



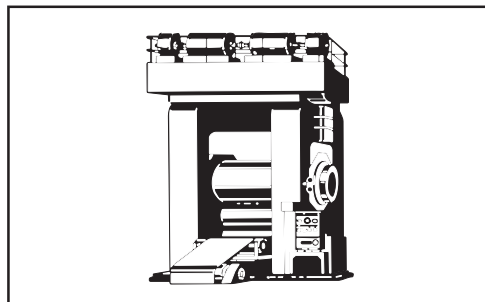
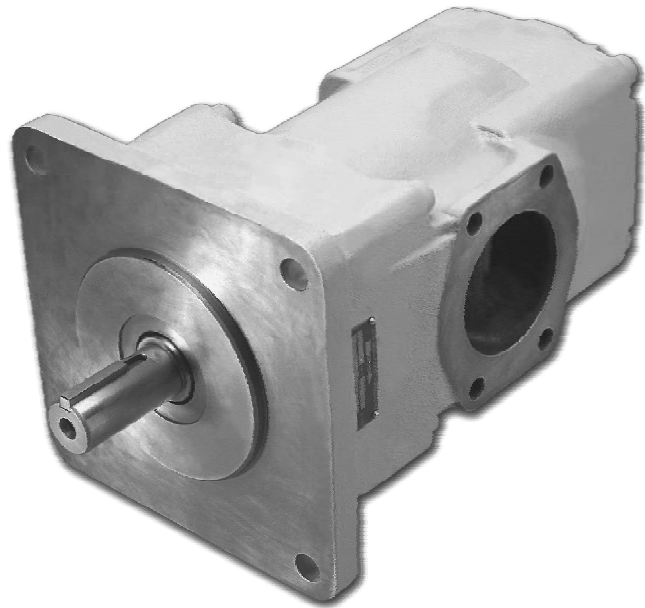
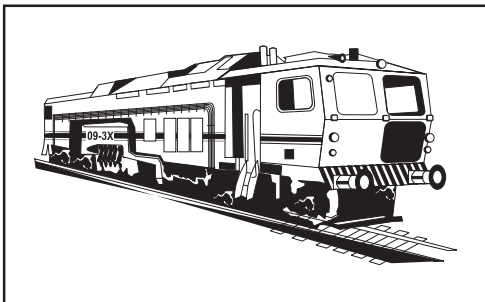
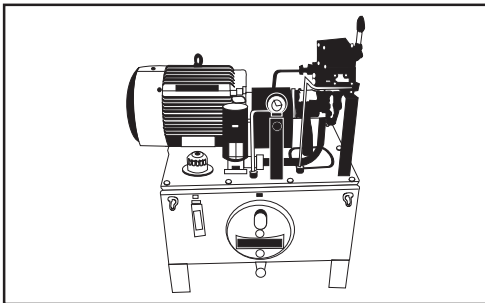
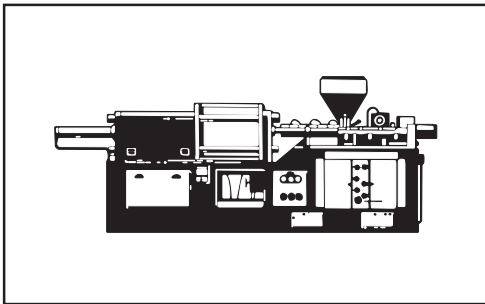
VELJAN

