DIAPHRAGM

Pumps and Compressors

107 Series

MODELS:

Standard models available.

107CAB18, 107CCD18, 107CEF18, 107CGH18
107CDC20

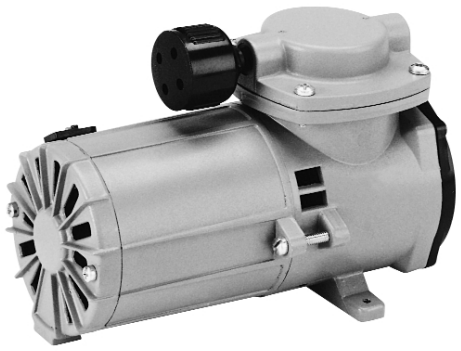
Other models based on availability and minimum purchase.



107CAB, CCD



107CEF, CGH



107CDC

FEATURES (AC& DC):

- Oil-less operation
- Permanently lubricated bearings
- Closed housing and motor vents (107CDC/C only)
- Stainless valves
- Die cast aluminum head, valve plate and diaphragm hold down plate with dichromate conversion treatment
- Balanced for smooth, low vibration operation
- Long-life diaphragm
- Field service capability
- UL® recognized motor and thermal protector (115 Volt, AC only)
- Inlet filter
- CE approval on all standard 220-240/50hz models (Consult factory for non-standard models.)

Consult factory for custom applications

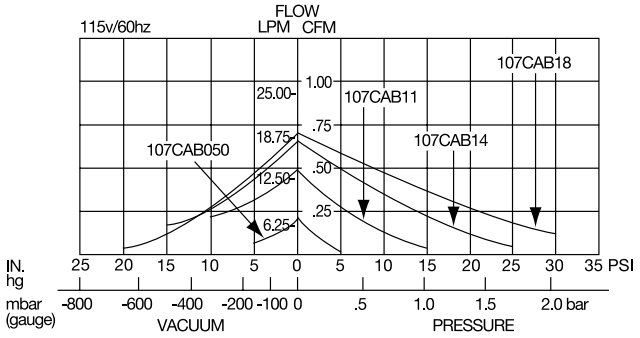
ISO 9001 CERTIFIED

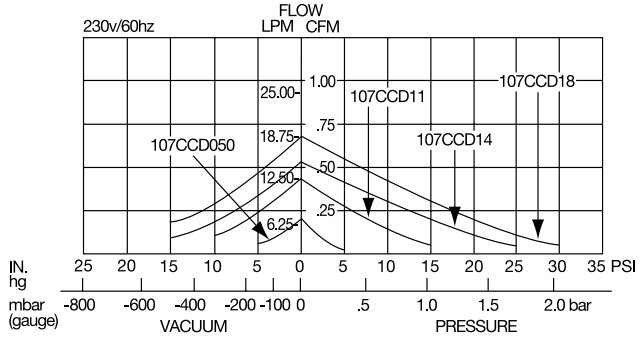
THOMAS®
PUMPS & COMPRESSORS

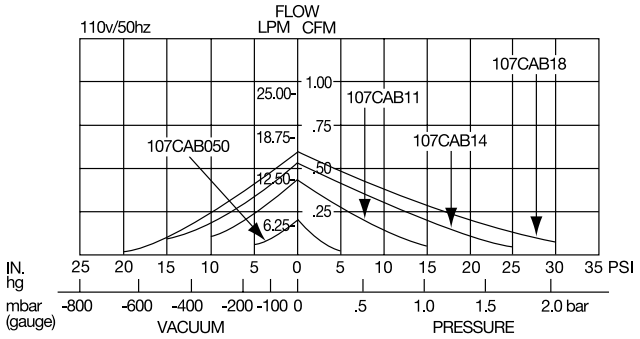
107 SERIES (AC) PERFORMANCE DATA:

