

# BENT AXIS PISTON PUMPS

FAMILY CODE

**108-018**  
**108-918**

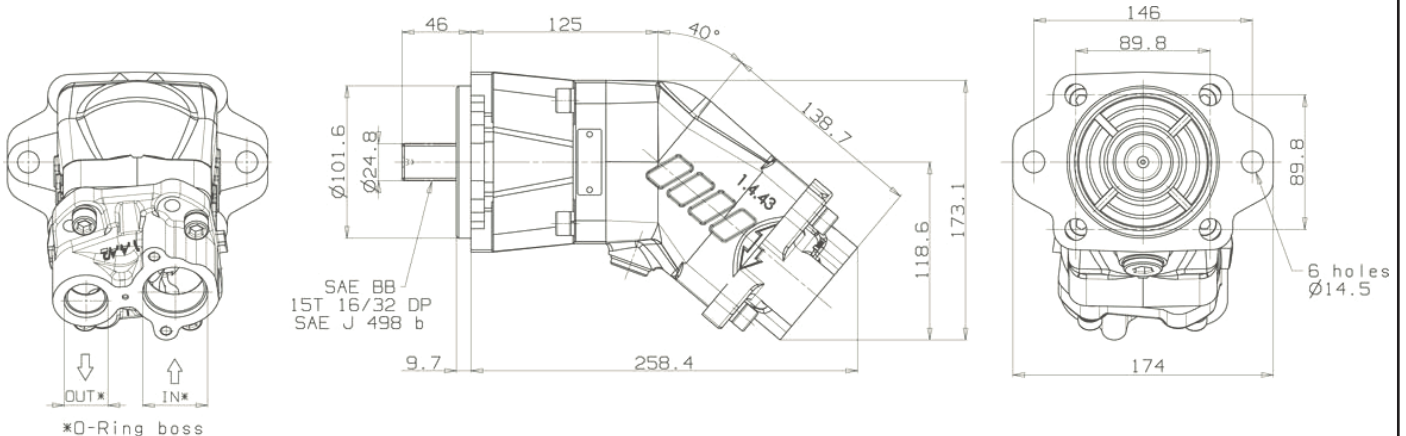
**"HDS" SAE-BB 47/55/64**  
**"MDS" SAE-BB 80**



Fluid	Mineral or synthetic compatible with the following seals: NBR, FKM, FPM, Nylon				
Kinematic viscosity suggested	Average ambient temp. (°F)	< -14	-14÷50	50÷95	> 95
	VG (cSt = mm²/s)	16	22	32	46
Optimale kinematic viscosity	VG= 10 cSt ÷ 100 cSt				
Max kinematic viscosity suggested at the start-up	VG= 750 cSt				
Viscosity index suggested	VI > 100				
Oil filtering	> 2900 PSI: 10 µm < 2900 PSI: 25 µm				
Inlet pressure	1,45 ÷ 29 PSI				
Pump rotation	Unidirectional (Right or Left)				

Verify that pump is, at least, 100 mm under the minimum level of the tank. Before starting the pump bleed the air.

## Dimensions in mm



Data: Lunedì 07 gennaio 2013

Codice foglio: 997-108-01810 Rev.: AC

Pump type	Rotation		IN	OUT	IN	OUT	Working temperature	
	Right	Left					min	max
<b>HDS SAE-BB 47</b>	<b>108-018-00476</b>	<b>108-018-00485</b>	1 5/8-12	1 1/16-12			<b>5°F</b>	<b>392°F</b>
	108-918-00477	108-918-00486			G 1 1/4	G 3/4		
<b>HDS SAE-BB 55</b>	<b>108-018-00556</b>	<b>108-018-00565</b>	1 5/8-12	1 1/16-12				
	108-918-00557	108-918-00566			G 1 1/4	G 3/4		
<b>HDS SAE-BB 64</b>	<b>108-018-00645</b>	<b>108-018-00654</b>	1 5/8-12	1 1/16-12				
	108-918-00646	108-918-00655			G 1 1/4	G 3/4		
<b>MDS SAE-BB 80</b>	<b>108-018-10803</b>	<b>108-018-10812</b>	1 5/8-12	1 1/16-12				
	108-918-10804	108-918-10813			G 1 1/4	G 3/4		

