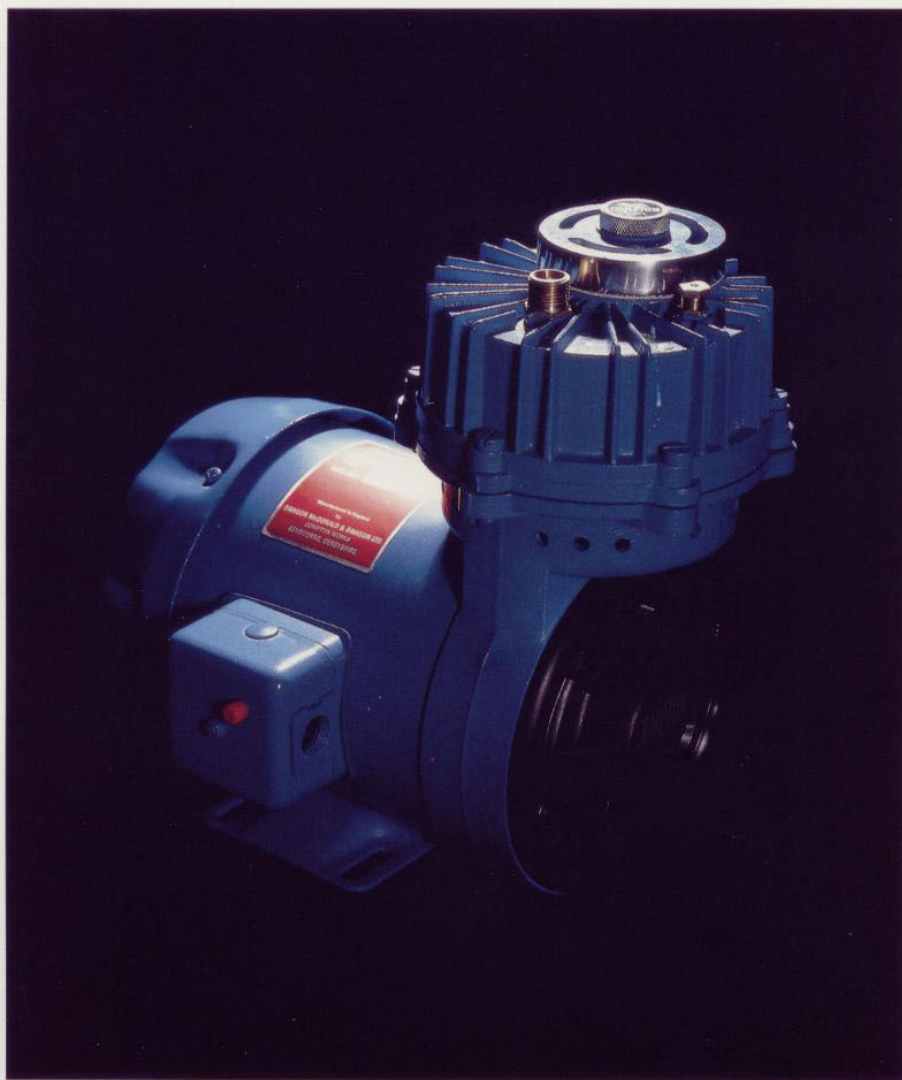


COMPTON
COMPRESSORS



O I L - F R E E C O M P R E S S O R S A N D V A C U U M P U M P S

THE DIAPHRAGM PRINCIPLE

COMPTON Compressors and Gas Circulating Pumps fall into two main categories-machines designed to deliver oil-free compressed air, and machines to compress, evacuate or circulate gas.

(see separate brochure).

Figure 1 shows a cross-section of a typical air compressor. The machine is actually our D 189 but the same principle applies to all our units

(Note- the part numbers apply only to the D189)

The pump operates as follows:

An eccentric (15-4) mounted on the motor shaft carries a grease packed and sealed ball-bearing (20). As the shaft rotates reciprocating motion is transmitted via the connecting rod (13G) to the bottom washer, (5-4, 84-5 and 8) diaphragm and top washer assembly.

This motion (see figures 2 and 3) provides a pumping action inside valve plate (10-4) and actuates the valves (506) and (29), thus admitting air into the pump and discharging it into the surge chamber. The incoming air is filtered by inlet filter (2775) and is discharged through outlet connections (71 or 2850).

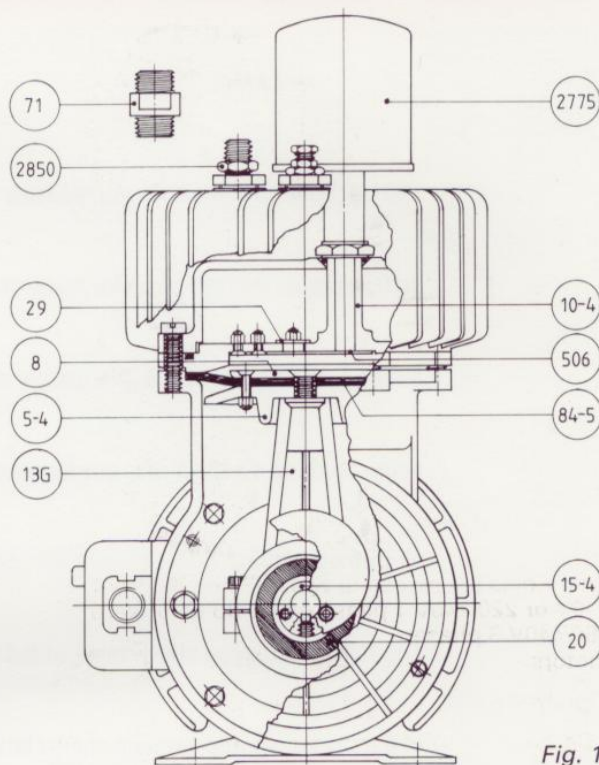


Fig. 1

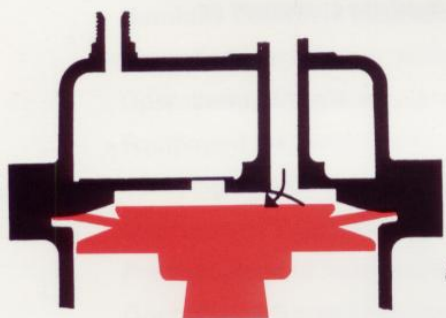
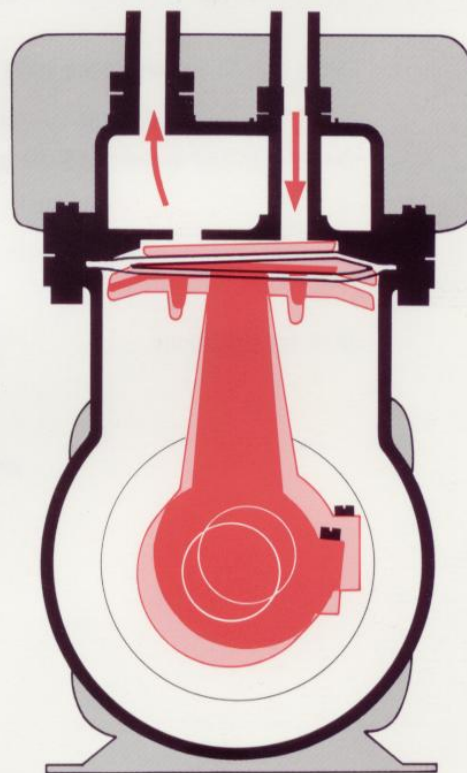


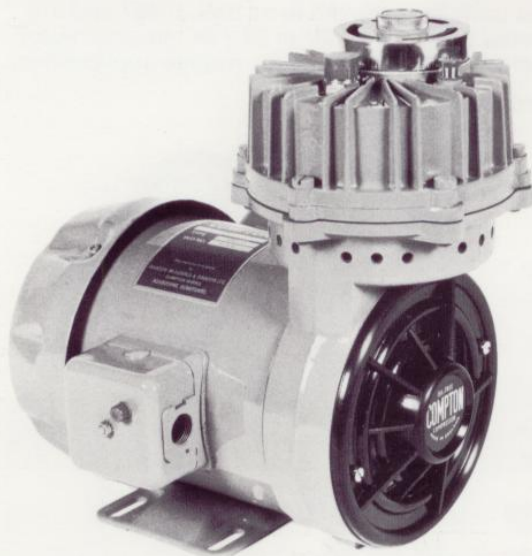
Fig. 2



Fig. 3



D-TYPE COMPRESSORS AND VACUUM PUMPS



All models are available with 1/3 hp (250 Watt) 110V or 220/240V 1 phase or 1/2 hp (370 Watt) 380/440V 3 phase motors.

Optional extras:

- Carrying handle
- 6 metres of cable
- Base plate

Approximate weight of D-Type machines = 16.5 kg.

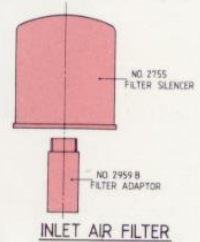
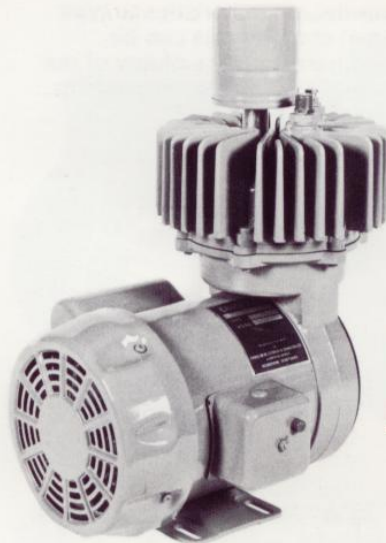
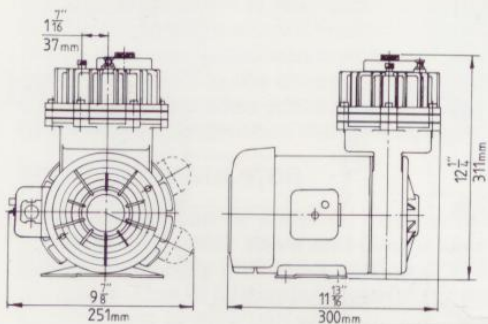
PRESSURE FLOWRATE CHARACTERISTICS

MODEL NO.	0 PSIG		5 PSIG		10 PSIG		20 PSIG		30 PSIG	
	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM
D/180	2.75	78	2.60	74	2.30	65	1.80	51	—	—
D/245S	3.60	102	3.13	89	2.97	84	2.58	73	2.25	64
D/617	2.30	65	1.90	54	1.60	45	1.20	34	—	—

MODEL NO.	0 PSIG		10 PSIG		20 PSIG		40 PSIG		60 PSIG	
	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM
D/189S	2.10	59.5	1.85	52	1.70	48	1.25	35	0.58	16.5

VACUUM FLOWRATE CHARACTERISTICS

MODEL NO.	0" HG		5" HG		10" HG		15" HG		20" HG		TERMINAL VACUUM INCHES HG
	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	
D/180	2.75	78	1.95	55	1.45	41	0.95	27	0.45	13	24
D/245S	3.60	102	3.10	88	2.35	66.5	1.60	45	0.90	25.5	24
D/617	2.30	65	1.95	55	1.45	41	0.80	23	0.20	6	21
D/189S	2.10	59.5	1.70	48	1.15	32.5	0.60	17	0.15	4	24



D-Type units with large cooling fins, suitable for long periods of continuous duty.

All models are available with 1/3 hp (250 Watt) 110V or 220/240V 1 phase or 1/2 hp (370 Watt) 380/440V 3 phase motors.