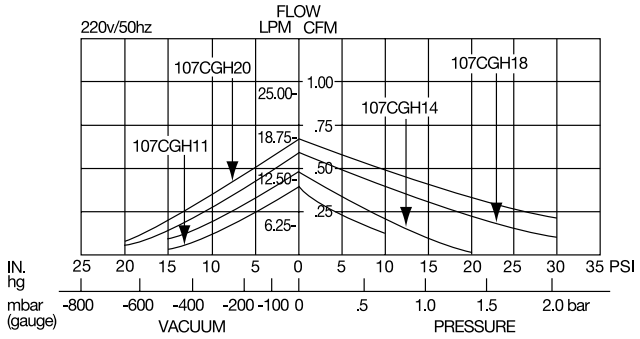
MODEL NUMBER:		107CAB050		107CAB11		107CAB14		STANDARD 107CAB18	
HEAD CONFIGURATION:		Pressure/Vacuum		Pressure/Vacuum		Pressure/Vacuum		Pressure/Vacuum	
STROKE:		.050 Inches		.110 Inches		.140 Inches		.180 Inches	
PRESSURE:		Flow @ 115v/110v		Flow @ 115v/110v		Flow @ 115v/110v		Flow @ 115v/110v	
CFM @ PSI	LPM @ bar								
PSI	bar	CFM	LPM	CFM	LPM	CFM	LPM	CFM	LPM
0 5 10 15 20 25 30 35	0 .5 1.0 1.5 2.0 3.0	.19 / .17 .02 / .03	5.4 / 4.8	.49 / .40 .31 / .28 .18 / .16 .07 / .06	13.9 / 11.3 7.1 / 6.4 2.3 / 2.0	.66 / .55 .45 / .40 .32 / .30 .23 / .20 .13 / .12 .06 / .05	18.7 / 15.6 11.1 / 10.1 6.8 / 6.0 3.0 / 2.7	.69 / .58 .60 / .49 .51 / .41 .40 / .33 .31 / .25 .23 / .18 .14 / .11	19.5 / 16.4 15.8 / 12.9 11.6 / 9.9 8.0 / 6.4 4.5 / 3.5
MAX. CONTINUOUS PRESSURE:		5 PSI	0.3 bar	15 PSI	1.0 bar	25 PSI	1.7 bar	20 PSI	1.4 bar
MAX. INTERMITTENT PRESSURE:		5 PSI	0.3 bar	15 PSI	1.0 bar	25 PSI	1.7 bar	30 PSI	2.1 bar
VACUUM:		Flow @ 115v/110v		Flow @ 115v/110v		Flow @ 115v/110v		Flow @ 115v/110v	
CFM @ IN. hg	LPM @ mbar (gauge)								
IN. hg	mbar (gauge)	CFM	LPM	CFM	LPM	CFM	LPM	CFM	LPM
0 5 10 15 20 25	0 -100 -200 -400 -600 -800	.19 / .17 .10 / .08	5.4 / 4.8 3.9 / 3.3 2.4 / 1.8	.49 / .40 .34 / .27 .19 / .15	13.9 / 11.3 11.4 / 9.2 8.9 / 7.0 3.8 / 3.0	.66 / .55 .45 / .38 .29 / .25 .16 / .12	18.7 / 15.6 15.2 / 12.7 12.0 / 10.1 6.9 / 5.7 2.5 / 1.4	.69 / .58 .54 / .44 .36 / .29 .20 / .16 .05 / .04	19.5 / 16.4 17.0 / 14.1 14.4 / 11.7 8.6 / 6.9 3.4 / 2.7
MAX. VACUUM:		9.0" hg	-305 mbar	17.2" hg	-582 mbar	20.1" hg	-681 mbar	22.1" hg	-748 mbar
MAX. AMBIENT TEMPERATURE:		104°F	40°C	104°F	40°C	104°F	40°C	104°F	40°C
MIN. AMBIENT TEMPERATURE:		50°F	10°C	50°F	10°C	50°F	10°C	50°F	10°C
MAX. RESTART PRESSURE:		0 PSI	0 bar	0 PSI	0 bar	0 PSI	0 bar	0 PSI	0 bar
MAX. RESTART VACUUM:		0" hg	0 mbar	0" hg	0 mbar	0" hg	0 mbar	0" hg	0 mbar
MOTOR VOLTAGE/FREQUENCY:		115/60/1-110/50/1		115/60/1-110/50/1		115/60/1-110/50/1		115/60/1-110/50/1	
HORSEPOWER:		1/20		1/20		1/20		1/20	
MOTOR TYPE:		Shaded Pole		Shaded Pole		Shaded Pole		Shaded Pole	
CURRENT AT RATED LOAD (AMPS):		1.40 / 1.60		1.45 / 1.64		1.50 / 1.74		1.69 / 2.18	
POWER AT RATED LOAD (WATTS):		80 / 85		85 / 90		92 / 100		107 / 136	
STARTING CURRENT (LOCKED ROTOR AMPS):		2.77 / 3.09		2.77 / 3.09		2.77 / 3.09		2.77 / 3.09	
INSULATION CLASS:		B		B		B		B	
MIN. FULL LOAD SPEED (RPM):		1740 / 1490		1720 / 1470		1700 / 1430		1630 / 1260	
THERMAL PROTECTOR:		Yes		Yes		Yes		Yes	
CAPACITOR VALUE:									
NET WEIGHT:		5.1 lbs.	2.3 Kg	5.1 lbs.	2.3 Kg	5.1 lbs.	2.3 Kg	5.1 lbs.	2.3 Kg

