



VENTILATION CABLE GLAND

TE Connectivity (TE)'s ventilation cable gland is a specialized component that provides a secure, sealed cable entry into enclosures while allowing controlled airflow and pressure equalization between the inside and outside of the enclosure. This helps prevent condensation, overheating, and equipment failure, maintaining optimal operating conditions.

FEATURES

- Compact design: 2-IN-1 product
- Different colors options and material
- IP68 & IP69 ingress protection
- UL Compliance
- Available in three thread versions: PG, Metric, and NPT
- Integrated ventilation feature for enhanced performance
- Compact design provides cost, weight, and space savings
- Offered in both plastic and metal body options
- Venting Membrane: The core feature is a specialized membrane (made of PTFE) that allows air and vapor to pass through while blocking liquids and particulate matter

Ventilation Cable Gland

BENEFITS

- Enhanced design allows for more space within panels , like lighting luminaires
- Compatible with various casing colors and installation constraints
- Engineered for reliable performance in outdoor applications
- No need for supplier changes when exporting from Europe or Asia to the U.S. market
- Designed for use across Asia, Europe, and America
- Help prevent internal damage caused by pressure differences
- Helps maintain stable internal enclosure temperatures
- Prevents Condensation: The primary benefit is the prevention of condensation buildup inside enclosures. Temperature fluctuations and humidity can cause moisture to condense, leading to corrosion, electrical faults, and reduced lifespan of internal components
- Pressure Equalization: Ventilation glands allow for the exchange of air between the inside and outside of the enclosure, equalizing pressure differences caused by temperature changes or altitude variations. This prevents stress on seals and the enclosure itself
- Maintains IP Rating: Despite allowing airflow, these glands are designed with membranes that maintain the Ingress Protection (IP) rating of the enclosure, helping prevent the entry of dust, water, and other contaminants
- Extends Component Lifespan: By preventing condensation and maintaining a stable internal environment, ventilation cable glands help extend the service life of sensitive electrical and electronic components within the enclosure
- Reduces Maintenance Costs: Preventing failures due to moisture and pressure imbalances can significantly reduce maintenance and repair costs

STANDARDS

- TYPE 4x acc. to UL 50E
- DIN EN 62444
- UL514B
- CSA22.2 No 18.3-12
- CSA22.2 No 94.2-15

SPECIFICATIONS

- Flammability: V2 according to UL94

ADVANTAGE

- Maximizes available space for other components
- Designed to meet lighting industry requirements and various applications
- Provides high ingress protection for improved durability
- Compatible with markets in Asia, Europe, and America
- Available in all popular thread sizes, providing for easy selection based on enclosure cut-out thread design
- ****2-in-1 Solution:**** Combined Functionality: They integrate the functions of a cable gland and a ventilation plug into a single unit, simplifying installation and reducing the number of required components
- Equalizes pressure differences between the inner housing and the external environment
- Competitively priced for cost-effective solutions. Significantly reduces the need for separate ventilation devices and additional mounting holes on the enclosure
- Adaptable to diverse design, environmental, and budget constraints
- Improved Reliability: Contributes to the overall reliability and longevity of the electrical and electronic systems housed within the enclosure

APPLICATIONS

- EVI (Electric Vehicle Infrastructure)
- Outdoor Lighting
- Industrial Automation - Protects sensitive control systems and electronic equipment in factories and processing plants
- Transportation: Used in automotive, railway, and shipping industries to protect electrical systems from harsh weather and condensation
- Marine Applications: Protects electrical equipment on boats and offshore installations from salt water and humidity
- Solar panel (combiner boxes, inverters)
- Telecom Panel which is installed outdoor
- HVAC panels

MECHANICAL

- Operating Temp for Polyamide Permanent: -40 °C to +100 °C
Operating Temp for Brass Permanent: -20 °C to +100 °C
- Brass IP 66,67
Polyamide IP66,68,69

MATERIALS

- Polyamide
- Brass

Ventilation Cable Gland

PART NUMBERS

Part Number	Part Description
2490540-1	VENTILATION GLAND,BRASS,M12,2-6,8
2490540-2	VENTILATION GLAND,BRASS,M12,4-7,8
2490540-3	VENTILATION GLAND,BRASS,M16,2-6,8
2490540-4	VENTILATION GLAND,BRASS,M16,4-7,8
2490540-5	VENTILATION GLAND,BRASS,M16,3-7,8
2490540-6	VENTILATION GLAND,BRASS,M16,5-9,8
2490540-7	VENTILATION GLAND,BRASS,M20,5-9,8
2490540-8	VENTILATION GLAND,BRASS,M20,6-11,8
2490540-9	VENTILATION GLAND,BRASS,PG7,2-6,8
1-2490540-0	VENTILATION GLAND,BRASS,PG7,4-7,8
1-2490540-0	VENTILATION GLAND,BRASS,PG7,4-7,8
1-2490540-1	VENTILATION GLAND,BRASS,PG9,2-6,8
1-2490540-2	VENTILATION GLAND,BRASS,PG9,4-7,8
1-2490540-3	VENTILATION GLAND,BRASS,PG11,3-7,8
1-2490540-4	VENTILATION GLAND,BRASS,PG11,5-9,8
1-2490540-5	VENTILATION GLAND,BRASS,PG13.5,5-9,9
1-2490540-6	VENTILATION GLAND,BRASS,PG13.5,6-11,9
2490541-1	VENTILATION GLAND,PA6,M12,4-8,8,GRY
2490541-2	VENTILATION GLAND,PA6,M12,4-8,8,LGR
2490541-3	VENTILATION GLAND,PA6,M12,4-8,8,BLK
2490541-4	VENTILATION GLAND,PA6,M16,4-8,10,GRY
2490541-5	VENTILATION GLAND,PA6,M16,4-8,10,LGR
2490541-6	VENTILATION GLAND,PA6,M16,4-8,10,BLK
2490541-7	VENTILATION GLAND,PA6,M20,6-12,10,GRY
2490541-8	VENTILATION GLAND,PA6,M20,6-12,10,LGR
2490541-9	VENTILATION GLAND,PA6,M20,6-12,10,BLK
1-2490541-0	VENTILATION GLAND,PA6,PG9,4-8,8,GRY

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1-2490541-3	VENTILATION GLAND,PA6,PG11,4-8,8,GRY
1-2490541-4	VENTILATION GLAND,PA6,PG11,4-8,8,LGR
1-2490541-5	VENTILATION GLAND,PA6,PG11,4-8,8,BLK
1-2490541-6	VENTILATION GLAND,PA6,PG13.5,6-12,9,GRY
1-2490541-7	VENTILATION GLAND,PA6,PG13.5,6-12,9,LGR
1-2490541-8	VENTILATION GLAND,PA6,PG13.5,6-12,9,BLK
1-2490541-9	VENTILATION GLAND,PA6,NPT3/8,4-8,15,GRY
2-2490541-0	VENTILATION GLAND,PA6,NPT3/8,4-8,15,LGR
2-2490541-1	VENTILATION GLAND,PA6,NPT3/8,4-8,15,BLK
2-2490541-2	VENTILATION GLAND,PA6,NPT1/2,6-12,15,GRY
2-2490541-3	VENTILATION GLAND,PA6,NPT1/2,6-12,15,LGR
2-2490541-4	VENTILATION GLAND,PA6,NPT1/2,6-12,15,BLK

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