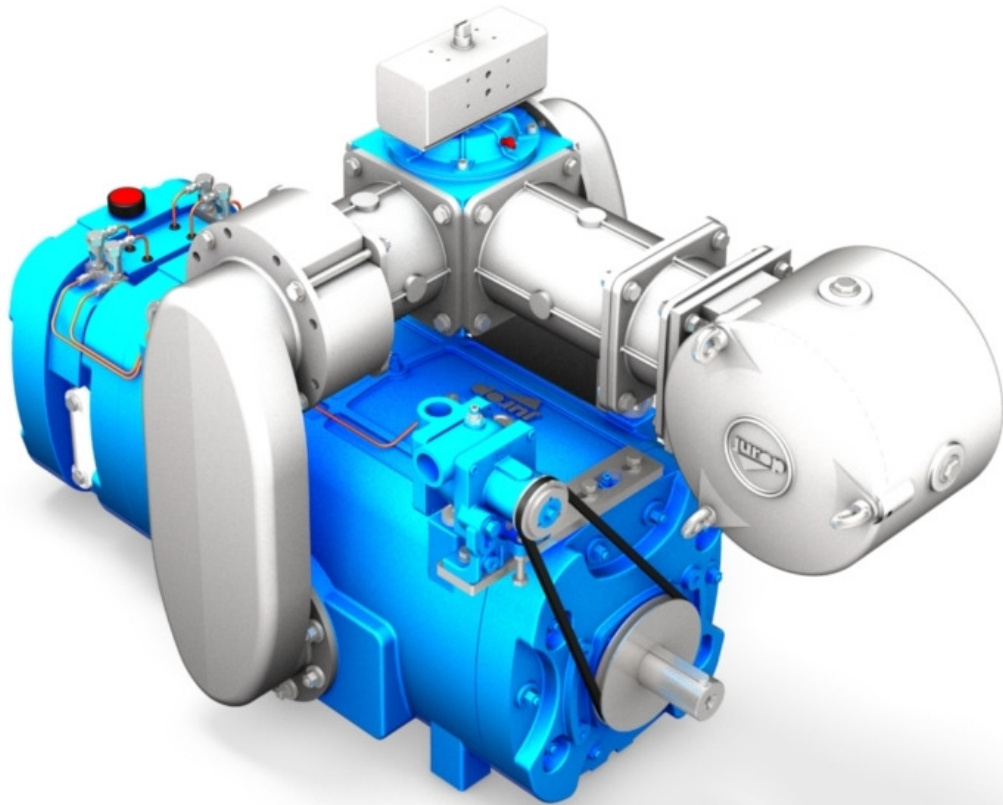


IT

EN

PR 150-200-250



POMPE / PUMPS

Pompe per vuoto
raffreddate ad acqua

*Water cooled vacuum
pumps*

The logo for Jurop, featuring the word "jurop" in a bold, blue, sans-serif font. Below the text is a grey triangle pointing upwards and to the right.

COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV GL
= ISO 9001 =

Serie PR • Sviluppo di nuovi concetti

PR Serie • Development of new concepts



Silenziosa • Silent

La bassa velocità di rotazione, la schermatura a labirinto delle bocche di entrata ed uscita e l'utilizzo di ampie intercapedini del circuito di raffreddamento rendono le **pompe PR** estremamente silenziose.

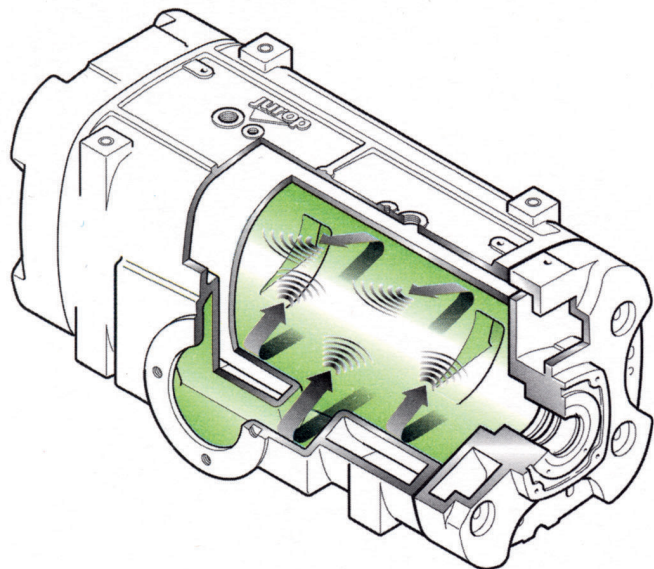
*The low operating speed, the cooled baffle plates in the inlet and outlet ports and the depth of the water jacket allow the **PR Pumps** to be extremely quiet in operation.*

