Accessories

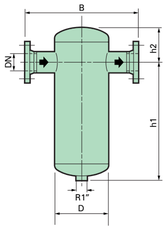
Accessories often supplied with the machine as standard, include: non-return valve, pressure / vacuum gauge, pressure relief valve, vacuum ventilation valve.

The accessories listed below can be supplied as optional equipment.

All prodcuts are of optimum design, to suit SL/SLS machines.

Cyclonic oil and water separator

Type	Connection	Dimensions in mm (inches)				
	DN	D	h1	h2	B	Weight kg (lb.)
SL15	BSP 1 1/2"	127 (5)	450 (17.7)	100 (3.94)	190 (7.48)	9 (19.8)
SL20	BSP 1 1/2"	152 (6)	450 (17.7)	120 (4.72)	230 (9.06)	12 (26.5)
SLS34	BSP 2"	152 (6)	450 (17.7)	120 (4.72)	230 (9.06)	12 (26.5)
SLS54	BSP 2"	178 (7)	480 (18.9)	140 (5.51)	240 (9.45)	13 (28.6)

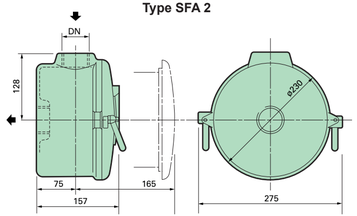


Vacuum intake filter

Protects the compressor / vacuum pump against course and fine impurities, but not against liquids. Fitted directly on the suction nozzle (also available with microfilter).

Type	Intake filter	Flanges R, A and B
SL 15 DV and 20 DV	SFA 2	BSP 2"
SLS 34 DV and 54 DV	SFA 2	BSP 2"

Type SFA 2

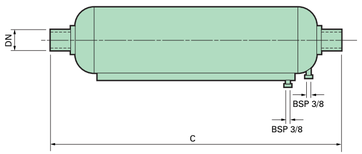


Weight - 3.2 kg

Exhaust silencer

Reduces exhaust noise during suction operations. Installed in the exhaust line, discharging into the atmosphere.

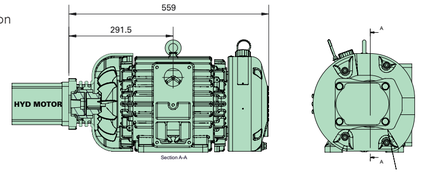
Type	Flange	Dimensions in mm (inches)		Weight
	DN	c	ød	kg (lb)
SL 15 DV, SL20DV	BSP 2"	535 (21.06)	145 (5.70)	5 (11)
SLS 34 DV,SLS54DV	BSP 2"	535 (21.06)	145 (5.70)	5 (11)



Hydraulic Drive Connection Kit

Hydraulic trunk, coupling and fittings.
Several standard kits can be offered, depending on application.

SLS 54 with HYD-KIT

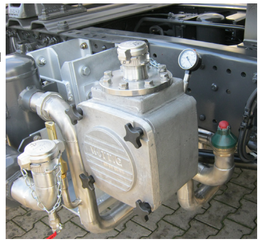


Vacuum ventilation valve
The vacuum ventilation valve ensures that the permissible or desired vacuum level is not exceeded by allowing atmospheric air to enter the inlet line. Installed in the vacuum/suction line, or fitted on the tank.

Non-return valve
Prevents backflow of atmospheric air, debris/liquid during vacuum operations, and compressed air during compression operations. Fitted directly to the delivery nozzle.

Pressure relief valve
The pressure relief valve ensures that the permissible machine operating pressure is not exceeded by blowing off the surplus air volume during pressure operation. Installed in the delivery line.

Mounting plate or frame
Mounting plates or frames can be supplied to take the complete compressor/vacuum pump with drive. Supplied with mounted machines and accessories.



Gardner Denver Customer Support

Application, installation and maintenance are all crucially important to produce the best results in performance and economy, whilst also providing a long, reliable life. We are always ready to provide advice or training and can be easily contacted locally or globally.

Some of the greatest strengths of the Gardner Denver Transport business are our wide installation and application experience, depth of market knowledge and customer support network. This full circle of experience and feed-back leads to the design, manufacture and supply of optimised products that meet the customers needs.

The Gardner Denver Transport business is working hard on every question or problem, simple or challenging, to provide you, our customers, with the solutions you need to suceed.

Gardner Denver Service

In the competitive market we work in, the cost to a business for a vehicle being off-the-road is high.

Should a problem occur, we provide round-the-clock service support with extensive stocked spare parts to get the customer and product back in operation as soon as possible.

