

ENGINEERING
TOMORROW



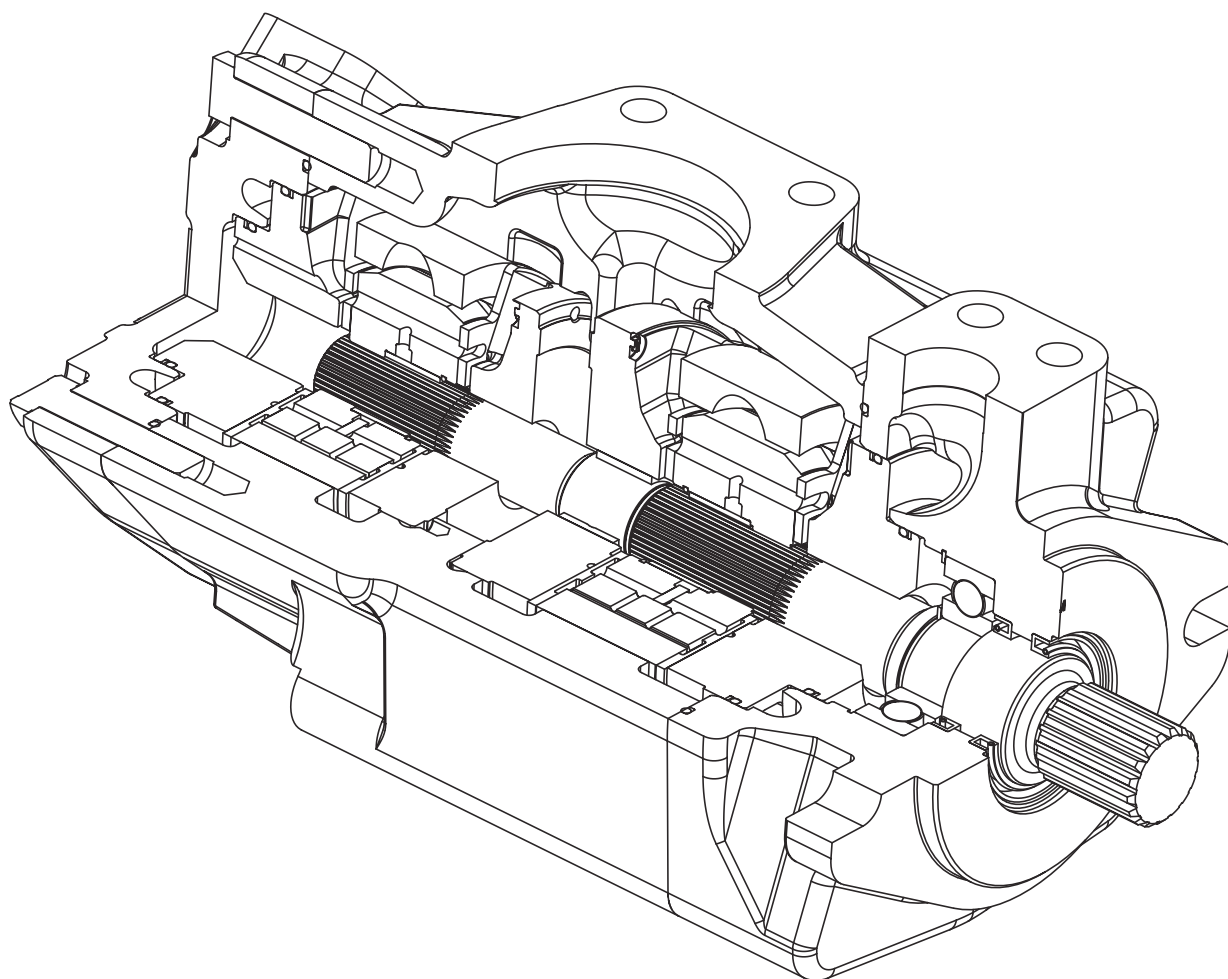
Vickers® by Danfoss

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

Parts and Service Manual

AX438783745879en-000101

VMQ24525S Series
– 32 Design



VICKERS®

High Pressure,
High Performance
Double Vane Pump
VMQ24525S Series
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Note Lubricate all parts and seals with a thin coat of oil at assembly.