Efficiente • Efficient

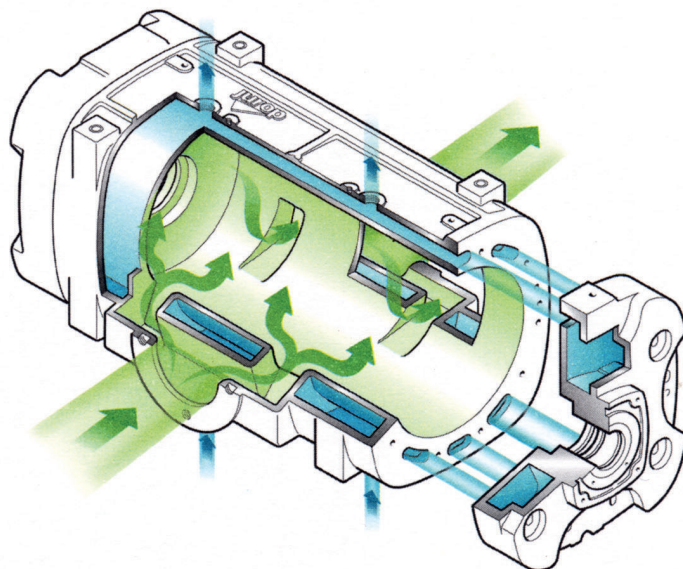
Un'omogenea distribuzione dell'aria e un efficace raffreddamento permettono di ottenere un alto rendimento volumetrico.

*The uniform distribution of the air flow through the **PR pump** and an effective cooling circuit result in produce a high volumetric efficiency.*

■ ASSORBIMENTO DEL RUMORE • NOISE ABSORPTION



■ CIRCUITI FLUIDI ARIA-ACQUA • AIR FLOW AND COOLING WATER CIRCUITS



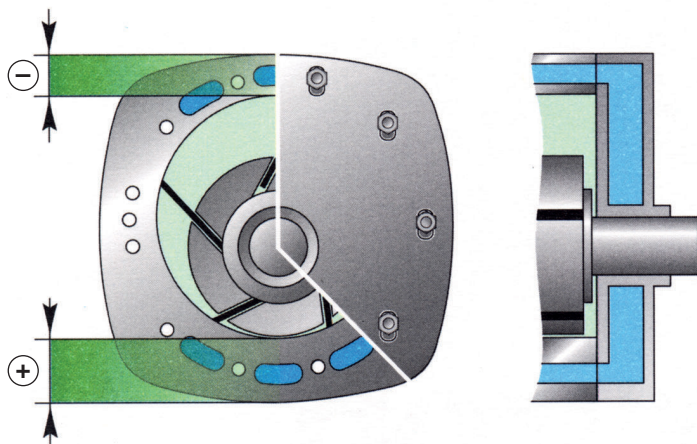
Robusta ed elastica • Robust and flexible

L'adozione di una camera con spessori differenziati e lo scorrimento delle flange derivante da un serraggio controllato, consentono alla **serie di pompe per vuoto PR** di assorbire senza danni i possibili eventi accidentali.

*The introduction of a housing with a differential thickness and the sliding end plate design allows the **range of PR Vacuum pumps** to withstand failures which would normally create damage.*

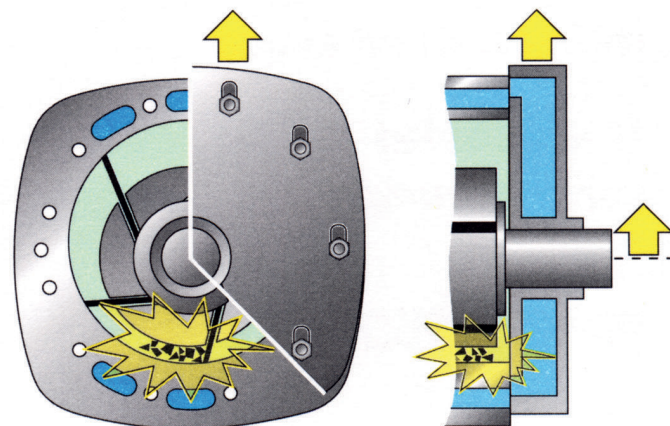
■ SITUAZIONE OPERATIVA • OPERATING POSITION

Flangia in posizione normale, assemblata con bulloni a serraggio predeterminato.
Sliding end plate shown in operating position. The end plate securing bolts are pre-tightened to breakaway torque.



