

# D12-70 OIL FREE rotary blowers, vacuum pumps and gas boosters



- ✓ Oil Free Air
- ✓ No Oil Consumption
- ✓ Compact Design
- ✓ Low Noise Level
- ✓ Vibration-Free Running
- ✓ Easy Maintenance
- ✓ Pulsation-Free Delivery

## SPECIFICATION

These positive displacement sliding vane machines are designed with a slotted rotor mounted eccentrically in the cylinder housing blades manufactured from a special grade of carbon. The cylinder bore is honed to give maximum blade life. The drive end bearing arrangement gives positive rotor location and prevents mechanical contact with the end covers. Shaft seals are fitted to prevent grease leakage from the bearings.

The blade depth can be quickly checked without removal of any parts or pipework.

All machines in this range are aircooled with a fan fitted at the rear end to assist cooling. Overheating of vacuum pumps continuously working at 457 mm Hg (18" Hg) and above is eliminated by the introduction of cool filtered ballast air.

Motorised units are flange mounted to electric motors with a cooling fan and flexible coupling enclosed in the coupling ring. When different operating speeds are required, baseplate mounted units with vee belt drive are available.

When supplied as gas boosters, these machines are suitable for handling dry natural gas, nitrogen, carbon dioxide and other non-corrosive gases. Outputs are effected by the specific gravity of the gas and therefore differ from the performance charts opposite, which are based on standard inlet conditions (16°C and 1 barA). A diaphragm-operated pressure relief valve is mounted in the bypass pipe to return surplus gas to the inlet. The bypass incorporates radiator type heat exchanger, either fan or non fan assist dependant on the degree of turndown on gas throughput required.

All machines can be built with reverse rotation, giving opposite hand inlet and outlet positions.

