

# Vane Pumps (Mobile & Industrial)



## SDV 10/20 Medium Pressure Single Vane Pumps



The SDV Series are a fixed displacement vane pump ideal for low to mid-pressure applications. Their compact design and low noise features make them well suited for filter carts, test stands and remote pilot pumps.

### Pump Performance Data

Single Pump Model Series**	Displacement in <sup>3</sup> /rev (cc/rev)	Max. Outlet Pressure PSI (BAR)	Rated Drive Speed RPM	Flow @ 1800 rpm and 0 PSI GPM (LPM)	Input Horsepower @ 1800 rpm and 2500 PSI HP (KW)
SDV10-1*1	0.20 (3.3)	2500 (175)	1800	1.6 (6.1)	2.89 (2.2)
SDV10-1*2	0.40 (6.6)	2500 (175)	1800	3.1 (11.7)	4.83 (3.6)
SDV10-1*3	0.60 (9.8)	2500 (175)	1800	4.7 (17.8)	7.65 (5.7)
SDV10-1*4	0.80 (13.1)	2500 (175)	1800	6.2 (23.5)	9.87 (7.4)
SDV10-1*5	1.00 (16.4)	2500 (175)	1800	7.8 (29.5)	12.77 (9.5)
SDV10-1*6	1.19 (19.5)	2200 (150)	1800	9.3 (35.2)	15.11 (11.3)
SDV10-1*7	1.39 (22.8)	2000 (140)	1800	10.8 (40.9)	18.01 (13.4)

Single Pump Model Series**	Displacement in <sup>3</sup> /rev (cc/rev)	Max. Outlet Pressure PSI (BAR)	Rated Drive Speed RPM	Flow @ 0 PSI* GPM (LPM)	Input Horsepower @ 2500 PSI* HP (KW)
SDV20-1*6	1.19 (19.5)	2500 (175)	1800	9.27 (35.1)	14.5 (10.8)
SDV20-1*7	1.39 (22.8)	2500 (175)	1800	10.84 (41.0)	16.4 (12.2)
SDV20-1*8	1.62 (26.5)	2500 (175)	1800	12.60 (47.7)	19.5 (14.5)
SDV20-1*9	1.81 (29.7)	2500 (175)	1800	14.12 (53.5)	22.1 (16.5)
SDV20-1*11	2.22 (36.4)	2500 (175)	1800	17.31 (65.5)	28.6 (21.3)
SDV20-1*12	2.38 (39.0)	2200 (150)	1800	18.55 (70.2)	30.4 (22.7)
SDV20-1*13	2.59 (42.4)	2000 (140)	1800	20.16 (76.3)	33.2 (24.8)

\* @ 1800 RPM.

\*\* Based on combinations of SDV20 pumps.



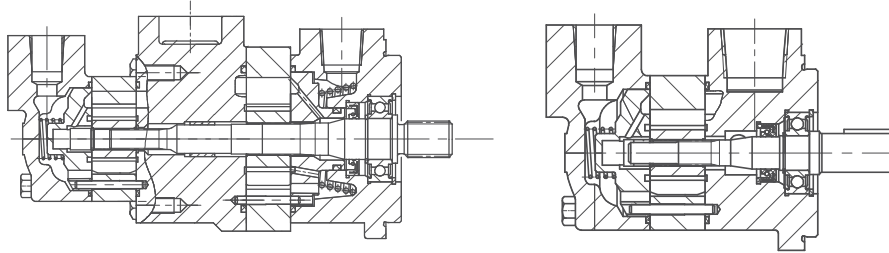
# Vane Pumps (Mobile & Industrial)