Optional extras:

- Carrying handle
- 6 metres of cable
- Base plate

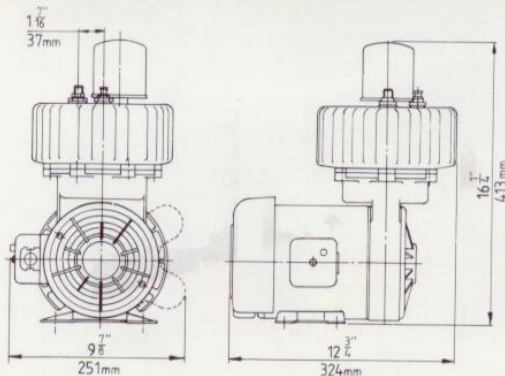
Approximate weight of D-Type machines = 17.25 kg.

PRESSURE FLOWRATE CHARACTERISTICS

MODEL NO.	0 PSIG		10 PSIG		20 PSIG		30 PSIG		40 PSIG		60 PSIG	
	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM
D/245	3.60	102	2.97	84	2.58	73	2.25	64	—	—	—	—
D/189	2.10	59.5	1.85	52	1.70	48	1.50	42.5	1.25	35	0.58	16.5

VACUUM FLOWRATE CHARACTERISTICS

MODEL NO.	0" HG		5" HG		10" HG		15" HG		20" HG		TERMINAL VACUUM INCHES HG
	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	
D/245	3.60	102	3.10	88	2.35	66.5	1.60	45	0.90	25.5	24
D/189	2.10	59.5	1.70	48	1.15	32.5	0.60	17	0.15	4	24

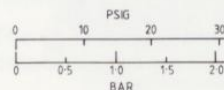


D-TYPE 12V/24V DC COMPRESSORS & VACUUM PUMPS

These units have similar characteristics to type D/180, but the internal components can be modified to give the characteristics of any of our D-Type units, as long as the maximum working pressure does not exceed 20 p.s.i g.

These units are referred to as type D/497 and are powered by either a 12V or 24V DC electric motor and are therefore suitable for mobile applications.

Approximate weight = 12 kg.

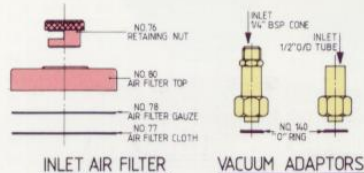


PRESSURE FLOWRATE CHARACTERISTICS

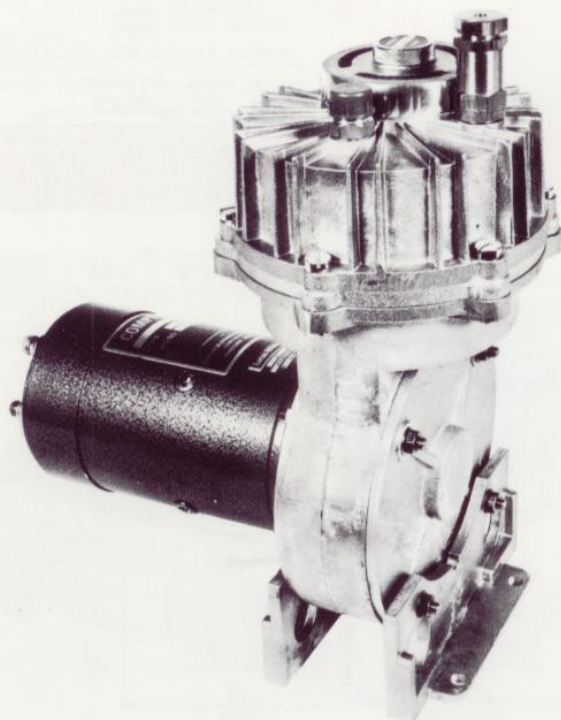
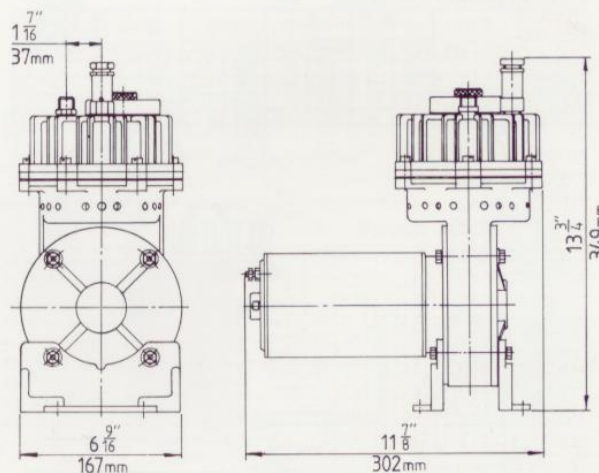
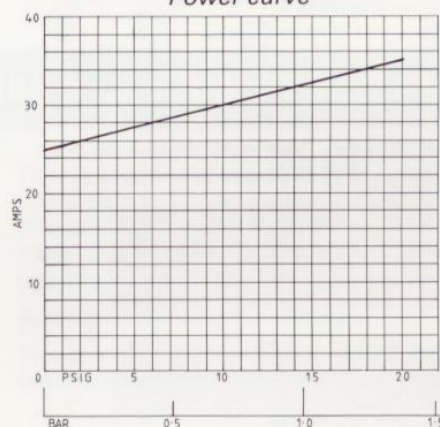
MODEL NO.	0 PSIG		5 PSIG		10 PSIG		15 PSIG		20 PSIG	
	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM
D/497	3.60	102	2.90	82	2.40	68	1.95	55	1.50	42.5

VACUUM FLOWRATE CHARACTERISTICS

MODEL NO.	0" HG		5" HG		10" HG		15" HG		20" HG		TERMINAL VACUUM
	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	INCHES HG
D/497	3.60	102	2.80	79	2.10	59.5	1.30	37	0.60	17	24



Power curve

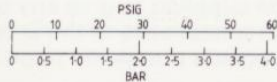


2D-TYPE COMPRESSORS & VACUUM PUMPS

The 2D models are available with 5/8 hp (462 Watts) 110V or 220/240V 1 phase or 3/4 hp (550 Watts) 380/440V 3 phase motors.

The 3 phase unit is also available with a weather proof motor.

Approximate weight of 2D type machines = 30 kg.

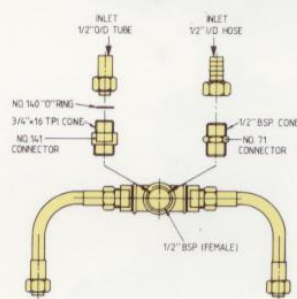
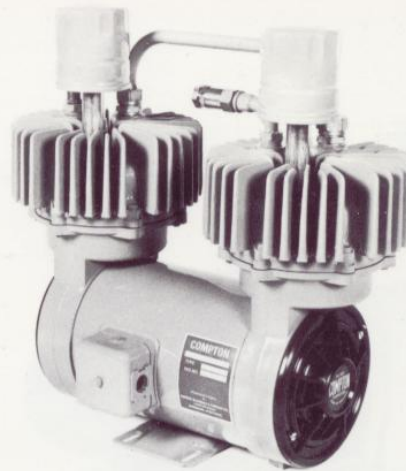
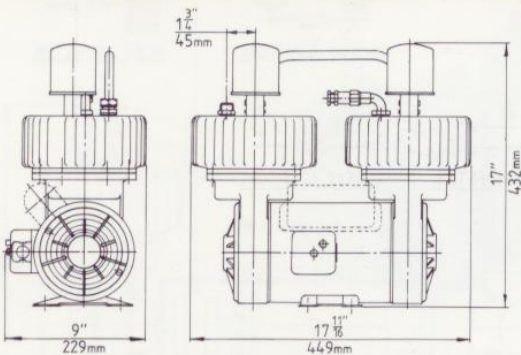


PRESSURE FLOWRATE CHARACTERISTICS

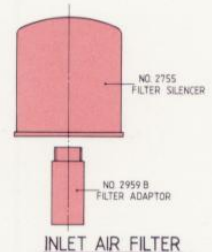
MODEL NO.	0 PSIG		5 PSIG		10 PSIG		20 PSIG		40 PSIG		60 PSIG	
	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM
2D/245	6.25	177	6.00	170	5.75	163	5.00	141.5	—	—	—	—
2D/197	4.20	119	4.00	113	3.70	105	3.50	99	2.50	71	1.70	48

VACUUM FLOWRATE CHARACTERISTICS

MODEL NO.	0" HG		5" HG		10" HG		15" HG		20" HG		TERMINAL VACUUM
	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	INCHES HG
2D/245	6.25	177	4.60	130	3.45	98	2.40	68	1.25	35	24
2D/197	4.20	119	3.10	88	2.15	61	1.30	37	0.63	18	24



VACUUM ADAPTOR

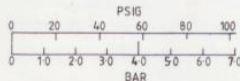


INLET AIR FILTER

2D/657 COMPRESSOR & VACUUM PUMP

The 2D/657 model is available with 5/8 hp (462 Watts) 220/240V 1 phase or 1hp (750 Watts) 380/440V 3 phase motors.

Approximate weight of 2D/657 = 32.7 kg



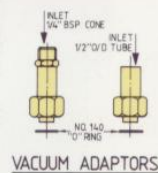
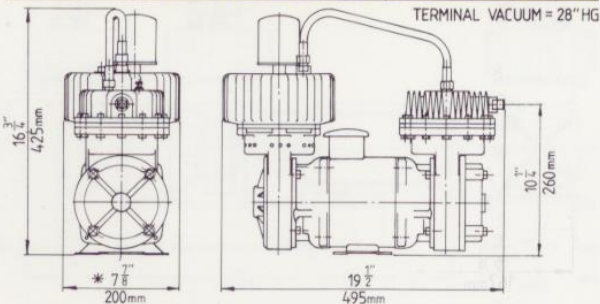
PRESSURE FLOWRATE CHARACTERISTICS

MODEL NO.	0 PSIG		20 PSIG		40 PSIG		60 PSIG		80 PSIG		100 PSIG	
	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM
2D/657	2.60	74	2.10	59.5	1.93	55	1.78	50	1.66	47	1.56	44

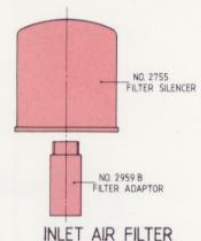
VACUUM FLOWRATE CHARACTERISTICS

MODEL NO.	0" HG		5" HG		10" HG		15" HG		20" HG		25" HG	
	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM
2D/657	2.60	74	2.10	59.5	1.70	48	1.20	34	0.80	23	0.30	8.5

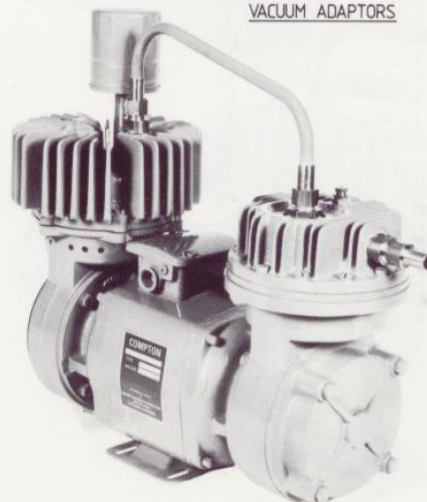
TERMINAL VACUUM = 28" HG



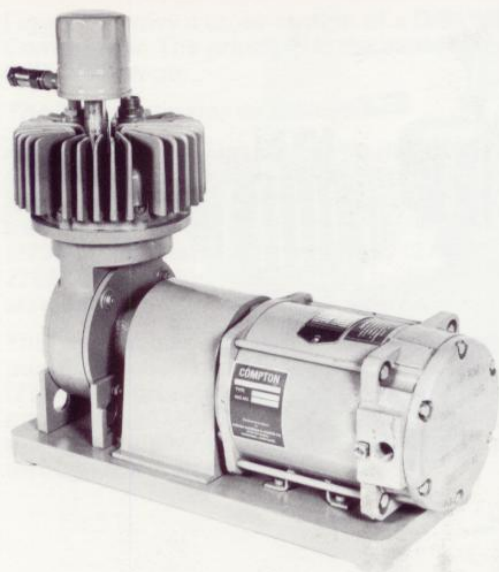
VACUUM ADAPTOR



INLET AIR FILTER



INDIRECTLY COUPLED D & 2D-TYPE COMPRESSORS & VACUUM PUMPS

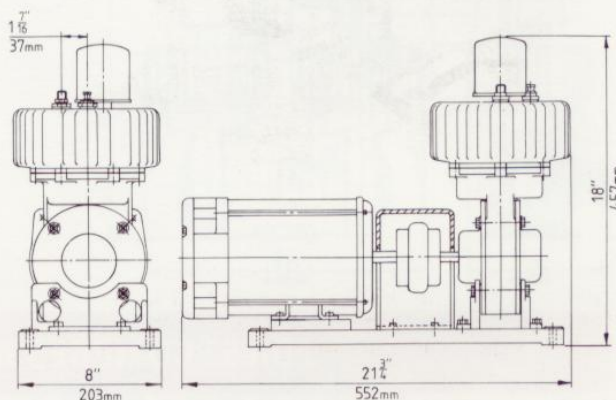
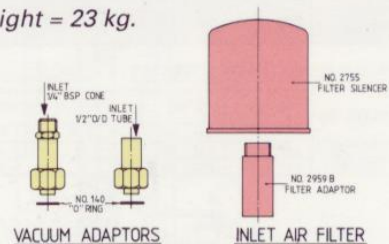


Both D & 2D type units are available with standard or flameproof motors in either 1 or 3 phase. The units can also be supplied without the motor, with 1/2" shaft extension.

