Port	Size	Series	Theoretical Displacement Vi	Minimum Speed	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. [3]	Cont.	Int. [3]	Cont.	Int. [3]	Cont.
			ml/rev.	RPM	RPM	RPM	bar	bar	bar	bar	bar	bar
P1	T6H20		42,9	600	2600 [1]	1800	280	240	175 [2]	140 [2]	175	140
	T6H29		61,9	600	2400 [1]	1800	250	210	175 [2]	140 [2]	175	140
P2 or P3	B	B02	5,8	600	2600	1800	300	275	240	210	175	140
		B03	9,8									
		B04	12,8									
		B05	15,9									
		B06	19,8									
		B07	22,5									
		B08	24,9									
		B10	31,8									
		B12	41,0									
		B15	50,0				280	240				
P2	C	*03	10,8	600 (400) (mobile)	2600	1800	275	240	210	175	175	140
		*05	17,2									
		*06	21,3									
		*08	26,4									
		*10	34,1									
		*12	37,1									
		*14	46,0									
		*17	58,3									
		*20	63,8									
		*22	70,3									
		*25	79,3		2500		210	160		160		
		*28	88,8									
		*31	100,0									
	D	014	47,6	600	2400	1800	240	210	210	175	175	140
		017	58,2									
		020	66,0									
		024	79,5									
		028	89,7									
		031	98,3									
		035	111,0									
		038	120,3									
		042	136,0		2200		210	160		160		
		045	145,7									
		050	158,0									

* = 0 : Industrial application = B : Industrial bi-rotational = M : Mobile application
1) See page 11 for max. pressure f(n).
2) Max. pressure HF-1 same as HF-0 and HF-2.
3) See page 6 for conditions.

HF-0, HF-2 = Antiwear Petroleum Base
HF-1 = Non Antiwear Petroleum Base
HF-5 = Synthetic Fluids
HF-3 = Water in oil Emulsions
HF-4 = Water Glycols

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

PRIMING AT STARTING

At first start operation of the pump, run it at the lowest speed and at the lowest pressure to obtain priming. When a pressure relief valve is used at the outlet it should be backed off to minimize return pressure. An air bleed off should be provided in the circuit to facilitate the priming. Never operate pump shaft at top speed and pressure without checking for completion of pump priming, and that the fluid is not aerated.
Always fill the housing of the T6H with oil of circuit prior to start up.

Parker Hannifin SAS
VPDE, Denison Vane Pumps
Vierzon - France

Min allowable inlet pressure

Series T6H, Denison Hybrid Pump

Cartridge		Speed RPM							Series
Size	Series	1200	1500	1800	2100	2200	2400	2600	
T6H20		0,80	0,80	0,80	0,80	0,80	0,85	0,90	T6H20
T6H29		0,80	0,80	0,80	0,86	1,00	1,04		T6H29
B	B02	0,80	0,80	0,80	0,80	0,80	0,80	0,80	B02
	B03								B03
	B04								B04
	B05								B05
	B06								B06
	B07								B07
	B08								B08
	B10								B10
	B12								B12
	B15							0,84	B15
C	*03	0,80	0,80	0,80	0,80	0,80	0,80	0,90	*03
	*05								*05
	*06								*06
	*08								*08
	*10								*10
	*12						0,85	0,92	*12
	*14							0,95	*14
	*17					0,85	0,90		*17
	*20								*20
	*22				0,85	0,90		0,98	*22
	*25				0,90	0,95	0,95		*25
	*28					0,98	0,98		*28
	*31				0,85	0,90	1,00		*31
D	014	0,80	0,80	0,80	0,80	0,88	0,95	1,00	014
	017								017
	020								020
	024				0,82			1,10	025
	028				0,85	0,92	1,00	1,18	028
	031				0,90	0,95		1,23	031
	035				0,92	0,98	1,02	1,29	035
	038				0,95	1,00	1,05		038
	042					1,02	1,08		042
	045			0,85	0,98	1,05			045
	050				1,02	1,09			050
T6H20	Max. case P (bar relative)	0,69	0,69	0,69	0,34	0,34	0,34	0,34	T6H20
T6H29		0,69	0,69	0,69	0,34	0,34	0,34		T6H29

Vane cartridge : Inlet pressure is measured at inlet flange with petroleum base fluids at viscosity between 10 and 65 cSt. The difference between inlet pressure (at the pump flange) and atmospheric pressure must not exceed 0,2 bar absolute to prevent aeration.

