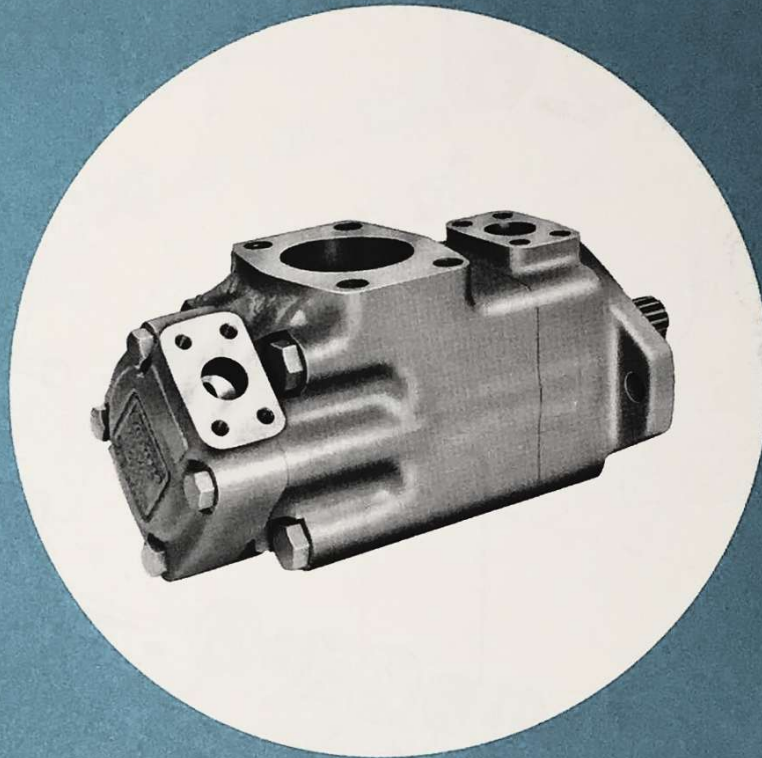


SPERRY  VICKERS

**DOUBLE
PUMPS**



**SERVICE
PARTS
INFORMATION**

**3525VQ SERIES
-20 DESIGN**

SPERRY VICKERS
TROY, MI. 48084

Revised 5-1-78

I-3171-S

MODEL	SAE COVERTYPE	PART NO.
3*25VQ*A*-***20(L)	4-BOLT FLANGE	231532
3*25VQ*E*-***20(L)	STRAIGHT THD.	242250

3*25VQ****-S				** -20	
SHAFT	KEY	SECONDARY SHAFT SEAL	SHAFT NO.	TYPE	
243448	88678	---	1	STR. KEYED STD.	
243449	---	---	11	SPLINE	
247019	---	---	19	SPLINE	
285417	---	---	33	SPLINE	
394036	393536	---	86	STR. KEYED, HEAVY DUTY	
413023	---	412009	111	SPLINE	
413435	---	412009	124	SPLINE	

MODEL	TYPE DRIVE	BEARING
3525VQ	DIRECT-	38441
3625VQ	INDIRECT-	239092

● ASSEMBLE SEAL FLUSH TO PILOT FACE WITH SPRING FACING INWARD AS SHOWN

□ ● SECONDARY SHAFT SEAL (SEE TABLE) (USE ON "S" FLANGE MOUNTED MODELS ONLY)

11163 SCREW
(4 REQ'D)
TORQUE TO
65-75 lbf. ft.

□ WIPE O. D. OF SEAL WITH OIL BEFORE PRESSING INTO BODY. APPLY GREASE TO SEAL I. D. BEFORE INSTALLATION OF SHAFT.

○ ASSEMBLE SEAL WITH SPRING TOWARD BEARING.

■ ▲ 419674 SEALING RING
(NOTE: INSTALL IN BODY BEFORE INSTALLATION OF CARTRIDGE KIT.)

NOTE
BRONZE FACES MUST BE
INSTALLED TOWARD THE
ROTOR.

