

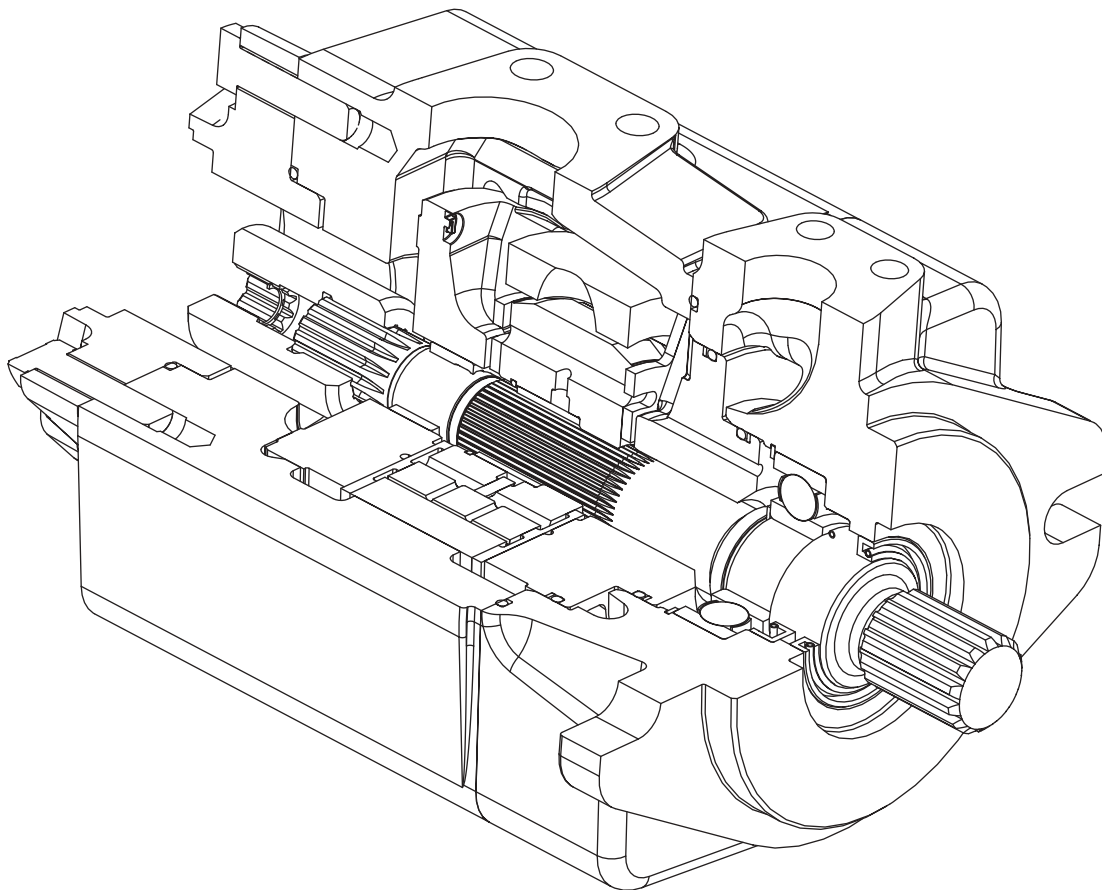
EAT•N

Vickers

**High Pressure, High Performance
Vane Pumps**

Parts Data

VMQ145T Series
- 32 Design



VICKERS[®]

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

- Included in Cartridge Kit (see table 4)
- ▲ Included in 02-334700 Buna-N Seal Kit, Single Shaft Seal or 02-334701 Viton® Seal Kit, Single Shaft Seal.
- △ Included in 02-334702 Buna-N Seal Kit, Double Shaft Seal or 02-334703 Viton® Seal Kit, Double Shaft Seal.
- * See Table X1 and X2 for Kit Rotation Information