## SDV 10/20 Medium Pressure Single Vane Pumps

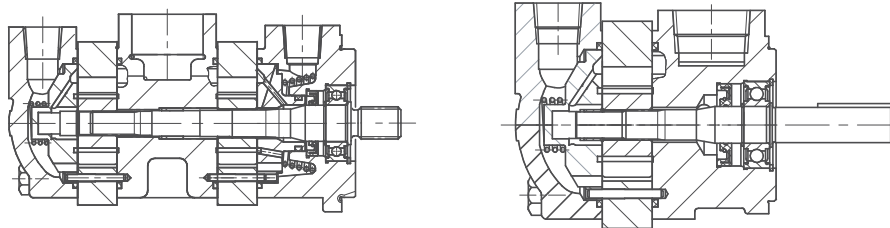
### Benefits/Features

- Two compact frame sizes available
- Low noise
- 100% tested
- Easy to convert or repair

SDV10



SDV20



### Pump Performance Data

SDV10 Size	Output Flow (l/min)		Output Flow (GPM)		Input Power (kW)		Input Power (HP)	
	0 BAR	150 BAR	0 PSI	2000 PSI	7 BAR	150 BAR	80 PSI	2500 PSI
1	6.1	3.9	1.6	1.0	0.1	1.44	0.14	1.93
2	11.9	9.9	3.1	2.6	0.21	3.6	0.28	4.83
3	17.8	15.6	4.7	4.1	0.31	5.7	0.41	7.65
4	23.6	20.2	6.2	5.3	0.41	7.4	0.55	9.87
5	29.5	24.8	7.8	6.6	0.51	9.52	0.69	12.77
6	35.2	31.0	9.3	8.2	0.61	11.3	0.82	15.11
7	41.0	36.8	10.8	9.7	0.71	13.43	0.96	18.01

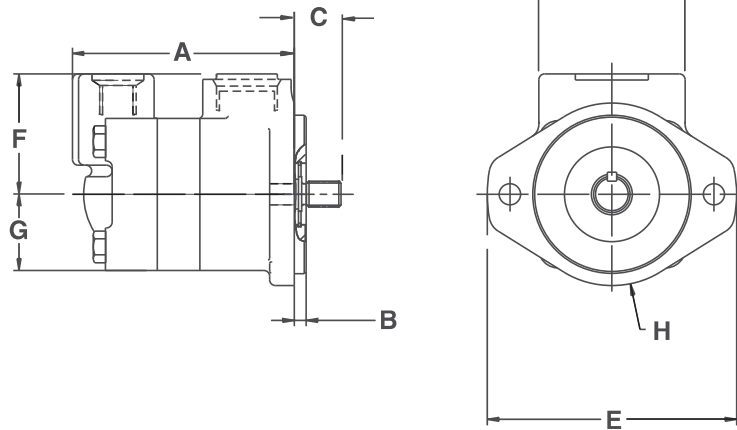
SDV20 Size	Output Flow (l/min)		Output Flow (GPM)		Input Power (kW)		Input Power (HP)	
	0 BAR	150 BAR	0 PSI	2000 PSI	7 BAR	150 BAR	80 PSI	2500 PSI
6	35.1	31.5	9.27	8.32	0.5	10.8	0.7	14.5
7	41.0	35.7	10.84	9.42	0.7	12.2	0.9	16.4
8	47.7	42.3	12.60	11.18	0.7	14.5	1.0	19.5
9	53.5	48.1	14.12	12.70	0.8	16.5	1.1	22.1
11	65.5	62.1	17.31	16.41	1.0	21.3	1.4	28.6
12	70.2	66.0	18.55	17.44	1.1	22.7	1.5	30.4
13	76.3	72.1	20.16	19.05	1.2	24.8	1.2	33.2

