

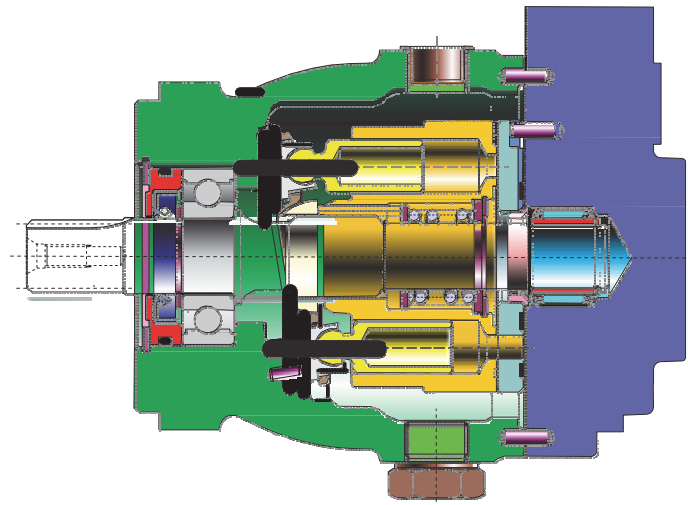


M-MV
MOTORS
MEDIUM DUTY





M/MV01. HYDRAULIC MOTOR.



Motor M1

MODEL CODE



1

Displacement cm ³ /rev [in ³ /rev]	
9,08 [0.55]	09
10,11 [0.62]	10
12,19 [0.74]	12
15,35 [0.94]	15
17,80 [1.09]	17
19,05 [1.16]	20
20,31 [1.24]	21

2

Shaft	
Key shaft (D=19 mm [0.75 inch])	C2
Splined shaft (Z=11; 16/32 D.P.)	S2
Splined shaft (Z=13; 16/32 D.P.)	S3

3

Connections	
Side	02
Twin port	03
Rear	04
Side and rear	05

4

Options	
Without options	00
Roller bearings	CR
Customized identification plate	DP
Fluorinated elastomer seals	EV
Flange port	FS
UNF Thread ports	FU
Relief valve on "A"	MA
Relief valve on "B"	MB
Relief valve on "A+B"	MM
Finishing coat	PA
Anticavitation valve on "A"	RA
Anticavitation valve on "B"	RB
Anticavitation valve on "A+B"	RR
Rear drain port	RD
Flushing valve	VS



In case of request for a combination of several options, please contact your Poclain Hydraulics application engineer for further information.

5*

High pressure relief valve setting	
Max. system pressure (bar [PSI])	
150 [2175]	15
200 [2900]	20
250 [3625]	25
300 [4351]	30

* Motors with option MA, MB, MM.

CHARACTERISTICS

Features

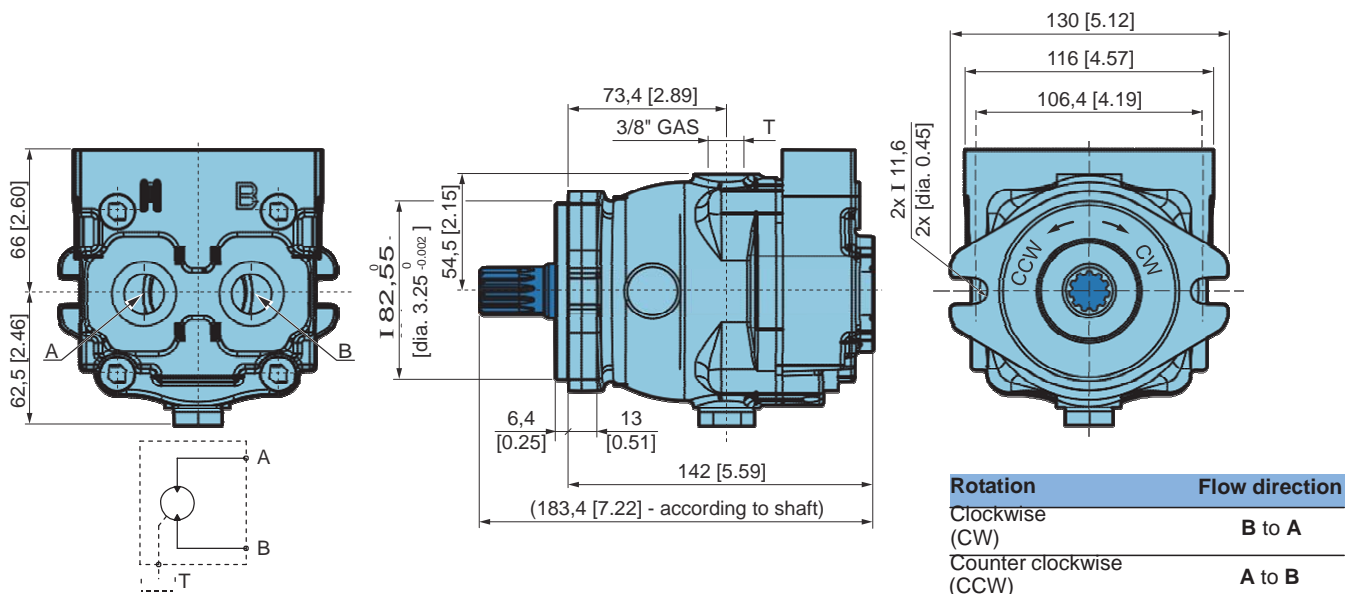
Displacement	cm ³ /rev [<i>in³/rev.</i>]	From 9,08 [0.55] to 20,31 [1.24]
Max. speed	rpm	3 600
Min. speed	rpm	500
Rated pressure	bar [PSI]	210 [3046]
Max. pressure	bar [PSI]	320 [4641]
Min. charge pressure	bar [PSI]	5-6 [72-87]
Mounting flange and shaft		Key shaft or splined shaft
Weight	kg [<i>lb</i>]	8 [17.64]
Rotation		Clockwise (B to A) or Counterclockwise (A to B)

