



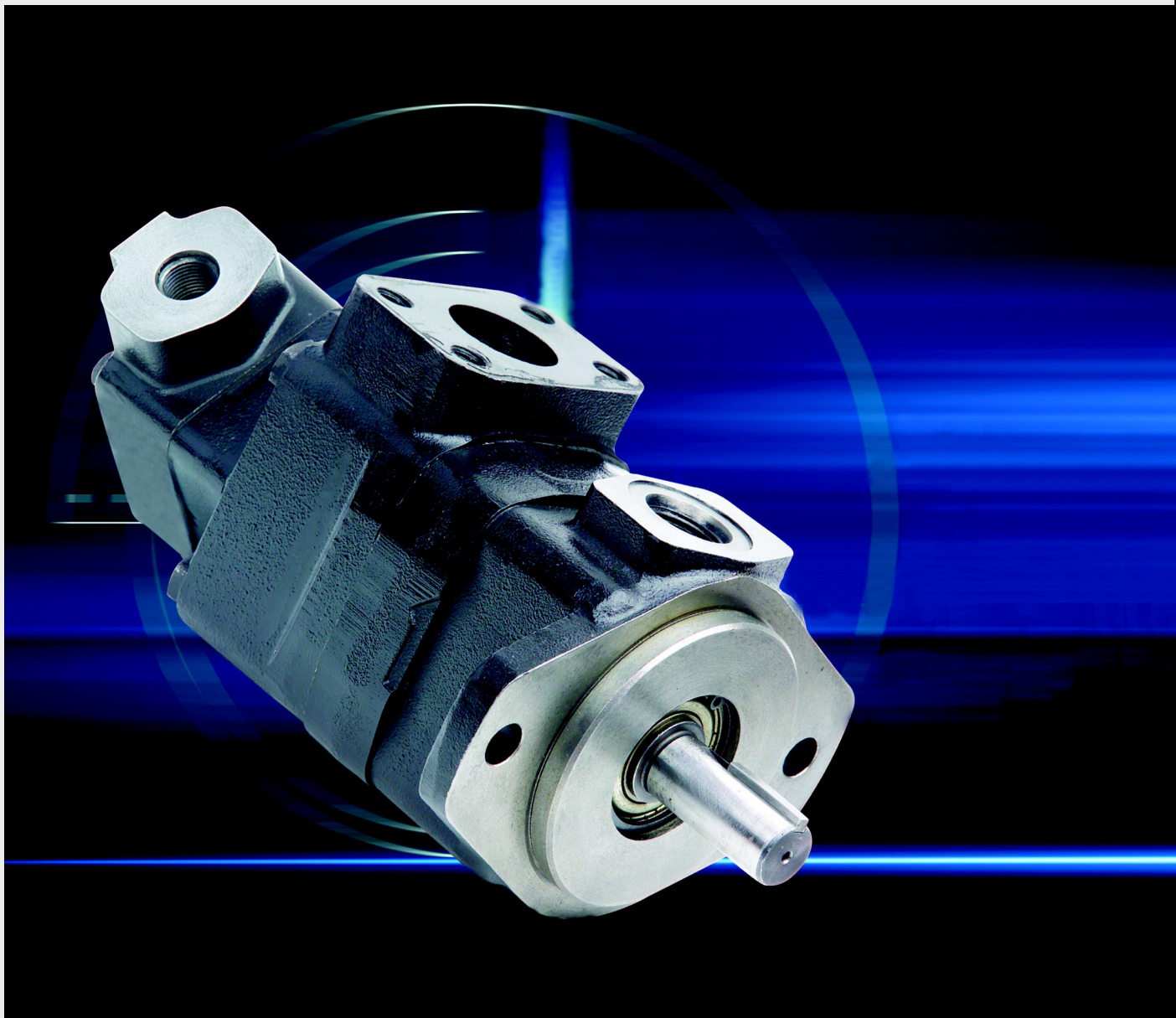
Vane Pump Series SDV

Fixed Displacement

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Catalogue HY0738-A/CH

November 2004



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General applications

Instructions

1. Check speed range, pressure, temperature, fluid quality, viscosity and pump rotation.
2. Check inlet conditions of the pump, if it can accept application requirement.
3. Type of shaft : if would support operating torque.
4. Coupling must be chosen to minimize pump shaft load (misalignment,weight).
5. Filtration : must be adequate for lowest contamination level.
6. Environment of pump : avoid pollution,shocks and noise reflection

Minimum and maximum speed, pressure ratings

| Series | Size | Theoretical Displacement Vi cm3/rev (in3/rev) | Maximum speed | | Maximum pressure | | | |
|--------|------|---|--------------------|--------------------|------------------|------------|------------------|------------|
| | | | HF-0, HF-1 HF-2 | HF-3, HF-4 HF-5 | HF-0, HF-2 | | HF-1, HF-4, HF-5 | HF-3 |
| | | | Int. | Cont. | Cont. | Cont. | | |
| | | | RPM | RPM | Bar (psi) | Bar (psi) | Bar (psi) | Bar (psi) |
| SDV10 | 1 | 3,3 (.20) | 4200 | 1800 | 175 (2500) | 160 (2250) | 130 (1900) | 100 (1500) |
| | 2 | 6,6 (.40) | 4200 | 1800 | 175 (2500) | 160 (2250) | 130 (1900) | 100 (1500) |
| | 3 | 9,8 (.60) | 3900 | 1800 | 175 (2500) | 160 (2250) | 130 (1900) | 100 (1500) |
| | 4 | 13,1 (.80) | 3000 | 1800 | 175 (2500) | 160 (2250) | 130 (1900) | 100 (1500) |
| | 5 | 16,4 (1.00) | 2400 | 1800 | 175 (2500) | 160 (2250) | 130 (1900) | 100 (1500) |
| | 6 | 19,5 (1.19) | 2100 | 1800 | 150 (2200) | 140 (2000) | 130 (1900) | 100 (1500) |
| | 7 | 22,8 (1.39) | 1800 | 1800 | 140 (2000) | 140 (2000) | 130 (1900) | 100 (1500) |
| SDV20 | 6 | 19,5 (1.19) | 3600 | 1800 | 175 (2500) | 160 (2250) | 130 (1900) | 110 (1600) |
| | 7 | 22,8 (1.39) | 2700 | 1800 | 175 (2500) | 160 (2250) | 130 (1900) | 110 (1600) |
| | 8 | 26,5 (1.62) | 2400 | 1800 | 175 (2500) | 160 (2250) | 130 (1900) | 110 (1600) |
| | 9 | 29,7 (1.81) | 2100 | 1800 | 175 (2500) | 160 (2250) | 130 (1900) | 110 (1600) |
| | 11 | 36,4 (2.22) | 1800 | 1800 | 175 (2500) | 160 (2250) | 110 (1600) | 100 (1400) |
| | 12 | 39,0 (2.38) | 1800 | 1800 | 150 (2200) | 140 (2000) | 110 (1600) | 100 (1400) |
| | 13 | 42,4 (2.59) | 1800 | 1800 | 150 (2200) | 140 (2000) | 110 (1600) | 100 (1400) |

HF-0, HF-2 = Anti-wear petroleum base. HF-1 = Non anti-wear petroleum base. HF-5 = Synthetic fluids.
 HF-3 = Water-in-oil invert emulsions. HF-4 = Water glycol solutions.

Minimum speed is 600 RPM

For further information, if the performance characteristics outlined above do not meet your own particular requirements, please consult your local Parker office.

