DATA SHEET

ORDERING CODE

F3 VS 43 21 8 D 86 A A

F3 - Special seals for fire-resistant fluids.
Omit if not required

VC = 12 Vane pump
Medium pressure application

VS = 12 Vane pump
Except the cover end cartridge of the VS*3 pump, industrial uses (very quiet), UNC threads.

VQ = 10 Vanes & bronze plates
Mobile use, UNC threads

PUMP MODEL
2010,2020,43,63,64,73,74, 76

PUMP FLOW AT SHAFT SIDE
US Gallons per minute
@1200 rpm and 7 Bar
(See flow chart)

PUMP FLOW AT COVER SIDE
US Gallons per minute
@1200 rpm and 7 Bar
(See flow chart)

REAR FLANGE POSITION
A: 45° Clockwise
B: 135° Clockwise
C: 135° Counterclockwise
D: 45° Counterclockwise
Viewed from shaft end of pump

PORTING COMBINATION
A: Outlet in line with inlet.
B: 90° Clockwise from inlet.
C: 180° From inlet.
D: 90° Counterclockwise from inlet.
Viewed from shaft end of pump

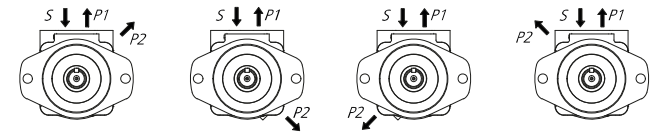
SHAFT TYPE
1 - Parallel keyed
11 - Splined
86 - Heavy duty parallel keyed

ROTATION
D = Clockwise rotation.
Y = Counterclockwise
Viewed from shaft end of pump

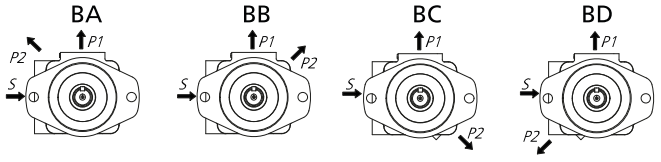
PORTING COMBINATION

2010 / 2020 / 43 / 63 / 64 / 73 / 74

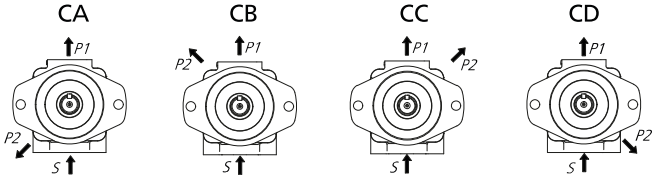
AA AB AC AD



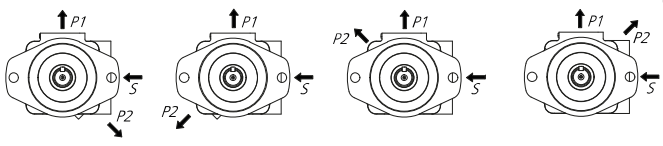
BA BB BC BD



CA CB CC CD

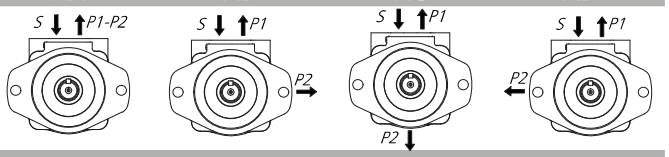


DA DB DC DD



SIZE 76 ONLY

AA AB AC AD



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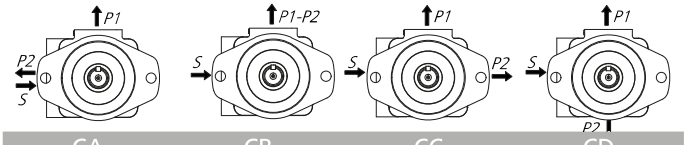

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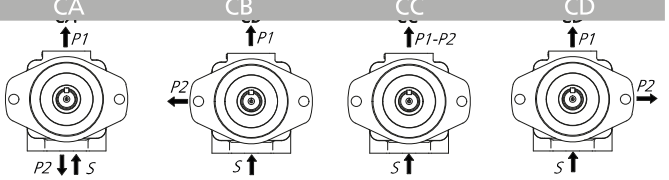

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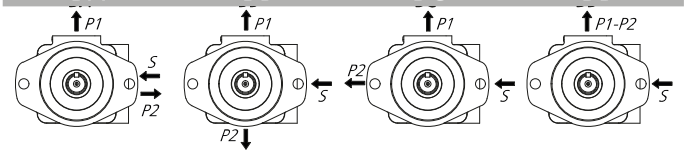


