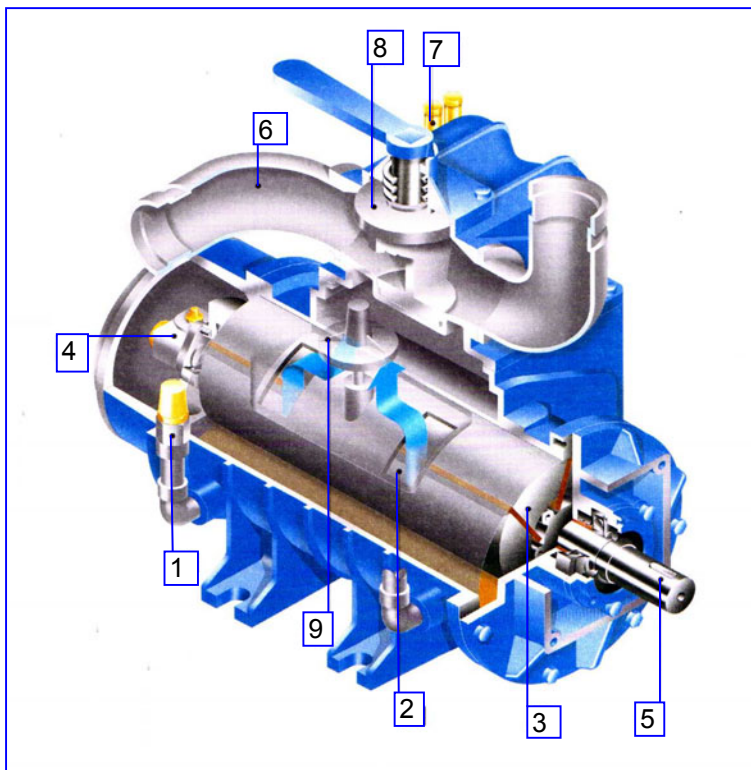
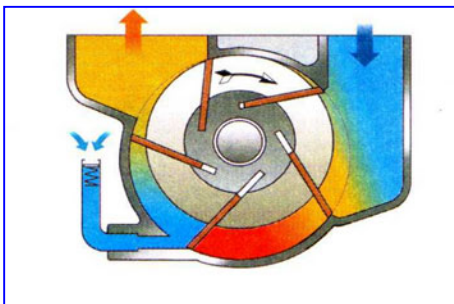


ZENITH VACUUM TANKER (GULLY EMPTIER) - Jurop PNR series pump

PNR series Vacuum Pump is cooled by means of injected air. Complete with change-over valve, lubricating pump and oil reservoir, pivoting suction / exhaust manifolds. Drive at 540 or 1,200 rpm . Vacuum line components are available upon request .

These pumps are mainly used on slurry tankers, vacuum tankers , cesspit or gully emptiers with semi or continuous use .



➔ **1 : Continuous duty @ 60% vacuum**

The controlled injection of air grants efficient cooling

2 : Efficient and quiet

The double inside inlet/outlet ports give a high volumetric efficiency and an extremely low noise running

3 : Tangential vanes

Five asbestos-free vanes; the tangential vane design reduces the wear due to friction and assures greater machine life

4 : Automatic lubrication

Standard three points lubrication for the PNR142 , Two points for all other models

5 : Single piece shaft

Hardened shaft bolted to the rotor for low serving cost

6 : Aluminium connections

Pivoting connections, available in different diameters

7 : Drip oilers

With sight-glasses for checking the efficiency of the lubrication. Copper oil lines .