Minimum allowable inlet pressure (bar absolute / psi)

| Series | Ring size | Speed (RPM) | | | | | | | | | | Size |
|--------|-----------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------|
| | | 1500 | 1800 | 2100 | 2400 | 2700 | 3000 | 3300 | 3600 | 3900 | 4200 | |
| SDV10 | 1 | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 1 |
| | 2 | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 2 |
| | 3 | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,85 (12.3) | 0,95 (13.8) | | 3 |
| | 4 | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,85 (12.3) | 0,95 (13.8) | | | | | 4 |
| | 5 | 0,80 (11.6) | 0,80 (11.6) | 0,85 (12.3) | 0,95 (13.8) | | | | | | | 5 |
| | 6 | 0,80 (11.6) | 0,85 (12.3) | 1,00 (14.5) | | | | | | | | 6 |
| | 7 | 0,85 (12.3) | 1,00 (14.5) | | | | | | | | | 7 |
| SDV20 | 6 | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,85 (12.3) | 0,95 (13.8) | 1,01 (14.6) | | | 6 |
| | 7 | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | 0,80 (11.6) | | | | | | 7 |
| | 8 | 0,80 (11.6) | 0,80 (11.6) | 0,85 (12.3) | 0,95 (13.8) | | | | | | | 8 |
| | 9 | 0,80 (11.6) | 0,80 (11.6) | 0,95 (13.8) | | | | | | | | 9 |
| | 11 | 0,80 (11.6) | 0,95 (13.8) | | | | | | | | | 11 |
| | 12 | 0,85 (12.3) | 1,03 (14.9) | | | | | | | | | 12 |
| | 13 | 0,95 (13.8) | 1,05 (15.2) | | | | | | | | | 13 |

Multiply absolute pressure by 1,25 for HF-3, HF-4 fluids.
 by 1,35 for HF-5 fluids.

by 1,10 for ester or rapeseed base

Use the cartridge with the highest absolute pressure for double pumps.

General characteristics

| Series | Mounting standard | Weight kg (lb) | Moment of inertia kgm ² x10 ⁻⁴ (lb.in ²) | Port connections | | | | | | |
|---------|-------------------|------------------|--|---------------------------|-----------------|---------|-----------------|-----------------|--------|---|
| | | | | Suction | | | Pressure | | | |
| Code | | | | P | S | B | P | S | B | |
| SDV10 | SAE A | 4.5-6.8 (10 -15) | 0.5 (0.17) | 1" NPTF | 1-5/16 12UNF-2B | G 1" | 1/2" NPTF | 3/4" 16UNF-2B | G 1/2" | |
| SDV20 | SAE A | 7.3-8.2 (16-18) | 2.2 (0.75) | 1-1/4 NPTF | 1-5/8 12UNF-2B | G 1-1/4 | 3/4" NPTF | 1-1/16 12UNF-2B | G 3/4" | |
| Code | | | | F | | | S | | | B |
| | | | | | | | P1* | P2** | P1-P2 | |
| SDV2010 | SAE B | 13.6 (30.0) | 2.6 (0.90) | 4 bolts flange 1-1/2" dia | | | 1-1/16 12UNF-2B | 3/4" 16UNF-2B | *** | |
| SDV2020 | SAE B | 15.9 (35.0) | 4.3 (1.50) | 4 bolts flange 2" dia | | | 1-1/16 12UNF-2B | 1-1/16 12UNF-2B | G 3/4" | |

* P1 = Pressure port near the shaft

** P2 = Pressure port near the cover end

*** P1 = G 3/4" P2 = G 1/2"

Model No.

SDV 10 - 1 P 5 S - 1 C L - P

Vane pump

Series
10

Mounting

1 = 2-bolt flange, 3" 1/4 pilot (SAE A) (standard)

Inlet port connections

P = 1" NPTF thread
 S = 1" 5/16-12 UNF-2B thread
 B = G 1" (BSPP)

Ring size

(Delivery at 1200 rpm and 100 psi)

1 = 1 USgpm
 2 = 2 USgpm
 3 = 3 USgpm
 4 = 4 USgpm
 5 = 5 USgpm
 6 = 6 USgpm
 7 = 7 USgpm

Series Identity

Shaft rotation (view on shaft end)
 L = Counter-clockwise
 Omit for clockwise

Position of outlet port (Viewed from cover end of pump)

A = Opposite inlet port
 B = 90° CCW from inlet
 C = In line with inlet
 D = 90° CW from inlet

Shaft

1 = Straight keyed
 11 = Splined
 38 = 11 teeth - 3/4" OD

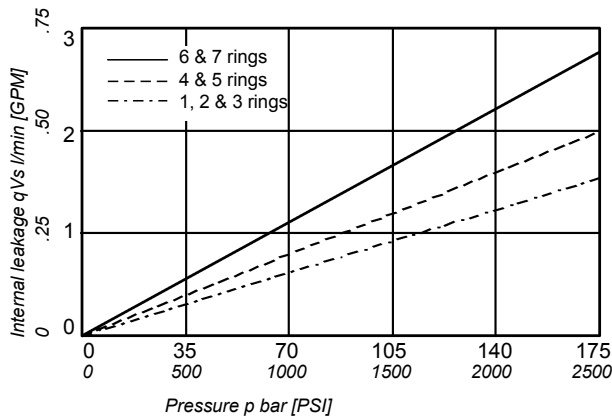
Outlet port connections

P = 1/2" NPTF thread
 S = 3/4" -16 UNF-2B thread
 B = G 1/2" (BSPP)

Operating characteristics

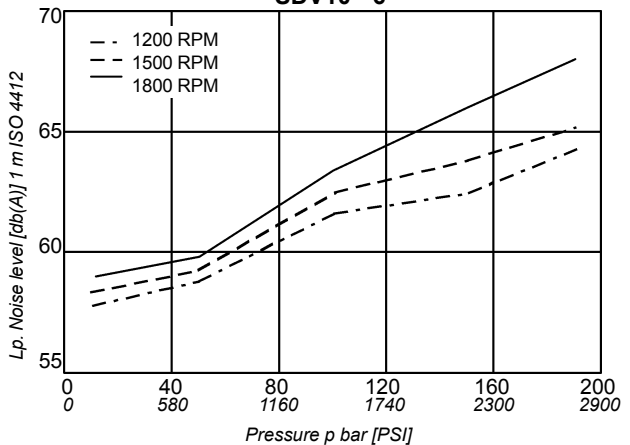
| Model Series | Ring Size | Displ. cm ³ /rev (in ³ /rev) | Max. Pressure bar (psi) | Speed RPM | Typical delivery L/min (Usqpm) | | | | Typical input power KW (hp) | | | |
|--------------|-----------|--|-------------------------|-----------|--------------------------------|-------|---------|----------|-----------------------------|--------|---------|----------|
| | | | | | 0 bar | 0 PSI | 150 bar | 2000 PSI | 7 bar | 80 PSI | 175 bar | 2500 PSI |
| SDV10 | 1 | 3,3 (.20) | 175 (2500) | 1200 | 4,0 | 1,0 | 2,0 | 0,5 | 0,07 | 0,09 | 0,71 | 0,96 |
| | | | | 1500 | 5,0 | 1,3 | 3,0 | 0,8 | 0,09 | 0,12 | 1,08 | 1,44 |
| | | | | 1800 | 5,9 | 1,6 | 3,9 | 1,0 | 0,10 | 0,14 | 1,44 | 1,93 |
| | 2 | 6,6 (.40) | 175 (2500) | 1200 | 7,9 | 2,1 | 5,9 | 1,6 | 0,14 | 0,18 | 2,16 | 2,89 |
| | | | | 1500 | 9,9 | 2,6 | 7,9 | 2,1 | 0,17 | 0,23 | 2,88 | 3,86 |
| | | | | 1800 | 11,9 | 3,1 | 9,9 | 2,6 | 0,21 | 0,28 | 3,60 | 4,83 |
| | 3 | 9,8 (.60) | 175 (2500) | 1200 | 11,8 | 3,1 | 9,8 | 2,6 | 0,20 | 0,27 | 3,56 | 4,77 |
| | | | | 1500 | 14,7 | 3,9 | 12,7 | 3,4 | 0,26 | 0,34 | 4,63 | 6,21 |
| | | | | 1800 | 17,6 | 4,7 | 15,6 | 4,1 | 0,31 | 0,41 | 5,70 | 7,65 |
| | 4 | 13,1 (.80) | 175 (2500) | 1200 | 15,7 | 4,2 | 12,3 | 3,3 | 0,27 | 0,37 | 4,49 | 6,02 |
| | | | | 1500 | 19,7 | 5,2 | 16,3 | 4,3 | 0,34 | 0,46 | 5,92 | 7,94 |
| | | | | 1800 | 23,6 | 6,2 | 20,2 | 5,3 | 0,41 | 0,55 | 7,36 | 9,87 |
| | 5 | 16,4 (1.00) | 175 (2500) | 1200 | 19,7 | 5,2 | 16,3 | 4,3 | 0,34 | 0,46 | 5,94 | 7,96 |
| | | | | 1500 | 24,6 | 6,5 | 21,2 | 5,6 | 0,43 | 0,57 | 7,73 | 10,36 |
| | | | | 1800 | 29,5 | 7,8 | 26,1 | 6,9 | 0,51 | 0,69 | 9,52 | 12,77 |
| | 6 | 19,5 (1.19) | 152 (2200) | 1200 | 23,4 | 6,2 | 19,2 | 5,1 | 0,41 | 0,55 | 7,00 | 9,39 |
| | | | | 1500 | 29,3 | 7,7 | 25,1 | 6,6 | 0,51 | 0,68 | 9,13 | 12,25 |
| | | | | 1800 | 35,1 | 9,3 | 30,9 | 8,2 | 0,61 | 0,82 | 11,27 | 15,11 |
| | 7 | 22,8 (1.39) | 138 (2000) | 1200 | 27,4 | 7,2 | 23,2 | 6,1 | 0,48 | 0,64 | 8,44 | 11,32 |
| | | | | 1500 | 34,2 | 9,0 | 30,0 | 7,9 | 0,60 | 0,80 | 10,94 | 14,67 |
| | | | | 1800 | 41,0 | 10,8 | 36,8 | 9,7 | 0,71 | 0,96 | 13,43 | 18,01 |

