

NAUTILUS EXV

Expansion Valve

The Nautilus Expansion Valve provides control of the expansion orifice open area through integrated closed loop positional control. This product is designed for 2-ton, 4-ton, and high-flow applications and has a normally open failsafe design. Mounting patterns are fully configurable to the application. Shown below is a 2/2 valve packaging example, with 2X M4 mounting holes.

*Technical Data:

Environmental Temperature Range: -40°C to 25°C Maximum Supply Pressure: 29 bar (burst to 90

bar) Network Messaging: LIN^

Resistance: 5.5Ω

Current Range: 0-1 Amp

System Voltage: 12 V nominal (9V min)

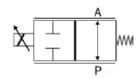
Mass/Weight: 0.18 kg / 0.39 lbs

^Messaging could be configured to CAN

*Contact Husco engineering for customized performance solution.



2/2 Valve Schematic Example



Partner with Husco

Husco develops comprehensive automotive solutions that drive performance, including systems and components for electric, hybrid and internal combustion engine vehicles.

Husco is a global company with facilities around the world. Options for manufacturing locations include North America, Europe, and Asia.





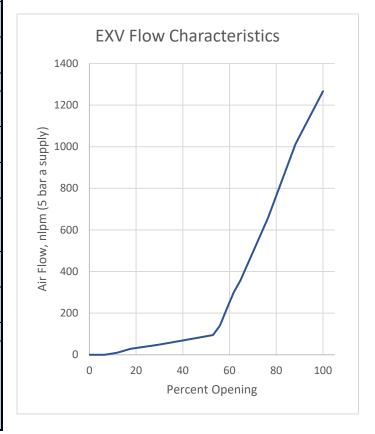
Husco's Automotive team specializes in collaborative development of customized performance solutions. Contact the engineering team for your custom solution.



An EXV with stepper motor driver integrated into straight-thru manifold. Integrated controller and position sensor (optional) allows for precise control and metering. A fully enclosed drivetrain eliminates external dynamic seals allowing reducing external leakage.

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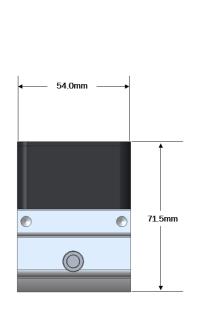
Refrigerant compatibility	R134a, R1234yf
Continuous refrigerant	Min: -28°C
operating range	Max: 140°C
Temporary refrigerant	Max 150°C
operating temperature	
Ambient temperature range	-40°C to 125°C
Pressure drop characteristic	< 0.04 MPa
when fully open	
Max. operating pressure	2.9MPa Max operating
differential (closed)	DP
Resting position	Optional, can be
	delivered as desired.
Power loss state	Maintain last powered
	position (No back-drive
	drivetrain)
Resolution	Min. 1/2000 of the
	control range
Control Precision /	1% Hysteresis
Hysteresis	
Operating Voltage	9.5-16 VDC
Addressing, connector / pin	4-pin Configuration:
	1 - GND
	2 – LIN-IN
	3 – LIN-OUT
	4 – 12V / PWR



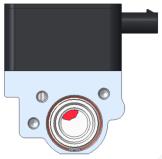




Packaging Size







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