

PRESSURE RELIEF VENT

Amphenol LTW



- ✓ Hydrophobic membranes type (water resistant) & oleophobic membranes type (water & oil resistant)
- ✓ Air permeability up to 10,000 ml/min at 7 kPa
- ✓ Flammability UL 94V-0



M12 Metal

Screw M12 x 1.5
IP69K



M12 Plastic

Screw M12 x 1.5
IP68, IP69K



M12 Stainless Steel

Screw M12 x 1.5
IP68, IP69K



M6 Plastic

Screw M6 x 0.75
IP66, IP68



Snap-In Plastic

Screw M12 x 1.5, M6 x 0.76
IP68, IP69K



Over-Pressure Vent

Rectangular (4 x M6)
IP68, IP69K



Over-Pressure Vent

M20
Spring-loaded, Piercing type



Over-Pressure Vent

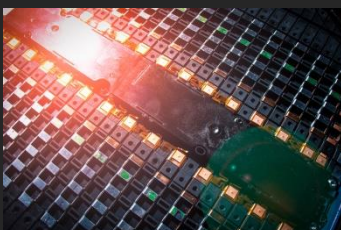
M40
Spring-loaded, Piercing type



Amphenol LTW Pressure Relief Vent Series



Product Overview



Amphenol LTW provides two essential solutions for effective pressure management: the Pressure Relief Vent and the Over-Pressure Relief Vent. These vents play a crucial role in equalizing internal- external pressure, emphasizing both operational safety and equipment longevity, and enabling devices to thrive in challenging environments:

- ❖ The Pressure Relief Vent facilitates controlled pressure release within safe operating limits, specifically designed to equalize the internal and external pressure. This not only prevents heat accumulation from electronic components but also reduces the need for bulkier housings and seals.
- ❖ The Over-Pressure Relief Vents (spring-loaded and rectangular types) acts as a specialized safeguard during emergencies characterized by sudden pressure bursts, mitigating the risk of potential explosions.

Both vents feature hydrophobic/oleophobic membranes effectively excluding water or oil and minimizing condensation. This design ensures comprehensive protection, reliability across various industrial applications.



Pressure Relief Vent Series

Type	M12 Metal	M12 Metal
Part Number	VENT-BJ005	VENT-MS1NME-O8001

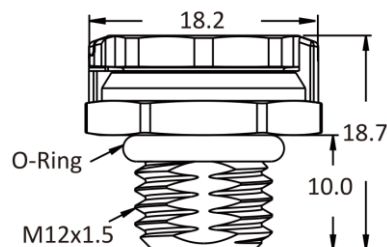


Product Performance Characteristics:

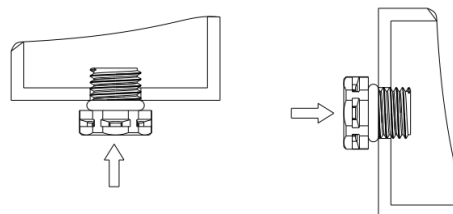
Assemble Type / Screw Size	Screw M12 x 1.5	Screw M12 x 1.5
Environment Temperature	-40°C ~ +125°C	-40°C ~ +125°C
Waterproof Rating	IP68 (2 m for 1 h), IP69K	IP68 (2 m for 1 h), IP69K
Air Permeability	> 1760ml/min at 7 kPa	> 1760ml/min at 7 kPa
Salt Spray	48h	48h
Torque Value	6.0 ~ 8.0 kgf.cm	6.0 ~ 8.0 kgf.cm
Recommended Panel Thickness	Through-hole: 2.0 ~ 3.5mm Threaded-hole: Min. 4.0mm	Through-hole: 2.0 ~ 3.5mm Threaded-hole: Min. 4.0mm
Housing	Zinc Alloy, Nickel Plated	Zinc Alloy, Nickel Plated
Membrane	ePTFE (Hydrophobic)	ePTFE (Oleophobic)
O-Ring	Silicone	Silicone
Housing Color	Silver	Silver
Water Entry Pressure	29 kPa minimum	-

Dimensions:

(unit: mm)



Recommended Installation:



Calculate Vent Equilibrium Time: [click here](#)

