

SUBB IN

Air intake hoses and ducts for passenger cars A design for every application



Fluid Technology

Air intake hoses and ducts for passenger cars

ContiTech MGW air ducts are used for both the dirty air side (in front of the air filter) and the clean air side. Depending on the filter system used, the clean air duct must withstand vacuum pressure of up -180 mbar (i.e. 820 mbar absolute) without collapsing.

If the air duct is located directly between airfilter and turbocharger, then at the turbocharger side a high temperature resistance is required. Due to the high rate of airflow a smooth and streamlined inner hose design is required, to minimize pressure loss. This also has a positive effect to the acoustic behaviour of the hose.

ContiTech MGW has developed a convolution design that not only gives excellent flexibility for the hose, but also meets the requirements for vacuum resistance in service. The target of this development was, to meet the right balance between the weight of the hose on the one hand and compliance with the requirements on the other one.

Assembly of a convoluted air duct

and blow-moulding pipe

Clean Air Duct

Technical details:

Working temperatures:

- > For CR: -40°C to +100°C (max. +120°C)
- > For EPDM: -40°C to +110°C (max. +130°C)
- > For ECO (unleaded): -40°C to +120°C (max. +140°C)*
- > For EPDM (peroxid.): -40°C to +150°C (max. +170°C)
- For AEM: -40°C to +160°C (max. +180°C) * according ELV 2000/53/EG

Permissible vacuum load:

Up to -180 mbar (i.e. 820 mbar absolute) at working temperature for injection moulded part without reinforcement. By adding strengthening features the vacuum resistance can be increased.

Resistance:

The resistance to ultraviolet rays, ozone and / or effects of chemical agents corresponds to the properties of the individual elastomers wich have been chosen to meet the customer's requirements.

Properties:

- > Air intake hoses with blow-by connectors and sockets for diesel and petrol engines.
- > Socket for temperature sensor.
- > Soundproofing features (e.g. steel rings).
- Flexibility and vacuum stability through convolutions and ribs.
- > The right material for ervery range of temperatures.

Clean Air Line, S-shaped pre-assembled hose clamp and temperature sensor

integrated cable brackets

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