TRAFFIC FIXED BOLLARD

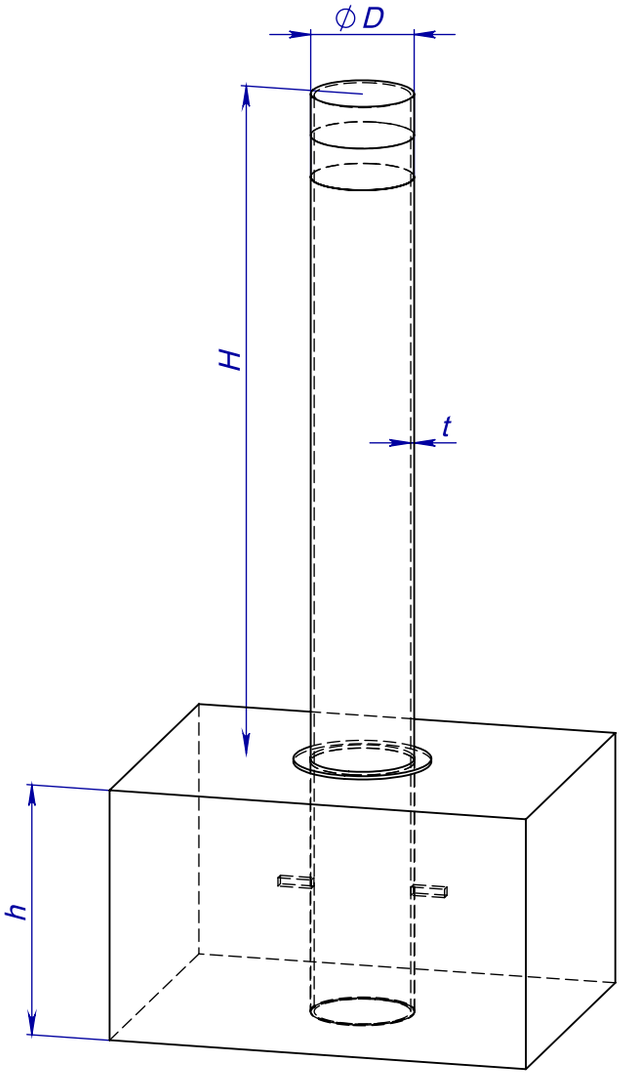
RELIABLE, PRACTICAL AND COST-EFFECTIVE SOLUTION TO
PROVIDE 100% SECURITY OF YOUR TERRITORY

TiSO fixed and removable parking bollards are widely used as static barriers in order to provide vehicle access control and parking management of secured areas. Due to bollards design and wide variety of available models, this type of solution becomes a good addition to different urban architectural concepts.
Fixed parking bollards do not take anti terroristic function, but still useful to manage traffic.
TiSO bollards is a good idea in order to organize pedestrian zone or parking near malls, office buildings, public institutions, and private areas.

Installation areas

- Governmental Institutions
- Military Bases
- Nuclear Power Plants
- Production sites (Industrial Plants)
- Commercial areas
- Financial institutions
- Airport Premises
- Business (Office) Center
- Hotels
- Sport Complexes
- Recreation areas
- Urban areas
- Education Institutions

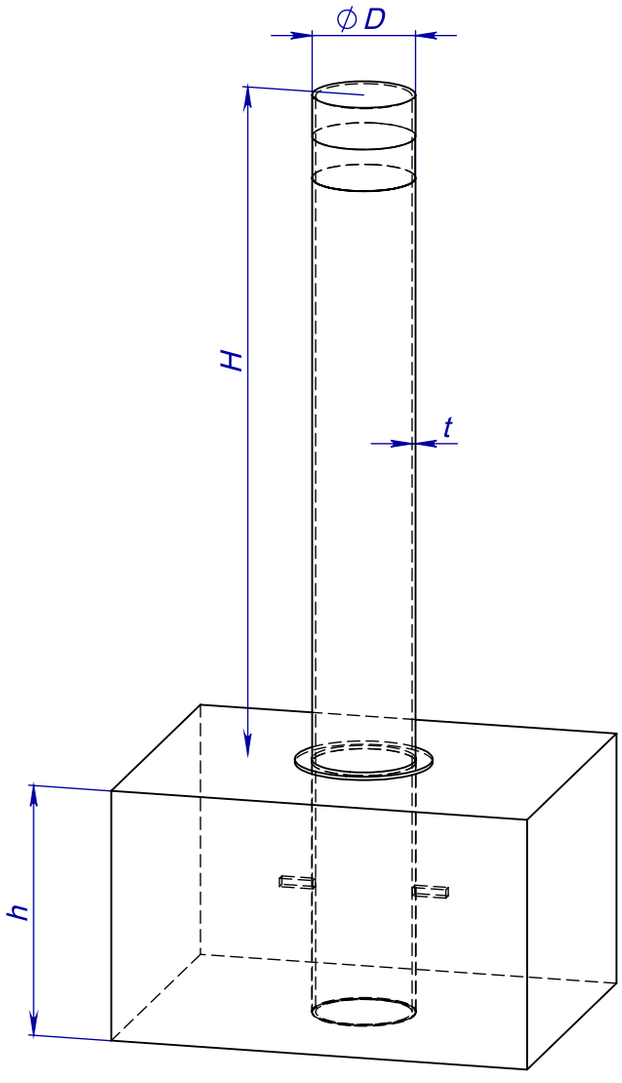
www.tiso.global
+380 (44) 291-21-11
e-mail: sales@tiso.global