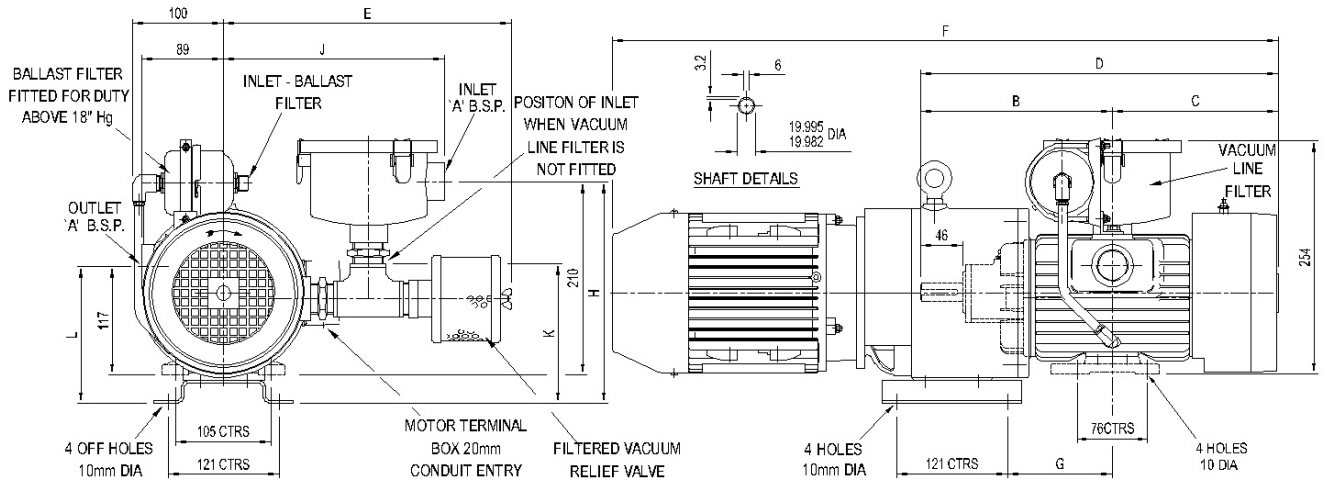
# PERFORMANCE CHARTS & DIMENSIONS

## D12-32 VACUUM PUMPS – CAPACITY AND POWER

Model	Speed	Displacement m <sup>3</sup> /hr	254 mmHg		381 mmHg		508 mmHg		559 mmHg	
			Air Flow m <sup>3</sup> /hr	Power kW	Air Flow m <sup>3</sup> /hr	Power kW	Air Flow m <sup>3</sup> /hr	Power kW	Air Flow m <sup>3</sup> /hr	Power kW
D12	1300	18.3	14.5	0.50	14.1	0.57	12.5	0.62	10.7	0.64
	1440	20.4	16.1	0.56	15.6	0.63	13.8	0.69	11.9	0.71
	1500	21.2	16.8	0.58	16.2	0.66	14.4	0.72	12.4	0.74
	1600	22.6	17.9	0.62	17.3	0.70	15.3	0.77	13.2	0.79
	1700	24.1	19.0	0.66	18.4	0.74	16.3	0.81	14.0	0.84
D18	1440	30.6	24.6	0.79	23.6	0.89	20.9	0.98	17.8	1.01
	1500	31.8	25.6	0.82	24.6	0.93	21.8	1.02	18.5	1.05
	1600	34.0	27.3	0.88	26.2	0.99	23.2	1.09	19.8	1.12
	1700	36.0	29.0	0.93	27.9	1.05	24.7	1.16	21.0	1.19
D26	1440	44.2	35.3	0.99	33.8	1.13	30.2	1.26	25.5	1.31
	1500	46.0	36.8	1.03	35.2	1.17	31.5	1.31	26.6	1.36
	1600	49.1	39.2	1.10	37.6	1.26	33.6	1.40	28.3	1.46
	1700	52.1	41.7	1.17	39.9	1.33	35.7	1.49	30.1	1.55
D32	1440	54.3	43.3	1.20	41.4	1.35	37.0	1.53	31.4	1.60
	1500	56.5	45.1	1.25	43.1	1.41	38.5	1.59	32.7	1.67
	1600	60.3	48.1	1.33	46.0	1.50	41.1	1.70	34.9	1.78
	1700	64.2	51.1	1.42	48.9	1.60	43.7	1.81	37.1	1.89

BARESHAFT VACUUM PUMPS							
Model	A	B	C	D	E	J	Kgs
D12	½"	165	135	300	284	215	16.0
D18	¾"	187	158	345	297	223	20.2
D26	1"	218	195	406	307	233	24.2
D32	1"	210	180	390	307	233	22.4

MOTORISED VACUUM PUMPS											
Model	kW	A	C	E	F	G	H	J	K	L	Kgs
D12	0.55	½"	135	284	633	162	228	215	142	151	42.4
	0.75										42.4
D18	0.75	¾"	158	297	677	167	236	223	149	151	46.7
	1.1				686						50.2
D26	1.1	1"	195	307	747	172	242	233	154	151	54.2
	1.5				772						58.2
	1.1				730						52.4
D32	1.5	1"	180	307	755	172	242	233	152	149	56.4
	2.2				793						64.1

