

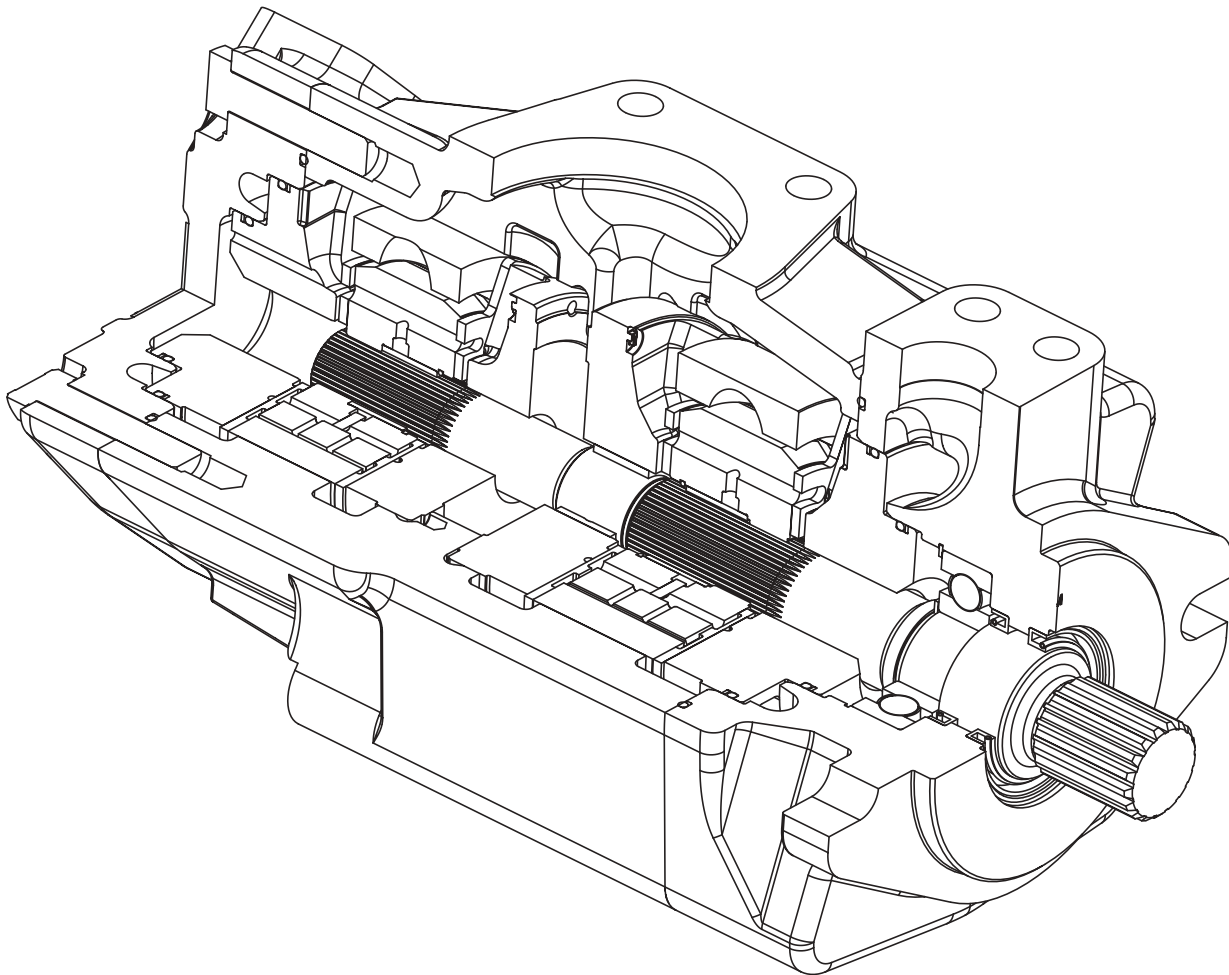
EAT•N

Vickers

**High Pressure, High Performance
Double Vane Pumps**

Parts Data

VMQ24535S Series
- 32 Design



VICKERS[®]

High Pressure, High Performance Double Vane Pump VMQ24535S Series — 32 Design

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

- Included in Cartridge Kit (see table 1)
- ▲ 02-334562 STD Seal Kit, Single Shaft Seal or 02-334563 Viton® Seal Kit, Single Shaft Seal.
- △ 02-334645 STD Seal Kit, Double Shaft Seal or 02-334646 Viton® Seal Kit, Double Shaft Seal.
- * With double and triple pumps, the orientation of the kits is such that the kit rotation is a reverse of the pump rotation. See tables X1 and X2 for the correct kit rotation relative to the pump rotation.