		107CCD050		107CCD11		107CCD14		STANDARD 107CCD18	
HEAD CONFIGURATION:		Pressure/Vacuum		Pressure/Vacuum		Pressure/Vacuum		Pressure/Vacuum	
STROKE:		.050 Inches		.110 Inches		.140 Inches		.180 Inches	
PRESSURE:		Flow @ 230v/220v		Flow @ 230v/220v		Flow @ 230v/220v		Flow @ 230v/220v	
CFM @ PSI	LPM @ bar								
PSI	bar	CFM	LPM	CFM	LPM	CFM	LPM	CFM	LPM
0 5 10 15 20 25 30 35	0 .5 1.0 1.5 2.0 3.0	.18 / .15 .10 / .08	5.1 / 4.2 1.8 / 1.4	.38 / .32 .25 / .21 .14 / .12 .10 / .08	10.8 / 9.1 5.7 / 4.8 3.0 / 2.4	.53 / .45 .38 / .32 .24 / .20 .15 / .13 .10 / .08	15.0 / 12.7 9.0 / 7.5 4.5 / 3.9 2.3 / 1.8	.65 / .55 .51 / .43 .40 / .34 .28 / .24 .20 / .17 .15 / .13 .10 / .08	18.4 / 15.6 13.0 / 11.0 8.3 / 7.1 5.2 / 4.4 3.1 / 2.5
MAX. CONTINUOUS PRESSURE:		5 PSI	0.3 bar	15 PSI	1.0 bar	20 PSI	1.4 bar	20 PSI	1.4 bar
MAX. INTERMITTENT PRESSURE:		5 PSI	0.3 bar	15 PSI	1.0 bar	20 PSI	1.4 bar	30 PSI	2.1 bar
VACUUM:		Flow @ 230v/220v		Flow @ 230v/220v		Flow @ 230v/220v		Flow @ 230v/220v	
CFM @ IN. hg	LPM @ mbar (gauge)								
IN. hg	mbar (gauge)	CFM	LPM	CFM	LPM	CFM	LPM	CFM	LPM
0 5 10 15 20 25	0 -100 -200 -400 -600 -800	.18 / .15 .08 / .06	5.1 / 4.2 3.4 / 2.7 1.8 / 1.2	.38 / .32 .24 / .20 .11 / .09	10.8 / 9.1 8.4 / 7.1 6.1 / 5.1 1.8 / 1.4	.53 / .45 .35 / .30 .21 / .18 .09 / .07	15.0 / 12.7 12.0 / 10.2 9.2 / 7.9 4.7 / 4.0	.65 / .55 .48 / .40 .32 / .27 .18 / .15	18.4 / 15.6 15.6 / 13.1 12.8 / 10.7 7.6 / 6.4 3.0 / 2.4
MAX. VACUUM:		9.0" hg	-305 mbar	16.9" hg	-572 mbar	19.0" hg	-643 mbar	22.0" hg	-746 mbar
MAX. AMBIENT TEMPERATURE:		104°F	40°C	104°F	40°C	104°F	40°C	104°F	40°C
MIN. AMBIENT TEMPERATURE:		50°F	10°C	50°F	10°C	50°F	10°C	50°F	10°C
MAX. RESTART PRESSURE:		0 PSI	0 bar	0 PSI	0 bar	0 PSI	0 bar	0 PSI	0 bar
MAX. RESTART VACUUM:		0" hg	0 mbar	0" hg	0 mbar	0" hg	0 mbar	0" hg	0 mbar
MOTOR VOLTAGE/FREQUENCY:		230/60/1-220/50/1		230/60/1-220/50/1		230/60/1-220/50/1		230/60/1-220/50/1	
HORSEPOWER:		1/20		1/20		1/20		1/20	
MOTOR TYPE:		Shaded Pole		Shaded Pole		Shaded Pole		Shaded Pole	
CURRENT AT RATED LOAD (AMPS):		.6 / .8		.7 / .9		.7 / .9		.8 / 1.0	
POWER AT RATED LOAD (WATTS):		75 / 85		80 / 100		90 / 100		100 / 120	
STARTING CURRENT (LOCKED ROTOR AMPS):		1.2		1.2		1.2		1.2	
INSULATION CLASS:		B		B		B		B	
MIN. FULL LOAD SPEED (RPM):		1750 / 1450		1730 / 1430		1700 / 1390		1620 / 1220	
THERMAL PROTECTOR:		Yes		Yes		Yes		Yes	
CAPACITOR VALUE:									
NET WEIGHT:		5.1 lbs.	2.3 Kg	5.1 lbs.	2.3 Kg	5.1 lbs.	2.3 Kg	5.1 lbs.	2.3 Kg





