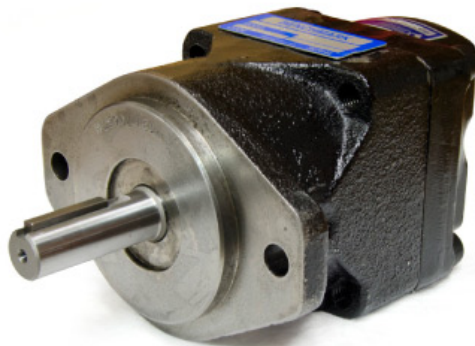




QHTM MOTEURS / MOTORS

VANNES / VANE

DENISON® STYLE





QHM3 M4 Series



MOTORS / MOTEURS

CARACTÉRISTIQUES / FEATURES

Ces moteurs sont non seulement compacts et efficaces, mais ils ont la capacité de fournir une vitesse variable, une puissance variable et un couple constant. Ils restent également en bon état lorsqu'ils sont calés sous charge (s'ils sont protégés par une soupape de décharge).

These motors are not only compact and efficient, but they have the ability to provide variable speed, variable horsepower, and constant torque. They also remain undamaged when stalled under load (if they are protected by a relief valve).



Conception Durable

La conception des chambres d'entrée et de sortie diamétralement opposées supprime les charges de palier résultant de la pression. Ce type de charge de roulement est l'une des principales causes de dommages aux roulements dans les modèles sans cette caractéristique de conception.

Low-Wear Design

The design of the diametrically opposed inlet and outlet chambers removes bearing loads resulting from pressure. This type of bearing load is a leading cause of bearing damage in models without this design feature.

SPECIFICATIONS

Model #	Max Pressure		Max. Displacement		Max. Speed (RPM)	Torque Nm / Bar	Mounting Standard
	PSI	Bar	in ³ / rev	cm ³ / rev			
QHM3B QHM3B1	3000	210	0.56-2.26	9-37	4000	0.15-0.58	SAE - A
QHM4C QHM4C1	2500	175	1.49-4.89	24-80	4000	0.39-1.27	SAE - B
QHM4D QHM4D1	2500	175	3.97-8.81	65-144	4000	1.04-2.30	SAE - C
QHM4E QHM4E1	2500	175	9.67-13.55	158-222	3600	2.52-3.53	SAE - C



QH PRO
DENISON Hydraulics

QHM3B **1** **036** **1** **N** **00** **B** **1** **01** *****

Series External Drain

Internal Drain option

Torque

009 - 0.130 Nm/bar

012 - 0.186 Nm/bar

018 - 0.304 Nm/bar

027 - 0.485 Nm/bar

036 - 0.624 Nm/bar

Type of Shaft

1 - Keyed (No SAE)

3 - Splined (SAE A)

4 - Splined (SAE B)

Rotation

N - Bi-directional

View from shaft end:

CW Rotation **A** - Inlet **B** - Outlet

CCW Rotation **A** - Outlet **B** - Inlet

Port Connections 00

- SAE threaded port SAE drain

01 - SAE 4 bolt lange BSPP drain

02 - BSPP threaded port BSPP drain

Seal Class

1 - S1

4 - S4

5 - S5

Design Letter

Porting Combination

00 - Standard

01 - SAE 4 bolt lange BSPP drain

02 - BSPP threaded port BSPP drain

Modifications

INTERNAL LEAKAGE

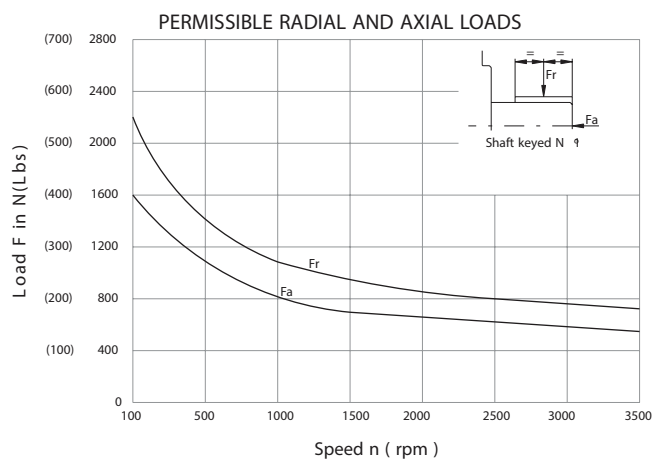
Internal Leakage Q₃ in lpm (Gpm)