Pressure Relief Vent Series

Type	M12 Plastic	M12 Plastic
Part Number (* without nut / ** with nut)	VENT-PS1NBK-N8001 (Black)* VENT-PS1NBK-N8002 (Black)* VENT-PS1NGY-N8001 (Gray)* VENT-PS1NGY-N8002 (Gray)* VENT-PS1YBK-N8001 (Black)** VENT-PS1YBK-N8002 (Black)** VENT-PS1YGY-N8001 (Gray)** VENT-PS1YGY-N8002 (Gray)** VENT-PS1NCR-N8001 (White) VENT-PS1NCR-N8002 (White)	VENT-PS1NBK-O8001 (Black)* VENT-PS1NBK-O8002 (Black)* VENT-PS1NGY-O8001 (Gray)* VENT-PS1NGY-O8002 (Gray)* VENT-PS1YBK-O8001 (Black)** VENT-PS1YBK-O8002 (Black)** VENT-PS1YGY-O8001 (Gray)** VENT-PS1YGY-O8002 (Gray)** VENT-PS1NCR-O8001 (White) VENT-PS1NCR-O8002 (White)



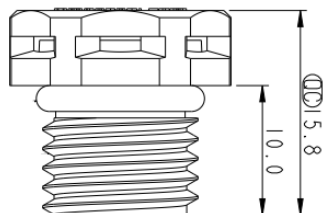
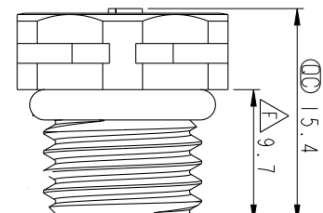
Product Performance Characteristics:

Assemble Type / Screw Size	Screw M12 x 1.5	Screw M12 x 1.5
Environment Temperature	-40°C ~ +125°C	-40°C ~ +125°C
Waterproof Rating	IP68 (2 m for 1 h), IP69K	IP68 (2 m for 1 h), IP69K
Air Permeability	001: > 1000 ml/min at 7 kPa 002: > 3000 ml/min at 7 kPa	001: > 550 ml/min at 7 kPa 002: > 1000 ml/min at 7 kPa
Salt Spray	1,000h	1,000h
Torque Value	6.0 ~ 8.0 kgf.cm	6.0 ~ 8.0 kgf.cm
Recommended Panel Thickness	Min. 4.0mm	Min. 4.0mm
Housing	Thermoplastic (UL 94V-0, f1)	Thermoplastic (UL 94V-0, f1)
Membrane	ePTFE (Hydrophobic)	ePTFE (Oleophobic)
O-Ring	Silicone	Silicone
Housing Color	Gray / Black / White (Translucent)	Gray / Black / White (Translucent)

Dimensions:

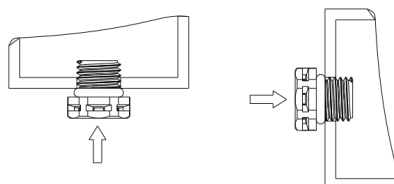
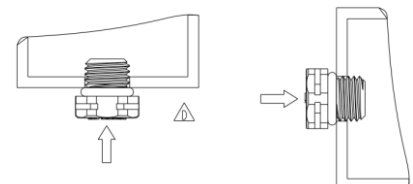
(unit: mm)

Gray / Black

White
(Translucent)

Recommended Installation:

Gray / Black

White
(Translucent)

Calculate Vent Equilibrium Time: [click here](#)

Pressure Relief Vent Series

Type	M12 Stainless Steel	M6 Plastic
Part Number	VENT-MS1NMS-O8001	VENT-PS2NGY-O8001 (Gray) VENT-PS2NBK-O8001 (Black)

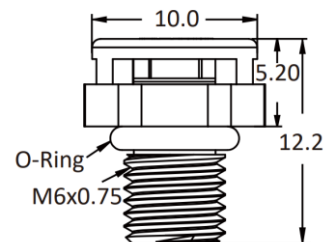
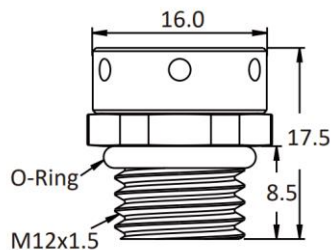


Product Performance Characteristics:

