

Assembly dimensions (mm)

## System description

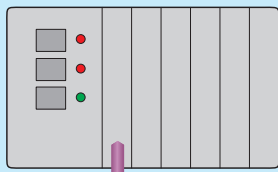
DeviceNet uses a trunk cable/drop cable topology. It utilizes the Controller Area Network (CAN) as a back bone. Depending on the line length, different baud rates are possible. It has to be taken into account though, that the total length of all drop cables also depends on the baud rate. DeviceNet supports various messaging formats which allows reduced response times and increases the efficiency of the data exchange:

- **Explicit Message Connection**  
In this mode direct data exchange between master and slave takes place without address priority.
- **Polled I/O Message Connection**  
When requested, slaves transmit I/O data to the master.
- **Bit Strobed I/O Message Connection**  
The master sends a 'Bit-Strobe' message to all slaves. The slaves respond sending their input data or output status.
- **Change of State / Cyclic Message Connection**  
Due to a certain event (e.g. change of input state) a device sends the current date. In order to avoid data collision on the bus, devices are prioritized. If several devices try to send a message at the same time, the device having the highest priority will be allowed to send first.

## Addressing

Module addressing can either be done via a master manufacturer's configuration software (e.g. DeviceNet Manager, RS Networkx) or via the WAGO software tool (WAGO DeviceNet Node Commissioning). When addressing is done via the master, the modules are first added to the network. The modules will then carry out a self test to find out if there is another module with the same address in the fieldbus network. If so, the module is deactivated. Factory set module addresses are required to set own addresses. Addressing done via the WAGO software tool occurs in connection to the WAGO-I/O-SYSTEM. The module is addressed via the fieldbus coupler's configuration interface and the connected fieldbus. Bus network scanning will find out the addresses that have already been used.

# Topology



PC or PLC with  
DeviceNet Scanner

Power supply

787 Series

755-361

756-1401/060-xxx

755-365

755-854

755-852

**755-122**  
8DO 24V DC  
2A



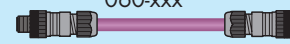
**755-122**  
8DO 24 VDC  
2A



**755-121**  
16DI 24 VDC



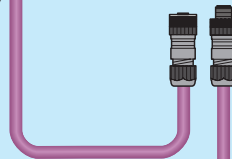
756-1405/  
060-xxx



755-808



756-1405/  
060-xxx



756-9209/  
060-000



756-1403/  
060-xxx



**WAGO-I/O-SYSTEM 750**