Pressure in bar (psi)

Legend: — 24 cSt, - - 10 cSt

Pressure (bar/psi)	24 cSt Internal Leakage (lpm/Gpm)	10 cSt Internal Leakage (lpm/Gpm)
0 (0)	0.0	0.0
35 (500)	~1.5	~3.5
100 (1500)	~6.0	~12.0
140 (2000)	~8.5	~18.0
175 (2500)	~12.0	~24.0

Typical (24 cSt)



Do not apply F_r and F_a loads simultaneously

Model	Series	Volumetric Displacement Vi		Input Flow at n = 2000 rpm				Torque T at n = 2000 rpm		Power Output at n = 2000 rpm	
				Theoretical		at 2500 psi p		at 2500 psi p		at 2500 psi p	
		in³/rev	cm³/rev	GPM	l/min	GPM	l/min	in.lbf	Nm	HP	KW
QHM3B	009	0.56	9.2	4.9	18.4	8.0	30.4	174.3	19.7	5.8	4.3
	012	0.75	12.3	6.5	24.6	9.7	36.6	236.6	26.7	7.8	5.8
	018	1.13	18.5	9.8	37.0	12.9	49.0	412.4	46.6	13.4	10.0
	027	1.70	27.8	14.7	55.6	17.8	67.6	680.5	77.4	21.8	16.3
	036	2.26	37.1	19.6	74.2	22.8	86.2	902.6	102.0	28.3	21.1