■ ▲ 154101
"O" RING

SHAFT
(SEE TABLE)

SCREW
(SEE TABLE)

MOUNTING ASSEMBLY 3*25VQ***F-**-20(L)		
INCLUDED IN FOOT BRACKET KIT NO. FB-C-10	SCREW (2 REQ'D) 205533	MOUNTING BRACKET 205077

NOTE
BRONZE FACES MUST BE
INSTALLED TOWARD THE
ROTOR.

NOTE
INSTALL INTO COVER
BEFORE INSTALLATION
OF CARTRIDGE KIT.

42955 SCREW
(TORQUE TO
150 ± 10 lbf. ft.)

230189
INLET BODY

TORQUE TO
105 ± 5 lbf. in.

TORQUE TO
45 ± 5 lbf. in.

SHAFT END CAPACITY (US GPM)	SCREW (2 REQ'D)	PIN (2 REQ'D)	INLET SUPPORT PLATE	▲ SEAL PACK (4 REQ'D)	◆ FLEX-SIDE PLATE KIT	ROTOR	VANE KIT	RING	OUTLET SUPPORT PLATE	CART. KIT	F3 CART. KIT
3*25VQ21A-*****20(*)	410609	418108	430806 (INCLUDES 327009 BUSHING)	433765 S/A	923953	262154	922700 (INCLUDES 10 VANES & 10 INSERTS)	394961	412003	413420	421582
3*25VQ25A-*****20(*)								319396		413421	421583
3*25VQ30A-*****20(*)								319397		413422	421584
3*25VQ35A-*****20(*)								319398		413418	421585
3*25VQ38A-*****20(*)								319399		413419	421586

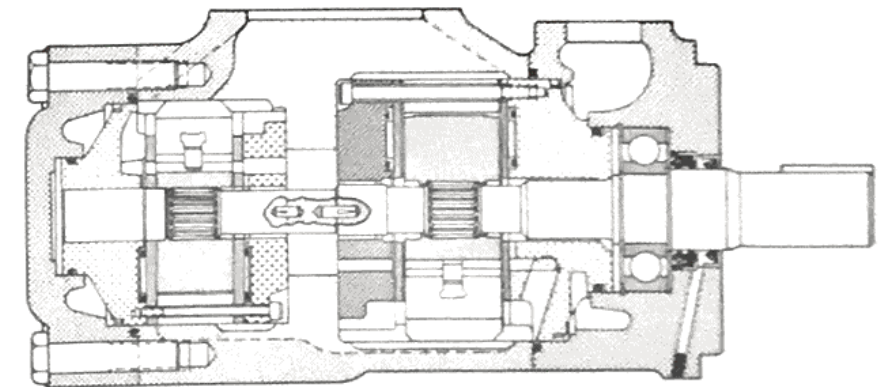
■ INCLUDED IN
CARTRIDGE KIT

▲ INCLUDED IN SINGLE
SHAFT SEAL KIT 920056
F3 EQUIVALENT
SEAL KIT 920056

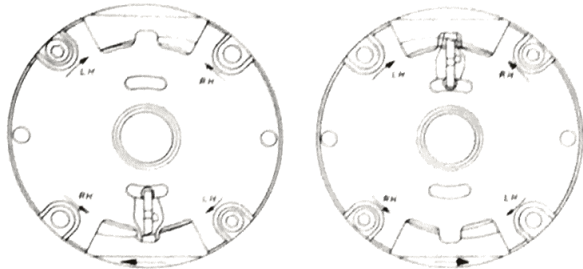
▲▲ INCLUDED IN DOUBLE
SHAFT SEAL KIT 920057
F3 EQUIVALENT
SEAL KIT 920059

▲ BACK-UP RING	▲ "O" RING	▲ SEAL RING	▲ "O" RING	OUTLET SUPPORT PLATE	▲ SEAL PACK (4 REQ'D)	◆ FLEX SIDE PLATE KIT	ROTOR	VANE KIT	RING	INLET SUPPORT PLATE	PIN (2 REQ'D)	SCREW (2 REQ'D)	STD. CART. KIT	F3 CART. KIT	COVER END CAPACITY (US GPM)
THESE PARTS ARE SERVICED IN CARTRIDGE KIT															
271789	154078	419673	154095	419079	433763 S/A	923956	270597	922701 (10 VANES & INSERTS)	326984	419080	422207	413834	421244	421576	3*25***12***20
									326985				421235	421577	3*25***14***20
									326986				421236	421578	3*25***17***20
									326987				421237	421579	3*25***19***20
									326988				421238	421580	3*25***21***20