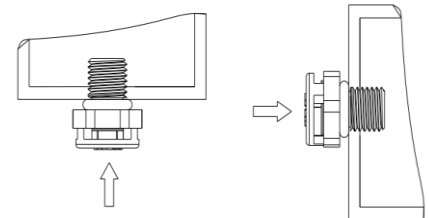
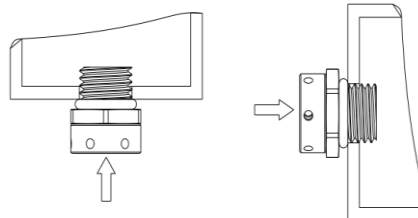
Assemble Type / Screw Size	Screw M12 x 1.5	Screw M6 x 0.75
Environment Temperature	-40°C ~ +125°C	-40°C ~ +125°C
Waterproof Rating	IP68 (2 m for 1 h), IP69K	IP66, IP68 (2 m for 1 h)
Air Permeability	> 1600ml/min at 7 kPa	> 300ml / min at 7 kPa
Salt Spray	1,000h	1,000h
Torque Value	6.0 ~ 8.0 kgf.cm	2.0 ~ 4.0 kgf.cm
Recommended Panel Thickness	Min. 4.0mm	Min. 4.0mm
Housing	SUS316L	Thermoplastic (UL 94V-0, f1)
Membrane	ePTFE (Oleophobic)	ePTFE (Oleophobic)
O-Ring	Silicone	Silicone
Housing Color	Silver	Gray / Black

Dimensions:

(unit: mm)



Recommended Installation:



Calculate Vent Equilibrium Time: [click here](#)

Pressure Relief Vent Series

Type	Snap-In Plastic	Snap-In Plastic
Part Number	VENT-PQ1NBK-N8001 (Black) VENT-PQ1NBK-N8002 (Black) VENT-PQ1NGY-N8001 (Gray) VENT-PQ1NGY-N8002 (Gray)	VENT-PQ1NBK-O8001 (Black) VENT-PQ1NBK-O8002 (Black) VENT-PQ1NGY-O8001 (Gray) VENT-PQ1NGY-O8002 (Gray)

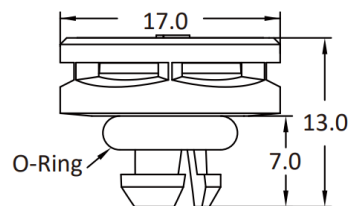


Product Performance Characteristics:

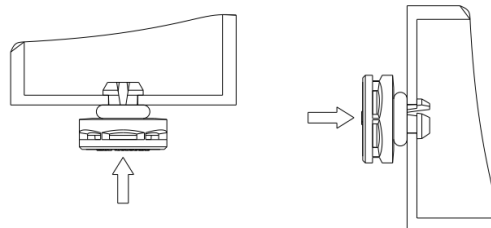
Assemble Type / Screw Size	Screw M12 x 1.5	Screw M6 x 0.75
Environment Temperature	-40°C ~ +125°C	-40°C ~ +125°C
Waterproof Rating	IP68 (2 m for 1 h), IP69K	IP68 (2 m for 1 h), IP69K
Air Permeability	001: > 1000 ml/min at 7 kPa 002: > 3000 ml/min at 7 kPa	001: > 550 ml/min at 7 kPa 002: > 1000 ml/min at 7 kPa
Salt Spray	1,000h	1,000h
Torque Value	N/A	N/A
Recommended Panel Thickness	3.85 ~ 4.15mm	3.85 ~ 4.15mm
Housing	Thermoplastic (UL 94V-0, f1)	Thermoplastic (UL 94V-0, f1)
Membrane	ePTFE (Hydrophobic)	ePTFE (Oleophobic)
O-Ring	Silicone	Silicone
Housing Color	Gray / Black	Gray / Black

Dimensions:

(unit: mm)



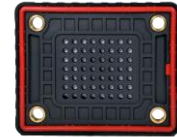
Recommended Installation:



Calculate Vent Equilibrium Time: [click here](#)

Over-pressure Relief Vent Series

Type	Over-pressure M20 (Spring-loaded)	Over-pressure M40 (Spring-loaded)	Over-pressure Rectangular (Piercing type)
Part Number	VENT-MS4NME-O8002	VENT-MS5NME-O8002	VENT-PR1NBK-O8001