■ SITUAZIONE ACCIDENTALE • FAILURE POSITION

Flangia sollevata dalla presenza di elementi estranei tra rotore e corpo.
The sliding end plate moves upwards to absorb the impact from the rotor caused by injection of foreign matter.



⊖ ⊕ Camera con spessori differenziati.
Differential thickness of the pump housing.

■ Pompa per vuoto/compressore. Serie PR.

Pompa a palette scivolanti, lubrificata.

Campo di impiego

- Macchine per aspirazione di rifiuti liquidi e polveri.
- Impianti fissi di produzione vuoto.
- Impianti di trasport pneumatico.

Azionamento

- Col motore del veicolo mediante trasmissione meccanica.
- Con motore ausiliario.
- Con trasmissione idraulica.

Nota: su richiesta il senso di rotazione può essere destro o sinistro.

Raffreddamento e lubrificazione

- Raffreddamento ad acqua a circolazione forzata con pompa di riciclo esterna.
- Lubrificazione delle parti in movimento con pompa a pistoni e serbatoio olio incorporati.

■ Vacuum pumps/compressors. Series PR.

Lubricated, sliding vanes pump.

Application

- Sludge and slurry suction vehicles. Dusty materials with suitable suction filter.
- Vacuum plants.
- Pneumatic transport installations..

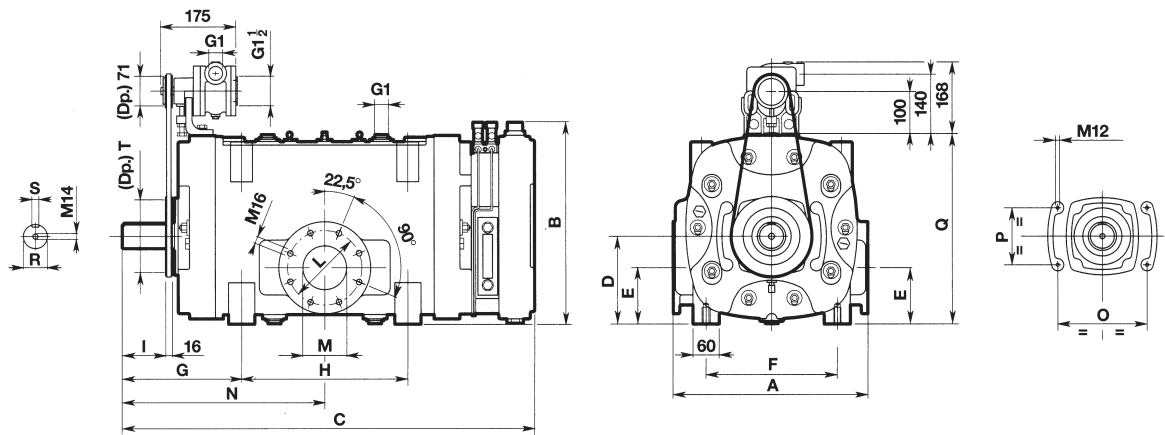
Drive

- By vehicle engine with mechanical transmission.
- With auxiliary engine, electric motor, etc.
- Hydrostatic drive.

Note: The pumps are delivered for right or left rotation upon request.

Cooling and lubrication

- Cooling is obtained by forced circulation with external pump.
- Automatic oil lubrication of the moving parts with a piston pump driven by the rotor. High capacity oil tank with level sightglass.



Dimensioni in mm · Dimensions mm

Mod.	A	B	C	D	E	F	G	H	I	L	M	N	O	P	Q	R	S	T
PR150	400	435	866	187	120	280	256	320	80	150	90	416	185	110	402	45	14	150
PR200	445	460	943	200	128	300	273	380	99	170	100	463	205	130	430	55	16	180
PR250	445	460	1123	200	144	300	283	540	99	200	130	553	205	130	430	55	16	180

