

COMPRESSORS, VACUUM & LIQUID PUMPS

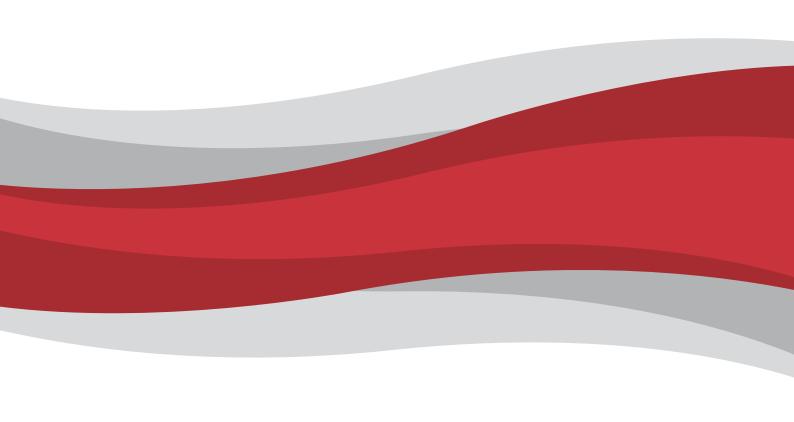
Global Solutions



Pump and Compressor Solutions for OEMs Worldwide

As the leader in providing fluidic solutions to Original Equipment Manufacturers, Thomas continues to develop new products to meet the requirements of evolving markets and applications. Breadth of product, proprietary technologies and global manufacturing benefit our customers.

These distinctions coupled with innovative research and development programs, qualify Thomas as the premier resource utilized by OEMs throughout the world.





Performance Range

The extensive product line presented in this catalog offers custom solutions configured to meet specific requirements.

Flow -Pressure -

- The flow range extends to 13.2 cfm (375 l/min).

Vacuum -

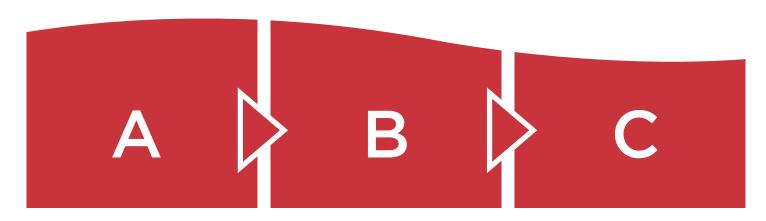
The pressure range extends to 175 psi (12 bar).

Liquid

- The vacuum range extends to 99% of local barometer (10 mbar abs).

- Thomas pumps cover a flow range to 3 l/min and pressures to 60 m H₂O.

These pumps are self-priming and can also be used for dosing applications.



Technology

Selection

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Series

Selection

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Model

Selection

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Technology Selection

Operating Principles for Compressors & Vacuum Pumps



WOB-L® PISTON

Oil-less WOB-L® piston pumps and compressors. Best choice for pressure and/or vacuum applications that require compact, lightweight designs and high performance piston seals.

Free flow: to 7.1 cfm (200 l/min)
Pressure: to 160 psi (11 bar)
Vacuum: to 99% local barometer



ROTARY VANE

Oil-less and self-lubricating rotary vane pumps and compressors. Low vibration, nearly pulsation free, compact and in some cases reversible flow operation.

Free flow: to 10 cfm (283 lpm)

Pressure: to 14.5 psi (1 bar)

Vacuum: to 93% local barometer



ARTICULATED PISTON

Oil-less articulating piston pumps and compressors. Well suited for applications that require high pressures with proportionately higher flow capability.

Free flow: to 5.4 cfm (153 l/min)
Pressure: to 175 psi (12.1 bar)



LINEAR

Oil-less linear diaphragm pumps and compressors. Quiet operation, lower pulsation, higher efficiency and fewer wearing parts.

Free flow: to 13.2 cfm (375 l/min)

Pressure: to 10.2 psi (700 mbar)

Vacuum: to 55% local barometer



DIAPHRAGM

Oil-less diaphragm pumps and compressors. Durable diaphragm design provides high efficiency, low sound level and good air tightness. Adapts well to different gases.

Free flow: to 3.2 cfm (91 l/min)

Pressure: to 44 psi (3 bar)

Vacuum: to 99% local barometer

Operating Principles for Liquid Pumps



DIAPHRAGM

Liquid diaphragm pumps. Self priming, dry running and suitable for continuous operation. Drive available for all required AC and DC voltages.

Free flow max: 1100 ml/min Suction height: $6 \text{ m H}_2\text{O}$ Pressure height: $60 \text{ m H}_2\text{O}$



PERISTALTIC

Liquid peristaltic pumps. Low vibration, nearly pulsation free and of compact design. Reversible operation.
Adjustable through supply voltage.

Free flow max: 3000 ml/min Suction height: $8.0 \text{ m H}_2\text{O}$ Pressure height: $10 \text{ m H}_2\text{O}$



LINEAR

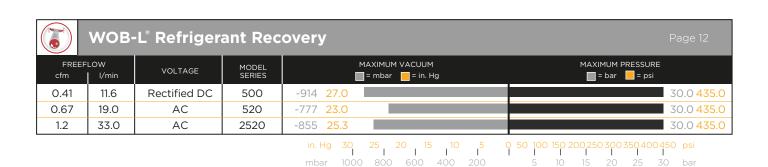
Liquid linear diaphragm pumps. Very long life and low sound level. For applications with low pressure requirements.

Free flow max: 300 ml/min Suction height: 3.0 m H₂O Pressure height: 9.0 m H₂O

Series Selection



	WOB-	·L [®] Piston						Page 8
FREEF cfm	LOW I/min	VOLTAGE	MODEL SERIES			MAXIMUM VACUUM = mbar = in. Hg	MAXIMUM PRESSURE ■ = bar = psi	
0.19	5.4	DC or BLDC	8003	-800	23.6			2.0 29.0
0.25	7.2	AC or DC	8005	-780	23.0			2.5 36.0
0.46	13.0	AC or DC	014	-880	26.0			6.9 100.0
0.476	13.5	DC	2110	0	0			2.0 29.0
0.48	13.6	DC	115	0	0			8.3 120.0
0.49	14.0	AC or DC	8009	0	0			7.0 102.0
0.50	14.2	BLDC	230	0	0			2.1 30.0
0.54	15.3	DC	135	0	0			6.0 87.0
0.56	15.8	AC or DC	8006	-800	23.6			3.0 44.0
0.85	24.0	DC	309	-904	26.7			11.0 160.0
0.86	24.5	DC	8009Z	0	0			6.9 100.0
0.92	26.1	AC DC or BLDC	405/415	-914	27.0			6.9 100.0
0.97	27.5	DC	215	0	Ο			8.3 120.0
1.1	31.0	AC or DC	8006Z	-950	28.0			3.0 44.0
1.1	32.3	BLDC	2220	0	O			2.1 30.0
1.2	34.0	BLDC	2250	-870	25.5			2.1 30.0
1.2	34.5	AC	617	-907	26.8			6.9 100.0
1.3	36.0	DC	319	-941	27.8			8.3 120.0
1.6	45.3	AC	668	-921	27.2			7.0 100.0
1.8	50.1	BLDC	260	-864	25.5			2.1 30.0
2.4	68.0	AC	660	-914	27.0			3.4 50.0
2.9	82.1	AC or BLDC	2450	0	0			2.1 30.0
3.1	89.2	AC	2668/2688	-982	29.0			11.1 160.0
3.4	96.3	AC	2505	-885	26.1			6.9 100.0
3.7	104.2	AC	2665	0	0			8.3 120.0
3.8	107.6	AC	1207		25.9			8.6 125.0
4.6	130.3	AC	2660	-982	29.0			3.1 45.0
5.1	145.0	AC	2770	0	0			6.9 100.0
6.6	186.9	AC	2807	-848	25.0			8.3 120.0
7.1	199.6	AC	2750	-986	29.1			1.7 25.0



mbar 1000 800 600 400 200

	Articu	ulating Pist	on		Page 12
FREEF	LOW	VOLTAGE	MODEL	MAXIMUM VACUUM	MAXIMUM PRESSURE
cfm	l/min	VOLTAGE	SERIES	🔲 = mbar 🔃 = in. Hg	🔃 = bar 📒 = psi
5.4	152.9	AC or DC	TA		12.1 175.0

Series Selection

	Diaph	ragm						Page	14
FREE!	FLOW I/min	VOLTAGE	MODEL SERIES			MAXIMUM VACUUM = mbar = in. Hg	MAXIMUM PRESSURE ■ = bar = psi		
-	0.8	DC	1010	-500	14.8			0.6	9.0
-	0.8	DC or BLDC	2002	-520	15.3			0.6	9.0
-	1.0	DC or BLDC	3003	-480	14.2			1.0	14.5
-	1.3	DC	3013	-450	13.3			0.6	8.7
0.1	2.0	DC	4002	-600	17.7			0.7	10.1
0.2	5.5	DC or BLDC	1410	-750	22.0			1.9	27.6
0.2	6.5	AC or DC	7010	-730	21.5			2.3	33.3
0.3	8.0	DC	1610	-900	26.6			2.0	29.0
0.3	9.0	AC. DC or BLDC	7006	-850	25.1			2.5	36.3
0.4	11.0	DC or BLDC	1420	-900	26.6			1.9	27.6
0.4	11.0	DC	7011	-900	26.6			2.3	33.3
0.4	12.5	AC or DC	7010Z	-900	26.6			2.3	33.3
0.5	14.0	DC	7015	-800	23.6			2.5	36.3
0.6	16.5	DC	1620	-870	25.7			1.8	26.1
0.6	18.0	AC. DC or BLDC	7006Z	-850	25.1			2.5	36.3
0.8	23.0	AC	8010	-780	23.0			3.0	43.5
8.0	23.2	AC	2119	-918	27.1			0	0
8.0	24.0	DC	7011Z	-980	28.9			2.3	33.3
0.9	25.0	AC or DC	7015Z	-950	28.0			2.5	36.3
1.0	27.5	BLDC	118	-820	24.2			2.1	30.0
1.0	28.0	AC	8015	-830	24.5			3.0	43.5
1.1	32.5	DC	007	-780	23.0			1.0	15.0
1.2	34.0	AC	8011	-950	28.0			0	0
1.2	35.1	AC	927	-807	23.8			2.1	30.0
1.3	38.0	AC	8010Z	-920	27.1			2.8	40.6
1.4	39.6	AC. DC or BLDC	107	-800	23.0			2.4	35.0
1.6	46.7	AC	2107	-956	28.3			1.4	20.0
1.8	50.0	AC	8015Z	-960	28.3			0	0
2.0	55.8	DC	910	-824	24.3			1.7	25.0
2.1	59.5	DC or BLDC	907	-841	24.8			2.1	30.0
2.3	65.0	AC	8011Z	-990	29.2			0	0
3.2	90.6	DC	2907	-814	24.0			1.0	15.0
				in. H	1	25 20 15 10 5 0 800 600 400 200	0 10 20 30 40 1 1 1 1 1 1 1 0.5 1.0 1.5 2.0 2.5 3.0	50 ps 3.5 bai	

	Rotar	y Vane						Page	18
FREEF	LOW I/min	VOLTAGE	MODEL SERIES			MAXIMUM VACUUM = mbar = in. Hg	MAXIMUM PRESSURE ■ = bar = psi		
0.1	1.6	DC or BLDC	G/01	-290	8.6			0.3	4.1
0.1	2.2	DC	G/01-K	-70	2.1	-		0.1	1.2
0.1	3.7	DC or BLDC	G/02	-450	13.3			0.6	8.7
0.2	6.8	DC	G/04	-260	7.7			0.3	3.8
0.3	7.5	DC	G045	-700	20.7			0.9	13.0
0.3	8.5	BLDC	BL-G 085 M	-500	14.2			0.5	6.5
0.4	11.0	DC	G09	-350	10.3			0.4	5.4
0.6	15.5	DC	G08	-830	24.5			1.4	20.3
0.8	23.0	DC	G/07	-800	23.6			1.4	20.3
1.3	36.0	DC	G/08-T	-930	25.0			1.4	20.3
1.5	42.0	DC	TF2	-800	23.6			1.0	14.5
2.3	66.0	DC	TF4	-800	23.6			1.0	14.5
2.5	70.0	AC or DC	VTE/DTE3	-850	25.1			1.0	14.5
2.8	79.3	AC or BLDC	SR	-847	25.0			0.7	10.1
4.2	120.0	AC or DC	VTE/DTE6	-850	25.1			1.0	14.5
4.8	136.0	DC	TF8	-800	23.6			1.0	14.5
5.6	160.0	AC or DC	VTE/DTE8	-850	25.1			0.6	8.7
7.1	200.0	AC or DC	VTE/DTE10	-850	25.1			1.0	14.5
10.0	283.1	AC	QR	-881	26.0			1.0	15.1
6 gd-thoma	is.com			in. I			0	25 1.75 bai	psi

