



HYDRAULIC PRODUCTS



WE HELP YOU SEE YOUR IDEAS WORK



VANE PUMPS						
Model No.	Max. Pr.		Max. Displacement		Max. Speed rpm	Mounting Standard
	psi	bar	in ³ /rev	cm ³ /rev		
Single Vane Pumps - Fixed Displacement						
VTXB1	3000	210	0.40 - 2.80	6 - 46	2500	SAE-A
VTXB2	3000	210	0.40 - 2.80	6 - 46	2500	SAE-B
VT6B	3500	240	0.40 - 2.42	6 - 40	2500	SAE-A
VT6B2	3500	240	0.40 - 2.42	6 - 40	2500	SAE-B
VT6C	4000	275	0.66 - 6.10	11 - 100	2800	SAE-B
VT6CSH	4000	275	0.66 - 6.10	11 - 100	2800	SAE-B
VT6CP	4000	275	0.66 - 6.10	11 - 100	2800	SAE-C
VT6GC	4000	275	0.66 - 6.10	11 - 100	2800	R.17-102
VT6D	3500	240	2.90 - 11.62	48 - 190	2500	SAE-C
VT6E	3500	240	8.07 - 16.40	132 - 270	2200	SAE-C
VT7BS	4650	320	0.35 - 3.05	6 - 50	3600	SAE-B
VT7QC1	4350	300	0.66 - 6.10	11 - 100	3000	SAE-B
VT7QC2	4350	300	0.66 - 6.10	11 - 100	3000	SAE-C
VT7DS	4350	300	2.68 - 9.64	44 - 158	3000	SAE-C
VT7ES	3500	240	8.07 - 16.40	132 - 270	2200	SAE-C
Double Vane Pumps - Fixed Displacement						
VTXBB1	3000	210	0.8 - 5.6	12 - 92	2500	SAE-A
VTXBB2	3000	210	0.8 - 5.6	12 - 92	2500	SAE-B
VT6BB	3500	240	0.79 - 5.61	12 - 92	2500	SAE-B
VT6CB	4000	275	1.05 - 8.52	17 - 140	2500	SAE-B
VT6CC	4000	275	1.32 - 12.20	22 - 200	2800	SAE-B
VT6CCSH	4000	275	1.32 - 12.20	22 - 200	2800	SAE-B
VT6CCZ	4000	275	1.32 - 12.20	22 - 200	2800	SAE-C
VT6GCC	4000	275	1.32 - 12.20	22 - 200	2800	R.17-102
VT6DC	4000	275	3.56 - 17.75	59 - 290	2500	SAE-C
VT6DDS	3500	240	5.80 - 23.30	96 - 380	2500	SAE-C
VT6EC	4000	275	8.73 - 22.56	143 - 370	2200	SAE-C
VT6ED	3500	240	11.0 - 28.06	180 - 460	2200	SAE-C
VT6EE / EES	3500	240	16.1 - 32.94	264 - 540	2200	ISO / SAE-E
VT67BB	4350	300	0.35 - 3.05	12 - 100	2800	SAE-B
