

Technical characteristics

SD, I, C1 Models

Characteristics	Unit	1005 SD		1015 SD		2005		2010		2015		2021													
		50	60	50	60	50	60	50	60	50	60	50	60												
Frequency	Hz	50	60	50	60	50	60	50	60	50	60	50	60												
Number of stages		1		1		2		2		2		2													
Rotation speed	tr/mn	1500	1800	1500	1800	1500	1800	1500	1800	1500	1800	1500	1800												
Pumping speed	m ³ /h	5	6	14	16,5	5	6	9	10,5	14	16,5	18	22												
Max. Gas throughput	hPa · l/s	1256	1547	3805	4500	1350	1547	2722	3263	4222	5063	5833	6977												
Partial ultimate pressure ⁽¹⁾	Torr/hPa	-				7.5 · 10 ⁻⁴ / 1 · 10 ⁻⁴																			
Ultimate pressure with gas ballast closed ⁽²⁾	Torr/hPa	3.75 · 10 ⁻⁴ / 5 · 10 ⁻⁴				3.75 · 10 ⁻⁴ / 5 · 10 ⁻⁴				3.75 · 10 ⁻⁴ / 5 · 10 ⁻⁴															
Ultimate pressure with gas ballast open ⁽²⁾	Torr/hPa	3 / 4		5.25 / 7		7.5 · 10 ⁻³ / 1 · 10 ⁻²																			
Maximum pressure at inlet in continuous operation	Torr/hPa																								
• without oil recovery														< 75 / 100				< 8 / 10							
• with oil recovery														< 760 / 1013				< 75 / 100							
Maximum exhaust relative overpressure	hPa	500																							
Pump tightness	hPa · l/s	< 5 · 10 ⁻⁶																							
Oil capacity	l	1.1		1.0		0.83		0.95		0.95		0.98													
Maximum water vapour pumping capacity ^{(1) (3)}	hPa	30	25	35	30	35	25	20	15	12	10	7	7												
Water vapour pumping capacity	g/h	120	130	330	370	120	110	125	100	110	100	90	90												
Emission sound pressure level without Gas Ballast ⁽⁴⁾	dB (A)	< 52	< 54	< 54	< 56	< 55	< 55	< 55	< 55	< 55	< 56	< 55	< 56												
Weight (pump + motor) ⁽⁵⁾	kg (lbs)	21 (46)		24.5 (54)		25 (55)		26 (57)		27 (59.5)		28 (62)													
Inlet and exhaust end fittings		DN 25 ISO-KF																							

⁽¹⁾.....Partial pressure measured according to Pneurop 6602 specifications, with a capacitive diaphragm pressure gauge and a liquid nitrogen trap.

⁽²⁾..... Ultimate pressure and vapour pressure measured according to Pneurop 6602 specifications, with a capacitive diaphragm pressure gauge.

Note: The measurements are made when the pump is filled with A120 oil for I, SD, SDI, C1 models. Pressure may vary if other oils are used (**see page 19**). Pressure measurements made with a gauge other than a capacitive gauge will give varying pressure results (partial pressure, ultimate pressure or vapour pressure).

⁽³⁾..... Vapor pressure measured with an automatic gas ballast.

⁽⁴⁾..... The sound level of I, SD, C1 models is under this maximum value.

⁽⁵⁾..... These values are for pumps equipped with single-phase motors.

SDI Models

The SDI pump characteristics correspond to the SD model (**see table above**) when the intermediate port is at low pressure, i.e. < 1 hPa.

Pumping through intermediate port	Unit	2005 SDI
Ultimate pressure	hPa	< 1
Flow rate (at ultimate pressure)	m ³ /h	≥ 0.1
Connecting port		1/8 Gas female equipped with a plug. Customer is in charge of the connection.

The pressure at the intermediate port increases versus the pumping speed.

The manufacturer guarantees the maximum pumping speed and the ultimate pressure. The complete product performance depends on the customer's application.