

Republic offers the DVT series of dry-running rotary vane combination pumps and are ideally suited for oil free applications. They are single stage, air-cooled and direct driven for continuous operation. These rugged pumps are simple to install and easy to service and maintain. The smaller pumps come with a motor integrated, while the larger pumps are available with or without motor. These pumps have a displacement ranging from 9 to 95 CFM (16 to 164 m<sup>3</sup>/hr), a maximum vacuum of 17.7 in. Hg and maximum pressure of 8.7 psig.



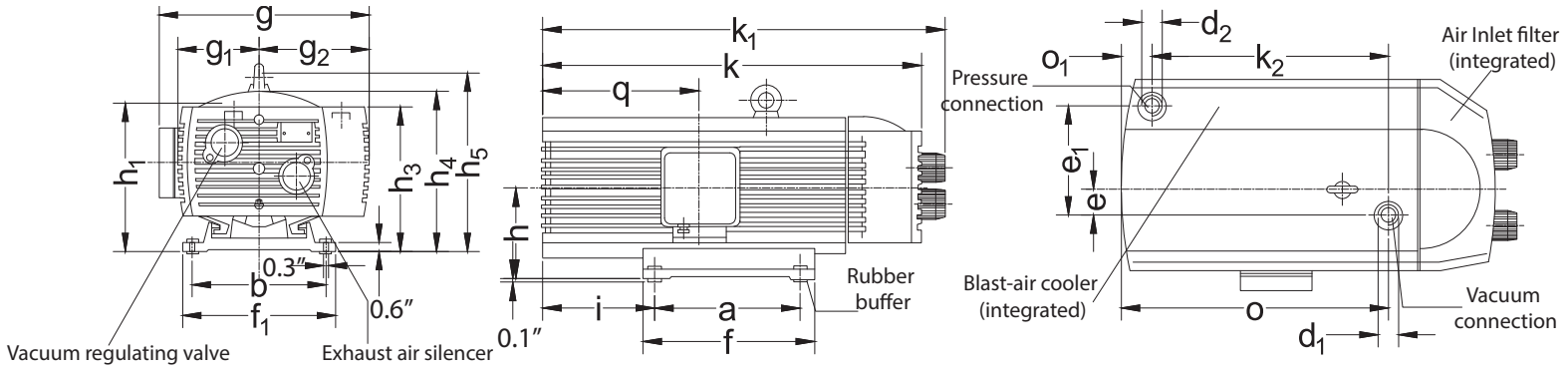
### PERFORMANCE

Model	Motor Output 3 Phase		Voltage 3 Phase (V)		Motor Output 1 Phase		Voltage 1 Phase (V)		Noise Level (dB)		Speed (rpm)		Weight (lb/kg)
	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	
416	0.75 kw	1.21 hp	175-260/300-450	202-300/350-450	0.75 kw	1.21 hp	230	230	69	72	1420	1700	80/36
425K	1.1 kw	1.74 hp	195-255/330-440	190-290/330-550	1.1 kw	1.74 hp	230	230	69	72	1420	1700	80/36
440K	1.85 kw	2.95 hp	195-255/330-440	190-290/330-550	1.85 kw	2.9 hp	230	230	68	71	1420	1700	100/45