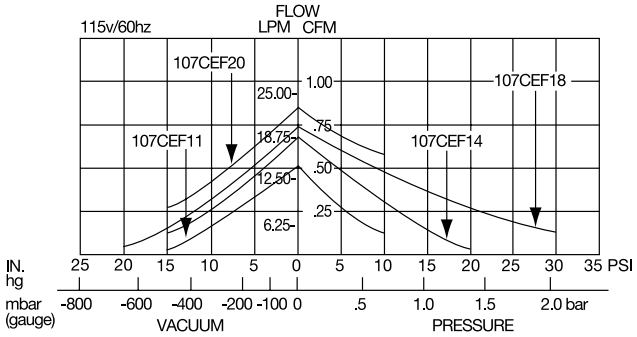


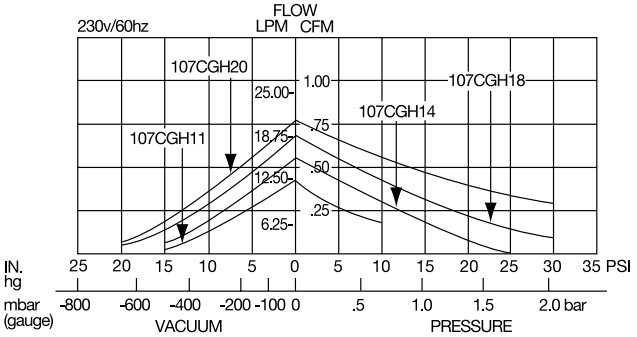


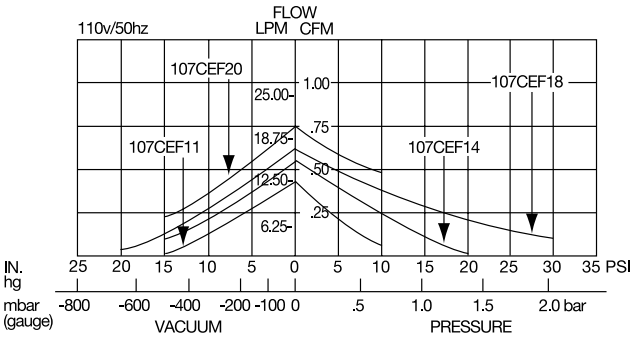
107 SERIES (AC) PERFORMANCE DATA:

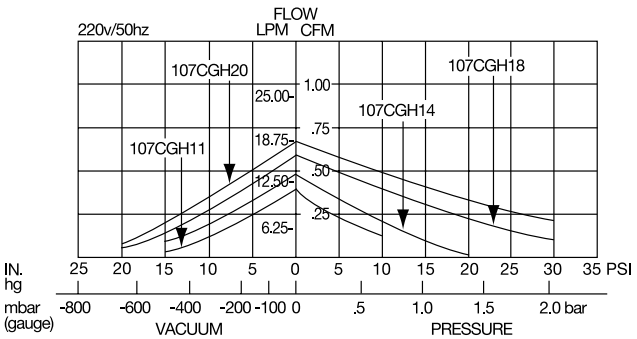
						STANDARD			
MODEL NUMBER:		**107CEF11**		**107CEF14**		**107CEF18**		**107CEF20**	
HEAD CONFIGURATION:		Pressure/Vacuum		Pressure/Vacuum		Pressure/Vacuum		Pressure/Vacuum	
STROKE:		.110 Inches		.140 Inches		.180 Inches		.200 Inches	
PRESSURE:		Flow @ 115v/110v		Flow @ 115v/110v		Flow @ 115v/110v		Flow @ 115v/110v	
CFM @ PSI	LPM @ bar								
PSI	bar	CFM	LPM	CFM	LPM	CFM	LPM	CFM	LPM
0 5 10 15 20 25 30 35	0 .5 1.0 1.5 2.0 3.0	.51 / .43 .29 / .25 .14 / .11	14.4 / 12.2 6.3 / 5.3	.65 / .56 .43 / .37 .29 / .24 .17 / .13 .05 / .03	18.4 / 15.9 10.4 / 8.8 5.2 / 4.0	.73 / .60 .66 / .53 .55 / .44 .45 / .36 .35 / .29 .27 / .22 .18 / .13	20.7 / 17.0 17.3 / 13.9 13.0 / 10.4 9.1 / 7.5 5.6 / 4.2	.85 / .75 .69 / .57 .57 / .48	24.1 / 21.2 18.0 / 15.0 13.1 / 11.3
MAX. CONTINUOUS PRESSURE:		10 PSI	0.7 bar	20 PSI	1.4 bar	30 PSI	2.1 bar	10 PSI	0.7 bar
MAX. INTERMITTENT PRESSURE:		10 PSI	0.7 bar	20 PSI	1.4 bar	30 PSI	2.1 bar	10 PSI	0.7 bar
VACUUM:		Flow @ 115v/110v		Flow @ 115v/110v		Flow @ 115v/110v		Flow @ 115v/110v	
CFM @ IN. hg	LPM @ mbar (gauge)								
IN. hg	mbar (gauge)	CFM	LPM	CFM	LPM	CFM	LPM	CFM	LPM
0 5 10 15 20 25	0 -100 -200 -400 -600 -800	.51 / .43 .34 / .28 .19 / .15 .05 / .03	14.4 / 12.2 11.6 / 10.0 8.9 / 7.3 4.0 / 3.0	.65 / .56 .43 / .38 .27 / .24 .15 / .14	18.4 / 15.9 14.7 / 12.8 11.4 / 10.0 6.4 / 5.8 2.4 / 2.4	.73 / .60 .55 / .46 .38 / .31 .23 / .17 .07 / .05	20.7 / 17.0 17.7 / 14.6 14.7 / 12.3 9.2 / 7.3 4.0 / 3.0	.85 / .75 .64 / .54 .44 / .37 .28 / .22	24.1 / 21.2 21.0 / 17.7 17.1 / 14.4 11.0 / 9.0 5.5 / 4.0
MAX. VACUUM:		16.7" hg	-565 mbar	19.5" hg	-660 mbar	22.7" hg	-769 mbar	23.2" hg	-786 mbar
MAX. AMBIENT TEMPERATURE:		104°F	40°C	104°F	40°C	104°F	40°C	104°F	40°C
MIN. AMBIENT TEMPERATURE:		50°F	10°C	50°F	10°C	50°F	10°C	50°F	10°C
MAX. RESTART PRESSURE:		0 PSI	0 bar	0 PSI	0 bar	0 PSI	0 bar	0 PSI	0 bar
MAX. RESTART VACUUM:		0" hg	0 mbar	0" hg	0 mbar	0" hg	0 mbar	0" hg	0 mbar
MOTOR VOLTAGE/FREQUENCY:		115/60/1-110/50/1		115/60/1-110/50/1		115/60/1-110/50/1		115/60/1-110/50/1	
HORSEPOWER:		1/20		1/20		1/20		1/20	
MOTOR TYPE:		Permanent Split Capacitor		Permanent Split Capacitor		Permanent Split Capacitor		Permanent Split Capacitor	
CURRENT AT RATED LOAD (AMPS):		.86 / 1.15		.93 / 1.22		1.05 / 1.48		1.14 / 1.55	
POWER AT RATED LOAD (WATTS):		70 / 79		77 / 93		90 / 118		99 / 126	
STARTING CURRENT (LOCKED ROTOR AMPS):		2.07 / 2.17		2.07 / 2.17		2.07 / 2.17		2.07 / 2.17	
INSULATION CLASS:		B		B		B		B	
MIN. FULL LOAD SPEED (RPM):		1755 / 1505		1535 / 1480		1720 / 1330		1675 / 1400	
THERMAL PROTECTOR:		Yes		Yes		Yes		Yes	
CAPACITOR VALUE:		5 mfd		5 mfd		5 mfd		5 mfd	
NET WEIGHT:		6 lb.s	2.7 Kg	6 lbs.	2.7 Kg	6 lbs.	2.7 Kg	6 lbs.	2.7 Kg