TECHNICAL SPECS:

Model	RB344-30	RB344-36	RB344-39	RB344-31	RB344-37	RB344-40
Cylinder diameter, mm (D)	114	220	273	114	220	273
Cylinder height, mm (H)	600			800		
Cylinder thickness, mm (t)	3	4		3	4	
Installation depth, mm (h)	300					
Cylinder materials	Brushed stainless steel AISI 304 Structural stainless steel AISI 316 Galvanized and powder coated tube (any RAL up on request)					

www.tiso.global
+380 (44) 291-21-11
e-mail: sales@tiso.global



TECHNICAL SPECS:

Model	RB344-13	RB344-16	RB344-19	RB344-21
Cylinder diameter, mm (D)	324			
Cylinder height, mm (H)	600	800	1000	1200
Cylinder thickness, mm (t)	2			
Installation depth, mm (h)	300			
Cylinder materials	Brushed stainless steel AISI 304 Structural stainless steel AISI 316 Galvanized and powder coated tube (any RAL up on request)			

www.tiso.global
+380 (44) 291-21-11
e-mail: sales@tiso.global

TRAFFIC REMOVABLE BOLLARDS
partially submerged

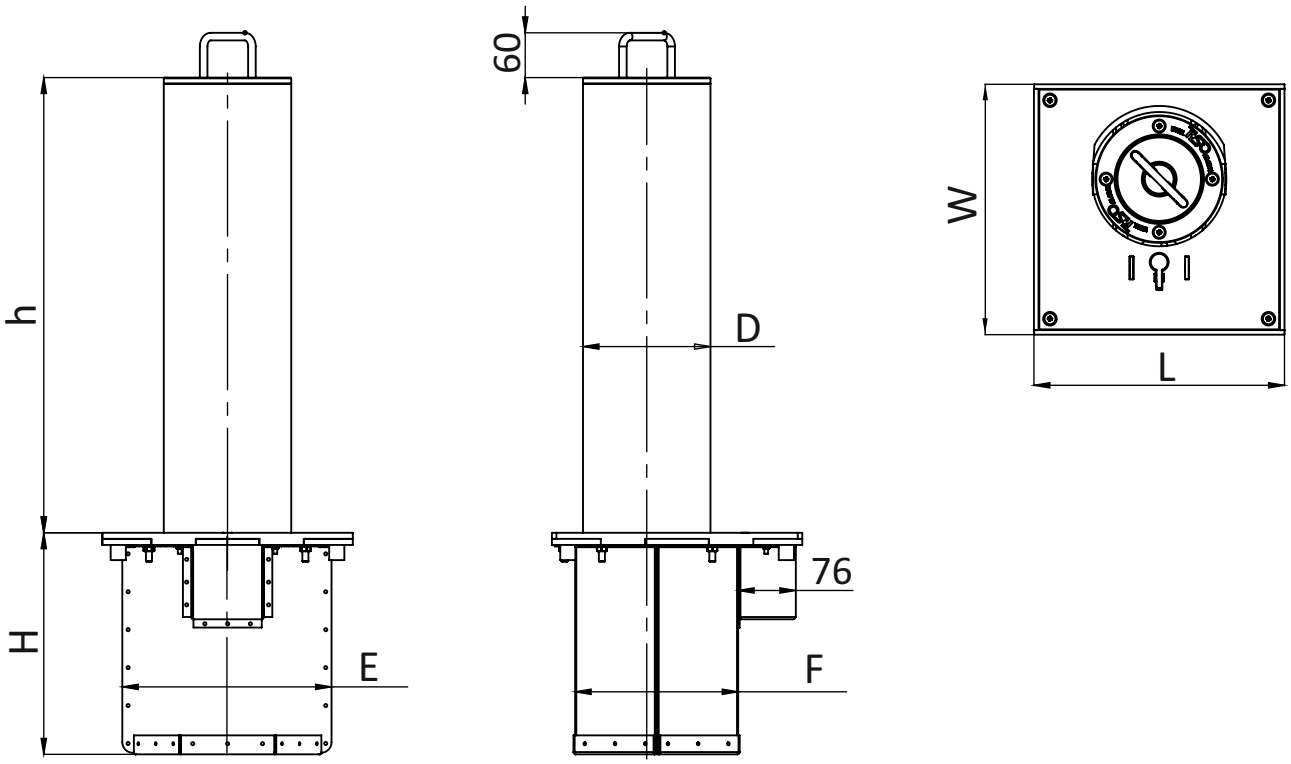
RELIABLE, PRACTICAL AND COST-EFFECTIVE SOLUTION TO
PROVIDE 100% SECURITY OF YOUR TERRITORY