◆ NOTE
WHEN ORDERED INDIVIDUALLY,
FLEX SIDE PLATE KIT INCLUDES
(4) F3 SEAL PACK SUBASSEMBLIES



SHARP EDGE OF VANE MUST
LEAD DIRECTION OF ROTATION



COVER END CARTRIDGE
R. H. ROTATION

SHAFT END CARTRIDGE
R. H. ROTATION

NOTE

STANDARD RIGHT HAND SHAFT ROTATION
CARTRIDGES SHOWN: REVERSE FOR LEFT
HAND ROTATION.

TO REVERSE CARTRIDGE KIT ROTATION,
REMOVE THE TWO SCREWS, AND REVERSE
THE LOCATION OF THE INLET SUPPORT
PLATE AND OUTLET SUPPORT PLATE. RE-
INSTALL THE TWO SCREWS HAND TIGHT.
USE PUMP COVER TO ALIGN ALL SECTIONS
OF THE CARTRIDGE. REMOVE COVER CARE-
FULLY AND TIGHTEN SCREWS TO RECOM-
MENDED TORQUE.

MODEL CODE BREAKDOWN

(F3) 3*25VQ 21A12-S 1 CC 20L * * *

SPECIAL VITON SEALS
SERIES

3525VQ, DOUBLE PUMP
3625VQ, DOUBLE PUMP

INTRA VANE FLEX PLATE TYPE PUMP

US GPM CAPACITY-SHAFT END PUMP

(SAE RATING 1200 RPM-100 PSI)
21, 25, 30, 35, 38

SAE PORT CONNECTIONS

CODE	INLET	OUTLET NO. 1 SHAFT END	OUTLET NO. 2 COVER END
A	4-BOLT FLG.	4-BOLT FLG.	4-BOLT FLG.
E	4-BOLT FLG.	4-BOLT FLG.	STR. THREAD

US GPM CAPACITY-COVER END PUMPS

(SAE RATING 1200 RPM-100 PSI)
3*25VQ (12, 14, 17, 19, 21)

MOUNTING

F-FOOT (SINGLE SHAFT SEAL)

S- FLANGE (DOUBLE SHAFT SEAL)

OMITTED- FLANGE, (SINGLE SHAFT SEAL)

SHAFT TYPE

1- STRAIGHT KEYED

11- SPLINED

19- SPLINED

33- SPLINED

86- STR. KEYED, HEAVY DUTY

111- SPLINED

124- SPLINED

SPECIAL FEATURE

SHAFT ROTATION

"L" LEFT HAND SHAFT
ROTATION CCW WHEN
VIEWED FROM SHAFT
END.

DESIGN NUMBER

OUTLET POSITIONS VIEWED FROM COVER END

WITH #1 OUTLET OPPOSITE INLET	AA	#2 OUTLET -135° CCW FROM INLET
	AB	" " - 45° CCW FROM INLET
	AC	" " - 45° CW FROM INLET
	AD	" " -135° CW FROM INLET
WITH #1 OUTLET 90° CCW FROM INLET	BA	#2 OUTLET -135° CW FROM INLET
	BB	" " - 45° CCW FROM INLET
	BC	" " - 45° CW FROM INLET
	BD	" " -135° CW FROM INLET
WITH #1 OUTLET INLINE WITH INLET	CA	#2 OUTLET -135° CCW FROM INLET
	CB	" " - 45° CCW FROM INLET
	CC	" " - 45° CW FROM INLET
	CD	" " -135° CW FROM INLET
WITH #1 OUTLET 90° CW FROM INLET	DA	#2 OUTLET -135° CCW FROM INLET
	DB	" " - 45° CCW FROM INLET
	DC	" " - 45° CW FROM INLET
	DD	" " -135° CW FROM INLET

To insure sustained efficiency and maximum trouble-free life of this precision equipment, initial and continuous filtration of the fluid medium to 25 microns absolute or less is essential. (For information

Vickers economical 3 or 10 micron filtration

