

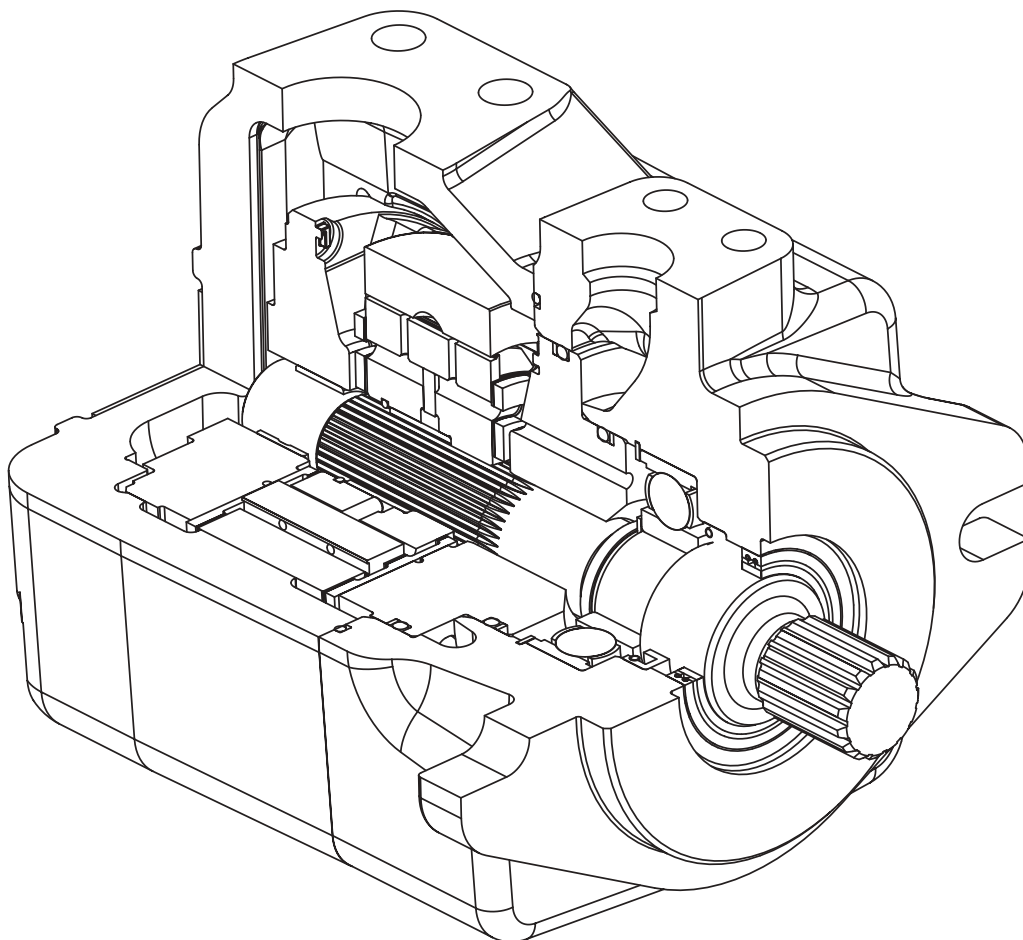
**EATON**

**Vickers**

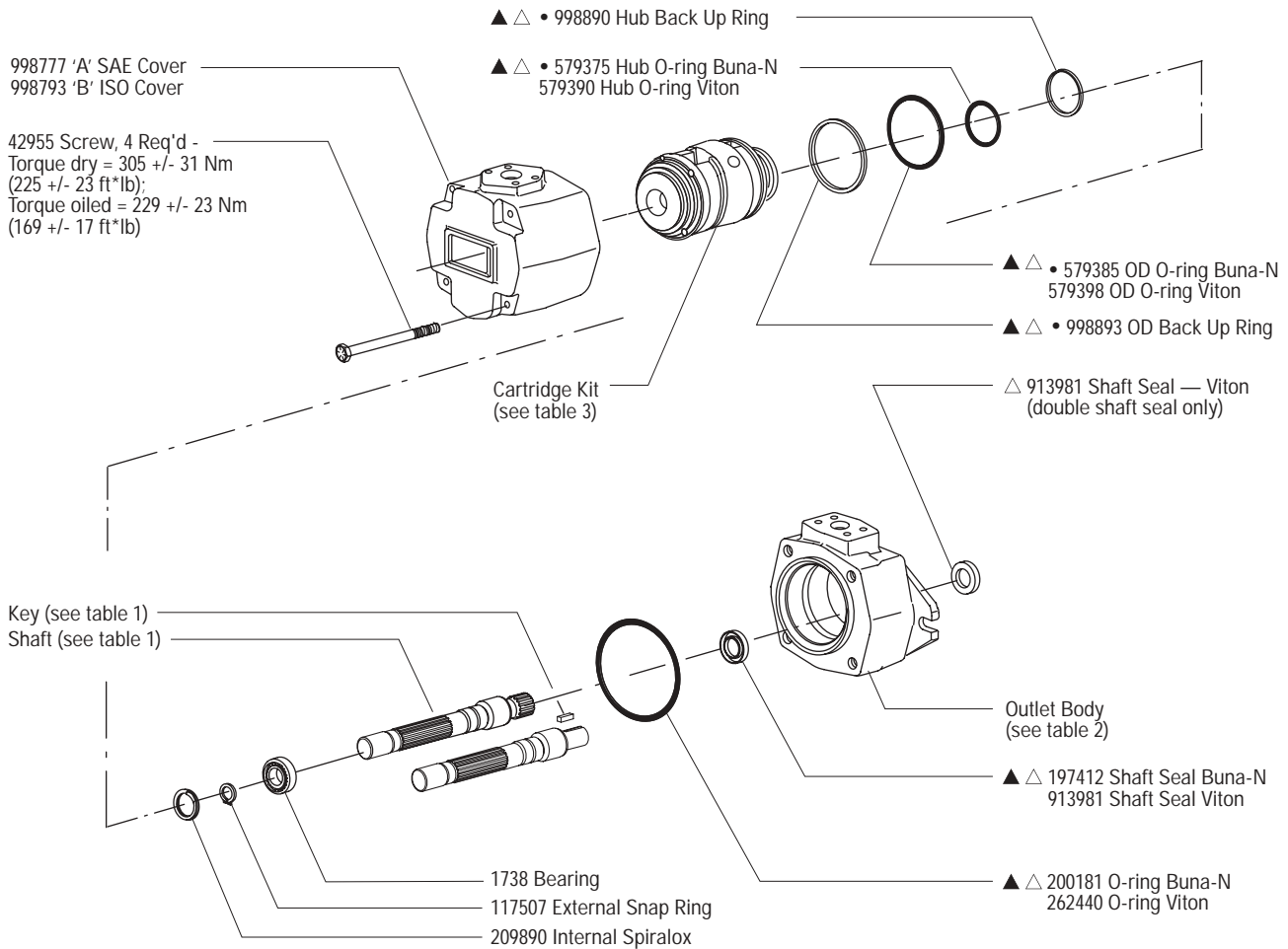
**High Pressure, High Performance  
Vane Pumps**

Parts Data

VMQ145S Series  
- 32 Design



**VICKERS**<sup>®</sup>



**Note:** Lubricate all parts and seals with a thin coat of oil at assembly.

- Included in Cartridge Kit (see table)
- ▲ Included in 02-334558 Buna-N Seal Kit, Single Shaft Seal or 02-334559 Viton® Seal Kit, Single Shaft Seal.
- △ Included in 02-334641 Buna-N Seal Kit, Double Shaft Seal or 02-334642 Viton® Seal Kit, Double Shaft Seal.
- \* See Table X1 and X2 for Kit Rotation Information

**TABLE X1**

**Cartridge Kit Rotation for Right Hand Rotation Pump**

PUMP ROTATION	R= Right Hand Rotation		L=Left Hand Rotation	
	SHAFT END KIT ROTATION	CENTER KIT ROTATION	COVER END KIT ROTATION	CENTER KIT ROTATION
Single & Thru (R)	(R)	-	-	-

\*Notes: - A right hand rotation pump has the shaft turning clockwise when viewed from the input shaft end  
 - When ordering a right hand rotation kit, the part number will not have a suffix

**TABLE X2**

**Cartridge Kit Rotation for Left Hand Rotation Pump**

PUMP ROTATION	R= Right Hand Rotation		L=Left Hand Rotation	
	SHAFT END KIT ROTATION	CENTER KIT ROTATION	COVER END KIT ROTATION	CENTER KIT ROTATION
Single & Thru (L)	(L)	-	-	-

\*Notes: - A left hand rotation pump has the shaft turning counterclockwise when viewed from the input shaft end  
 - When ordering a left hand rotation kit, the part number will have a suffix of '-L'