TiSO removable traffic bollards are one more interesting solution for vehicle access control management. The main difference to regular fixed/static bollards determined by mobility which provides free driveway in case of necessity.
To get bollard unlocked, the only thing which has to be done is a simple turn of a key. The range of removable bollards available in different dimensions, blocking heights, tube's materials, and diameters. The installation depth is 315 mm.
Intended for vehicle access control with little traffic intensity.

Installation areas

- Governmental Institutions
- Military Bases
- Nuclear Power Plants
- Production sites (Industrial Plants)
- Commercial areas
- Financial institutions
- Airport Premises
- Business (Office) Center
- Hotels
- Sport Complexes
- Recreation areas
- Urban areas
- Education Institutions

www.tiso.global
+380 (44) 291-21-11
e-mail: sales@tiso.global



TECHNICAL SPECS:

Model	RB345-03	RB345-02	RB345-01	RB345-15	RB345-06	RB345-05	RB345-04	RB345-18
Tube diameter (D), mm	114	170	220	273	114	170	220	273
Tube height (H), mm	600				800			
Dimensions (LxWxH), mm	330x330x290		380x400x290		330x330x290		380x400x290	
Dimensions (ExF), mm	275x215		350x280		275x215		350x280	
Materials	Brushed stainless steel AISI 304 Brushed stainless steel AISI 316 Galvanized and powder coated tube (any RAL up on request)							

www.tiso.global
+380 (44) 291-21-11
e-mail: sales@tiso.global

MANUAL RETRACTABLE TRAFFIC BOLLARDS

RELIABLE, PRACTICAL AND COST-EFFECTIVE SOLUTION TO PROVIDE 100% SECURITY OF YOUR TERRITORY

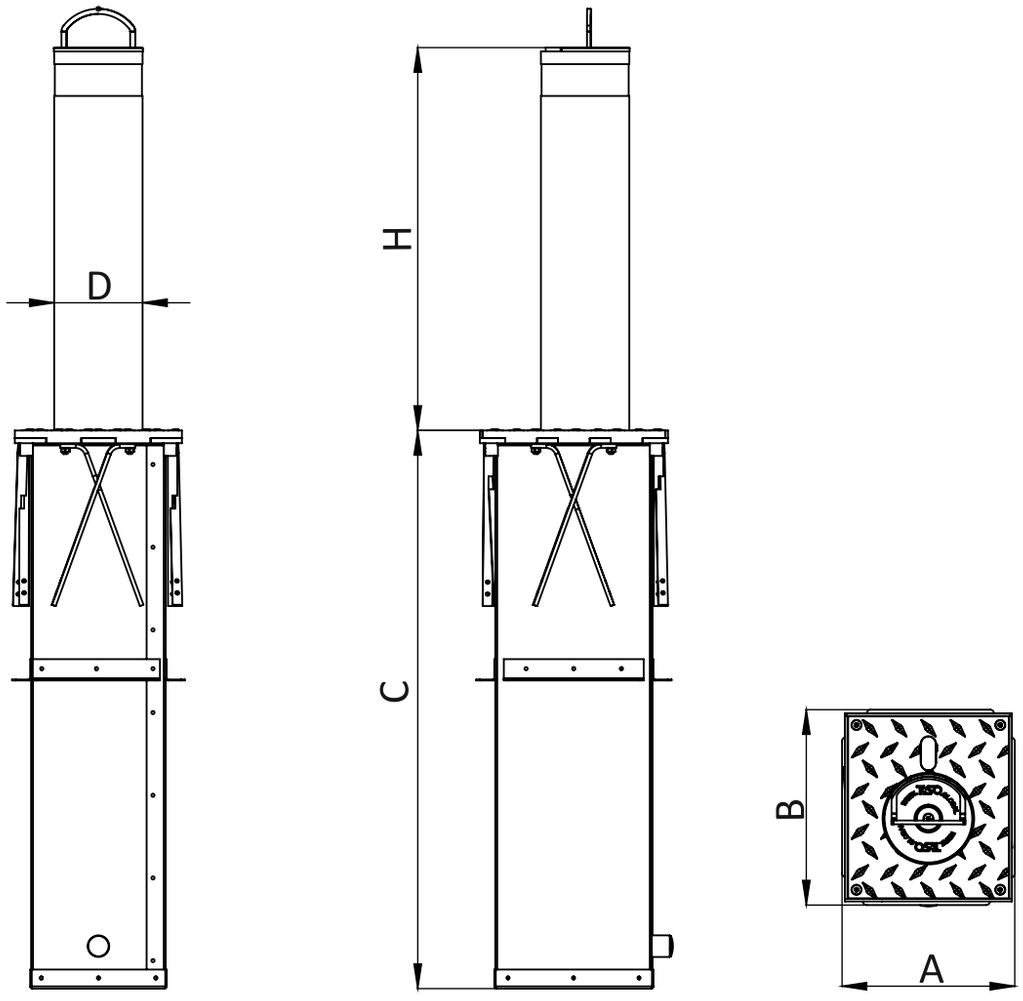
TiSO manually retractable bollard has been designed to be used as a static obstacle in order to secure pedestrian or other areas from unauthorized vehicle traffic. This bollard is also an ideal cost effective solution for parking drives or bays and for securing a vehicle when parked overnight. The bollard is locked / unlocked with the special key, a user friendly handle at the top of the tube enables easy and smooth manual operation.