VT67CB	4350	300	1.01 - 9.15	17 - 150	2800	SAE-B
VT67DB	4350	300	3.25 - 14.70	54 - 240	2500	SAE-C
VT67EB	4350	300	8.42 - 19.45	138 - 320	2200	SAE-C
VT67EC	4000	275	8.73 - 22.50	143 - 370	2200	SAE-C
VT7BBS	4650	320	0.67 - 6.10	12 - 100	3600	SAE-B
VT7QCC1	4350	300	1.32 - 12.20	22 - 200	3000	SAE-B
VT7QCC2	4350	300	1.32 - 12.20	22 - 200	3000	SAE-C
VT7DBS	4350	300	3.03 - 12.69	50 - 208	2500	SAE-C
VT7QDC	4350	300	3.34 - 15.74	55 - 258	2500	SAE-C
VT7DDS	3600	250	5.36 - 19.28	88 - 316	2500	SAE-C
VT7EBS	4350	300	8.42 - 19.45	138 - 319	2200	SAE-C
VT7QEC	4350	300	8.73 - 22.56	143 - 370	2200	SAE-C
VT7EDS	3600	250	10.7 - 26.00	176 - 427	2200	SAE-C
VT7EE / EES	3500	240	16.1 - 32.80	264 - 540	2200	ISO / SAE-E
Triple Vane Pumps - Fixed Displacement						
VT6CBB	4000	275	1.46 - 11.70	23 - 180	2500	SAE-B
VT6CCB	4000	275	1.72 - 15.00	28 - 240	2500	SAE-B
VT6DCB	4000	275	3.96 - 20.50	65 - 330	2500	SAE-C
VT6DCC	4000	275	4.22 - 23.94	70 - 390	2500	SAE-C
VT6DDCS	4000	275	6.46 - 29.34	107 - 480	2500	SAE-C
VT6EDCS	4000	275	11.63 - 34.15	191 - 560	2200	SAE-E
VT67DBB	4350	300	3.59 - 17.75	60 - 290	2500	SAE-C
VT67DCB	4350	300	3.91 - 20.80	64 - 341	2200	SAE-C
VT67DCC	4000	275	4.00 - 21.84	66 - 358	2200	SAE-C
VT67DDCS	4000	275	6.00 - 25.38	99 - 416	2200	SAE-C
VT67EDB	4350	300	11.28 - 31.11	186 - 510	2500	ISO3019-2
VT67EDC	4000	275	11.41 - 32.14	187 - 528	2200	ISO3019-2
VT7DBBS	4350	300	3.35 - 15.74	56 - 258	2500	SAE-C
VT7QDCB	4350	300	3.66 - 18.90	61 - 308	2500	SAE-C
VT7QDCC	4000	275	3.96 - 21.84	66 - 358	2500	SAE-C
VT7DDBS	4350	300	5.67 - 22.33	94 - 366	2500	SAE-C
VT7EDBS	4350	300	11.10 - 29.10	182 - 478	2200	SAE-E
VT7QEDCS	4350	300	11.34 - 32.15	187 - 528	2200	SAE-E