Prestazioni · Performances

Mod.		PR150	PR200	PR250
Velocità consigliata · Suggested speed	min ⁻¹	1200	1200	1100
Portata aria a bocca libera · Air flow free air	m ³ /h	900	1250	1550
Portata aria a 400 mbar/60% vuoto · Air flow at 400 mbar/60% vacuum	m ³ /h	860	1210	1470
Vuoto massimo · Maximum vacuum	%	95	95	95
Vuoto massimo in servizio continuo · Max vacuum continuous duty	%	80	80	80
Potenza assorbita a 0,5 bar rel. (1,5 assol.) · Power required at 0,5 bar rel. (1,5 abs.)	kW	28	39	48
Pressione max rel. (assol.) · Maximum operating rel. pressure (absolute)	bar	1 (2)	1 (2)	1 (2)
Rumorosità a 60% di vuoto a 7 m. · Sound pressure level at 7 m and 60% vacuum	dBA	75	74	78
Peso · Weight	kg	345	445	530
Consumo olio · Oil consumption	g/h	210	250	330
Capacità serbatoio olio · Oil tank capacity	l	11	13	13
Momento d'inerzia · Mass moment of inertia	kgm ²	0,57	0,96	1,30
Potenza termica dissipata · Heat to be dissipated	kcal/h	8.000	11.000	12.000
Portata pompa di ricircolo · Circulating pump flow rate	l/min	50	70	80
Velocità pompa di ricircolo · Circulating pump speed	min ⁻¹	2.600	3.000	2.800