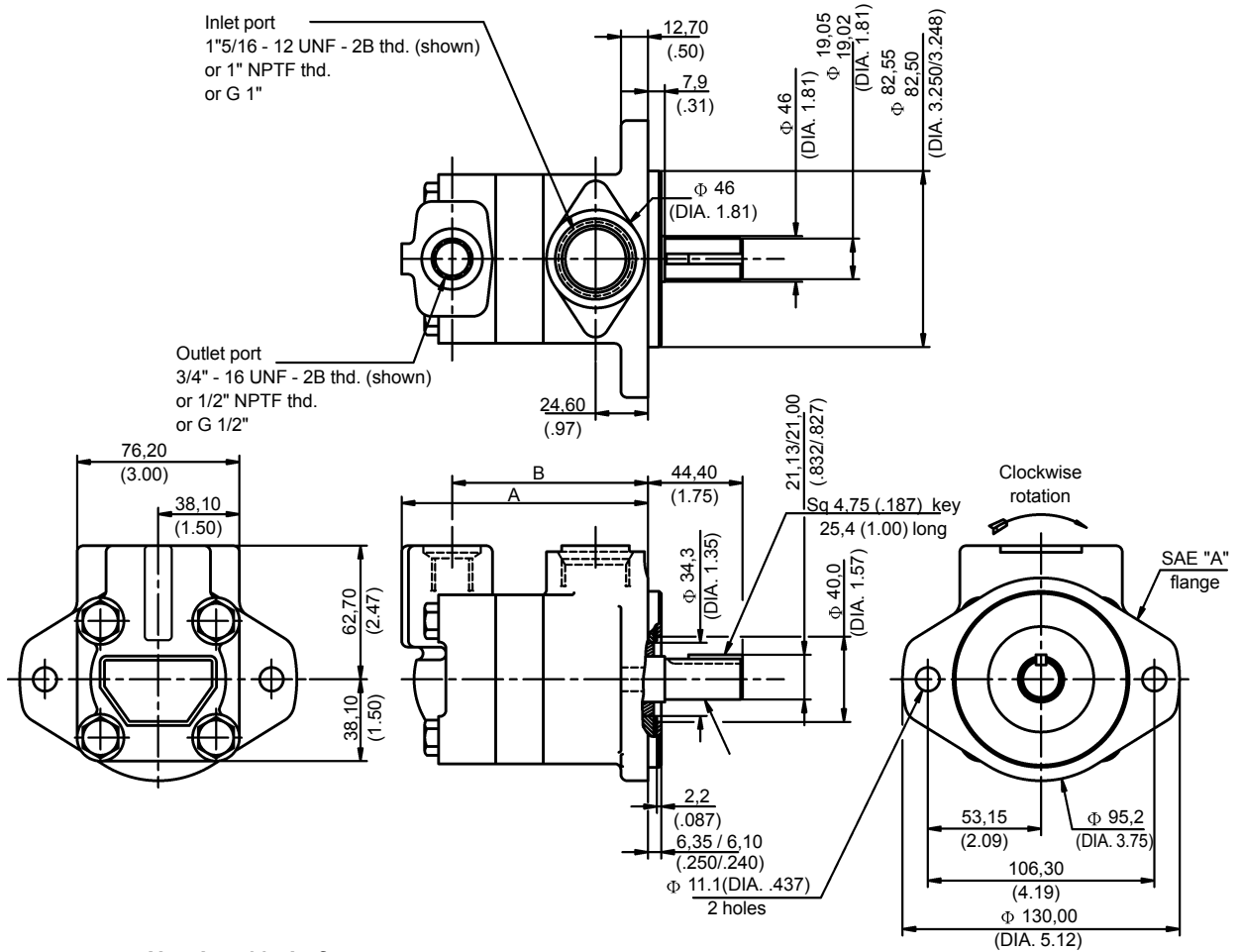
Internal leakage (typical)



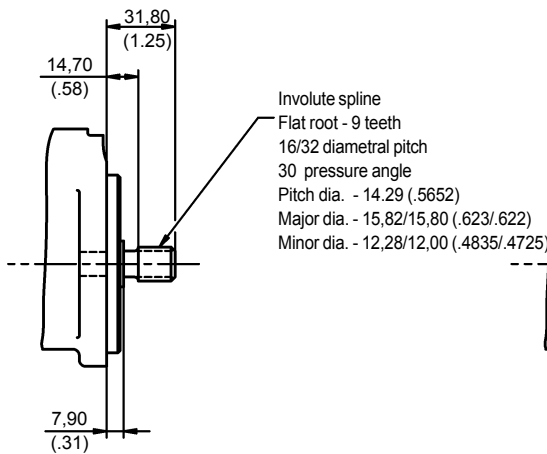
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is higher than 50% of theoretical flow. Total leakage is the sum of each section loss at its operating conditions.