8 : 4-ways vacuum / pressure manifold

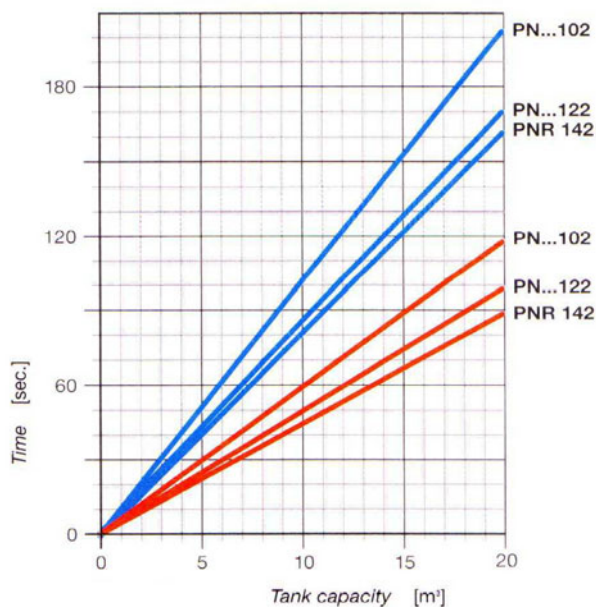
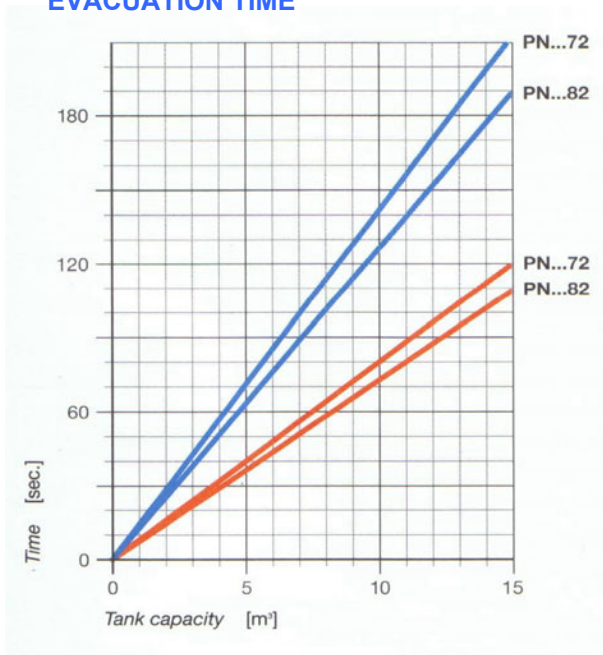
Pneumatic or hydraulic actuators are available

9 : Non-return check valve

Cast iron, single piece guided valve, assures long life and efficiency.



EVACUATION TIME



80% vacuum ————
 60% vacuum ————

The diagram shows the evacuation time for a tank of given capacity. The actual time is affected by the air tightness of the whole vacuum system .

PERFORMANCE DATA

Model		PNR72	PNR82	PNR 102	PNR122	PNR 142
Max speed	rpm	1,350	1,350	1,300	1,300	1,200
Air Flow (free air)	l/min	7,200	8,200	10,200	12,200	14,200
Air Flow (60% vacuum)	l/min	6,600	7,600	9,400	11,200	12,800
Max vacuum	%	93	93	92	92	90
Power required @ 1.5 bar absolute pressure	kW	11.0	12.5	16.0	19.0	20.5
Max operating absolute press	bar	2.0	2.0	2.0	2.0	2.0
Noise level 60% vacuum @ 7m	dB	78.0	78.0	78.0	78.0	78.0
Weight (direct drive unit / exclude motor & PTO)	kg	124.0	130.0	160.0	177.0	240.0
Oil consumption	g/hr	110~130	110~130	130~150	130~150	160~170
Mass moment of inertia	kgm2	0.20	0.23	0.35	0.40	0.58