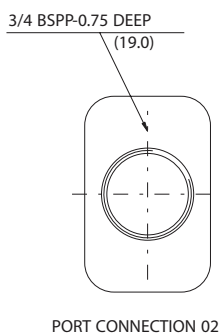
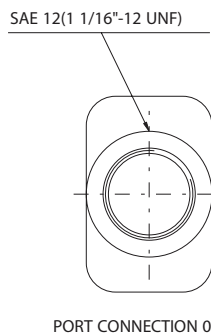
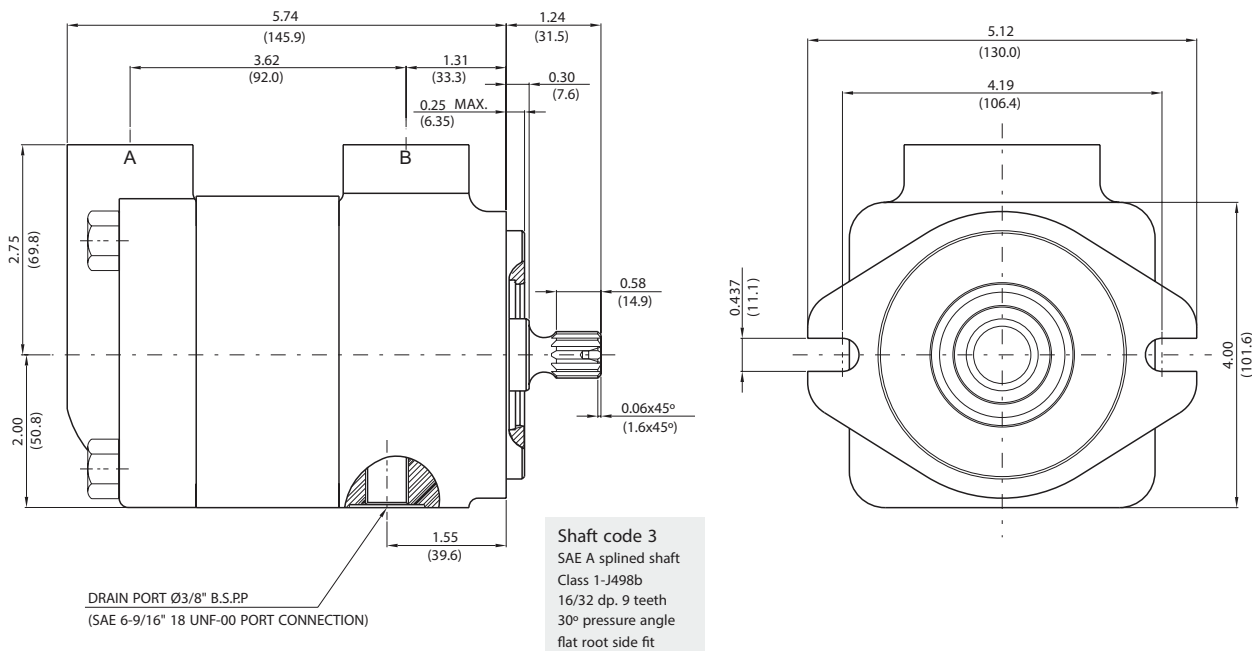
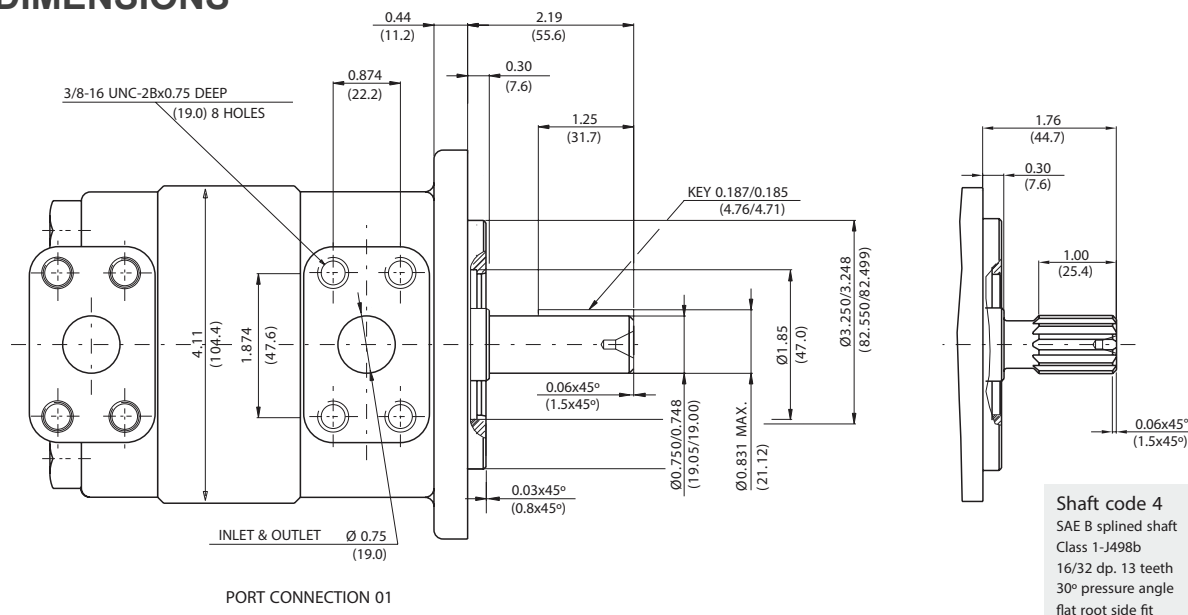


QHM3B



MOTORS / MOTEURS

DIMENSIONS





QHM4C / QHM4SC



S = Severe duty motor
QHM4C1-QHM4SC1 : Drain port is plugged

CODE

QHMS4C

QHM4C **1** **067** **1** **N** **00** **A 1** **02** *****

Series External Drain

Internal Drain option

Torque

024	- 0.39	Nm/bar
027	- 0.45	Nm/bar
031	- 0.55	Nm/bar
043	- 0.74	Nm/bar
055	- 0.93	Nm/bar
067	- 1.13	Nm/bar
075	- 1.27	Nm/bar

Type of Shaft

1 - Keyed (SAE B)
2 - Keyed (no SAE)
3 - Splined (SAE B)

Rotation

N - Bi-directional

Port Connections

01 - SAE threaded port
SAE drain
02 - SAE 4 bolt lange
UNC threaded - SAE drain
04 - SAE 4 bolt lange
UNC threaded - BSPP drain
M4 - SAE 4 bolt lange
metric threaded - BSPP drain

Seal Class

1 - S1 (M4C)
5 - S5 (M4SC)