Series Selection

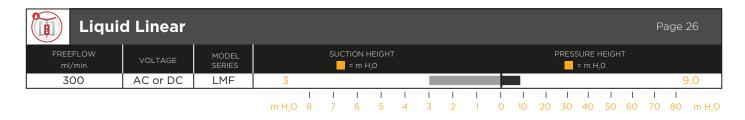


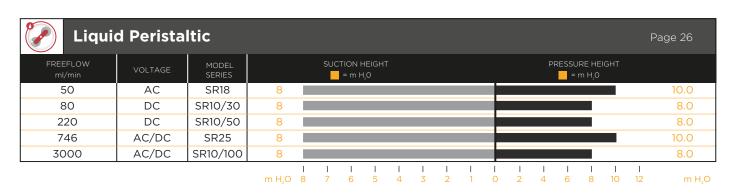
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	Linear						F	Page 2	2
FREE!	FLOW I/min	VOLTAGE	MODEL SERIES			MAXIMUM VACUUM	MAXIMUM PRESSURE = mbar = psi		
cim						= mbar = in. Hg	= mbar = psi		
-	1.5	AC or DC	LMG	-200	5.9			450	6.5
0.3	8.5	AC or DC	VA	-550	16.2			700	10.2
0.8	22.0	AC or DC	LM	-350	10.3			400	5.8
1.1	31.1	AC	6015SE	-140	4.0			140	2.0
2.1	60.3	AC or DC	6025SE	-270	8.0			280	4.1
4.0	115.0	AC	YP	-200	5.9			200	2.9
6.7	190.0	AC	AP	0	0			300	4.4
10.6	300.0	AC	LP	0	0			300	4.4
13.2	375.0	AC	LW	0	0			300	4.4

in. Hg 30 25 20 15 10 5 0 1.25 2.5 3.75 5.0 6.25 7.5 8.75 10.0 psi mbar 1000 800 600 400 200 100 200 300 400 500 600 700 mbar

Liqui	d Diaphra	agm																	Pa	age 2	26
FREEFLOW ml/min	VOLTAGE	MODEL SERIES				1 NOIT = m +	HEIGHT I ₂ 0									SURE I					
180	DC	1210	6																	60	.0
750	DC	1510	7																	20	.0
1100	DC	5002F	6																	40	.0
900	AC/DC	F120	4																	60	.0
			m H ₂ O	8	7	1 6	I 5	1 4	3	2	1	0	1 10	1 20	I 30	1 40	1 50	l 60	1 70	I 80	m H ₂ O





8003 BLDC



8009 DC



8006 AC



115ADC



215DC



230



3D19





WOB-L® Piston

\bigcirc												
Pressure												
MODEL	MOTOR CAP	ACITY					OW @ bar				MAXIMUM b	PRESSURE ar
	VOLTAGE	TYPE*	0.0	0.5	1.0	1.5	2.0	3.0	5.0	7.0	CONTINUOUS	INTERMITTENT
8003D	12, 24	PM	4.3	3.1	2.1	1.3	-	-	-	-	1.0	2.0
8003ZDP	12	PM	5.4	2.8	1.6	0.8	-	-	-	-	0.3	2.0
8003V	12, 24	PM	-	-	-	-	-	-	-	-	-	-
8003ZVR	12	PM	-	-	-	-	-	-	-	-	-	-
8005D	12, 24	PM	7.2	5.7	4.3	3.2	2.4	-	-	-	1.5	2.5
8005D	230/50/1	SP	6.0	4.8	3.7	2.8	2.0	-	-	-	1.5	2.5
8005V	12, 24	PM	-	-	-	-	-	-	-	-	-	-
8005V	230/50/1	SP	-	-	-	-	-	-	-	-	-	-
8006D	12, 24	PM	15.8	12.2	9.3	6.9	4.8	1.3	-	-	1.0	3.0
8006D	230/50/1	PSC	15.8	12.6	10.1	7.6	5.5	2.0	-	-	1.0	3.0
8006V	12, 24	PM	-	-	-	-	-	-	-	-	-	-
8006V	230/50/1	SP	-	-	-	-	-	-	-	-	-	-
8006ZVP	12, 24	PM	-	-	-	-	-	-	-	-	-	-
8006ZVP	230/50/1	PSC	-	-	-	-	-	-	-	-	-	-
8006ZVR	230/50/1	PSC	-	-	-	-	-	-	-	-	-	-
8009D	12, 24	PM	14.0	11.5	9.0	8.0	7.1	5.6	3.2	1.8	1.0	7.0
8009D	230/50/1	PSC	11.8	10.4	9.4	8.5	7.6	6.2	4.2	2.9	1.0	7.0
8009ZD	24	PM	24.5	21.6	19.1	17.2	15.3	13.4	10.2	7.0	1.0	7.0
8009ZD	230/50/1	PSC	22.4	19.9	17.8	16.1	14.4	11.9	8.2	5.4	1.0	7.0

*PM = Permanent Magnet, SP = Shaded Pole, PSC = Permanent Split Capacitor

Note: Minimum release quantities or regional availability may apply. Consult factory.



WOB-L® Piston

Pressure												
MODEL	MOTOR CAP	ACITY					OW @ bar				MAXIMUM bi	
	VOLTAGE	TYPE*	0.0	0.5	1.0	1.5	2.0	3.0	5.0	7.0	CONTINUOUS	INTERMITTENT
014CA28	115/60/1	SP	13.0	11.2	9.8	8.9	8.0	7.1	5.0	3.3	6.9	6.9
014CD28	220/50/1	SP	10.8	8.8	7.9	7.1	6.2	5.4	4.0	2.5	6.9	6.9
014CDC20/12	12	PM	11.0	8.4	6.9	6.0	5.2	4.3	-		1.4	3.4
115ADC56/	12, 24	PM	13.6	11.7	10.7	10.0	9.4	8.0	6.4	4.4	-	8.3
135ADC56/	12, 24	PM	15.3	14.2	12.7	11.6	10.6	9.1	6.8	4.8	-	6.0
215ADC38/	12, 24	PM	27.5	25.4	23.2	21.1	19.6	16.5	11.6	8.3	-	8.3
230ZA30/12	12	BLDC	10.0	8.0	7.4	6.7	6.3	-	-		2.1	2.1
260ZC35/24	24	BLDC	50.1	43.0	38.0	29.0	27.0	-	-		2.1	2.1
309CDC56/12	12	PM	24.0	18.4	15.5	12.7	11.0	9.3	-		-	11.0
309DDC56/12	12	PM	23.0	18.4	15.2	12.7	11.3	-	-		-	9.3
3191250IRBLSCE	12	PM	35.4	34.0	30.0	28.0	25.0	23.0	20.0	17.0	-	8.3
3D191250IRSLSCE	12	PM	29.7	28.6	25.2	23.5	21.0	19.3	16.8	15.0	-	8.3

*PM = Permanent Magnet, SP = Shaded Pole, BLDC=Brushless DC



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WOB-L® Piston

Vacuum											
MODEL	MOTOR CAPA	CITY				OW mbar			MAX. VACUUM	DIMENSIONS (H x W x L)	WEIGHT
	VOLTAGE	TYPE*	0	-100	-200	-400	-600	-800	mbar	mm	kg
8003D	12, 24	-	-	-	-	-	-	-	-	54 x 30 x 82	0.19
8003ZDP	12	PM	-	-	-	-	-	-	-	53 x 30 x 123	0.28
8003V	12, 24	PM	4.3	3.5	2.8	1.5	0.2	-	-650	54 x 30 x 82	0.19
8003ZVR	12	PM	2.9	2.5	2.0	1.2	0.6	-	-800	53 x 30 x 123	0.28
8005D	12, 24	PM	-	-	-	-	-	-	-	75 x 96 x 118	1.1
8005D	230/50/1	SP	-	-	-	-	-	-	-	75 x 106 x 110	1.1
8005V	12, 24	PM	7.2	6.0	4.8	3.0	1.4	-	-780	75 x 96 x 118	1.1
8005V	230/50/1	SP	6.0	4.9	3.8	2.4	1.2	-	-780	75 x 106 x 110	1.1
8006D	12, 24	PM	-	-	-	-	-	-	-	100 x 71 x 146	1.2
8006D	230/50/1	PSC	-	-	-	-	-	-	-	114 x 78 x 147	1.5
8006V	12, 24	PM	15.8	13.4	11.1	6.2	3.6	-	-800	100 x 71 x 146	1.2
8006V	230/50/1	SP	14.2	12.0	9.7	6.0	3.0	-	-800	110 x 71 x 131	1.5
8006ZVP	12, 24	PM	31.0	25.0	20.0	11.7	5.1	-	-800	99 x 63 x 191	0.9
8006ZVP	230/50/1	PSC	29.0	24.9	20.7	12.9	6.2	-	-800	114 x 78 x 193	2.0
8006ZVR	230/50/1	PSC	14.2	12.0	10.5	7.0	4.0	1.5	-950	114 x 78 x193	2.0
8009D	12, 24	PM	-	-	-	-	-	-	-	104 x 63 x 145	1.1
8009D	230/50/1	PSC	-	-	-	-	-	-	-	108 x 91 x 153	1.7
8009ZD	24	PM	-	-	-	-	-	-	-	105 x 70 x 177	2.1
8009ZD	230/50/1	PSC	-	-	-	-	-	-	-	108 x 110 x 195	2.5



Note: Minimum release quantities or regional availability may apply. Consult factory.



WOB-L® Piston

Vacuum											
MODEL	MOTOR CAP	ACITY				OW mbar			MAX. VACUUM	DIMENSIONS (H x W x L)	WEIGHT
	VOLTAGE	TYPE*	0	-100	-200	-400	-600	-800	mbar	mm	kg
014CA28	115/60/1	SP	13.0	12.1	11.2	8.8	5.3	-	-880	127 x 114 x 150	2.13
014CD28	220/50/1	SP	10.8	9.6	8.3	5.8	3.2	-	-880	128 x 114 x 150	2.13
014CDC20/12	12	PM	11.0	8.5	6.5	4.9	2.5	-	-860	105 x 48 x 164	1.04
115ADC56/	12, 24	PM	-	-	-	-	-	-	-	145 x 46 x 148	0.70
135ADC56/	12, 24	PM	-	-	-	-	-	-	-	92 x 42 x 110	0.53
215ADC38/	12, 24	PM	-	-	-	-	-	-	-	113 x 53 x 157	1.40
230ZA30/12	12	BLDC	-	-	-	-	-	-	-	97 x 67 x 92	0.50
260ZC35/24	24	BLDC	50.1	40.0	34.0	24.0	12.0	3.0	-864	118 x 77 x 105	1.26
309CDC56/12	12	PM	21.2	18.9	16.7	11.9	7.6	3.4	-900	156 x 102 x 194	2.30
309DDC56/12	12	PM	-	-	-	-	-	-	-	172 x 134 x 231	2.90
3191250IRBLSCE	12	PM	35.4	28.5	24.0	17.0	8.0	3.5	-930	156 x 102 x 198	2.30
3D191250IRSLSCE	12	PM	-	-	-	-	-	-	-	173 x 134 x 332	2.90

*PM = Permanent Magnet, SP = Shaded Pole, BLDC=Brushless DC

Note: Minimum release quantities or regional availability may apply. Consult factory.

