Starting Torque, daNm [lb-in] | at max. press. drop cont. 36 [3180] at max. press. drop Int.* 54 [4780] |
| Min. Speed***, [RPM] | 10 |
| Weight, kg [lb] | 8,9 [20] |

* 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.

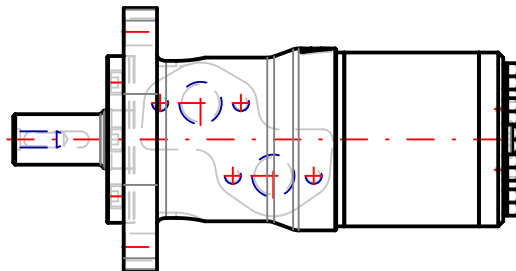
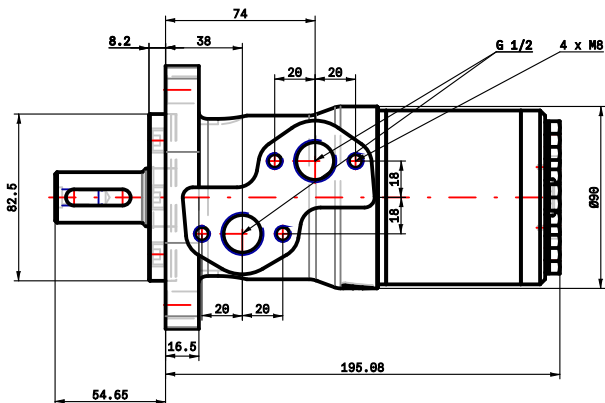
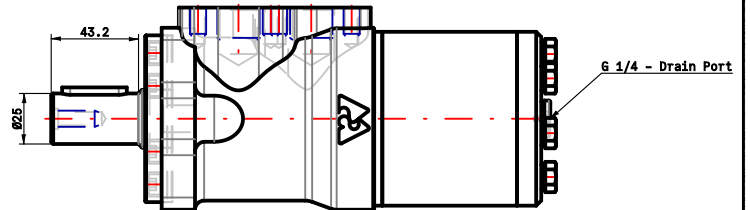
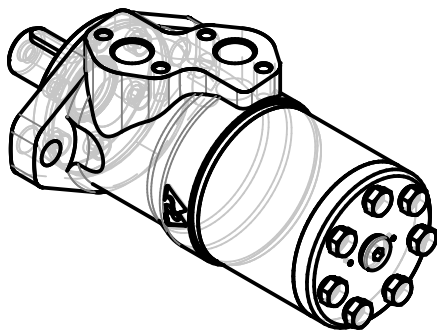
*** For speeds lower than given, consult factory or your regional manager.

- 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 mm²/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.

MP500CDP

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 |
|--------|--------|
| 195.08 | |

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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.



MP500CDP

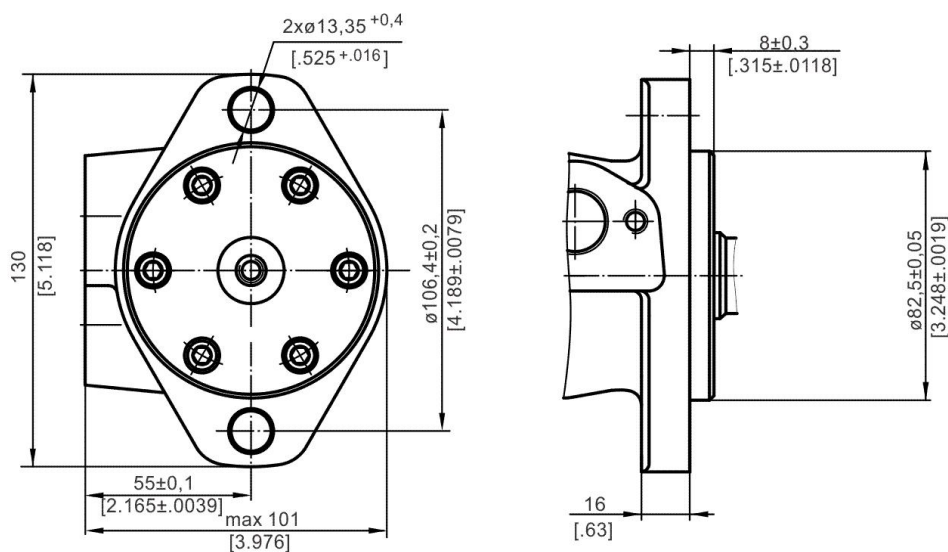
Design: M+S Check:

| Scale | Sheet | Rev. | Weight | | |
|-----------------|-------|------|----------|--|--|
| Date 10.06.2025 | | | 8,9 [20] | | |