A major advantage is that these bollards do not require a power supply and are quick and easy to install. TiSO offer a range of manually retractable
bollards in various dimensions, blocking heights, tube finishes, and diameters.

Installation areas

- Governmental Institutions
- Military Bases
- Nuclear Power Plants
- Production sites (Industrial Plants)
- Commercial areas
- Financial institutions
- Airport Premises
- Business (Office) Center
- Hotels
- Sport Complexes
- Recreation areas
- Urban areas
- Education Institutions

www.tiso.global
+380 (44) 291-21-11
e-mail: sales@tiso.global



TECHNICAL SPECS:

Model	RB345-62	RB345-51	RB345-52	RB345-65	RB345-54	RB345-55
Tube diameter (D), mm	140	220	273	140	220	273
Tube height (H), mm	600			800		
Wall thickness, mm	4					
Foundation case dimensions, mm(AxBxC)	270x305x880	330x380x880	375x415x880	270x305x1080	330x380x1080	375x415x1080
Operation temperatures*, °C	-40 °C / +60 °C					
Materials	Brushed stainless steel AISI 304 Brushed stainless steel AISI 316 Galvanized and powder coated tube (any RAL up on request)					

* for temperatures lower than -10° C use the heating device
for temperatures higher than +40° C use the cooler device

www.tiso.global
+380 (44) 291-21-11
e-mail: sales@tiso.global

SEMI-AUTOMATIC
TRAFFIC BOLLARDS
gas spring

RELIABLE AND COST-EFFECTIVE SOLUTION TO
PROVIDE 100% SECURITY OF YOUR TERRITORY

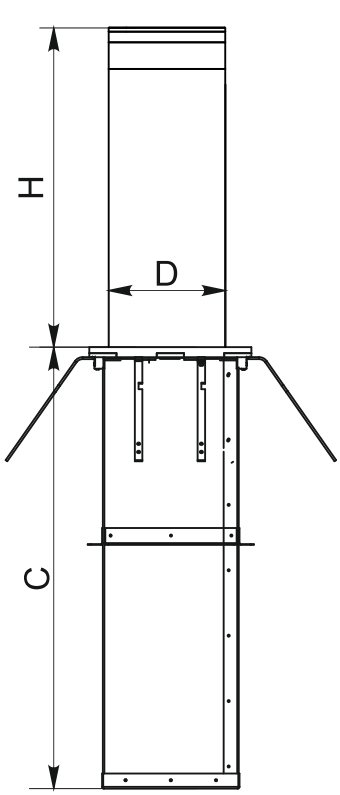
TiSO semi-automatic bollards are a perfect solution for effective vehicle access control under the circumstances of unavailable power supply. Semi-automatic bollards have gas spring mechanism which is locked at down position and rise rapidly when released. Being complete and independent solution, semi-automatic bollards require manual impact for driveway opening or closing. Regularly this function is provided by staff involved to access control management. The range of semi-automatic bollards is specified by tube's material, diameter, and rising height of blocking segment.

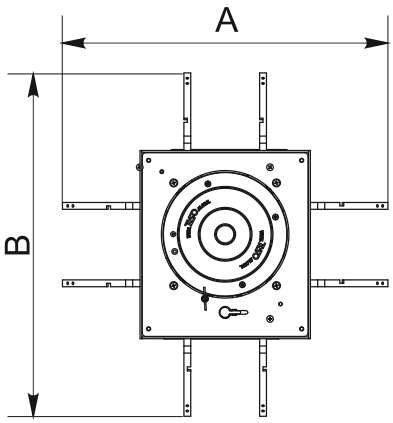
Installation areas

- Governmental Institutions
- Military Bases
- Nuclear Power Plants
- Production sites (Industrial Plants)
- Commercial areas
- Financial institutions
- Airport Premises
- Business (Office) Center
- Hotels
- Sport Complexes
- Recreation areas
- Urban areas
- Education Institutions