DATA SHEET

CHARACTERISTICS

TYPE	SHAFT END							COVER END							WEIGHT
	FLOW			SPEED (rpm)	PRESSURE (bar)		NOMI-NAL POWER	FLOW			SPEED (rpm)	PRESSURE (bar)		NOMI-NAL POWER	
MODEL	L @ 1000RPM	GAL. @ 1200RPM	Reducc. (1)	MAX	CONT	INTERMIT	(2)	L @ 1000RPM	GAL. @ 1200RPM	Reducc. (1)	MAX	CONT	INTERMIT	(2)	KG
VC2010	16	5	2	3400	155	180	3,2				3000	155	180		13.6
	20	6	2,84				3,9	3	1	0,8				0,7	
	23	7	4	3000			4,4	7	2	0,9				1,4	
	27	8	4,2	2800			5,1	10	3	1,2				2,1	
	30	9	4,5				5,6	13	4	1,6				2,7	
	34	10	4,8	2500			6,1	16	5	1,7				3,2	
	36	11					6,5	20	6	1,8				3,7	
	39	12	5,4	2400			7,5	23	7	1,9	2400	140		4,2	
	42	13	6		140		8,1								
VC2020	16	5	2	3400	155	180	3,2	16	5	2	3400	155	180	3,2	15.9
	20	6	2,84				3,9	20	6	2,8				3,9	
	23	7	4	3000			4,4	23	7	4	3000			4,4	
	27	8	4,2	2800			5,1	27	8	4,2	2800			5,1	
	30	9	4,5				5,6	30	9	4,5				5,6	
	34	10	4,8	2500			6,1	34	10	4,8	2500			6,1	
	36	11					6,5	36	11					6,5	
	39	12	5,4	2400			7,5	39	12	5,4	2400			7,5	
	42	13	6		140		8,1	42	13	6		140		8,1	
VQ43 VS43	32	10	4,5	2500 1800 (VS)	175	210	6,9	8	2	0,9	2500	175	210	1,9	21
	40	12	5,7				10,4	18	5	2,1				4	
	45	14					11,6	27	8	2,8				6,6	
	55	17	5,8				13,8	29	9	3,5				6,9	
	60	19					15,2	36	11					7,3	
	67	21	6				16,8	39	12	4,3				7,4	
	80	25	6,2	1500	125	150	20,3	46	14					7,6	
VQ63 VS63	66	21	8,6	2500 1800 (VS)	175	210	16,8	8	2	0,9	2500	175	210	1,9	31
	81	25	9				20,3	18	5	2,1				4	
	97	30	10				24,3	27	8	2,8				6,6	
	112	35	11,4				27,3	29	9	3,5				6,9	
	121	38					29,3	36	11					7,3	
	142	45	13,1	1500	125	150	33,3	39	12	4,3				7,4	
								46	14					7,6	
VQ64 VS64	66	21	8,6	2500 1800 (VS)	175	210	16,8	32	10	4,5	2500 1800 (VS)	175	210	6,9	33
	81	25	9				20,3	40	12	5,7				10,4	
	97	30	10				24,3	45	14					11,6	
	112	35	11,4				27,3	55	17	5,8				13,8	
	121	38					29,3	60	19					15,2	
	142	45	13,1	1500	125	150	33,3	67	21	6				16,8	
								80	25	6,2	1500	125	150	20,3	
VQ73 VS73	138	42	15	2200 1800 (VS)	155	175	32,3	8	2	0,9	2500 1800 (VS)	175	210	1,9	46
	148	45	15,7				36,3	18	5	2,1				4	
	162	50	14,3				37,9	27	8	2,8				6,6	
	180	57	17,9				43,2	29	9	3,5				6,9	
	193	60	18,6				46,1	36	11					7,3	
	214	67	22				51,2	39	12	4,3				7,4	
	240	75	26				57,4	46	14					7,6	
VQ74 VS74	138	42	15	2200 1800 (VS)	155	175	32,3	32	10	4,5	2500 1800 (VS)	175	210	6,9	45
	148	45	15,7				36,3	40	12	5,7				10,4	
	162	50	14,3				37,9	45	14					11,6	
	180	57	17,9				43,2	55	17	5,8				13,8	
	193	60	18,6				46,1	60	19					15,2	
	214	67	22				51,2	67	21	6				16,8	
	240	75	26				57,4	80	25	6,2	1500	125	150	20,3	
VQ76 VS76	138	42	15	2200 1800 (VS)	155	175	32,3	66	21	8,6	2500 1800 (VS)	175	210	16,8	55
	148	45	15,7				36,3	81	25	9				20,3	
	162	50	14,3				37,9	97	30	10				24,3	
	180	57	17,9				43,2	112	35	11,4				27,4	
	193	60	18,6				46,1	121	38					29,3	
	214	67	22				51,2	142	45	13,1	1500	125	150	33,3	
	240	75	26				57,4								