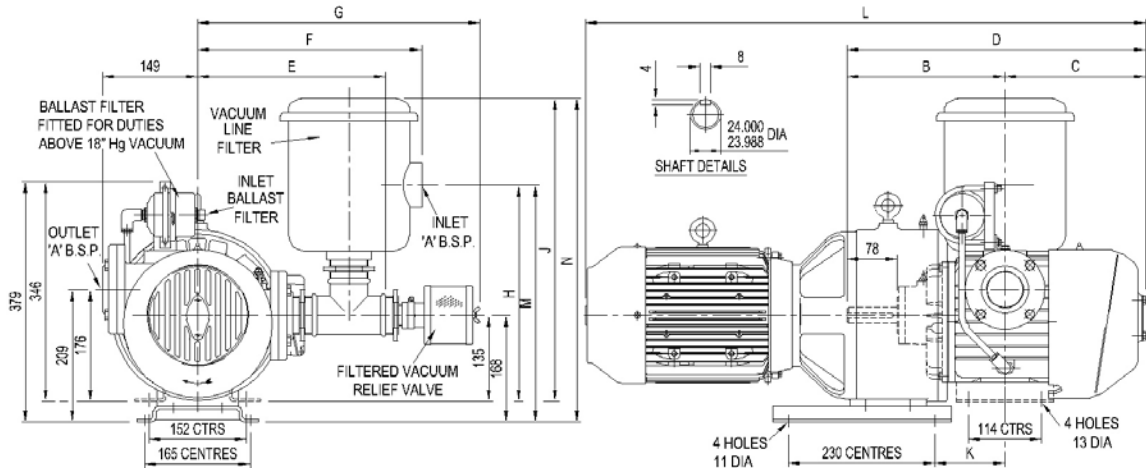


## D38-70 VACUUM PUMPS – CAPACITY AND POWER

Model	Speed	Displacement m <sup>3</sup> /hr	254 mmHg		381 mmHg		508 mmHg		559 mmHg	
			Air Flow m <sup>3</sup> /hr	Power kW	Air Flow m <sup>3</sup> /hr	Power kW	Air Flow m <sup>3</sup> /hr	Power kW	Air Flow m <sup>3</sup> /hr	Power kW
D38	960	64.5	49.4	0.88	46.5	1.09	42.3	1.28	40.8	1.35
	1000	67.2	51.6	0.92	48.4	1.14	44.1	1.33	42.5	1.41
	1100	73.9	56.6	1.01	53.3	1.25	48.5	1.47	46.7	1.55
	1200	80.7	61.7	1.10	58.1	1.36	52.9	1.60	51.0	1.70
D51	960	86.6	70.6	1.37	66.7	1.66	60.1	1.95	56.0	2.02
	1000	90.2	73.5	1.43	69.5	1.73	62.9	2.03	58.3	2.10
	1100	99.2	80.9	1.57	76.4	1.90	68.9	2.23	64.2	2.31
	1200	108.2	88.2	1.71	83.4	2.10	75.1	2.44	70.0	2.52
D70	960	118.9	99.8	1.90	94.6	2.20	86.8	2.48	81.5	2.56
	1000	123.8	104.0	1.98	98.5	2.30	90.4	2.58	84.9	2.67
	1100	136.2	114.3	2.18	108.4	2.52	99.5	2.84	93.4	2.93
	1200	148.6	124.7	2.37	118.2	2.75	108.5	3.10	101.9	3.20

BARESHAFT VACUUM PUMPS										
Model	A	B	C	D	E	F	G	H	J	KGS
D38	1.5"	225	184	309	279	307	322	329	386	45.9
D51	2"	248	206	454	279	307	322	329	386	52.7
D70	2"	279	238	517	303	328	452	358	492	65.9

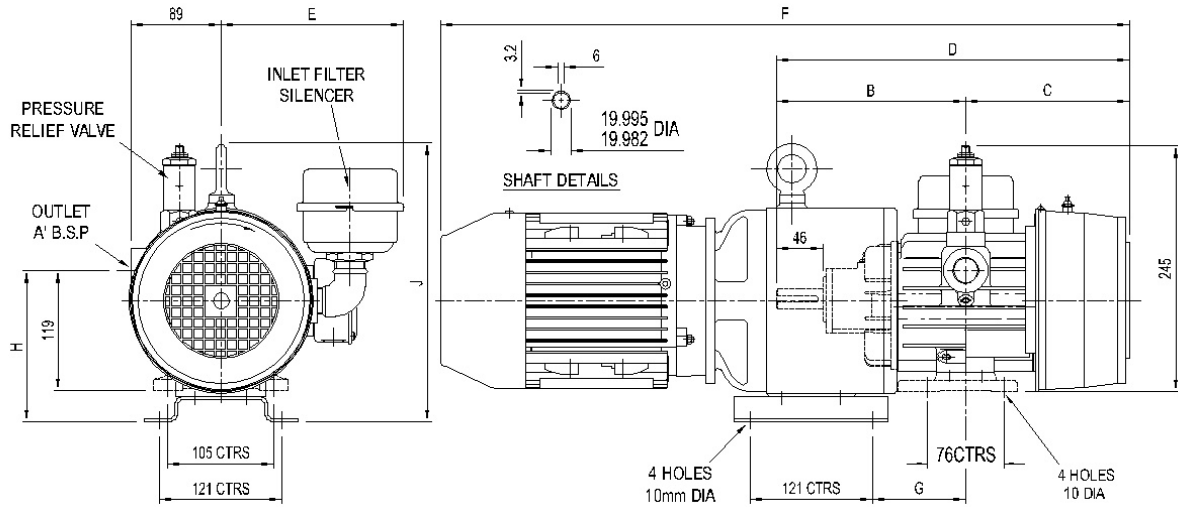
MOTORISED VACUUM PUMPS										
Model	kW	A	C	E	F	G	L	M	N	KGS
D38	.75						783			87.5
	1.1	1.5"	184	279	307	322	808	362	419	94.0
	1.5						809			93.7
D51	1.1						853			100.0
	1.5	2"	206	279	307	322	854	362	419	100.5
	2.2						860			113.4
	3.0						921			128.8
	1.5						917			116.7
D70	2.2	2"	238	303	328	452	923	391	525	126.6
	3.0						984			148.1