Drive Train Vane Pumps - Fixed Displacement

Model No.	Max. Pr.		Max. Displacement		Max. Speed rpm	Mounting Standard
	psi	bar	in ³ /rev	cm ³ /rev		
VT6CR	4000	275	0.66 - 6.10	11 - 100	2800	SAE-B
VT6DR	3500	240	2.90 - 11.65	48 - 190	2500	SAE-C
VT6ER	3500	240	8.07 - 16.40	132 - 270	2200	SAE-C
VT6DCCR	4000	275	4.22 - 23.84	70 - 390	2500	SAE-C
VT6EDCR	4000	275	11.63 - 34.15	191 - 560	2200	ISO3019-2
VT6EES	3500	240	16.1 - 32.80	264 - 540	2200	SAE-E
VT7EES	3500	240	16.1 - 32.80	264 - 540	2200	SAE-E

NOTE :- 1. PUMPS ARE AVAILABLE IN INDUSTRIAL AND MOBILE DUTY TYPES AND ALSO WITH DOUBLE SHAFT SEALS.
2. PUMPS ARE ALSO AVAILABLE WITH ISO-3019-2 MOUNTING STANDARD.

VST7 SILENT VANE PUMPS

Model No.	Max. Pr.		Max. Displacement		Max. Speed rpm	Mounting Standard
	psi	bar	in ³ /rev	cm ³ /rev		
Single Vane Pumps - Fixed Displacement						
VST7B	3000	210	0.354 - 2.50	5.8- 41.0	2500	SAE B
VST7C	3500	240	0.348 - 4.84	5.7- 49.3	2200	SAE J 744 / SAE C
VST7D	3500	240	2.680 - 9.63	43.9 - 157.9	2500	SAE J 744 / SAE C
VST7E	3500	240	8.07 - 16.39	132.3 - 268.7	2200	SAE J 744 / SAE C
Double Vane Pumps - Fixed Displacement						
VST7CC	3500	240	0.348 - 4.84	5.7 - 79.3	2200	SAE J 744 / SAE C
VST7DB	3500	240	0.348 - 9.63	5.7 - 157.9	2500	SAE J 744 / SAE C
VST7DC	3500	240	0.348 - 9.63	5.7 - 157.9	2500	SAE J 744 / SAE C
VST7EB	3500	240	0.348 - 16.39	5.7 - 268.7	2200	SAE J 744 / SAE C
VST7EC	3500	240	0.348 - 16.39	5.7 - 268.7	2200	SAE J 744 / SAE C
VST7ED	3500	240	2.68 - 16.39	43.9 - 268.7	2200	SAE J 744 / SAE C
Triple Vane Pumps - Fixed Displacement						
VST7CBB	3500	240	0.348 - 4.84	5.7 - 79.3	2500	SAE B
VST7DBB	3500	240	0.348 - 9.63	5.7 - 157.9	2500	SAE C
VST7DCC	3500	240	0.348 - 9.63	5.7 - 157.9	2500	SAE C
VST7ECB	3500	240	0.348 - 16.39	5.7 - 268.7	2200	ISO 3019-2/250 B4 HW
VST7EDB	3500	240	0.348 - 16.39	5.7 - 268.7	2200	ISO 3019-2/250 B4 HW
VST7EDC	3500	240	0.348 - 16.39	5.7 - 268.7	2200	ISO 3019-2/250 B4 HW

AXIAL PISTON PUMPS - J9V Series

VARIABLE VOLUME SWASH PLATE DESIGN FOR OPEN LOOP APPLICATIONS

Max. Working Pressure : 280 bar
 Drive Shaft : Wide variety of splined /keyed shaft options to meet SAE and DIN standards
 Controls : Pressure, Flow & Power

MODELS	Max. DISP. cm ³ /rev	SUCTION PORT	DELIVERY PORT	MOUNTING FLANGE
J9V009	9	M27X2, 1 1/16-12UNF	M27X2, 1 1/16-12UNF	SAE 82-2(A) ISO-3019/2
J9V018	18	1" SAE	3/4" SAE	SAE 82-2(A) ISO-3019/2
J9V027	27	1 1/4" SAE	3/4" SAE	SAE101-2(B) ISO-3019/2
J9V045	45	1 1/2" SAE	1" SAE	SAE101-2(B) ISO-3019/2
J9V072	72	2" SAE	1 1/4" SAE	SAE127-4(C) ISO-3019/2
J9V099	100	2 1/2" SAE	1 1/4" SAE	SAE127-2(C) ISO-3019/2
J9V0135	140	2 1/2" SAE	1 1/4" SAE	SAE152-4(D) ISO-3019/2





AXIAL PISTON PUMPS - VP Series

- Maximum continuous working pressure upto 350 bar.
- Compact & lightest design for its size and suitable for Mobile, Marine & Industrial equipment usage.
- Displacement control is by rotary servo with pressure compensator overrides.
- Rocker displacement control reduces size and lowers noise.
- Barrel bearing reduces barrel face loads & wear and extends temperature / speed range.
- Maximum speed 3000 rpm (VP6V & VP7V) & 2400 rpm (VP11V & VP14V)

Models	Max. Disp. cm ³ /rev	Suction Port	Delivery Port	Mounting Flange
VP6V	98	2" SAE	1½" SAE	SAE127-2(C)
VP7V	119	2" SAE	1½" SAE	SAE152-4(D)
VP11V	180	2½" SAE	1½" SAE	SAE152-4(D)
VP14V	229	2½" SAE	1½" SAE	SAE152-4(D)