The D-type unit is referred to as the D/296 and can be supplied to give any of the performance characteristics of the D-type compressors or vacuum pumps on page 3.

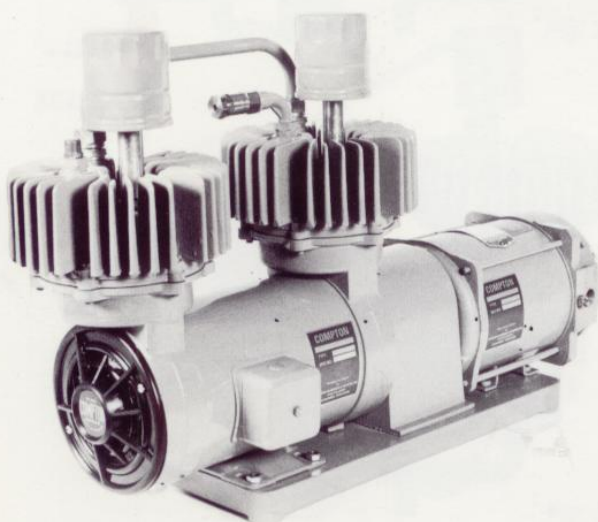
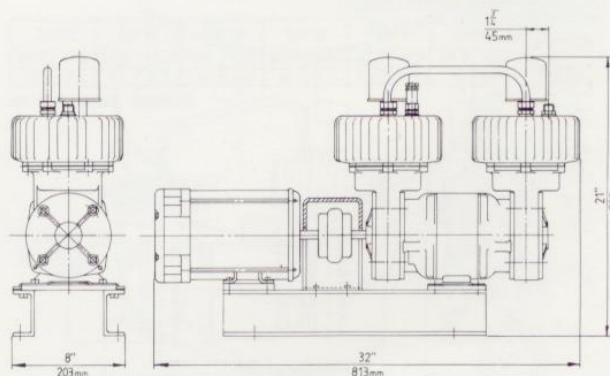
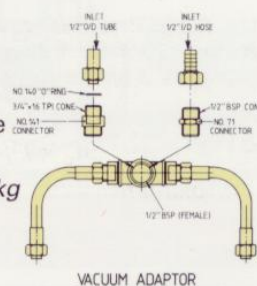
e.g. The D/296/189 would give the same performance figures as the D/189.

Approximate weight = 23 kg.

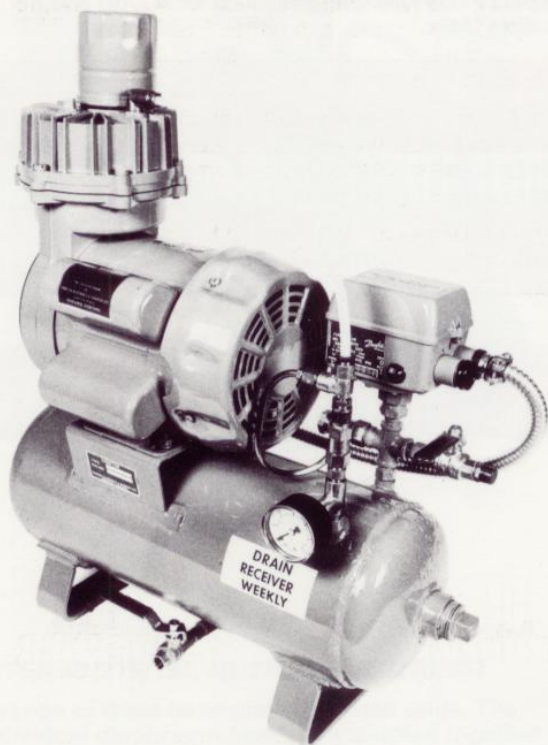


The 2D-type unit is referred to as the 2D/867 and again can be supplied to give any of the performance characteristics of the 2D-type units shown on page 5.

Approximate weight = 54.5 kg



RECEIVER MOUNTED D & 2D TYPE AUTOMATIC COMPRESSORS



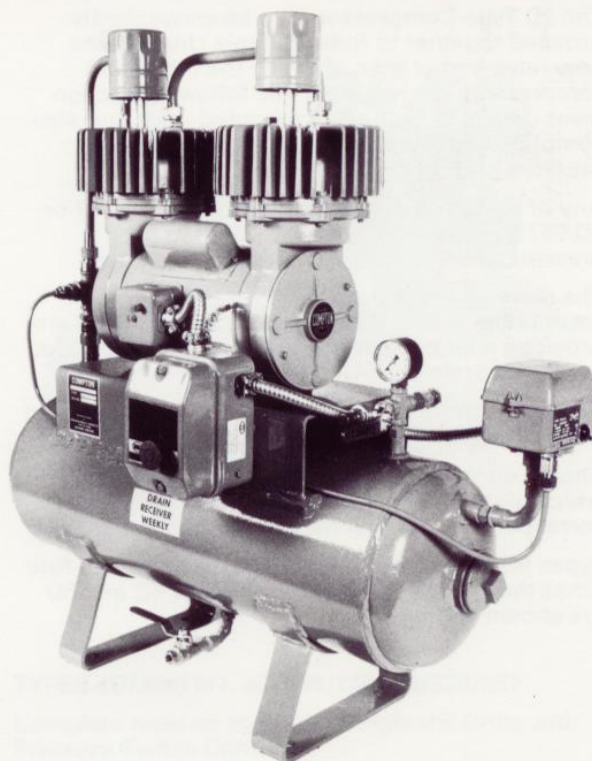
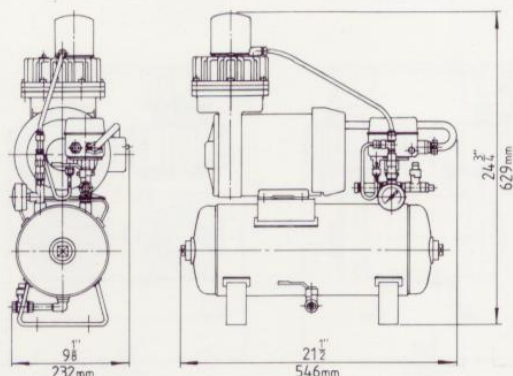
The D-type receiver mounted compressor is referred to as the D/3283. It is supplied with automatic pressure switch control, pressure gauge, safety valve and outlet valve. It can be supplied with any of the D-type units shown on page 3, giving the same performance figures.

e.g. The D/3283/189 would give the same performance figures as the D/189.

Maximum cut-out pressure - 60 P.S.I.G.

The actual size of the air receiver on the D/3283 is 19" (483mm) long x 7 1/4" (184mm) diameter.

Approximate weight of the D/3283 = 28.6 kg



The 2D-type unit is referred to as the 2D/800. It is supplied with pressure switch control, pressure gauge, safety valve, outlet lever valve and drain cock. It can be supplied with any of the 2D units shown on page 5, giving the same performance figures.

e.g. The 2D/800/657 would give the same performance figures as the 2D/657.

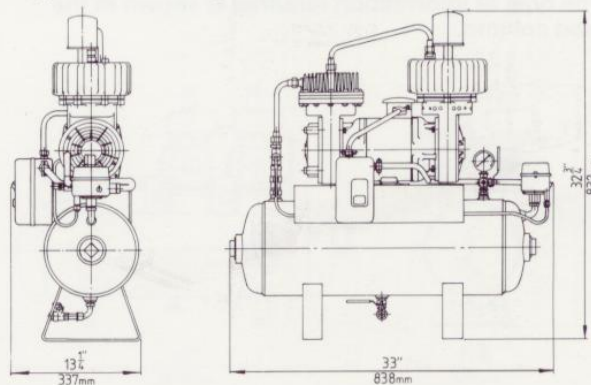
Maximum cut out pressure:

2D/800/197 - 45 P.S.I.G.

2D/800/657 - 100 P.S.I.G.

The actual size of the air receiver on the 2D/800 is 24" (610mm) x 9 1/2" (241mm) Dia.

Approximate weight of the 2D/800 = 66 kg



MULTIPLE UNITS

The 2D Type Compressors can be conveniently grouped together to form Multiple Units where flow rates higher than given by the individual compressors are required. The following section gives details of base-plate mounted units and also complete receiver mounted installations with pressure switch control.

Any of the 3 available 2D units - 2D245, 2D/197 or 2D/657 may be employed according to the pressure and volume required.

The air receivers are all constructed to the appropriate British Standard Specification and are provided with pressure gauge, safety valve, outlet valve and drain cock.

Automatic Units have individual Thermal-Overload Protection provided for each motor.

Shown on the next page are the 4D multiple units which give twice the flow rate of the corresponding 2D Unit for any particular pressure.

Types 6D and 8D will obviously give three and four times the flow rates respectively. Types 6D and 8D are shown on page 10.

Pressure flow rate characteristics for 4D, 6D and 8D Multiple Units.

MODEL NO.	0 PSIG		5 PSIG		10 PSIG		20 PSIG		40 PSIG		80 PSIG		100 PSIG	
	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM
4D/245	12.50	354	12.00	340	11.50	326	10.00	283	—	—	—	—	—	—
4D/197	8.40	238	8.00	227	7.40	210	7.00	198	5.00	142	—	—	—	—
4D/657	5.20	148	4.50	128	4.30	122	4.20	119	3.86	109	3.32	94	3.12	88

MODEL NO.	0 PSIG		5 PSIG		10 PSIG		20 PSIG		40 PSIG		80 PSIG		100 PSIG	
	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM
6D/245	18.75	531	18.00	510	17.25	489	15.00	425	—	—	—	—	—	—
6D/197	12.60	357	12.00	340	11.10	315	10.50	297	7.50	213	—	—	—	—
6D/657	7.80	222	6.75	192	6.45	183	6.30	179	5.79	164	4.98	141	4.68	133

MODEL NO.	0 PSIG		5 PSIG		10 PSIG		20 PSIG		40 PSIG		80 PSIG		100 PSIG	
	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM	SCFM	SLPM
8D/245	25.00	708	24.00	680	23.00	652	20.00	566	—	—	—	—	—	—
8D/197	16.80	476	16.00	454	14.80	420	14.00	396	10.00	284	—	—	—	—
8D/657	10.40	296	9.00	256	8.60	244	8.40	238	7.72	218	6.64	188	6.24	176

SELECTION OF UNITS

If a steady volume of air is required and there is no special reason for requiring a reserve then it is usually preferable to use a base-plated mounted unit without a receiver and allow it to run continuously, pressure control being effected by adjustment of the pressure relief valve. As with all proposed applications of our products we are only too happy to advise customers regarding the choice of base-plate mounted or receiver mounted units and hope you will send us the fullest possible details of your project.