- Included in Cartridge Kit (see table)
- ▲ 02-334560 Buna-N Seal Kit, Single Shaft Seal or 02-334561 VitonSeal Kit, Single Shaft Seal.
- △ 02-334643 Buna-N Seal Kit, Double Shaft Seal or 02-334644 VitonSeal 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.

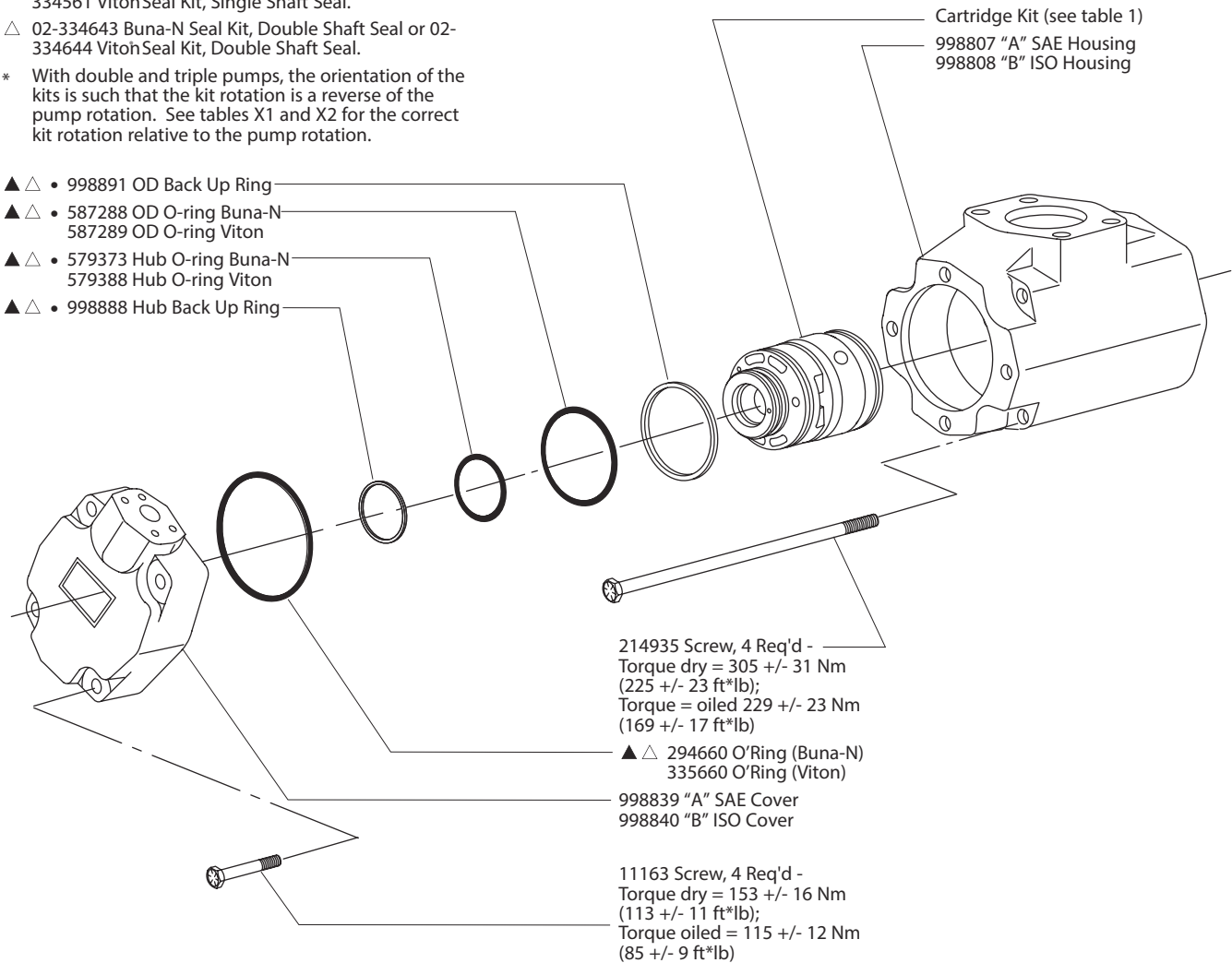


TABLE X1

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'