8003 Z



8005 DC



8009 ZDC





260





319



WOB-L® Piston

2250



2450



2660/2668



2750



2807



Pressure												
		OUTV					0111					PRESSURE
MODEL	MOTOR CAPA	ACITY					OW @ bar				MAXIMUM ba	
	VOLTAGE	TYPE*	0.0	0.5	1.0	1.5	2.0	3.0	5.0	7.0	CONTINUOUS	INTERMITTENT
405AA38	115/60/1	SP	9.0	8.0	7.2	6.5	5.7	4.5	-	-	1.4	2.8
405AD38	230/50/1	SP	7.5	6.6	6.0	5.4	4.7	3.7	-	-	1.4	2.8
405ADC38/	12, 24	PM	22.3	20.7	19.0	17.4	16.0	13.2	9.9	6.6	6.9	6.9
415CDC30/	12, 24	PM	26.1	23.7	21.7	19.7	18.1	15.0	10.7	6.9	6.9	6.9
415ZC36/24	24	BLDC	18.1	16.2	15.1	14.1	13.0	11.7	10.1	8.7	6.9	6.9
617CA22	115/60/1	SP	22.1	20.2	18.3	16.3	14.7	11.4	6.6	1.7	6.9	6.9
617CA32	115/60/1	SP	34.5	32.1	29.5	26.9	24.4	20.2	-	-	3.4	4.2
617CD22	220/50/1	SP	19.5	17.4	15.6	13.7	12.3	9.4	5.7	2.8	6.9	6.9
617CD32	220/50/1	SP	28.6	26.5	24.4	22.1	19.8	-	-	-	2.8	2.8
660E48XNTLSXX	115/60/1	PSC	68.0	63.6	60.6	56.6	50.8	45.3	-	-	3.1	3.1
660N48XNTLSXX	230/50/1, 230/60/1	PSC	56.7	53.0	50.5	47.2	42.3	37.8	-	-	3.1(50Hz)3.4(60Hz)	3.1(50Hz)3.4(60Hz)
660S48XNTLSXX	100/50/1, 100/60/1	PSC	68.0	63.6	60.6	56.6	50.8	45.3	-	-	3.1(50Hz)3.4(60Hz)	3.1(50Hz)3.4(60Hz)
668E44XNTLSXX	115/60/1	PSC	45.3	42.8	40.5	38.4	36.8	33.5	27.3	21.1	6.9	6.9
668N44XNTLSXX	230/50/1, 230/60/1	PSC	37.8	35.7	33.8	32.0	30.7	27.9	22.8	21.1	6.9	6.9
668S44XNTLSXX	100/50/1, 100/60/1	PSC	45.3	42.8	40.5	38.4	36.8	33.5	27.3	21.1	6.9	6.9
1207PHI80	220-240/50/1	PSC	88.3	80.4	77.0	75.9	70.6	65.1	52.4	-	8.6	8.6
1207PK80	115/60/1	CS	107.0	104.6	100.8	96.2	92.3	84.6	69.4	-	8.6	8.6
2110ZA26/12	12	BLDC	13.5	12.5	11.5	10.5	9.0	-	-	-	2.0	2.0
22201230INTLSCX	12	BLDC	34.0	31.3	28.5	25.2	22.7	-	-	-	2.1	2.1
2250ZC35/24	24	BLDC	22.1	16.8	14.7	13.6	11.6	-	-	-	1.4	2.1
2450AE44	115/60/1	PSC	84.9	80.1	73.1	68.5	60.1	-	-	-	2.1	2.1
2450AUU44	230/50/1	PSC	73.6	69.4	64.0	59.1	51.8	-	-	-	2.1	2.1
2505CE38	115/60/1	PSC	96.3	91.5	86.7	78.5	63.0	49.6	35.4	21.2	6.9	6.9
2505CG38	230/60/1	PSC	96.3	94.0	85.8	77.0	61.2	47.3	-	-	4.1	4.1
2505CHI45	220-240/50/1	PSC	96.3	92.6	86.4	78.7	-	-	-	-	2.1	2.1
2660E48XNTLSXX	115/60/1	PSC	130.3	124.6	113.3	106.5	102.0	-	-	-	2.8	2.8
2660N48XNTLSXX	230/50/1, 230/60/1	PSC	108.6	103.8	94.4	88.8	85.0	-	-	-	3.1	3.1
2660S48XNTLSXX	100/50/1, 100/60/1	PSC	130.3	124.6	113.3	106.5	102.0	-	-	-	1.7(50Hz)1.4(60Hz)	1.7(50Hz)1.4(60Hz)
2665PE40	115/60/1	PSC	104.2	99.1	94.0	88.4	82.7	72.6	62.5	-	7.0	8.3
2665PHI44	220-240/50/1	PSC	91.5	86.5	81.5	76.0	70.4	65.0	59.5	-	7.0	8.3
2668E44XNTLSXX	115/60/1	PSC	87.8	84.7	80.3	76.0	71.7	-	-	-	6.9	6.9
2668N44XNTLSXX	230/50/1, 230/60/1	PSC	73.6	70.6	67.6	62.5	57.3	-	-	-	6.9	6.9
2668S44XNTLSXX	100/50/1, 100/60/1	PSC	87.8	84.7	80.3	76.0	71.7	-	-	-	6.9	6.9
2688TE44/38	115/60/1	PSC	43.6	43.0	42.4	39.3	38.4	37.9	37.1	-	11.1	11.1
2688TGHI44/38	220-240/50/1, 230/60/1	PSC	34.5	33.9	33.0	31.9	31.3	30.8	30.1	-	11.1	11.1
2688VE44	115/60/1	PSC	-	-	-	-	-	-	-	-	-	-
2688VGHI44	220-240/50/1.230/60/1	PSC	-	-	-	-	-	-	-	-	-	-
2688VS44	100/50/1. 100/60/1	PSC	-	-	-	-	-	-	-	-	-	-
2750BE75	115/60/1	PSC	-	-	-	-	-	-	-	-	-	-
2750BGHI75	220-240/50/1, 230/60/1	PSC	-	-	-	-	-	-	-	-	-	-
2750BS75	100/50/60/1	PSC	-	-	-	-	-	-	-	-	-	-
2750CE60	115/60/1	PSC	175.3	168.2	156.3	-	-	-	-	-	1.0	1.0
2750CGHI60	220-240/50/1, 230/60/1	PSC	150.1	140.6	130.8	122.6	-	-	-	-	1.4	1.4
2750CS60	100/50/60/1	PSC	176.7	169.1	157.7	146.4	135.7	-	-	-	1.4	1.7
2750VEF75	115/60/1, 110/50/1	PSC	-	-	-	-	-	-	-	-	-	-
2750VHI75	230/50/1	PSC	-	-	-	-	-	-	-	-	-	-
2750VS75	100/50/60/1	PSC	-	-	-	-	-	-	-	-	-	-
2770CE50	115/60/1	PSC	145.0	137.1	128.9	120.6	112.7	100.8	73.8	-	6.9	6.9
2770CGHI50	220-240/50/1, 230/60/1	PSC	122.6	116.0	109.3	100.8	88.6	85.7	63.3	-	6.9	6.9
2807CE72	115/60/1	PSC	186.9	178.7	171.7	165.2	157.2	141.4	112.5	84.9	3.4	8.3
2807CGHI72	220-240/50/1, 230/60/1	PSC	155.2	148.3	142.6	137.2	130.6	117.4	93.4	70.4	3.4	8.3





WOB-L® Piston

110											
Vacuum											
MODEL	MOTOR CAPA	CITY				OW @ mbar			MAX. VACUUM	DIMENSIONS (H x W x L)	WEIGHT
	VOLTAGE	TYPE*	0.0	-100	-200	-400	-600	-800	mbar	mm	kg
405AA38	115/60/1	SP	-	-	-	-	-	-	-	135 x 108 x 171	2.50
405AD38	230/50/1	SP	-	-		-	-	-	-	135 x 108 x 171	2.50
405ADC38/	12, 24	PM	-	-	-	-	-	-	-	135 x 108 x 184	1.95
415CDC30/	12, 24	PM	26.1	23.2	20.2	13.2	7.5	2.8	-830	143 x 108 x 184	2.30
415ZC36/24	24	BLDC	18.1	15.6	13.4	10.0	6.4	3.0	-915	96 x 108 x 153	1.60
617CA22	115/60/1	SP	22.1	19.6	17.0	11.7	6.5	1.7	-860	180 x 127 x 206	5.00
617CA32	115/60/1	SP	34.5	28.7	23.5	16.4	9.4	-	-910	180 x 127 x 206	5.00
617CD22	230/50/1	SP	19.5	16.9	14.6	10.1	5.4	-	-880	180 x 127 x 206	5.00
617CD32	230/50/1	SP	28.6	24.3	20.2	13.5	7.4	-	-890	180 x 127 x 206	5.00
660E48XNTLSXX	115/60/1	PSC	68.0	58.2	52.0	40.0	18.8	7.7	-920	183 x 137 x 203	6.50
660N48XNTLSXX	230/50/1, 230/60/1	PSC	56.6	49.1	42.0	29.8	16.8	5.9	-920	183 x 137 x 203	6.10
660S48XNTLSXX	100/50/1, 100/60/1	PSC	68.0	58.2	52.0	40.0	18.8	7.7	-920	183 x 137 x 203	6.50
668E44XNTLSXX	115/60/1	PSC	45.3	37.8	31.3	22.6	13.1	-	-930	183 x 137 x 203	6.00
668N44XNTLSXX	230/50/1, 230/60/1	PSC	37.8	31.5	26.1	18.8	10.9	-	-930	183 x 132 x 181	6.00
668S44XNTLSXX	100/50/1,100/60/1	PSC	45.3	37.8	31.3	22.6	13.1	-	-930	183 x 132 x 185	6.00
1207PHI80	220-240/50/1	PSC	88.3	72.0	58.1	40.5	22.8	6.2	-800	255 x 166 x 271	11.80
1207PK80	115/60/1	CS	107.0	87.3	70.4	49.1	27.6	7.5	-880	254 x 166 x 272	11.80
2110ZA26/12	12	BLDC	-	-	-	-	-	-	-	76 x 56 x 90	0.4
22201230INTLSCX	12	BLDC	-	-	-	-	-	-	-	49 x 67 x 119	0.70
2250ZC35/24	24	BLDC	22.1	20.3	18.4	11.2	4.2	-	-745	108 x 79 x 154	1.10
2450AE44	115/60/1	PSC	-	-	-	-	-	-	-	163 x 99 x 211	4.30
2450AUU44	230/50/1	PSC	-	-	-	-	-	-	-	163 x 99 x 211	4.30
2505CE38	110/60/1	PSC	96.3	76.2	57.8	38.8	21.0	4.8	-900	165 x 118 x 237	6.40
2505CG38	230/60/1	PSC	96.3	74.8	54.7	36.8	17.0	3.7	-900	165 x 118 x 237	6.40
2505CHI45	220-240/50/1	PSC	96.3	74.5	56.1	38.8	18.7	4.2	-900	165 x 118 x 237	6.40
2660E48XNTLSXX	115/60/1	PSC	130.3	113.0	95.0	63.0	39.4	11.3	-920	183 x 132 x 236	8.00
2660N48XNTLSXX	230/50/1, 230/60/1	PSC	108.6	94.2	79.2	52.5	32.8	9.4	-920	183 x 132 x 236	7.80
2660S48XNTLSXX	100/50/1, 100/60/1	PSC	130.3	113.0	95.0	63.0	39.4	11.3	-920	183 x 132 x 236	8.00
2665PE40	115/60/1	PSC	-	-	-	-	-	-	-	180 x 132 x 236	7.30
2665PHI44	220-240/50/1	PSC	-	-	-	-	-	-	-	180 x 132 x 236	7.30
2668E44XNTLSXX	115/60/1	PSC	87.8	75.0	61.5	40.2	24.1	8.7	-930	180 x 132 x 236	7.30
2668N44XNTLSXX	230/50/1, 230/60/1		73.6	63.6	53.6	35.3	21.4	7.7	-930	180 x 132 x 236	7.30
2668S44XNTLSXX	100/50/1, 100/60/1	PSC	87.8	75.0	61.5	40.2	24.1	8.7	-930	180 x 132 x 236	7.30
2688TE44/38	115/60/1	PSC	-	-	-	-	-	-	-	188 x 170 x 247	7.30
2688TGHI44/38	220-240/50/1, 230/60/1	PSC	-	-	-	-	-	-	-	188 x 170 x 247	6.80
2688VE44	115/60/1	PSC	45.3	38.6	32.9	24.8	16.3	7.0	-980	188 x 168 x 247	7.40
2688VGHI44	220-240/50/1, 230/60/1	PSC	38.5	35.2	31.4	22.6	14.7	7.1	-980	188 x 168 x 247	6.60
2688VS44	100/50/60/1	PSC	37.4	34.2	30.7	22.5	14.6	7.1	-980	188 x 168 x 247	7.40
2750BE75	115/60/1	PSC	199.6	186.6	169.4	117.2	68.2	23.8	-915	236 x 136 x 256	9.50
	220-240/50/1, 230/60/1		181.2	161.1	140.5	98.1	57.9	15.7	-915	236 x 136 x 256	9.50
2750BS75	100/50/60/1	PSC	199.6	186.6	169.4	117.2	68.2	23.8	-915	236 x 136 x 256	9.50
2750CE60	115/60/1	PSC			120.6	85.5	49.6	15.9	-915	236 x 136 x 256	9.50
	220-240/50/1, 230/60/1		150.1	131.7	112.8	80.3	48.4	18.3	-915	236 x 136 x 256	9.50
2750CS60	100/50/60/1	PSC	176.7	155.1	133.9	93.8	55.0	-	-915	236 x 136 x 256	9.50
2750VEF75	115/60/1, 110/50/1		103.0	93.3	83.2	60.5	38.4	17.9	-990	236 x 136 x 256	9.00
2750VHI75	220-240/50/1		93.1	83.1	72.9	52.4	33.1	14.9	-980	236 x 136 x 256	9.50
2750VS75	100/50/60/1		97.6	95.5	90.2	65.9	41.5	19.4	-990	236 x 136 x 256	9.50
2770CE50	115/60/1	PSC	-	-	-	-	-	-	-	243 x 155 x 325	11.30
	220-240/50/1, 230/60/1		-	-	-	-	-	-	-	243 x 155 x 325	11.30
2807CE72	115/60/1	PSC	186.9		97.1	66.5	36.8	-	-850	255 x 166 x 400	17.70
2807CGHI72	220-240/50/1, 230/60/1	PSC	155.2	125.0	96.1	54.4	26.8	-	-850	255 x 166 x 400	17.70

415DC



617



668



1207



*PM = Permament Magnet, SP = Shaded Pole, PSC = Permanent Splt Capacitor, BLDC=Brushless DC, CS = Capacitor Start Note: Minimum release quantities or regional availability may apply. Consult factory.

