

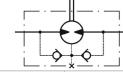
# MR160CDP PRODUCT FEATURE SUMMARY

DATE: 12.06.2025 Username: Evelin Badic

**MODEL TYPE: MR160CDP** 

CNSORDERNO (Order number)	MR160CDP
MF (Mounting Flange)	omit: Oval mount,two holes
ONB (Option (needle bearings))	omit: none
PT (Port type)	omit: Side ports
DC (Displacement code)	160: 159,6 cm³/rev [9.74 in³/rev]
SE (Shaft Extensions)	C: Ø25 straight, Parallel key A8x7x32 DIN6885
SSV (Shaft Seal Version)	D: Standard shaft seal
<b>DP</b> (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)	155.6
L1 (Length of gear wheel setmm)	27.800
DIM (Dimension unit)	mm

### **DATA SHEET**



Type Displacement, cm3/rev [in3/rev]		
		159,6 [9.74]
Max. Speed,	cont.	375
[RPM]	Int.*	470
Max. Torque, daNm [lb-in]	cont.	39 [3450]
	Int.*	43 [3805]
Max. Output, kW [HP]	cont.	11,5 [15.4]
	Int.*	14 [18.8]
Max. Pressure Drop, bar [PSI]	cont.	175 [2540]
	Int.*	200 [2900]
Max. Oil Flow, [RPM]	cont.	60 [15.9]
	Int.*	75 [19.8]

	Туре	
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]		7 [102]
Min Starting Torque, daNm [lb-in]	at max. press. drop cont.	32 [2832]
	at max. press. drop Int.*	37 [3275]
Min. Speed***, [RPM]		10
Weight, kg [lb]		7,5 [15.2]

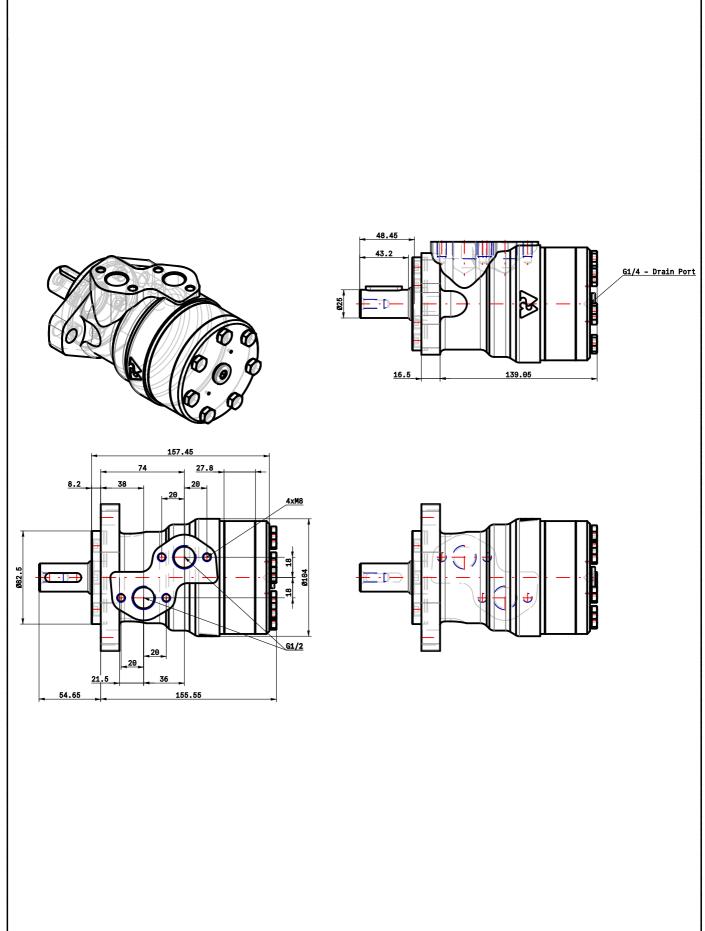
- \* Intermittent operation: the permissible values may occur for max. 10% of every minute.
- \*\* Peak load: the permissible values may occur for max. 1% of every minute.
- \*\*\* For speeds lower than given, consult factory or your regional manager.
- 1. Intermittent speed and intermittent pressure drop must not occur simutaneously.
- 2. Recommended filtration is per ISO cleanliness code 20/16. A nominal filtration of 25 micron or better.
- 3. 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.
- 4. Recommended minimum oil viscosity 13 mm<sup>2</sup>/s [70 SUS] at 50°C [122°F].
- 5. Recommended maximum system operating temperature is 82°C [180°F].
- 6. To assure optimum motor life fill with fluid prior to loading and run at moderate load and speed for 10-15 minutes.