VARIABLE VOLUME VANE PUMPS

Models	Flow @ 1500rpm (l/min)	Pressure Adjusting Range (kgf/cm ²)	Suction Port	Delivery Port	Mounting Flange Details	Shaft Dia.
JPVR 1 10	10	10-20 10-35 10-55 10-70	BSP 1/2"	BSP 3/8"	Ø82.55 2 BOLT	Ø12.7-h6
JPVR 1 17	17		BSP 1/2"	BSP 3/8"	Ø82.55 2 BOLT	Ø12.7-h6
JPVR 1 25	25		BSP 3/4"	BSP 1/2"	Ø95.02 4 BOLT	Ø19.05-h6
JPVR 1 35	35		BSP 3/4"	BSP 1/2"	Ø95.02 4 BOLT	Ø19.05-h6

VANE MOTORS

Model No.	Max. Pr.		Max. Displacement		Max. Speed rpm	Torque Nm / bar	Mounting Standard
	psi	bar	in ³ /rev	cm ³ /rev			
VM3B/VM3B1	3000	210	0.54 - 2.26	9 - 37	4000	0.15 - 0.58	SAE-A
VM4C/VM4C1	2500	175	1.49 - 4.89	24 - 80	4000	0.39 - 1.27	SAE-B
VM4SC/VM4SC1	3340	230	1.49 - 4.89	24 - 80	4000	0.39 - 1.27	SAE-B
VM4D/VM4D1	2500	175	3.97 - 8.81	65 - 144	4000	1.04 - 2.30	SAE-C
VM4SD/VM4SD1	3340	230	3.97 - 8.81	65 - 144	4000	1.04 - 2.30	SAE-C
VM4E/VM4E1	2500	175	9.67 - 13.55	158 - 222	3600	2.52 - 3.53	SAE-C
VM4SE/VM4SE1	3340	230	9.67 - 13.55	158 - 222	3600	2.52 - 3.53	SAE-C

SYSTEM SAVERS

Type	Max. Pr.		Max. Displacement		Max. Speed rpm
	psi	bar	in ³ /rev	cm ³ /rev	
Single Vane Pumps	4650	320	0.39 - 16.47	6.50 - 270	3600
Model No's:	VT6B, VT7B/VT7BS, VT6C, VT6QC, VT6CSH, VT6D, VT7D/VT7DS, VT6E, VT7E/VT7ES				
Double Vane Pumps	4650	320	0.79 - 32.94	13 - 540	3000
Model No's:	VT6CC, VT7QCC, VT7BB/VT7BBS, VT6DC, VT7QDC, VT7DB/VT7DBS, VT6EC, VT7EB, VT6ED, VT7ED/VT7EDS, VT6DDS, VT7DD/VT7DDS, VT6EE/VT6EES, VT7EE/VT7EES, VT67CB, VT67DB, VT67EB				
Triple Vane Pumps	4350	300	1.40 - 32.15	23 - 527	2500
Model No's:	VT6CBB, VT6CCB, VT6DCC, VT6DDCS, VT6EDC, VT7DDB/VT7DDBS, VT7EDB/VT7EDBS				

HYDRAULIC VALVES							
Series	Size		Max. flow		Max. Pr.		Mounting Options
	in	mm	gpm	lpm	psi	bar	
Pressure Controls							
VR4* 03	3/8"	10	24	90	5000	350	Subplate / Threaded / Cartridge
VR4* 06	3/4"	20	80	300	5000	350	Subplate / Threaded / Cartridge
VR4* 10	1 1/4"	32	159	600	5000	350	Subplate / Threaded / Cartridge
VR5* 06	3/4"	20	24	90	5000	350	Flange
VR5* 08	1"	25	80	300	5000	350	Flange
VR5* 10	1 1/4"	32	159	600	5000	350	Flange
VR5* 12	1 1/2"	38	159	600	5000	350	Flange
VR1E02	1/4"	6	1.7	6.6	5000	350	Subplate / Panel / Foot / Cartridge
VV01	-	-	1	3.8	5000	350	Stackable (vent valve)

