

APROLI 280/700 STRONG is an oil-hydraulic gate operator designed for swinging gates hinged to large pillars. It consists of an hydraulic mechanism ie. Drive 700 (designed to work in the most harsh conditions) over an oil reservoir-valve block assembly. The valve block incorporates the main hydraulic features of the unit, ie. manual override by unscrewing the release valve in events like power failure and the adjustable open and close safety pressure valves to control the amount of force developed by the operator and ensure total anti-crush operations. In the valve block there is also a double locking valve that holds the gates open or closed, ie. hydraulically locked in either positions, when the motor stops (a reversible non locking option is also available).

The electric motor and the lobe-design pump are in an oil bath inside the oil reservoir, the external end cap of which is fitted with the electrical connections for power supply. The shaft has a toothed central part that can mesh a rack system and can rotate 120°; shaft rotation is by oil pressure applied to either side of the rack by means of two pistons. A strong, anti-crush, articulated arm, made of steel, is fitted to the operator shaft. The terminal section of the arm (adjustable to meet three distance requirements) is made of aluminium, and is fitted with an articulated shoe for fixing to a gate. The whole operator is weatherproof and made of shock resistant materials: the valve block, the main assembly block, the jack central casting and the fixing bracket are made of pressure cast aluminium. The high quality standards of part machining and the hardening treatment made to the gear coupling ensure maximum smoothness of operation and therefore long life to the equipment; perfect sealing of the parts that have power oil inside is guaranteed by thirty years' expertise.

All the moving parts and protections have been designed to prevent any arm or danger to people.

APROLI 280/700 STRONG can be connected to the Elpro control panel, an extremely reliable control unit, and can be remotely operated from a distance by a radio transmitter, customized on request, or by a key switch, the key can be also customized having different toothing options, or by a digital key pad; the system can be connected to safety devices such as mechanical cable-operated edges and photocells.

TECHNICAL SPECIFICATIONS

HYDRAULIC PUMP AND OPERATOR

P3 - Hydraulic pump capacity	0,85 l/min
Working temperature	-20 °C +80 °C (*)
Working torque	250-400 Nm
Piston diameter	80 mm
Piston stroke	62 mm
Oil type	Oil Fadini - Item 708L
Shaft rotation angle	130°
Weight of operator c/w arm	20 kg
Protection standard	IP 67

(*) -40 °C with specific optional accessories (Ref. General Catalogue).

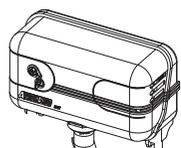
APPLICATIONS

Max gate weight per leaf	400 kg
Max gate width per leaf	3 m

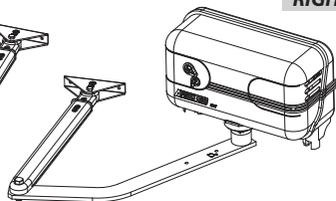
VERSIONS

- Non locking (reversible): an electric lock is needed
- With bidirectional hydraulic locking device

LEFT-HAND version



RIGHT-HAND version



ELECTRIC MOTOR

Power output	0,18 kW (0,25 CV)
Supply voltage	230 Vac
Frequency	50 Hz
Absorbed power	250 W
Absorbed current	1,2 A
Motor rotation speed	1.350 rpm
Capacitor	12,5 µF
Intermittent service	S3

PERFORMANCE

Frequency of use	very intensive
Service cycle	opening 23 s dwell 30 s closing 23 s dwell 30 s
Complete cycle time	106 s
Complete cycles	opening-dwell-closing-dwell No. 34/hour
Annual cycles (with 8 hours of use per day)	No. 99.280