The type of information required is shown in the next column.

Medium to be compressed or circulated.

Flow Rate

Inlet Pressure

Outlet Pressure

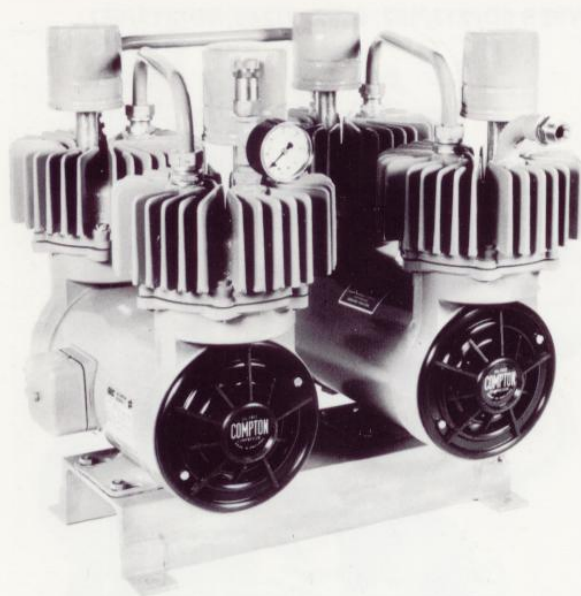
Inlet Temperature

Ambient Temperature

Duty:- Intermittent or Continuous.

Size limitations (if applicable)

4D MULTIPLE UNITS



TYPES 4D/275/197, 4D/275/245, 4D/275/657

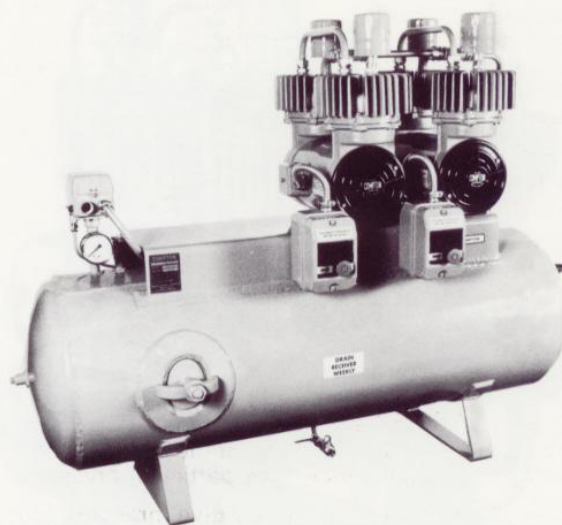
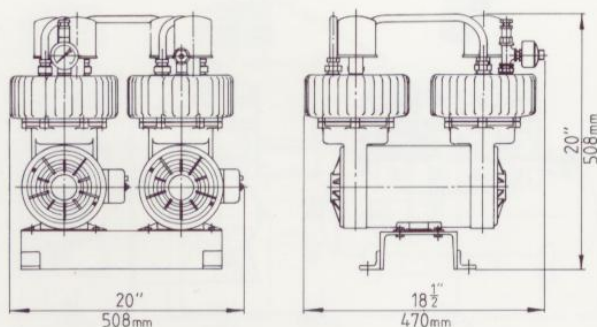
A range of three base-plate mounted units. The individual diaphragm heads are coupled together to provide a common output. Individual inlet filters are fitted as standard but an inlet manifold is available to enable air to be drawn from a remote source if required.

Fitted with adjustable relief valve and pressure gauge.

The 4D/275 can be built up as any of the above mentioned units giving twice the flow rates of the previous mentioned 2D Compressors and Vacuum Pumps.

e.g. The 4D/275/245 would give twice the performance figures of the 2D/245.

Approximate weight of 4D/275 = 61.3 kg



TYPES 4D/330/197, 4D/330/245, 4D/330/657

Complete receiver mounted Automatic Units with Pressure Switch Control.

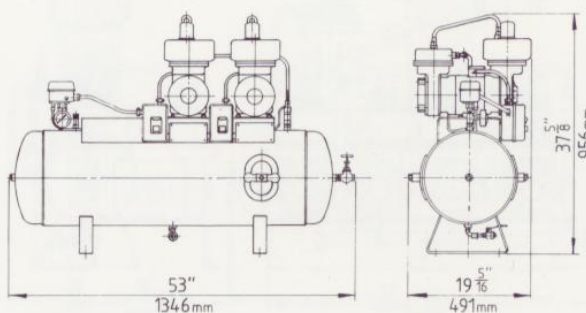
Receiver size: 15" dia. x 42" long.

Ready for installation.

The 4D/330 can be built up to give twice the performance figures of the previously mentioned 2D compressors.

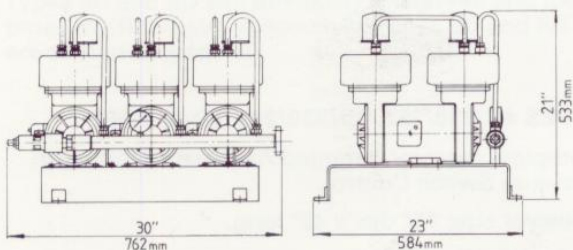
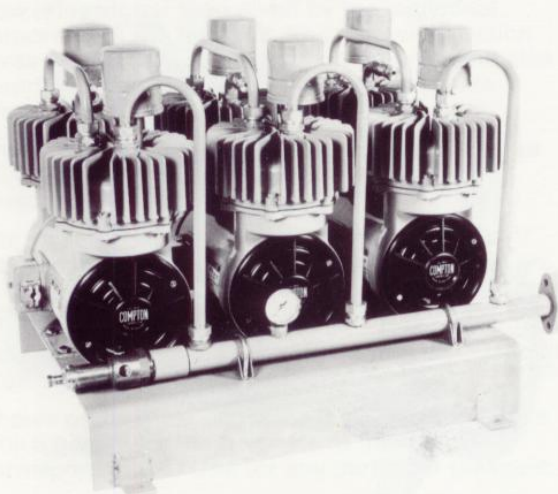
e.g. The 4D/330/657 would give twice the performance figures of the 2D/657.

Approximate weight of the 4D/330 = 233 kg.

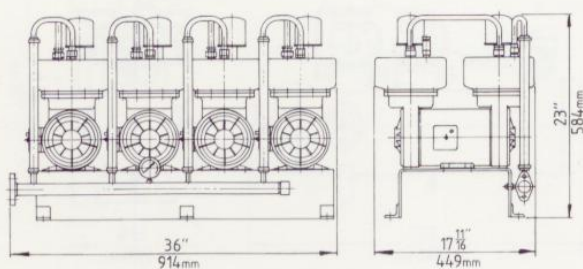
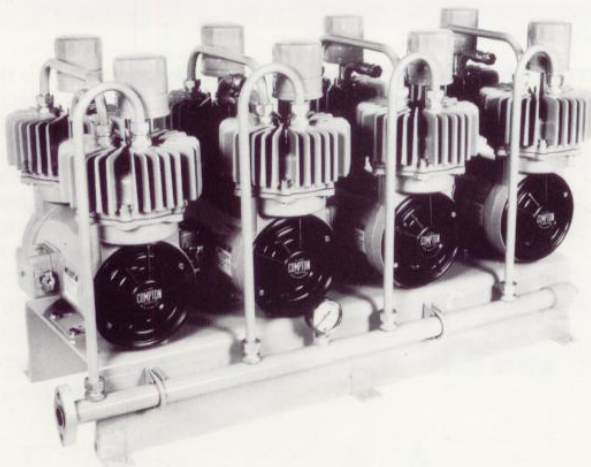


6D & 8D MULTIPLE UNITS

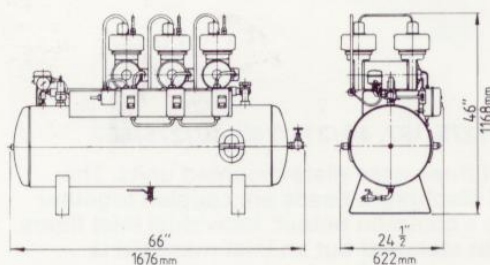
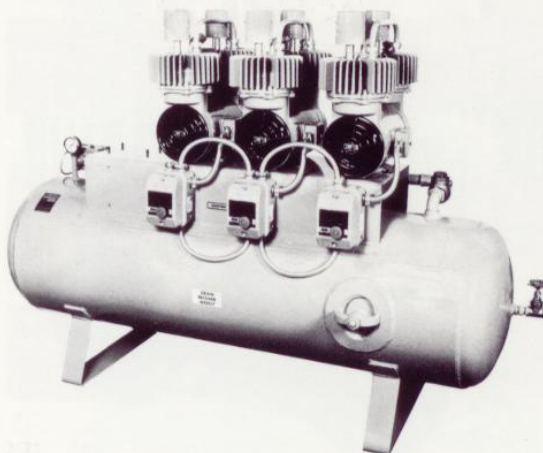
TYPES 6D/388/197, 6D/388/245, 6D/388/657



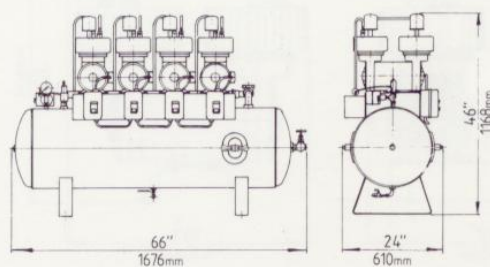
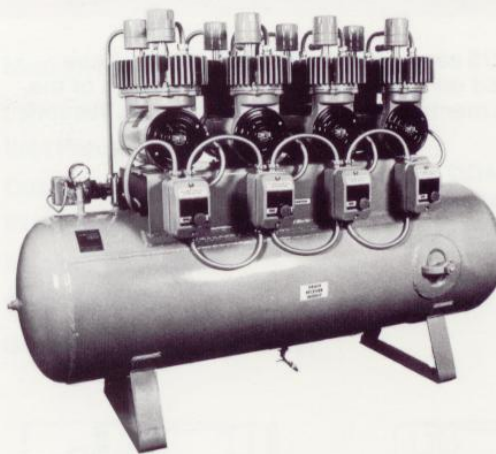
TYPES 8D/449/197, 8D/449/245, 8D/449/657



TYPES 6D/217/197, 6D/217/245, 6D/217/657



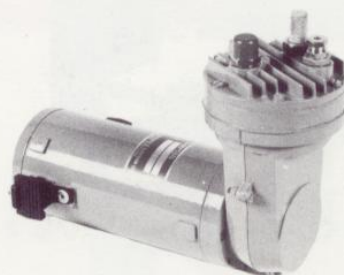
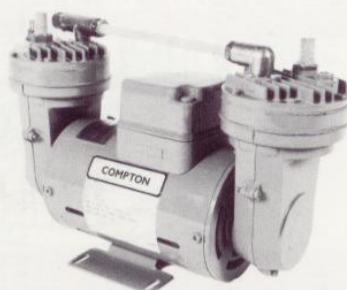
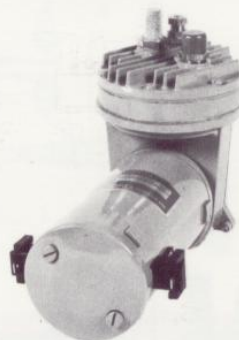
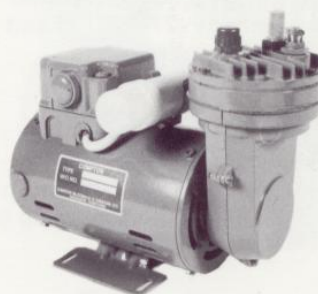
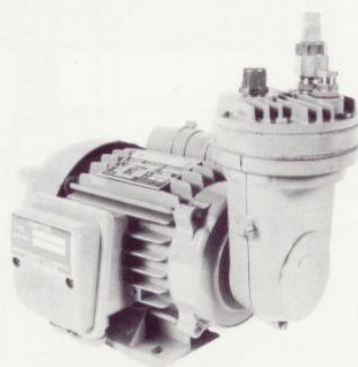
TYPES 8D/400/197, 8D/400/245, 8D/400/657



COMPTON COMPRESSORS

THE D/351VM RANGE OF COMPRESSORS & VACUUM PUMPS

- Low noise level.
- Compact.
- Components easily accessible for service.