Piston cartridge : Rapid compensation at high speeds can cause severe case spikes. If the pump feeds into a blocked center valve that close quickly, use both case drain ports and direct short case drain lines and a relief valve.

Multiply absolute pressure by 1,25 for HF-3, HF-4 fluids.
by 1,35 for HF-5 fluid.
by 1,10 for ester or rapeseed base.

GENERAL CHARACTERISTICS

	Mounting standard	Weight without connector and bracket - kg	Moment of inertia kg m² x 10^{-4}	SAE 4 bolts J518c ISO/DIS 6162-1 or 6162-2			
				Suction	Pressure P1	Pressure P2	Pressure P3
T6H20B	SAE J744c ISO-3019-1 - SAE B 101-2	37,0	42,9	2.1/2”	1.1/4”	3/4" or 1"	
T6H20C		37,0	46,7				
T6H29B	SAE J744c ISO-3019-1 - SAE C 127-2	49,0	64,2				
T6H29C		49,0	68,0				
T6H29D		60,0	80,7	3"		1.1/4”	
T6H29DB		72,0	83,9				3/4" or 1"

Parker Hannifin SAS
VPDE, Denison Vane Pumps
Vierzon - France

Model No.

T6H29B-	B08	-	1	L	1	B	-	2	F	0	M	0	-	00	-	....
T6H29C-	*12	-	1	L	1	C	-	2	F	0	M	0	-	00	-	....

Series and capacity P1 (rotating group)
61,9 ml/rev.

Cam ring P2
(Delivery at 0 bar & 1500 r.p.m.)

T6H29B	T6H29C
B02 = 8,7 l/min	*03 = 16,2 l/min
B03 = 4,7 l/min	*05 = 25,8 l/min
B04 = 19,2 l/min	*06 = 31,9 l/min
B05 = 23,9 l/min	*08 = 39,6 l/min
B06 = 29,7 l/min	*10 = 51,1 l/min
B07 = 33,7 l/min	*12 = 55,6 l/min
B08 = 37,4 l/min	*14 = 69,0 l/min
B10 = 47,7 l/min	*17 = 87,4 l/min
B12 = 61,5 l/min	*20 = 95,7 l/min
B15 = 75,0 l/min	*22 = 105,4 l/min
	*25 = 118,9 l/min
	*28 = 133,2 l/min
	*31 = 150,0 l/min

Type of shaft
1 = keyed (SAE C)
4 = splined (SAE C)

Direct. of rotation (view on shaft end)
R = clockwise
L = counter-clockwise

Seal class
1 = S1 BUNA N
5 = S5 VITON®

Design letter

Modification

Porting combination
Depend on the rotation - See page 26

Variable port

	Dia	Code
P2	1"	0
P2	3/4"	1

Variables flanges connections
4 bolts SAE flange (J518c)
0 = UNC thread
M = metric thread)

Control accessories
0 = Maxi flow
9 = 90% maxi flow
8 = 80% maxi flow
7 = 70% maxi flow
6 = 60% maxi flow
5 = 50% maxi flow

Control
C = Compensator
F = RC pilot operated compensator
L = RC pilot operated compensator "load sensing"

Connection (drain + vent.)
0 = ext. drain + UNF thread
2 = ext. drain + BSPP thread
3 = int. drain + UNF thread
4 = int. drain + BSPP thread

