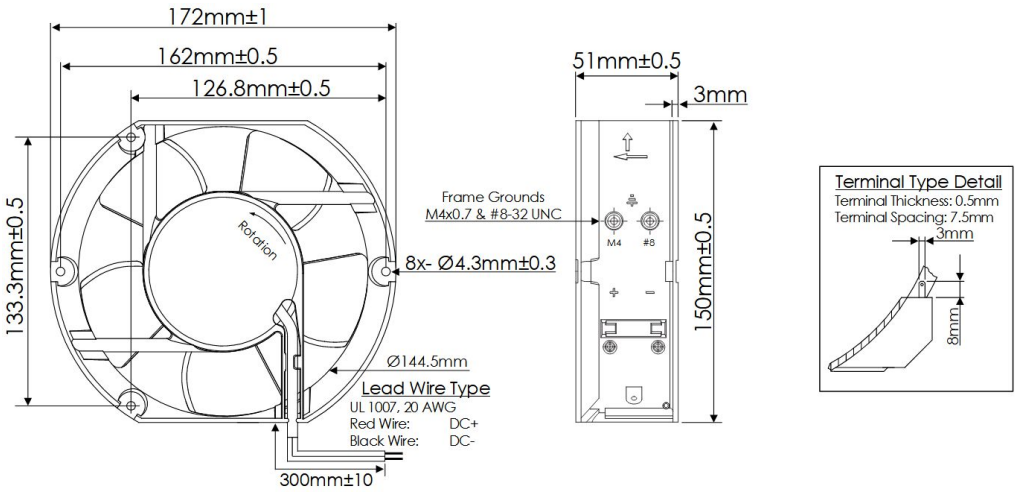
OD172SAP Series

DC Fans - 12, 24, 48V
172mm x 152mm x 51mm
(6.7" x 5.9" x 2.0")



Frame	Die Cast Aluminum, Black Finish
Impeller	PBT, UL94 V-0 Plastic
Connection	2x Lead Wires, 20 AWG
Motor	Brushless DC, Auto Cutoff, Auto Restart, Polarity Protected, Electronically Protected
Bearing System	Dual Ball Bearings
Dielectric Strength	500VDC/min, <1mA
Insulation Resistance	≥10MΩ @ 500V DC

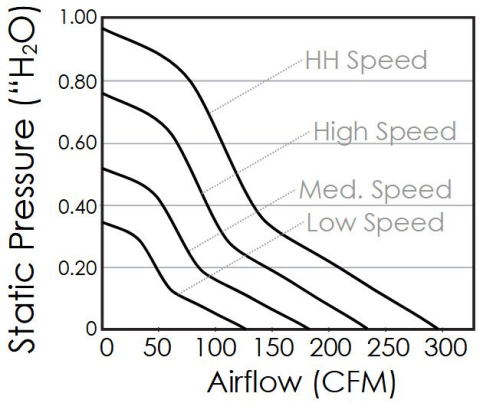
Operating Temperature
-25°C ~ +65°C

Storage Temperature
-20°C ~ +75°C

Life Expectancy
70,000 Hours (L10 at 40°C)

Available Options
Tachometer Output
PWM Speed Control Input
Thermal Speed Control
0-10V Speed Control
Alarm Output
IP Ratings

Weight: 1.8 lbs.



Part Number	Rated Voltage (Volts DC)	Voltage Range (Volts DC)	Input Power (Watts)	Rated Current (Amps)	Rated Speed (RPM)	Max Airflow (CFM)	Noise Level (dBA)	Max Static Pressure ("H_2O)
OD172SAP-12HH*B	12	10 ~ 13.2	50.4	4.20	3800	290	56	0.95
OD172SAP-12H*B	12	10 ~ 13.2	23.0	1.90	3200	230	52	0.77
OD172SAP-12M*B	12	10 ~ 13.2	13.2	1.10	2500	180	42	0.51
OD172SAP-12L*B	12	10 ~ 13.2	5.5	0.45	1600	125	32	0.35
OD172SAP-24HH*B	24	22 ~ 26.4	50.4	2.10	3850	300	56	0.95
OD172SAP-24H*B	24	22 ~ 26.4	24.0	0.97	3200	235	52	0.77
OD172SAP-24M*B	24	22 ~ 26.4	13.0	0.52	2500	180	42	0.51
OD172SAP-24L*B	24	22 ~ 26.4	5.0	0.20	1600	125	32	0.35
OD172SAP-48HH*B	48	40 ~ 52.0	49.4	1.03	3850	300	56	0.95
OD172SAP-48H*B	48	40 ~ 52.0	24.0	0.48	3200	235	52	0.77
OD172SAP-48M*B	48	40 ~ 52.0	14.5	0.30	2500	180	42	0.51
OD172SAP-48L*B	48	40 ~ 52.0	5.8	0.12	1600	125	32	0.35