(1) Delivery flow reduction in Ltrs./min. at 100 Bar. 22 cST of oil viscosity at operating temperature. To calculate the approximate delivery flow at a given pressure and speed, use the following formula with flow reduction and theoretical flow values shown in the chart. Flow reduction values are independent of shaft speed.

$$\text{Approx. output flow (Ltrs./min.)} = \text{Theoretical flow} \times \frac{\text{R.P.M}}{1000} - \text{Reduction} \times \frac{\text{Pressure (Bar)}}{1000}$$

(2) Nominal Power in H.P. at 100 Bar and 1000 RPM (to convert into Kw multiply by 0.735).
To obtain the real input power at different pressure and revolutions, use the formula as follows:

$$\text{Real input power} = \text{Input power} \times \frac{\text{R.P.M}}{1000} \times \frac{\text{Pressure (Bar)}}{1000}$$

(3) See options on dimension pages.

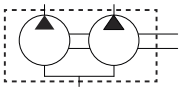
VS-43 / VQ-43 DIMENSIONS

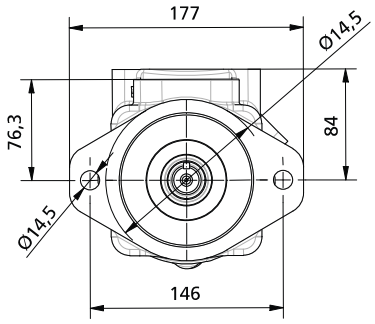
SHAFT END FLOW								SPEED(rpm)		PRESSURE (bar)		CONNECTION	
Lts/min.at 1000 rpm	32	40	45	55	60	67	80	Mín.	Máx.*	Contin.*	Intermit.*	Inlet	Outlet
Gal/min.at1200 rpm	10	12	14	17	19	21	25	600	2500	175	210	Ø2.5"	Ø1"

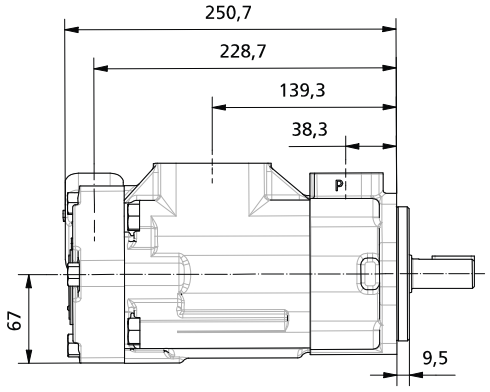
COVER END FLOW								SPEED(rpm)		PRESSURE (bar)		CONNECTION	
Lts/min.at 1000 rpm	8	18	27	29	36	39	46	Mín.	Máx.*	Contin.*	Intermit.*	Inlet	Outlet
Gal/min.at1200 rpm	2	5	8	9	11	12	14	600	2500	175	210	Ø2.5"	Ø¾"

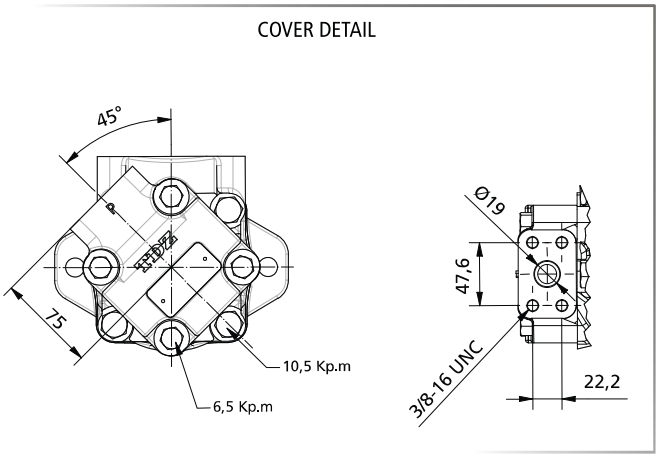
DIMENSIONS IN MILLIMETERS. 1" = 25,4 mm

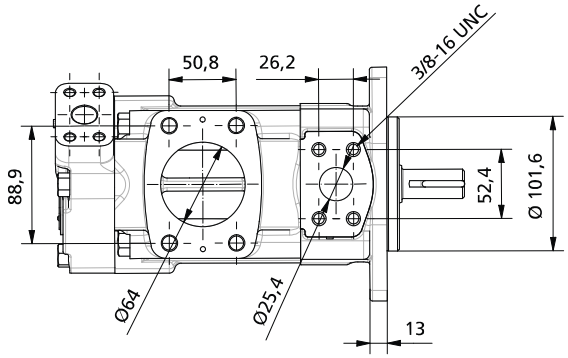
* See page 27 for further information about speed & pressure



