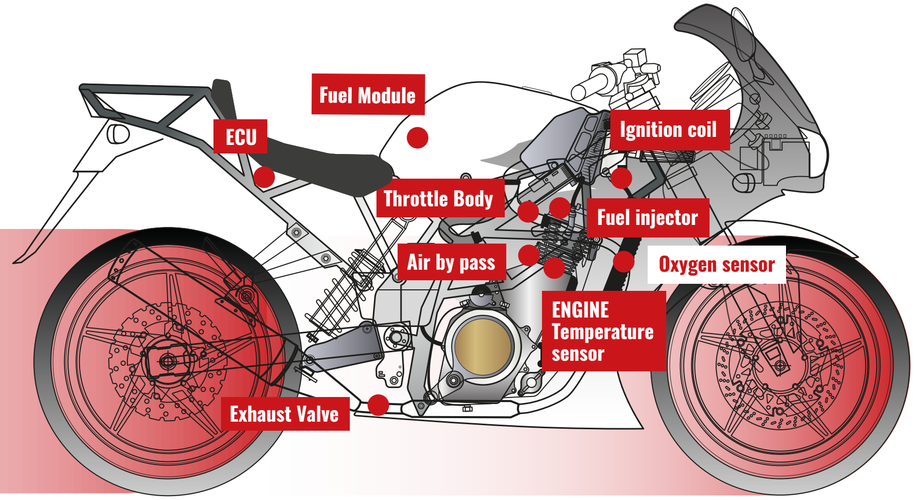
DELLORTO

MOTORCYCLE ENGINE MANAGEMENT SYSTEM AND COMPONENTS

- Supporting future engines, fuels and emission standards, towards carbon neutrality goal
- EURO5 stageB, BS6 stage B compliant system
- E20 and E30 compliant solutions



KEY MODULES SELECTION, APPLICATION AND CALIBRATION

- **ELECTRONIC CONTROL MODULES**
  Developed in the Italy Headquarter - Produced in India, Italy and China plant
- **THROTTLE BODY MODULES**
  Developed in the Italy Headquarter - Produced in Italy and India plant
- **FUEL SUPPLY MODULES**
  Developed and produced in China plant
- **APPLICATION AND CALIBRATION**
  Local teams available in EU, India and China - R&D Labs available at Italy HQ

ELECTRONIC CONTROL MODULES

Based on successfully Moto3 official supply since 2012

RIDE-BY-WIRE ECUs

State-of-the-art control strategies and advanced features

- Proprietary innovative torque-based control, specifically conceived for motorcycle applications.
- Riding modes, engine brake control, traction control, bi-directional quick-shifter, cruise control, speed limiter control.
- Catalyst heat-up strategy, catalyst and exhaust temperature models, evaporative purge control, self-adaptive injection and idle controls.
- OBD2 including catalyst monitoring, lambda monitoring, misfire detection
- Mixed alpha-n/speed-density injection control, advanced closed-loop injection control, deceleration fuel cut-off, barometric estimation from MAP, ambient air temperature estimation from IAT, low battery compensation.
- Custom functions upon OEM request.
- Hardware platform scalable up to four ignition coils and four injectors control.

VENICE
Twin cylinder engines
80 pin version

VENICE LITE
Single cylinder engines
48 pin Lite version

ELECTRONIC CONTROL MODULES

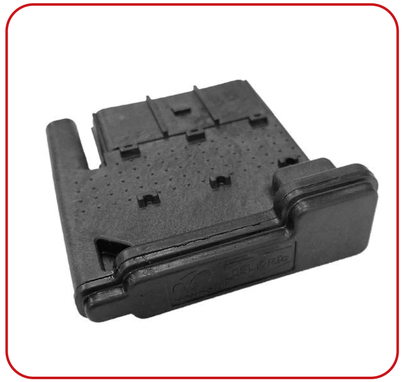
Based on successfully Moto3 official supply since 2012

RIDE-BY-CABLE ECUs

State-of-the-art control strategies and advanced features

- Riding modes, engine brake control, traction control, quick-shifter.
- Catalyst heat-up strategy, catalyst and exhaust temperature models, evaporative purge control, self-adaptive injection and idle controls.
- OBD2 including catalyst monitoring, lambda monitoring, misfire detection
- Mixed alpha-n/speed-density injection control, advanced closed-loop injection control, deceleration fuel cut-off, barometric estimation from MAP, ambient air temperature estimation from IAT, low battery compensation.
- Custom functions upon OEM request
- More than 2 milions units successfully on the market, 2024 production above 1 milion units
- Lite version34 pin for low-cost application with integrated connector