Service Information

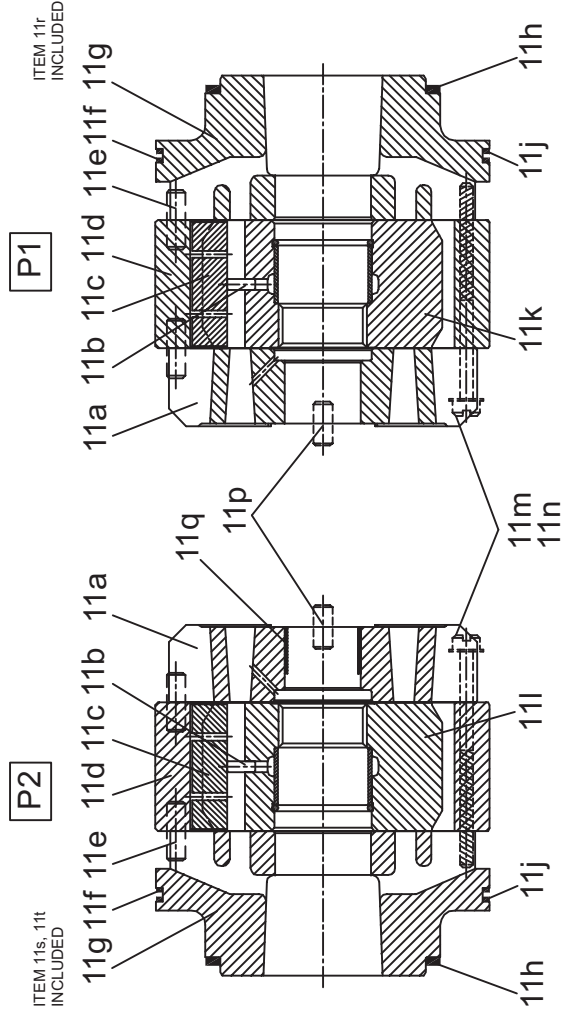
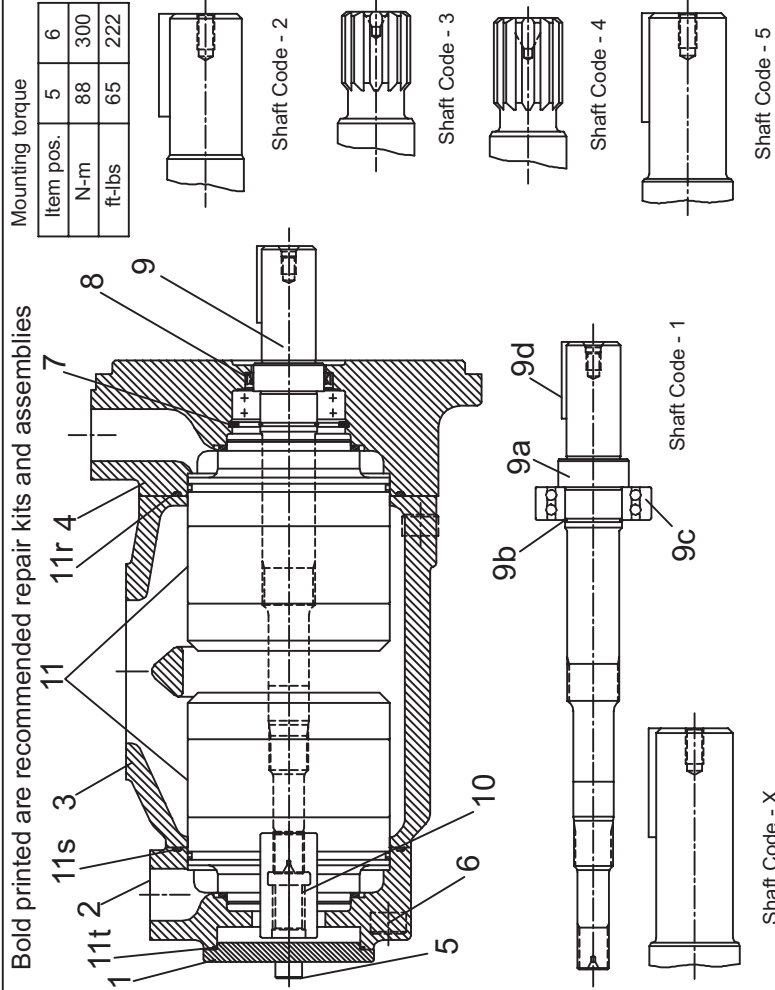
SS4 - 00128