520



TA-3101 DC TA-4101 DC



TA-3101 TA-4101



TA-5102





WOB-L® Refrigerant Recovery

Pressure										
MODEL	MOTOR CAPA	ACITY				OW @ bar			MAXIMUM b	
	VOLTAGE	TYPE*	0.0	6.0	12.0	18.0	24.0	30.0	INLET	EXHAUST
500CAR75	100-115/50/60	RDC	11.6	8.4	7.1	6.4	4.5	3.7	2.4	30.0
500CDR75	230/50/60	RDC	11.3	8.5	6.8	6.4	4.8	3.7	2.4	30.0
520CJ75	100/50/60/1	CS	10.2	8.1	7.4	7.4	6.8	6.6	2.4	30.0
520CK75	115/60/1	CS	14.2	10.0	9.1	9.1	8.8	7.6	2.4	30.0
520CL75	220-240/50/1	CS	10.2	8.1	7.4	7.4	6.8	6.5	2.4	30.0
2520CK60	115/60/1	CS	28.3	21.5	16.4	14.0	13.1	11.9	2.4	30.0
2520CL60	220/50/240/60/1	CS	21.0	15.5	12.5	11.5	10.8	9.9	2.4	30.0

RDC=Rectified DC Permanent Magnet, CS=Capacitor Start

Note: Minimum release quantities or regional availability may apply. Consult factory.

Articulated Piston

MODEL	MOTOR CAP	ACITY					OW @ bar					PRESSURE ar
	VOLTAGE	TYPE*	0.0	0.5	1.0	1.5	2.0	3.0	5.0	7.0	CONTINUOUS	INTERMITTENT
TA-3101-DC (270024)	12	PM	48.1	44.9	41.8	39.0	36.8	32.5	25.7	19.3	6.9	6.9
TA-4101-DC (270025)	12	PM	62.2	57.0	52.6	48.5	45.1	39.9	32.6	26.5	6.9	6.9
TA-4101-DC (270047)	24	PM	62.2	57.0	52.6	48.5	45.1	39.9	32.6	26.5	6.9	6.9
TA-5102-DC (270058)	12	PM	115.0	103.6	99.1	96.0	91.8	83.8	66.5	44.7	6.9	6.9
TA-3051 (270002)	115/230/60/1	CS	56.6	53.4	50.3	47.6	45.5	41.4	-	-	3.4	3.4
TA-3052 (270006)	115/230/60/1	CS	70.7	66.6	62.5	58.6	55.3	49.6	-	-	3.4	3.4
TA-3101 (270005)	115/230/60/1	CS	45.3	41.1	37.6	34.7	32.3	28.3	22.0	16.7	6.9	6.9
TA-4051 (270014)	115/230/60/1	CS	71.4	61.1	59.2	54.6	50.7	44.9	-	-	3.4	3.4
TA-4052 (270007)	115/230/60/1	CS	93.4	88.2	83.0	78.2	74.1	65.9	-	-	3.4	3.4
TA-4101 (270015)	115/230/60/1	CS/CR	62.2	59.1	56.0	53.1	50.4	45.6	37.5	30.8	6.9	6.9
TA-4102 (270010)	115/230/60/1	CS	73.6	69.5	65.4	61.3	57.1	49.9	40.3	33.6	6.9	6.9
TA-4172 (270072)	115/230/60/1	CS	39.6	39.1	38.5	38.0	37.4	36.1	34.4	32.5	12.0	12.0
TA-5052 (270008)	115/230/60/1	CS	121.7	116.5	110.8	104.9	100.2	91.4	-	-	3.4	3.4
TA-5052 (270039)	110/220-240/50/1	CS	96.2	92.1	88.0	83.9	79.8	73.5	-	-	3.4	3.4
TA-5102 (270011)	115/230/60/1	CS	90.6	84.4	79.3	74.9	71.2	66.5	55.4	46.2	6.9	6.9
TA-5102 (270040)	110/220-240/50/1	CS	72.2	66.9	63.0	60.0	57.0	52.8	44.5	36.3	6.9	6.9
TA-5102 (270043)	208-230/460/60/3	POLY	90.6	84.4	79.3	74.9	71.2	66.5	55.4	46.2	6.9	6.9
TA-5172 (270073)	115/230/60/1	CS	50.9	50.7	50.4	50.3	50.1	49.5	48.0	46.5	12.0	12.0
TA-5172 (270078)	110/220-240/50/1	CS	40.4	40.2	39.9	39.8	39.6	39.2	38.4	37.3	12.0	12.0
TA-5172 (270076)	208/230/460/60/50/3	POLY	50.9	50.7	50.4	50.3	50.1	49.5	48.0	46.5	12.0	12.0
TA-6052 (270009)	115/230/60/1	CS	147.2	141.0	135.4	130.3	125.2	119.8	-	-	3.4	3.4
TA-6102 (270012)	115/230/60/1	CS	121.7	115.5	109.9	104.4	100.0	91.9	76.7	67.7	6.9	6.9
TA-6102 (270042)	110/220-240/50/1	CS/CR	97.6	92.4	88.0	83.9	79.8	73.5	61.2	53.5	6.9	6.9
TA-6102 (270044)	208-230/460/60/3	POLY	121.7	115.5	109.9	104.4	100.0	91.9	76.7	67.7	6.9	6.9
TA-6172 (270080)	115/230/60/1	CS/CR	67.9	67.5	67.1	66.5	66.8	66.1	64.9	63.5	12.0	12.0
TA-6172 (270082)	110/220-240/50/1	CS/CR	54.4	54.1	53.8	53.6	53.3	52.7	51.5	50.7	12.0	12.0
TA-7102 (270045)	115/230/60/1	CS/CR	152.9	148.7	144.6	140.5	136.4	128.2	111.0	92.4	6.9	6.9

*PM = Permanent Magnet, CS = Capacitor Start, CS/CR = Capacitor start/run, POLY = 3 Phase





WOB-L® Refrigerant Recovery

500

Vacuum											
MODEL	MOTOR CAPA	ACITY				OW @ mbar			MAX. VACUUM	DIMENSIONS (H x W x L)	WEIGHT
	VOLTAGE	TYPE*	0	-100	-200	-400	-600	-800	mbar	mm	kg
500CAR75	100-115/50/60	RDC	11.6	9.6	8.2	6.1	4.1	-	-910	205 x 128 x 257	5.00
500CDR75	230/50/60	RDC	11.3	9.6	8.4	6.1	4.0	1	-910	205 x 128 x 257	5.20
520CJ75	100/50/60/1	CS	10.2	8.8	7.0	4.7	2.5	-	-780	230 x 148 x 199	8.40
520CK75	115/60/1	CS	14.2	11.8	6.9	4.1	1	-	-780	230 x 148 x 193	7.70
520CL75	220-240/50/1	CS	10.2	8.8	7.0	4.7	2.5	-	-780	230 x 148 x 199	8.40
2520CK60	115/60/1	CS	28.3	23.8	19.5	12.7	6.4	-	-820	232 x 148 x 281	12.70
2520CL60	220/50240/60/1	CS	21.0	17.0	12.7	7.9	4.0	-	-820	232 x 148 x 288	13.40



RDC=Rectified DC Permanent Magnet, CS=Capacitor Start

Note: Minimum release quantities or regional availability may apply. Consult factory.

2520



Articulated Piston

TA-6052 (270009) 115/230/60/1

TA-6102 (270012) |115/230/60/1

TA-6102 (270042) 110/220-240/50/1

TA-6102 (270044) 208-230/460/60/3

TA-6172 (270082) 110/220-240/50/1

TA-6172 (270080) 115/230/60/1 CS/CR

TA-7102 (270045) 115/230/60/1 CS/CR

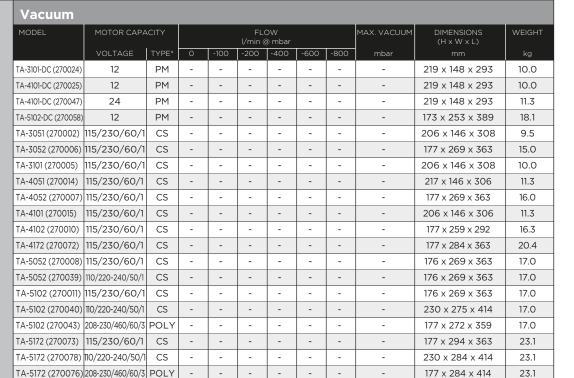
CS

CS

CS/CR

POLY

CS/CR



230 x 286 x 436

176 x 259 x 389

176 x 259 x 389

176 x 259 x 389

177 x 284 x 363

177 x 284 x 363

189 x 299 x 409

20.4

20.4

20.4

20.4

25.4

25.4



TA-3052



Note: Minimum release quantities or regional availability may apply. Consult factory.

-

^{*}PM = Permanent Magnet, CS = Capacitor Start, CS/CR = Capacitor start/run, POLY = 3 Phase

1010 DC



1410 DC



1610



7006 DC



7010 DC



8010





			_	_		_		_				
Pressure												
MODEL	MOTOR CAPA	ACITY					OW @ bar					PRESSURE ar
	VOLTAGE	TYPE*	0.0	0.5	1.0	1.5	2.0	3.0	5.0	7.0	CONTINUOUS	INTERMITTENT
1010	2.5 - 4	PM	0.8	0.1	-	-	-	-	-	-	0.6	0.6
2002	2.0 - 12	PM	0.8	0.1	-	-	-	-	-	-	0.2	0.6
3003	4.5 - 12	PM	1.0	0.1	-	-	-	-	-	-	0.2	0.6
3013	4.5 - 12	PM	1.3	0.1	-	-	-	-	-	-	0.2	0.6
4002D	6	PM	2.0	0.8	-	-	-	-	-	-	0.2	0.7
1410D	12, 24	PM	5.5	2.5	-	-	-	-	-	-	1.0	1.0
1410VD	12, 24	PM	4.3	2.5	1.4	0.6	-	-	-	-	0.7	1.9
1420DP	12, 24	PM	11.0	5.1	-	-	-	-	-	-	1.0	1.0
1420VDP	12, 24	PM	8.2	6.0	3.9	1.7	-	-	-	-	0.7	1.9
1610	12, 24	PM	8.0	6.3	4.1	1.7	0.0	-	-	-	0.5	2.0
1620	12, 24	PM	16.5	12.3	7.9	3.7	-	-	-	-	0.25	1.8
7006	12, 24	PM	7.2	5.3	3.9	2.8	1.9	-	-	-	0.8	2.5
7006	230/50/1	PSC	6.9	5.0	3.7	2.3	1.3	-	-	-	0.8	2.5
7006ZP	12, 24	PM	13.8	9.4	7.1	5.5	4.1	-	-	-	0.8	2.5
7006ZP	230/50/1	PSC	13.8	9.4	7.1	5.5	4.1	-	-	-	0.8	2.5
7006ZVR	12, 24	PM	-	-	-	-	-	-	-	-	-	-
7006ZVR	230/50/1	SP	-	-	-	-	-	-	-	-	-	-
7010	12, 24	PM	6.5	4.5	2.9	1.9	-	-	-	-	1.0	2.2
7010	115/60/1,230/50/1	SP	5.8	4.3	3.0	2.0	-	-	-	-	1.2	2.3
7010ZDP	12, 24	PM	12.0	8.1	5.1	2.5	-	-	-	-	0.8	2.0
7010ZDP	115/60/1,230/50/1	SP	10.4	7.3	4.8	2.5	-	-	-	-	0.8	2.3
7010ZVR	12, 24	PM	-	-	-	-	-	-	-	-	-	-
7010ZVR	230/50/1	SP	-	-	-	-	-	-	-	-	-	-
7011	12, 24	PM	12.4	8.1	5.3	3.5	1.5	-	-	-	0.8	2.3
7011ZP	12, 24	PM	24.0	17.0	11.0	8.0	-	-	-	-	0.5	2.3
7011ZR	12, 24	PM	-	-	-	-	-	-	-	-	-	-
7015ZR	12, 24	PM	-	-	-	-	-	-	-	-	-	-
7015ZR	230/50/1	PSC	-	-	-	-	-	-	-	-	-	-
7015	12, 24	PM	14.0	9.7	7.1	4.9	3.1	-	-	-	1.0	2.5
7015ZP	12, 24	PM	27.0	20.0	15.0	12.0	9.0	-	-	-	1.0	3.0
7015ZP	230/50/1	PSC	22.0	16.2	11.5	9.3	5.3	-	-	-	1.0	2.5
8010	230/50/1	PSC	23.0	16.0	11.0	8.0	4.5	1.8	-	-	1.0	2.8
8010ZP	230/50/1	PSC	38.0	31.0	24.0	17.0	11.0	3.5	-	-	0.8	2.8
8010ZR	230/50/1	PSC	-	-	-	-	-	-	-	-	-	-
8011	230/50/1	PSC	-	-	-	-	-	-	-	-	-	-
8011ZP	230/50/1	PSC	-	-	-	-	-	-	-	-	-	-
8011ZR	230/50/1	PSC	-	-	-	-	-	-	-	-	-	-
8015	230/50/1	PSC	28.0	22.0	17.5	13.0	10.0	3.5	-	-	0.8	3.0
8015ZP	230/50/1	PSC	-	-	-	-	-		-	-	-	-
8015ZR	230/50/1	PSC	-	-	-	-	-	-	-	-	-	-

^{*}PM = Permanent Magnet, SP = Shaded Pole.