MONNALISA
Twin and single cylinder engines 48 pin version



MONNALISA LITE
Single cylinder air cooled engines 34 pin Lite version

THROTTLE BODY MODULES

Based on successfully MotoGP and WSBK applications

RIDE-BY-WIRE THROTTLE BODY EXAMPLES

- In-line four cylinder
- independent left-right bank activation
- Innovative by-pass system
- 8 injector fuel rail with pressure sensor

- In-line twin cylinder
- Integrated Dellorto dual MAP
- 2 injectors fuel rail

- Single cylinder
- Integrated Dellorto TMAP sensor
- Injector with fuel connection

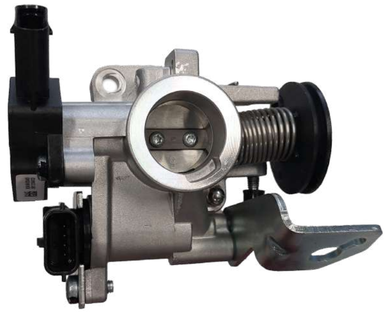
HIGHLIGHTS

- Highly flexible configuration with modular design
- Fully compatible with low-carbon and fossil-free fuels
- Round and oval bore, with dia. range from 30 to 90mm and more upon request
- Integrated Dellorto sensors such as single or dual MAP either combined TMAP
- Integrated fuel rail system
- Dumarey partnership for high-quality, state-of-the–art fuel injectors
- Over 5 million units produced every year, of which 2 million ride-by-wire

THROTTLE BODY MODULES

Based on successfully MotoGP and WSBK applications

RIDE-BY-CABLE THROTTLE BODY EXAMPLES



- Ultra-small architecture
- 3-in-1 TMAP with contactless TPS sensor
- By-pass with mini stepper-motor

- 4-stroke off-road application
- 2-in-1 MAP with contactless TPS
- Manual idle setting
- Variable cable cam radius
- Cable cam protection cover

- 2-stroke off-road application
- Contactless TPS
- Manual starter by-pass
- Twin injectors on board
- Cable cam protection cover

HIGHLIGHTS

- Highly flexible configuration with modular design
- Fully compatible with low-carbon and fossil-free fuels
- Round and oval bore, with dia. range from 20 to 60mm and more upon request
- Integrated Dellorto sensors such as 3-in-1 TMAP with TPS or 2-in-1 MAP with TPS or TMAP
- Integrated fuel rail system
- Dumarey partnership for high-quality, state-of-the–art fuel injectors
- Over 5 million units produced every year, of which over 3 milion ride-by-cable

FUEL PUMP MODULES

Fueling engines from 125 to 1600cc

FUEL PUMP APPLICATION EXAMPLES

- Side-mounted
- Two parts lay-out
- Integrated pressure regulator
- Integrated fine filter
- Integrated fuel level sender
- Integrated pre-filter

- Bottom-mounted
- Integrated pressure regulator
- Integrated fine filter
- Integrated pre-filter

- Bottom-mounted
- Integrated pressure regulator
- Ultra-compact
- Integrated pre-filter

HIGHLIGHTS

- Highly flexible configuration with modular design
- Fully compatible with fuels up to E30
- Fuel pressure from 2,5 up to 5bar
- Perfect matching with Dumarey fuel injectors

SENSORS AND ACTUATORS

Complementing every application

TMAP SENSOR

3-IN-1 SENSOR
(TPS – MAP – IAT)

DUAL MAP SENSOR

EXHAUST VALVE

ELECTRIC OIL PUMP

CONTACTLESS TPS
SENSOR

LITHIUM ELECTRIC STARTER BATTERY

12 V – from 5 Ah to 12.5 Ah

KEY FEATURES

- Range available: 5Ah – 7,5Ah – 10Ah – 12,5Ah
- LFP 26650 cell type – specifically designed for STARTER BATTERY HIGH PERFORMANCE
- Peck current – 70C
- Discharge temperature from -20°C to 80°C
- Comunicantion protocol: LIN/CAN
- Message catalogue with information for: Battery History. Battery Status, Battery warnings, trasmissione of voltage and sensor status
- Propetary BMS HW and SW
- Safety level: Asil A
- Battery life above 2000 cycles
- Automitive level validation