What do we offer?

- Globally stocked genuine spare parts
- Service and maintenance kits
- Detailed commissioning
- Complete check and overhaul of your compressed air system
- Reliable, professional maintenance and service
- Personalised maintenance and service contracts
- Service training of customers and dealers
- Professional information and advice

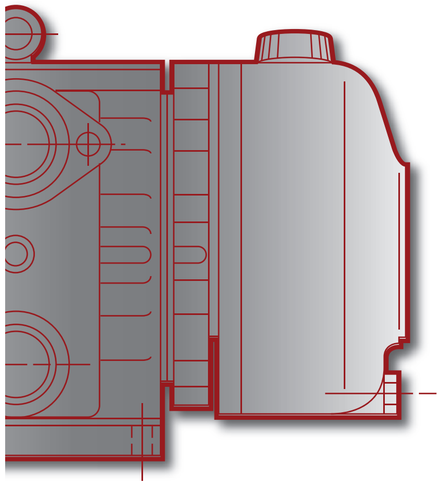
CONTACT YOUR GARDNER DENVER REPRESENTATIVE

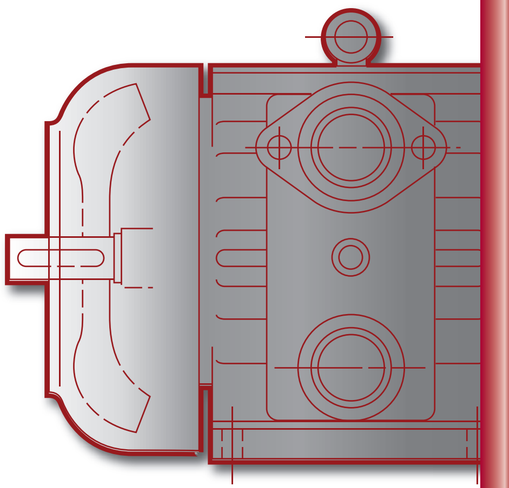
CONTACT HEAD OFFICE

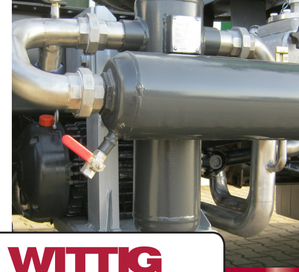
Gardner Denver

PO Box 178, Springmill Street, Bradford, West Yorkshire, BD5 7YH, England
Tel: +44 (0) 1274 718100 **Fax:** +44 (0) 1274 718101
Sales: +44 (0) 1274 718160
Web: www.gardnerdenver.com
e-mail: wittig.sales@gardnerdenver.com

SL/SLS 02/2012







WITTIG
A Gardner Denver Product

ROTARY VANE COMPRESSORS AND COMPRESSOR/ VACUUM PUMPS

- **SL 15, 15 DV, 20, 20 DV**
- **SLS 34,34 DV, 54, 54 DV**

Rotary vane compressors, series SL, SLS D (Pressure)

Applications

Installation in liquid-manure and sewage vehicles, in smaller stationary or mobile sludge-suction vehicles.

- removal of industrial sludge, waste oil, etc.
- for mobile industrial vacuum cleaners,
- for vacuum clamping, lifting and handling equipment.

Drive (optional running clockwise or anti-clockwise)

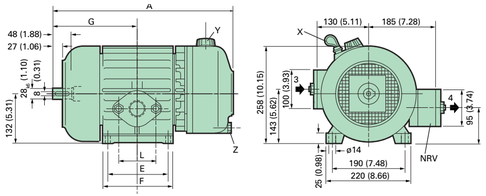
- speed range: 1000/1500 RPM
- by hydraulic drive,
- via flexible coupling,
- by petrol or diesel engine or electric motor.
- from vehicle engine via auxiliary drive and universal shaft,
- via V-belts, pulley is fitted directly to the free shaft extensions.

Cooling, lubrication

- A drive shaft mounted axial cooling fan guarantees continuous, effective cooling.
- These machines are equipped with an automatic lubrication system.

