

# Delphi

Explore our technologies

# GASOLINE DIRECT INJECTION (GDi) INJECTOR

for Passenger Cars, Light Vehicles and Hybrids



## Explore our technologies

# GDi INJECTOR

### M16 injector family:

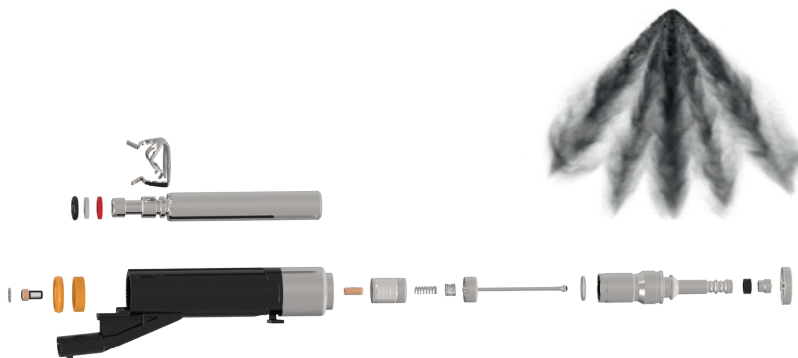
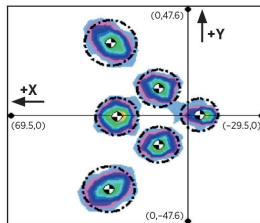
ECU controlled fuel injector providing pressurized quantity of fuel for GDi engines

- M16e: up to 400bar system operating pressure
- M16: 500+bar system operating pressure

### How it works

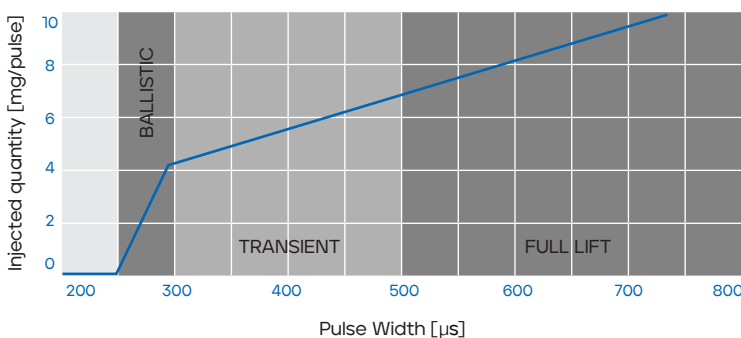
BENEFITS OF ARMATURE GUIDED CONCEPT:

- Maximize magnetic efficiency
- Durable in various operational environments
- Better closed loop closing detection
- Compatible with large static flow range



Typical M16e injectors Flow and Spray characteristics (350b)

### Average delivery characteristic at 35 MPa



### Features and benefits

- Extremely flexible packaging for central and side engine mounting applications, hanging or seated injector in cylinder block for both 6 and 7,5mm tip diameter
- Similar packaging for easy upgrade from M16e to M16
- Corrosive fuel robustness including DLC coated ball option
- Flexible fuel compatibility (E0 - E100/M15)
- M16 injector family offers full range of Static flow
  - M16e: from 10 to 37g/s at 350bar
  - M16: from 10 to 40g/s at 500bar
- Shot-to-shot and multi-pulse optimized capability
- Low pressure pulsations - due to customized inlet fuel orifice
- Ability to deliver accurate multi-injection at every operating pressure
- Capable to optimize flow and spray to meet application requirements with non-thermal, laser drilling of nozzle holes
- Low part to part dynamic flow variation and pronounced electrical signal for effective close loop correction for very low injection masses
- Optimized magnetic performance and low drive wave form energy
- Optimized design for low noise and low stress (low mass armature)
- Market leader with 400bar capable product