O I L - F R E E C O M P R E S S O R S A N D V A C U U M P U M P S

THE VALVE MEMBRANE PRINCIPLE

Figure 1 shows a cross-section of a D/351VM Air Compressor. The principle is the same for all the D/351VM range.

The Pump operates as follows.

An eccentric (2752) mounted on the motor shaft carries a grease packed and sealed ball bearing (2761). As the shaft rotates reciprocating motion is transmitted via the connecting rod/bottom washer (2733) to the diaphragm assembly (2760, 2735 and 2759). The assembly is secured by the centre screw (2759).

This motion (see figures 2 and 3) provides a pumping action inside the valve support plate (2744) and actuates the flaps on the valve membrane (2746) thus admitting air into the pump through the filter silencer (2785), and discharging it through the outlet connection (2850).

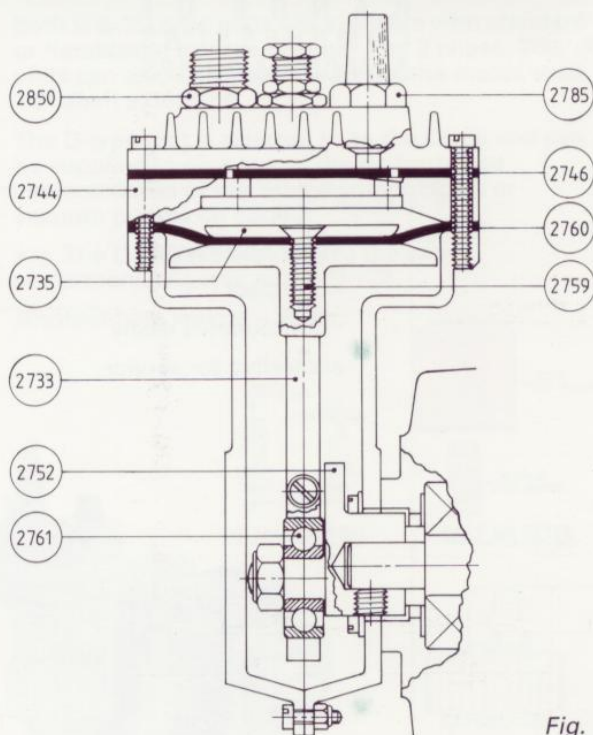


Fig. 1

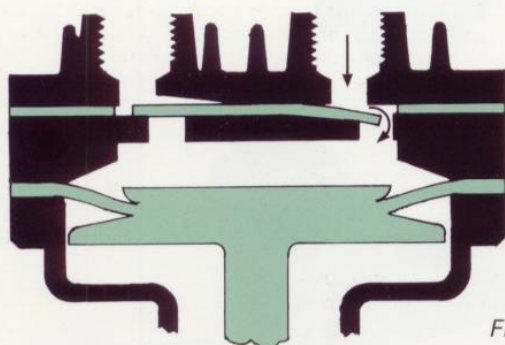


Fig. 2

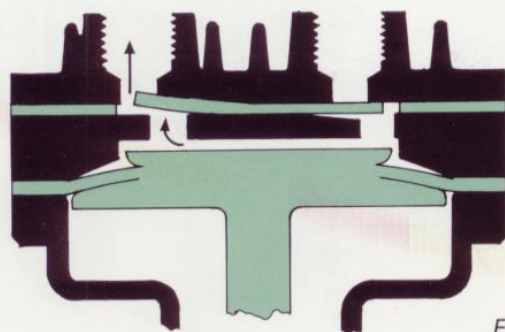
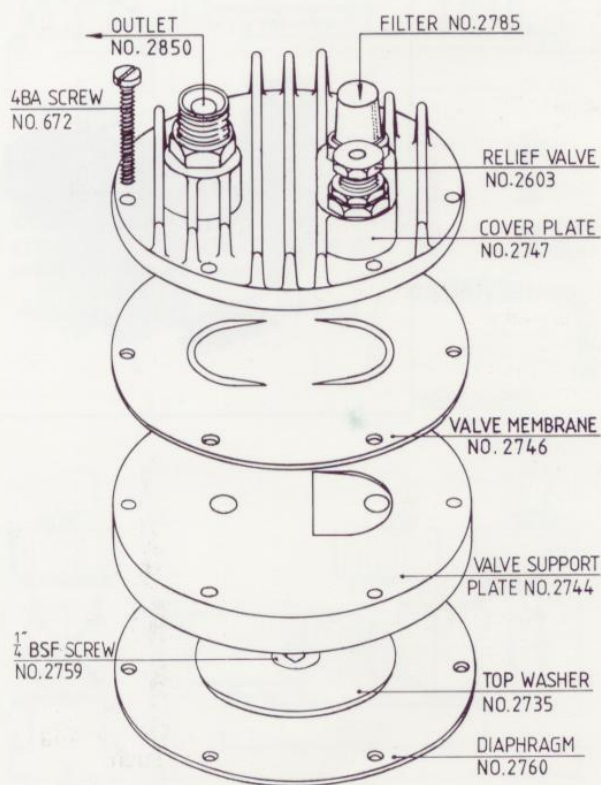
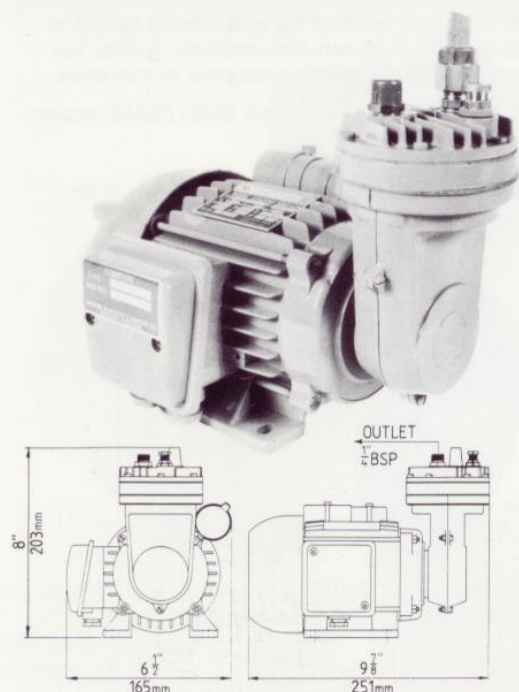


Fig. 3



D/351VM COMPRESSOR & VACUUM PUMP



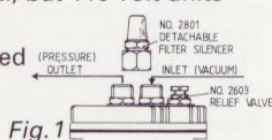
TOTALLY ENCLOSED FAN COOLED IP44

This unit is one of our D/351VM range. It is continuously rated, is quiet in operation and may be connected to provide either pressure or vacuum.

It is normally powered by a 90 watt motor wound for 220/240 volts, 1 ph., 50 Hz., but 110 volt units are also available.

Other voltages can be supplied if quantities are sufficient.

Approximate weight = 5kg

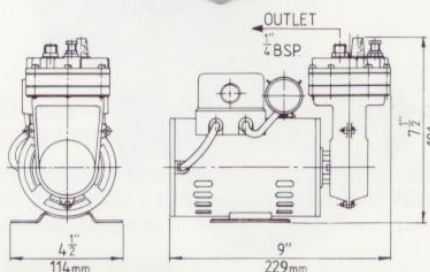
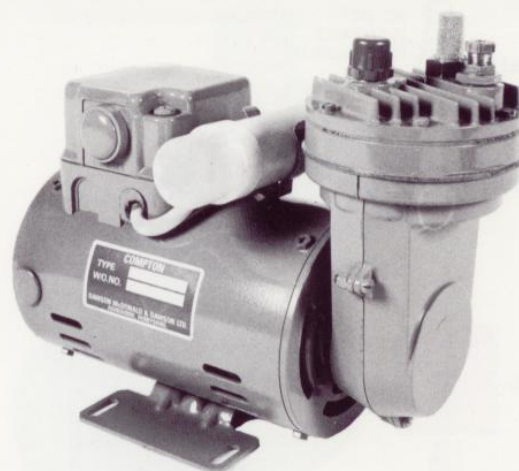


CHANGEOVER FROM PRESSURE TO VACUUM AND VICE VERSA.

Very often the pump is required either for use solely as a compressor or solely as a vacuum pump. In such cases this should be specified when ordering and the connections will be fitted in the appropriate ports in the head of the machine, i.e. the filter is fitted on the inlet port for compression duties and on the outlet port when used for vacuum duties. If it is required to change over from pressure to vacuum from time to time then a filter can be supplied which is easily changed from one connection to the other as required (see Fig.1). This will be supplied when machines are ordered as Compressor/Vacuum Pumps.

PRESSURE REGULATOR

Compressors can be supplied fitted with a Pressure Regulator Valve and Gauge (see Fig. 2) which allow easy and quick setting of the working pressure. This is particularly useful for such applications as airbrush work.



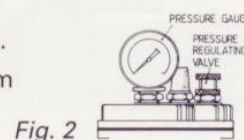
VENTILATED, DRIP PROOF IP 22

This unit is another of our D/351VM range, ideal for applications where space is limited. It is also continuously rated, is quiet in operation and may be connected to provide either pressure or vacuum.

It is normally powered by a 90 watt motor wound for 220/240 volts, 1 ph., 50 Hz., but 110 volt units are also available.

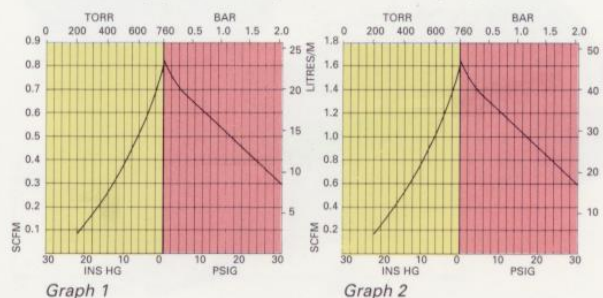
Approximate weight = 5 kg.

Note - The changeover from pressure to vacuum is as stated in Fig.1.

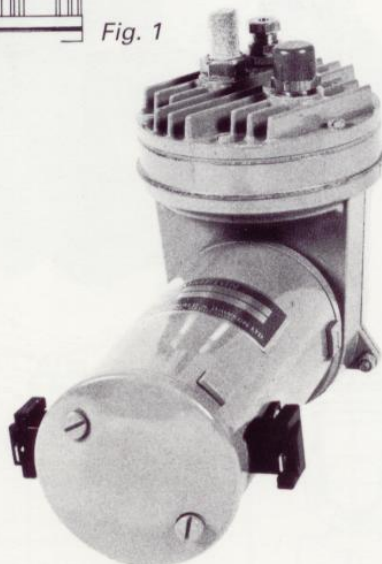
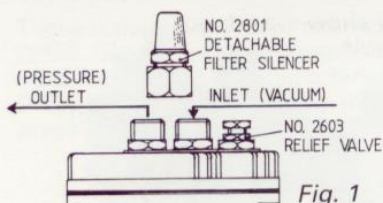


This unit can also be supplied with a pressure regulator and valve as shown in Fig.2 above.