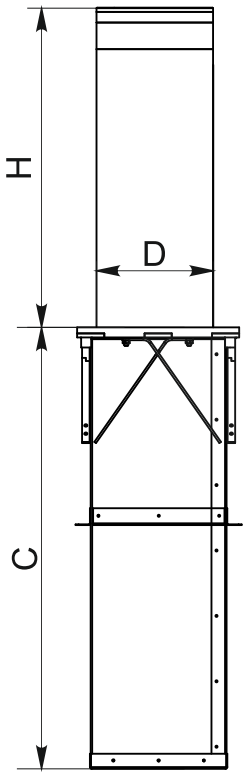
www.tiso.global
+380 (44) 291-21-11
e-mail: sales@tiso.global

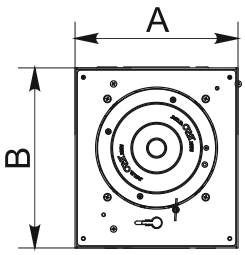
Overall dimensions of the bollard
with raised foundation anchors





Overall dimensions of the bollard
with lowered foundation anchors





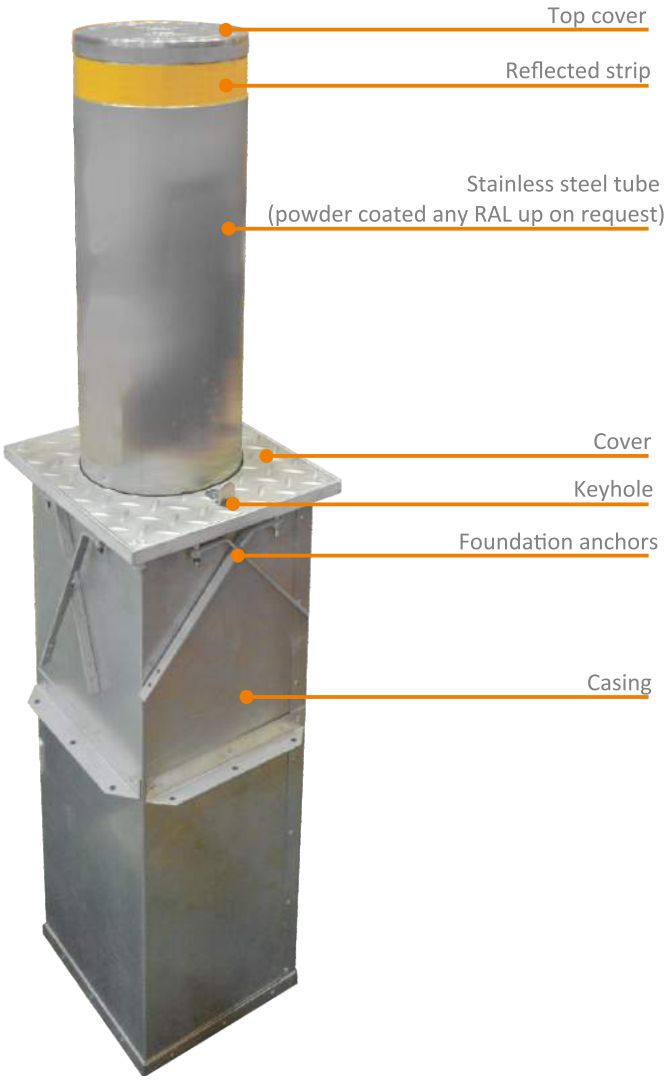
TECHNICAL SPECS*:

Model	RB343-60	RB343-61	RB343-63	RB343-64
Drive	Gas-spring mechanism			
Tube diameter (D), mm	220	273	220	273
Tube height (H), mm	600		800	
Foundation case dimensions (AxBxC), mm • with lowered anchors • with raised anchors	 330x380x878 671x721x878	 374x413x878 715x754x878	 330x380x1078 671x721x1078	 374x413x1078 715x754x1078
Operation temperatures**, °C	-40 / +60			
Tube material	Brushed stainless steel AISI 304 Brushed stainless steel AISI 316 Galvanized and powder coated tube (any RAL up on request)			

*technical data is subject to change without notice

**for temperatures lower than -10 °C use the heating device; for temperatures higher than +40 °C use the cooler device

www.tiso.global
+380 (44) 291-21-11
e-mail: sales@tiso.global



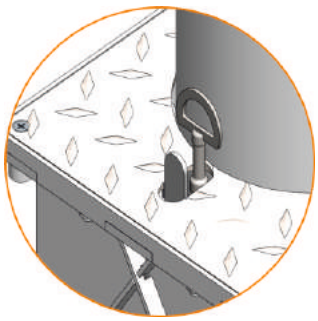
Standard kit

- Reflective tape
- Key
- Bollard in assembly
- Installation casing

Options

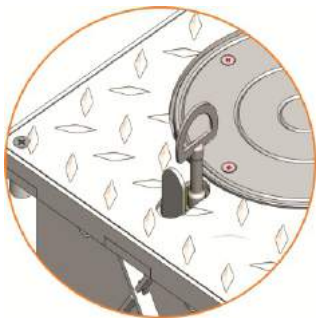
- LED indication
- Sound signal
- Any RAL color
- Additional keys
- Traffic lights

Opening of access



1. Turn the key to unlock.
2. Push the bollard with a foot to retract it in the casing and automatically lock in the down position.