# PERFORMANCE CHARTS & DIMENSIONS

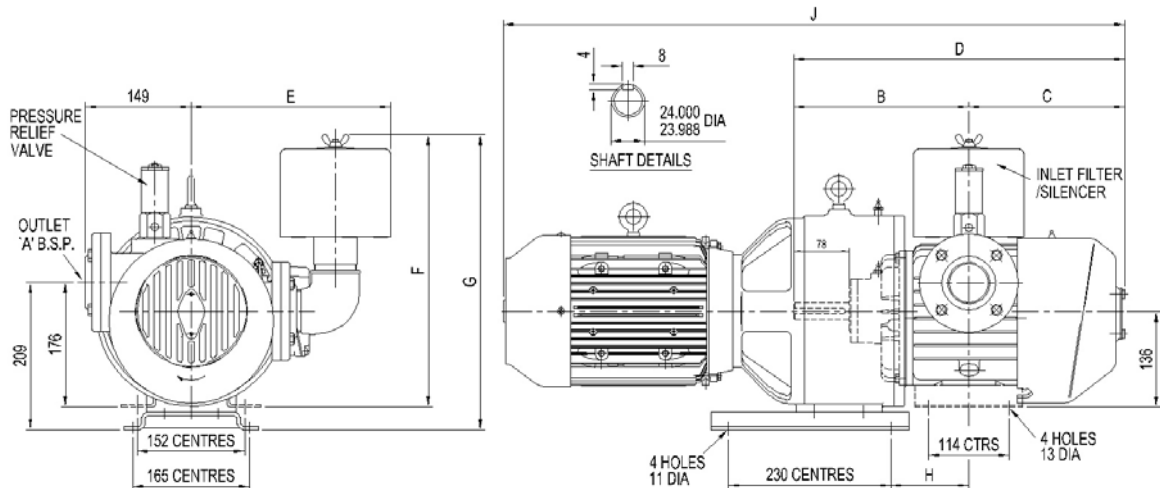
## D12-32 BLOWERS – FREE AIR DELIVERED AND POWER

Model	Speed	Displacement m <sup>3</sup> /hr	345 mbar		690 mbar		1035 mbar		1380 mbar		BARESHAFT BLOWERS									
			Air Flow m <sup>3</sup> /hr	Power kW	Air Flow m <sup>3</sup> /hr	Power kW	Air Flow m <sup>3</sup> /hr	Power kW	Air Flow m <sup>3</sup> /hr	Power kW	Model	A	B	C	D	E	Kgs			
D12	1300	18.3	14.3	0.55	12.7	0.65	11.0	0.75	9.5	0.90	D12	½"	165	153	318	180	14			
	1440	20.4	15.8	0.60	14.1	0.75	12.2	0.80	10.5	1.00	D18	¾"	187	175	362	180	19			
	1500	21.2	16.5	0.60	14.6	0.75	12.7	0.90	10.8	1.05	D26	1"	218	204	422	186	24			
	1600	22.6	17.5	0.65	15.6	0.80	13.6	1.00	11.9	1.10	D32	1"	210	196	406	186	22			
	1700	24.1	18.5	0.75	16.6	0.90	14.4	1.05	12.7	1.20										
D18	1440	30.6	24.1	0.80	21.7	1.05	19.5	1.30	17.3	1.50	MOTORISED BLOWERS									
	1500	31.8	25.1	0.90	22.6	1.10	20.4	1.35	18.1	1.60	Model	kW	A	C	E	F	G	H	J	Kgs
	1600	34.0	26.8	1.00	24.1	1.20	21.7	1.40	19.3	1.65	D12	.75	½"	153	180	664	67	151	277	40.2
	1700	36.0	28.5	1.05	25.6	1.30	23.1	1.50	20.9	1.70		1.1				639				45.7
D26	1440	44.2	34.6	1.20	31.4	1.65	28.2	2.10	25.0	2.55	D18	1.5	¾"	175	180	708	90	151	277	44.5
	1500	46.0	36.0	1.30	32.8	1.70	29.4	2.20	26.3	2.60		2.2				683				49.0
	1600	49.1	38.5	1.35	35.0	1.80	31.2	2.30	27.8	2.70	D26	1.1				770	120			50.1
	1700	52.1	40.9	1.40	37.0	1.95	33.3	2.50	29.7	3.00		1.5	1"	204	186	770		151	277	54.6
												2.2				874	138			66.0
D32	1440	54.3	42.6	1.40	38.7	2.00	34.8	2.55	30.9	3.05	D26	3.0				809				66.0
	1500	56.5	44.3	1.50	40.2	2.10	36.2	2.70	32.2	3.15		2.2				858				64.5
