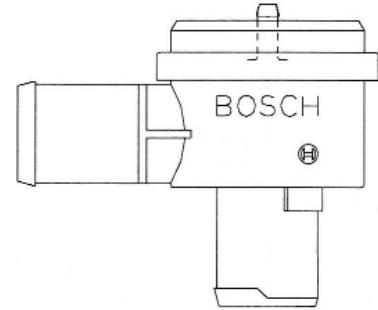


OVER-RUN CUT-OFF VALVES

Purpose and Function.

These valves are primarily designed to relieve pressure build up between the closed throttle plate and the turbocharger during deceleration. Whilst the throttle is open and the turbocharger is producing boost pressure, the flow of air is unrestricted. When the throttle plate is closed due to gear change or vehicle deceleration, air flow is now stopped between the closed throttle and the turbocharger, this may cause cavitation within the turbocharger and consequential damage to the impeller resulting in turbocharger failure. This is commonly referred to as "Boost Surge". Over-run Cut-off valves are designed to allow a small volume of air to be diverted from the area between the throttle plate and turbocharger back to the area prior to the inlet of the turbocharger. The valve vacuum connection is connected directly to the inlet manifold. During deceleration, manifold vacuum rises above the opening pressure of the valve, the diaphragm-operated valve will now open and allow air to flow. This will then reduce the occurrence of "Boost Surge" and protect the turbocharger. It is important to note that when used on an "Air Flow Controlled" engine management system [one that uses an Air Flow/Mass Sensor] the volume of air being diverted by the valve is in fact "measured air". It is therefore important that the valve does not vent to atmosphere or mixture control and emission problems could result. It is not recommended that these valves release pressure to atmosphere on any application.



OVER-RUN CUT-OFF VALVE TECHNICAL DATA

Part Number	Operating Pressure [mBar]	Inlet Connection	Outlet Connection	Comment
0 280 142 102	130	25 mm	25 mm	
0 280 142 103	200	25 mm	25 mm	Typically open at idle
0 280 142 105	50	25 mm	25 mm	