# Vane Pumps (Mobile & Industrial)

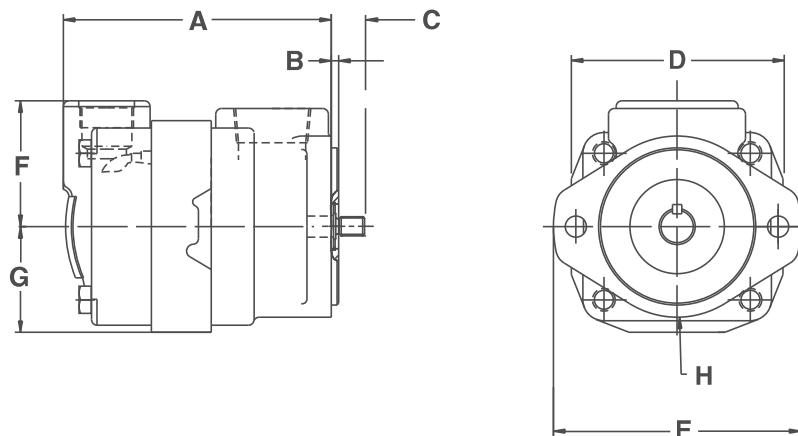


## SDV 10/20 Medium Pressure Single Vane Pumps

SDV10



SDV20



### Dimensions, inch (mm)

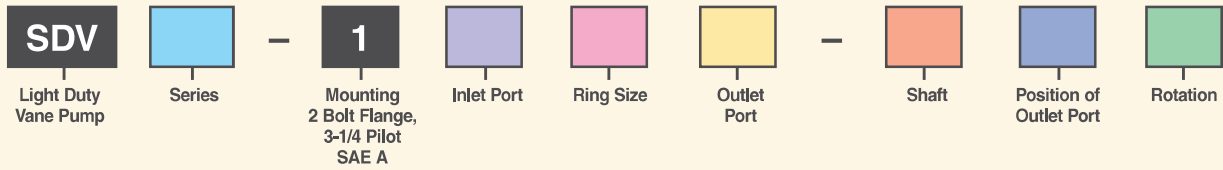
Ring Size	A*	B	C Max	D	ØE	F	G	ØH
SDV10	4.55 (115.6) to 5.00 (127.0)	0.250 (6.35)	1.75 (44.4)	3.00 (76.2)	5.12 (130.00)	2.47 (62.7)	1.50 (38.1)	3.75 (95.2)
SDV20	4.93 (125.2) to 5.52 (140.2)	0.173 (4.4)	2.66 (67.6)	4.38 (111.2)	5.12 (130.00)	2.60 (66.0)	2.19 (55.6)	3.75 (95.2)

\* Depending on ring size



# Vane Pumps

## SDV 10/20 Model Ordering Code



Code	Series
10	Size 10, 1-7 GPM (3.8-26.5 LPM)
20	Size 20, 6-13 GPM (22.7-49.2 LPM)

Code	Inlet Port Connection	
	SDV10	SDV20
P	1" NPTF Thread	1 1/4" NPTF Thread
S	1 5/16"-12 UNF-2B Thread	1 5/8"-12 UNF-2B Thread
B	G1" (BSPP)	G1 1/4" (BSPP)

Code	Ring Size ***
1*	1 GPM (3.8 LPM)
2*	2 GPM (7.6 LPM)
3*	3 GPM (11.4 LPM)
4*	4 GPM (15.1 LPM)
5*	5 GPM (18.9 LPM)
6	6 GPM (22.7 LPM)
7	7 GPM (26.5 LPM)
8**	8 GPM (30.3 LPM)
9**	9 GPM (34.1 LPM)
10**	10 GPM (37.9 LPM)
11**	11 GPM (41.6 LPM)
12**	12 GPM (45.4 LPM)
13**	13 GPM (49.2 LPM)

\* SDV10 only  
 \*\* SDV20 only  
 \*\*\* Delivery at 1200 RPM and 100 PSI

Code	Outlet Port Connection	
	SDV10	SDV20
P	1/2" NPTF Thread	3/4" NPTF Thread
S	3/4"-16 UNF-2B Thread	1 1/16"-12 UNF-2B Thread
B	G1/2" (BSPP)	G3/4" (BSPP)

Code	Shaft
1	Straight Keyed
11	Splined
38	11 Teeth - 3/4" OD
62*	Splined

\* SDV20 only

Code	Position of Outlet Port*
A	Opposite Inlet Port
B	90° CCW from Inlet
C	In Line with Inlet
D	90° CW from Inlet

\* Viewed from cover end of pump

Code	Rotation*
Omit	CW
L	CCW

\* As viewed from shaft end.