- ▲ △ • 998892 OD Back Up Ring
- ▲ △ • 579377 OD O-ring Buna-N
579392 OD O-ring Viton
- ▲ △ • 579374 Hub O-ring Buna-N
579389 Hub O-ring Viton
- ▲ △ • 998889 Hub Back Up Ring

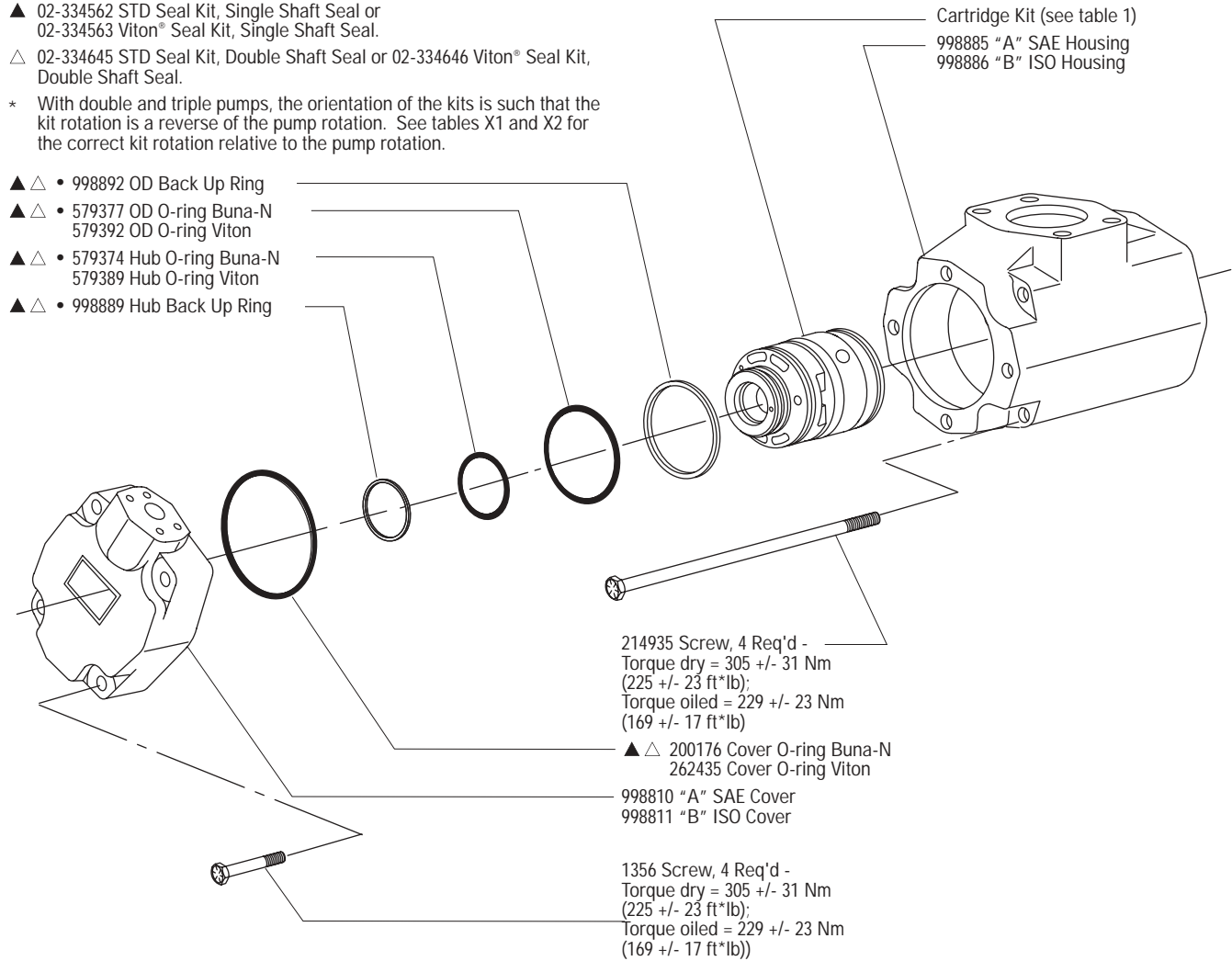


TABLE X1

Cartridge Kit Rotation for Right Hand Rotation Pump

| R= Right Hand Rotation | | L=Left Hand Rotation | |
|------------------------|------------------------|----------------------|------------------------|
| PUMP ROTATION | SHAFT END KIT ROTATION | CENTER KIT ROTATION | COVER END KIT ROTATION |
| Double (R) | (R) | - | (L) |