 $^{{}^*\}mathsf{PSC}\text{-}\mathsf{Permanent}\;\mathsf{Split}\;\mathsf{Capacitor},\;\mathsf{Consult}\;\mathsf{factory}\;\mathsf{for}\;\mathsf{60}\;\mathsf{hertz}\;\mathsf{models}\;\mathsf{-}\;\mathsf{minimum}\;\mathsf{quantities}\;\mathsf{apply}.$







Vacuum											
MODEL	MOTOR CAP	ACITY				OW @ mbar			MAX. VACUUM	DIMENSIONS (H x W x L)	WEIGHT
	VOLTAGE	TYPE*	0	-100	-200	-400	-600	-800	mbar	mm	kg
1010	2.5 - 4	PM	0.8	0.6	0.4	0.1	-	-	-500	23 x 14 x 33	0.02
2002	2.0 - 10	PM	0.8	0.6	0.4	-	-	-	-520	26 x 17 x 41	0.03
3003	4.5 - 12	PM	1.0	0.6	0.3	-	-	-	-380	37 x 23 x 43	0.04
3013	4.5 - 12	PM	1.3	0.7	0.4	0.1	-	-	-450	34 x 23 x 44	0.03
4002V	6	PM	2.0	1.5	1.2	0.5	-	-	-600	30 x 17 x 53	0.05
1410V	12, 24	PM	5.5	4.6	3.9	2.4	1.0	-	-750	54 x 30 x 83	0.17
1410VD	12, 24	PM	4.3	3.5	2.8	1.7	0.6	-	-730	54 x 30 x 83	0.17
1420VP	12, 24	PM	11.0	9.5	8.0	5.0	2.1	-	-780	75 x 30 x 87	0.22
1420VDP	12, 24	PM	8.2	7.0	5.8	3.2	1.0	-	-730	75 x 30 x 87	0.22
1610	12, 24	PM	8.0	6.9	5.7	3.7	1.9	0.4	-900	97 x 47 x 120	0.64
1620	12, 24	PM	16.5	14.4	12.1	7.8	4.0	0.7	-870	141 x 47 x 138	0.75
7006	12, 24	PM	7.2	5.3	4.4	2.7	1.2	0.3	-850	78 x 47 x 123	0.60
7006	230/50/1	PSC	6.9	5.3	4.3	2.6	1.2	0.3	-850	110 x 79 141	1.6
7006ZP	12, 24	PM	13.8	10.6	8.6	5.3	2.8	0.9	-850	78 x 47 x 123	0.9
7006ZP	230/50/1	PSC	13.8	10.6	8.6	5.3	2.8	0.9	-850	110 x 79 x 185	1.8
7006ZVR	12, 24	PM	6.6	5.7	4.8	3.2	1.9	0.7	-950	78 x 47 x 123	0.90
7006ZVR	230/50/1	SP	7.1	6.0	5.0	3.3	1.9	0.6	-950	78 x 61 x 123	1.8
7010	12, 24	PM	6.5	4.6	3.7	2.2	1.0	-	-730	86 x 48 x 120	0.60
7010	115/230/1	SP	5.8	4.5	3.5	2.1	0.9	-	-780	83 x 61 x 109	0.95
7010ZDP	12, 24	PM	12.0	10.0	8.0	4.5	1.7	-	-750	82 x 48 x 161	0.75
7010ZDP	230/50/1	SP	10.4	8.6	7.0	4.2	1.8	-	-750	82 x 61 x 158	1.45
7010ZVR	12, 24	PM	6.0	5.1	4.4	2.9	1.6	0.4	-900	82 x 48 x 161	0.75
7010ZVR	230/50/1	SP	5.3	4.5	3.7	2.4	1.3	0.3	-900	82 x 61 x 158	1.45
7011	12, 24	PM	12.4	9.5	7.5	4.5	1.5	-	-730	62 x 87 x 150	0.85
7011ZP	12, 24	PM	24.0	20.0	15.5	3.0	2.5	-	-700	48 x 97 194	1.4
7011ZR	12, 24	PM	7.0	6.2	5.6	3.5	2.0	0.8	-990	48 x 97 x 192	1.4
7015ZR	12, 24	PM	12.0	10.5	9.5	7.0	4.5	2.0	-920	125 x 76 x 164	2.3
7015ZR	230/50/1	PSC	12.0	10.5	9.5	6.5	4.0	1.5	-900	137 x 79 x 182	2.4
7015	12, 24	PM	14.0	11.0	8.5	4.9	1.8	-	-800	125 x 80 x 130	1.1
7015ZP	12, 24	PM	27.0	21.0	17.0	11.0	5.0	-	-800	125 x 76 x 164	2.3
7015ZP	230/50/1	PSC	22.0	16.8	13.2	7.8	2.9	-	-800	137 x 79 x 182	2.4
8010	230/50/1	PSC	23.0	14.0	11.5	7.0	3.0	-	-780	122 x 129 x200	2.5
8010ZP	230/50/1	PSC	38.0	29.0	23.0	14.0	6.0	-	-780	122 x 124 x 255	3.4
8010ZR	230/50/1	PSC	26.0	22.0	19.0	13.0	7.7	2.7	-920	122 x 124 x 255	3.4
8011	230/50/1	PSC	34.0	29.0	22.0	14.0	8.0	3.0	-950	143 x 129 x 193	3.5
8011ZP	230/50/1	PSC	65.0	58.0	48.0	32.0	17.0	5.8	-930	143 x 129 x 261	5.0
8011ZR	230/50/1	PSC	34.0	26.0	22.8	16.0	10.0	4.5	-990	143 x 129 x 261	5.0
8015	230/50/1	PSC	28.0	20.5	16.0	10.0	5.3	1.0	-830	122 x 129 x 200	2.5
8015ZP	230/50/1	PSC	50.0	42.0	34.0	22.0	11.5	1.8	-830	122 x 124 x 255	3.9
8015ZR	230/50/1	PSC	29.0	24.5	21.0	14.5	8.6	3.2	-960	122 x 124 x 255	3.9



 * PSC=Permanent Split Capacitor, Consult factory for 60 hertz models - minimum quantities apply.

Note: Minimum release quantities or regional availability may apply. Consult factory.





3013



1420 BLDC



1620 VD



7011 DC



8011 Z



107 AC



107 DC



2107



2907





Pressure												
MODEL	MOTOR CAPA	ACITY				FL0 I/min	OW @ bar				MAXIMUM bi	
	VOLTAGE	TYPE*	0.0	0.5	1.0	1.5	2.0	3.0	5.0	7.0	CONTINUOUS	INTERMITTENT
007BDC19	12	PM	-	-	-	-	-	-	-	-	-	-
007CDC19	12	PM	18.4	15.9	11.9	8.3	5.0	-	-	-	1.0	1.7
107AB18XFTLBXX	100/50/1, 115/60/1	SP	19.5	15.8	11.6	8.0	4.5	-	-	-	1.4	1.7
107CDU18XFTLBXX	220-230/50/1, 230/60/1	SP	18.4	13.0	8.3	5.2	3.1	-	-	-	1.4	1.7
107ZC18/24	24	BLDC	27.2	20.0	14.8	10.3	6.7	-	-	-	2.4	2.4
1071220IFTLBXX	12	PM	39.6	35.1	27.1	20.2	14.5	6.2	-	-	2.4	2.4
118ZC20/24	24	BLDC	24.1	20.8	17.0	14.2	10.5	-	-	-	1.4	2.1
118ZC20/24UV	24	BLDC	25.8	21.2	18.4	15.1	11.0	-	-	-	1.4	2.1
907BDC22	12	PM	-	-	-	-	-	-	-	-	-	-
907CDC18	12	PM	58.0	42.5	27.3	18.4	10.9	-	-	-	2.1	2.1
907ZC18/24	24	BLDC	62.9	43.8	29.5	15.3	-	-	-	-	1.7	1.7
910CDC22/12	12	PM	55.8	45.5	37.0	29.7	23.7	10.4	-	-	1.7	2.8
927CA18	115/60/1	SP	35.1	29.5	23.4	17.1	12.9	4.6	-	-	2.1	2.8
927CD18	220/50/1	SP	32.6	26.7	20.8	15.8	11.0	4.2	-	-	2.1	2.8
2107A18XSTLNXX	115/60/1	SP	42.5	-	-	-	-	-	-	-	0.3	0.3
2107DU18XSTLNXX	220-230/50/1	SP	35.3	-	-	-	-	-	-	-	0.3	0.3
2107VA20	115/60/1	SP	-	-	-	-	-	-	-	-	-	-
2107VD20	220/50/1	SP	-	-	-	-	-	-	-	-	-	-
2119VCDU18	220/50/1, 230/50/60/1	SP	-	-	-	-	-	-	-	-	-	-
2119VE20	115/60/1	PSC	-	-	-	-	-	-	-	-	-	-
2907CDC22/12	12	PM	90.6	77.2	63.5	-	-	-	-	-	1.0	1.0

 $^{^{*}}$ PM = Permanent Magnet, SP = Shaded Pole, BLDC=Brushless DC, PSC = Permanent Split Capacitor







Diaphragm

Vacuum												
MODEL	MOTOR CAPA					FLOW in @ m	bar			MAX. VACUUM	DIMENSIONS (H x W x L)	WEIGHT
	VOLTAGE	TYPE*	0	-100	-200	-400	-600	-800	-900	mbar	mm	kg
007BDC19	12	PM	32.5	25.8	20.2	13.4	6.7	-	-	-780	128 x 60 x 155	1.3
007CDC19	12	PM	18.4	15.6	12.9	7.4	-	-	-	-780	130 x 85 x 157	1.3
107AB18XFTLBXX	100/50/1, 115/60/1	SP	19.5	17.0	14.4	8.6	3.4	-	-	-750	119 x 108 x 161	2.3
107CDU18XFTLBXX	220-230/50/1, 230/60/1	SP	18.4	15.6	12.8	7.6	3.0	-	-	-750	119 x 108 x 161	2.3
107ZC18/24	24	BLDC	27.2	22.7	18.4	11.3	5.6	-	-	-800	119 x 108 x 154	0.9
1071220IFTLBXX	12	PM	39.5	34.4	29.3	19.3	8.6	-	-	-750	119 x 108 x 182	2.0
118ZC20/24	24	BLDC	24.1	20.3	18.4	11.2	4.2	-	-	-745	124 x 108 x 155	0.8
118ZC20/24UV	24	BLDC	26.6	24.1	20.1	12.7	6.8	-	-	-810	124 x 89 x 155	2.0
907BDC22	12	PM	60.0	43.3	35.6	21.6	10.9	-	-	-850	149 x 102 x 199	2.9
907CDC18	12	PM	58.0	44.6	33.1	19.7	8.3	-	-	-750	149 x 102 x 199	2.9
907ZC18/24	24	BLDC	62.9	48.5	36.8	18.0	-	-	-	-720	150 x 121 x 151	2.5
910CDC22/12	12	PM	55.8	48.4	40.9	25.6	12.7	-	-	-820	149 x 102 x 199	3.7
927CA18	115/60/1	SP	35.1	29.3	23.9	15.2	7.1	-	-	-810	172 x 121 x 198	4.9
927CD18	220/50/1	SP	32.6	25.5	19.6	13.0	6.0	-	-	-810	172 x 121 x 198	4.9
2107A18XSTLNXX	115/60/1	SP	42.5	35.5	31.0	25.0	15.3	-	-	-750	120 x 108 x 190	2.7
2107DU18XSTLNXX	220-230/50/1	SP	35.2	31.2	25.5	15.5	6.8	-	-	-750	120 x 108 x 190	2.7
2107VA20	115/60/1	SP	24.1	20.7	17.6	12.2	7.3	3.0	-	-960	120 x 108 x 206	2.8
2107VD20	220/50/1	SP	20.4	17.7	15.1	10.6	6.4	2.4	-	-960	120 x 108 x 206	2.8
2119VCDU18	220/50/1, 230/50/60/1	SP	20.7	18.7	16.9	12.5	7.9	-	-	-910	123 x 107 x 220	3.3
2119VE20	115/60/1	PSC	23.2	18.8	16.7	12.3	7.8	-	-	-918	123 x 107 x 220	3.3
2907CDC22/12	12	PM	90.6	70.5	53.7	35.1	17.9	-	-	-810	149 x 120 x 317	5.0