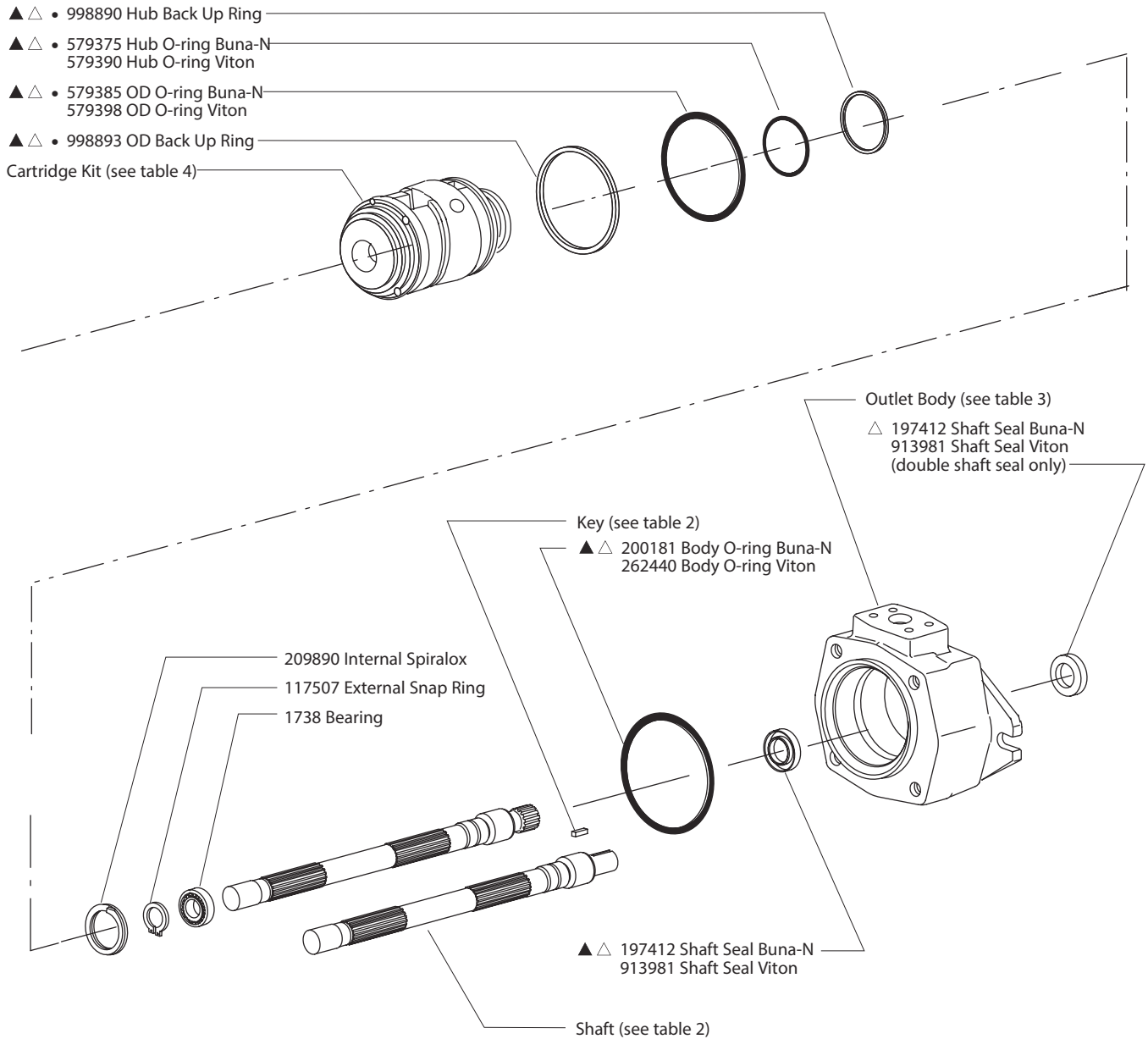


TABLE 1

MODEL CODE COVER END	* • CARTRIDGE KIT (BUNA-N)	* • CARTRIDGE KIT (VITON ')
VMQ24525S***010	02-465574	02-465569
VMQ24525S***016	02-465575	02-465570
VMQ24525S***020	02-465576	02-465571
VMQ24525S***025	02-465578	02-465572
VMQ24525S***032	02-465577	02-465573
VMQ24525S***040	02-348974	02-348981
VMQ24525S***045	02-348975	02-348982
VMQ24525S***050	02-348976	02-348983
VMQ24525S***063	02-348977	02-348984
VMQ24525S***071	02-348978	02-348985
VMQ24525S***080	02-348979	02-348986
VMQ24525S***090	02-348980	02-348987