The standard motors are normally 90 watt, 1 ph., 50 Hz., 1400 r.p.m., see graph 1, but 2800 r.p.m. motors are available thus giving twice the flow rate for any particular pressure, see graph 2.



12/24VDC D/351VM COMPRESSORS & VACUUM PUMPS PM44

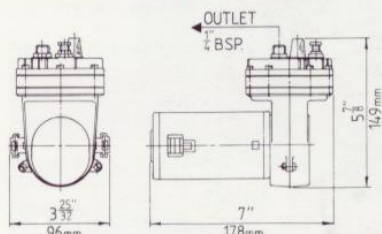


This D/351VM unit is ideal for use where space is limited due to its reduced dimensions. It may be connected to provide either pressure or vacuum.

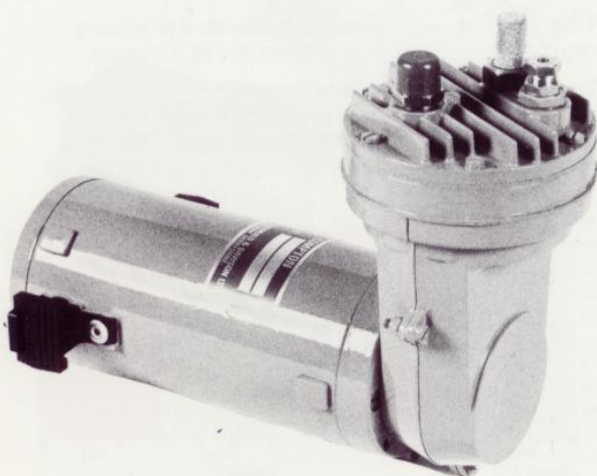
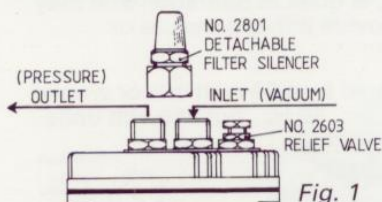
The unit is powered by a 12 volt EMD PM44 motor.

Approximate weight = 2.3 kg.

The changeover from pressure to vacuum is as detailed on page 13 and shown in Fig. 1.



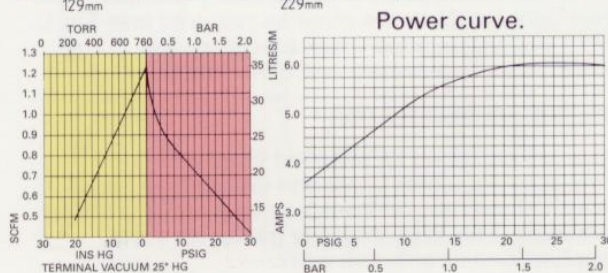
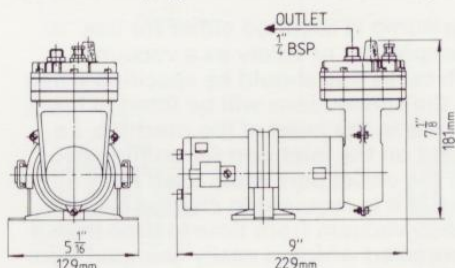
12/24VDC D/351VM COMPRESSORS & VACUUM PUMPS PM50



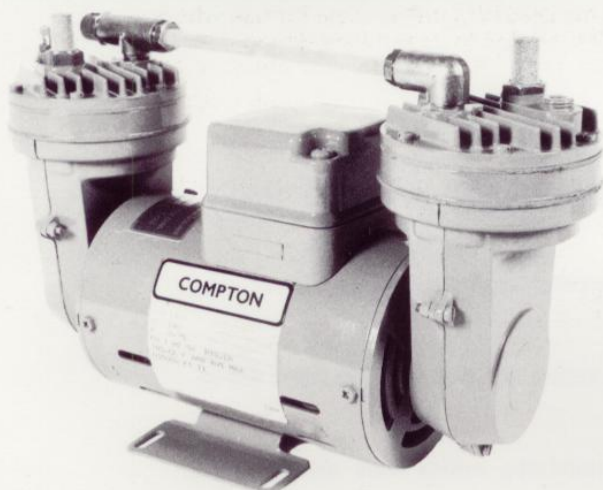
This is another of our D/351VM units. It may be connected to provide either pressure or vacuum. The unit is powered by either a 12 or 24 volt EMD PM50 motor, therefore making it ideal for mobile use.

Approximate weight = 4.9 kg.

The changeover from pressure to vacuum is as detailed on page 13 and shown in Fig. 1.



2D/351VM COMPRESSOR & VACUUM PUMP TYPE VENTILATED, DRIP PROOF IP22



VENTILATED DRIP PROOF IP22

This unit is a double headed version of the D/351VM, thus giving twice the capacity. It is continuously rated, is quiet in operation and may be connected to provide either pressure or vacuum. It is normally arranged as a single stage compressor or vacuum pump, but can be connected as a two stage vacuum pump if desired.

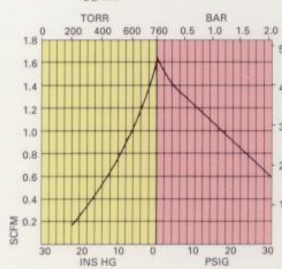
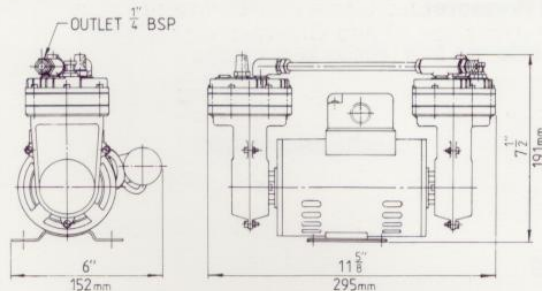
MAX VACUUM:

Single Stage: 24" Hg. (182 Torr)

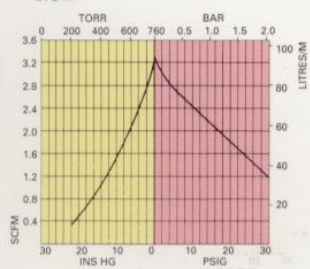
Two Stage: 28" Hg. (50.8 Torr)

Approximate weight = 5.8 kg

The standard motors are normally 90 watt, 1 ph., 50 Hz., 1400 r.p.m. wound for either 220/240 volts or 110 volts, see Graph 1, but 2800 r.p.m., 220/240 volt motors are available giving twice the flow rate for any particular pressure, see Graph 2.

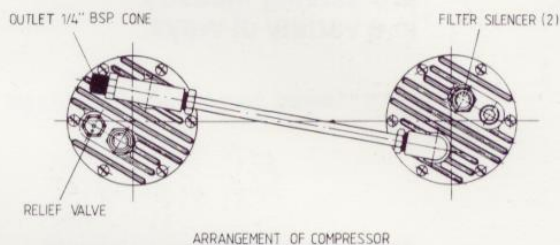


Graph 1

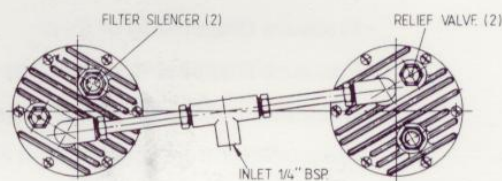


Graph 2

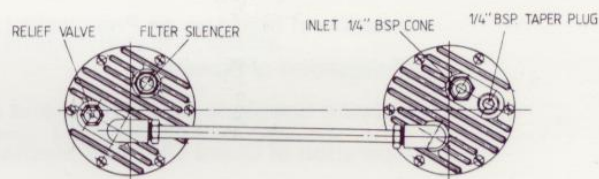
The diagrams below show the various arrangements available.



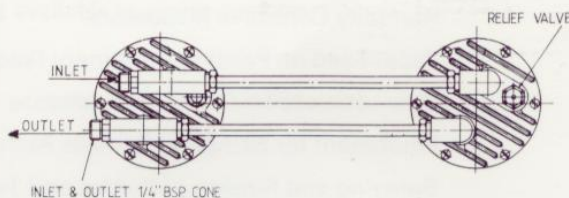
ARRANGEMENT OF COMPRESSOR



ARRANGEMENT OF SINGLE STAGE VACUUM PUMP



ARRANGEMENT OF TWO STAGE VACUUM PUMP



ARRANGEMENT OF COMPRESSOR DRAWING AIR FROM A REMOTE SOURCE, OR AS A SINGLE STAGE VACUUM PUMP WITH A PIPED DISCHARGE

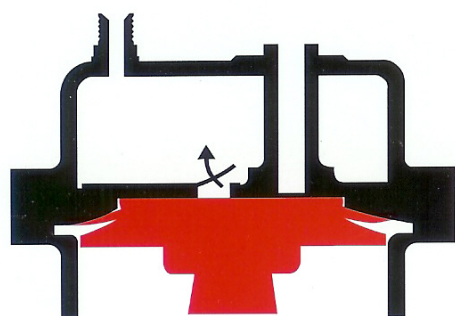
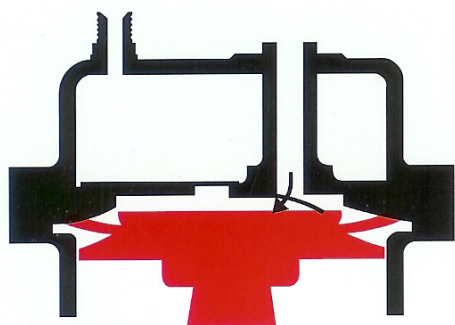
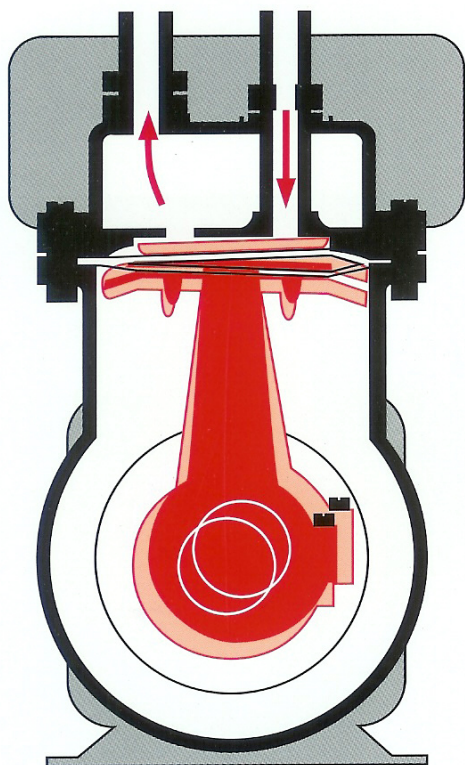
COMPTON
COMPRESSORS

*for the
movement
of
air and
gases*



OIL - FREE
COMPRESSORS
AND
VACUUM
PUMPS

COMPTON COMPRESSORS



COMPTON

'COMPTON' Oil-free Compressors and Vacuum Pumps have been manufactured in Ashbourne for many years.

At the heart of the unit is the unique diaphragm principle, which, coupled with stainless steel valves, guarantees a quality pump ensuring complete oil-free operation.

This leaflet is designed to show some of the machines we have available and give details of the pressures and vacuum characteristics of which they are capable.

The units detailed belong to our standard range, but we pride ourselves on being able to customise our units to meet specific requirements.

Our design and drawing offices are always available to advise customers on any special needs, and are able on many occasions to offer a unit to meet their specifications.