Design Letter

Porting Combination

00 - Standard

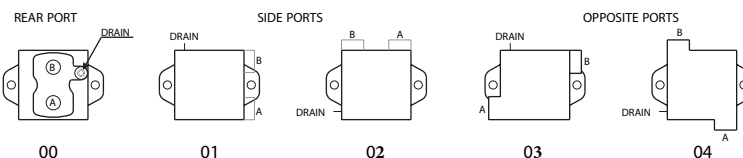
View from shaft end:

CW Rotation

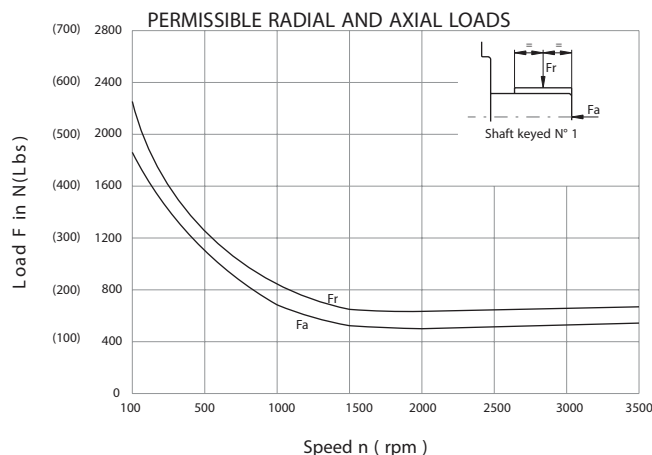
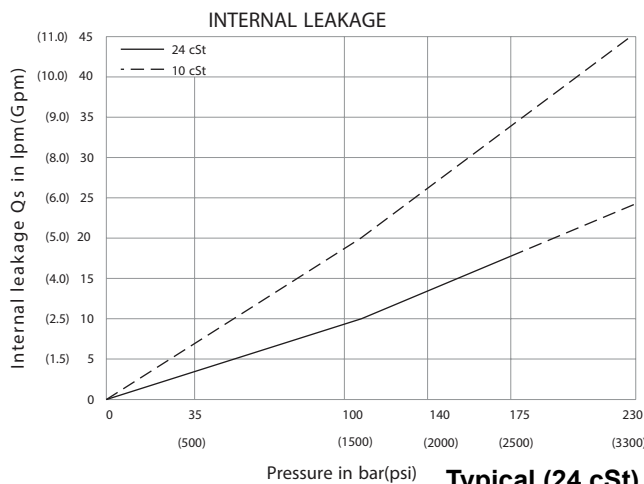
A - Inlet
B - Outlet

CCW Rotation

A - Outlet
B - Inlet



INFORMATION TECHNIQUE / TECHNICAL INFORMATION



Model	Series	Volumetric Displacement V_i		Input Flow at $n = 2000$ rpm				Torque T at $n = 2000$ rpm		Power Output at $n = 2000$ rpm	
				Theoretical		at 2500 psi p		at 2500 psi p		at 2500 psi p	
		in ³ /rev	cm ³ /rev	GPM	l/min	GPM	l/min	in.lbf	Nm	HP	KW
QHM3B	009	0.56	9.2	4.9	18.4	8.0	30.4	174.3	19.7	5.8	4.3
	012	0.75	12.3	6.5	24.6	9.7	36.6	236.6	26.7	7.8	5.8
	018	1.13	18.5	9.8	37.0	12.9	49.0	412.4	46.6	13.4	10.0
	027	1.70	27.8	14.7	55.6	17.8	67.6	680.5	77.4	21.8	16.3
	036	2.26	37.1	19.6	74.2	22.8	86.2	902.6	102.0	28.3	21.1