Closing of access



1. Turn the key to back.
2. The bollard rases and automatically lock in the up position.

www.tiso.global
+380 (44) 291-21-11
e-mail: sales@tiso.global

SEMI-AUTOMATIC
TRAFFIC BOLLARDS
drill drive

RELIABLE AND COST-EFFECTIVE SOLUTION TO
PROVIDE 100% SECURITY OF YOUR TERRITORY

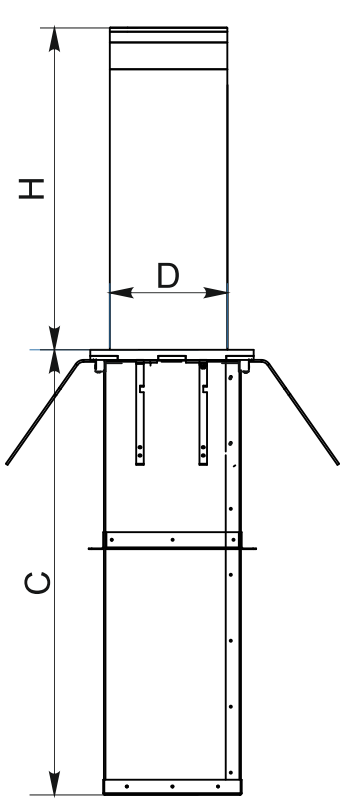
TiSO drill drive bollards intend to fit installations without power supply availability. The operation principle determined by the drill impact, which gets blocking segment up or down according to screw direction. This solution is intends to manage traffic of low intensity and featured with outstanding lifetime, due to lack of consumables in its operation and design concept. The range is classified according to by tube's material, diameter, and rising height of blocking segment.

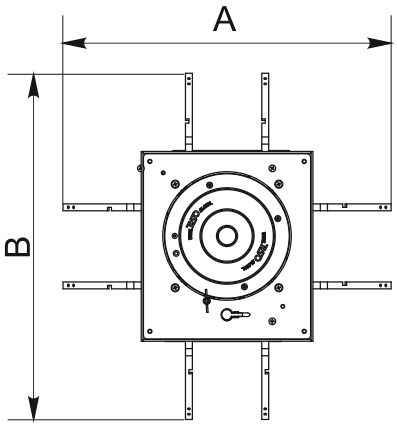
Installation areas

- Governmental Institutions
- Military Bases
- Nuclear Power Plants
- Production sites (Industrial Plants)
- Commercial areas
- Financial institutions
- Airport Premises
- Business (Office) Center
- Hotels
- Sport Complexes
- Recreation areas
- Urban areas
- Education Institutions

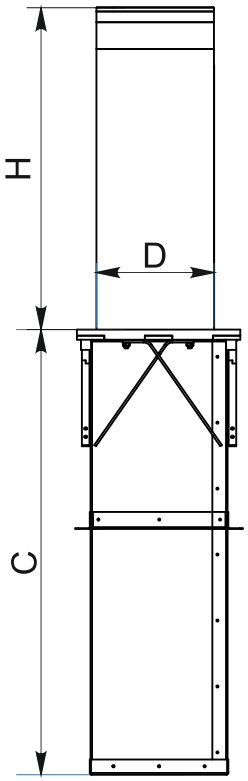
www.tiso.global
+380 (44) 291-21-11
e-mail: sales@tiso.global

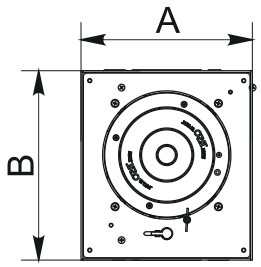
Overall dimensions of the bollard
with raised foundation anchors