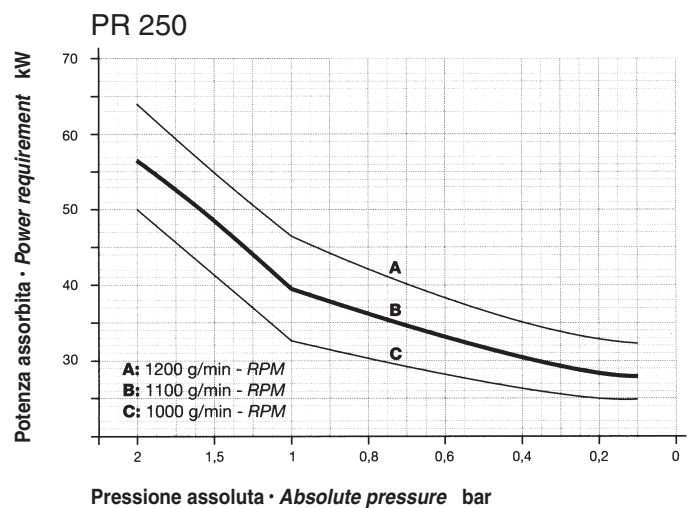
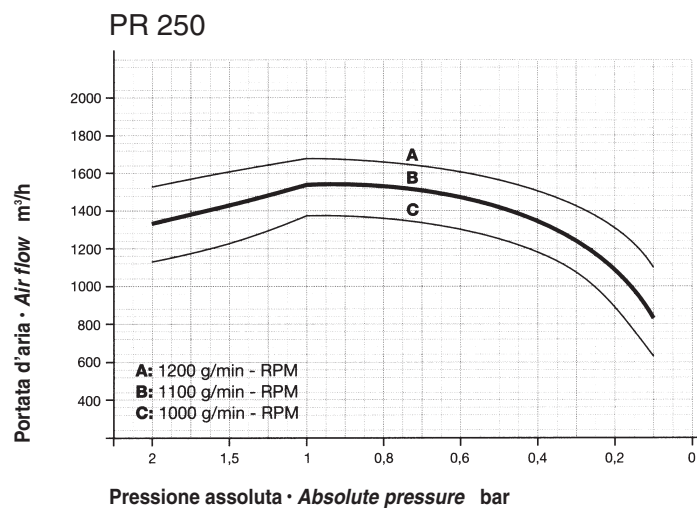
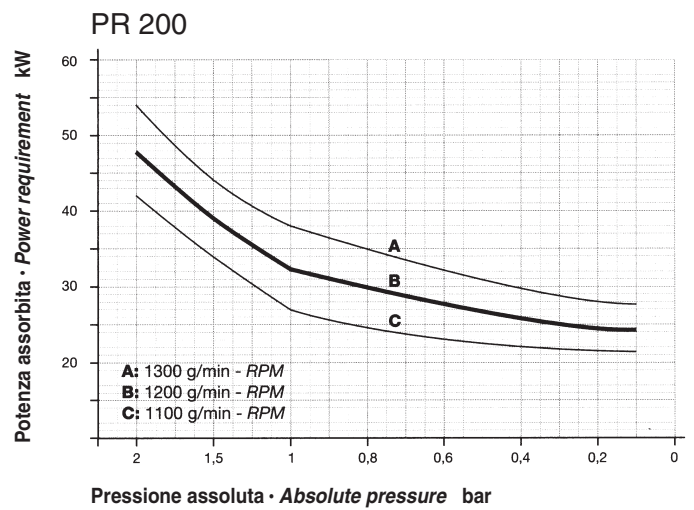
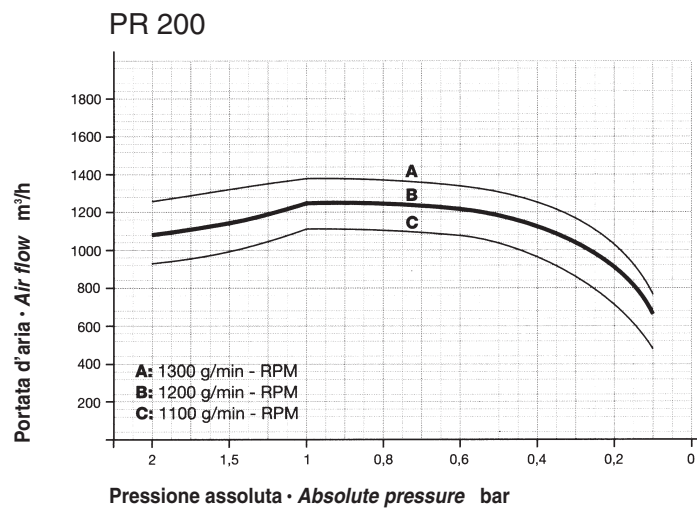
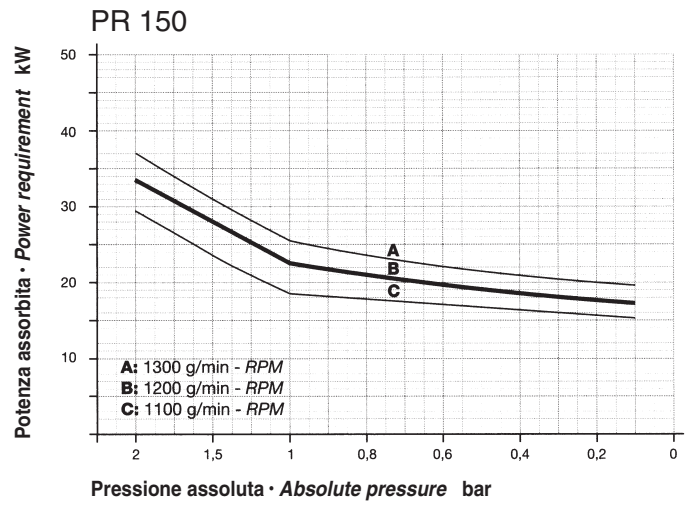
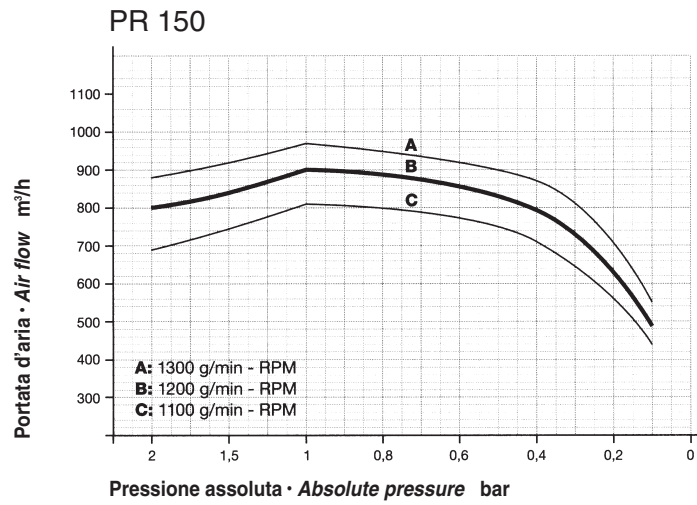
Lubrificazione · Lubrication

