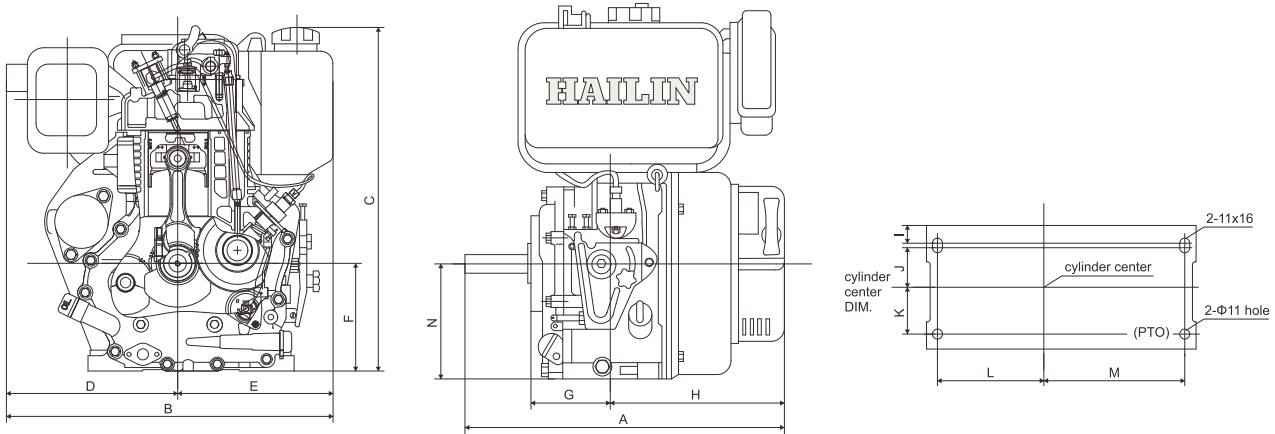
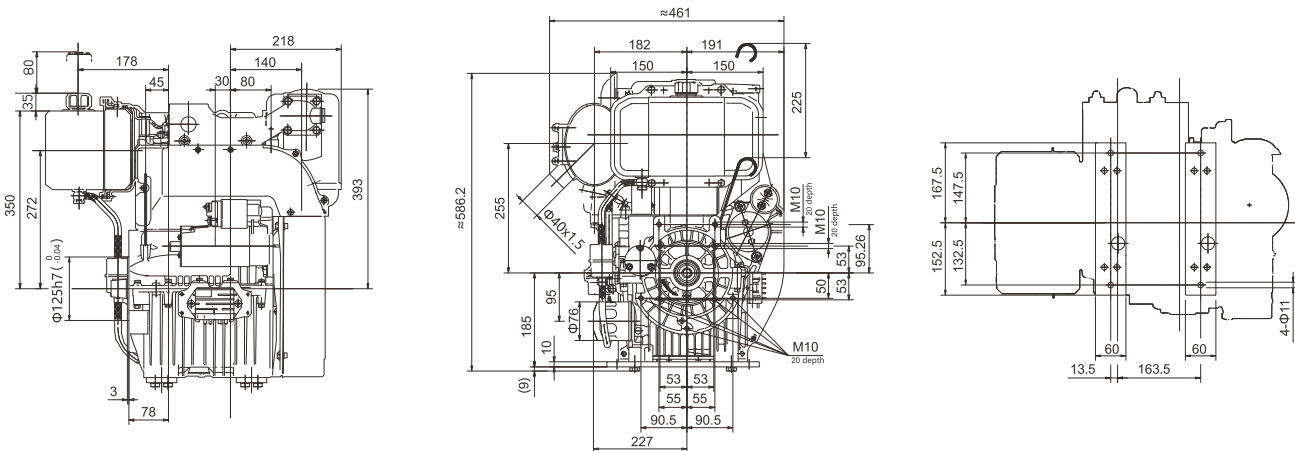


# DIESEL ENGINE | Overall dimensions and installation



|   | HL170FA | HL178FA | HL186FA | HL188FV |
|---|---------|---------|---------|---------|
| A | 324     | 358     | 392     | 392     |
| B | 392     | 421     | 470     | 470     |
| C | 416     | 450     | 494     | 498     |
| D | 218     | 218     | 247     | 247     |
| E | 192     | 203     | 223     | 223     |
| F | 130     | 145     | 155     | 155     |
| G | 86      | 96      | 105     | 105     |
| H | 185     | 199     | 224     | 224     |
| I | 5       | 5       | 5       | 5       |
| J | 36.5    | 41.5    | 43.5    | 43.5    |
| K | 38.5    | 43.5    | 51.5    | 51.5    |
| L | 95      | 104     | 117     | 117     |
| M | 115     | 144     | 155     | 155     |
| N | 160     | 171.5   | 173.7   | 173.7   |

Unit: mm



HL292FE

|                      |   |
|----------------------|---|
| Model                | HL170FA   |
| Type                 | Single-cylinder, Vertical 4-stroke air cooled diesel engine |
| Displacement         | 219 cc  |
| Compression Ratio    | 20.5 : 1  |
| Bore x Stroke        | 70×57 mm  |
| Maximum Output       | 2.8kW (3.8hp) @3000rpm; 3.1kW (4.2hp) @3600rpm              |
| Continuous Output    | 2.5kW (3.4hp) @3000rpm; 2.8kW (3.8hp) @3600rpm              |
| Power Take Off       | Crankshaft  |
| Revolution Direction | Counterclockwise (Viewed from output shaft)                 |
| Cooling System       | Forced air by flywheel fan                                  |
| Lubricating System   | Forced lubrication and splash lubrication                   |
| Starting System      | Recoil Start  |
| Fuel Tank            | 2.5 Liters  |
| Lub Oil Capacity     | 0.8 Liters  |
| Fuel Consumption     | 341 ml/kW.h @3000rpm; 347 ml/kW.h @3600rpm                  |
| Dimension            | 392x332x416 mm  |
| Dry Weight           | 28 kg   |