	1600	60.3	47.4	1.60	43.0	2.25	38.7	2.85	34.4	3.40	D32	3.0	1"	196	186	793	130	149	275	64.5
	1700	64.2	50.3	1.70	45.7	2.40	41.1	3.00	36.5	3.60		4.0				858				64.5
											5.5				793				64.5	



## D38-70 BLOWERS – FREE AIR DELIVERED AND POWER

Model	Speed	Displacement m <sup>3</sup> /hr	345 mbar		690 mbar		1035 mbar		1380 mbar		BARESHAFT BLOWERS									
			Air Flow m <sup>3</sup> /hr	Power kW	Air Flow m <sup>3</sup> /hr	Power kW	Air Flow m <sup>3</sup> /hr	Power kW	Air Flow m <sup>3</sup> /hr	Power kW	Model	A	B	C	D	E	F	KGS		
D38	960	64.5	50.8	1.00	46.5	1.40	42.3	1.95	38.0	2.50	D38	1.5"	225	199	424	275	340	43.4		
	1000	67.2	52.8	1.05	48.4	1.50	44.0	2.00	39.5	2.55	D51	2"	248	220	468	275	340	50.2		
	1100	73.9	58.2	1.10	53.3	1.65	48.4	2.25	43.3	2.80	D70	2"	279	253	532	288	383	60.2		
	1200	80.7	63.5	1.20	58.1	1.80	52.8	2.50	47.2	3.05	MOTORISED BLOWERS									
D51	960	86.6	72.2	1.50	66.4	2.10	60.4	2.80	54.5	3.40	Model	kW	A	C	E	G	H	J	KGS	
	1000	90.2	75.2	1.60	69.1	2.20	63.0	2.85	56.9	3.45	D38	.75	1.5"	199	275	373	90	782	85	
	1100	99.2	82.7	1.70	76.1	2.40	69.3	3.15	63.0	3.85		1.1							807	91.5
D70	1200	108.2	90.2	1.80	83.0	2.60	75.6	3.45	68.2	4.20	D51	1.5							809	93.3
	960	118.9	101.5	2.25	93.7	3.05	85.9	4.00	78.1	4.95		2.2							815	104.1
	1000	123.8	105.8	2.30	97.6	3.25	89.5	4.15	81.1	5.05	D70	1.1	2"	220	275	373	113	852	98.3	
	1100	136.2	116.3	2.55	107.3	3.55	98.5	4.50	89.5	5.50		1.5							854	100.0
	1200	148.6	126.8	2.80	117.2	3.85	107.3	4.95	97.4	6.05		2.2							860	112.9



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