Corpo - Housing

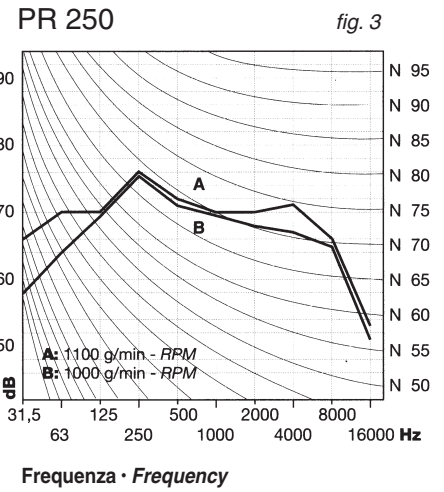
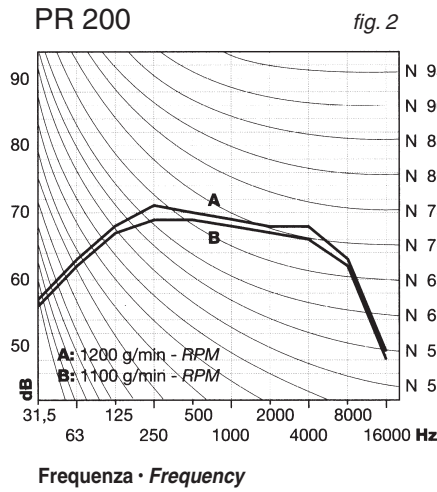
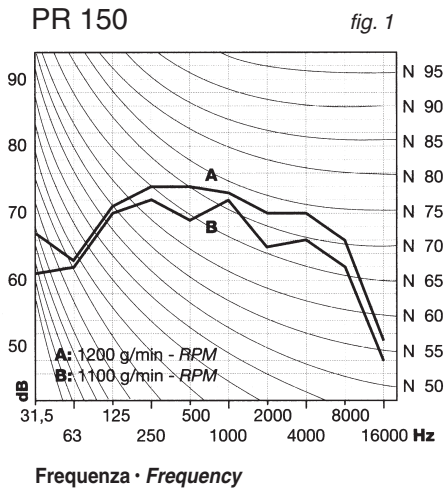
Olio minerale ISO VG 150 – Mineral oil ISO VG 150

Portata/pressione · Flow rate/pressure

Potenza/pressione · Power/pressure



Rumore • Sound pressure level



■ Il diagramma (fig. 1-2-3) riporta lo spettro del rumore a 456 mm Hg (60% di vuoto) a 7 m di distanza, a diversi regimi di rotazione. In tali condizioni il **valore di riferimento** è:

PR150	1.100 g/min.	72 dBA
	1.200 g.min	75 dBA
PR200	1.100 g/min.	72 dBA
	1.200 g.min	74 dBA
PR250	1.000 g/min.	76 dBA
	1.100 g.min	78 dBA

Per avere il valore del rumore a distanze e/o gradi di vuoto diversi, sommare al valore di riferimento il **fattore di correzione** (fig. 4).

Esempio: PR150 a 1.100 g/min., 30% di vuoto e 4 m: $72+6=78$ dBA

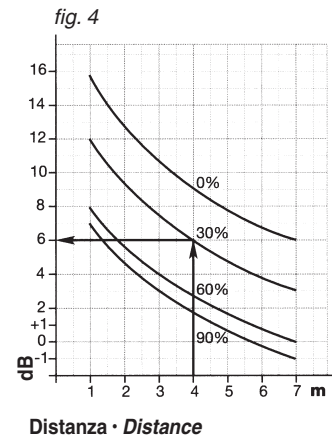
■ The diagram (fig. 1-2-3) show the sound analysis of PR vacuum pumps measured at 456 mm Hg (60% vacuum) at 7 m distance for different rotation speed. In such conditions the **reference value** is:

PR150	1.100 r.p.m.	72 dBA
	1.200 r.p.m.	75 dBA
PR200	1.100 r.p.m.	72 dBA
	1.200 r.p.m.	74 dBA
PR250	1.000 r.p.m.	76 dBA
	1.100 r.p.m.	78 dBA

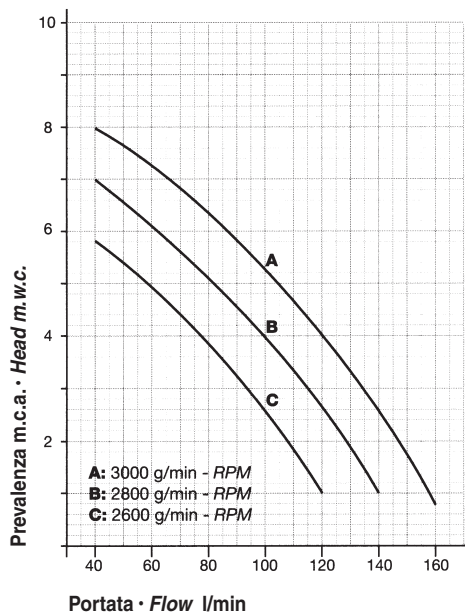
To have the sound level for different distances and/or vacuum rates add the **correction factor** from fig. 4 to the reference value.