VT6EE-VT6EES

Double vane pump



Bold printed are recommended repair kits and assemblies



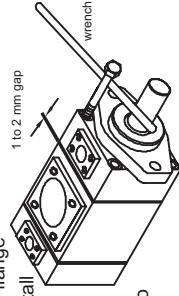
| Item pos. | Description | Part No. | |
|-----------|---|--------------|-----|
| | | | Qty |
| 1 | Cover plate | VT6EE-VT6EES | 1 |
| 2 | End cap (UNC) (VT6EES) | H-034-67313 | 1 |
| 3 | End cap (Metric) (VT6EE - VT6EES) | H-034-67307 | 1 |
| 4 | Housing (UNC) (VT6EES) | H-034-67306 | 1 |
| 5 | Housing (Metric) (VT6EE - VT6EES) | H-034-67304 | 1 |
| 6 | Mounting flange (UNC) (VT6EES) | H-034-67303 | 1 |
| 7 | Mounting flange (Metric) (VT6EES) | H-034-66809 | 1 |
| 8 | Mounting flange (Metric) (VT6EE) | H-034-67314 | 1 |
| 9 | Mounting flange (Metric) (VT6EE) | H-034-66781 | 1 |
| 10 | Mounting Screw | V361-12230-3 | 2 |
| 11 | Mounting Screw | V361-14324-3 | 8 |
| 12 | Retaining ring | V356-30315 | 1 |
| 13 | Shaft seal (S1-0.7 bar) | V620-00018-3 | 1 |
| 14 | Shaft seal (S4-S5-7 bar) | V620-00019-3 | 1 |
| 15 | Shaft and bearing assy (Code-1) | VS24-69070 | 1 |
| 16 | Shaft and bearing assy (Code-2) (VT6EE) | VS24-69071 | 1 |
| 17 | Shaft and bearing assy (Code-3) | VS24-69072 | 1 |
| 18 | Shaft and bearing assy (Code-4) | VS24-69761 | 1 |
| 19 | Shaft and bearing assy (Code-5) | VS24-69762 | 1 |
| 20 | Shaft and bearing assy (Code-X) | C-S14-72172 | 1 |
| 21 | Shaft keyed (Code-1) | H-034-67308 | 1 |
| 22 | Shaft keyed (Code-2) (VT6EE) | H-034-67309 | 1 |
| 23 | Shaft splined (Code-3) | H-034-67310 | 1 |
| 24 | Shaft splined (Code-4) | H-034-67311 | 1 |
| 25 | Shaft splined (Code-5) | H-034-67312 | 1 |
| 26 | Shaft keyed (Code-X) | C-034-03252 | 1 |
| 27 | Round section ring | V034-70866 | 1 |
| 28 | Ball bearing | V230-90018-3 | 1 |
| 29 | Key code-1 | H-034-66981 | 1 |
| 30 | Key code-2 (VT6EE) | H-034-66786 | 1 |
| 31 | Key code-5 | H-034-66978 | 1 |
| 32 | Coupling (SAE-B) | H-034-66541 | 1 |
| 33 | Coupling (SAE-BB) | H-034-66544 | 1 |
| 34 | Cartridge assembly 042 C.W. (P1) | VS24-49390 | 1 |
| 35 | Cartridge assembly 042 C.C.W. (P1) | VS24-49391 | 1 |
| 36 | Cartridge assembly 045 C.W. (P1) | VS24-10205 | 1 |
| 37 | Cartridge assembly 045 C.C.W. (P1) | VS24-10206 | 1 |
| 38 | Cartridge assembly 050 C.W. (P1) | VS24-40769 | 1 |
| 39 | Cartridge assembly 050 C.C.W. (P1) | VS24-40770 | 1 |
| 40 | Cartridge assembly 052 C.W. (P1) | VS24-10207 | 1 |
| 41 | Cartridge assembly 052 C.C.W. (P1) | VS24-10208 | 1 |
| 42 | Cartridge assembly 057 C.W. (P1) | C-S14-72204 | 1 |