# MR160CDP

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
155.6	

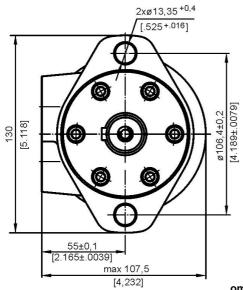
Confidential property of M+S Hydraulic, Bulgaria. Please note that this drawing is automatically generated based on the selection. In case of possible changes or revisions in the drawing specifications, the selection process should be repeat. M+S is not responsible for any possible errors on the drawings.

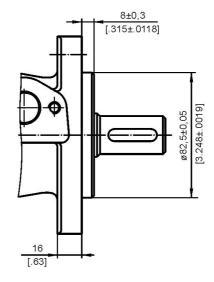
Design: M+S Check:

2\$2 AFS DYDRADLIC



#### omit: Oval mount,two holes





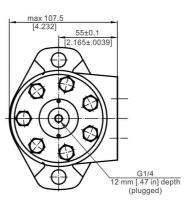
4xM8
13 mm [.51 in] depth
Port A

Port B

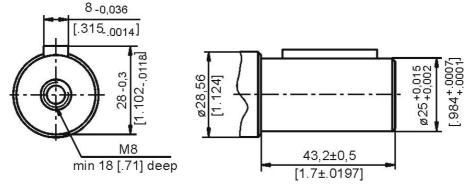
20±0,3
[.787±.0118]

Port B

2xG1/2
15 mm [.59 in] depth



### C: ø25 straight, Parallel key A8x7x32 DIN6885



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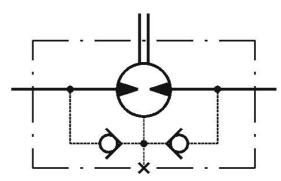
Design: M+S Check:



MR1	60C	DP
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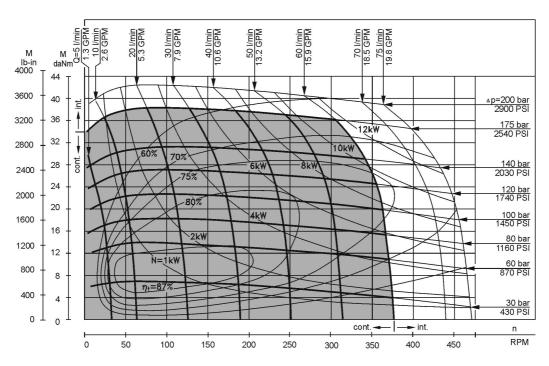


## MR160CDP



The shaft seal pressure equals the pressure in the drain line.

### **FUNCTION DIAGRAMS**

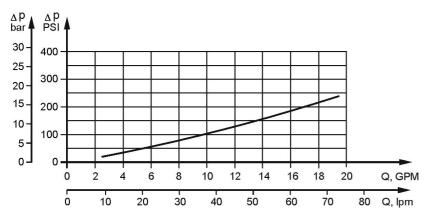


The function diagrams data is for average performance of randomly selected motors at back pressure  $5+10 \text{ bar } [72.5\div145 \text{ PSI}]$  and oil with viscosity of  $32 \text{ mm}^2/\text{s} [150 \text{ SUS}]$  at  $50^{\circ}\text{C} [122^{\circ}\text{F}]$ .



# MR160CDP DATA SHEET

### **Pressure Losses**

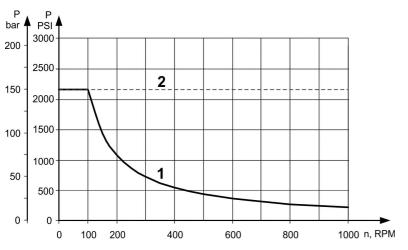


### Oil flow in drain line

Pressure drop bar [PSI]	Viscosity mm²/s [SUS]	Oil flow in drain line lpm [GPM]
400 [4450]	20 [98]	2,5 [.660]
100 [1450]	35 [164]	1,8 [.476]
140 [2030]	20 [98]	3,5 [.925]
	35 [164]	2,8 [.740]

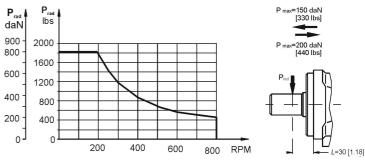
### MAX: PERMISSIBLE SHAFT SEAL PRESSURE

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



Black Curve shows continuous operations. Dashed Curve shows intermittent operations.

### PERMISSIBLE SHAFT LOADS



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

Standard Motor - The standard motor mounting flange is located as close to the output shaft as possible. This type of mounting support the motor close to the shaft load. This mounting flange is also compatible with many standard gear boxes.

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