* Insert "T" for Terminal type power connection, or blank for Wire Lead type power connection. For Terminal power connection, observe frame polarity markings.

Knight Electronics, Inc.
10557 Metric Drive
Dallas, TX 75243
214-340-0265

Revised 9/11/2026
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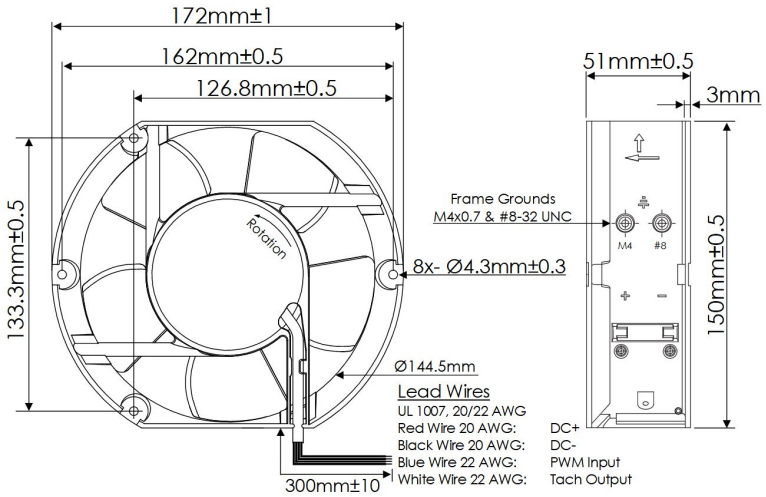
OD172SAP Series with PWM and Tach

DC Fans - 12, 24, 48V
172mm x 152mm x 51mm
(6.7” x 5.9” x 2.0”)



Frame	Die Cast Aluminum, Black Finish
Impeller	PBT, UL94 V-0 Plastic
Connection	4x Lead Wires, 20/22 AWG
Motor	Brushless DC, Auto Cutoff, Auto Restart, Polarity Protected, Electronically Protected
Bearing System	Dual Ball Bearings
Dielectric Strength	500VDC/min, <1mA
Insulation Resistance	≥10MΩ @ 500V DC

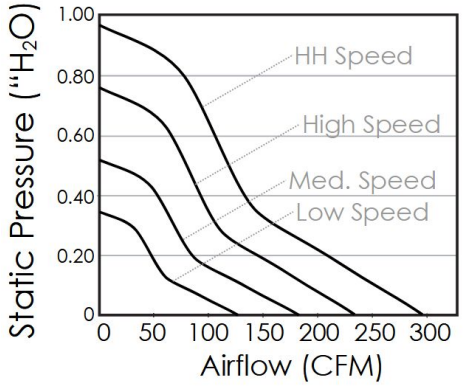
Operating Temperature
-25°C ~ +65°C

Storage Temperature
-20°C ~ +75°C

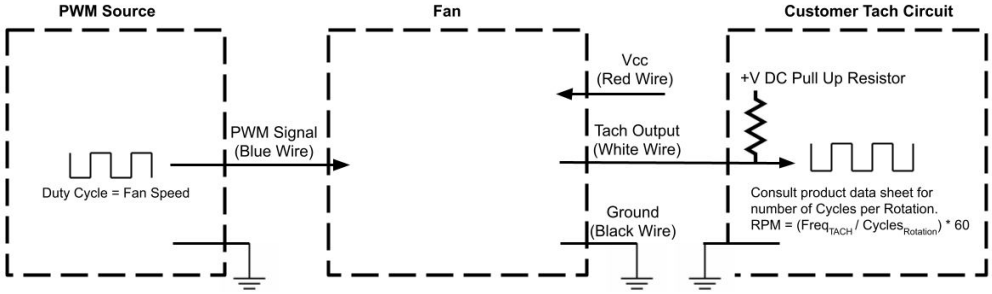
Life Expectancy
70,000 Hours (L10 at 40°C)