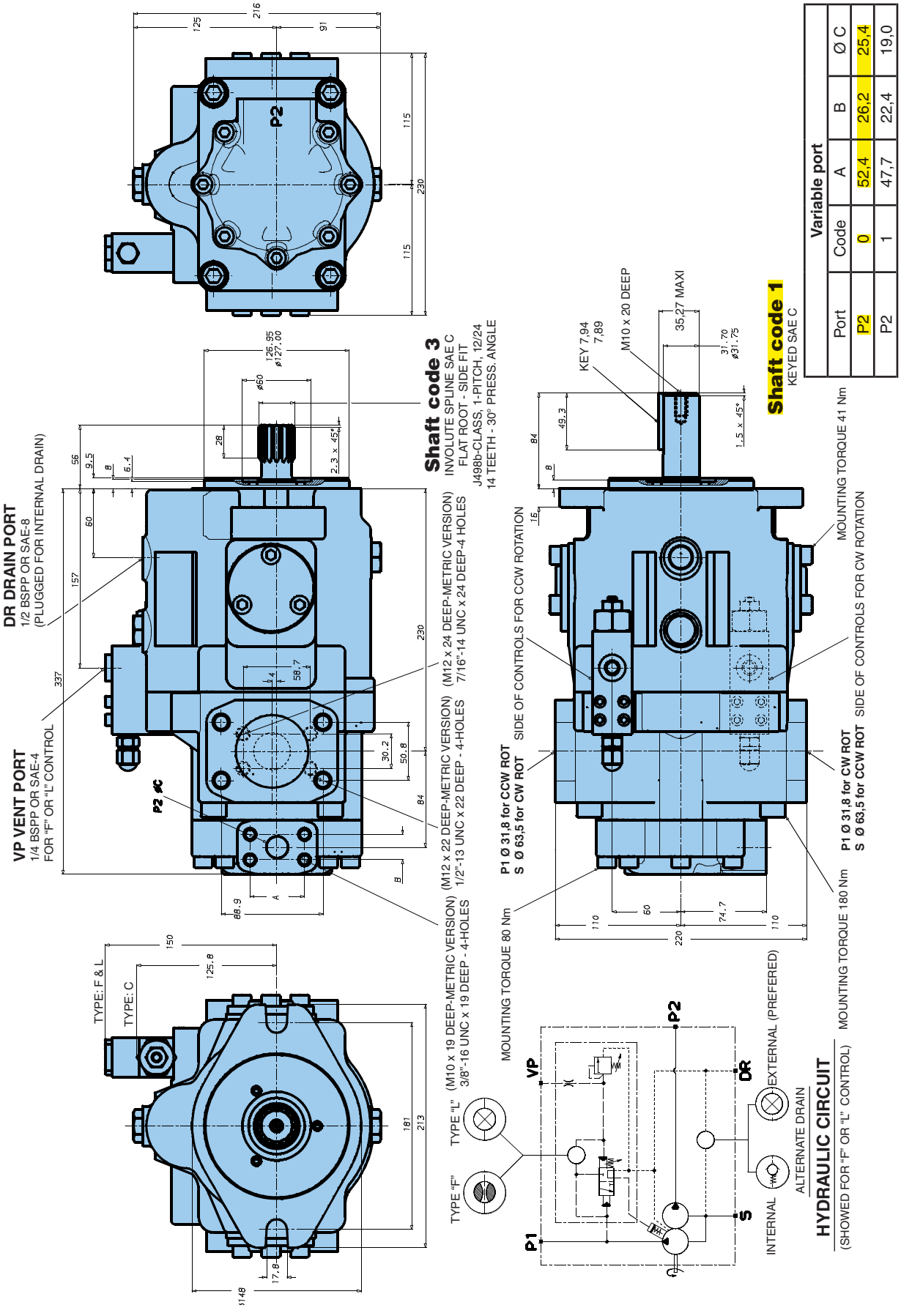
* = 0 = Indust. uni-rotational / B = Indust. bi-rotational / M = Mobile bi-rotational