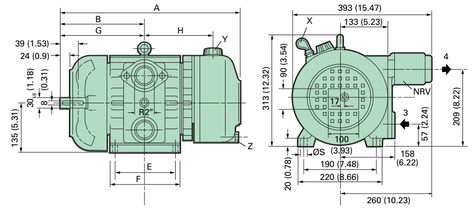
Rotary vane compressor		SL 15	SL 20	SLS 34	SLS 54
Volume flow, free air delivery	m^3/h (cfm)	125 (74)	165 (97)	200 (118)	325 (191)
Volume flow at an operating pressure of 2 bar (g) (29 psig)	m^3/h (cfm)	110 (65)	145 (85)	180 (106)	300 (177)
Suction temperature	°C (°F)	20 (68)	20 (68)	20 (68)	20 (68)
Suction pressure (absolute)	bar (psi)	1 (14.5)	1 (14.5)	1 (14.5)	1 (14.5)
Max. discharge pressure (gauge)	barg (psig)	2 (29)	2 (29)	2 (29)	2 (29)
Speed	rpm (rev/min)	1500	1500	1500	1500
Power requirement at shaft at 2 barg (29 psig)	kW (hp)	6.2 (8.3)	8.2 (11)	9.5 (12.7)	15.5 (20.8)
Requisite drive output rating	kW (hp)	7.1 (9.5)	9.5 (12.7)	11 (14.8)	18 (24.1)
Oil consumption	l/h (ounce s/h)	0.02 (0.7)	0.02 (0.7)	0.03 (1.0)	0.09 (3.0)
Mass moment of inertia	kgm2 (lb.sq.ft.)	0.04 (0.95)	0.05 (1.19)	0.05 (1.19)	0.05 (1.19)
Sound pressure level at 7m (23ft) and at 2 bar (g) (29 psig)	dB(A)	74	76	79	81
Oil tank capacity	litres (gal US)	2.0 (0.5)	2.0 (0.5)	2.6 (0.7)	2.6 (0.7)
Weight including non-return valve	kg (lb)	48 (106)	57 (126)	62 (137)	81 (179)

Dimensions of types SL 15 and SL 20



Type	SL 15	SL 20
A	433 (17.05)	478 (18.82)
E	110 (4.33)	155 (6.10)
F	140 (5.51)	185 (7.28)
G	204 (8.03)	227 (8.94)
Intake flange DIN 2558		
L	110 (4.33)	110 (4.33)
DN	BSP 2"	BSP 2"
Delivery flange DIN 2558		
L	100 (3.94)	100 (3.94)
DN	BSP 1 1/2"	BSP 1 1/2"

Dimensions of types SLS 34 and SLS 54



Type	SLS 34	SLS 54
A	420 (16.54)	510 (20.1)
E	100 (3.94)	165 (6.5)
F	130 (5.12)	195 (7.68)
G	198 (7.79)	243 (9.57)
H	150 (5.9)	195 (7.68)
ØS	M10	M14

3 = Suction side Y = Oil filter point
4 = Discharge side Z = Oil Drain
X = Oul dipstick NRV = Non-return valve

All dimensions in mm (inches)

Rotary vane compressor/Vacuum pumps, series SL/SLS DV (Pressure/Vacuum)

Applications

Installation in liquid-manure and sewage vehicles, in smaller stationary or mobile sludge-suction vehicles.

- removal of industrial sludge, waste oil, etc.
- for mobile industrial vacuum cleaners,
- for vacuum clamping, lifting and handling equipment.

Drive (optional running clockwise or anti-clockwise)

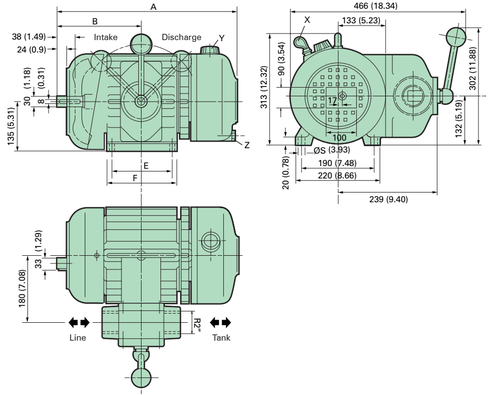
- speed range: 1000/1500 RPM
- by hydraulic drive,
- via flexible coupling,
- by petrol or diesel engine or electric motor.
- from vehicle engine via auxiliary drive and universal shaft,
- via V-belts, pulley is fitted directly to the free shaft extensions.

Cooling, lubrication

- A drive shaft mounted axial cooling fan guarantees continuous, effective cooling.
- These machines are equipped with an automatic lubrication system.