Installed Options
PWM Speed Control Input
Open Collector Tach Output

Weight: 1.8 lbs.



Part Number	Rated Voltage (Volts DC)	Voltage Range (Volts DC)	Input Power (Watts)	Rated Current (Amps)	Rated Speed (RPM)	Max Airflow (CFM)	Noise Level (dBA)	Max Static Pressure (”H_2O)
OD172SAP-12HHB10A	12	10 ~ 13.2	50.4	4.20	3800	290	56	0.95
OD172SAP-12HB10A	12	10 ~ 13.2	23.0	1.90	3200	230	52	0.77
OD172SAP-12MB10A	12	10 ~ 13.2	13.2	1.10	2500	180	42	0.51
OD172SAP-12LB10A	12	10 ~ 13.2	5.5	0.45	1600	125	32	0.35
OD172SAP-24HHB10A	24	22 ~ 26.4	50.4	2.10	3850	300	56	0.95
OD172SAP-24HB10A	24	22 ~ 26.4	24.0	0.97	3200	235	52	0.77
OD172SAP-24MB10A	24	22 ~ 26.4	13.0	0.52	2500	180	42	0.51
OD172SAP-24LB10A	24	22 ~ 26.4	5.0	0.20	1600	125	32	0.35
OD172SAP-48HHB10A	48	40 ~ 52.0	49.4	1.03	3850	300	56	0.95
OD172SAP-48HB10A	48	40 ~ 52.0	24.0	0.48	3200	235	52	0.77
OD172SAP-48MB10A	48	40 ~ 52.0	14.5	0.30	2500	180	42	0.51
OD172SAP-48LB10A	48	40 ~ 52.0	5.8	0.12	1600	125	32	0.35



PWM Max High Voltage: 5.5V
PWM Max Sink Current: 5mA
PWM Frequency Range: 1KHz-100KHz
PWM Typical Frequency: 25KHz
RPM at 0% Duty Cycle: 0 RPM
RPM will be full speed if PWM input is disconnected.
RPM will be 0 if PWM input is 0V or grounded.
Tach Max Pullup Voltage: Fan Vcc
Tach Max Sink Current: 5mA
Tach Cycles per Rotation: 2

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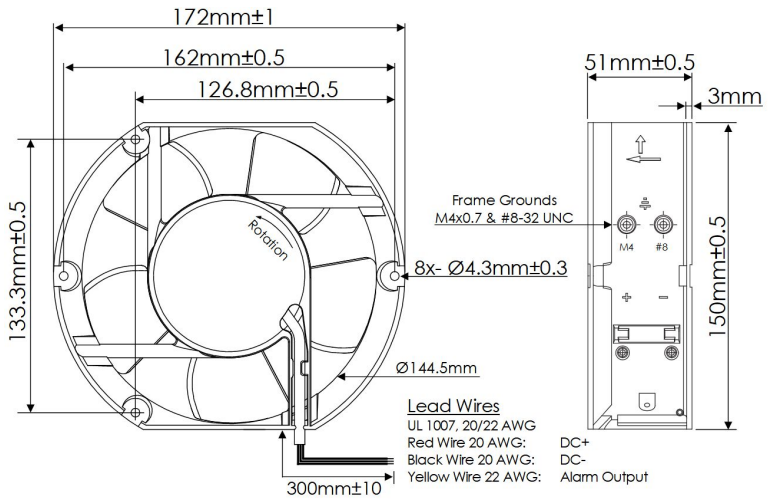
OD172SAP Series with Alarm

