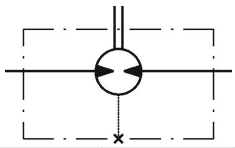
MR315CUP

PRODUCT FEATURE SUMMARY

DATE: 10.06.2025 **Username: Evelin Badic**
MODEL TYPE: MR315CUP

CNSORDERNO (Order number)	MR315CUP
MF (Mounting Flange)	omit: Oval mount,two holes
ONB (Option (needle bearings))	omit: none
PT (Port type)	omit: Side ports
DC (Displacement code)	315: 315,7 cm³/rev [19.26 in³/rev]
SE (Shaft Extensions)	C: Ø25 straight, Parallel key A8x7x32 DIN6885
SSV (Shaft Seal Version)	U: High pressure shaft seal (without check valves)
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)	182.6
L1 (Length of gear wheel setmm)	54.800
DIM (Dimension unit)	mm

DATA SHEET



Type		
Displacement, cm3/rev [in3/rev]		315,7 [19.26]
Max. Speed, [RPM]	cont.	190
	Int.*	240
Max. Torque, daNm [lb-in]	cont.	36 [3185]
	Int.*	47 [4160]
Max. Output, kW [HP]	cont.	5 [6.7]
	Int.*	8 [10.7]
Max. Pressure Drop, bar [PSI]	cont.	85 [1230]
	Int.*	115 [1670]
Max. Oil Flow, [RPM]	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]		3 [44]
Min Starting Torque, daNm [lb-in]	at max. press. drop cont.	31,5 [2875]
	at max. press. drop Int.*	58 [5220]
Min. Speed*, [RPM]**		10
Weight, kg [lb]		9,1 [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.

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 mm²/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.

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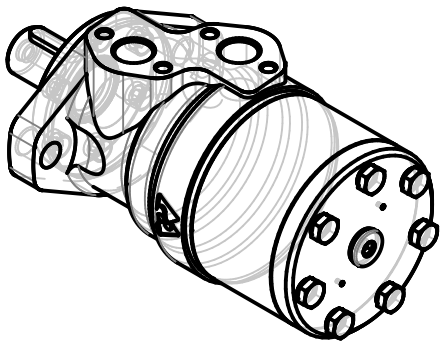
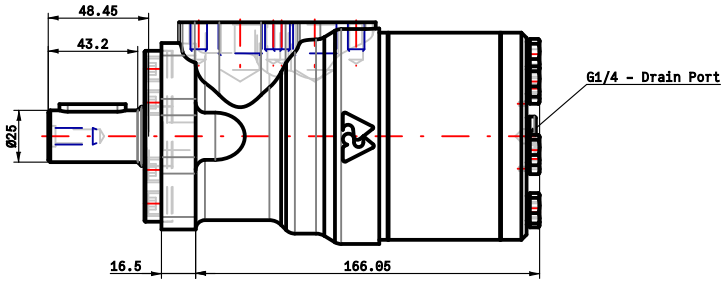
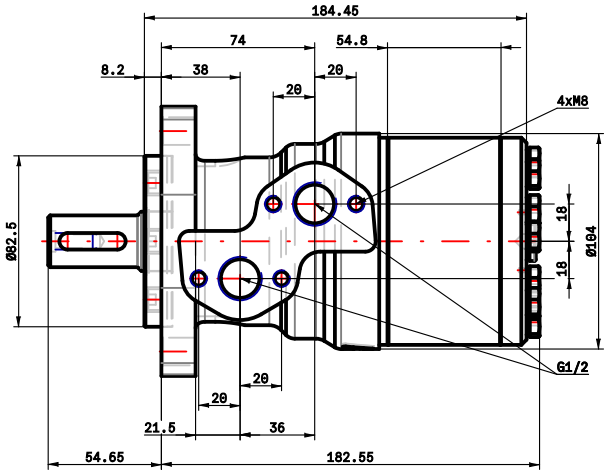
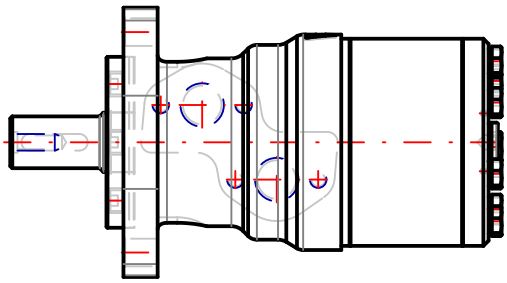
3d generated view