Motor Performance

Power of the motor given at rated pressure and max. speed

Displacement cm ³ /rev [<i>in³/rev.</i>]	9,08 [0.55]	12,19 [0.74]	15,35 [0.94]	17,80 [1.09]	19,05 [1.16]	20,31 [1.24]
Power kW [<i>hp</i>]	11,4 [15.29]	15,4 [20.65]	19,3 [25.88]	22,4 [30.04]	24,0 [32.18]	25,6 [34.33]

Dimensions



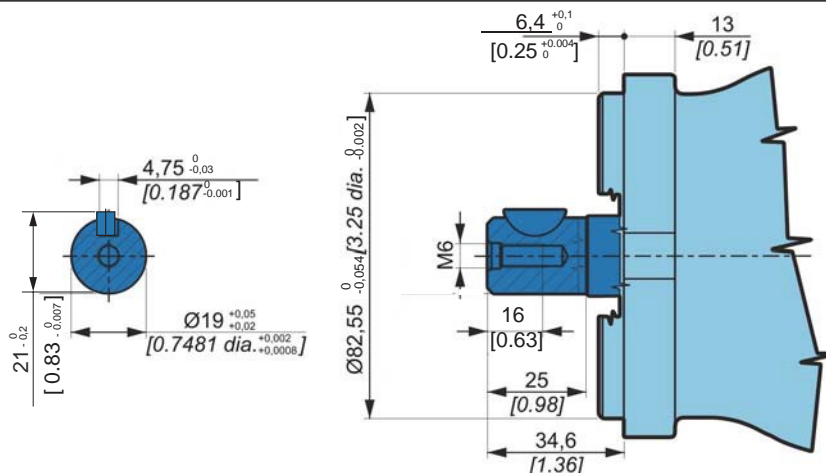


Mounting flanges and shaft



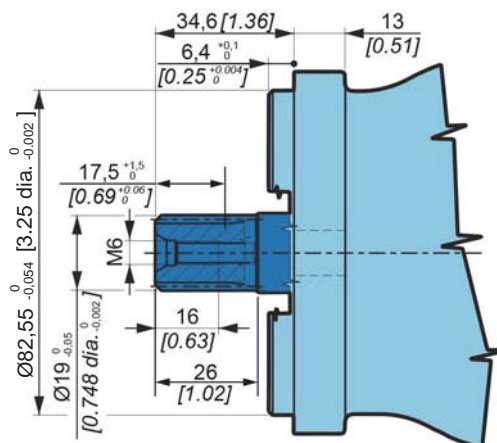
C2 Key shaft

Max. torque: 140 Nm [1239 in.lbf]



S2 Splined shaft

Max. torque: 140 Nm [1239 in.lbf]



Splined info

Standard	ANSI B92.1a-1996
Pitch	16/32" D.P.
Number of teeth	11
Pressure angle	30°
Tolerance class	5