**TABLE 1**

MODEL CODE	30TH DESIGN SHAFT	31ST & 32ND DESIGN SHAFT	KEY
VMQ145S-*.***.*-01	934203	4993353-001	928542
VMQ145S-*.***.*-02	934204	4993354-001	—
VMQ145S-*.***.*-03	934205	4993355-001	928547
VMQ145S-*.***.*-04	—	—	928565
VMQ145S-*.***.*-05	934206	4993356-001	928543
VMQ145S-*.***.*-06	934207	4993357-001	—
VMQ145S-*.***.*-09	937224	4993373-001	—

**TABLE 2**

OUTLET BODY				
Flange Mounting Style	Single Shaft Seal Inch Port Threads	Metric Port Threads	Double Shaft Seal Inch Port Threads	Metric Port Threads
SAE C	4993341-001	4993342-001	4993343-001	4993344-001
ISO 125	—	4993346-001	—	4993345-001

**TABLE 3**

MODEL CODE	* • CARTRIDGE KIT (BUNA-N)	* • CARTRIDGE KIT (VITON®)
VMQ145*140	02-346970	02-346971
VMQ145*160	02-346968	02-346969
VMQ145*180	02-346966	02-346967
VMQ145*195	02-346964	02-346965
VMQ145*215	02-346962	02-346963

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# Model Code

VMQ1    \*\*    \*    \*\*\*    \*    \*    \*\*    \*\*    \*    \*    \*    \*    \*    \*    \*    \*    OO    \*    O    32

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**1 2 3 4 Series designation**  
VMQ1 – Vane pump single series

**5 6 Frame size**  
45 – 140-215 cm<sup>3</sup>/r  
(8.54-13.12 in<sup>3</sup>/r)

**7 Pump type**  
S – Single

**8 9 10 Displacement**  
Frame size 45  
140 – 140 cm<sup>3</sup>/r (8.54 in<sup>3</sup>/r)  
160 – 160 cm<sup>3</sup>/r (9.76 in<sup>3</sup>/r)  
180 – 180 cm<sup>3</sup>/r (10.98 in<sup>3</sup>/r)  
195 – 195 cm<sup>3</sup>/r (11.89 in<sup>3</sup>/r)  
215 – 215 cm<sup>3</sup>/r (13.12 in<sup>3</sup>/r)

**11 Front flange mounting style**  
B – SAE C 2-bolt  
127,00 (5.000) x 12,4  
(0.49) pilot  
17,6 (0.69) slots on  
181,0 (7.13) bolt circle  
D – ISO 3019/2 125A2HW  
2-bolt  
125,00 (4.921) x 9,2  
(0.36) pilot  
18,1 (0.71) slots on  
180,0 (7.09) bolt circle

**12 Rear mounting flange and orientation**  
0 – None (non thru-drive)

**13 14 Input shaft type\***  
01 – SAE J744 keyed  
Frame size 45:  
38,10 (1.500)  
02 – SAE J744 splined  
Frame size 45: C-C  
03 – ISO 3019/2 keyed  
Frame size 45:  
40,00 (1.575)  
05 – SAE J744 keyed  
Frame size 45:  
44,45 (1.750)  
06 – SAE J744 splined  
Frame size 45: D  
09 – SAE J744 splined  
Frame size 45: C

**15 16 Output shaft coupling**  
00 – None (non thru-drive)

**17 Inlet port type**  
A – SAE J518 4-bolt split flange  
B – ISO 6162 4-bolt split flange

**18 Outlet port type**  
A – SAE J518 4-bolt flange  
B – ISO 6162 4-bolt flange

**19 Outlet port position**  
Viewed from cover end of pump  
A – Opposite inlet port  
B – 90° CCW to inlet port  
C – In-line with inlet port  
D – 90° CW to inlet port

**20 Shaft seal**  
A – Single, primary  
B – Double, secondary (spring side out)  
Recommended for wet mount applications

**21 Seal type**  
N – Buna N  
V – Viton  
W – Buna N with Viton shaft seal(s)

**22 Shaft rotation**  
Viewed from shaft end of pump  
L – Left hand (CCW)  
R – Right hand (CW)

**23 24 Special features**  
00 – None

**25 Paint**  
0 – None  
A – Blue

**26 Customer identification**  
0 – None

**27 28 Design code**  
32 – 32 design  
Installation dimensions remain unchanged for design numbers 30 to 39 inclusive.

\* Verify shaft torque ratings meet or exceed input torque requirements

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**VICKERS**<sup>®</sup>

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