Model	Measurement	Pressure (psig)	50 Hz Vacuum (in. Hg)					60 Hz Vacuum (in. Hg)				
			0	7.5	12	15	18	0	7.5	12	15	18
416	Vacuum flow (cfm/m <sup>3</sup> /hr)	3.63	9.1/15.5	6.5/11.1	-	3.8/6.5	-	10.6/18.1	7.8/13.3	-	4.7/8.0	-
	Pressure flow (cfm/m <sup>3</sup> /hr)		-	-	-	-	-	-	-	-	-	-
	Power (hp/kw)		1.0/0.42	1.0/0.43	-	1.0/0.43	-	1.0/0.52	1.0/0.56	-	1.0/0.54	-
	Vacuum flow (cfm/m <sup>3</sup> /hr)	7.25	8.8/15.0	5.9/10.1	-	3.5/6.0	-	10.5/17.9	7.2/12.3	-	4.3/7.3	-
	Pressure flow (cfm/m <sup>3</sup> /hr)		-	-	-	-	-	-	-	-	-	
	Power (hp/kw)		1.0/0.48	1.0/0.48	-	1.0/0.53	-	1.0/0.58	1.0/0.59	-	1.0/0.62	-
425K	Vacuum flow (cfm/m <sup>3</sup> /hr)	5.80	14.0/23.8	-	7.5/12.7	5.9/10.0	4.2/7.2	16.8/28.6	-	9.2/15.6	7.2/12.3	5.4/9.1
	Pressure flow (cfm/m <sup>3</sup> /hr)		14.9/25.3	-	11.8/20.0	10.9/18.6	10.2/17.3	18.1/30.8	-	13.8/23.4	12.7/21.6	11.6/19.7
	Power (hp/kw)		1.0/0.71	-	1.5/0.91	1.5/0.96	1.5/1.00	1.5/0.95	-	1.5/1.10	2.01/1.14	2.01/1.18
	Vacuum flow (cfm/m <sup>3</sup> /hr)	7.25	13.8/23.4	-	7.4/12.5	5.8/9.9	4.2/7.1	16.8/28.5	-	9.1/15.5	7.2/12.3	5.4/9.1
	Pressure flow (cfm/m <sup>3</sup> /hr)		14.7/24.9	-	11.5/19.6	10.7/18.2	9.9/16.9	18.0/30.7	-	13.7/23.3	12.6/21.5	11.5/19.6
	Power (hp/kw)		1.0/0.75	-	1.5/0.95	1.5/1.00	1.5/1.05	1.5/1.02	-	2.01/1.16	2.0/1.20	2.01/1.24
	Vacuum flow (cfm/m <sup>3</sup> /hr)	8.70	13.5/23.0	-	7.2/12.3	5.7/9.7	4.1/7.0	16.6/28.3	-	9.1/15.4	7.2/12.2	5.3/9.0
	Pressure flow (cfm/m <sup>3</sup> /hr)		14.4/24.5	-	11.3/19.2	10.5/17.8	9.7/16.5	18.0/30.5	-	13.6/23.1	12.5/21.3	11.4/19.4
	Power (hp/kw)		1.5/0.80	-	1.5/1.00	1.5/1.05	1.5/1.10	1.5/1.07	-	2.0/1.22	2.0/1.26	2.0/1.30
440K	Vacuum flow (cfm/m <sup>3</sup> /hr)	5.80	20.4/34.7	-	10.4/17.7	8.1/13.8	5.9/10.1	25.0/42.5	-	12.6/21.5	10.2/17.3	7.8/13.2
	Pressure flow (cfm/m <sup>3</sup> /hr)		20.2/34.4	-	15.4/26.2	13.9/23.6	12.2/20.7	24.9/42.3	-	18.2/30.9	16.2/27.6	14.4/24.5
	Power (hp/kw)		1.5/1.09	-	2.0/1.33	2.0/1.38	2.01/1.43	2.0/1.45	-	2.5/1.75	2.5/1.78	2.5/1.87
	Vacuum flow (cfm/m <sup>3</sup> /hr)	7.25	20.3/34.5	-	10.2/17.3	7.9/13.4	5.8/9.9	24.8/42.1	-	12.6/21.4	10.0/17.0	7.5/12.7
	Pressure flow (cfm/m <sup>3</sup> /hr)		20.0/33.9	-	15.1/25.6	13.6/23.1	11.8/20.0	24.7/41.9	-	18.1/30.7	16.0/27.2	14.0/23.8
	Power (hp/kw)		2.0/1.13	-	2.0/1.40	2.0/1.48	2.0/1.53	2.0/1.53	-	3.0/1.82	3.0/1.87	3.0/1.95
	Vacuum flow (cfm/m <sup>3</sup> /hr)	8.70	20.0/34.1	-	10.0/17.1	7.8/13.2	5.7/9.7	24.2/41.1	-	12.5/21.3	9.7/16.4	7.1/12.0
	Pressure flow (cfm/m <sup>3</sup> /hr)		19.7/33.4	-	14.8/25.1	13.4/22.7	11.3/19.2	24.2/41.1	-	17.9/30.4	15.6/26.5	13.5/23.0
	Power (hp/kw)		2.0/1.22	-	2.0/1.48	2.0/1.54	2.5/1.60	2.5/1.57	-	3.0/1.90	3.0/1.97	3.0/2.05

All measurements are ±10%

## APPROXIMATE DIMENSIONS



Model	Unit	a	b	d1	d2	e	e1	f	f1	g	g1	g2	h	h1	h3	h4	h5	i	k	k1	k2	o	o1	q
416	in	8.1	5.0	0.5"	0.5"	1.5	6.1	9.6	6.1	11.1	4.2	6.1	4.3	7.9	8.1	8.3	8.9	4.3	18.3	20.1	11.7	13.0	1.4	7.2
	mm	205	128	0.5"	0.5"	38	155	244	156	283	106	156	110	200	205	210	225	110	465	511	296	331	35	182
425k	in	8.7	7.8	0.75"	0.75"	1.6	6.7	10.2	9.4	12.9	4.9	6.8	5.5	9.0	8.9	9.8	11.4	5.1	20	21.5	11.1	13.2	2.2	7.0
	mm	220	198	0.75"	0.75"	40	170	260	238	328	125	173	140	229	227	250	290	130	505	545	282	336	55	178
440k	in	8.7	7.8	0.75"	0.75"	1.6	6.7	10.3	9.4	12.6	5.0	6.9	5.5	9.0	8.8	9.8	11.6	7.0	23.1	24.3	14.3	16.3	2.2	9.5
	mm	220	198	0.75"	0.75"	40	170	261	240	321	126	174	140	229	224	249	295	178	586	617	362	414	55	241

## Optional Accessories

- Inlet filter
- Inlet check valve
- Vacuum gauge
- Motor starter
- Control panel
- PLC