Motor M1

Mounting flanges and shaft

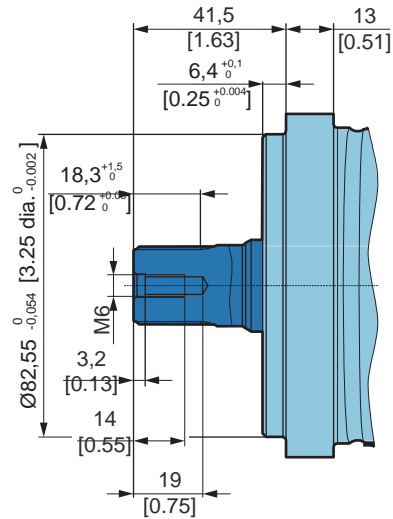
M 1
 1
 2
 3
 4

S3 Splined shaft

Max. torque: 220 Nm [1947 in.lbf]

Splined info

Standard	ANSI B92.1a-1996
Pitch	16/32" D.P.
Number of teeth	13
Pressure angle	30°
Tolerance class	5

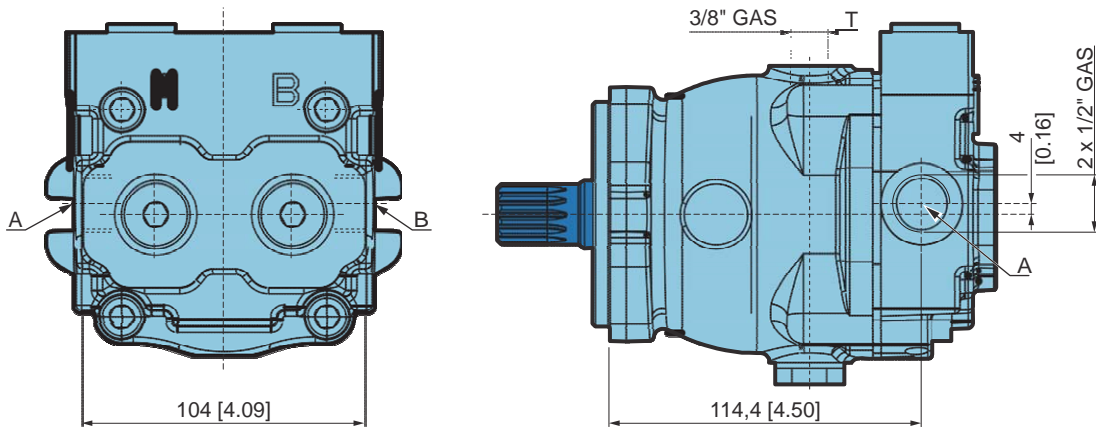




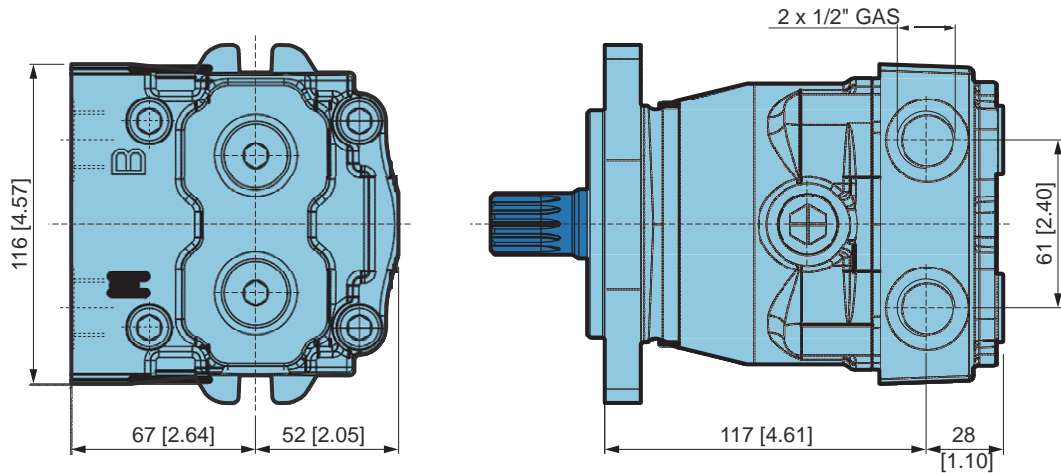
Connections



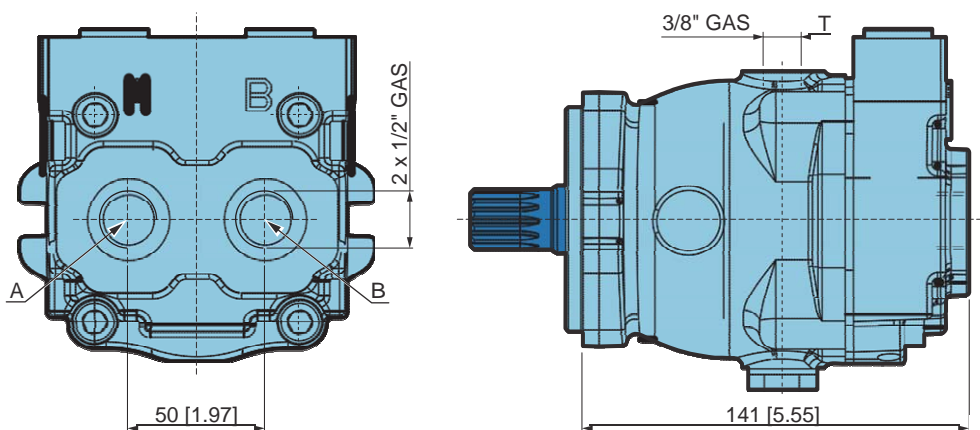
02 Side connection



03 Twin port



04 Rear connection

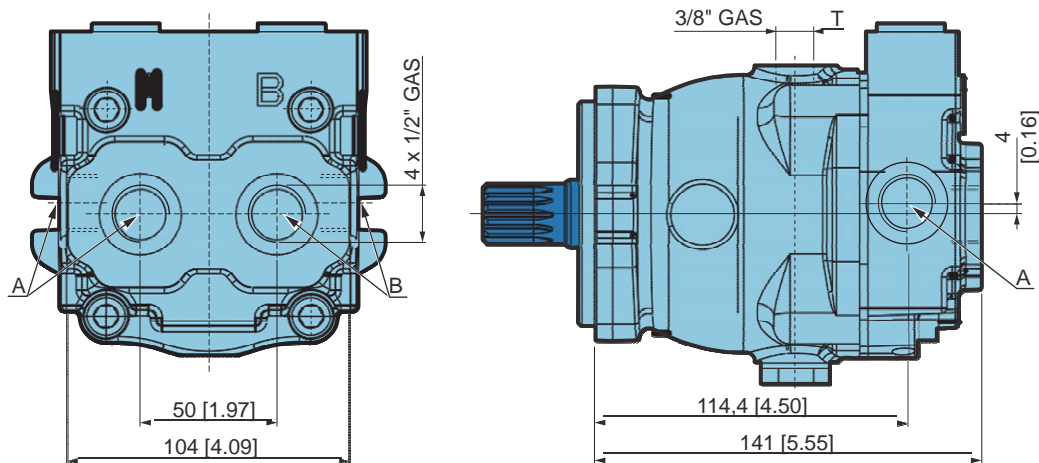


Motor M1

Connections



05 Side and rear connection





OPTIONS

Roller Bearing

	1	2	3	4
M 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CR

It is an optional high capacity bearing.

Depending on the characteristics of shaft load, the duty cycle of the application and the expected life time of your application, Roller bearing might be needed.

Consult your Poclairn Hydraulics Application Engineer.

Customized identification plate

	1	2	3	4
M 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DP

It is possible to provide our products with dedicated plate (your part number engraved on the plate) when requested.



This option is available only for minimum volume of 50 pieces.



Consult your Poclairn Hydraulics application engineer for other possibilities.

Fluorinated elastomer seals

	1	2	3	4
M 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EV

Standard NBR sealing are designed to resist temperatures up to 90°C [194° F] and HV type oils.

If your application is outside these limits, fluorinated elastomer seals might be recommended.

Consult your Poclairn Hydraulics Application Engineer.