Product Performance Characteristics:

Assemble Type / Screw Size	Screw M12 x 1.5	Screw Type	4 x M6
Environment Temperature	-40°C ~ +150°C	-40°C ~ +150°C	-40°C ~ +120°C
Waterproof Rating	IP68 (2 m for 60mins), IP69K	IP68 (2 m for 60mins), IP69K	IP68 (2 m for 1 h), IP69K
Air Permeability	> 1400ml / min at 7 kPa	> 3000ml / min at 7 kPa	> 10,000ml / min at 7 kPa
Salt Spray	48h	48h	96h
Torque Value	3.0 ~ 5.0 kgf.cm	3.5 ~ 5.5 kgf.cm	2.0 ~ 3.0 kgf.cm
Wrench Size	28.0mm	50.0mm	EPV Rectangular Type
Thread Size	EPV M20*1.5	EPV M40*1.5	EPV Rectangular Type
Housing	Aluminum Alloy	Aluminum Alloy	Thermoplastic(UL 94V-0, f1)
Membrane	ePTFE (Oleophobic)	ePTFE (Oleophobic)	ePTFE (Oleophobic)
O-Ring	Silicone	Silicone	Silicone
Housing Color	Silver	Silver	Black
Opening Pressure	12±2 kPa	6±2 kPa	30±5 kPa

Dimensions:

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Recommended Installation:

		N/A
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Calculate Vent Equilibrium Time: [click here](#)

Over-pressure Relief Vent Series

Type	Over-pressure M20 (Piercing type)	Over-pressure M40 (Piercing type)
Part Number	VENT-MS4NME-O8001	VENT-MS5NME-O8001 (Silver) VENT-MS5NBK-O8001 (Black)

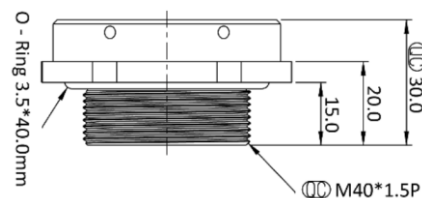
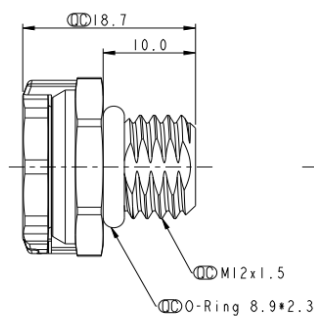


Product Performance Characteristics:

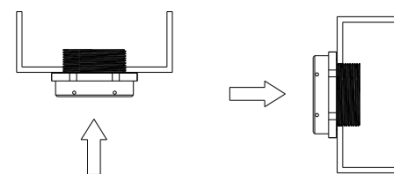
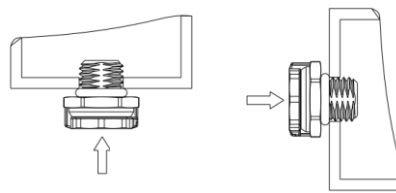
Assemble Type / Screw Size	Screw Type	Screw Type
Environment Temperature	-40°C ~ +150°C	-40°C ~ +150°C
Waterproof Rating	IP68 (2 m for 60mins), IP69K	IP68 (2 m for 60mins), IP69K
Air Permeability	> 2000ml / min at 7 kPa	> 4500ml / min at 7 kPa
Salt Spray	48h	48h
Torque Value	3.0 ~ 5.0 kgf.cm	3.5 ~ 5.5 kgf.cm
Wrench Size	26.0mm	50.0mm
Thread Size	EPV M20*1.5	EPV M40*1.5
Housing	Aluminum Alloy	Aluminum Alloy
Membrane	ePTFE (Oleophobic)	ePTFE (Oleophobic)
O-Ring	Silicone	Silicone
Housing Color	Silver	Silver / Black
Opening Pressure	40±5 kPa	40±5 kPa

Dimensions:

(unit: mm)



Recommended Installation:



Calculate Vent Equilibrium Time: [click here](#)



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Luc Kan | Sales & Marketing

Email: luc@ltw-tech.com

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