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TABLE 2

MODEL CODE	30TH DESIGN SHAFT	31ST & 32ND DESIGN SHAFT	KEY
VMQ24525S-***-***-**-01	934229	4993363-001	928542
VMQ24525S-***-***-**-02	934230	4993364-001	—
VMQ24525S-***-***-**-03	934231	4993365-001	928547
VMQ24525S-***-***-**-04	—	—	—
VMQ24525S-***-***-**-05	934232	4993366-001	928543
VMQ24525S-***-***-**-06	934233	4993367-001	—
VMQ24525S-***-***-**-09	937226	4993375-001	—

TABLE 3

OUTLET BODY				
Flange Mounting Style	Single Shaft Seal Inch Port Threads	Metric Port Threads	Double Shaft Seal 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 ')
VMQ24525S140***	02-346970	02-346971
VMQ24525S160***	02-346968	02-346969
VMQ24525S180***	02-346966	02-346967
VMQ24525S195***	02-346964	02-346965
VMQ24525S215***	02-346962	02-346963

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Model Code

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VMQ2 ** ** S *** *** * 0 ** 00 * * * * * * * 00 * 0 32
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1 2 3 4 Series designation
VMQ2 – Vane pump double series

5 6	Frame size (front section)
45 -	140-215 cm (8.54-13.12 ft)

7 8	Frame size (rear section)
25	10-90 cm ³ /r (0.62-5.49 in ³ /r)

9	Pump type
S -	Standard

10 11 12 Displacement
(front section)

Frame size 45

140	–	140 cm ³ /r (8.54 in ³ /r)
160	–	160 cm ³ /r (9.76 in ³ /r)
180	–	180 cm ³ /r (10.98 in ³ /r)
195	–	195 cm ³ /r (11.89 in ³ /r)
215	–	215 cm ³ /r (13.12 in ³ /r)

13 14 15 Displacement
(rear section)

Frame size 25

010	–	10 cm ³ /r (0.62 in ³ /r)
016	–	16 cm ³ /r (0.98 in ³ /r)
020	–	20 cm ³ /r (1.23 in ³ /r)
025	–	25 cm ³ /r (1.58 in ³ /r)
032	–	32 cm ³ /r (1.96 in ³ /r)
040	–	40 cm ³ /r (2.44 in ³ /r)
045	–	45 cm ³ /r (2.75 in ³ /r)
050	–	50 cm ³ /r (3.05 in ³ /r)
063	–	63 cm ³ /r (3.84 in ³ /r)
071	–	71 cm ³ /r (4.33 in ³ /r)
080	–	80 cm ³ /r (4.88 in ³ /r)
090	–	90 cm ³ /r (5.49 in ³ /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

0 – 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

Products we offer:

- Cartridge valves
- DCV directional control valves
- Electric converters
- Electric machines
- Electric motors
- Gear motors
- Gear pumps
- Hydraulic integrated circuits (HICs)
- Hydrostatic motors
- Hydrostatic pumps
- Orbital motors
- PLUS+1® controllers
- PLUS+1® displays
- PLUS+1® joysticks and pedals
- PLUS+1® operator interfaces
- PLUS+1® sensors
- PLUS+1® software
- PLUS+1® software services, support and training
- Position controls and sensors
- PVG proportional valves
- Steering components and systems
- Telematics

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Hydro-Gear

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Daikin-Sauer-Danfoss

www.daikin-sauer-danfoss.com

**Danfoss
Power Solutions (US) Company**
2800 East 13th Street
Ames, IA 50010, USA
Phone: +1 515 239 6000

**Danfoss
Power Solutions GmbH & Co. OHG**
Krokamp 35
D-24539 Neumünster, Germany
Phone: +49 4321 871 0

**Danfoss
Power Solutions ApS**
Nordborgvej 81
DK-6430 Nordborg, Denmark
Phone: +45 7488 2222

**Danfoss
Power Solutions Trading
(Shanghai) Co., Ltd.**
Building #22, No. 1000 Jin Hai Rd
Jin Qiao, Pudong New District
Shanghai, China 201206
Phone: +86 21 2080 6201