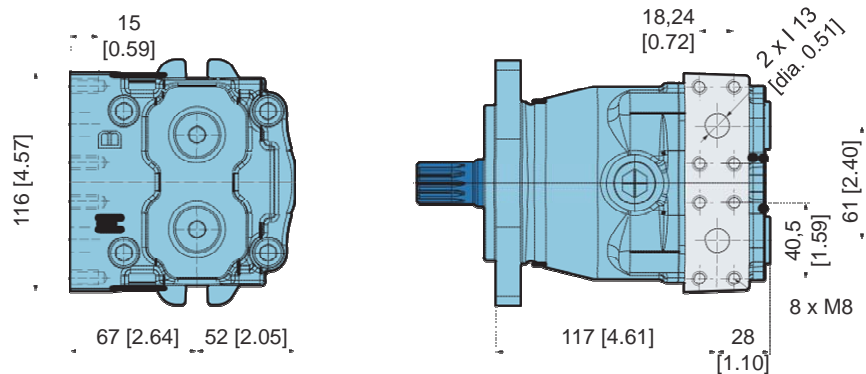
Motor M1

Flange port

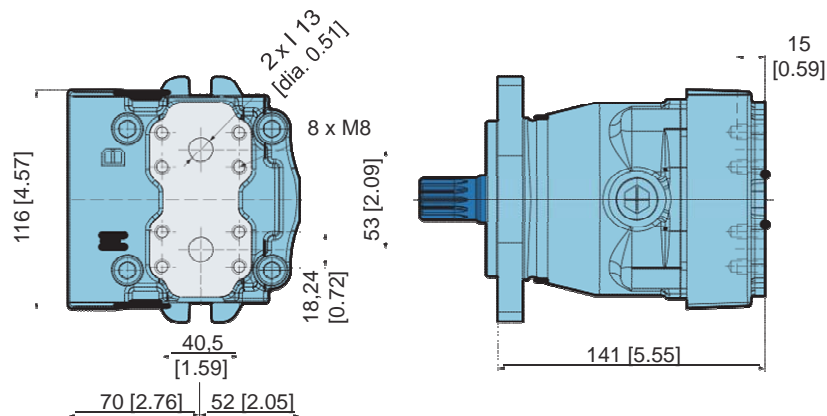
The A and B ports are SAE flange 6000.



03 Flange ports for Twin port connection



04 Flange ports for rear connection

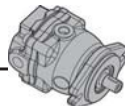


UNF Thread ports



The power supply ports A, B and drain port T are also available with UNF threads.

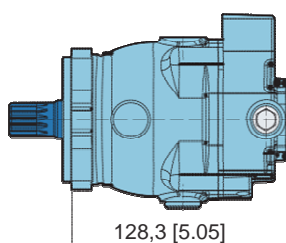
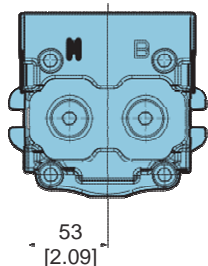
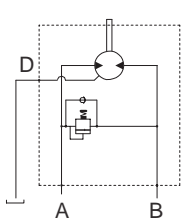
Port	Function	ISO 11926-1 (option FU)
A; B	Power supply	3/4-16 UNF-SAE
T	Drain	9/16-18 UNF-SAE



Relief valve on "A"



A relief valve is available for A side.

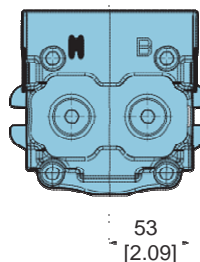
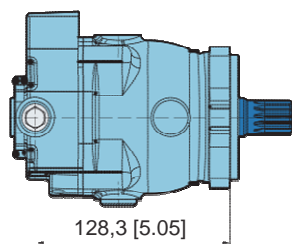
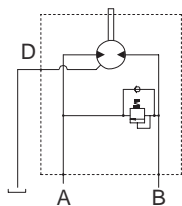


5	
High pressure relief valve setting	
Max. system pressure (bar [PSI])	
150 [2175]	15
200 [2900]	20
250 [3625]	25
300 [4351]	30

Relief valve on "B"



A relief valve is available for B side.

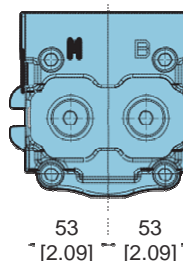
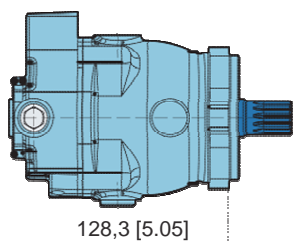
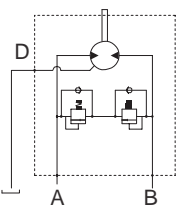


5	
High pressure relief valve setting	
Max. system pressure (bar [PSI])	
150 [2175]	15
200 [2900]	20
250 [3625]	25
300 [4351]	30

Relief valve on "A+B"



A relief valve is available for A and B side.