Standard Rotation
Viewed from Shaft End

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

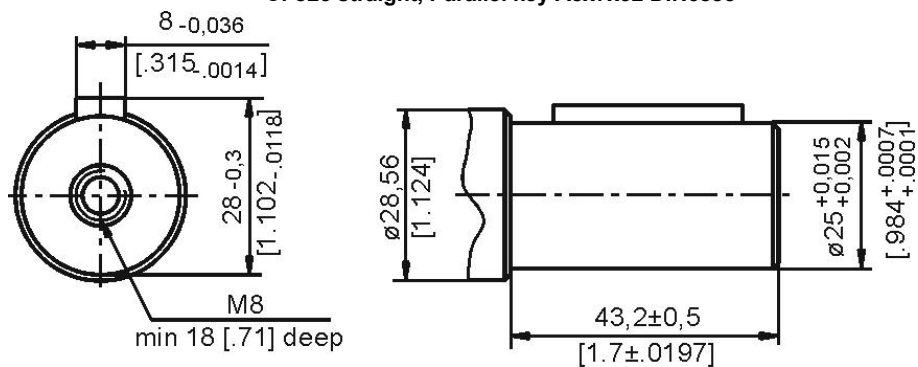
omit: Oval mount, two holes



omit: Side ports



C: o25 straight, Parallel key A8x7x32 DIN6885



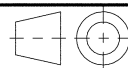
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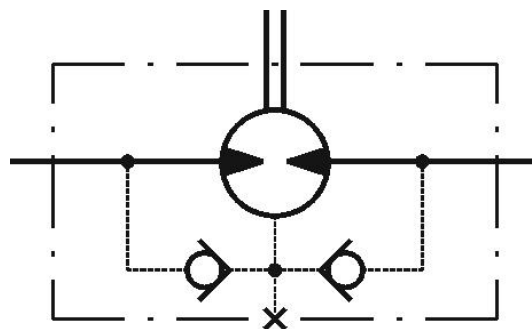
M+S HYDRAULIC

MP500CDP

| Scale | Sheet | Rev. | Weight |
|-----------------|-------|------|----------|
| Date 10.06.2025 | | | 8.9 [20] |