*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

| R= Right Hand Rotation | | L=Left Hand Rotation | |
|------------------------|------------------------|----------------------|------------------------|
| PUMP ROTATION | SHAFT END KIT ROTATION | CENTER KIT ROTATION | COVER END KIT ROTATION |
| Double (L) | (L) | - | (R) |

*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'

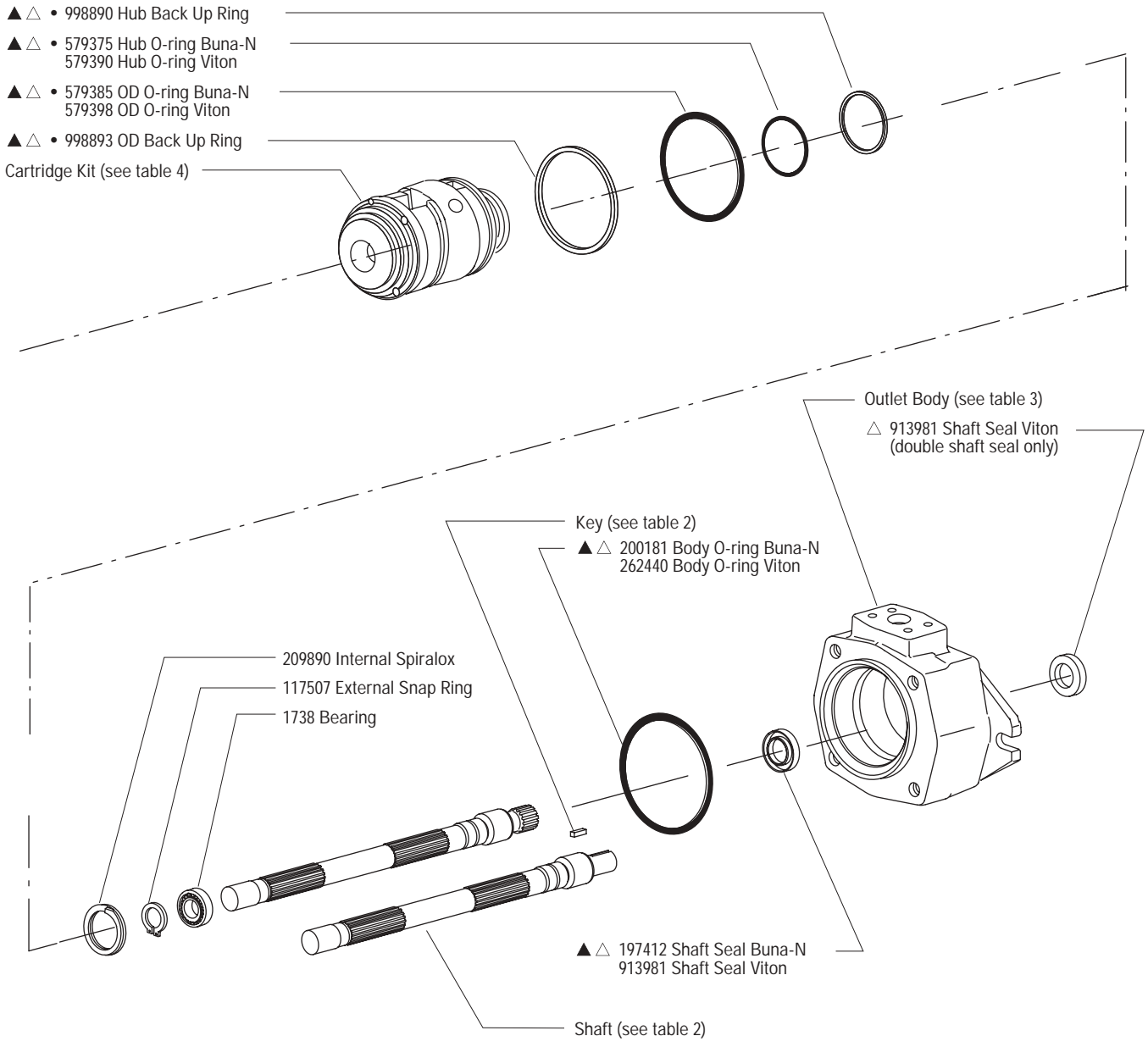


TABLE 1

| MODEL CODE COVER END | * • CARTRIDGE KIT (BUNA-N) | * • CARTRIDGE KIT (VITON®) |
|-------------------------|-------------------------------|-------------------------------|
| VMQ24535S***090 | 02-465685 | 02-465692 |
| VMQ24535S***100 | 02-465686 | 02-465693 |
| VMQ24535S***112 | 02-465687 | 02-465694 |
| VMQ24535S***125 | 02-465688 | 02-465695 |
| VMQ24535S***135 | 02-465689 | 02-465696 |
| VMQ24535S***140 | 02-465690 | 02-465697 |
| VMQ24535S***158 | 02-465691 | 02-465698 |