| Item pos. | Description | Part No. | |
|-----------|------------------------------------|--------------|-----|
| | | VT6EE-VT6EES | Qty |
| | Cartridge assembly 057 C.C.W. (P1) | C-S14-72205 | |
| | Cartridge assembly 062 C.C.W. (P1) | VS24-10209 | |
| | Cartridge assembly 062 C.C.W. (P1) | VS24-10210 | |
| | Cartridge assembly 066 C.C.W. (P1) | VS24-10211 | |
| | Cartridge assembly 066 C.C.W. (P1) | VS24-10212 | |
| | Cartridge assembly 072 C.C.W. (P1) | VS24-40375 | |
| | Cartridge assembly 072 C.C.W. (P1) | VS24-40376 | |
| | Cartridge assembly 085 C.C.W. (P1) | VS24-59352 | |
| | Cartridge assembly 085 C.C.W. (P1) | VS24-68983 | |
| | Cartridge assembly 042 C.C.W. (P2) | VS24-69054 | 1 |
| | Cartridge assembly 042 C.C.W. (P2) | VS24-69055 | |
| | Cartridge assembly 045 C.C.W. (P2) | VS24-69056 | |
| | Cartridge assembly 045 C.C.W. (P2) | VS24-69057 | |
| | Cartridge assembly 050 C.C.W. (P2) | VS24-69058 | |
| | Cartridge assembly 050 C.C.W. (P2) | VS24-69059 | |
| | Cartridge assembly 052 C.C.W. (P2) | VS24-69060 | |
| | Cartridge assembly 052 C.C.W. (P2) | VS24-69061 | |
| | Cartridge assembly 057 C.C.W. (P2) | C-S14-72206 | |
| | Cartridge assembly 057 C.C.W. (P2) | C-S14-72207 | |
| | Cartridge assembly 062 C.C.W. (P2) | VS24-69062 | |
| | Cartridge assembly 062 C.C.W. (P2) | VS24-69063 | |
| | Cartridge assembly 066 C.C.W. (P2) | VS24-69064 | |
| | Cartridge assembly 066 C.C.W. (P2) | VS24-69065 | |
| | Cartridge assembly 072 C.C.W. (P2) | VS24-69066 | |
| | Cartridge assembly 072 C.C.W. (P2) | VS24-69067 | |
| | Cartridge assembly 085 C.C.W. (P2) | VS24-69068 | |
| | Cartridge assembly 085 C.C.W. (P2) | VS24-69069 | |
| 11a | Port plate - rear C.W. (P1) | V034-59082 | 1 |
| | Port plate - rear C.C.W. (P1) | V034-59083 | |
| | Port plate - rear C.W. (P2) | V034-59083 | |
| | Port plate - rear C.C.W. (P2) | V034-59082 | |
| 11b | Pin vane holdout | V034-59161 | 24 |
| 11c | Vane | V034-59162 | 24 |
| 11d | Cam ring - 042 | V034-66899 | 2 |
| | Cam ring - 045 | V034-59164 | |
| | Cam ring - 050 | V034-66744 | |
| | Cam ring - 052 | V034-59165 | |
| | Cam ring - 057 | C-034-03202 | |
| | Cam ring - 062 | V034-59166 | |
| | Cam ring - 066 | V034-59167 | |
| | Cam ring - 072 | V034-66736 | |
| 11e | Cam ring - 085 | V034-67030 | 4 |
| | Dowel pin | V324-22016 | |

| Item pos. | Description | Part No. | |
|-----------|---|--------------|-----|
| | | VT6EE-VT6EES | Qty |
| 11f | Back-up ring | V618-15018 | 2 |
| 11g | Pressure port plate C.W. (P1) | V034-59159 | 1 |
| | Pressure port plate C.C.W. (P1) | V034-59160 | |
| | Pressure port plate C.W. (P2) | V034-59160 | |
| | Pressure port plate C.C.W. (P2) | V034-59159 | |
| 11h | Sq.section seal | V691-10237 | 2 |
| 11j | Sq.section seal | V691-10253 | 2 |
| 11k | Rotor-insert assy | H-S24-10185 | 1 |
| 11l | Rotor-insert assy | H-S24-69822 | 1 |
| 11m | Screw | V310-10340 | 4 |
| 11n | Lockwasher internal tooth | V348-10010 | 4 |
| 11p | Dowel pin | V323-82014 | 2 |
| 11q | Bearing bush | V034-59901 | 1 |
| 11r,11s | Sq.section seal | V691-10259 | 2 |
| 11t | Sq.section seal | V691-10155 | 1 |
| 11f,11h | Seal kit (S1 - 0.7 bar) | VS24-69073 | 1 |
| 11j, 8 | Seal kit (S4 - 7 bar) | VS24-69073-4 | |
| 11r,11s | Seal kit (S5 - 7 bar) | VS24-69073-5 | |
| 11t | | | |
| 11a,11p | Port plate - rear assy C.W. (P1) | VS24-10214 | 1 |
| | Port plate - rear assy C.C.W. (P1) | VS24-10215 | |
| 11a,11p | Port plate - rear and bush assy C.W. (P2) | VS24-69074 | 1 |
| 11q | Port plate - rear assy C.C.W. (P1) | VS24-69075 | |
| 1.5 | Cover plate assy | VS24-69763 | 1 |

