PORTABLE ACTUATORS FOR VALVES AND GATES

F.Ili Scapin
COSTRUZIONI MECCANICHE E DIFSE IDRICHE
Our actuators are portable devices that have been conceived, designed and certified for handling valves and sluice gates, i.e. mobile control and locking systems placed along rivers, water canals and penstocks, to regulate their flow amount.

Practical, with their light weight; reliable, because they are built in light alloys coupled to most recent engines and components; compliant with safety legislation, with their internal clutch and adjustable anti-rotation pin system that prevents accidental rotation. Our portable actuators represent the easiest, fastest and most efficient way to operate on sluice gates and hydraulic valves when no electrical power is available, and with no physical effort requested to operators. With the goal to offer a comprehensive system, a wide set of accessories is available; these can be either standard or made-to-measure so as to solve all problems related to usage on valves, manual gearbox reducers, and emergency operations on electric actuators of any brand.

With two battery-operated tools, APB45N and APB60N, and two engine-operated models APS100N and APS140N, these portable devices offer quick and safe interventions to all operators involved in distribution, management, treatment and depuration of water flows.
**APB45N Portable battery-operated model**

Basic model APB45N is a portable 36V battery-operated system that allows to move small sizes hydraulic penstock valves and sluice gates. Practical, with its small dimensions and low weight, it can be easily used on any position and even in very restricted spaces.

**TECHNICAL DATA**
- Max torque: 45 Nm
- Continuous torque: 42 Nm
- Output rpm: 95 rpm
- Engine rpm: 3519 rpm
- Reduction ratio: 37:1
- Engine power: 349 Watt
- Battery: Dewalt: 36V
- Dimensions: 385x250x355(h) mm
- Weight: 7.6 Kg including battery
- Bushing connection: Q24x24x5(H) mm

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**APB60N Portable battery-operated model**

A technologically advanced device with its micro reducer coupled to 1100W electric engine and electric torque limiter, APB60N is powered by long-life 36V-750Wh battery backpack, offering high-speed maneuver for managing at best both emergency interventions and normal routine activities.

**TECHNICAL DATA**
- Max torque: 68 Nm
- Continuous torque: 55 Nm
- Output rpm: 125 rpm
- Engine rpm: 19700 rpm
- Reduction ratio: 3.15/1+50/1
- Engine power: 1100 Watt
- Battery: Hitachi 36V
- Dimensions: 420x220x280(h) mm
- Weight: 9 Kg including battery
- Bushing connection: Q24x24x5(H) mm

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**APS100N Portable engine-operated model**

Compact, light and reliable, APS100N is a portable actuation device of 12Kg. Equipped with Honda engine GX25 4T, centrifugal clutch and mechanical inverter, this model can be used in either horizontal/vertical position and guarantees high torques with really surprising performances.

**TECHNICAL DATA**
- Max torque: 105 Nm
- Continuous torque: 60 Nm
- Output rpm: 104 rpm
- Engine rpm: 8000 rpm
- Reduction ratio: 77:1
- Engine power: 0.72 KW (1.0 HP)
- Consumption: 0.54 LT/h
- Dimensions: 515x250x313(h) mm
- Weight: 12 Kg
- Bushing connection: Q24x24x5(H) mm

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**APS140N Portable engine-operated model**

With a max torque of 147 Nm achieved via an engine Honda GX35 4T, APS140N is a high-performance portable engine-operated actuator that can handle, even under heavy conditions, average and big size sluice gates that cannot be electrically fed.

**TECHNICAL DATA**
- Max torque: 147 Nm
- Continuous torque: 96 Nm
- Output rpm: 110 rpm
- Engine rpm: 8500 rpm
- Reduction ratio: 77:1
- Engine power: 1.0 KW (1.3 HP)
- Consumption: 0.71 LT/h
- Dimensions: 526x250x313(h) mm
- Weight: 13 Kg
- Bushing connection: Q24x24x5(H) mm
Our portable actuation systems are conceived, designed and approved for responsible applications on sluice gates. Never operate with the actuators unless they are secured to the rotation-preventing flange firmly installed on the sluice gates. Fili Scapin does not approve or authorize their usage for applications other than those described and waive any and all responsibility for any improper use of the actuators.