LUBRICATION

BP

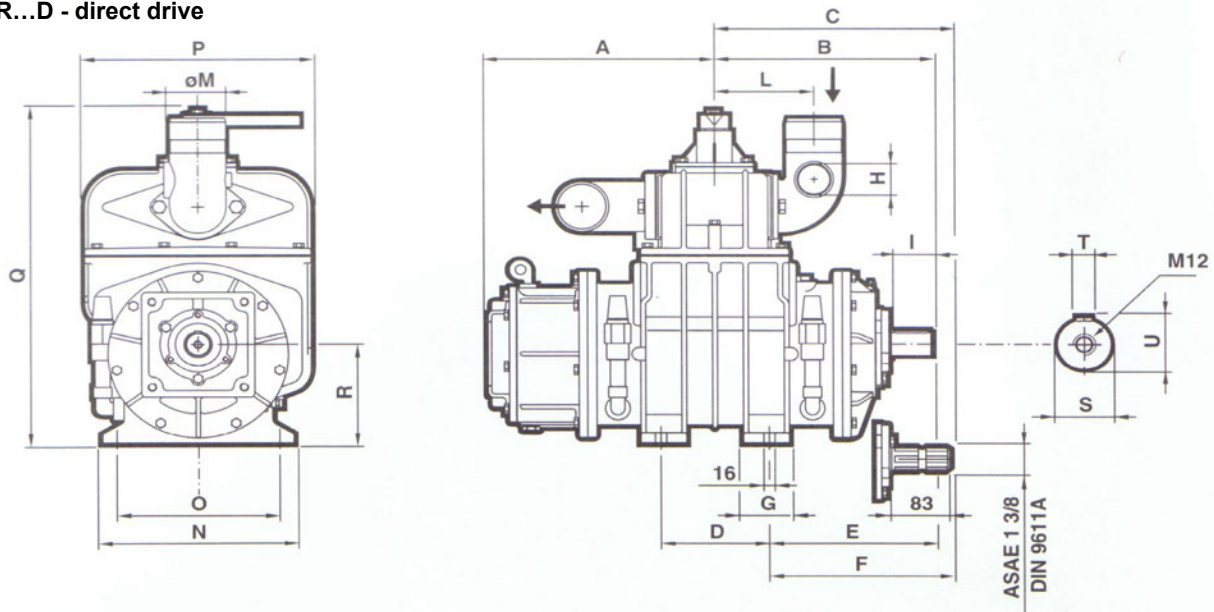
SHELL

ESSO

AGIP

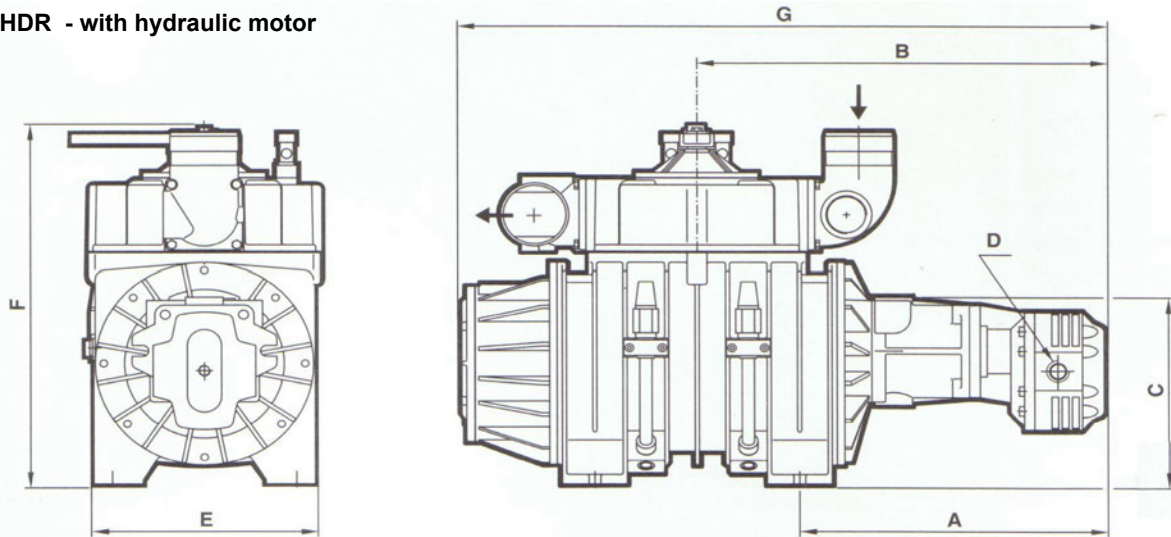
Summer	Energol CS150	Vitrea/Tellus150	Nuto 150	Acer 150
Winter	Vanelus C3SAE20W20	Rimula SAE20W20	Essolube D3SAE20W20	Diesel Sigma 5

PNR...D - direct drive



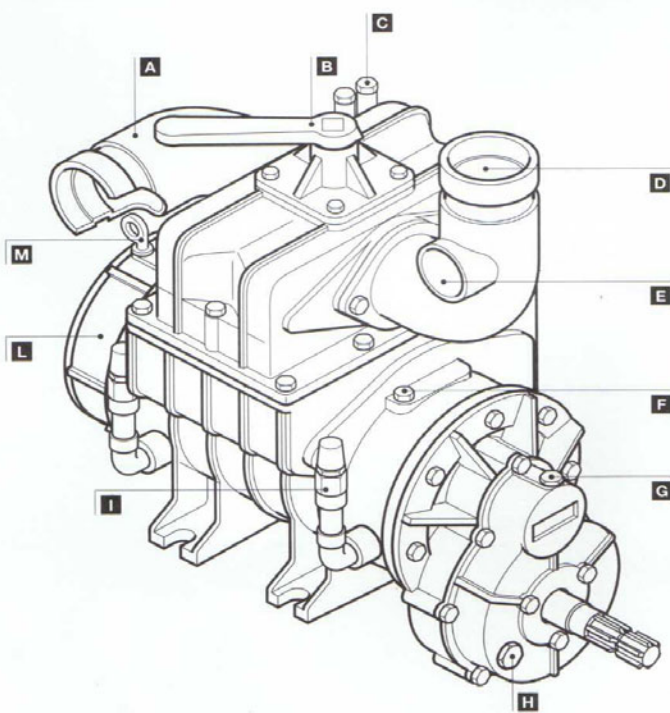
Model	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R	S	T	U	
												ASP./IN	SC./OUT							
PNR 72D	298	284	309	153	207	232	65	G1 1/2	57	140	76-80	76	270	230	320	508	150	35	10	38
PNR 82D	320	306	331	153	230	255	65	G1 1/2	57	140	76-80	76	270	230	320	508	150	35	10	38
PNR102D	320	313	329	153	237	253	72	G2	64	165	80-100	100	285	255	345	550	168	40	12	43
PNR122D	353	346	362	153	269	285	72	G2	64	165	80-100	100	285	255	345	550	168	40	12	43
PNR142D	344	338	355	300	188	205	95	G2	64	237	80-100	100	320	270	340	562	210	40	12	43

