

SynJet[®] XFlow 42 Outdoor Cooler

SynJet cooling provides the most reliable thermal management solution available. This cooler has been developed by Aavid for cooling high power outdoor and industrial electronics.

- Outdoor Rated¹
- L10 of 100K Hours at 60°C
- Energy Efficient
- 5 Yr Warranty
- Rugged
- IP 56



Specifications²

Thermal & Acoustic

SynJet Setting ³	SPL (dBA) ⁴	Wire Connections
High Performance	27	Red to +VDC Black & Blue to Ground
Standard Performance	22	Red to +VDC Black only to Ground
Silent Performance	18	Red to +VDC Black & Purple to Ground
PWM at 100% duty cycle	27	Red to +VDC Black only to Ground Blue to PWM Signal

Electrical

SynJet Setting ²	Voltage (VDC)	Current (mA) ⁵			Pavg (W)	Voltage (VDC)	Current (mA) ⁶			Pavg (W)
		Imin	Iavg	Ipeak			Imin	Iavg	Ipeak	
Mid	5	20	180	360	0.90	12	10	92	184	1.10
Standard			80	160	0.40			46	92	0.55
Silent			60	120	0.30			33	66	0.40
PWM at 100% duty cycle			220	440	1.10			115	230	1.38

Environmental

All Settings	Min	Max	Units	Conditions
Operating Temperature	-40	70	°C	Air temperature surrounding cooler
Storage Temperature	-50	85	°C	Air temperature surrounding cooler
Storage Altitude		15K	m	Above sea level
Operating Relative Humidity	5	95	%	Non-condensing
Weight		100	g	SynJet Only
Reliability		100K	hrs	L10 @ 60°C
Regulatory Compliance				RoHS, UL, FCC Part 15 Class B, CE

¹ SynJet design guidelines for outdoor use must be followed to meet rated lifetime specifications.

² All values are typical at 25°C unless otherwise stated.

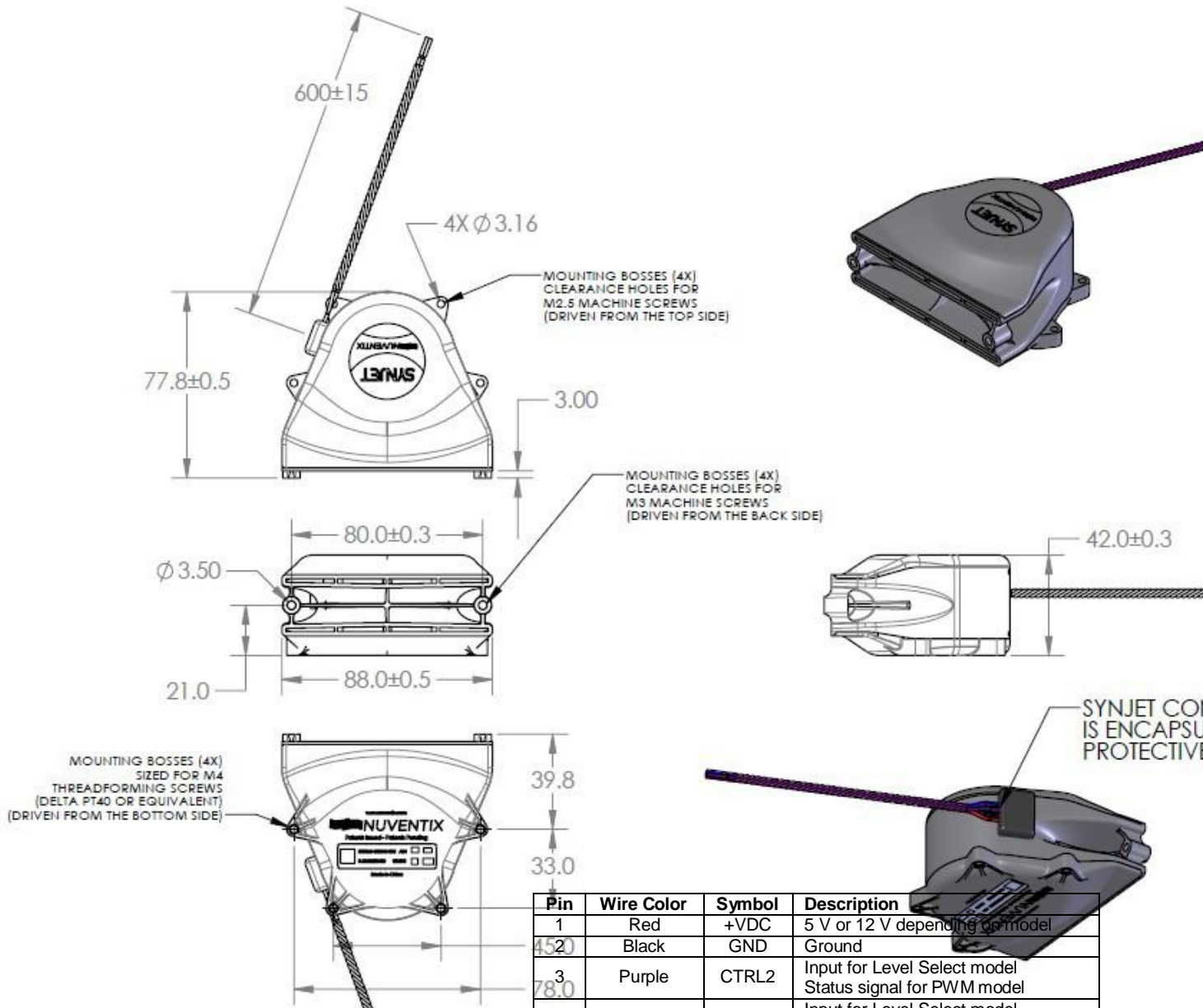
³ The Level Select model should be used for discrete performance settings. Follow the instructions in the Product Design Guide for adjusting settings.

⁴ Sound Pressure Level is measured at 1 meter distance per ISO 7779.

⁵ The SynJet has a time varying current. The current waveform is sinusoidal and the average current (Iavg) is used to calculate the average power consumption

(Pavg) at nominal input voltage (VDC). See the Electrical section in the Product Design Guide for a detailed explanation.

Mechanical - SynJet Cooling Solution



All dimensions are nominal and in mm unless otherwise stated. See product drawings for more detail.

Pin	Wire Color	Symbol	Description
1	Red	+VDC	5 V or 12 V depending on model
2	Black	GND	Ground
3	Purple	CTRL2	Input for Level Select model Status signal for PWM model
4	Blue	CTRL1	Input for Level Select model PWM input for PWM model

IMPORTANT: SynJets should be completely wired to the power supply before the power supply is energized. The power supply should be turned off before the SynJet Cooler is disconnected. SynJet Coolers are not designed for "hot swap" or "hot plug" applications.

Part Numbers

Part Number	Description	Notes
NX202104	SynJet, XFlow 42, Outdoor, PWM, 5V, 600mm Wire Harness	Use with PWM input to control performance setting
NX202105	SynJet, XFlow 42, Outdoor, Level Select, 5V, 600mm Wire Harness	Configurable to discrete performance settings
NX202106	SynJet, XFlow 42, Outdoor, PWM, 12V, 600mm Wire Harness	Use with PWM input to control performance setting
NX202107	SynJet, XFlow 42, Outdoor, Level Select, 12V, 600mm Wire Harness	Configurable to discrete performance settings

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