OPERATING CHARACTERISTICS - TYPICAL [24 cSt]

Pressure port	Series	Volumetric Displacement Vi	Flow Q [l/min], n = 1500 RPM					Input power P [kW], n = 1500 RPM		
			p = 0 bar	p = 140 bar		p = 300 bar		p = 7 bar	p = 140 bar	p = 300 bar
P2 T6H29B	B02	5,8 ml/rev	8,7	7,0		5,1		0,5	2,6	5,1
	B03	9,8 ml/rev	14,7	13,0		11,1		0,6	4,0	8,1
	B04	12,8 ml/rev	19,2	17,5		15,6		0,6	5,0	10,4
	B05	15,9 ml/rev	23,9	22,2		20,2		0,7	6,1	12,7
	B06	19,8 ml/rev	29,7	28,0		26,1		0,7	7,5	15,6
	B07	22,5 ml/rev	33,7	32,0		30,2		0,8	8,5	17,6
	B08	24,9 ml/rev	37,4	35,7		33,7		0,8	9,3	19,5
	B10	31,8 ml/rev	47,7	46,0		44,1		0,9	11,7	24,6
	B12	41,0 ml/rev	61,5	59,8		57,9		1,2	14,9	31,5
	B15	50,0 ml/rev	75,0	73,3		71,6[1]		1,3	18,1	35,7[1]
			p = 0 bar	p = 140 bar		p = 240 bar		p = 7 bar	p = 140 bar	p = 240 bar
				Indust.	Mobile	Indust.	Mobile			
P2 T6H29C	*03	10,8 ml/rev	16,2	11,2	10,7	7,7	-	1,3	5,3	-
	*05	17,2 ml/rev	25,8	20,8	20,3	17,3	15,8	1,4	7,5	12,2
	*06	21,3 ml/rev	31,9	26,9	26,4	23,4	21,9	1,5	8,9	14,7
	*08	26,4 ml/rev	39,6	34,6	34,1	31,1	29,6	1,6	10,7	17,7
	*10	34,1 ml/rev	51,1	46,1	45,6	42,6	41,1	1,7	13,4	22,3
	*12	37,1 ml/rev	55,6	50,6	50,1	47,1	45,6	1,7	14,4	24,1
	*14	46,0 ml/rev	69,0	64,0	63,5	60,5	59,0	1,9	17,6	29,5
	*17	58,3 ml/rev	87,4	82,4	81,9	78,9	77,4	2,1	21,9	36,9
	*20	63,8 ml/rev	95,7	90,7	90,2	87,2	85,7	2,2	23,8	40,2
	*22	70,3 ml/rev	105,4	100,4	99,9	96,9	95,4	2,3	26,1	44,1
	*25	79,3 ml/rev	118,9	113,9	113,4	110,4	108,9	2,5	29,2	49,5
	*28	88,8 ml/rev	133,2	128,2	127,7	125,8[2]	124,5[2]	2,8	32,7	48,5[2]
	*31	100,0 ml/rev	150,0	145,0	144,5	142,6[2]	141,3[2]	2,8	36,5	54,4[2]

[1] B15 = 280 bar max. int. *[2] 028 - 031 = 210 bar max. int.*
- Not to use because internal leakage greater than 50% theoretical flow.

