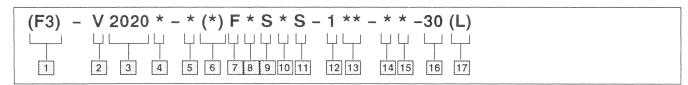
Model Code



1 Special seals

F3 - For mineral oil & fire resistant fluids S - 1.062 - 12 UN-2B thread (Omit if not required)

2 Vane pump

3 Series designation

4 Cover type

F - Flow control cover

P - Priority valve cover

Omit - Standard cover

5 Mounting

1 - Flange, 2 bolt SAE B size

2 - Foot bracket

6 - Flange, 2 bolt SAE A size

6 Foot bracket

(Mounting position with respect to inlet port when viewed from shaft end. No code required for inlet port at 12 o'clock)

3 - Inlet port at 3 o'clock

6 - Inlet port at 6 o'clock

9 - Inlet port at 9 o'clock

Omitted for flange mounting

7 Inlet port

F - 4 bolt flange

8 Ring capacity (Shaft end) (Rated capacity (USgpm) at 1200 rpm, 6.9 bar (100 psi)

5 – 5 USgpm **9** – 9 USgpm 6 - 6 USgpm 11 - 11 USgpm

7 – 7 USgpm **12** – 12 USgpm

8 - 8 USgpm 13 - 13 USgpm

9 No. 1 outlet port (Shaft end)

10 Ring capacity (Cover end) (Rated capacity (USgpm) at 1200 rpm, 6.9 bar (100 psi)

5 - 5 USgpm

9 - 9 USgpm 6 - 6 USgpm

7 - 7 USgpm 11 - 11 USgpm

11 No. 2 outlet port (Cover end)

8 - 8 USgpm

Code	Std. cover	Flow control cover			
Code		Pressure	Tank		
Р	phononic resultant de primer de la constitución de	3/4-16 St.Thd.	1/2 NPT Thd.		
S	1.062-12 St.Thd.	3/4-16 St.Thd.	1.062-12 St.Thd.		
T		3/4-16 St.Thd.	3/4-16 St.Thd.		

Priority valve cover

Code	Primary outlet	Secondary outlet	Tank
T	3/4-16	7/8-14	3/4-16
	St.Thd.	St.Thd.	St.Thd.

12 Shaft type

1 - Straight thread

3 - Threaded

11 - Splined

13 Outlet port orientation

(Viewed from cover end of pump)

With no. 1 outlet opposite inlet

AA - No. 2 outlet opposite inlet

AB - No. 2 outlet 90° CCW from inlet AC - No. 2 outlet inline with inlet

AD - No. 2 outlet 90° CW from inlet

With no. 1 outlet 90° CCW from inlet

BA - No. 2 outlet opposite inlet

BB - No. 2 outlet 90° CCW from inlet

BC - No. 2 outlet inline with inlet

BD - No. 2 outlet 90° CW from inlet

With no. 1 outlet inline with inlet

CA - No. 2 outlet opposite inlet

CB - No. 2 outlet 90° CCW from inlet

CC - No. 2 outlet inline with inlet

CD - No. 2 outlet 90° CW from inlet

With no. 1 outlet 90° CW from inlet

DA - No. 2 outlet opposite inlet

DB - No. 2 outlet 90° CCW from inlet DC - No. 2 outlet inline with inlet

DD - No. 2 outlet 90° CW from inlet

14 Flow rate

(Thru orifice in cover USpgm)

15 Pressure setting

A - 250 psi **F** - 1500 psi

B - 500 psi **G** - 1750 psi **C** - 750 psi **H** - 2000 psi

D - 1000 psi **J** - 2250 psi

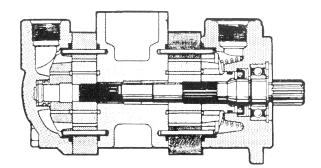
E - 1250 psi K - 2500 psi

16 Design

17 Rotation

(Viewed from shaft end of pump) L - Left hand (counterclockwise)

Omit - Right hand (clockwise)



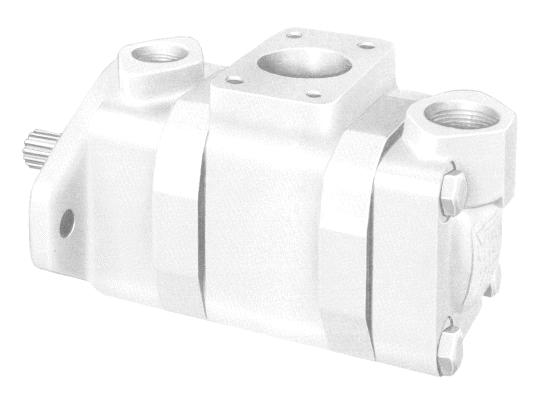
Typical sectional view

Service Data



Double Vane Type Pump

(F3)-V2020*-*(*)F*S*S-1**-**-30(L)



Vickers Incorporated A TRINOVA Company 5445 Corporate Drive P. O. Box 302 Troy, Michigan 48007-0302

M-2256-S Released 1-01-92 The right to modifications for technical improvements is reserved. Printed in U.S.A.

MODEL CODE	PRESSURE SETTING	CONTROL VALVE S/A (F Cover Only)		
Α -	250 psi	229613		
В-	500 psi	233018		
C -	750 psi	232794		
D -	1000 psi	232795		
E -	1250 psi	232796		
F-	1500 psi	232797		
G -	1750 psi	232798		
H -	2000 psi	232799		
J	2250 psi	233019		
K _	2500 nci	233020		

NOTE:

For satisfactory service life of these components in industrial applications, use full flow filtration to provide fluid which meets ISO cleanliness code 16/13 or cleaner. OFP, OFR, and OFRS series filters are recommended.