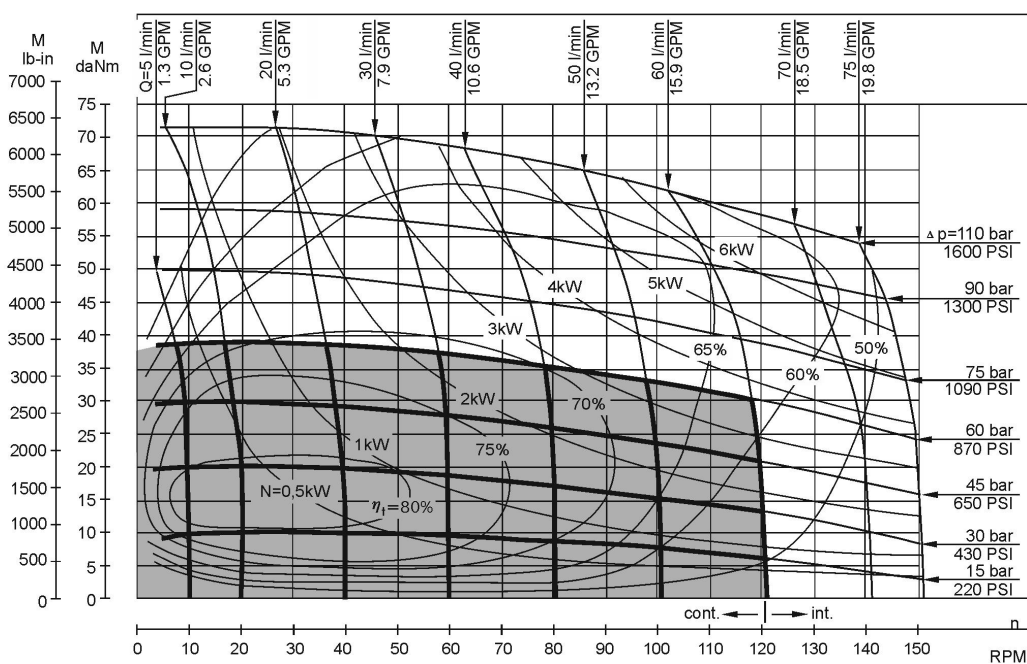


MP500CDP



The shaft seal pressure equals the pressure in the drain line

FUNCTION DIAGRAMS

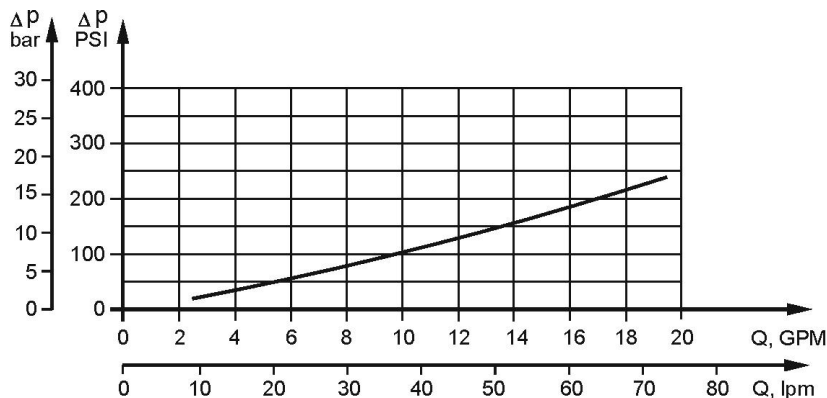


The function diagrams data is for average performance of randomly selected motors at back pressure 5±10 bar [72.5±145 PSI] and oil with viscosity of 32 mm²/s [150 SUS] at 50°C [122°F].

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DATA SHEET

Pressure Losses

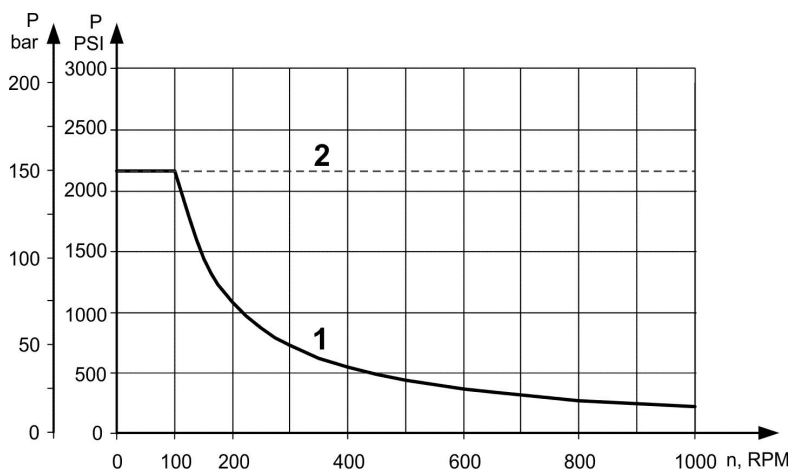


Oil flow in drain line

| Pressure drop bar [PSI] | Viscosity mm ² /s [SUS] | Oil flow in drain line lpm [GPM] |
|----------------------------|---------------------------------------|--|
| 100 [1450] | 20 [98] | 2,5 [.660] |
| | 35 [164] | 1,8 [.476] |
| 140 [2030] | 20 [98] | 3,5 [.925] |
| | 35 [164] | 2,8 [.740] |

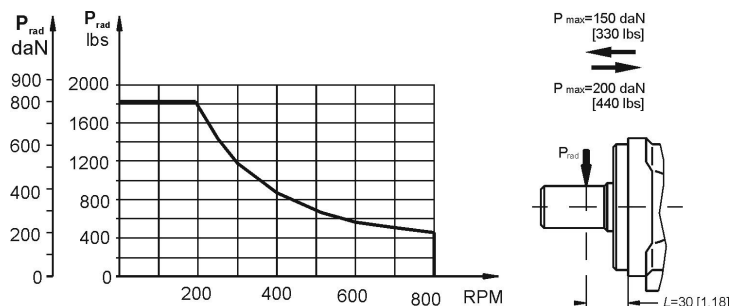
MAX: PERMISSIBLE SHAFT SEAL PRESSURE

Max. return pressure without drain line or max. pressure in the drain line



Curve "1" shows continuous operations.
Curve "2" shows intermittent operations.

PERMISSIBLE SHAFT LOADS



Radial Shaft Load Prad for C,CO Shaft Extensions by
L=30mm[1.81in]