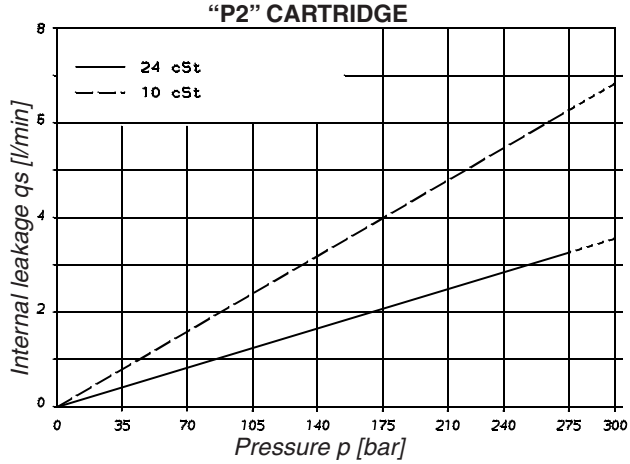
Parker Hannifin SAS
VPDE, Denison Vane Pumps
Vierzon - France



Variable port				
Port	Code	A	B	Ø C
P2	0	52,4	26,2	25,4
P2	1	47,7	22,4	19,0

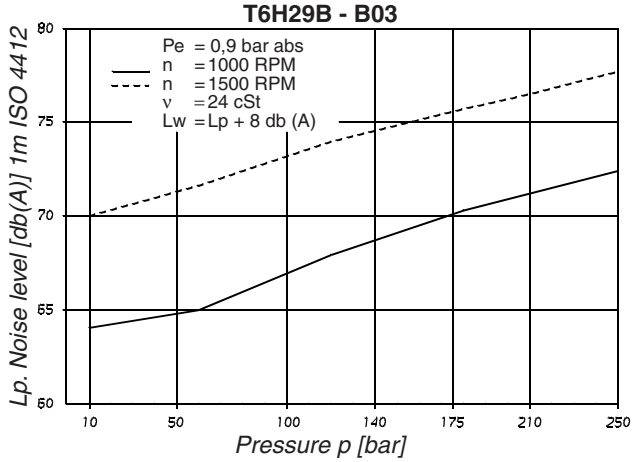
Parker Hannifin SAS
VPDE, Denison Vane Pumps
Vierzon - France

INTERNAL LEAKAGE (TYPICAL)
"P2" CARTRIDGE



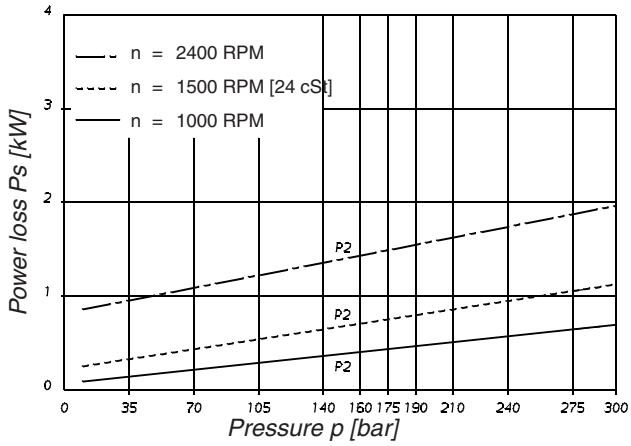
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is higher than 50% of theoretical flow.

NOISE LEVEL (TYPICAL)
T6H29B - B03

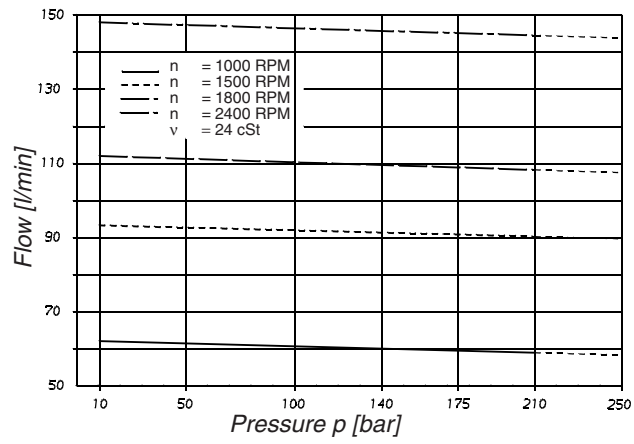


Noise level is given with each cartridge discharging at the pressure noted on the curve (P1 full flow).