	F -	1500 psi	2	32797			
374865 Plug	G -	1750 psi	23	32798			
154129 O-ring	H -	2000 psi	23	32799			
/ / 239766 Spring	J -	2250 psi	23	33019			
Control valve S/A	K -	2500 psi	23	33020			
Control valve S/A (F Cover See table) – 205840 Pin					MODEL		COVER
203640 FIII					V2020-**	***S-**	850557
						***P-**2	850601
						***S-**2	850584
F Cover						***T-**2	850563
(See table)						***T-***2	850309
Screw 4 Req'd (See table) Torque 102-115 N.m. (75-85 lb. ft.)	– 374865 F	◆ Pin (& Bush 2 Req'd ▲ ◆ 154	Inlet body — ning S/A) See table — 090 O-ring — (See table) —			
▲ ◆ 513408 O-ring- 577701 Wave washer- Cover (See table) - Screw 4 Req'd (See table) - Torque 102-115 N.m. (75-85 lb. ft.)	1540	90 O-ring			574957 Pre		Vane kit (See table) ◆ Ring (See table)
							Y
D. Dilavita Cantanal	MOD	EL + R	OTOR	♦■ VANE K	T + PIN	♦ RING	◆ COVER END

923485

923493

923478

2456

16662

179341

F - FIIOTRY COIREO		
*	V2020-***5	502255
433026 Plug & O-ring S/A	V2020-***6	OOLLOO
433025 Spring	V2020-***7	
The second secon	V2020-***8	502256
433026 Plug & O-ring S/A 433025 Spring 433024 Piston	V2020-***9	
2 3 3 3 3 3 3 3 3 3 3	V2020-***11	502257
Plug		
	P Cover (see table	9)
	433026 Plug & O	-ring S/A
	0	
	- 2706 Seat	
	-2706 Seat -290057 Piston	
Screw 4 Req'd (See table)	- Spring (See table)
Torque 102-115 N.m.	347397 Seat	,
(75-85 lb. ft.)	- 421286 Shim	
6	- 373117 Shim	
421288 Shim————————————————————————————————————		
373118 Shim	0	
309199 Plug & O-ring S/A	>	

F - Flow Control

P - Priority Control

MODEL	PRESSURE SETTING	SPRING
V2020P-****-A	250 psi	252886
V2020P-****-B	500 psi	2280
V2020P-****C	750 psi	2200
V2020P-****-D	1000 psi	435626
V2020P-****-E	1250 psi	400020
V2020P-****-F	1500 psi	
V2020P-****-G	1750 psi	
V2020P-****-H	2000 psi	2281
V2020P-****-J	2250 psi	
V2020P-****-K	2500 psi	

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CART. KIT

02-141747

923480

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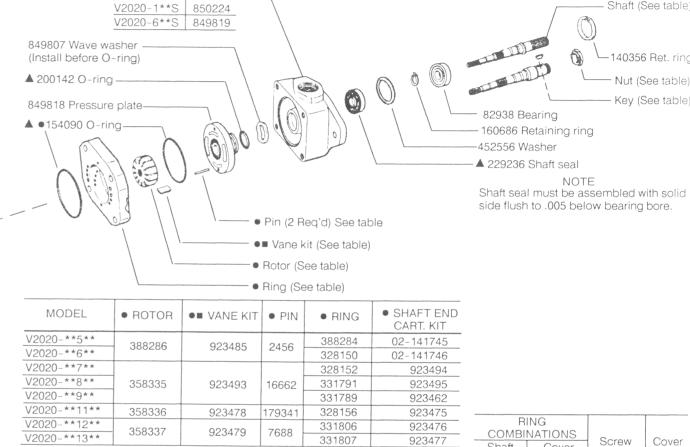
NO.	SHAFT	KEY	NUT	TYPE	
1	308686	9955		Straight	
3	308925	1617	18755	Threaded	
11	308926	**************************************		Splined	

NOTE

Shaft (See table)

<u></u> 140356 Ret. ring

Nut (See table) - Key (See table)



MODEL

BODY -

RING COMBINATIONS				
	Shaft	Cover	Screw	Cover
	End	End		
	5 & 6	7		
	7	5 & 6	189378	
	9	6		
	8	7	67464	Std.
	8	8		
	11	11	142713	
	12	8		
	13	9		
	5 & 6	12 & 13	20040	
	10 & 11	7,8 & 9	36048	
	12 & 13	5 & 6		
	12 & 13	7,8&9	70074	
	12 & 13	10 & 11	73074	
	5 & 6	10 & 11		F
	7.8 & 9	7.8 & 9	134249	
	10 & 11	5 & 6		
	5 & 6	7,8 & 9		
	7,8 & 9	5 & 6	142713	
	10 & 11	7,8 & 9	20049	
	12 & 13	6	36048	
	10 & 11	11		
	12 & 13	7,8&9	73074	Р
	12 & 13	11		
	7,8 & 9 7,8 & 9		134249	
	10 & 11	6	104243	
-	7, 8 & 9	6	142713	

- ▲ Included in seal kit 02-143191 F3 equivalent seal kit 02-143192
- Shaft end cartridge kit (See table)
- Cover end cartridge kit (See table)
- Vane kit (includes12 vanes) See table