# Vane Pumps (Mobile & Industrial)



## SDV2010 Medium Pressure Double Vane Pumps



The SDV Series are a fixed displacement vane pump, ideal for low to mid pressure applications. The double pump provides the flexibility of two different displacements within one housing. The

compact design and low noise features make them well suited for filter carts, test stands, remote pilot pumps, and for hi/lo circuits.

### Pump Performance Data

Series SDV2010	-7	-8	-9	-11	-12	-13
Displacement* in <sup>3</sup> /rev (cc/rev)	1.6 - 2.8 (26.1 - 45.6)	1.8 - 3.0 (29.8 - 49.3)	2.0 - 3.2 (33.0 - 52.5)	2.4 - 3.6 (39.7 - 59.2)	2.6 - 3.8 (42.3 - 61.8)	2.8 - 4.0 (45.7 - 65.2)
Max. continuous pressure PSI (BAR)	2500 (175)	2500 (175)	2500 (175)	2500 (175)	2200 (150)	2200 (150)
Max. speed RPM	1800	1800	1800	1800	1800	1800

\* Range calculated by adding displacement for SDV20 to range of displacements for SDV10.

Series SDV2020	-7	-8	-9	-11	-12	-13
Displacement* in <sup>3</sup> /rev (cc/rev)	2.6 - 3.2 (42.3 - 52.5)	2.8 - 3.4 (46.0 - 56.2)	3.0 - 3.6 (49.2 - 59.4)	3.4 - 4.4 (55.9 - 72.8)	3.6 - 4.6 (58.5 - 75.4)	3.8 - 4.8 (61.9 - 78.8)
Max. continuous pressure PSI (BAR)	2500 (175)	2500 (175)	2500 (175)	2500 (175)	2200 (150)	2200 (150)
Max. speed RPM	1800	1800	1800	1800	1800	1800

\* Range calculated by adding displacement for SDV20 (shaft end) to range of SDV20 (cover end).

Double Pump Model Series**	Displacement Range* in <sup>3</sup> /rev (cc/rev)	Max. Outlet Pressure PSI (BAR)	Rated Drive Speed RPM	Flow @ 0 PSI @ 1800 RPM GPM (LPM)	Input Horsepower @ 2500 PSI @ 1800 RPM HP (KW)
SDV2010-1F7	10.28 - 17.95 (26.1 - 45.6)	2500 (175)	1800	12.4 - 21.6 (46.9 - 81.8)	19.3 - 34.4 (14.4 - 25.7)
SDV2010-1F8	11.73 - 19.41 (29.8 - 49.3)	2500 (175)	1800	14.2 - 23.4 (53.8 - 88.6)	22.4 - 37.5 (16.7 - 28.0)
SDV2010-1F9	12.99 - 20.67 (33.0 - 52.5)	2500 (175)	1800	15.7 - 24.9 (59.4 - 94.3)	25.0 - 40.1 (18.6 - 29.9)
SDV2010-1F11	15.63 - 23.31 (39.7 - 59.2)	2500 (175)	1800	18.9 - 28.1 (71.5 - 106.4)	31.5 - 46.6 (23.5 - 34.7)
SDV2010-1F12	16.65 - 24.33 (42.3 - 61.8)	2200 (150)	1800	20.2 - 29.4 (77.5 - 110.6)	33.3 - 48.4 (24.8 - 36.1)
SDV2010-1F13	17.99 - 25.67 (45.7 - 65.2)	2200 (150)	1800	21.8 - 31.0 (82.5 - 117.3)	36.1 - 51.2 (26.9 - 38.2)

\*Based on combinations with SDV10 sizes.

\*\*Complete model code required, see catalog on CD.