Rotary vane compressor / vacuum pump		SL 15 DV	SL 20 DV	SLS 34 DV	SLS 54 DV
Volume flow, free air delivery	m^3/h (cfm)	125 (74)	165 (97)	200 (118)	325 (191)
Volume flow at residual pressure of 400 mbar (18"HG) 60% vacuum	m^3/h (cfm)	123 (72)	155 (91)	185 (109)	310 (182)
Max. operating pressure with 4-way valve	barg (psig)	1.5 (21.75)	1.5 (21.75)	1.5 (21.75)	1.5 (21.75)
Max. operating pressure without 4-way valve	barg (psig)	2 (29)	2 (29)	2 (29)	2 (29)
Speed	rpm (rev/min)	1500	1500	1500	1500
Power requirement at shaft at 0.5 bar (7.25 psig)	kW (hp)	3 (4.0)	3.7 (5.0)	5.7 (7.6)	10 (13.4)
Oil Consumption	l/h (gal US/h)	0.02 (0.7)	0.02 (0.7)	0.03 (1.0)	0.08 (2.7)
Mass moment of inertia	kgm2 (lb.sq.ft.)	0.04 (0.95)	0.05 (1.19)	0.05 (1.19)	0.07 (1.67)
Operating vacuum for continuous operation	mbar/% ("HG)	200/80(23.6)	200/80(23.6)	200/80(23.6)	200/80(23.6)
Sound pressure level at 7m (23ft) and at 400 mbar (18"HG)/0.5 bar (7.25 psig)	dB(A)	67/71	69/73	70/74	70/74
Oil tank capacity	l (gal US)	2.0 (0.5)	2.0 (0.5)	2.6 (0.7)	2.6 (0.7)
Weight including non-return valve	kg (lb)	48 (106)	57 (126)	62 (137)	81 (179)

Dimensions of types SLS 34 DV(R/L)U and SLS 54 DV(R/L)U with switch-over four-way valve



Type	SLS 34 DV	SLS 54 DV
A	420 (16.54)	510 (20.1)
E	100 (3.94)	165 (6.5)
F	130 (5.12)	195 (7.68)
G	198 (7.79)	243 (9.57)
H	150 (5.9)	195 (7.68)
ØS	M10	M14

X = Oil dipstick Z = Oil drain
Y = Oil filter point

The non-return valve is fitted within the four-way valve.

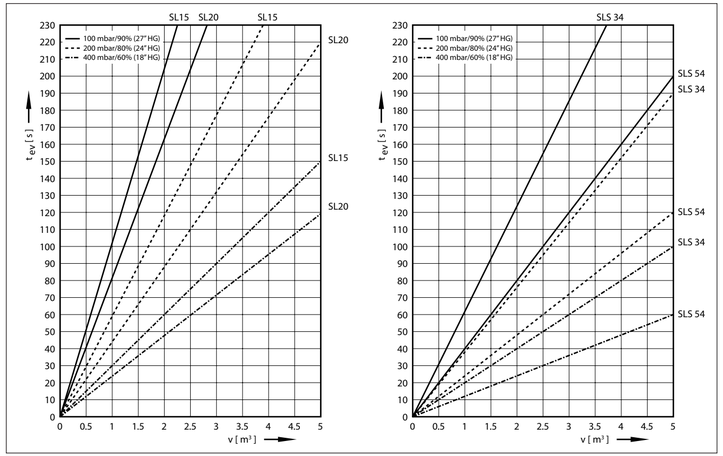
All dimensions in mm (inches)

Evacuation times

These diagrams show the evacuation times t_{ev} as a factor of the generated vacuum and the vessel volume.

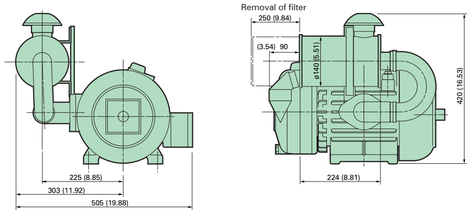
These times are given as guide values only.

The actual times may be affected by losses from the tank pipework.

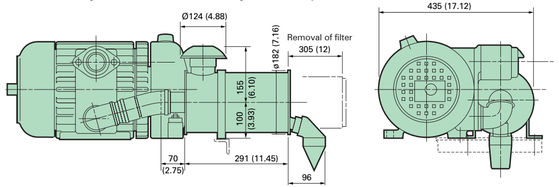


Packages

Mounting dimensions of cyclonic air filter for rotary vane compressors SL15 and SL 20



Mounting dimensions of cyclonic air filter for rotary vane compressors SLS 34 and SLS 54



Rotary vane compressor		SL 15	SL 20	SLS 34	SLS 54
Intake filter with mounting flange	kg (lb)	10 (22)	10 (22)	12 (26.5)	13 (28.6)