						STANDARD			
MODEL NUMBER:		**107CGH11**		**107CGH14**		**107CGH18**		**107CGH20**	
HEAD CONFIGURATION:		Pressure/Vacuum		Pressure/Vacuum		Pressure/Vacuum		Pressure/Vacuum	
STROKE:		.110 Inches		.140 Inches		.180 Inches		.200 Inches	
PRESSURE:		Flow @ 230v/220v		Flow @ 230v/220v		Flow @ 230v/220v		Flow @ 230v/220v	
CFM	LPM	CFM	LPM	CFM	LPM	CFM	LPM		
.44 / .38 .34 / .27 .18 / .14	12.5 / 10.8 7.6 / 6.0	.57 / .48 .47 / .38 .33 / .29 .21 / .19 .10 / .09 .02 / .01	16.1 / 13.6 11.5 / 9.6 6.3 / 5.7 2.0 / 1.8	.69 / .59 .63 / .52 .51 / .44 .43 / .36 .35 / .29 .24 / .21 .16 / .13	20.0 / 16.7 16.3 / 13.7 12.4 / 10.4 8.8 / 7.4 5.0 / 4.1	.77 / .66 .71 / .59 .63 / .51 .53 / .41 .44 / .35 .37 / .28 .29 / .21	21.8 / 18.7 19.1 / 15.7 15.3 / 11.9 11.8 / 9.2 8.7 / 6.3		
10 PSI	.7 bar	20 PSI	1.4 bar	20 PSI	1.4 bar	20 PSI	1.4 bar		
10 PSI	.7 bar	25 PSI	1.7 bar	30 PSI	2.1 bar	30 PSI	2.1 bar		
Flow @ 230v/220v		Flow @ 230v/220v		Flow @ 230v/220v		Flow @ 230v/220v			
CFM	LPM	CFM	LPM	CFM	LPM	CFM	LPM		
.44 / .38 .32 / .26 .19 / .14 .05 / .03	12.5 / 10.8 10.5 / 8.8 8.4 / 6.7 4.0 / 2.8	.57 / .48 .43 / .34 .27 / .21 .12 / .10	16.1 / 13.6 13.8 / 11.3 11.4 / 9.0 6.1 / 4.8 1.1 / 1.1	.69 / .59 .55 / .46 .38 / .31 .22 / .17 .07 / .05	20.0 / 16.7 17.2 / 15.0 14.7 / 12.3 9.1 / 7.3 4.0 / 3.0	.77 / .66 .62 / .52 .44 / .37 .27 / .22 .10 / .08	21.8 / 18.7 19.3 / 16.3 16.6 / 14.0 10.7 / 9.0 5.0 / 4.1		
17.5" hg	-593 mbar	19.9" hg	-674 mbar	22.5" hg	-762 mbar	23.8" hg	-806 mbar		
104°F	40°C	104°F	40°C	104°F	40°C	104°F	40°C		
50°F	10°C	50°F	10°C	50°F	10°C	50°F	10°C		
0 PSI	0 bar	0 PSI	0 bar	0 PSI	0 bar	0 PSI	0 bar		
0" hg	0 mbar	0" hg	0 mbar	0" hg	0 mbar	0" hg	0 mbar		
230/60/1-220/50/1		230/60/1-220/50/1		230/60/1-220/50/1		230/60/1-220/50/1			
1/20		1/20		1/20		1/20			
Permanent Split Capacitor		Permanent Split Capacitor		Permanent Split Capacitor		Permanent Split Capacitor			
.49 / .43		.53 / .51		.60 / .62		.65 / .65			
93 / 84		102 / 99		119 / 125		132 / 133			
.83 / .93		.83 / .93		.83 / .93		.83 / .93			
B		B		B		B			
1760 / 1460		1750 / 1450		1695 / 1340		1620 / 1210			
Yes		Yes		Yes		Yes			
5 mfd		5 mfd		5 mfd		5 mfd			
6 lbs.	2.7 Kg	6 lbs.	2.7 Kg	6 lbs.	2.7 Kg	6 lbs.	2.7 Kg		