5	
High pressure relief valve setting	
Max. system pressure (bar [PSI])	
150 [2175]	15
200 [2900]	20
250 [3625]	25
300 [4351]	30

Motor M1

Finishing coat



The motors can be delivered with finishing coat when requested. Standard paint is RAL 9005 (black color).

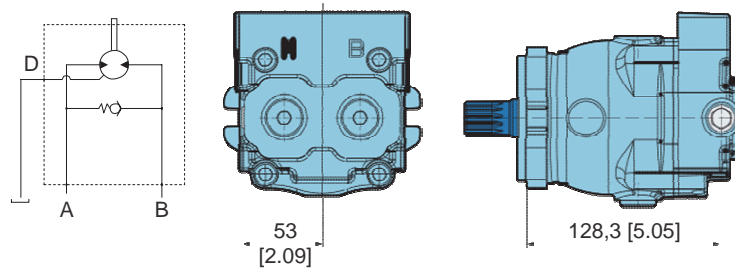


Consult your Poclairn Hydraulics application engineer for other colors of topcoat.

Anticavitation valve on "A"



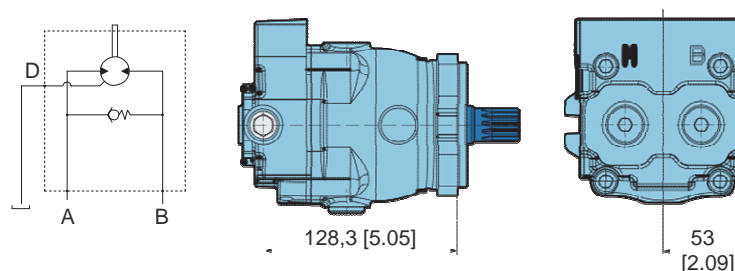
A check valve with anticavitation function is available for A side.



Anticavitation valve on "B"



A check valve with anticavitation function is available for B side.

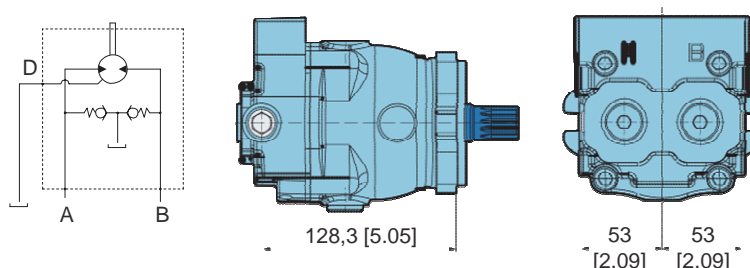




Anticavitation valve on "A+B"



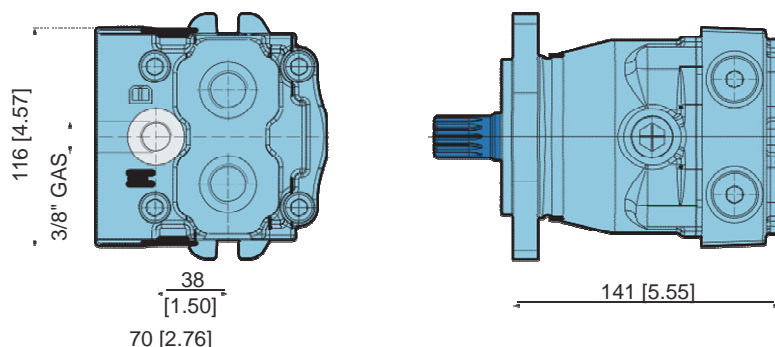
A check valve with anticavitation function is available for A and B side.



Rear drain port



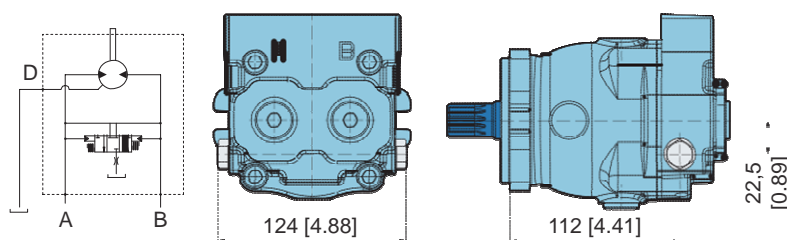
The drain connection is available in the rear side of the motor.



Flushing valve



An exchange valve is available for M1 motor. The valve is integrated in the motor cover and permits to control the temperature in the circuit by a flow that is directed from the low pressure side to the motor housing.



Motor M1