Double Pump Model Series**	Displacement Range* in <sup>3</sup> /rev (cc/rev)	Max. Outlet Pressure PSI (BAR)	Rated Drive Speed RPM	Flow @ 0 PSI @ 1800 RPM GPM (LPM)	Input Horsepower @ 2500 PSI @ 1800 RPM HP (KW)
SDV2020-1F7	16.65 - 25.67 (42.3 - 65.2)	2500 (175)	1800	20.1 - 25.0 (76.1 - 94.6)	30.9 - 38.5 (23.0 - 28.7)
SDV2020-1F8	18.11 - 27.13 (46.0 - 68.9)	2500 (175)	1800	21.9 - 26.7 (82.9 - 101.1)	34.0 - 41.6 (25.4 - 31.0)
SDV2020-1F9	19.37 - 28.39 (49.2 - 72.1)	2500 (175)	1800	23.4 - 28.2 (88.6 - 106.7)	36.6 - 44.2 (27.3 - 33.0)
SDV2020-1F11	22.01 - 31.02 (55.9 - 78.8)	2500 (175)	1800	26.6 - 37.5 (100.7 - 142.0)	43.1 - 61.8 (32.1 - 46.1)
SDV2020-1F12	23.03 - 32.05 (58.5 - 81.4)	2200 (150)	1800	27.8 - 38.7 (105.2 - 146.5)	44.9 - 63.6 (33.5 - 47.4)
SDV2020-1F13	24.37 - 33.39 (61.9 - 84.8)	2200 (150)	1800	29.4 - 40.3 (111.3 - 152.6)	47.7 - 66.4 (35.6 - 49.5)

\*Based on combinations of SDV20 pumps.

\*\*Complete model code required, see catalog on CD.



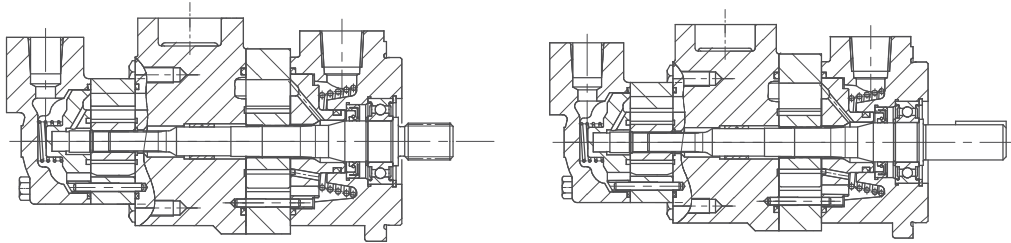
# Vane Pumps (Mobile & Industrial)

## SDV2010 Medium Pressure Double Vane Pumps

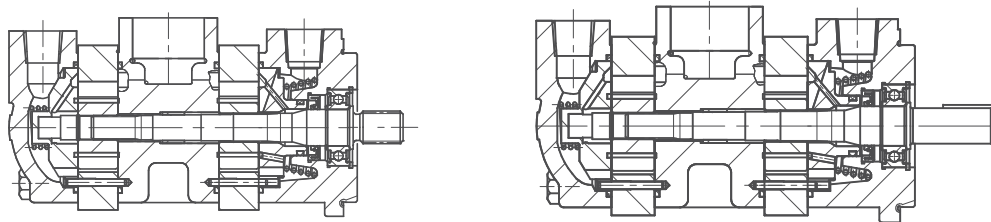
### Benefits/Features

- Two compact frame sizes available
- Low noise
- 100% tested
- Easy to convert or repair

