

SIO SECURITY SOLUTIONS

HYDRAULIC BOLLARDS, GEARMOTORS,
BOOM AND SPIKE BARRIERS



SIO VASUNDDHARA
INTERNATIONAL PRIVATE LIMITED

PEOPLE | CUSTOMERS | GROWTH

K - 2/836, Vasant Kunj Road, Near Mata Chowk, Mahipalpur, New Delhi - 110 037, INDIA.
Ph: +91 11 2678 5169 / 4103 2065 • Email: contact@sio.co.in • Web: www.sio.co.in
For Distribution Inquiries: +91 99104 89457 • For Institutional Inquiries: +91 99589 98108

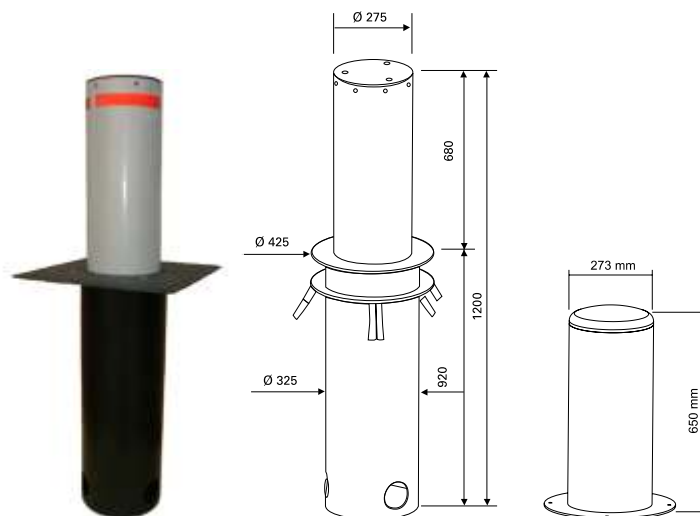
SIO Hydraulic Bollards.



SIO Hydro and SIO Fix are hydraulic bollards installed for protection in spaces open for public access, such as transit and parking areas.

PROPERTIES:

- Bollard with hydraulic movement for maximum silence and longer life.
- Compact version with incorporated hydraulic device for easy installation.
- Easy release system with personalized key.
- With lighting and sonorous system.
- External control unit for SIO Hydro
- Foundation box
- 5 mm thickness (Stainless Steel cylinder also available on request)
- Electro-valve for automatic descent in case of power failure (optional)



SPECIFICATIONS:

HYDRAULIC UNIT

Hydraulic pump capacity	4 l/min
Average operation pressure	2.2 MPA (22 bar)
Maximum pressure adjustment	4.5 MPA (45 bar)
Operation temperature	-20°C + 55°C
Hydraulic oil	SIO
Protection class	Ip55

ELECTRONIC MOTOR

Power supply	230V - 50 Hz	30%
Motor current	1.65 A	30%
Motor power	330 W	30%
Capacitor	12.5 mF	30%
Rotation speed	2800 rpm	30%

HYDRAULIC PISTON

Exit time of the rod	6 sec.
Rod effective stroke	720 mm
Rod diameter	16 mm
Piston diameter	30 mm
Max traction force during rod exit	275 kg
Max traction force during rod re-enter	147 kg
Power supply obstruction light (LED)	24 V
Shock resistance	9.000 Joule
Crashing resistance	120.000 Joule

FREQUENCY OF USE



SIO FIX
code: 12500010

680 x 275 mm
With support base
Pcs for Pallets: 8



SIO HYDRO
code: 12500005

Complete with lights
Pcs for Pallets: 4



SIO HYDRO INOX
code: 12500006

Complete with lights
Pcs for Pallets: 4

MOUNTING ACCESSORIES



SIO WLIGHT
with red/green lights



SIO ZK
Foundation with plate
rag bolts



RAL
Supplement RAL
(grey anthracite)



SIO CARBULL
Vehicle manhole cover
(550 x 550 mm)



SIO BOX
Foundation form and
rag bolts (1m)

SIO Operators for Sliding Gates.