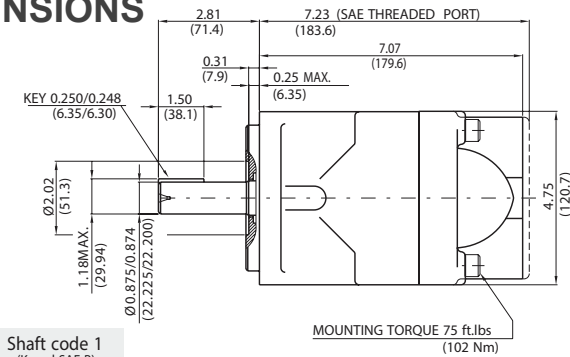


QHM4C / QHM4SC

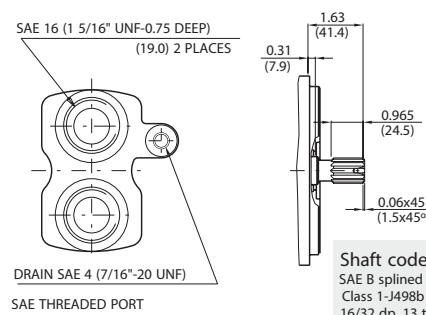


MOTORS / MOTEURS

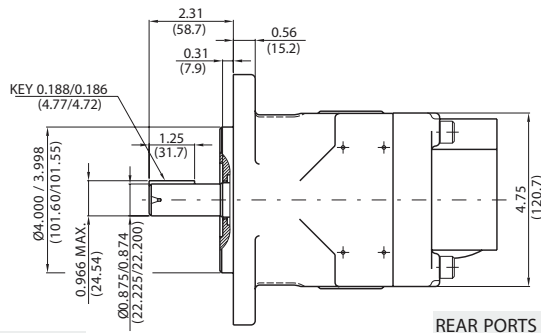
DIMENSIONS



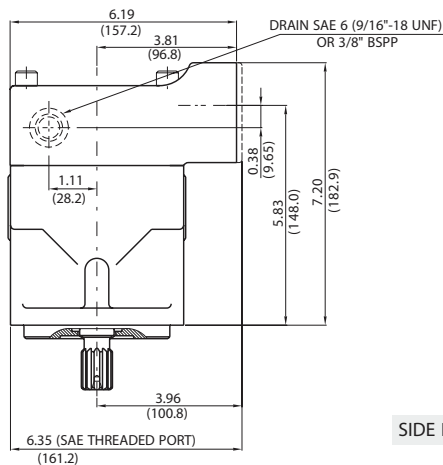
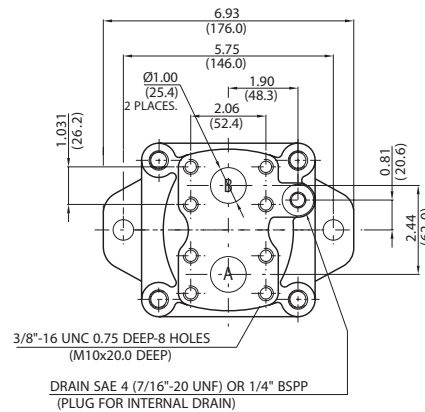
Shaft code 1
(Keyed SAE B)



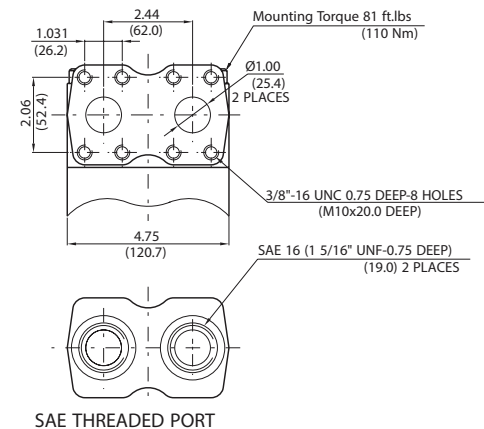
Shaft code 3
SAE B splined shaft
Class 1-J498b
16/32 dp. 13 teeth
30° pressure angle
flat root side fit



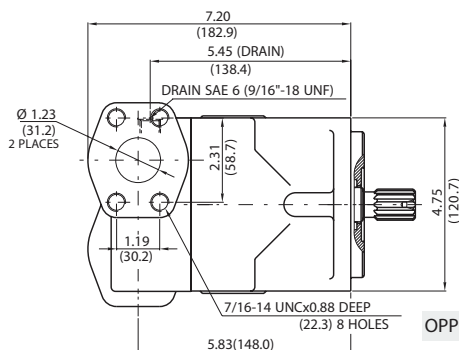
Shaft code 2
(Keyed no SAE)



SIDE PORTS



SAE THREADED PORT



OPPOSITE PORTS