907



910



G 04 EB



G 045





Pressure												
MODEL	MODEL CAPA	ACITY					OW @ mbar				MAXIMUM ml	
	VOLTAGE	TYPE*	0.0	50	100	200	400	600	800	1000	CONTINUOUS	INTERMITTENT
G 01-K-LC(L)	6	PM	2.2	0.8	-	-	-	-	-	-	25	80
G 01-K-EB	6, 12	PM	1.4	-	-	-	-	-	-	-	10	40
G 01 EB	3, 6, 12, 24	PM	1.6	1.2	0.7	-	-	-	-	-	100	180
G 01-4 EB	6, 12, 24	PM	1.4	1.2	0.9	0.4	-	-	-	-	100	280
G 02 EB	3, 6, 12, 24	PM	3.6	2.6	1.6	-	-	-	-	-	100	190
G 02-4 EB	6, 12, 24	PM	3.7	3.2	2.5	1.3	-	-	-	-	100	310
G 02-8	6, 12	PM	2.7	2.5	2.2	1.6	0.5	-	-	-	200	500
G 04 EB	3, 6, 12, 24	PM	6.8	4.5	2.4	-	-	-	-	-	40	150
G 04-4 EB	6, 12	PM	5.1	4.0	3.0	0.9	-	-	-	-	50	240
G 04-8	12	PM	4.4	3.6	2.6	1.0	-	-	-	-	100	260
G 045-LC	12	PM	6.5	6.0	5.6	-	-	-	-	-	100	750
G 045	12, 24	PM	6.1	5.8	5.5	4.5	2.9	1.3	-	-	150	750
G 07	12, 24	PM	21.0	21.0	20.0	19.0	15.0	13.0	9.0	6.0	200	1400
G 07-N	12, 24	PM	20.0	19.0	18.0	16.0	-	-	-	-	250	900
G 08	12, 24	PM	15.5	15.0	15.0	14.0	11.0	9.0	6.0	5.0	300	1400
G 08-T Series	12, 24	PM	19.0	19.0	18.0	17.0	13.0	11.0	7.0	6.0	-	1400
G 08-T Parallel	12, 24	PM	36.0	36.0	34.0	33.0	25.0	21.0	12.0	10.0	-	1400
G09-6	12, 24	PM	11.0	9.5	5.0	-	-	-	-	-	200	370
BL-G 02-4	12	BLDC	2.1	1.5	1.0	-	-	-	-	-	150	200
BL-G 085 M	12	BLDC	8.5	7.5	6.5	4.7	1.0	-	-	-	150	450

*PM = Permanent Magnet, BLDC = Brushless DC

Note: Minimum release quantities or regional availability may apply. Consult factory.



Rotary Vane

QR-0030 QR-0050	
	# #

SR-0015-VP



Pressure	9						
MODEL	MOTOR CAPA	ACITY		FLOW I/min @ mbar		MAXIMUM mt	
	VOLTAGE	TYPE*	0	500	1000	CONTINUOUS	INTERMITTENT
QR-0030	100-115/200	SPh	90.6	70.0	49.5	700	1000
art oooo	240/60/50/1	SFII	76.4	58.7	40.7	700	1000
QR-0050	100-115/200	SPh	130.2	109.7	86.6	700	1000
G. (0000	240/60/50/1	SFII	113.2	92.7	69.6	700	1000
QR-0080	100-115/200	CS	226.5	201.1	177.2	700	1000
G. (0000	240/60/50/1	CS	189.7	168.5	148.5	700	1000
QR-0080	200-240/460/60/3	POLY	226.5	201.1	177.2	700	1000
GIV GGG	200-220/380-415/50/3		220.5	201.1	177.2	700	1000
QR-0100	200-240/460/60/3	POLY	283.1	258.5	233.8	700	1000
GIV 0100	200-220/380-415/50/3		203.1	250.5	255.0	700	1000
QR-0100	100-115/200	CS	283.1	258.5	233.8	700	1000
G. (0.00	240/60/50/1		235.0	214.4	193.9	700	1000
SR-0015-VP	115/60/50/1	PSC	42.5	30.8	20.5	700	700
SR-0015-VP	220/240/50/60/1	PSC	33.9	24.3	16.1	700	700
SR-0015-VP	115/60/50/1	SPh	42.5	30.8	20.5	700	700

 * CS = Capacitor Start, SPh = Split Phase, PSC = Permanent Split Capacitor, POLY = 3 Phase





Rotary Vane

Vacuum											
MODEL	MOTOR CAP	ACITY				DW) mbar			MAX. VACUUM mbar	DIMENSIONS (H x W x L)	WEIGHT
	VOLTAGE	TYPE*	0	-100	-200	-400	-600	-800	CONT./INTERM.	mm	kg
G 01-K-LC(L)	6	PM	2.2	-	-	-	-	-	-25/-70	20.5 x 20 x 46	0.03
G 01-K-EB	6, 12	PM	1.4	-	-	-	-	-	-10/-40	20.5 x 20 x 53	0.04
G 01 EB	3, 6, 12, 24	PM	1.6	0.8	-	-	-	-	-100/-200	29 x 26 x 55	0.10
G 01-4 EB	6, 12, 24	PM	1.4	0.9	0.4	-	-	-	-100/-290	29 x 26 x 55	0.10
G 02 EB	3, 6, 12, 24	PM	3.6	1.6	-	-	-	-	-100/-190	29 x 26 x 55	0.10
G 02-4 EB	6, 12, 24	PM	3.7	2.5	1.3	-	-	-	-100/-310	29 x 26 x 55	0.10
G 02-8	6, 12	PM	2.7	2.1	1.5	0.3	-	-	-200/-450	29 x 26 x 72	0.13
G 04 EB	3, 6, 12, 24	PM	6.8	2.5		-	-	-	-40/-160	29 x 26 x 62	0.10
G 04-4 EB	6, 12	PM	5.1	3.0	1.0	-	-	-	-50/-260	29 x 26 x 62	0.10
G 04-8	12	PM	4.4	2.5	0.9	-	-	-	100/-250	29 x 26 x 78	0.14
G 045-LC	12	PM	6.5	5.7	4.5	1.8	0.8	-	-100/-630	42 x 42 x 90	0.25
G 045	12, 24	PM	6.1	5.3	4.4	2.6	0.8	-	-150/-700	42 x 42 x 86	0.25
G 07	12, 24	PM	21.0	18.0	16.0	10.0	5.0	-	-200/-770	48 x 48 x 150	0.70
G 07-N	12, 24	PM	20.0	16.2	14.2	8.5	3.0	-	-300/-720	51 x 51 x 113	0.40
G 08	12, 24	PM	15.5	13.0	12.0	8.0	5.0	1.0	-300/-830	59 x 59 x 135	0.75
G 08-T Series	12, 24	PM	19.0	17.0	15.0	11.0	7.0	3.0	-/-930	59 x 59 x 210	1.30
G 08-T Parallel	12, 24	PM	36.0	32.0	27.0	19.0	10.0	2.0	-/-840	59 x 59 x 210	1.30
G09-6	12, 24	PM	11.0	7.8	4.2	-	-	-	-200/-350	40 x 40 x 60	0.30
BL-G 02-4	12	BLDC	2.1	1.0	-	-	-	-	-150/-190	32 x 32 x 69	0.13
BL-G 085 M	12	BLDC	8.5	6.7	5.0	1.7	-	-	-150/-500	50 x 50 x 44	0.15

*PM = Permanent Magnet, BLDC = Brushless DC

Note: Minimum release quantities or regional availability may apply. Consult factory.



Rotary Vane

Vacuum												
MODEL	MOTOR CAPA	ACITY	FLOW I/min @ mbar						MAX. VACUUM	DIMENSIONS (H x W x L)	WEIGHT	
	VOLTAGE	TYPE*	0	-100	-200	-400	-600	-800	mbar	mm	kg	
QR-0030	100-115/200	SPh	90.60	78.90	67.70	47.60	26.00	-	-840	147 x 142 x 344	15.0	
	240/60/50/1	51 11	76.40	68.00	59.20	40.10	21.90	-	040	147 X 142 X 544	15.0	
QR-0050	100-115/200	SPh	130.2	116.8	102.9	72.8	44.3	17.5	-870	147 x 142 x 344	15.0	
	240/60/50/1	JFII	113.3	101.5	89.3	62.5	35.8	9.0	-070	147 X 142 X 544	15.0	
QR-0080	100-115/200	CS	226.5	199.7	173.00	121.5	74.7	23.7	-870	171 x 165 x 417	24.5	
an occo	240/60/50/1		189.7	166.3	143.40	100.9	57.7	12.9	-070	1/1 x 103 x 41/	24.5	
QR-0080	200-240/460/60/3	DOI V	226.5	100 7	173.00	121 5	74.7	23.7	-840	171 x 165 x 417	25.4	
	200-220/380-415/50/3	POLI	220.5	133.7	175.00	121.5	74.7	25.7	-040	171 × 103 × 417	25.4	
QR-0100	200-240/460/60/3	POLY	2971	251 7	219.6	157.0	95.3	35.9	-840	171 x 165 x 417	25.4	
	200-220/380-415/50/3		203.1	231.3	213.0	137.0	33.3	33.3	-040	171 × 103 × 417	25.4	
QR-0100	100-115/200	CS	283.1	251.3	219.6	157.0	95.3	35.9	-870	171 x 165 x 417	24.5	
ar oloo	240/60/50/1	CS	235.1	206.5	178.6	125.1	73.1	21.9	-870	1/1 x 103 x 41/	24.5	
SR-0015-VP	115/60/50/1	PSC	42.5	35.8	29.6	19.6	9.5	-	-810	105 x 106 x 208	3.6	
SR-0015-VP	220/240/50/60/1	PSC	33.9	29.1	24.4	15.8	7.9	-	-810	105 x 106 x 208	3.6	
SR-0015-VP	115/60/50/1	SPh	42.5	35.8	29.6	19.6	9.5	-	-810	105 x 106 x 208	3.9	

 * CS = Capacitor Start, SPh = Split Phase, PSC = Permnent Split Capacitor, POLY = 3 Phase

Note: Minimum release quantities or regional availability may apply. Consult factory.

G-01-K-LC(L)



G 02 EB



G 07 N







Rotary Vane

DTE 3



DTE 6



VTE 10



Pressure											
MODEL	MOTOR CAP	ACITY			l/r	FLOW nin @ mb	ar			MAXIMUM bi	
	VOLTAGE	TYPE*	0	100	200	400	600	800	1000	CONTINUOUS	INTERMITTENT
TF 2	24	PM	42	39	37	33	29	25	21	-	1.0
TF 4	12, 24	PM	66	62	59	52	46	39	33	-	1.0
TF4 HP	24	PM	84	83	82	77	71	64	58	-	1.0
TF 8	24	PM	131	131	126	117	108	99	90	-	1.0
VTE 3	230/50/1	PSC	-	-	-	-	-	-	-	-	-
VTE 3	115/60/1	PSC	-	-	-	-	-	-	-	-	-
VTE 3	multi	POLY	-	-	-	-	-	-	-	-	-
VTE 3	24	PM	-	-	-	-	-	-	-	-	-
DTE 3	230/50/1	PSC	58	57	55	52	47	43	38	1.0	1.0
DTE 3	115/60/1	PSC	70	69	68	63	60	55	-	0.8	0.8
DTE 3	multi	POLY	58	57	55	52	47	43	38	1.0	1.0
DTE 3	24	PM	58	57	55	52	47	43	38	1.0	1.0
VTE 6	230/50/1	PSC	-	-	-	-	-	-	-	-	-
VTE 6	115/60/1	PSC	-	-	-	-	-	-	-	-	-
VTE 6	multi	POLY	-	-	-	-	-	-	-	-	-
VTE 6	24	PM	-	-	-	-	-	-	-	-	-
DTE 6	230/50/1	PSC	100	98	97	90	85	75	67	1.0	1.0
DTE 6	115/60/1	PSC	120	117	115	108	102	95	83	1.0	1.0
DTE 6	multi	POLY	100	98	97	90	85	75	67	1.0	1.0
DTE 6	24	PM	100	98	97	90	85	75	67	1.0	1.0
VTE 8	230/50/1	PSC	-	-	-	-	-	-	-	-	-
VTE 8	115/60/1	PSC	-	-	-	-	-	-	-	-	-
VTE 8	multi	POLY	-	-	-	-	-	-	-	-	-
VTE 8	24	PM	-	-	-	-	-	-	-	-	-
DTE 8	230/50/1	PSC	133	132	128	118	113	-	-	0.6	0.6
DTE 8	115/60/1	PSC	160	128	153	145	133	102	98	0.6	0.6
DTE 8	multi	POLY	133	132	128	118	113	102	98	1.0	1.0
DTE 8	24	PM	133	132	128	118	113	102	98	1.0	1.0
VTE 10	230/50/1	PSC	-	-	-	-	-	-	-	-	-
VTE 10	115/60/1	PSC	-	-	-	-	-	-	-	-	-
VTE 10	multi	POLY	-	-	-	-	-	-	-	-	-
VTE 10	24	PM	-	-	-	-	-	-	-	-	-
DTE 10	230/50/1	PSC	167	164	158	146	134	122	-	0.8	0.8
DTE 10	115/60/1	PSC	200	194	187	174	161	148	-	0.8	0.8
DTE 10	multi	POLY	167	164	158	146	134	122	110	1.0	1.0
DTE 10	24	PM	167	164	158	146	134	122	110	1.0	1.0