Overall dimensions of the bollard
with lowered foundation anchors





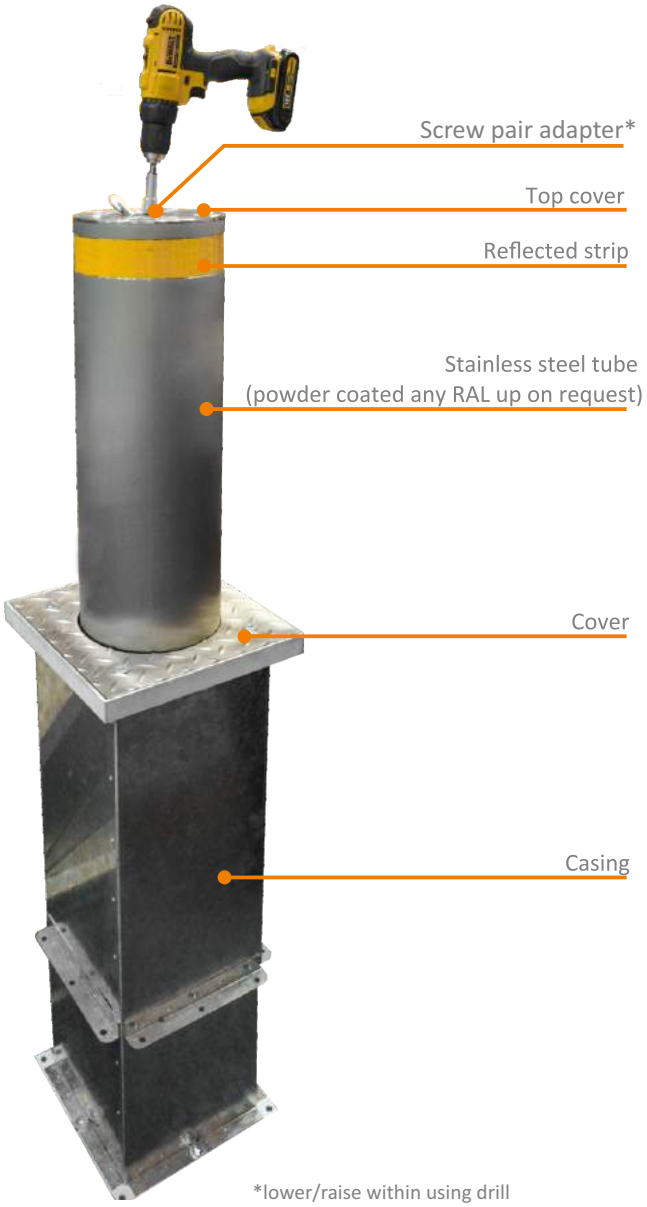
TECHNICAL SPECS*:

Model	RB343-03	RB343-01	RB343-02	RB343-06	RB343-04	RB343-05
Drive	Screw pair					
Tube diameter (D), mm	114	220	273	114	220	273
Tube height (H), mm	600			800		
Foundation case dimensions (AxBxC), mm • with lowered anchors • with raised anchors	270x310x878 610x650x878	330x380x878 671x721x878	374x413x878 715x754x878	270x310x1078 610x650x1078	330x380x1078 671x721x1078	374x413x1078 715x754x1078
Operation temperatures**, °C	-40 / +60					
Tube material	Brushed stainless steel AISI 304 Brushed stainless steel AISI 316 Galvanized and powder coated tube (any RAL up on request)					

*technical data is subject to change without notice

**for temperatures lower than -10 °C use the heating device; for temperatures higher than +40 °C use the cooler device

www.tiso.global
+380 (44) 291-21-11
e-mail: sales@tiso.global



*lower/raise within using drill

Standard kit

- Reflective tape
- Drill adapter
- Bollard in assembly
- Installation casing

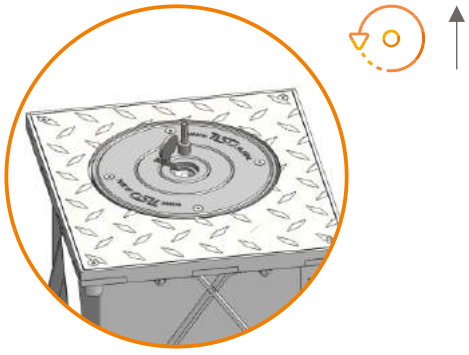
Options

- LED indication
- Sound signal
- Any RAL color
- Additional keys
- Traffic lights
- Anti-vandal screws

Opening of access

Turn the drill adapter clockwise to lowered the bollard

Closing of access



Turn the drill adapter contraclockwise to raised the bollard

www.tiso.global
+380 (44) 291-21-11
e-mail: sales@tiso.global

AUTOMATIC TRAFFIC BOLLARDS

RELIABLE, PRACTICAL AND COST-EFFECTIVE SOLUTION TO PROVIDE 100% SECURITY OF YOUR TERRITORY

TiSO automatic traffic bollards is the most demanded part of traffic barriers range, due to wide project applicability and installation simplicity. This type of TiSO equipment is engineered in order to provide maximum operation durability.

Range of TiSO automatic traffic bollards includes blocking segment with a built in hydraulic unit and outside PLC.