DC Fans - 12, 24, 48V
172mm x 152mm x 51mm
(6.7” x 5.9” x 2.0”)



Frame	Die Cast Aluminum, Black Finish
Impeller	PBT, UL94 V-0 Plastic
Connection	3x Lead Wires, 20/22 AWG
Motor	Brushless DC, Auto Cutoff, Auto Restart, Polarity Protected, Electronically Protected
Bearing System	Dual Ball Bearings
Dielectric Strength	500VDC/min, <1mA
Insulation Resistance	≥10MΩ @ 500V DC

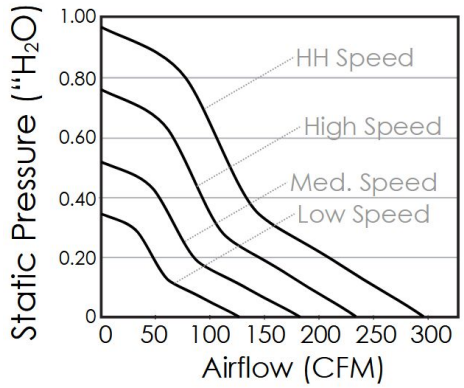
Operating Temperature
-25°C ~ +65°C

Storage Temperature
-20°C ~ +75°C

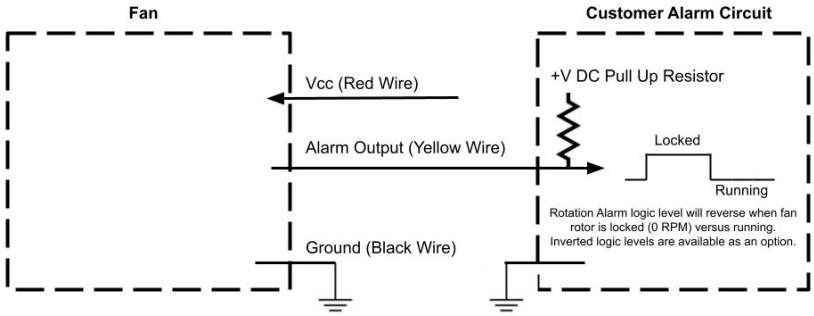
Life Expectancy
70,000 Hours (L10 at 40°C)

Installed Options
Open Collector Alarm Output

Weight: 1.8 lbs.



Part Number	Rated Voltage (Volts DC)	Voltage Range (Volts DC)	Input Power (Watts)	Rated Current (Amps)	Rated Speed (RPM)	Max Airflow (CFM)	Noise Level (dBA)	Max Static Pressure (”H_2O)
OD172SAP-12HHB02A	12	10 ~ 13.2	50.4	4.20	3800	290	56	0.95
OD172SAP-12HB02A	12	10 ~ 13.2	23.0	1.90	3200	230	52	0.77
OD172SAP-12MB02A	12	10 ~ 13.2	13.2	1.10	2500	180	42	0.51
OD172SAP-12LB02A	12	10 ~ 13.2	5.5	0.45	1600	125	32	0.35
OD172SAP-24HHB02A	24	22 ~ 26.4	50.4	2.10	3850	300	56	0.95
OD172SAP-24HB02A	24	22 ~ 26.4	24.0	0.97	3200	235	52	0.77
OD172SAP-24MB02A	24	22 ~ 26.4	13.0	0.52	2500	180	42	0.51
OD172SAP-24LB02A	24	22 ~ 26.4	5.0	0.20	1600	125	32	0.35
OD172SAP-48HHB02A	48	40 ~ 52.0	49.4	1.03	3850	300	56	0.95
OD172SAP-48HB02A	48	40 ~ 52.0	24.0	0.48	3200	235	52	0.77
OD172SAP-48MB02A	48	40 ~ 52.0	14.5	0.30	2500	180	42	0.51
OD172SAP-48LB02A	48	40 ~ 52.0	5.8	0.12	1600	125	32	0.35



Alarm Max Pullup Voltage: Fan Vcc
Alarm Max Sink Current: 5mA
Alarm Active Logic State: HIGH

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