SPECIFY COMPTON

- Suitable for both pressure and vacuum
- Oil-free air/gas for analysis
- Environmentally friendly – sealed for life bearings
- Large main Bearings for greater strength and longer life
- Stainless Steel long lasting Valves
- High Pressures up to 100 p.s.i.g. (6.9 bar)
- Diaphragms easily replaced
- Motors to suit a wide variety of voltages and frequencies
- Continuously rated for long periods of operation
- Custom-built units a speciality

FULLY BACKED BY

- On site demonstrations/evaluations
- Product availability

SERVICE SUPPORT

- Our service centre will quickly process estimates, repairs, spare parts etc, for greater Customer satisfaction.

DEVELOPMENT SUPPORT

- Our development department is able to modify or adapt many of our standard units to give special features or requirements.



O I L - F R E E C O M P R E S S O R S A N D V A C U U M P U M P S

OIL-FREE DIAPHRAGM COMPRESSORS & VACUUM PUMPS

Units can be indirectly mounted to flameproof motors as shown. The D type unit is referred to as the D/296/- and can be supplied to give any of the performance characteristics of the single ended D units. Similarly the 2D unit is referred to as the 2D/867/-

Model	Voltage	PERFORMANCE			DIMENSIONS			Weight Kg
		Flow L/M	Vacuum mm.Hg	Pressure Bar	L. mm.	W. mm.	H. mm.	
D/180	A, B, C	78	610	1.4	300 x 251 x 311			16.5
D/245S	A, B, C	102	610	2.0	300 x 251 x 311			16.5
D/617	A, B, C	65	533	1.4	300 x 251 x 311			16.5
D/189S	A, B, C	60	610	4.1	300 x 251 x 311			16.5
D/189	A, B, C	60	610	4.1	307 x 251 x 393			17.25
D/245	A, B, C	102	610	2.0	307 x 251 x 393			17.25
D/497	12V, 24V DC	102	610	1.4	302 x 167 x 349			12
2D/245	A, B, C	204	610	1.4	415 x 212 x 412			30
2D/197	A, B, C	120	610	4.1	415 x 212 x 412			30
2D/657	A, C	74	711	7	478 x 200 x 405			32.7
4D/275/245	A, B, C	354	610	1.4	455 x 490 x 488			61.3
4D/275/197	A, B, C	238	610	4.1	455 x 490 x 488			61.3
4D/275/657	A, C	148	711	7	510 x 395 x 470			61.3

Voltage

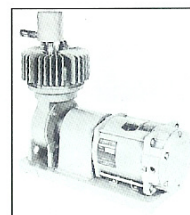
A = 220/240V, 1 phase, 50/60 Hz.

B = 110V, 1 phase, 50/60 Hz.

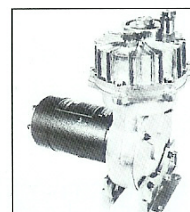
C = 380/440V, 3 phase, 50/60 Hz.

Model 6D/388/- will give 3 times the value of the appropriate 2D.

Model 8D/449/- will give 4 times the value of the appropriate 2D.



D/296/-



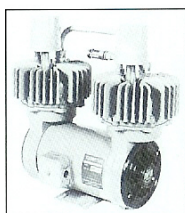
D/497



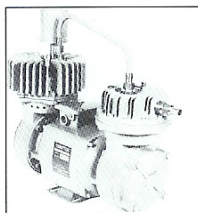
D/189



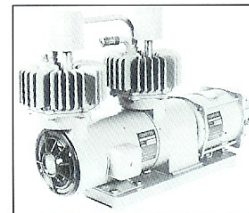
D/180



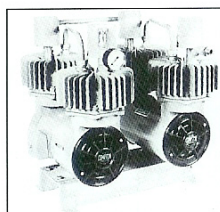
2D/197



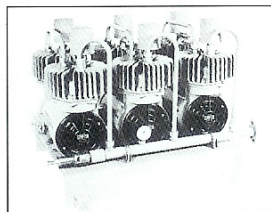
2D/657



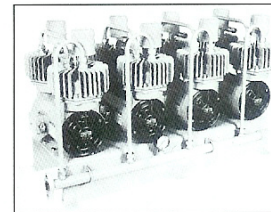
2D/867/-



4D/275/-



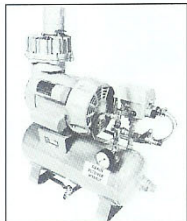
6D/388/-



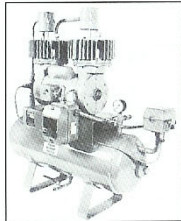
8D/449/-

RECEIVER MOUNTED MODELS

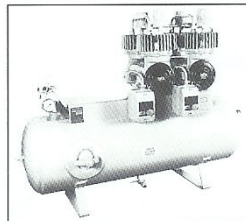
Any of the Compton Models can be mounted on Receivers to give a completely Automatic Compressed Air Installation. Single models are referred to as D/3283/- followed by 189 or 245 etc., which denotes the unit in question. Similarly for 2D/800/-, 4D/330/-, 6D/217/-.



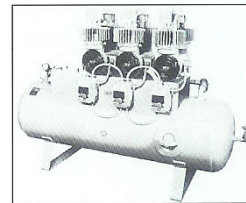
D/3283/-



2D/800/-



4D/330/-



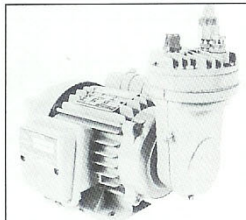
6D/217/-

THE D/351 VM RANGE

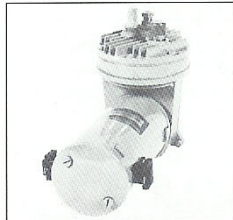
The D/351 VM Range of Compressors and Vacuum Pumps, incorporating the unique Compton Valve Membrane Principle. The valve membrane incorporates both the inlet and outlet valves offering an arrangement which easily facilitates the changing of the valves when necessary.



D/351VM IP22



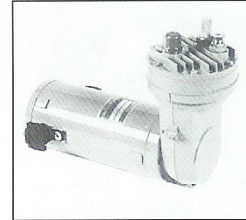
D/351VM IP44



D/351VM PM44



2D/351VM IP22



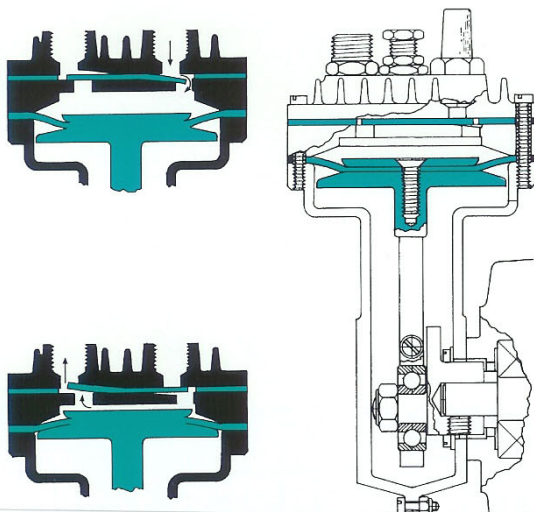
D/351VM PM50

PERFORMANCE DIMENSIONS

Model	Voltage	Flow L/M	Vacuum mm.Hg	Pressure Bar	L. mm.	W. mm.	H. mm.	Weight Kg
D/351VM IP44	110v or 240v	23	610	2	251 x 165 x 203			5
D/351VM IP22	110v or 240v	23	610	2	229 x 114 x 191			5
D/351VM PM44	12v or 24V DC	29	584	2	178 x 96 x 149			2.3
D/351VM PM50	12v or 24V DC	35	635	2	229 x 129 x 181			4.9
2D/351VM IP22	110v or 240v	46	610	2	295 x 152 x 191			5.8

Type 2D/351VM when arranged as a two stage vacuum pump will pull a terminal vacuum of 712mm. Hg.

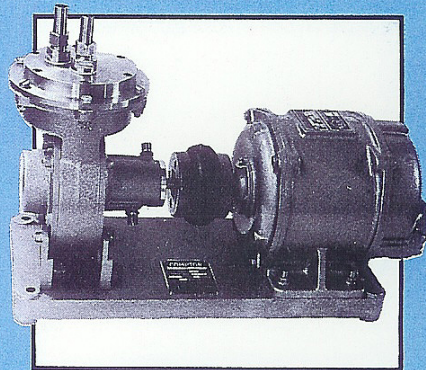
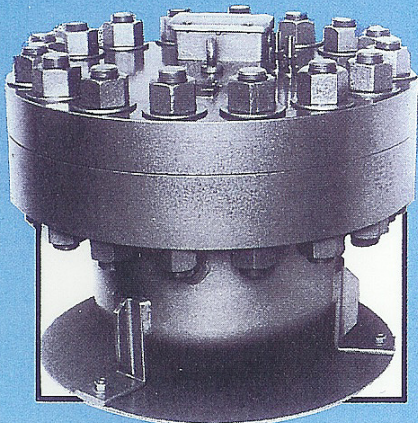
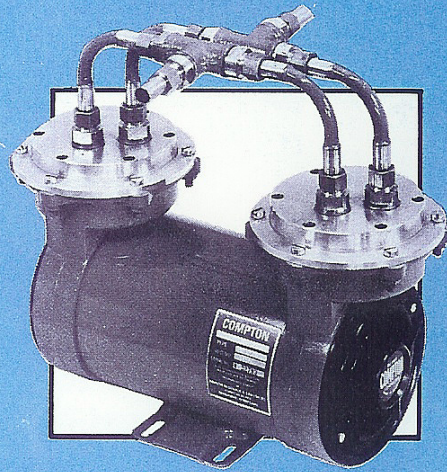
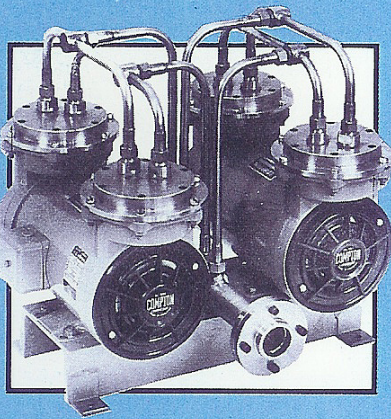
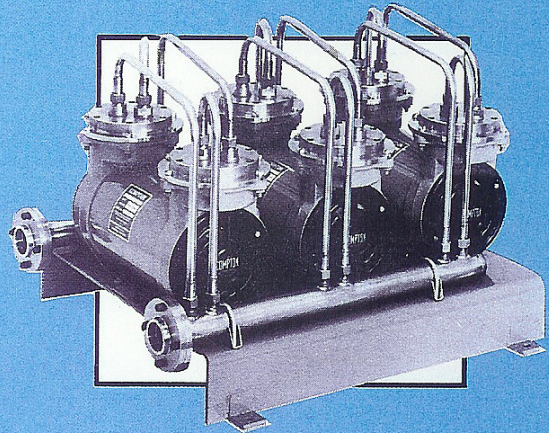
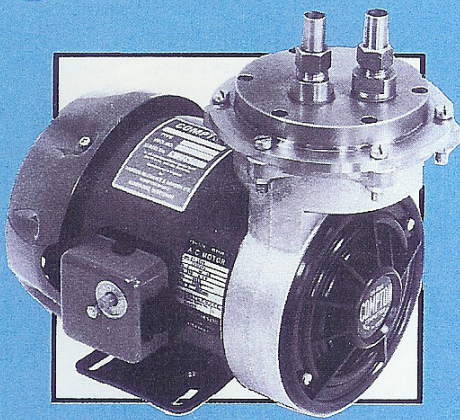
- Low noise level.
- Compact.
- Components easily accessible for service.