PNR...HDR - with hydraulic motor



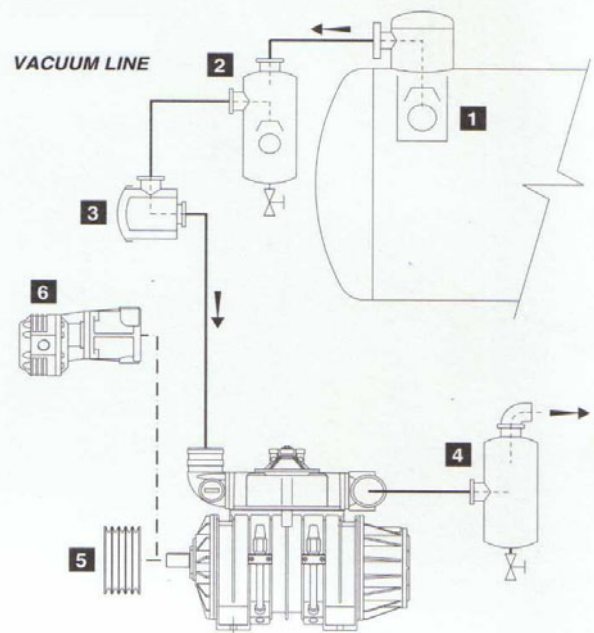
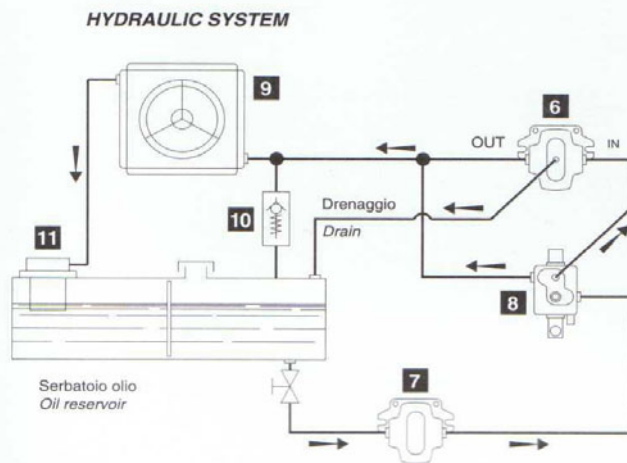
Model	Hydraulic motor characteristics			Dimensions (mm)							
	Q (l/min)	p (bar)	n (rpm)	A	B	C	D		E	F	G
							IN	OUT			
PNR 72 HDR	65	120	1350	472	549	235	G1	G1 1/4	270	508	847
PNR 82 HDR	65	140	1350	495	571	235	G1	G1 1/4	270	508	892
PNR 102 HDR	90	130	1300	510	587	253	G1 1/4	G1 1/2	285	550	907
PNR 122 HDR	105	130	1300	523	599	253	G 3/4	G1	285	550	952
PNR 142 HDR	115	130	1200	446	596	295	G1	G1 1/4	320	562	941

DESCRIPTION



- A** Exhaust
- B** Vacuum-pressure manifold
- C** Drip-oilers
- D** Suction
- E** Pressure relief valve port
- F** Vanes inspection port
- G** Gear box oil filling plug
- H** Gear box oil level plug
- I** Air-injection valves
- L** Oil Tank
- M** Oil filling port & dip stick

INSTALLATION



Vacuum line components & mechanical transmission

- 1** Primary shut off
- 2** Secondary shut off
- 3** Suction filter
- 4** Silencer - oil separator
- 5** Pulley with tapered bush

Hydraulic system components

- 6** Motor
- 7** Pump
- 8** Distributor c/w max press reg
- 9** Oil - Air heat exchanger
- 10** Pressure relief valve
- 11** Oil filter