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
182.6	

Design: M+S | Check:

M+S HYDRAULIC

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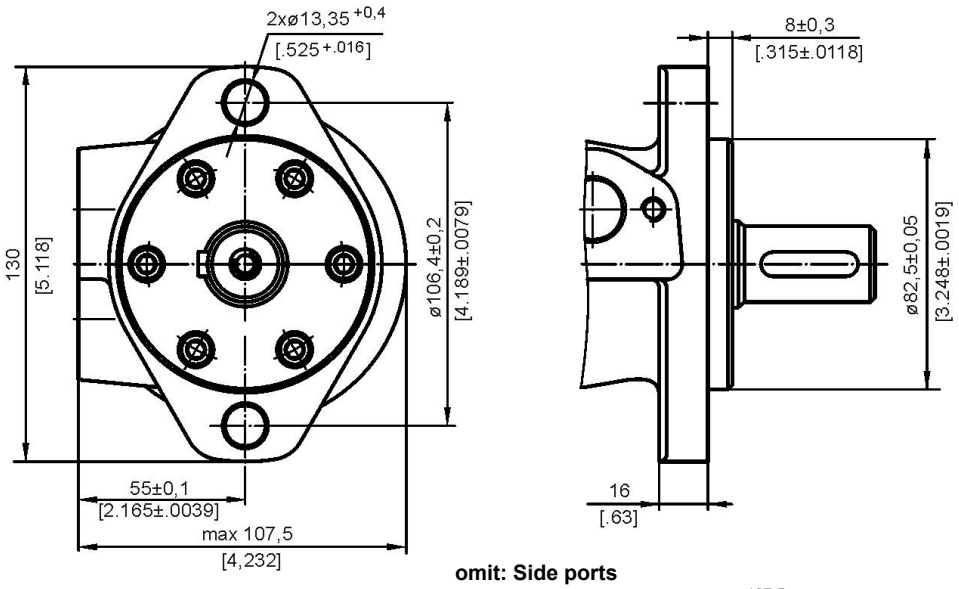
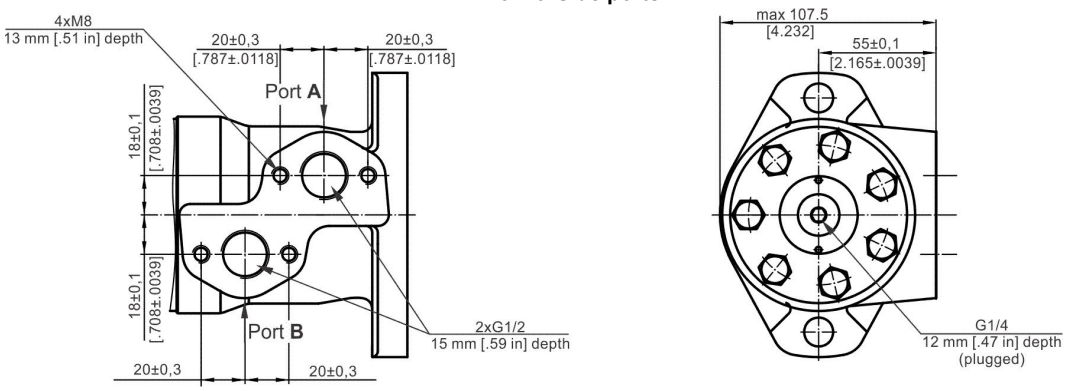
Scale	Sheet	Rev.	Weight
Date 10.06.2025			9,1 [20]