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TABLE 2

| MODEL CODE | 30TH DESIGN SHAFT | 31ST & 32ND DESIGN SHAFT | KEY |
|-------------------------|----------------------|-----------------------------|--------|
| VMQ24535S-***-***-**-01 | 934220 | 4993358-001 | 928542 |
| VMQ24535S-***-***-**-02 | 934221 | 4993359-001 | — |
| VMQ24535S-***-***-**-03 | 934222 | 4993360-001 | 928547 |
| VMQ24535S-***-***-**-04 | — | — | — |
| VMQ24535S-***-***-**-05 | 934223 | 4993361-001 | 928543 |
| VMQ24535S-***-***-**-06 | 934224 | 4993362-001 | — |
| VMQ24535S-***-***-**-09 | 937225 | 4993374-001 | — |

TABLE 3

| OUTLET BODY | | | | |
|-----------------------------|----------------------|------------------------|----------------------|------------------------|
| Flange Mounting Style | Single Shaft Seal | | Double Shaft Seal | |
| | Inch Port Threads | Metric Port Threads | Inch Port Threads | Metric Port Threads |
| SAE B | 4993341-001 | 4993342-001 | 4993343-001 | 4993344-001 |
| ISO 100 | — | 4993346-001 | — | 4993345-001 |

TABLE 4

| MODEL CODE SHAFT END | * • CARTRIDGE KIT (BUNA-N) | * • CARTRIDGE KIT (VITON®) |
|-------------------------|-------------------------------|-------------------------------|
| VMQ24535S140*** | 02-346970 | 02-346971 |
| VMQ24535S160*** | 02-346968 | 02-346969 |
| VMQ24535S180*** | 02-346966 | 02-346967 |
| VMQ24535S195*** | 02-346964 | 02-346965 |
| VMQ24535S215*** | 02-346962 | 02-346963 |

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Model Code

VMQ2 ** ** S *** *** * O ** OO * * * * * * * * OO * O 32

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35

1 2 3 4 Series designation
VMQ2 – Vane pump double series

5 6 Frame size (front section)
45 – 140-215 cm³/r
(8.54-13.12 in³/r)

7 8 Frame size (rear section)
35 – 90-158 cm³/r
(5.49-9.64 in³/r)

9 Pump type
S – Standard

10 11 12 Displacement (front section)
Frame size 45
140 – 140 cm³/r (8.54 in³/r)
160 – 160 cm³/r (9.76 in³/r)
180 – 180 cm³/r (10.98 in³/r)
195 – 195 cm³/r (11.89 in³/r)
215 – 215 cm³/r (13.12 in³/r)

13 14 15 Displacement (rear section)
Frame size 35
090 – 90 cm³/r (5.49 in³/r)
100 – 100 cm³/r (6.10 in³/r)
112 – 112 cm³/r (6.83 in³/r)
125 – 125 cm³/r (7.63 in³/r)
135 – 135 cm³/r (8.24 in³/r)
140 – 140 cm³/r (8.54 in³/r)
158 – 158 cm³/r (9.64 in³/r)

16 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

17 Adapter flange
0 – None (standard
double pump)

18 19 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 Spline
Frame size 45: C

20 21 Output shaft coupling
00 – None (standard
double pump)

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

23 Front outlet port type
A – SAE J518 4-bolt flange
B – ISO 6162 4-bolt flange

24 Rear outlet port type
A – SAE J518 4-bolt flange
B – ISO 6162 4-bolt flange

25 Front outlet port position
Viewed from cover end of
pump
A – Opposite inlet port
B – 90° CCW to inlet port
C – In-Line with front
inlet port
D – 90° CW to inlet port

26 Rear outlet port position
Viewed from cover end
of pump
A – 135° CCW to inlet port
B – 45° CCW to inlet port
C – 45° CW to inlet port
D – 135° CW to inlet port

27 Shaft Seal
A – Single, primary
B – Double, secondary
(spring side out)
Recommended for wet
mount applications

28 Seal Type
N – Buna-N
V – Viton
W – Buna-N with Viton
shaft seal(s)

29 Shaft rotation
Viewed from shaft end
of pump
L – Left Hand (CCW)
R – Right Hand (CW)

30 31 Special features
00 – None

32 Paint
O – None
A – Blue

33 Customer identification
O – None

34 35 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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