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**TECHNICAL FEATURES**

Pump type	Displacement inch <sup>3</sup> /rev	Pressure		Speed			Min. speed rpm	Weight lb
		P1 * PSI	P3 * PSI	V0 rpm	V1 rpm	V2 rpm		
HDS-47	2,87	5076	5801	2700	1900	2500	300	31
HDS-55	3,46							
HDS-64	3,88		5511					
MDS-80	4,71	4496	4496	2300	1800	2100		

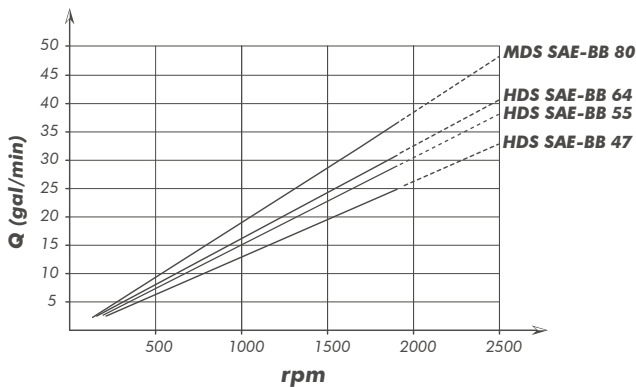
P1 = Max. continuous pressure (100%)  
P3 = Max. peak pressure (6 sec.max)

V0 = Max. continuous speed without load  
V1 = Max. continuous speed  
V2 = Max. intermittent speed

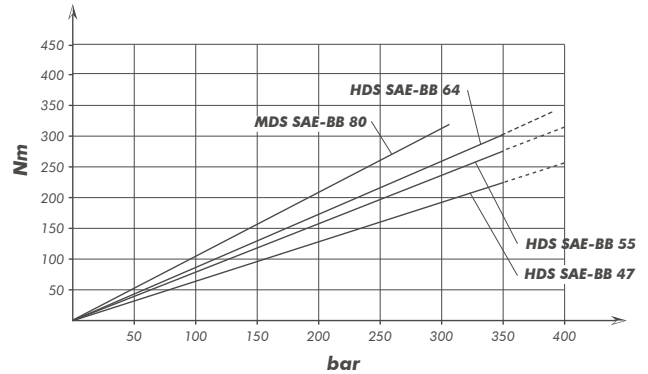


\* Indicated pressure values are limited due to the max allowed torque on SAE BB shaft (450 Nm).

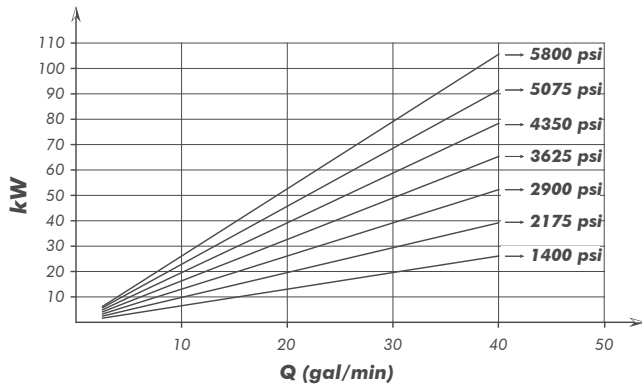
**FLOW**



**DRIVE TORQUE**



**POWER INPUT**



**HOW TO CHOOSE THE SUCTION PIPE SIZE**

Q	Ø Min pipe diam.		Flow speed (feet/sec)
	mm	inch	
20	25	1"	2,23
30	32	1" 1/4	2,03
40	32		2,72
50	38	1" 1/2	2,42
60	38		2,88
70	40	1" 9/16	3,05
80	45	1" 3/4	2,76
90	45		3,08
100	50	2"	2,79
110	50		3,05
120	60	2" 3/8	2,33
130	60		2,53
140	60		2,72
150	60	2" 1/2	2,89
160	63		2,82
170	63		2,99
180	63		3,15

To ensure the proper suction pipe size the flow speed should not exceed 3,28 feet/sec.

**Seal Kit**

108-903-00214

LEFT PUMP



RIGHT PUMP