Standard Rotation Port **A** Pressurized - **CW**
Viewed from Shaft End Port **B** Pressurized - **CCW**

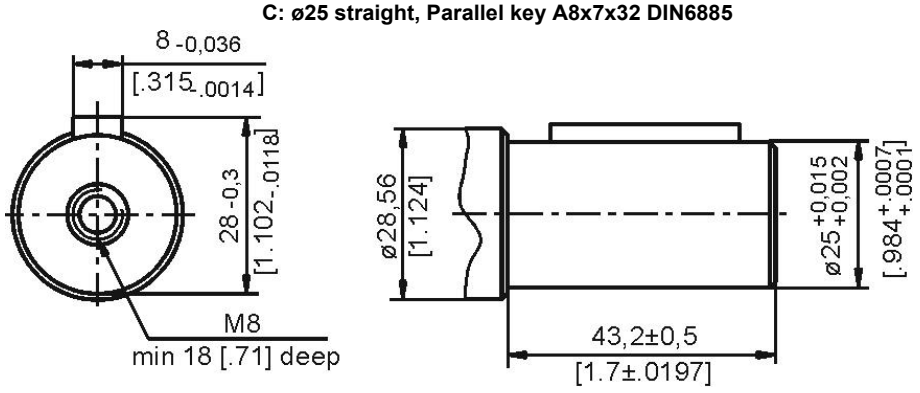
omit: Oval mount,two holes



omit: Side ports



C: ø25 straight, Parallel key A8x7x32 DIN6885



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M+S HYDRAULIC

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Scale	Sheet	Rev.	Weight
Date 10.06.2025			9,1 [20]

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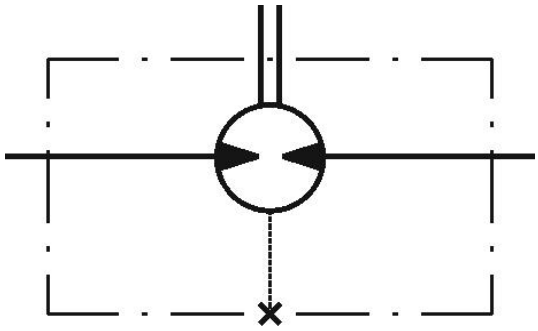
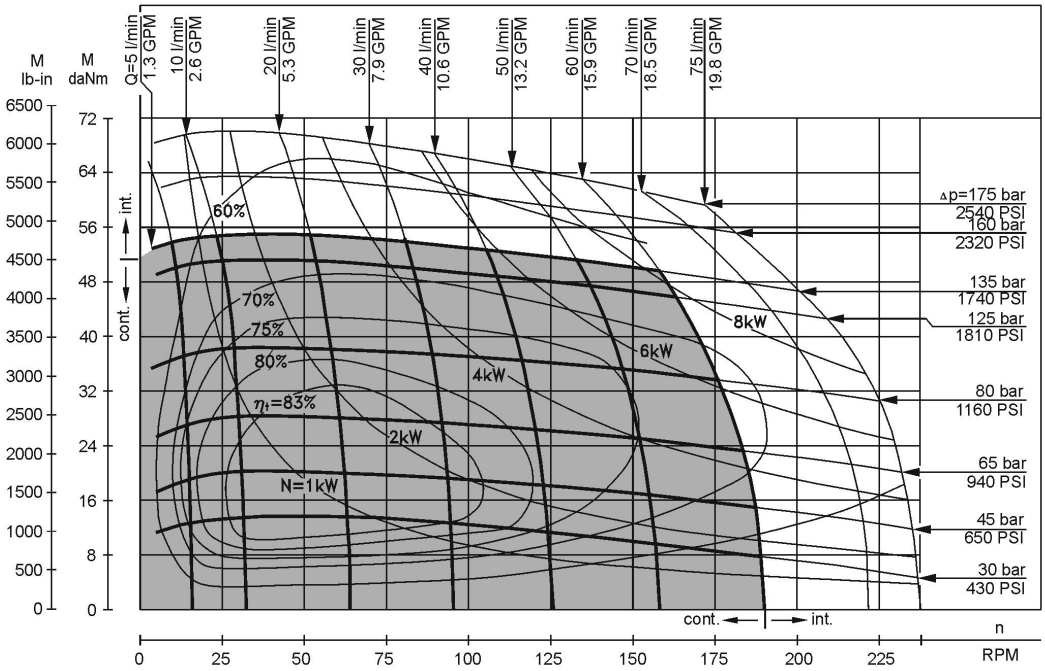


The shaft seal pressure equals the pressure in the drain line.