Noise level (typical)
SDV10 - 6

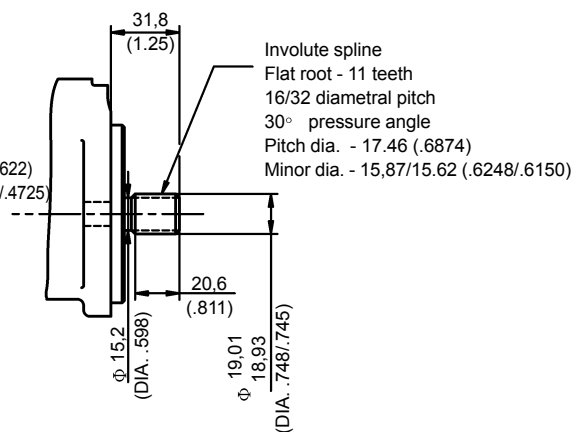




Number 11 shaft

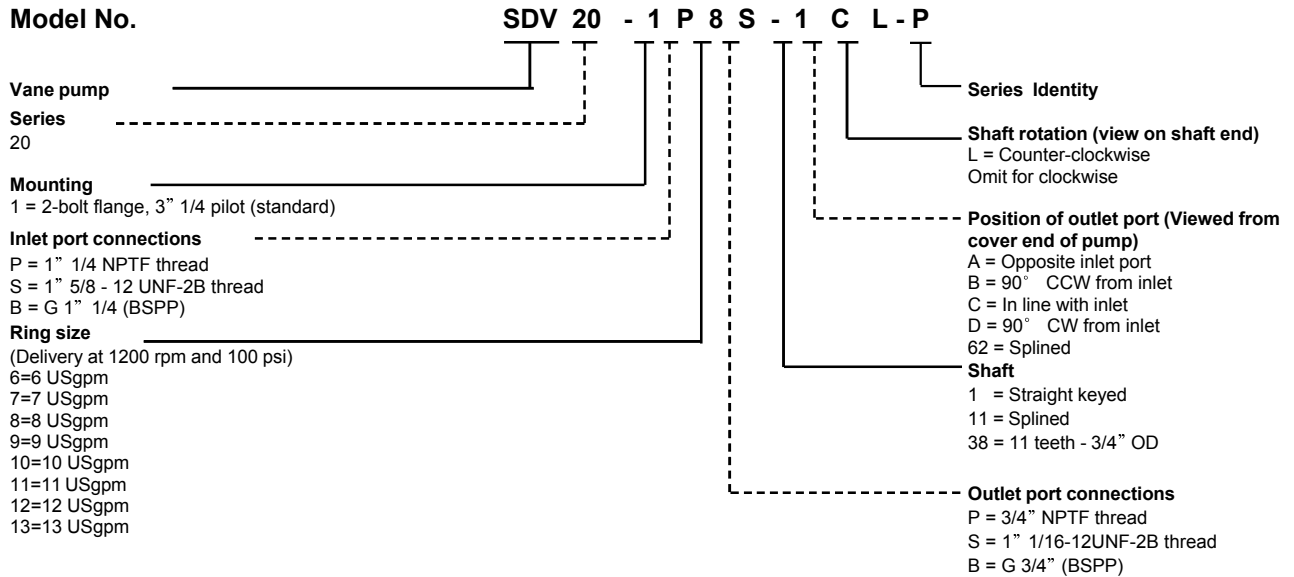


Number 38 shaft



| Ring size | Dimensions | | Weight Kg (lb) |
|-----------|--------------|--------------|-------------------|
| | A | B | |
| 1 | 15,6 (4.55) | 91,9 (3.62) | 4,5 - (10.0) |
| 2 | 115,6 (4.55) | 91,9 (3.62) | 4,5 - (10.0) |
| 3 | 115,6 (4.55) | 91,9 (3.62) | 4,5 - (10.0) |
| 4 | 121,9 (4.80) | 98,3 (3.87) | 5,6 - (12.5) |
| 5 | 121,9 (4.80) | 98,3 (3.87) | 5,6 - (12.5) |
| 6 | 127,0 (5.00) | 103,4 (4.07) | 6,8 - (15.0) |
| 7 | 127,0 (5.00) | 103,4 (4.07) | 6,8 - (15.0) |

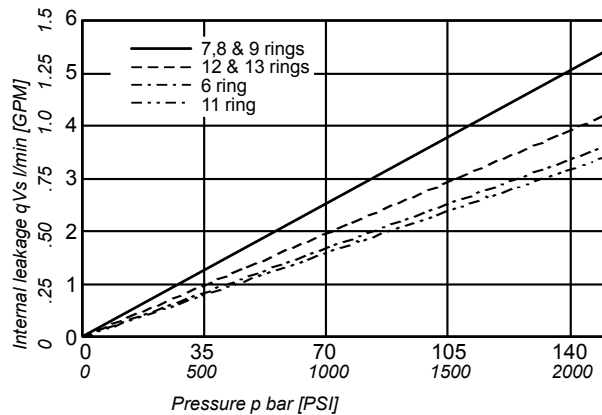
Weight:
 SDV 10 Series: 4,5 - 6,8kg
 (10 - 15 lb)



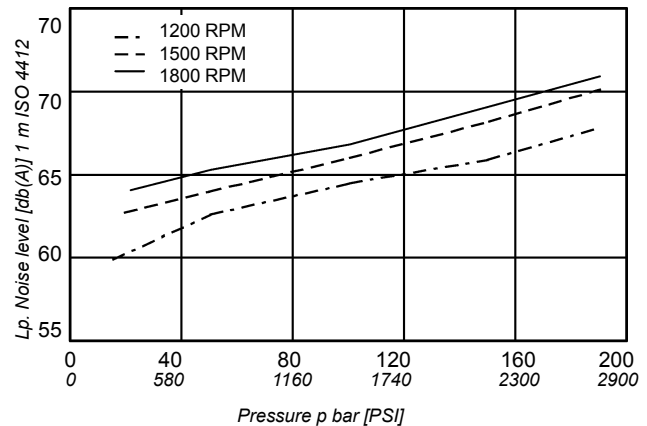
Operating characteristics

| Model Series | Ring Size | Displ. cm³/rev (in³/rev) | Max. Pressure bar (psi) | Speed RPM | Typical delivery L/min (Usqpm) | | | | Typical input power KW (hp) | | | |
|--------------|-----------|--------------------------|-------------------------|-----------|--------------------------------|-------|---------|----------|-----------------------------|--------|---------|----------|
| | | | | | 0 bar | 0 PSI | 150 bar | 2000 PSI | 7 bar | 80 PSI | 175 bar | 2500 PSI |
| SDV20 | 6 | 19,5 (1.19) | 175 (2500) | 1200 | 23,40 | 6,18 | 19,80 | 5,23 | 0,4 | 0,5 | 6,8 | 9,1 |
| | | | | 1500 | 29,25 | 7,73 | 25,65 | 6,78 | 0,5 | 0,6 | 8,8 | 11,8 |
| | | | | 1800 | 35,10 | 9,27 | 31,50 | 8,32 | 0,5 | 0,7 | 10,8 | 14,5 |
| | 7 | 22,8 (1.39) | 175 (2500) | 1200 | 27,36 | 7,23 | 21,96 | 5,80 | 0,4 | 0,6 | 7,5 | 10,1 |
| | | | | 1500 | 34,20 | 9,04 | 28,80 | 7,61 | 0,5 | 0,7 | 9,9 | 13,3 |
| | | | | 1800 | 41,04 | 10,84 | 35,64 | 9,42 | 0,6 | 0,9 | 12,2 | 16,4 |
| | 8 | 26,5 (1.62) | 175 (2500) | 1200 | 31,80 | 8,40 | 26,40 | 6,97 | 0,5 | 0,7 | 9,1 | 12,1 |
| | | | | 1500 | 39,75 | 10,50 | 34,35 | 9,08 | 0,6 | 0,8 | 11,8 | 15,8 |
| | | | | 1800 | 47,70 | 12,60 | 42,30 | 11,18 | 0,7 | 1,0 | 14,5 | 19,5 |
| | 9 | 29,7 (1.81) | 175 (2500) | 1200 | 35,64 | 9,42 | 30,24 | 7,99 | 0,6 | 0,7 | 10,4 | 13,9 |
| | | | | 1500 | 44,55 | 11,77 | 39,15 | 10,34 | 0,7 | 0,9 | 13,4 | 18,0 |
| | | | | 1800 | 53,46 | 14,12 | 48,06 | 12,70 | 0,8 | 1,1 | 16,5 | 22,1 |
| | 11 | 36,4 (2.22) | 175 (2500) | 1200 | 43,68 | 11,54 | 40,28 | 10,64 | 0,7 | 0,9 | 13,8 | 18,5 |
| | | | | 1500 | 54,60 | 14,43 | 51,20 | 13,53 | 0,8 | 1,1 | 17,6 | 23,6 |
| | | | | 1800 | 65,52 | 17,31 | 62,12 | 16,41 | 1,0 | 1,4 | 21,3 | 28,6 |
| | 12 | 39,0 (2.38) | 152 (2200) | 1200 | 46,80 | 12,36 | 42,60 | 11,25 | 0,7 | 1,0 | 14,6 | 19,6 |
| | | | | 1500 | 58,50 | 15,46 | 54,30 | 14,35 | 0,9 | 1,2 | 18,6 | 25,0 |
| | | | | 1800 | 70,20 | 18,55 | 66,00 | 17,44 | 1,1 | 1,5 | 22,6 | 30,4 |
| | 13 | 42,4 (2.59) | 152 (2200) | 1200 | 50,88 | 13,44 | 46,68 | 12,33 | 0,8 | 1,1 | 16,0 | 21,5 |
| | | | | 1500 | 63,60 | 16,80 | 59,40 | 15,69 | 1,0 | 1,3 | 20,4 | 27,3 |
| | | | | 1800 | 76,32 | 20,16 | 72,12 | 19,05 | 1,2 | 1,6 | 24,7 | 33,2 |