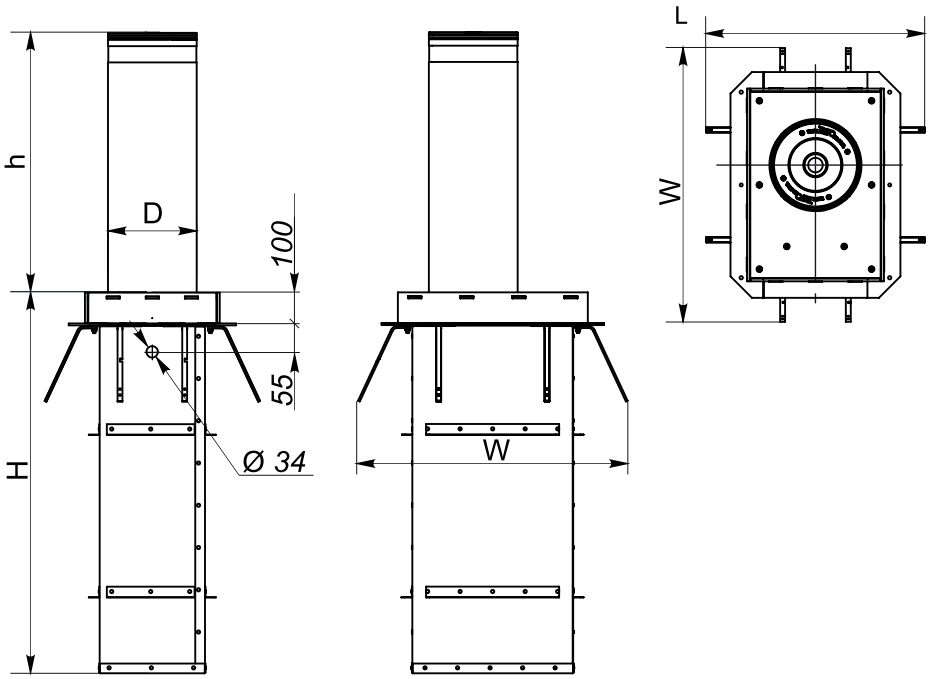
Also the range is classified according to rising heights, tube's materials, diameters etc. Large amount of available accessories enables equipment operation under severe climate circumstances, both extreme above and below 0 C° temperatures. Having no high security features, traffic bollards is the perfect choice for installations at private and other areas without strict requirement to antiterrorism protection. All equipment is designed and tested for high intensity operation.

Installation areas

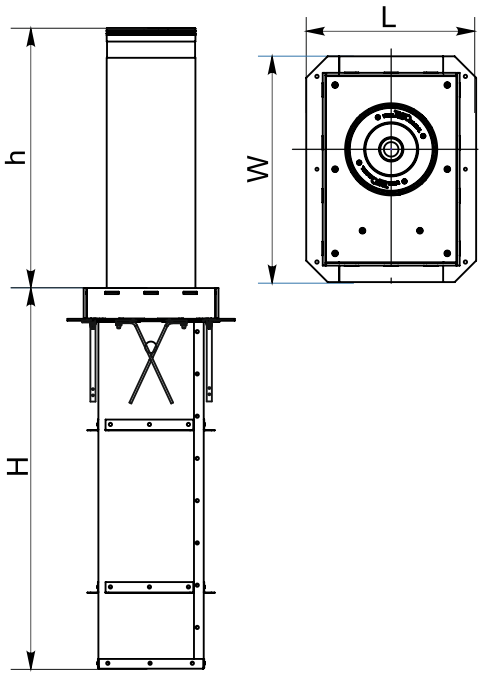
- Governmental Institutions
- Military Bases
- Nuclear Power Plants
- Production sites (Industrial Plants)
- Commercial areas
- Financial institutions
- Airport Premises
- Business (Office) Center
- Hotels
- Sport Complexes
- Recreation areas
- Urban areas
- Education Institutions

www.tiso.global
+380 (44) 291-21-11
e-mail: sales@tiso.global

Overall dimensions of the bollard
with raised foundation anchors



Overall dimensions of the bollard
with lowered foundation anchors



TECHNICAL SPECS*:

Model	RB343-21	RB343-23	RB349-11	RB349-12	RB343-24	RB343-26	RB349-14	RB349-15
Drive	Hydraulic (HPU) / internal							
Tube diameter (D), mm	114	170	220	273	114	170	220	273
Tube height (h), mm	600				800			
Dimensions (LxWxH), mm with raised foundation anchors with lowered foundation anchors		610x755x980 460x610x980		660x830x980 515x685x980		610x755x1170 460x610x1170		660x830x1170 515x685x1170
Wall thickness, mm	3	5	4	8	3	5	4	8
Impact resistance, J	10000	35000	40000	80000	15000	35000	45000	85000
Breakout resistance, J	60000	155000	160000	580000	65000	155000	165000	585000
Axle load, mm	15							
Rising time, sec (±1 s)	7,0				9,0			
Lowering time, sec (±1 s)	5,5				8,0			
Operation temperatures**, °C	-40 / +60							
Power supply	1 phase 230V, 50/60 Hz							
Protection level	IP 67 (for bollard) IP 55 (for contral box)							
Tube material	Brushed stainless steel AISI 304 Brushed stainless steel AISI 316 Galvanized and powder coated tube (any RAL up on request)							

*technical data is subject to change without notice

**for temperatures lower than -10 °C use the heating device; for temperatures higher than +40 °C use the cooler device

www.tiso.global
+380 (44) 291-21-11
e-mail: sales@tiso.global