SIO MERCURY Gearmotor for Residential (230V version) or Semi-Intensive use (24V version) for sliding gates with maximum weight of 800 Kg. Available versions - 400 Kg, 600 Kg, 800 Kg.

PROPERTIES:

- Refined design, compact and easy to install
- Die-cast aluminium body with external housing & innovative design
- Optional batteries kit 24 V version.
- Simple and quick installation.
- Electronic anti-crushing clutch.
- Mechanical or magnetic limit switch (MAG version)
- Adjustable slowdown in opening and closing
- Emergency batteries and solar panel kit for recharge can be added.
- LED light application on all models possible.
- Optional external release system with stainless steel cable and safety box



LED light application on all models possible (optional)



Release system through robust nylon lever (optional metal lock)

Code	Name	Max. Gate Weight (kg)	Max. leaf length	Max. Cycles/ Hour	PCS for Pallet
11304000	SIO MERCURY 400	400	4 m	20	30
11304005	SIO MERCURY 400 24V	400	4 m	30	30
11304050	SIO MERCURY 400 E*	400	4 m	20	30
11304100	SIO MERCURY 600	600	6 m	20	30
11304105	SIO MERCURY 600 24V	600	6 m	30	30
11304205	SIO MERCURY 800	800	6 m	20	30
11304210	SIO MERCURY 800 24V	800	6 m	30	30
11304215	SIO MERCURY 800 E*	800	6 m	20	30

SIO SATURN Gearmotor for Condominium Sliding Gates. Available in 1000 OIL / 1500 24V OIL / 2000 OIL

PROPERTIES:

- Solid die-cast aluminium body.
- All SIO SATURN Oil gears are oil lubricated for longer life.
- High quality mechanical or inductive limit switches.
- Release system with robust aluminium lever with lock in case of power cut.
- Optional external release with metal box.
- Optional emergency batteries (only in 1500 24V variant).
- Cathaphoresis treated base.
- Optional external release system with stainless steel cable and safety box



In option release with aluminium lever and lock



Oil lubrication of the gears for max. duration



Mechanical twin-disc clutch.



Code	Name	Max. Gate Weight (kg)	Max. leaf length	Max. Cycles/ Hour	PCS for Pallet
12400115	SIO SATURN 1000 E*	1000	10 m	20	25
12400120	SIO SATURN 1000	1000	10 m	20	25
12400100	SIO SATURN 1000 OIL	1000	10 m	25	25
12400105	SIO SATURN 1000 OIL	1000	10 m	25	25
12400026	SIO SATURN 1500 OIL 24V	1500	10 m	40	25
12400025	SIO SATURN 1500 OIL 24V	1500	10 m	40	25
12400040	SIO SATURN 2000 OIL	2000	10 m	25	25
12400045	SIO SATURN 2000 OIL	2000	10 m	25	25

SIO BOXER (1000 OIL / 2000 OIL) Gearmotor in Oil bath for Sliding Gates for Condominium or Intensive Use.

PROPERTIES:

- Solid die-cast aluminium body.
- All SIO BOXER with electric motor and gears in Oil lubrication for longer life.
- High quality mechanical or inductive limit switches.
- Release system lever and lock in case of power failure.
- Optional external release with metal box.
- Standard mechanical twin-disc clutch in oil bath on all models.
- Cathaphoresis treated aluminium base.
- Standard encoder to comply with the rules.
- Extra base painting on request.
- Optional external release system with stainless steel cable and safety box



Release with aluminium lever and lock



Electric motor and gears in oil lubrication



Mechanical twin-disc clutch

Code	Name	Max. Gate Weight (kg)	Max. leaf length	Max. Cycles/ Hour	PCS for Pallet
12405000	SIO BOXER 1000	1000	10 m	35	30
12405005	SIO BOXER 1000	1000	10 m	35	30
12405020	SIO BOXER 1000	1000	10 m	35	30
12405205	SIO BOXER 2000	2000	10 m	35	30
12715255	SIO BOXER 2000	2000	10 m	35	30

SIO Boom Barrier.