BS.EN.ISO 9002 Certificate No. 1194

COMPTON

*Oil free compressors
& gas circulating pumps*

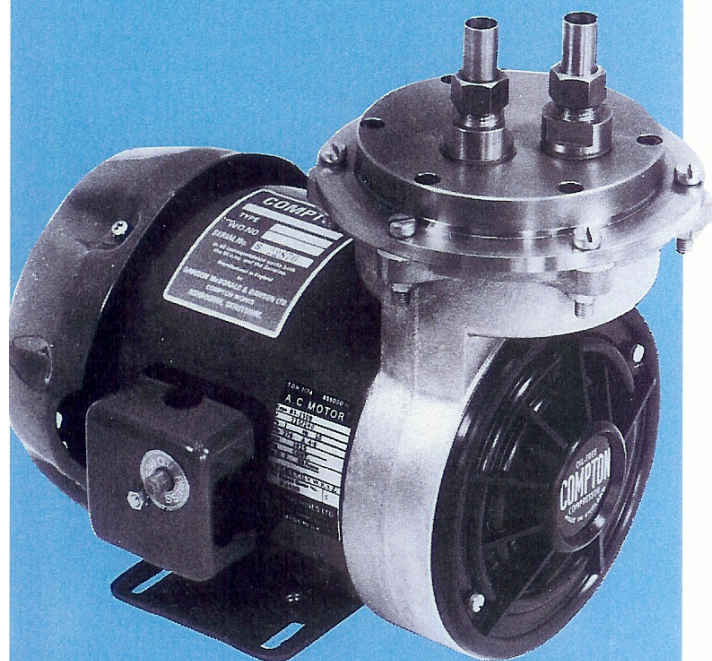


D/416-6-4-2E-1E

A single head unit available with a range of eccentric/valve plate combinations to suit various flow rate/pressure conditions.

Types D/416-4 and D/416-6 are intended for operation with inlet pressures not greatly above atmospheric; under these conditions they will have the following flow rates at various output pressures.

OUTPUT PRESSURE P.S.I.G.	TYPE	0	5	10	15	20	30	40
FLOW RATE S.C.F.M.	D/416-6	3.12	3.0	2.87	2.62	2.5		
	D/416-4	2.1	1.9	1.8	1.65	1.5	1.2	0.9



Types D/416-2E and D/416-1E are suitable for smaller flow rates or for applications where the inlet pressure is appreciably above atmospheric. The flow rate of these two types may be calculated from the following formula:

$$V = aP_1 - bP_o,$$

where V = flow rate S.C.F.M.

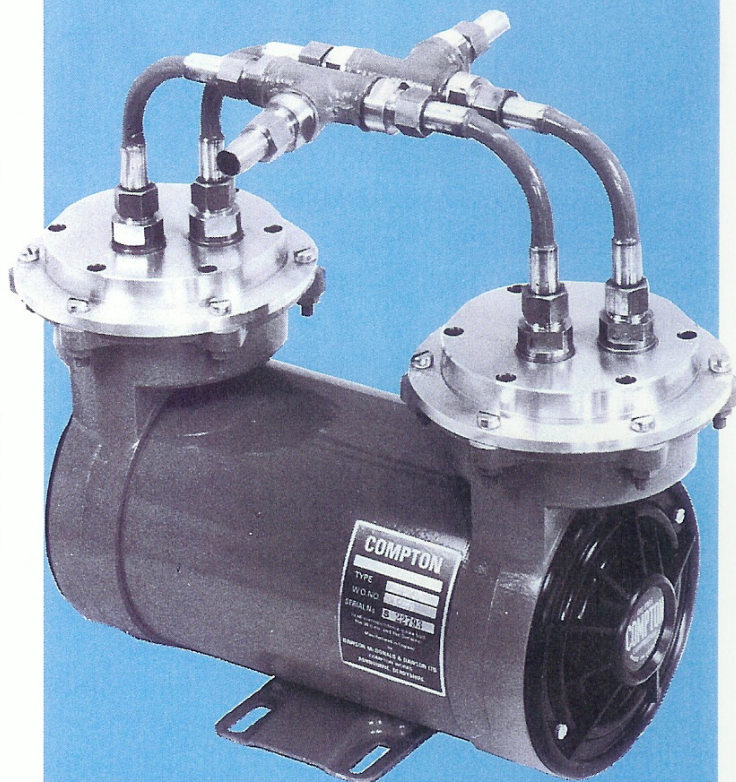
P_1 = Inlet pressure P.S.I.A.

P_o = Outlet pressure P.S.I.A. a and b are constants depending on the type of pump.

For D/416-2E $a = 0.11$, $b = 0.032$.

For D/416-1E $a = 0.096$, $b = 0.052$.

2D/416-6-4-2E-1E



2D/416 compressors having twice the capacity of the D/416 types are available as shown above.

The capacity of these 2D units may be calculated by multiplying by 2 the flow rate figures for a single head machine.

VACUUM PUMPS

All the 416 range of machines are suitable for vacuum duties and, of course, the exhaust may be piped away or recirculated as desired.

2D/416 units may be connected in series or parallel for vacuum duties i.e. single or two stage; single stage units will draw a vacuum of 23"-24" HG, two stage units at least 28" HG.

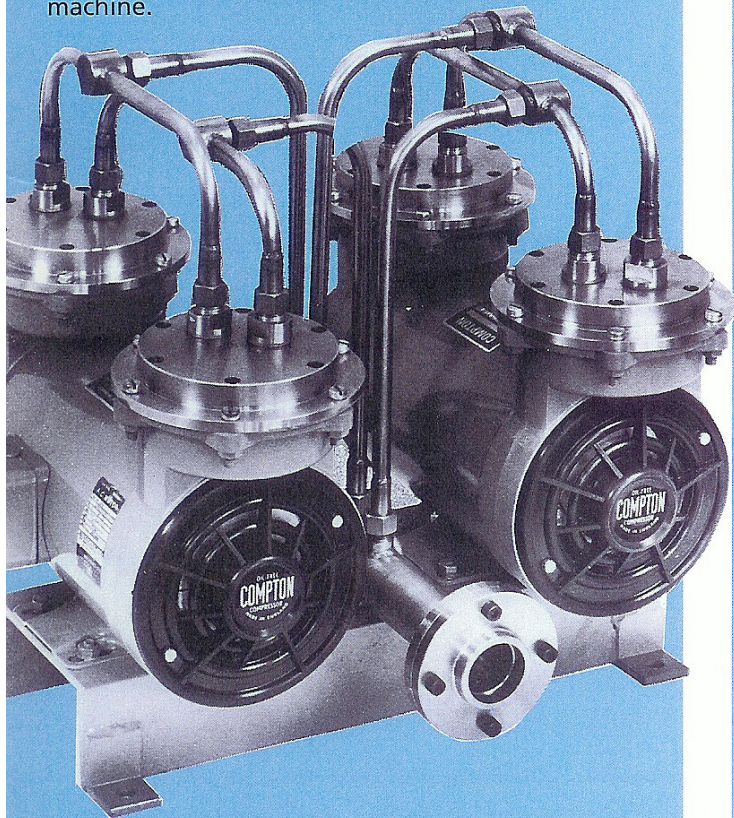
Curves are available showing the performance of various units under vacuum conditions.

4D/416-6-4-2E-1E multiple units

Convenient and compact arrangements using two of the double-units described earlier are available.

In this design the inlet and outlet pipework is grouped in such a manner that a "straight-through" effect is achieved making very easy the inclusion of the unit in pipework systems.

The capacity of any 4D units is, of course, four times the capacity of the equivalent single-head machine.



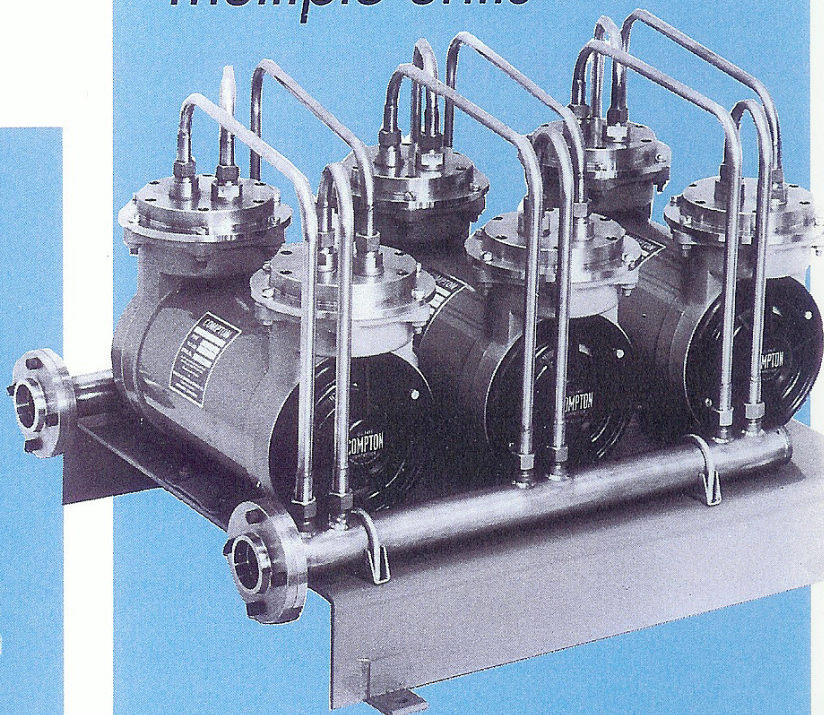
VACUUM DUTIES

4D machines may be arranged as single stage, two stage or four stage units.

The vacuum drawn by each of the types is as follows:

- 1 stage 24" HG.
- 2 stage 28" HG.
- 4 stage within 0.5mm of the barometer.

6D/416-6-4-2E-1E multiple units



The 6D unit shown here is an extension of the multiple unit principle and consists of three-2D units on a common base-plate.

The capacity of the 6D unit is 6 times the equivalent single-head machine.

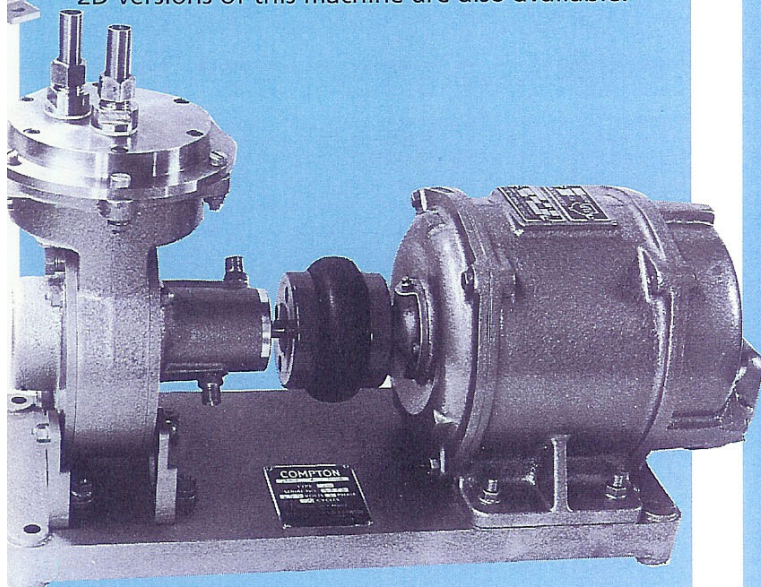
6D units are suitable for either pressure, circulation or vacuum duties.

D/296-6-4-2E-1E

To meet cases where a flame-proof or other special motor, which cannot be manufactured readily in our special design, is required, the arrangement illustrated below is available.

The compressor can be supplied with characteristics similar to any of the single head machines.

2D versions of this machine are also available.



Pressurised gas circulating pumps



In this arrangement a diaphragm pump is built within a welded steel pressure vessel which is maintained at a pressure equal to the inlet pressure to the pump. This reduces the differential pressure across the diaphragm and makes it possible to circulate gases in systems having a high static pressure, providing only a small differential pressure is required to effect circulation.

Tests have been carried out at pressures up to 1500 P.S.I.G.

By making use of the range of compressors available, machines of capacities to suit many applications can be designed.

The enquiry form at the back of this booklet will show the sort of information needed to prepare a quotation.