



Technical Bulletin

DMF & Valeo FullPack

Vehicle Type	Part Number
Opel 2.0, CDTi engines	837442, 837443, 837444, 837445

Valeo FullPack - Technical Information

Valeo FullPack™ covers Opel 2. CDTi engines

- Valeo 837442, 837443, 837444, 837445 is a specific product for Opel 2.0 CDTi engine
- This product has been designed for
- Long lasting performance
- Following most rigorous standards

Valeo FullPack™ is easy to fit

- Valeo FullPack™ includes **all items and components needed** by the garagist when replacing the clutch system.
- The product can be installed using standard garage equipment.
- **No special tooling is required to assemble Clutch, Dual Mass Flywheel or CSC**



The highest performance for a comfortable drive



- Dual Mass Flywheel and Clutch included in **FullPack™** have been designed with a **high torque capacity**, which ensures full engine torque transmission.
- Pressure Plate Cover assembly is designed for **high efficiency clutch (HEC)** which keeps an optimum pedal load during the entire clutch life thanks to Valeo high quality friction material with very low wear.
- Shiftability adapted to enable **smoother gear changes**.

DMF: Best in class technology



- Dual Mass Flywheel has an optimized dampening curve for engine vibrations better filtering, it has been designed to give the best performance for its specific application list.
- The FullPack™ range offers the driver optimal acoustic comfort without noises and vibration in all speed and driving condition
- Valeo has taken a special care of the acoustic comfort (including a damper disc type M) .Gearboxes of this application (M32 & F40) are sensitive so special attention has been paid to the care of these.
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- The Dual Mass flywheels have a ball bearing guide system between primary and secondary masses with small axial play and tilt, which brings better performance and durability compared to other guiding systems in the market.
- DMF has new design with improved mechanical resistance.
 - Ring Gear is made in high resistance steel (430 MPa* & min hardening 52** HRC)
 - Secondary flywheel is made in high resistance nodular casting (500 MPa* yield

strength) to increase the resistance in all driving condition.

- Curved springs, which are manufactured in CrSiMn*** steel, with high fatigue properties (2000 MPa* Tensile strength) along with the other components mentioned makes them a long lasting products.

* MPa : Megapascals

** HRC: Rockwell Hardness

*** CrSiMn: Chromium - Silicon - Manganese

Valeo FullPack™	FREE PLAY ANGLE (J1) Maximum acceptable angle	Up to Starting Ring gear number of teeth	TILT Maximum permissible value	CRANKSHAFT BOLTS TIGHTENING TORQUE	PPCA TIGHTENING TORQUE	CSC TIGHTENING TORQUE
837442	20.5°	7	2.5 mm	160 Nm	25 Nm	15-20 Nm
837443	20.5°	7	2.5 mm	160 Nm	25 Nm	15-20 Nm
837444	23.5°	8	2.5 mm	160 Nm	25 Nm	15-20 Nm
837445	23.5°	8	2.5 mm	105 Nm	25 Nm	15-20 Nm