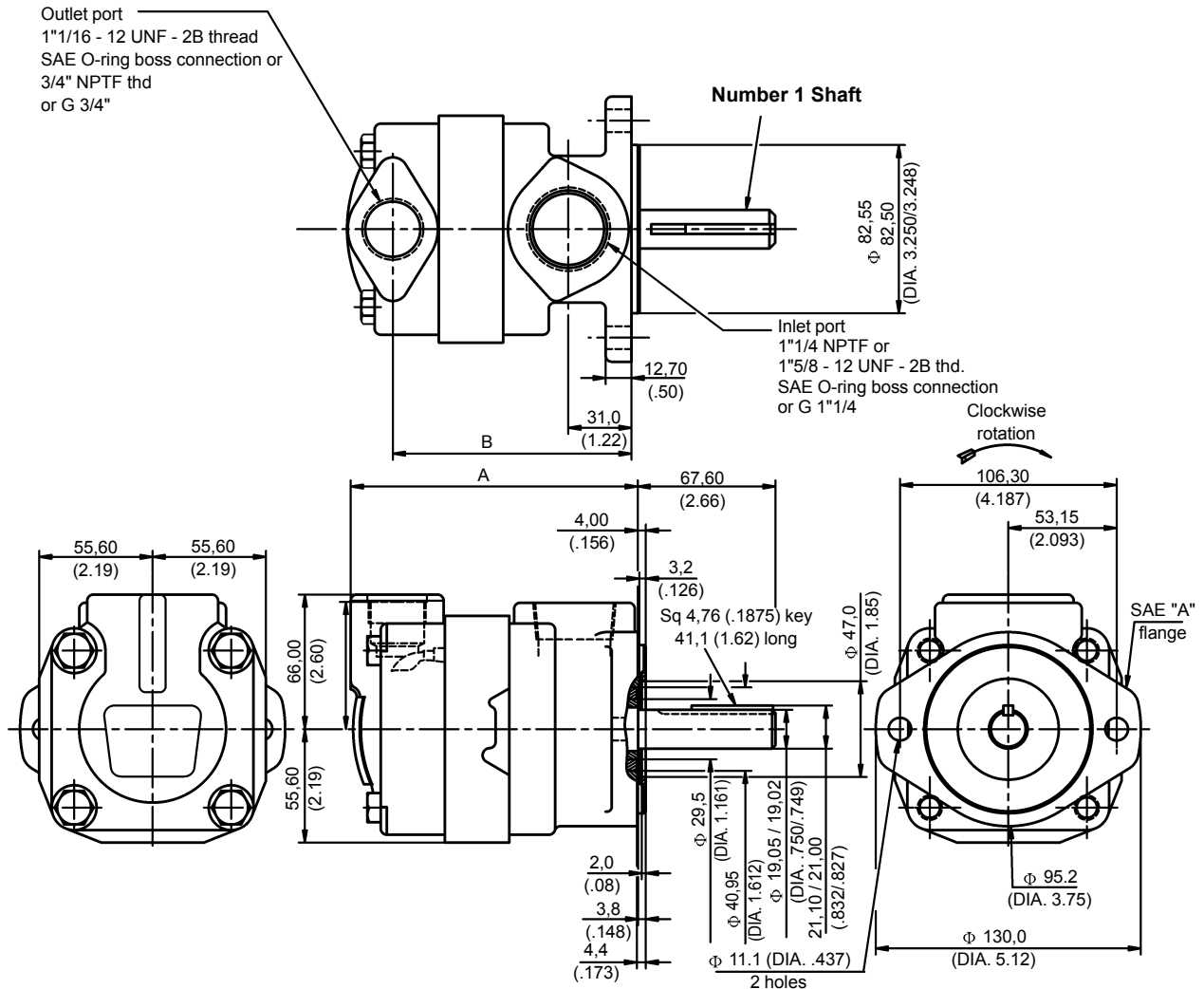
Internal leakage (typical)



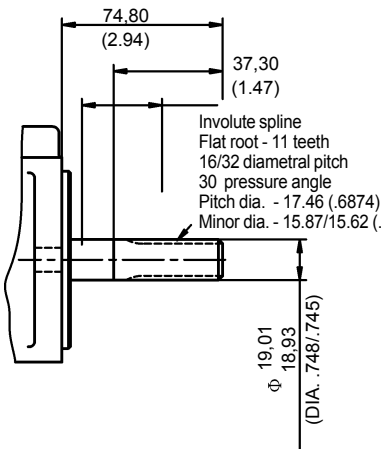
Noise level (typical) SDV20 - 13



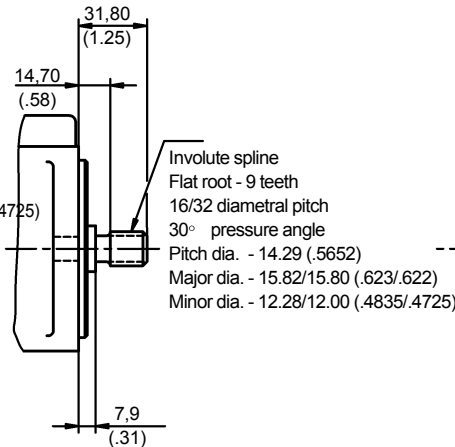
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is higher than 50% of theoretical flow. Total leakage is the sum of each section loss at its operating conditions.



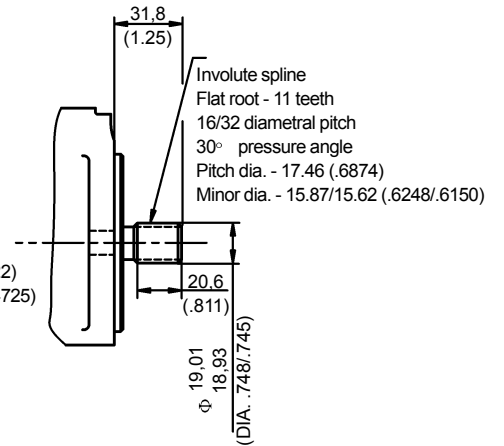
Number 11 shaft



Number 62 shaft



Number 38 shaft



| Ring size | Dimensions | | Weight Kg (lb) |
|-----------|--------------|--------------|----------------|
| | A | B | |
| 6 | 125,2 (4.93) | 102,1 (4.02) | 7,3 - (16.0) |
| 7 | 131,6 (5.18) | 108,4 (4.27) | 7,7 - (17.0) |
| 8 | 131,6 (5.18) | 108,4 (4.27) | 7,7 - (17.0) |
| 9 | 131,6 (5.18) | 108,4 (4.27) | 7,7 - (17.0) |
| 11 | 136,6 (5.38) | 113,5 (4.47) | 8,0 - (17.5) |
| 12 | 140,2 (5.52) | 117,1 (4.61) | 8,2 - (18,0) |
| 13 | 140,2 (5.52) | 117,1 (4.61) | 8,2 - (18,0) |

Weight:
 SDV 20 Series: 7,3 - 8,2kg
 (16 - 18 lb)

Model No.

SDV 2010 - 1 F 13 S 3 S - 1 CC - L - P

Vane pump

Series
 2010

Mounting

1 = 2-bolt flange, 4" pilot (standard)

Inlet port connections

F = 4 bolt flange 1" 1/2 dia

Shaft-end pump ring size

(Delivery at 1200 rpm and 100 psi)

- 6 = 6 USgpm
- 7 = 7 USgpm
- 8 = 8 USgpm
- 9 = 9 USgpm
- 11 = 11 USgpm
- 12 = 12 USgpm
- 13 = 13 USgpm

No 1 outlet port (shaft end)

S = 1" 1/16 - 12 UNF-2B thd

B = G 3/4" (BSPP)

Cover-end pump ring size

(Delivery at 1200 rpm and 100 psi)

- 1 = 1 USgpm
- 2 = 2 USgpm
- 3 = 3 USgpm
- 4 = 4 USgpm
- 5 = 5 USgpm
- 6 = 6 USgpm
- 7 = 7 USgpm

Series Identity

Shaft rotation (view on shaft end)
 L = Left hand for counter-clockwise
 Omit for right hand

Position of outlet port (Viewed from cover end of pump)