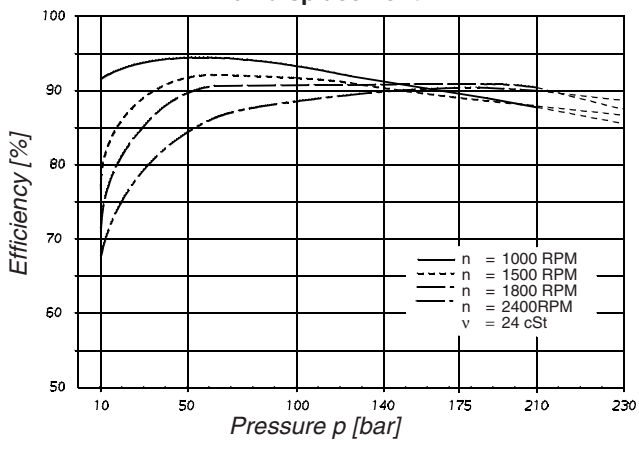
HYDROMECHANICAL POWER LOSS (TYPICAL)
"P2" CARTRIDGE



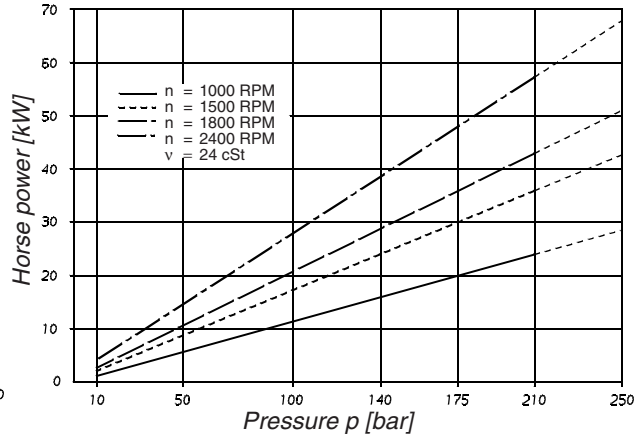
OUTLET FLOW
"P1" CARTRIDGE



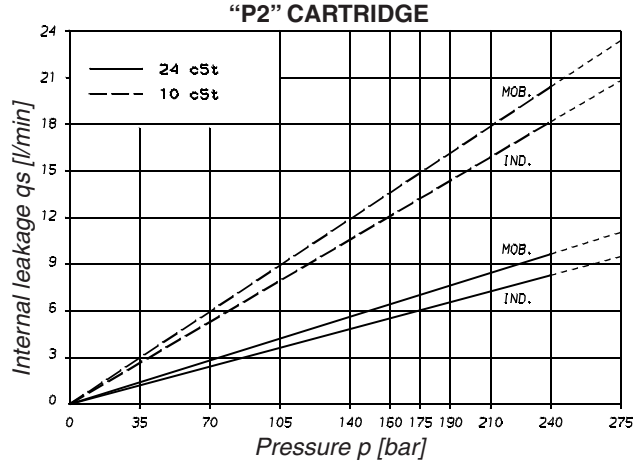
OVERALL EFFICIENCY - "P1" CARTRIDGE
Full displacement