* V - Relief, U - Unloader, S - Sequence, R - Reducing

Series	Size		Max. flow		Max. Pr.		Mounting Options
	in	mm	gpm	lpm	psi	bar	
Check Valves							
VIC03	3/8"	10	13	50	4500	315	Threaded
VIC06	3/4"	20	53	200	4500	315	Threaded
VIC10	1 1/4"	32	106	400	4500	315	Threaded
VC4V03	3/8"	10	48	180	5000	350	Subplate / Threaded / Cartridge
VC4V06	3/4"	20	95	360	5000	350	Subplate / Threaded / Cartridge
VC4V10	1 1/2"	38	119	450	5000	350	Subplate / Threaded / Cartridge
VC5V06	3/4"	20	26	100	3050	210	Flange (Poppet & Ball Type)
VC5V08	1"	25	53	200	3050	210	Flange (Poppet & Ball Type)
VC5V10	1 1/4"	32	106	400	3050	210	Flange (Poppet & Ball Type)
VC5V12	1 1/2"	38	198	750	3050	210	Flange (Poppet & Ball Type)
VC5V16	2"	50	198	750	3050	210	Flange (Poppet & Ball Type)
Pilot Operated Check Valves							
VC4V03	3/8"	10	48	180	5000	350	Subplate / Threaded / Cartridge
VC4V06	3/4"	20	95	360	5000	350	Subplate / Threaded / Cartridge
VC4V10	1 1/2"	38	119	450	5000	350	Subplate / Threaded / Cartridge
Air Bleed Off Valve							
VAB04	1/4"	6	-	-	5000	350	Threaded

Series	Type	Size		Max. flow		Max. Pr.		Mounting Options
		in	mm	gpm	lpm	psi	bar	
Seat Valves - On/Off								
VD4S03	Body Type	3/8"	10	47	180	5000	350	Subplate / Threaded
VD4S06	Body Type	1"	25	95	360	5000	350	Subplate / Threaded
VD4S10	Body Type	1 1/2"	38	158	600	5000	350	Subplate / Threaded
VD5S03	2/3 Port	3/4"	10	24	90	5000	350	SAE Flange
VD5S06	2/3 Port	1"	25	80	300	5000	350	SAE Flange
VD5S08	2/3 Port	1 1/4"	32	158	600	4000	280	SAE Flange
VD5S10	3 Port	1 1/2"	38	158	600	5000	350	SAE Flange
VCID / VCIC	Cavity as per DIN - 24342	1/2"	16	53	200	5000	350	Cartridge
VCID / VCIC		1"	25	119	450	5000	350	Cartridge
VCID / VCIC		1 1/4"	32	198	750	5000	350	Cartridge
VCID / VCIC		1 1/2"	40	330	1250	5000	350	Cartridge
VCID / VCIC		2"	50	528	2000	5000	350	Cartridge
VCID / VCIC		2 1/2"	63	792	3000	5000	350	Cartridge
VCAR4	Cavity as per	1/2"	12	47	180	5000	350	Cartridge
VCAR2	VELJAN std.	1 1/2"	38	158	600	5000	350	Cartridge
Stack Valves								
VZDV03	Pressure Relief	1/4"	6	16	60	5000	350	CETOP 03
VZDV05		3/8"	10	32	120	4500	315	CETOP 05
VZDV08		3/4"	20	110	500	4500	315	CETOP 08
VZDR03	Pressure Reducing	1/4"	6	16	60	5000	350	CETOP 03
VZDR05		3/8"	10	32	120	4500	315	CETOP 05
VZRD03	Throttle with Check	1/4"	6	16	60	5000	350	CETOP 03
VZRD05		3/8"	10	32	120	4500	315	CETOP 05
VZRD08		3/4"	20	110	500	4500	315	CETOP 08
VZRE03	Check (Pilot Operated)	1/4"	6	16	60	5000	350	CETOP 03
VZRE05		3/8"	10	32	120	4500	315	CETOP 05
VZRE08		3/4"	20	110	500	4500	315	CETOP 08
VZRV03	Check (Direct Operated)	1/4"	6	11	40	5000	350	CETOP 03
VZRV05		3/8"	10	26	100	4500	315	CETOP 05