With n° 1 outlet opposite inlet

- AA = N° 2 outlet 135° CCW from inlet
- AB = N° 2 outlet 45° CCW from inlet
- AC = N° 2 outlet 45° CW from inlet
- AD = N° 2 outlet 135° CW from inlet

With n° 1 outlet 90° CCW from inlet

- BA = N° 2 outlet 135° CCW from inlet
- BB = N° 2 outlet 45° CCW from inlet
- BC = N° 2 outlet 45° CW from inlet
- BD = N° 2 outlet 135° CW from inlet

With n° 1 outlet in line with inlet

- CA = N° 2 outlet 135° CCW from inlet
- CB = N° 2 outlet 45° CCW from inlet
- CC = N° 2 outlet 45° CW from inlet
- CD = N° 2 outlet 135° CW from inlet

With n° 1 outlet 90° CW from inlet

- DA = N° 2 outlet 135° CCW from inlet
- DB = N° 2 outlet 45° CCW from inlet
- DC = N° 2 outlet 45° CW from inlet
- DD = N° 2 outlet 135° CW from inlet

Shaft

- 1 = Straight keyed
- 11 = Splined

N° 2 outlet port (cover end)

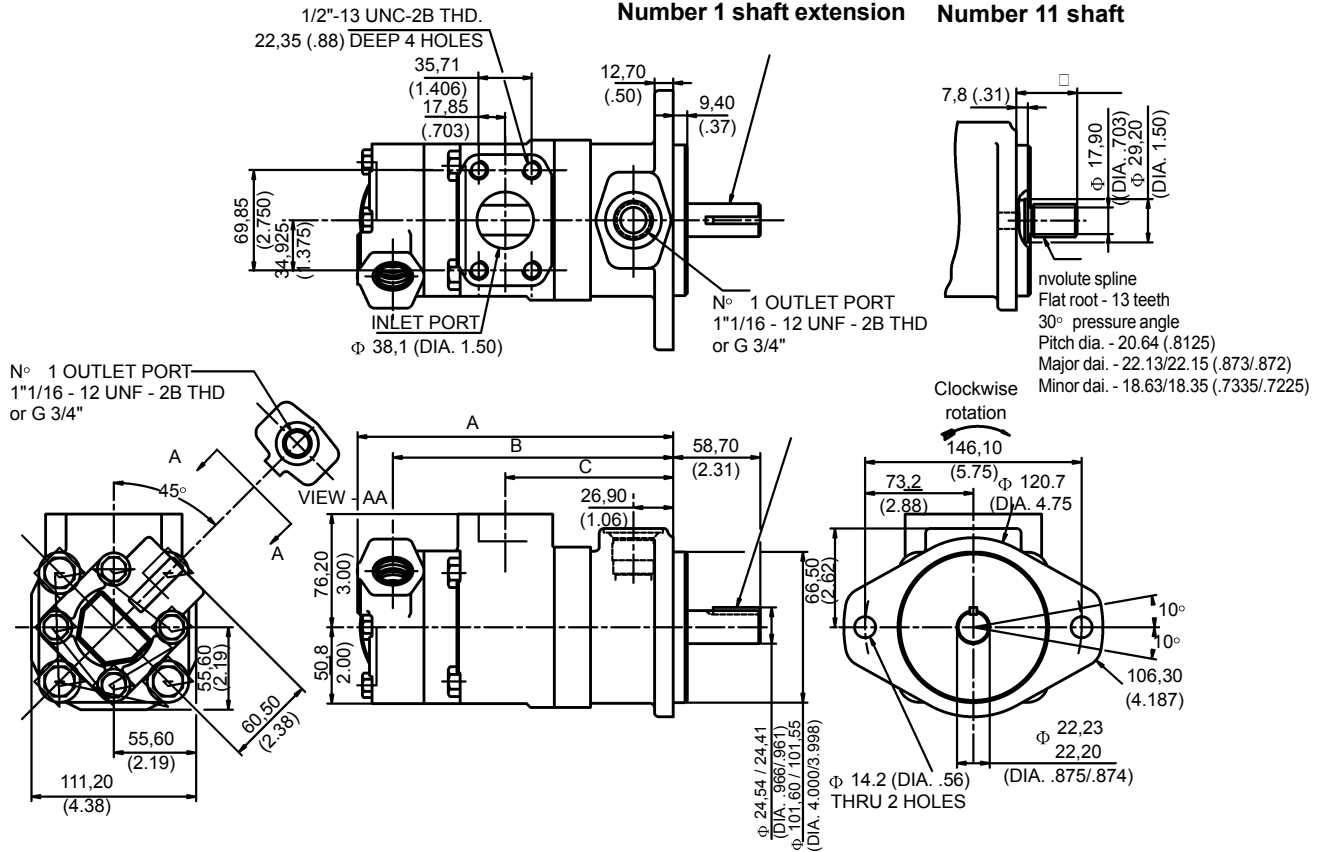
- S = 3/4" -16 UNF-2B thread
- B = G 1/2" (BSPP)

Operating characteristics

| Model Series | Ring Size | Displ. cm ³ /rev (in ³ /rev) | Max. Pressure bar (psi) |
|--------------|-----------|--|-------------------------|
| P1 | 6 | 19,5 (1.19) | 175 (2500) |
| | 7 | 22,8 (1.39) | 175 (2500) |
| | 8 | 26,5 (1.62) | 175 (2500) |
| | 9 | 29,7 (1.81) | 175 (2500) |
| | 11 | 36,4 (2.22) | 175 (2500) |
| | 12 | 39,0 (2.38) | 152 (2200) |
| | 13 | 42,4 (2.59) | 152 (2200) |
| P2 | 1 | 3,3 (.20) | 175 (2500) |
| | 2 | 6,6 (.40) | 175 (2500) |
| | 3 | 9,8 (.60) | 175 (2500) |
| | 4 | 13,1 (.80) | 175 (2500) |
| | 5 | 16,4 (1.00) | 175 (2500) |
| | 6 | 9,5 (1.19) | 152 (2200) |
| | 7 | 22,8 (1.39) | 138 (2000) |