Example: PR150 a 1.100 g/min., 30% vacuum and 4 m: $72+6=78$ dBA

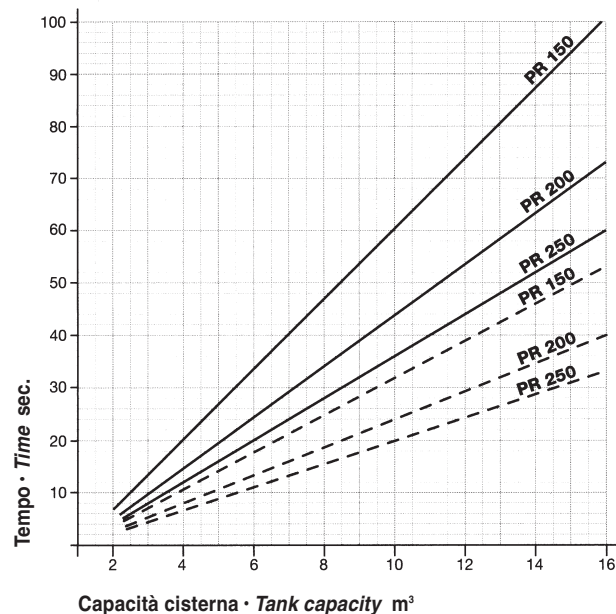
Fattore di correzione
Correction factor



Pompa ricircolo acqua Water recycling pump



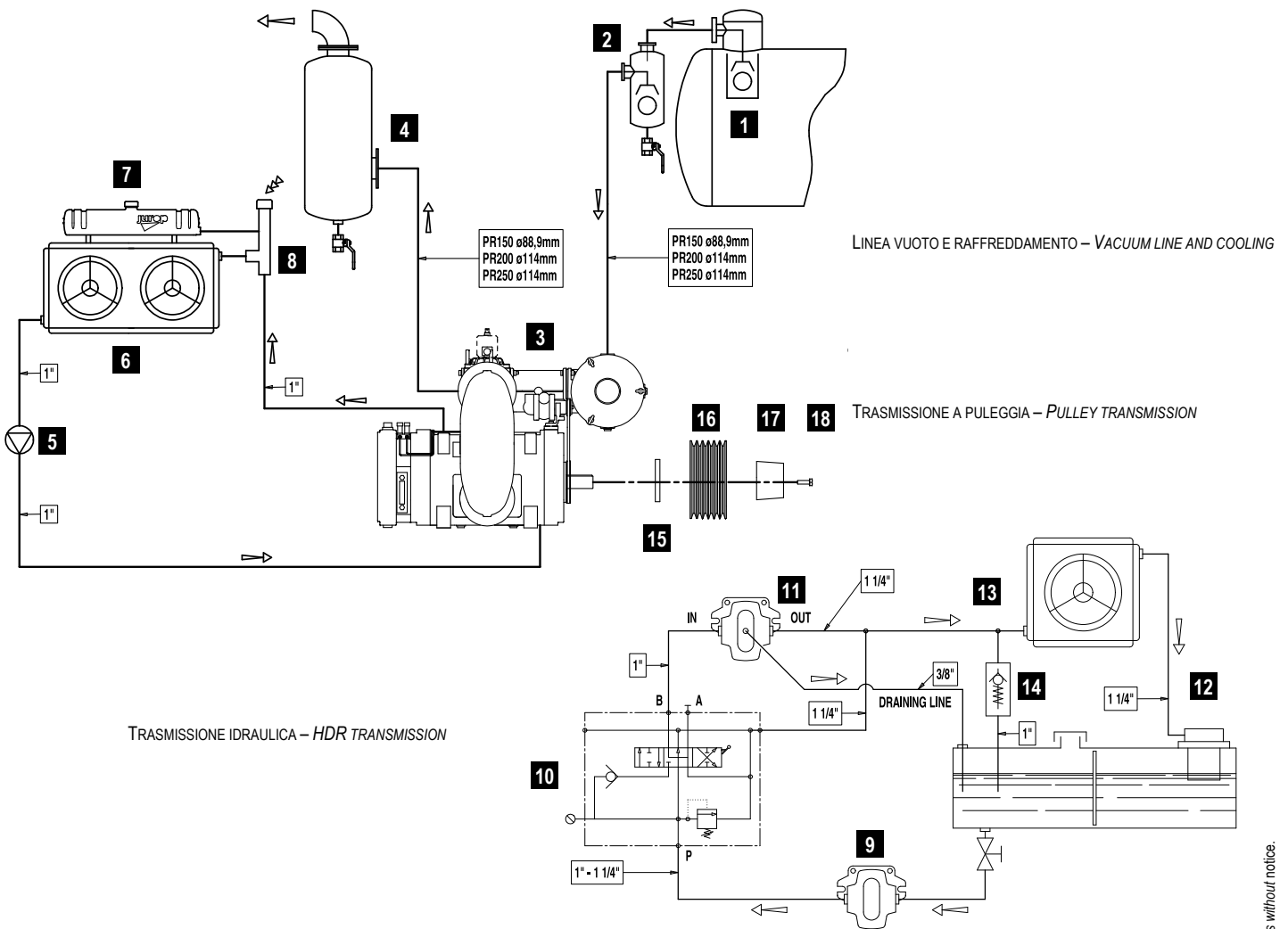
Tempi di evacuazione Evacuation times



■ Il diagramma fornisce il tempo per raggiungere il 60÷80% di vuoto in una cisterna di una data capacità. Il tempo è comunque funzione della tenuta del circuito del vuoto.

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

————— 80% Vuoto-Vacuum
- - - - - 60% Vuoto-Vacuum



Componenti-Components	Pos.	Codice - Code			Descrizione - Description
		PR 150	PR 200	PR 250	
Linea vuoto Vacuum line	1	18450.029.10	18450.029.10	18450.029.10	Valvola troppo pieno (Carbonio) - Primary shutoff (Mild steel)
		18450.027.10	18450.027.10	18450.027.10	Valvola troppo pieno (Inox) - Primary shutoff (Stainless steel)
	2	14450.020.00	14450.025.00	14450.025.00	Depuratore a ciclone (Carbonio) - Secondary shutoff (Mild steel)
		14450.022.00	14450.024.00	14450.024.00	Depuratore a ciclone (Inox) - Secondary shutoff (Stainless steel)
	3	18521.012.00	18521.015.00	18521.016.00	Gruppo Aspirazione DX Pneum. - Filter suction unit (Right - Pneum.)
		18521.013.00	18521.020.00	18521.021.00	Gruppo Aspirazione SX Pneumatico - Filter suction unit (Left - Pneum.)
		18521.022.00	18521.024.00	18521.026.00	Gruppo Aspirazione DX Manuale - Filter suction unit (Right - Manual)
		18521.023.00	18521.025.00	18521.027.00	Gruppo Aspirazione SX Manuale - Filter suction unit (Left - Manual)