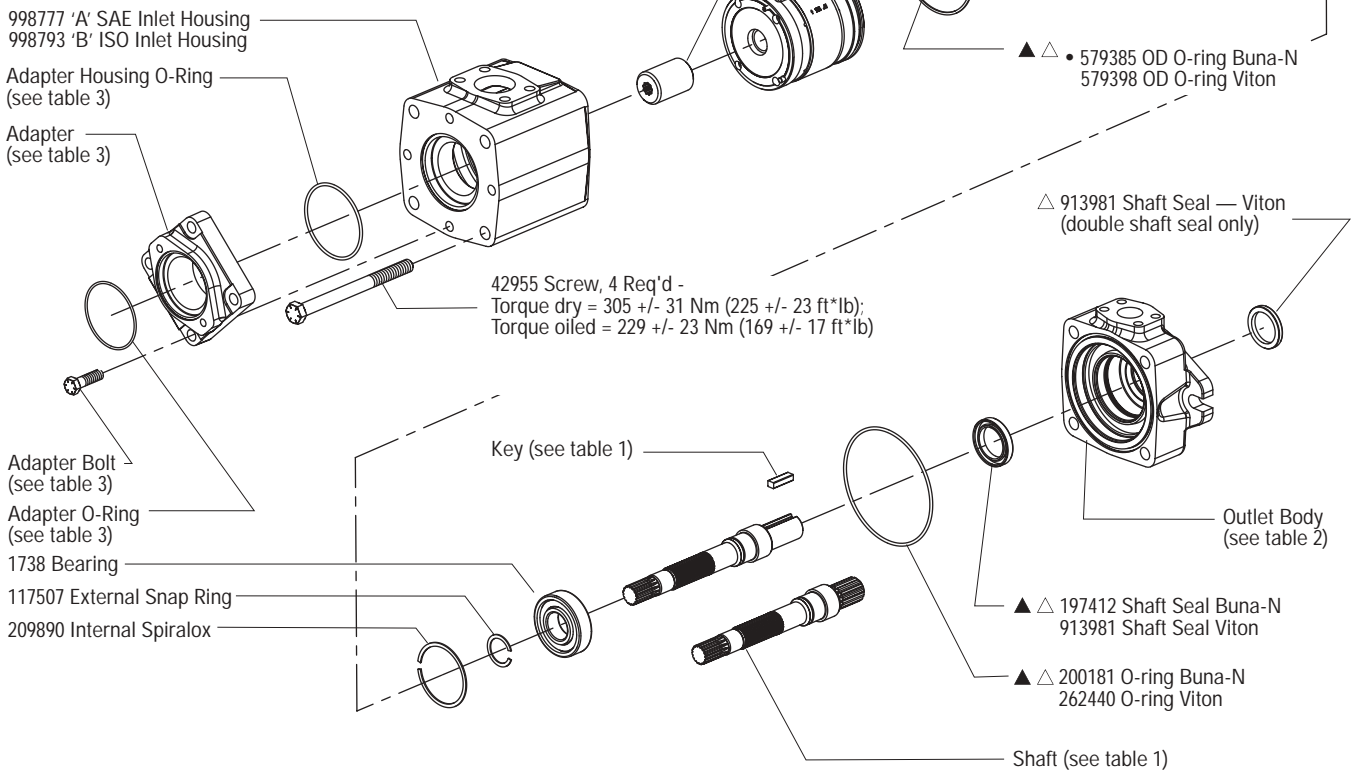


TABLE X1

Cartridge Kit Rotation for Right Hand Rotation Pump

R= Right Hand Rotation		L=Left Hand Rotation	
PUMP ROTATION	SHAFT END KIT ROTATION	CENTER KIT ROTATION	COVER END 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

R= Right Hand Rotation		L=Left Hand Rotation	
PUMP ROTATION	SHAFT END KIT ROTATION	CENTER KIT ROTATION	COVER END 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 3

MODEL CODE THRU DRIVE COMPONENTS	OUTLET SPLINE SIZE	ADAPTER MOUNTING PAD SIZE	ADAPTER ADAPTER	ADAPTER/ HOUSING O-RING		MOUNTING PAD O-RING		COUPLING ASSEMBLY	ADAPTER BOLT DRY	ADAPTER TORQUE NM (FT-LB)	
				BUNA N	VITON	BUNA N	VITON			OILED	OILED
VMQ145T-***-***-16	SAE A	SAE A	937081	200159	262418	353409	576601	02-315059	1315	153±16 (113±11)	115±12 (85±9)
VMQ145T-***-***-22	SAE B	SAE B	998588	200159	262418	375422	401525	02-315058	1315	153±16 (113±11)	115±12 (85±9)
VMQ145T-***-***-25	SAE B-B	SAE B	998588	200159	262418	375422	401525	02-315057	1315	153±16 (113±11)	115±12 (85±9)
VMQ145T-***-***-32	SAE C	SAE C	998589	200159	262418	312092	353264	02-315056	298168	305±31(225±23)	229±23 (169±1)

TABLE 1

MODEL CODE	30TH DESIGN SHAFT	31ST & 32ND DESIGN SHAFT	KEY
VMQ145T-***-***-01	937122	4993368-001	928542
VMQ145T-***-***-02	937123	4993369-001	—
VMQ145T-***-***-03	937124	4993370-001	928547
VMQ145T-***-***-04	—	—	928565
VMQ145T-***-***-05	937125	4993371-001	928543
VMQ145T-***-***-06	937126	4993372-001	—

TABLE 2

OUTLET BODY

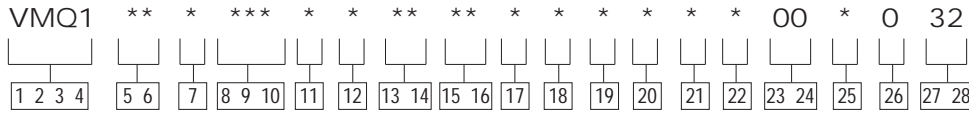
Flange Mounting Style	SINGLE SHAFT SEAL		DOUBLE SHAFT SEAL	
	Inch Port Threads	Metric Port Threads	Inch Port Threads	Metric Port Threads
SAE C	4993341-001	4993342-001	4993343-001	4993344-001
ISO 125	—	4993346-001	—	4993345-001

TABLE 4

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



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

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

7 Pump type
T – Thru-drive
(Options at model codes **12** and **15 16** must be specified for thru-drive units)

8 9 10 Displacement
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)

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
Viewed from adapter end of pump
SAE A
A – In-line with mounting flange
B – 90° to mounting flange
SAE B
E – In-line with mounting flange
F – 90° to mounting flange
SAE C
L – 45° CCW to mounting flange
M – 45° CW to mounting flange

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
(Not available on thru-drive units)

15 16 Output shaft coupling
Thru-drive units, model code
7 = T
16 – SAE J744 16-4 A-spline shaft
22 – SAE J744 22-4 B-spline shaft
25 – SAE J744 25-4 B-B-spline shaft
32 – SAE J744 32-4 C-spline shaft (frame sizes 35 & 45 only)

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 adapter 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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