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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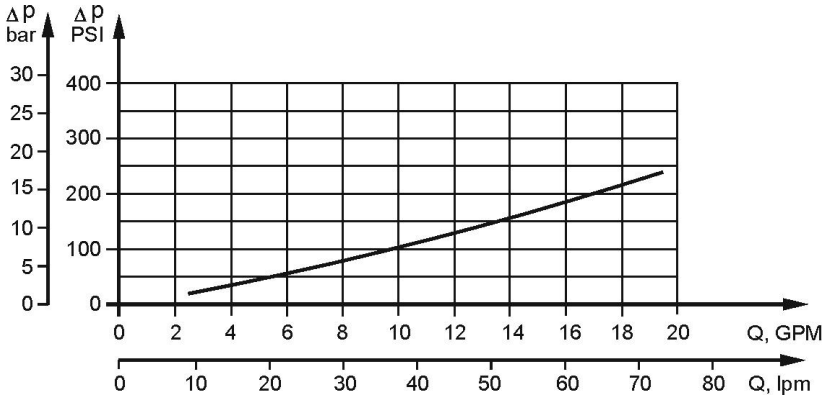
DATA SHEET

Pressure Losses

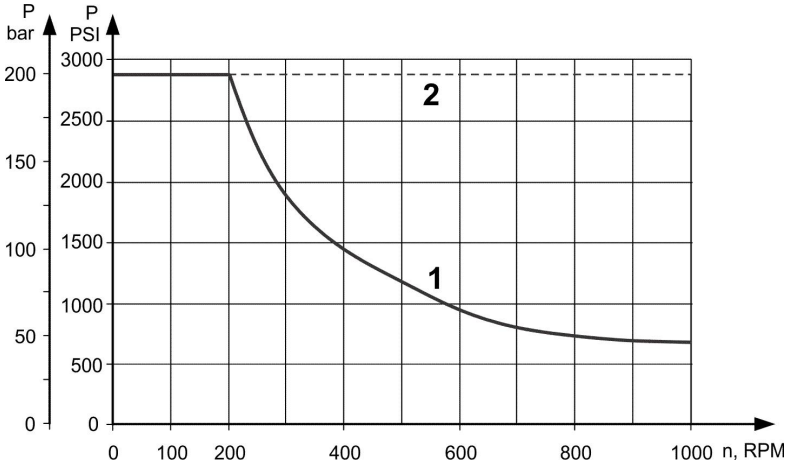


Oil flow in drain line

Pressure drop bar [PSI]	Viscosity mm²/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]

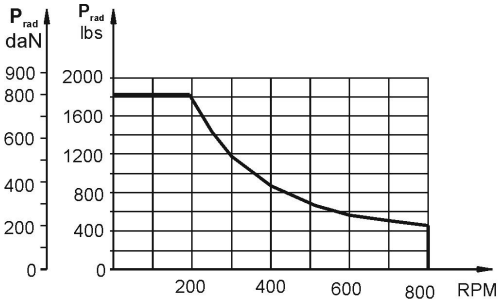
MAX: PERMISSIBLE SHAFT SEAL PRESSURE

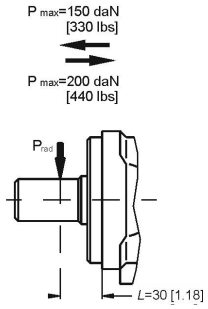
Max. return pressure without drain line or max. pressure in the drain line



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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