### SDV2010



### SDV2020



### Pump Performance Data

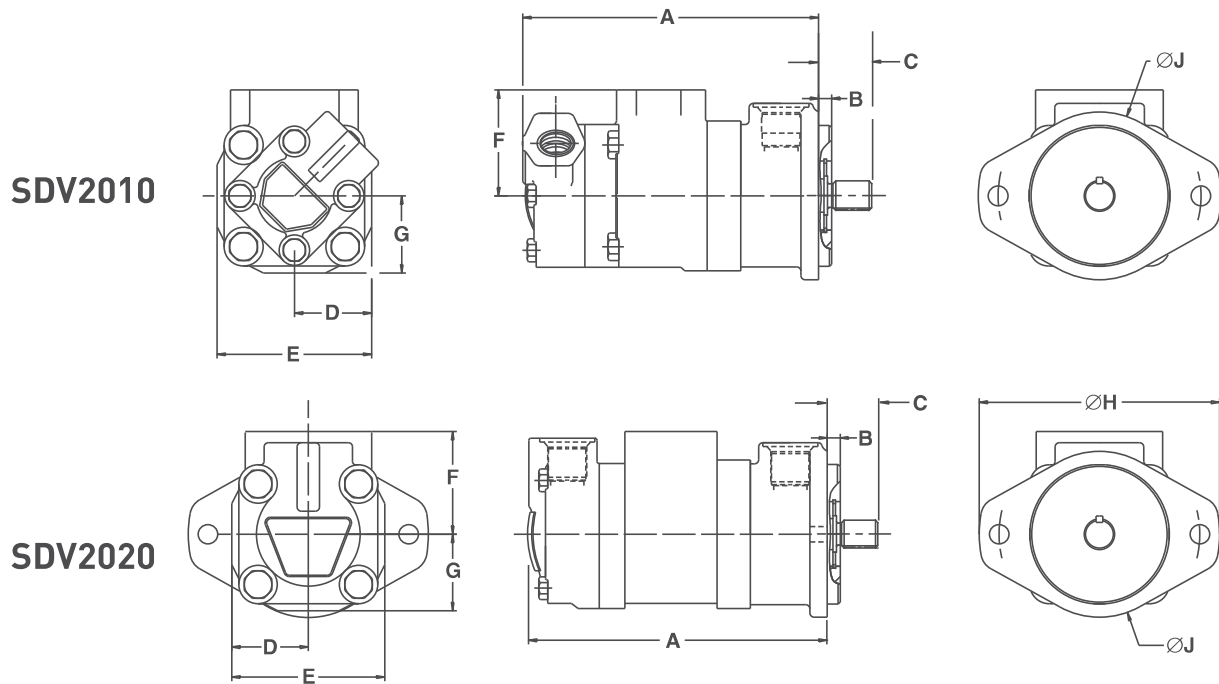
SDV10 Size	Output Flow (l/min)		Output Flow (GPM)		Input Power (kW)		Input Power (HP)	
	0 BAR	150 BAR	0 PSI	2000 PSI	7 BAR	150 BAR	80 PSI	2500 PSI
1	5.9	3.9	1.6	1.0	0.10	1.44	0.14	1.93
2	11.9	9.9	3.1	2.6	0.21	3.60	0.28	4.83
3	17.6	15.6	4.7	4.1	0.31	5.70	0.41	7.65
4	23.6	20.2	6.2	5.3	0.41	7.36	0.55	9.87
5	29.5	26.1	7.8	26.1	0.51	9.52	0.69	12.77
6	35.1	30.9	9.3	8.2	0.61	11.27	0.82	15.11
7	41.0	36.8	10.8	9.7	0.71	13.43	0.96	18.01

SDV20 Size	Output Flow (l/min)		Output Flow (GPM)		Input Power (kW)		Input Power (HP)	
	0 BAR	150 BAR	0 PSI	2000 PSI	7 BAR	150 BAR	80 PSI	2500 PSI
6	35.1	31.5	9.27	8.32	0.50	10.80	0.7	14.5
7	41.0	35.6	10.84	9.42	0.60	12.20	0.9	16.4
8	47.7	42.3	12.60	11.18	0.70	14.50	1.0	19.5
9	53.5	48.1	14.12	12.70	0.80	16.50	1.1	22.1
11	65.5	62.1	17.31	16.41	1.00	21.30	1.4	28.6
12	70.2	66.0	18.55	17.44	1.10	22.60	1.5	30.4
13	76.3	72.1	20.16	19.05	1.20	24.70	1.2	33.2