^{*}PM = Permanent Magnet, PSC = Permanent Split Capacitor, POLY = 3 Phase







Rotary Vane

Vacuum											
MODEL	MOTOR CAP.	ACITY				OW Constant			MAX. VACUUM	DIMENSIONS	WEIGHT
	VOLTAGE	TYPE*	0	-100	-200	9 mbar -400	-600	-800	mbar CONT./INTERM.	(H x W x L) mm	kg
TF 2	24	PM	42	37	32	21	11	-	-	93 x 88 x 215	3.5
TF 4	12, 24	PM	66	53	40	33	17	-	-	93 x 88 x 215	3.5
TF4 HP	24	PM	84	73	63	42	21	-	-	93 x 88 x 215	3.5
TF 8	24	PSC	136	119	102	68	34	-	-	143 x 138 x 260	7.5
VTE 3	230/50/1	PSC	58	51	44	31	17	3	-850 / -850	150 x 152 x 205	6.5
VTE 3	115/60/1	PSC	70	62	53	37	20	4	-850 / -850	150 x 152 x 205	6.5
VTE 3	multi	POLY	58	51	44	31	17	3	-850 / -850	150 x 152 x 205	6.5
VTE 3	24	PM	58	51	44	31	17	3	-850 / -850	150 x 152 x 210	7.9
DTE 3	230/50/1	PSC	-	-	-	-	-	-	-	150 x 152 x 205	6.5
DTE 3	115/60/1	PSC	-	-	-	-	-	-	-	150 x 152 x 205	6.5
DTE 3	multi	POLY	-	-	-	-	-	-	-	150 x 152 x 205	6.5
DTE 3	24	PM	-	-	-	-	-	-	-	150 x 152 x 210	7.9
VTE 6	230/50/1	PSC	100	89	77	52	30	7	-850 / -850	156 x 152 x 220	7.5
VTE 6	115/60/1	PSC	120	106	92	64	36	9	-850 / -850	156 x 152 x 220	7.5
VTE 6	multi	POLY	100	89	77	52	30	7	-850 / -850	156 x 152 x 220	7.5
VTE 6	24	PM	100	89	77	52	30	7	-850 / -850	156 x 152 x 225	8.5
DTE 6	230/50/1	PSC	-	-	-	-	-	-	-	156 x 152 x 220	7.5
DTE 6	115/60/1	PSC	-	-	-	-	-	-	-	156 x 152 x 220	7.5
DTE 6	multi	POLY	-	-	-	-	-	-	-	156 x 152 x 220	7.5
DTE 6	24	PM	-	-	-	-	-	-	-	156 x 156 x 225	8.5
VTE 8	230/50/1	PSC	133	117	99	68	77	10	-850 / -850	156 x 156 x 249	8.0
VTE 8	115/60/1	PSC	160	140	120	81	45	13	-850 / -850	156 x 156 x 249	8.0
VTE 8	multi	POLY	133	117	99	68	37	10	-850 / -850	156 x 156 x 249	8.0
VTE 8	24	PM	133	117	99	68	37	10	-850 / -850	156 x 156 x 245	9.2
DTE 8	230/50/1	PSC	-	-	-	-	-	-	-	156 x 156 x 249	8.0
DTE 8	115/60/1	PSC	-	-	-	-	-	-	-	156 x 156 x 249	8.0
DTE 8	multi	POLY	-	-	-	-	-	-	-	156 x 156 x 249	8.0
DTE 8	24	PM	-	-	-	-	-	-	-	156 x 156 x 245	9.2
VTE 10	230/50/1	PSC	167	150	130	90	50	10	-850 / -850	156 x 156 x 265	10.3
VTE 10	115/60/1	PSC	200	175	155	105	60	15	-850 / -850	156 x 156 x 265	10.3
VTE 10	multi	POLY	167	150	130	90	50	10	-850 / -850	156 x 156 x 265	10.1
VTE 10	24	PM	167	150	130	90	50	10	-850 / -850	156 x 156 x 270	11.8
DTE 10	230/50/1	PSC	-	-	-	-	-	-	-	156 x 156 x 265	10.3
DTE 10	115/60/1	PSC	-	-	-	-	-	-	-	156 x 156 x 265	10.3
DTE 10	multi	POLY	-	-	-	-	-	-	-	156 x 156 x 265	10.1
DTE 10	24	PM	-	-	-	-	-	-	-	156 x 156 x 270	11.8



TF 4



VTE 3



*PM = Permanent Magnet, PSC = Permanent Split Capacitor, POLY = 3 Phase

Pressure

LMG 4

LMG 4

LMG 4

LM 15

LM 15

LM 15

LM 22

LM 22

YP-6DU

YP-15DU

YP-20DU

YP-30DU

YP-40DU

YP-50DU

Model Selection



YP-20DU



6015



Linear Diaphragm

Linear Diaphragm

230/50/1

115/60/1

12, 24

230/50/1

115/60/1

12, 24

230/50/1

12, 24

230/50/60/1

230/50/60/1

230/50/60/1

230/50/60/1

230/50/60/1

230/50/60/1

 $0^{\,\mathrm{1})}$ – Free flow operation not recommended

LM

*LM = Linear Magnetic, 230/50/60/1 models "I/min" reported at 50 Hz

16.0

16.0

15.0

22.0

20.0

-

Note: Minimum release quantities or regional availability may apply. Consult factory.

6025	
	0

Pressure									
MODEL	MOTOR CAPA	ACITY			FLOW I/min @ mbar	MAXIMUM PRESSURE mbar			
	VOLTAGE	TYPE*	0	100	200	300	400	CONTINUOUS	INTERMITTENT
6015SE (150098)	115/60/1	LM	31.1	10.5	-	-	-	140	140
6025SE (150057)	115/60/1	LM	58.0	44.6	26.9	10.1	-	280	280
6025SE (150058)	230/50/60/1	LM	60.3	46.5	30.8	8.4	-	280	280
6025SE (150108)	12	LM	42.5	28.0	12.5	2.1	-	280	280
6025SE (150109)	24	LM	42.5	28.0	12.5	2.1	-	280	280

1.1

12

1.1

12.5

12.5

12.0

16.0

15.0

6.0

15.0

20.0

37.0

49 0

56.0

10

0.95

8.4

8.7

6.6

8.0

5.0

9.0

15.0

20.0

29.0

0.5

0.35

0.5

0.8

_

450

450

300

300

200

250

200

150

200

200

200

200

200

450

450

400

420

320

300

260

150

200

200

200

200

200

Note: Minimum release quantities or regional availability may apply. Consult factory.

Linear Diaphragm (Vibrating Armature Type)



Pressure													
MODEL	MOTOR CAP	ACITY			OW @ mbar		MAXIMUM PRESSURE mbar						
	VOLTAGE	TYPE*	0	100	200	400	CONTINUOUS	INTERMITTENT					
106	230/50	VA	0.9	0.6	0.2	-	200	270					
112.0	230/50	VA	2.8	2.0	1.2	-	280	280					
112.1	230/50	VA	5.0	2.6	2.0	-	340	340					
202.0	230/50	VA	4.6	3.3	1.7	-	340	340					
202.1	230/50	VA	4.8	3.8	2.1	0.3	450	450					
302.0	230/50	VA	5.5	4.3	3.0	1.0	500	500					
302.1	230/50	VA	8.5	6.5	5.2	3.0	700	700					
312	230/50	VA	6.2	3.8	1.7	-	270	270					
362	230/50	VA	8.5	4.6	-	-	200	200					

^{*}VA = Vibrating armature

^{*}LM = Linear Magnetic, 230/50/60/1 Model Flow reported at 60 Hz



Linear Diaphragm

Vacuum												
MODEL	MOTOR CAPA	CITY		FLOW I/min @ mbar		MAX. VACUUM mbar	DIMENSIONS (H x W x L)	WEIGHT				
	VOLTAGE	TYPE*	O 1)	-100	-200	CONT./INTERM.	mm	kg				
LMG 4	230/50/1	LM	-	0.9	0.4	-200 / -200	46 x 53 x 72	0.2				
LMG 4	115/60/1	LM	-	0.9	0.4	-200 / -200	46 x 53 x 72	0.2				
LMG 4	12, 24	LM	-	0.9	0.4	-200 / -200	46 x 53 x 72	0.2				
LM 15	230/50/1	LM	16.0	12.5	7.5	-300 / -350	65 x 111 x 107	1.0				
LM 15	115/60/1	LM	16.0	12.5	8.4	-300 / -400	65 x 111 x 107	1.0				
LM 15	12, 24	LM	15.0	16.0	5.3	-200 / -280	76 x 111 x 107	1.0				
LM 22	230/50/1	LM	22.0	16.0	6.0	-250 / -260	65 x 111 x 107	1.0				
LM 22	12, 24	LM	20.0	15.0	5.6	-200 / -260	76 x 111 x 107	1.0				
YP-6DU	230/50/60/1	LM	-	-	-	-	77 x 116 x 110	1.1				
YP-15DU	230/50/60/1	LM	-	-	-	-	77 x 116 x 110	1.2				
YP-20DU	230/50/60/1	LM	-	-	-	-	77 x 116 x 110	1.2				
YP-30DU	230/50/60/1	LM	-	-	-	-	104 x 160 x 136	2.3				
YP-40DU	230/50/60/1	LM	-	-	-	-	104 x 160 x 136	2.5				
YP-50DU	230/50/60/1	LM	-	-	-	-	104 x 160 x 136	2.8				



 $0^{\, \mbox{\tiny 1)}}$ – Free flow operation not recommended

Note: Minimum release quantities or regional availability may apply. Consult factory.





YP-30DU





Linear Diaphragm

Vacuum										
MODEL	MOTOR CAPA	CITY		l/	FLOW min @ mb	ar		MAX. VACUUM	DIMENSIONS (H x W x L)	WEIGHT
	VOLTAGE	TYPE*	0	-50	-100	-150	-200	mbar	mm	kg
6015SE (150098)	115/60/1	LM	31.1	18.0	9.0	-	-	-140	85 x 117 x 127	1.2
6025SE (150057)	115/60/1	LM	58.0	48.8	38.1	29.8	21.9	-270	85 x 117 x 127	1.5
6025SE (150058)	230/50/60/1	LM	60.3	46.0	37.0	29.3	22.0	-270	85 x 117 x 127	1.5
6025SE (150108)	12	LM	42.5	34.0	26.0	19.0	12.5	-270	85 x 117 x 127	1.5
6025SE (150109)	24	LM	42.5	34.0	26.0	19.0	12.5	-270	85 x 117 x 127	1.5

*LM = Linear Magnetic, 230/50/60/1 Model Flow reported at 60 Hz

Note: Minimum release quantities or regional availability may apply. Consult factory.



Linear Diaphragm (Vibrating Armature Type)

Vacuum									
MODEL	MOTOR CAP	ACITY		FL0 I/min @			MAX. VACUUM	DIMENSIONS (H x W x L)	WEIGHT
	VOLTAGE	TYPE*	0	-100	-200	-400	mbar	mm	kg
107	230/50	VA	1.2	0.6	-	-	-190	60 x 60 x 90	0.3
113.0	230/50	VA	4.2	2.0	1.2	-	-280	81 x 78 x 113	0.8
113.1	230/50	VA	3.2	2.5	1.6	0.4	-450	81 x 78 x 113	0.8
203.0	230/50	VA	4.6	2.5	1.2	-	-300	91 x 70 x 140	1.6
203.1	230/50	VA	5.5	4.0	2.3	0.6	-450	91 x 70 x 140	1.6
303.0	230/50	VA	5.5	3.5	2.2	0.5	-420	97 x 78 x 165	2.2
303.1	230/50	VA	6.8	5.0	3.6	2.0	-550	97 x 78 x 165	2.2
313	230/50	VA	6.2	3.3	0.7	-	-250	84 x 65 x 162	0.9
363	230/50	VA	8.5	4.4	-	-	-230	84 x 65 x 162	0.9

*VA = Vibrating armature

Note: Minimum release quantities or regional availability may apply. Consult factory.