24V ELECTRO-MECHANICAL BARRIER FOR BOOMS UP TO 6M

- 24V barrier for booms up to 6m and 4-6 sec opening time
- 24V motor with 110V or 220V input
- Painted casing
- Control unit UNIT 1 24V DG with display



TECHNICAL SPECIFICATIONS

Motor power:	24V DC
Opening time:	4-6 sec. (up to 6m)
Max boom length:	up to 6m
Operating Temperature:	-20°C



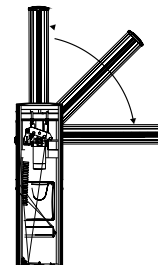
Release for round booms



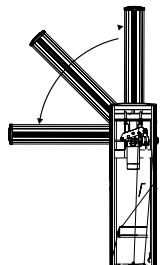
Manual release with lock



Image of the Interior



RIGHT



LEFT

24V ELECTRO-MECHANICAL BARRIER

Code	Name	Motor Input Voltage	Description
11320505L-1	B 500 BL 24V	24V DC - 115V AC	24V BARRIER LEFT for boom up to max 6m. 4-6 sec. opening time.
11320505R-1	B 500 BR 24V	24V DC - 115V AC	24V BARRIER RIGHT for boom up to max 6m. 4-6 sec. opening time.
11320506L-1	B 500 BL 24V	24V DC - 230V AC	24V BARRIER LEFT for boom up to max 6m. 4-6 sec. opening time.
11320506R-1	B 500 BL 24V	24V DC - 230V AC	24V BARRIER RIGHT for boom up to max 6m. 4-6 sec. opening time.

BOOMS AND SPRING COMBINATIONS

	Code	Description
	11902065-1	BOLD - 4M KIT round boom 4.0 m+, n.1 spring Ø5mm + n.1 spring Ø4mm
	11902070-1	BOLD - 5M KIT round boom 5.0 m+, n.1 spring Ø6mm
	11902075-1	BOLD - 6M KIT round boom 6.0 m+, n.1 spring Ø5mm + n.1 spring Ø6mm

SIO Spike Barrier.

Spike barriers are designed especially for entrance points to prevent force entry of vehicle. It prevents the entry from one direction only. Electrically operated Spike Barrier (Flat Type Spike) of 3/4/5/6 can be integrated with boom barrier of 3,4,5,6 m boom length with control units in common cabinet.



FEATURES:

- Provides noise free smooth operation because of hydraulic operated mechanism.
- Available in Length of 3/4/5/6 m.
- Options are available with Flat top surface and curved top surface (hump type)
- 100% duty cycle
- Emergency lowering or up possible in case of threat or fire
- Microprocessor based control electronics with display for programming different operation logic.
- Can be integrated with any third party access control.
- Electronic force can be adjusted 0-50 levels.
- Movable nails are made of hard steel with hole in its core to deflate the tyre thus avoiding any explosion due to tyre burst.
- 50/100 ton load bearing capacity
- Manual operations in case of Power failure.

SPECIFICATIONS:

Model	SIO 300H
Material	Galvanized Steel
Type	HUMP
Length	3, 4, 5, 6 m
Opening Closing Time	3-4 sec for 5m
Spike Height	150 mm
Axle Height	500 mm
Power Supply	230V 50Hz
Power Consumption	220W
Current Consumption	1 A
Maximum Hydraulic Pressure	100 Bar
Accessories max. Current	500 mA
Spike material	AISI 304
Blocking angle	600, 120mm minimum (customizable)
Load Capacity	100 Ton
Environment Temperature	-20°C to +55°C, 95% non-condensing humidity

OPTIONS AVAILABLE:

- Emergency Button with Lock down
- Traffic Light
- Remote Controller
- Pair of Photocell Safety Beam
- Access Control System



www.sio.co.in

SIO VASUNDDHARA INTERNATIONAL PVT. LTD.

Founded with the vision to work with fairness, honesty and courtesy towards all internal and external stakeholders to achieve the company's objectives, Sio Vasunddhara International has serviced such prestigious names as ABB, DLF, L&T, PVR, TAJ hotels and resorts, Unitech, Fortis, Airtel, bata, The Oberoi, HP, Raheja developers and many others.