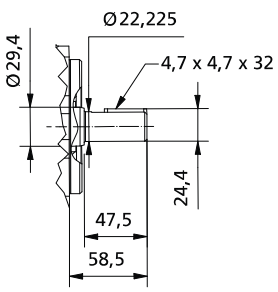




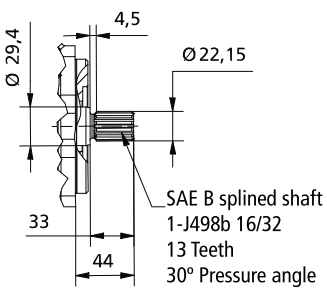




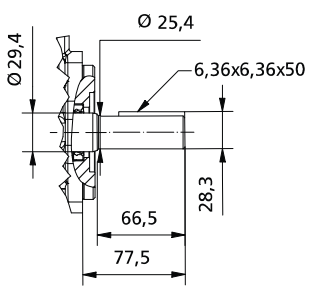
N°1 Shaft



N°11 Shaft



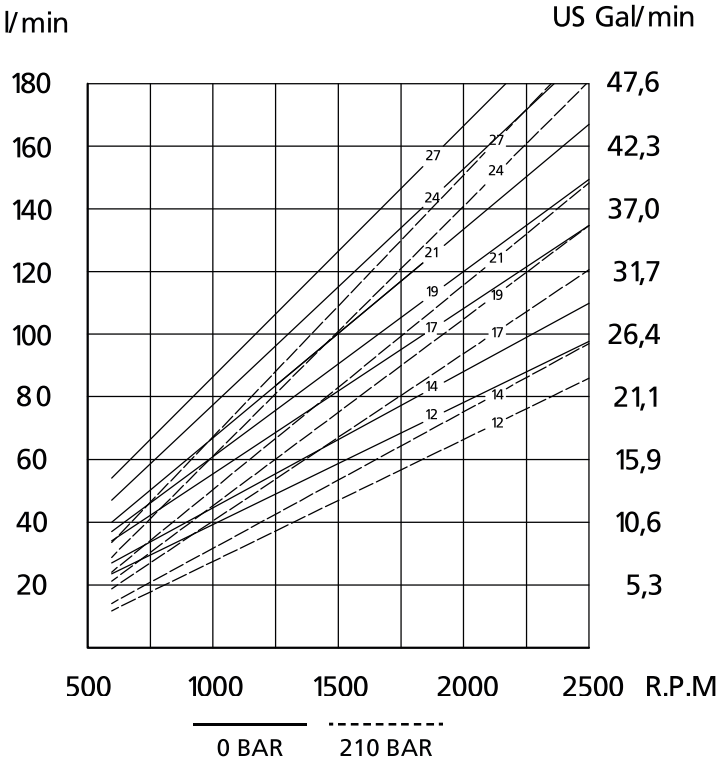
N°86 Shaft

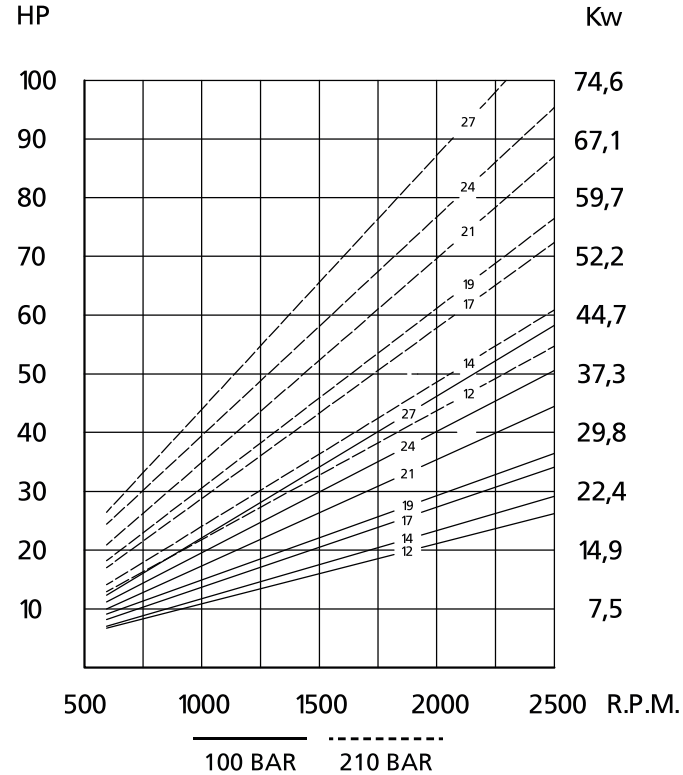


ADDITIONAL SHAFT CODES: SEE ON PAGES 114-118

VS-25 / VQ-25

FLOW AND INPUT POWER DIAGRAMS





VK-20 / VQ-20

FLOW AND INPUT POWER DIAGRAMS

Max. pressure (210 bar) Min. Pressure (7 bar)