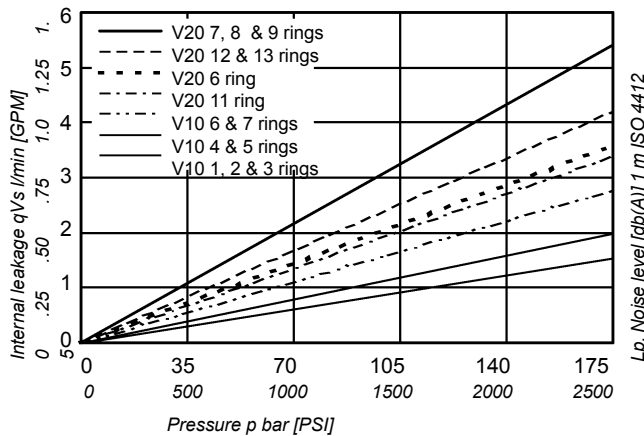
Please refer to page 4

Please refer to page 6



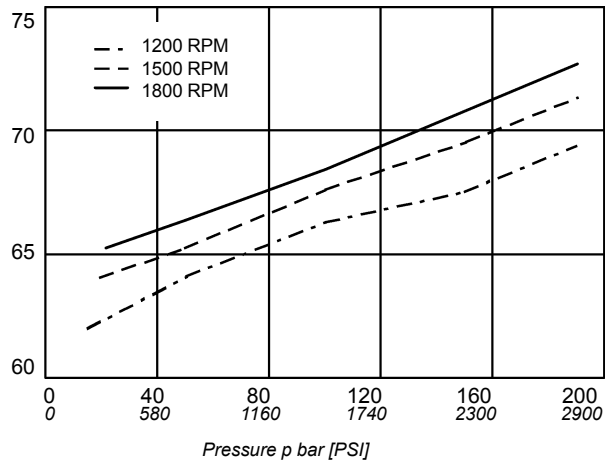
| Ring size | | Dimension | | | Ring size | | Dimension | | | Weight Kg(lb) |
|-----------|-----------|---------------|---------------|---------------|-----------|-----------|---------------|---------------|---------------|------------------|
| Cover end | Shaft end | A | B | C | Cover end | Shaft end | A | B | C | |
| 1, 2, 3, | 6 | 207.2 (8.157) | 183.5 (7.224) | 107.1 (4.217) | 4, 5 | 10, 11 | 225 (8.858) | 201.3 (7.925) | 118.5 (4.665) | 13.6(30) |
| 1, 2, 3, | 7, 8, 9 | 213.6 (8.409) | 189.9 (7.476) | 113.5 (4.469) | 4, 5 | 12, 13 | 228.5 (8.996) | 204.8 (8.063) | 122 (4.803) | |
| 1, 2, 3, | 10, 11 | 218.6 (8.606) | 194.9 (7.673) | 118.5 (4.665) | 6, 7 | 6 | 218.6 (8.606) | 194.9 (7.673) | 107.1 (4.217) | |
| 1, 2, 3, | 12, 13 | 222.1 (8.744) | 198.4 (7.811) | 122 (4.803) | 6, 7 | 7, 8, 9 | 225 (8.858) | 201.3 (7.925) | 113.5 (4.469) | |
| 4, 5 | 6 | 213.6 (8.409) | 189.9 (7.476) | 107.1 (4.217) | 6, 7 | 10, 11 | 230 (9.055) | 206.3 (8.122) | 118.5 (4.665) | |
| 4, 5 | 7, 8, 9 | 220 (8.661) | 196.3 (7.728) | 113.5 (4.469) | 6, 7 | 12, 13 | 233.5 (9.193) | 209.8 (8.260) | 122 (4.803) | |

Internal leakage (typical)

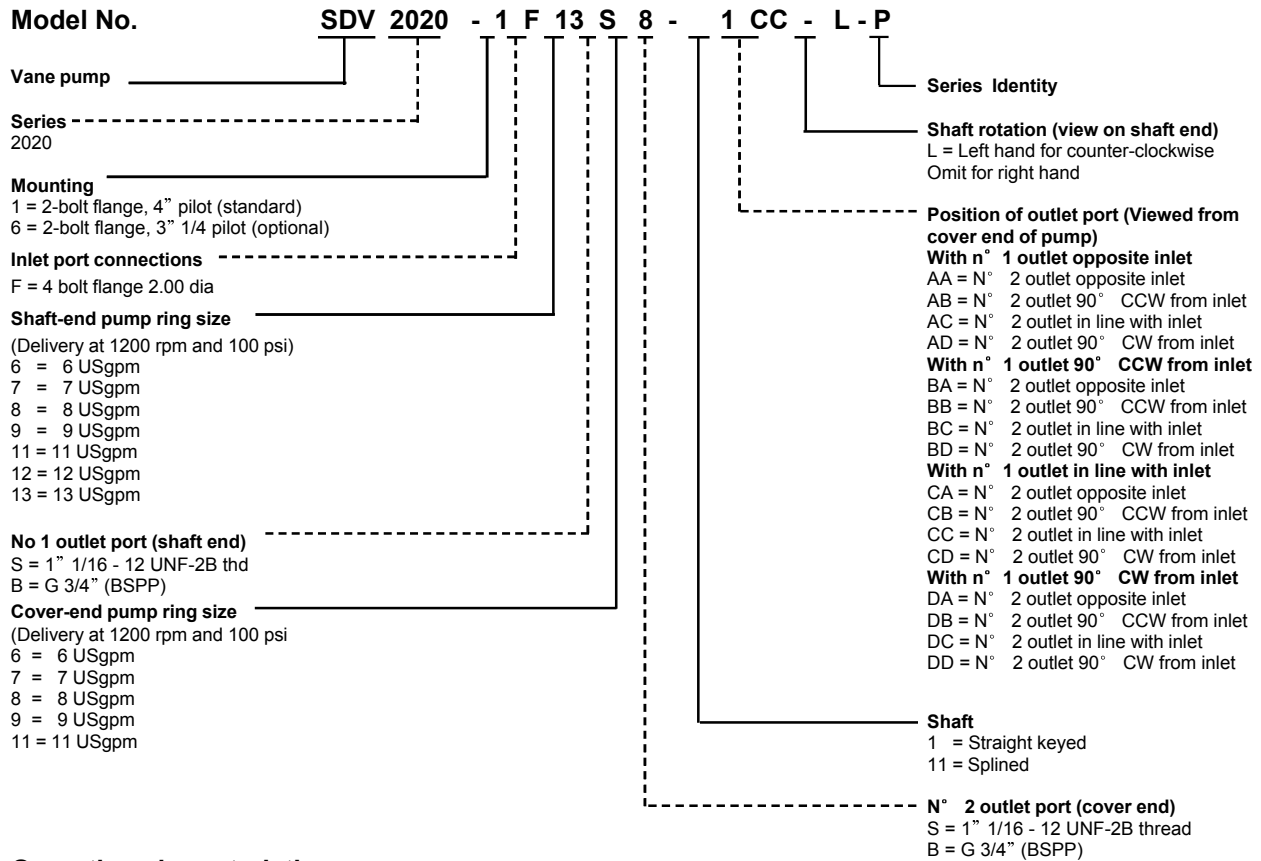


Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is higher than 50% of theoretical flow. Total leakage is the sum of each section loss at its operating conditions.

**Noise level (typical)
 SDV2010 - 13 - 6**

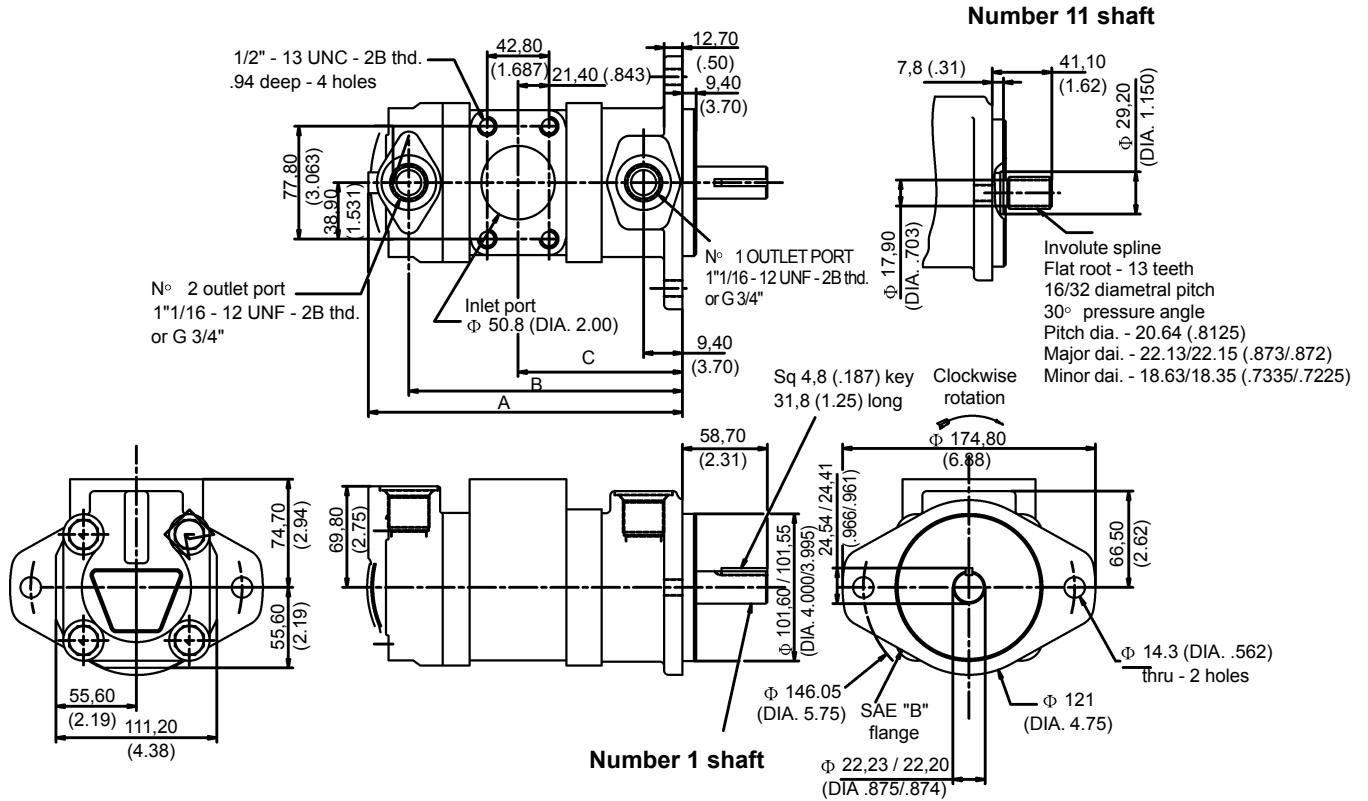


Double pump noise level is given with each section discharging at the pressure noted on the curve.