107

YP-6A





Linear Diaphragm

Pressure	;								
MODEL	MOTOR CAPA	ACITY			OW @ mbar		OPERATING PRESSURE RANGE mbar		
	VOLTAGE	TYPE*	0	100	200	300	MINIMUM	MAXIMUM	
YP-6A	230/50/60/1	LM	-	6.0	-	-	20.0	150.0	
YP-15A	230/50/60/1	LM	-	15.0	5.0	-	20.0	200.0	
YP-20A	230/50/60/1	LM	-	20.0	9.0	-	20.0	200.0	
YP-6V	230/50/60/1	LM	-	6.0	-	-	20.0	150.0	
YP-15V	230/50/60/1	LM	-	15.0	5.0	-	50.0	200.0	
YP-20V	230/50/60/1	LM	-	20.0	7.0	-	50.0	200.0	
YP-30VC	230/50/60/1	LM	-	35.0	25.0	-	50.0	200.0	
YP-40VC	230/50/60/1	LM	-	48.0	30.0	-	50.0	200.0	
YP-50VC	230/50/60/1	LM	-	61.0	38.0	-	50.0	200.0	
YP-60VC	230/50/60/1	LM	-	70.0	52.0	-	50.0	200.0	
YP-70VC	230/50/60/1	LM	-	93.0	73.0	-	50.0	200.0	
AP-30	230/50/60/1	LM	-	45.0	13.0	-	100.0	230.0	
AP-40	230/50/60/1	LM	-	52.0	21.0	-	100.0	230.0	
AP-60N	230/50/60/1	LM	-	82.0	47.0	4.0	100.0	300.0	
AP-60/80	230/50/60/1	LM	-	91.0	60.0	18.0	100.0	300.0	
AP-80H	230/50/60/1	LM	-	124.0	82.0	21.0	100.0	300.0	
AP-100	230/50/60/1	LM	-	-	108.0	48.0	140.0	300.0	
AP-120	230/50/60/1	LM	-	-	125.0	70.0	160.0	300.0	
LP-150HN	230/50/60/1	LM	-	200.0	150.0	90.0	100.0	300.0	
LP-200HN	230/50/60/1	LM	-	250.0	200.0	148.0	100.0	300.0	
LW-240	230/50/60/1	LM	-	315.0	245.0	175.0	100.0	300.0	

^{*}LM = Linear Magnetic, 230/50/60/1 Model Flow reported at 50 Hz

Note: Minimum release quantities or regional availability may apply. Consult factory.







Linear Diaphragm

Pressure									
MODEL	MOTOR CAP	ACITY			OPERATING PRESSURE RANGE mbar				
	VOLTAGE	TYPE*	0	100	200	300	400	MINIMUM	MAXIMUM
AP-40 (150131)	115/60/1	LM	-	45.0	33.0	-	-	100	231
AP-60 (150132)	115/60/1	LM	-	66.0	53.0	35.0	-	100	300
AP-80 (150133)	115/60/1	LM	ı	92.0	73.0	47.0	i	120	300

^{*}LM = Linear Magnetic



Linear Diaphragm

Vacuum								
MODEL	MOTOR CAPA	CITY		FLOW I/min @ mbar		OP VACUUM RANGE mbar	DIMENSIONS (H x W x L)	WEIGHT
	VOLTAGE	TYPE*	0	-100	-200	MIN./MAX.	mm	kg
YP-6A	230/50/60/1	LM	-	-	-	-	111 X 128 X 148	2.1
YP-15A	230/50/60/1	LM	-	-	-	-	111 X 128 X 148	2.4
YP-20A	230/50/60/1	LM	-	-	-	-	111 X 128 X 148	2.4
YP-6V	230/50/60/1	LM	-	5.0	-	-20 / -150	111 X 128 X 148	2.1
YP-15V	230/50/60/1	LM	-	14.0	3.0	-50 / -200	111 X 128 X 148	2.4
YP-20V	230/50/60/1	LM	-	19.0	70.0	-50 / -200	111 X 128 X 148	2.4
YP-30VC	230/50/60/1	LM	-	31.0	20.0	-50 / -200	163 X 175 X 207	4.8
YP-40VC	230/50/60/1	LM	-	43.0	25.0	-50 / -200	163 X 175 X 207	5.1
YP-50VC	230/50/60/1	LM	-	58.0	30.0	-50 / -200	163 X 175 X 207	5.5
YP-60VC	230/50/60/1	LM	-	67.0	42.0	-50 / -200	163 X 175 X 207	5.9
YP-70VC	230/50/60/1	LM	-	87.0	61.0	-50 / -200	163 X 175 X 207	6.2
AP-30	230/50/60/1	LM	-	-	-	-	199 X 172 X 215	4.6
AP-40	230/50/60/1	LM	-	-	-	-	199 X 172 X 215	4.6
AP-60N	230/50/60/1	LM	-	-	-	-	199 X 172 X 215	5.8
AP-60/80	230/50/60/1	LM	-	-	-	-	199 X 172 X 215	5.8
AP-80H	230/50/60/1	LM	-	-	-	-	199 X 172 X 215	6.1
AP-100	230/50/60/1	LM	-	-	-	-	199 X 172 X 215	6.1
AP-120	230/50/60/1	LM	-	-	-	-	199 X 172 X 215	6.1
LP-150HN	230/50/60/1	LM	-	-	-	-	218 X 179 X 250	8.6
LP-200HN	230/50/60/1	LM	-	-	-	-	218 X 179 X 250	8.6
LW-240	230/50/60/1	LM	-	-	-	-	216 X 220 X 365	14.1





*LM = Linear Magnetic, 230/50/60/1 Model Flow reported at 50 Hz

Note: Minimum release quantities or regional availability may apply. Consult factory.



Linear Diaphragm

Vacuum											
MODEL	MOTOR CAPA	ACITY		FLOW I/min @ mbar					P VACUUM RANGE DIMENSIONS (H x W x L)		
	VOLTAGE	TYPE*	0	-50	-100	-150	-200	in.Hf	mm	kg	
AP-40 (150131)	115/60/1	LM	-	-	-	-	-	-	199 x 172 x 215	4.6	
AP-60 (150132)	115/60/1	LM	-	-	-	-	-	-	199 x 172 x 215	4.7	
AP-80 (150133)	115/60/1	LM	-	-	-	-	-	-	199 x 172 x 215	4.7	



Note: Minimum release quantities or regional availability may apply. Consult factory.

LP-200HN



1210 DC



5002F





SR10/30 DC



SR10/50 DC



SR18



SR25 DC





Liquid Diaphragm

	TYPICAL CHARACTERISTICS safe dry running. self priming. different diaphragm materials possible. connection via nozzle or thread						
MODEL	VOLTAGE	MOTOR TYPE	FREE FLOW ml/min	PRESSURE HEIGHT	SUCTION HEIGHT	OPERATION	DIMENSIONS (mm) H x W x L
1210	DC	PM	180	60 m H ₂ O	6.0 m H ₂ O	Continuous	37 x 23 x 52
1510	DC	PM	750	20 m H ₂ O	7.0 m H ₂ O	Continuous	58 x 30 x 68.2
5002F	DC	PM	400	15 m H ₂ O	6.0 m H ₂ O	Continuous	80 x 30 x 52
5002F Twin	DC	PM	1100	25 m H ₂ O	4.5 m H ₂ O	Continuous	82 x 30 x 86
F120 stepper	DC/AC*	ST	1-260	60 m H ₂ O	4.0 m H ₂ O	Continuous	102 x 59 x 87
F120	DC	PM	900	20 m H ₂ O	4.0 m H ₂ O	Continuous	126 x 61 x 101

*DC/AC = With separate electronics, PM = Permanent Magnet, ST = Stepper motor Note: Minimum release quantities or regional availability may apply. Consult factory.



Liquid Linear

	TYPICAL CHARACTERISTICS self priming. individual impulse drive. long life; pulse control. dosing pumps available						
MODEL	VOLTAGE	MOTOR TYPE	FREE FLOW ml/min	PRESSURE HEIGHT	SUCTION HEIGHT	OPERATION	DIMENSIONS (mm) H x W x L
LMF 3	AC or DC*	LM	250	7.5 m H ₂ O	2.0 m H ₂ O	Continuous	46 x 53 x 72
LMF 4	AC or DC*	LM	300	9.0 m H₂O	3.0 m H ₂ O	Continuous	46 x 53 x 72
LMF Dosing	DC	LM	63	5.6 m H ₂ O	1.0 m H ₂ O	Continuous	46 x 53 x 88

*DC = With separate electronics, LM = Linear drive

Note: Minimum release quantities or regional availability may apply. Consult factory.



Liquid Peristaltic. Direct Drive

TYPICAL CHARACTERISTICS safe dry running. adjustable via speed. reversible (DC). interchangeable cassettes. wide range of tubing options							
MODEL	VOLTAGE	MOTOR TYPE	FREE FLOW ml/min	PRESSURE HEIGHT	SUCTION HEIGHT	OPERATION	DIMENSIONS (mm) H x W x L
SR10/30	DC	PM	16-55	8 m H₂O	8 m H₂O	Intermittent	68 x 54 x 40
SR10/30	DC	PM	20-80	8 m H₂O	8 m H₂O	Intermittent	81 x 56 x 40
SR10/30	DC/AC*	ST	0.5-20	8 m H ₂ O	8 m H₂O	Intermittent	38 x 53 x 40
SR10/50	DC	PM	52-220	8 m H ₂ O	8 m H₂O	Intermittent	85 x 60 x 57
SR10/100	AC or DC	PSC/PM	1300-3000	8 m H ₂ O	8 m H₂O	Intermittent	143 x 109 x 119

*DC/AC = With separate electronics, PM = Permanent Magnet, ST = Stepper motor, PSC = Permanent split capacitor Note: Minimum release quantities or regional availability may apply. Consult factory.



Liquid Peristaltic. Gear Drive

~	insensitive against contamination. adjustable via speed. pumping of highly viscous liquids. sterilisable tubes. simple changing of tubing. wide range of tubing available						
MODEL	VOLTAGE	MOTOR TYPE	FREE FLOW ml/min	PRESSURE HEIGHT	SUCTION HEIGHT	OPERATION	DIMENSIONS (mm) H x W x L
SR18	AC	SY	3-50	10 m H ₂ O	8 m H₂O	Continuous	61.5 x 68 x 90
SR25	AC	SY	0.2-14	10 m H ₂ O	8 m H ₂ O	Continuous	92 x 86 x 80
SR25	AC or DC	SP/PM	2.0-746	10 m H ₂ O	8 m H ₂ O	Continuous	156 x 80 x 108
SR25-300S	DC/AC*	ST	0.1-430	10 m H ₂ O	8 m H ₂ O	Continuous	96 x 80 x 101

*DC/AC = With separate electronics, PM = Permanent Magnet, ST = Stepper motor, SY = Syncro, SP = Shaded Pole Note: Minimum release quantities or regional availability may apply. Consult factory.

Notes	

Conversion of Units

Flow 1 cfm = 28.32 l/min 1 l/min = 0.0353 cfm Vacuum 1 in. Hg = 33.8 mbar 1 mbar = 0.0296 in. Hg Weight 1 lb = 0.4536 kg 1 kg = 2.21 lb

Pressure 1 psi = 0.069 bar 1 bar = 14.5 psi Dimensions 1 in = 25.4 mm 1 mm = 0.0394 in Temperature $^{\circ}C = 0.55 \times (^{\circ}F - 32.0)$ $^{\circ}F = (1.8 \times ^{\circ}C) + 32.0$

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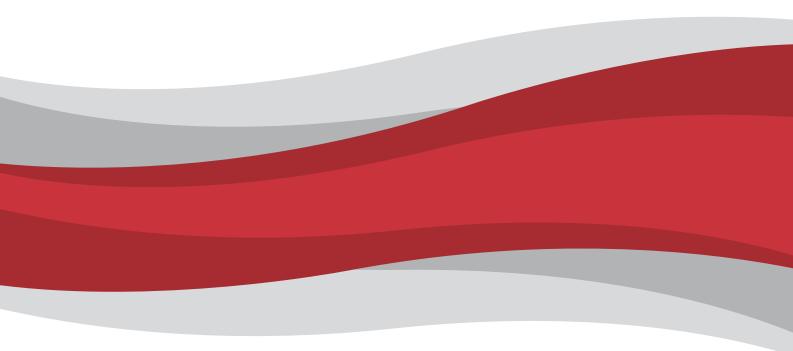
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