INPUT HORSEPOWER - "P1" CARTRIDGE
Full displacement

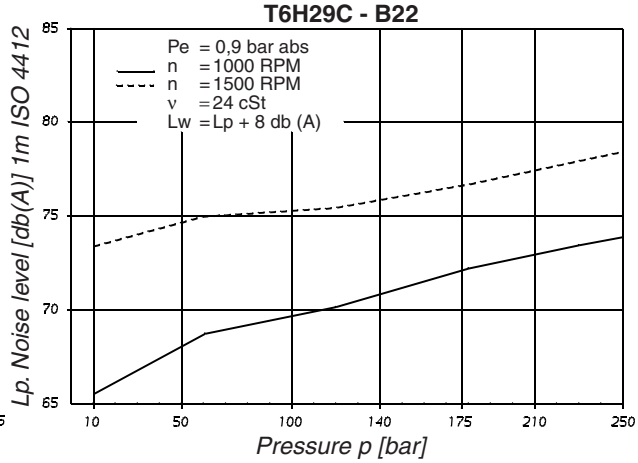


INTERNAL LEAKAGE (TYPICAL)
"P2" CARTRIDGE



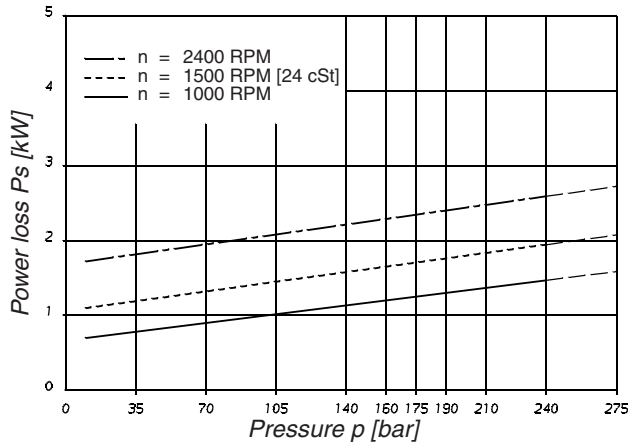
Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is higher than 50% of theoretical flow.

NOISE LEVEL (TYPICAL)
T6H29C - B22

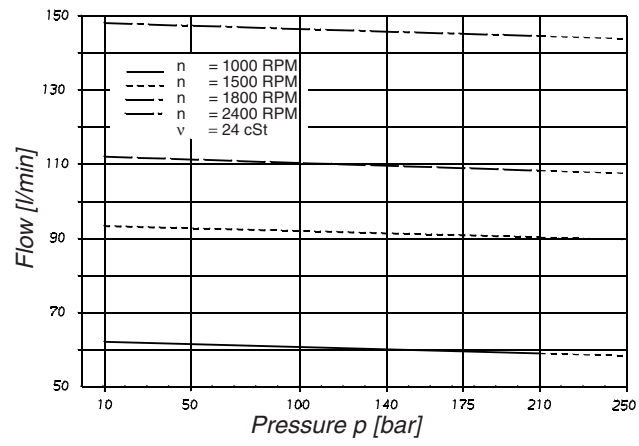


Noise level is given with each cartridge discharging at the pressure noted on the curve (P1 full flow).

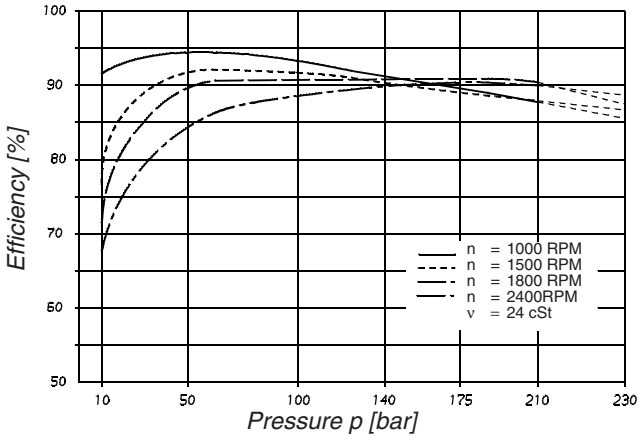
HYDROMECHANICAL POWER LOSS (TYPICAL)
"P2" CARTRIDGE



OUTLET FLOW
"P1" CARTRIDGE



OVERALL EFFICIENCY - "P1" CARTRIDGE
Full displacement



INPUT HORSEPOWER - "P1" CARTRIDGE
Full displacement