To change porting position, follow the steps below:

- Secure pump and remove 4 bolts from mounting flange. Move the mounting flange 1 to 2 mm away from housing. Insert one bolt halfway to mounting flange. Install a wrench between the shaft and bolt and turn in the desired way, so that the required position of P1 port with respect to Suction is obtained. Reinstall the bolts and tighten to corresponding mounting torque as provided on page 2.
- Follow similar procedure for changing P2 position. Use wrench between two bolts placed diagonally opposite.



Instruction : Do not remove mounting flange/end cap completely from the housing but only just 1 to 2 mm to avoid the cartridge pin to move out from the housing dowel pin hole. Make sure no piece of paint enters into the gap to avoid leakage. If it is difficult to turn mounting flange/end cap put some hydraulic oil in to the pressure port to lubricate the pressure port seals.

MODEL CODE

VT6EE/VT6EES - 066 - 045 - 1 R 00 - A 1 0 00 -

Series
 VT6EE Series - 250 B4HW
 ISO 3019-2 mounting flange
 VT6EES Series - SAE 4 bolts
 Mounting flange J744c

Modifications

Mounting w/connection variables
 SAE 4 bolt flange (J518c)

| UNC METRIC | |
|------------|----|
| VT6EE | M0 |
| VT6EES | 00 |

Coupling adaptor

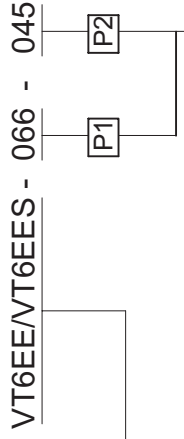
- 0 = None
- 2 = SAE 'B'
- 3 = SAE 'BB'

Seal class

- 1 = S1 - BUNAN
- 4 = S4 - EPDM
- 5 = S5 - VITON

Design letter

Porting combination



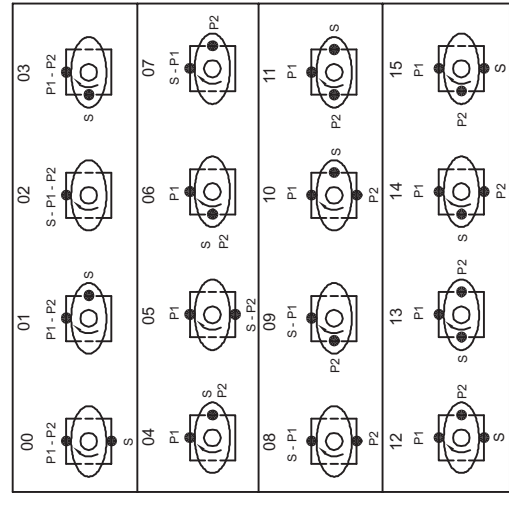
| Cam ring | Displacement in ³ /rev (cm ³ /rev) | Cam ring | Displacement in ³ /rev (cm ³ /rev) |
|----------|---|----------|---|
| 042 | = 8.07 (132.3) | 062 | = 12.00 (196.7) |
| 045 | = 8.69 (142.4) | 066 | = 13.02 (213.3) |
| 050 | = 9.67 (158.5) | 072 | = 13.86 (227.1) |
| 052 | = 10.06 (164.8) | 085 | = 16.46 (269.8) |
| 057 | = 11.02 (180.7) | | |

Type of shaft ————— Type of shaft

- VT6EE
- VT6EES
- 2 - keyed G45N (ISO 3019-2)
- 1 - keyed (SAE CC)
- 3 - splined (SAE CC)
- 4 - splined (SAE D&E)
- 5 - keyed (SAE D&E)

Direction of rotation (view on shaft end)

- R - clockwise
- L - counter-clockwise



S - Suction port P - Pressure port

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| | |
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