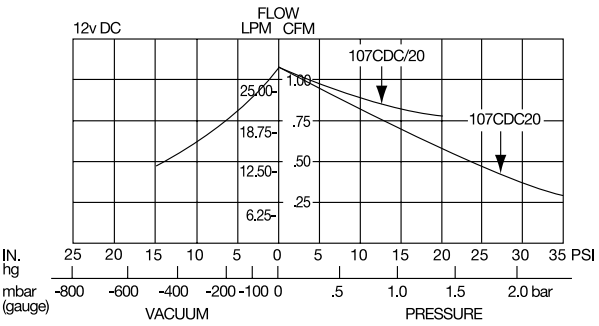






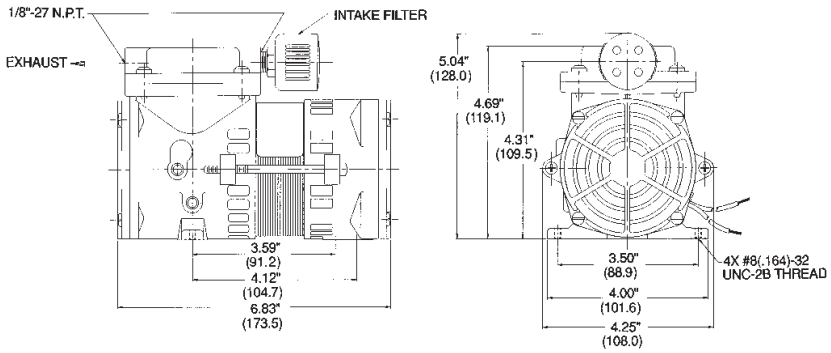
107 SERIES (DC) PERFORMANCE DATA:

		STANDARD			
MODEL NUMBER:		**107CDC20**		**107CDC/C20**	
HEAD CONFIGURATION:		Pressure/Vacuum		Pressure/Vacuum	
STROKE:		.200 Inches		.200 Inches	
PRESSURE:		Flow @ 12v		Flow @ 12v	
CFM @ PSI	LPM @ bar				
PSI	bar	CFM	LPM	CFM	LPM
0 5 10 15 20 25 30 35	0 .5 1.0 1.5 2.0 3.0	1.40 1.34 1.12 .94 .77 .61 .49 .39	39.6 35.1 27.1 20.2 14.5 6.2	1.40 1.34 1.12 .94 .77	39.6 35.1 27.1 20.1
MAX. CONTINUOUS PRESSURE:		35 PSI	2.4 bar	20 PSI	1.4 bar
MAX. INTERMITTENT PRESSURE:		35 PSI	2.4 bar	20 PSI	1.4 bar
VACUUM:		Flow @ 12v		Flow @ 12v	
CFM @ IN. hg	LPM @ mbar (gauge)				
IN. hg	mbar (gauge)	CFM	LPM	CFM	LPM
0 5 10 15 20 25	0 -100 -200 -400 -600	1.40 1.09 .80 .48	39.6 34.4 29.3 19.3 8.6	1.40 1.09 .80 .48	39.6 34.4 29.3 19.3 8.6
MAX. VACUUM:		22.9" hg	-775 mbar	22.9" hg	-775 mbar
MAX. AMBIENT TEMPERATURE:		104°F	40°C	104°F	40°C
MIN. AMBIENT TEMPERATURE:		50°F	10°C	50°F	10°C
MAX. RESTART PRESSURE:		15 PSI	1.0 bar	15 PSI	1.0 bar
MAX. RESTART VACUUM:		22.9" hg	-775 mbar	22.9" hg	-775 mbar
MOTOR VOLTAGE/FREQUENCY:		12v DC		12v DC	
HORSEPOWER:		1/10		1/10	
MOTOR TYPE:		Permanent Magnet		Permanent Magnet	
CURRENT AT RATED LOAD (AMPS):		8.5		8.5	
POWER AT RATED LOAD (WATTS):					
STARTING CURRENT (LOCKED ROTOR AMPS):		40.0		40.0	
INSULATION CLASS:		A		A	
MIN. FULL LOAD SPEED (RPM):		2970		2970	
THERMAL PROTECTOR:		No		No	
CAPACITOR VALUE:					
NET WEIGHT:		4.5 lbs.	2.0 Kg	4.7 lbs.	2.1 Kg

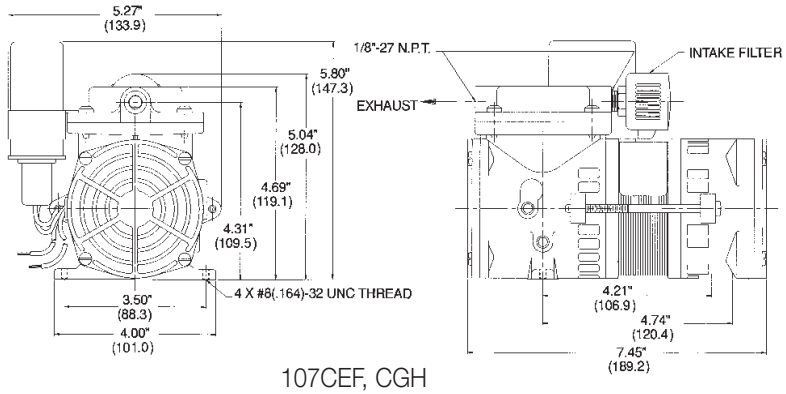


DIMENSIONS:

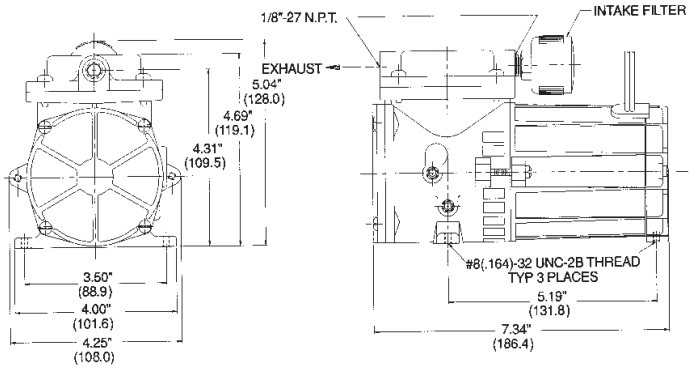
Millimeters are in ( )



107CAB, CCD



107CEF, CGH



107CDC & 107CDC/C

NOTE: 107CDC/C has closed motor vents

The information presented in this material is based on technical data and test results of nominal units. It is believed to be accurate and reliable and is offered as an aid to help in the selection of Thomas products. It is the responsibility of the user to determine the suitability of the product for his intended use and the user assumes all risk and liability whatsoever in connection therewith. Thomas Industries does not warrant, guarantee or assume any obligation or liability in connection with this information.

Note: Models pictured are representative of the series and do not represent a specific model number. Consult factory for detailed physical description.

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