# Vane Pumps (Mobile & Industrial)



## SDV2010 Medium Pressure Double Vane Pumps



### Dimensions, inch (mm)

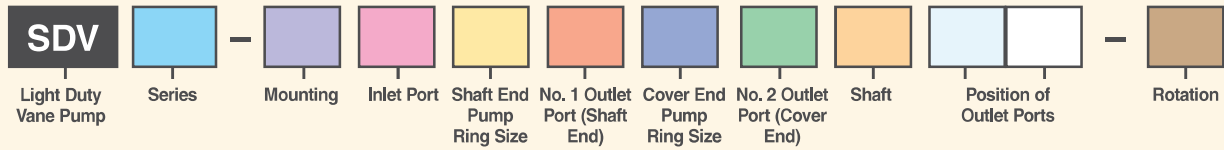
Ring Size	A*	B	C	D	E	F	G	ØH	ØJ
SDV2010	8.39 (213.1) to 9.17 (232.9)	0.37 (9.4)	2.31 (58.7)	2.19 (55.6)	4.38 (111.2)	3.00 (76.2)	2.19 (55.6)	8.88 (174.8)	4.75 (120.7)
SDV2020	8.41 (213.6) to 9.19 (233.4)	0.37 (9.4)	2.31 (58.7)	2.19 (55.6)	4.38 (111.2)	2.94 (74.7)	2.19 (55.6)	8.88 (174.8)	4.75 (120.7)

\* Depending on ring size



# Vane Pumps

## SDV 2010 Model Ordering Code



Code	Series
2010	SDV20/SDV10 Combination
2020	SDV20/SDV20 Combination

Code	Mounting
1	2 Bolt Flange, 4" Pilot (Standard)
6*	2 Bolt Flange, 3 1/4" Pilot

\* Available on SDV2020 only.

Code	Inlet Port Connection	
	SDV2010	SDV2020
F	4 Bolt Flange 1 1/2" Dia.	4 Bolt Flange 2" Dia.

Code	Shaft End Pump Ring Size*
7	7 GPM (26.5 LPM)
8	8 GPM (30.3 LPM)
9	9 GPM (34.1 LPM)
11	11 GPM (41.6 LPM)
12	12 GPM (45.4 LPM)
13	13 GPM (49.2 LPM)

\* Delivery at 1200 RPM and 100 PSI.

Code	Shaft End Pump Outlet Port
S	1 1/16"-12 UNF-2B Thread
B	G3/4" BSPP

Code	Ring Size ***
1*	1 GPM (3.8 LPM)
2*	2 GPM (7.6 LPM)
3*	3 GPM (11.4 LPM)
4*	4 GPM (15.1 LPM)
5*	5 GPM (18.9 LPM)
6	6 GPM (22.7 LPM)
7	7 GPM (26.5 LPM)
8**	8 GPM (30.3 LPM)
9**	9 GPM (34.1 LPM)
11**	11 GPM (41.6 LPM)

\* SDV2010 only

\*\* SDV2020 only

\*\*\* Delivery at 1200 RPM and 100 PSI (6.9 BAR)

Code	Cover End Pump Outlet Port	
	SDV2010	SDV2020
S	3/4"-16 UNF-2B Thread	1 1/16"-12 UNF-2B Thread
B	G1/2" (BSPP)	G3/4" (BSPP)

Code	Shaft
1	Straight Keyed
11	Splined

Code	Position of Outlet Port No. 1*
A	Opposite Inlet Port
B	90° CCW from Inlet
C	In Line with Inlet
D	90° CW from Inlet

\* Viewed from cover end of pump

Code	Position of Outlet Port No. 2*
A	135° CCW from Inlet
B	45° CCW from Inlet
C	45° CW from Inlet
D	135° CW from Inlet

\* Viewed from cover end of pump

Code	Rotation*
Omit	CW
L	CCW

\* As viewed from shaft end.