4	15470.014.00	15470.014.00	15470.017.00	Silenziatore/Separatore olio (Carb.) - Silencer/Oil separator (Mild steel)	
	15470.019.00	15470.019.00	15470.020.00	Silenziatore/Separatore olio (Inox) - Silencer/Oil separator (Stain. steel)	
5	-	-	-	Pompa ricircolo - Circulating pump	
Raffreddamento Cooling	6	4021.5010.00	4021.5010.00	4021.5010.01	Scambiatore aria-acqua (24V) - Air-water heat exchanger (24V)
		4021.5010.02	4021.5010.02	4021.5010.03	Scambiatore aria-acqua (12V) - Air-water heat exchanger (12V)
Trasmissione idraulica HDR transmission	7	18920.8Y6.C0	18920.8Y6.C0	18920.8Y6.C0	Vaso di espansione - Expansion tank
	8	18820.045.E0	18820.045.E0	18820.045.E0	Riempimento serbatoio - Exchanger inlet port
	9	-	-	-	Pompa HDR - HDR pump
	10	4024.3020.00	4024.3020.00	4024.3040.00	Distributore idraulico - Distributor
	11	4024.1070.04	4024.1070.03	4024.1070.07	Motore HDR - HDR motor
	12	4022.3040.11	4022.3040.12	4022.3040.12	Filtro olio - Oil filter
Trasmissione a puleggia Pulley Transmission	13	4021.5010.31	4021.5010.41	4021.5010.24	Scambiatore aria-olio - Heat exchanger
	14	4024.4212.06	4024.4212.06	4024.4212.06	Valvola di sicurezza 1" (3bar) - Safety valve 1" (3 bar)
	15	16240.196.00	16240.195.00	16240.195.00	Distanziale - Spacer
	16	40254.264.90	40254.264.91	(40254.264.91)	Puleggia Dp=250 4 (5) xSPB - Pulley Dp=250 4 (5) xSPB
17	40254.260.11	40254.260.24	40254.260.24	Bussola conica - Taper bush	
18	-	-	-	Vite M 14x40 - Screw M 14x40	

Jurop SpA si riserva il diritto di apportare modifiche senza alcun preavviso. - Jurop SpA reserves the right to make changes without notice.

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