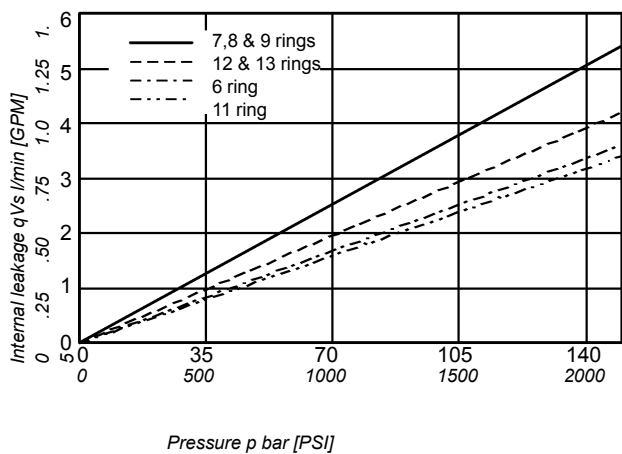
Operating characteristics

| Model Series | Ring Size | Displ. cm ³ /rev (in ³ /rev) | Max. Pressure bar (psi) | Speed RPM | Typical delivery L/min (USgpm) | | | | Typical input power KW (hp) | | | |
|--------------|-----------|--|-------------------------|-----------|--------------------------------|-------|---------|----------|-----------------------------|--------|---------|----------|
| | | | | | 0 bar | 0 PSI | 150 bar | 2000 PSI | 7 bar | 80 PSI | 175 bar | 2500 PSI |
| P1 & P2 | 6 | 19,5 (1.19) | 172 (2500) | 1200 | 23,40 | 6,18 | 19,80 | 5,23 | 0,4 | 0,5 | 6,8 | 9,1 |
| | | | | 1500 | 29,25 | 7,73 | 25,65 | 6,78 | 0,5 | 0,6 | 8,8 | 11,8 |
| | | | | 1800 | 35,10 | 9,27 | 31,50 | 8,32 | 0,5 | 0,7 | 10,8 | 14,5 |
| | 7 | 22,8 (1.39) | 172(2500) | 1200 | 27,36 | 7,23 | 21,96 | 5,80 | 0,4 | 0,6 | 7,5 | 10,1 |
| | | | | 1500 | 34,20 | 9,04 | 28,80 | 7,61 | 0,5 | 0,7 | 9,9 | 13,3 |
| | | | | 1800 | 41,04 | 10,84 | 35,64 | 9,42 | 0,6 | 0,9 | 12,2 | 16,4 |
| | 8 | 26,5 (1.62) | 172 (2500) | 1200 | 31,80 | 8,40 | 26,40 | 6,97 | 0,5 | 0,7 | 9,1 | 12,1 |
| | | | | 1500 | 39,75 | 10,50 | 34,35 | 9,08 | 0,6 | 0,8 | 11,8 | 15,8 |
| | | | | 1800 | 47,70 | 12,60 | 42,30 | 11,18 | 0,7 | 1,0 | 14,5 | 19,5 |
| | 9 | 29,7 (1.81) | 172(2500) | 1200 | 35,64 | 9,42 | 30,24 | 7,99 | 0,6 | 0,7 | 10,4 | 13,9 |
| | | | | 1500 | 44,55 | 11,77 | 39,15 | 10,34 | 0,7 | 0,9 | 13,4 | 18,0 |
| | | | | 1800 | 53,46 | 14,12 | 48,06 | 12,70 | 0,8 | 1,1 | 16,5 | 22,1 |
| | 11 | 36,4 (2.22) | 172 (2500) | 1200 | 43,68 | 11,54 | 40,28 | 10,64 | 0,7 | 0,9 | 13,8 | 18,5 |
| | | | | 1500 | 54,60 | 14,43 | 51,20 | 13,53 | 0,8 | 1,1 | 17,6 | 23,6 |
| | | | | 1800 | 65,52 | 17,31 | 62,12 | 16,41 | 1,0 | 1,4 | 21,3 | 28,6 |
| | 12 | 39,0 (2.38) | 152 (2200) | 1200 | 46,80 | 12,36 | 42,60 | 11,25 | 0,7 | 1,0 | 14,6 | 19,6 |
| | | | | 1500 | 58,50 | 15,46 | 54,30 | 14,35 | 0,9 | 1,2 | 18,6 | 25,0 |
| | | | | 1800 | 70,20 | 18,55 | 66,00 | 17,44 | 1,1 | 1,5 | 22,6 | 30,4 |
| | 13 | 42,4 (2.59) | 152 (2200) | 1200 | 50,88 | 13,44 | 46,68 | 12,33 | 0,8 | 1,1 | 16,0 | 21,5 |
| | | | | 1500 | 63,60 | 16,80 | 59,40 | 15,69 | 1,0 | 1,3 | 20,4 | 27,3 |
| | | | | 1800 | 76,32 | 20,16 | 72,12 | 19,05 | 1,2 | 1,6 | 24,7 | 33,2 |



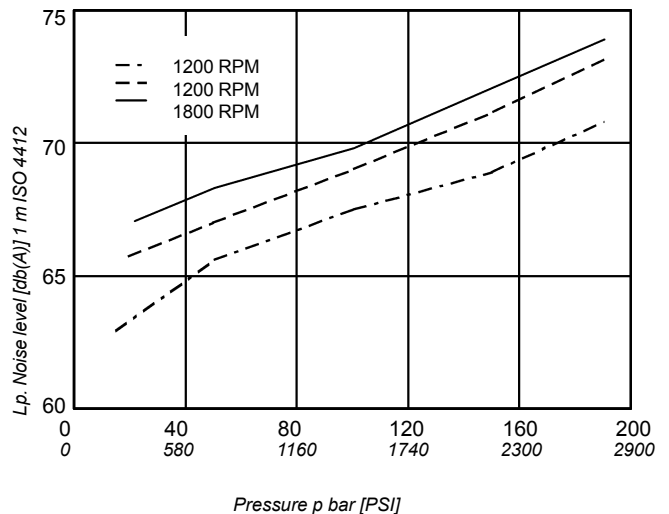
| Ring size | | Dimension | | | Ring size | | Dimension | | | Weight Kg(lb) |
|-----------|-----------|---------------|---------------|---------------|-----------|-----------|---------------|---------------|---------------|------------------|
| Cover end | Shaft end | A | B | C | Cover end | Shaft end | A | B | C | |
| 6 | 7, 8, 9 | 211.8 (8.339) | 188.6 (7.425) | 114.5 (4.508) | 7, 8, 9 | 10, 11 | 223.2 (8.787) | 200 (7.874) | 119.5 (4.705) | 15.9(35) |
| 6 | 10, 11 | 216.8 (8.535) | 193.6 (7.622) | 119.5 (4.705) | 7, 8, 9 | 12, 13 | 226.7 (8.925) | 203.5 (8.012) | 123 (4.843) | |
| 6 | 12, 13 | 220.3 (8.673) | 197.1 (7.760) | 123 (4.843) | 10,11 | 10, 11 | 228.2 (8.984) | 205 (8.071) | 119.5 (4.705) | |
| 7, 8, 9 | 7, 8, 9 | 218.2 (8.591) | 195 (7.677) | 114.5 (4.508) | 10,11 | 12, 13 | 231.7 (9.122) | 208.3 (8.201) | 123 (4.843) | |

Internal leakage (typical)



Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is higher than 50% of theoretical flow. Total leakage is the sum of each section loss at its operating conditions.

**Noise level (typical)
SDV2020 - 13 - 11**



Double pump noise level is given with each section discharging at the pressure noted on the curve.



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