

# Defender



## K4 Certified electro-hydraulic bollard

Boon Edam's electro-hydraulic bollards combine an open, aesthetic appearance with the highest level of perimeter control. The Defender K4 crash test certified bollards provide free movement of pedestrians and are available in a variety of operating sets and arrays. During the crash test the 6800kg vehicle is accelerated to 50km/h. To pass the test, the load area of the vehicle must not penetrate the front face of the barrier by more than 1 metre. Defender bollards are suitable for repetitive operation and are the most economical and effective barrier solution for securing busy access points.

The Defender consists of a retractable, round tubular column with a full guard height of 762mm. Maximum spacing between the bollards may not exceed 914mm center to center. The Defender is

available with manual, automatic or fixed operation, offers low operating and maintenance costs and is ideal for securing wide entrances where installing larger systems could become price prohibitive.

Your **Security.** Our **Solution.**

# Construction

- The Defender is K4 certified by the U.S. Department Of State (DOS).
- Standard DOS crash rating bollard spacing is not to exceed 914mm.
- Standard configuration with three bollards is shown. Additional bollard configurations are available.
- All steel parts are standard hot dipped galvanised for corrosion protection.
- Highly visible yellow paint is standard. Custom specified paint colors are available.
- Construction and installation by others, such as concrete foundation, rebar, roadway surface, conduit, wiring and hydraulic hoses.

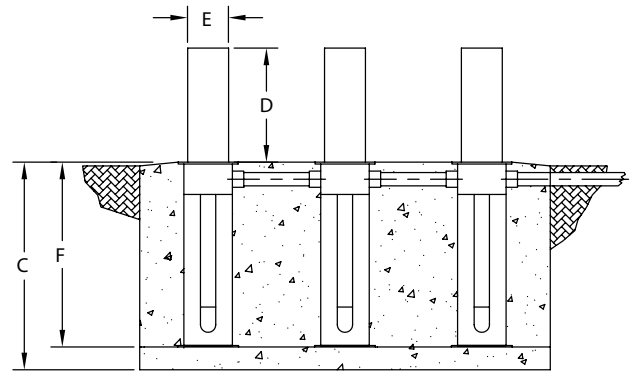
# Features & Options

<i>Characteristics</i>	<i>Std</i>	<i>Opt</i>
Manual hand pump	•	
Hot-dipped galvanised	•	
Standard main operator control panel	•	
Custom main operator control panel		•
Remote operator control panel		•
2.2kW hydraulic unit	•	
3.7kW hydraulic unit		•
7.5kW hydraulic unit		•
Barrier-up position sensor	•	
Barrier-down position sensor	•	
Hydraulic oil heater/cooler		•
Emergency Fast Operate (EFO)	•	
Vehicle detection loops		•
Traffic signal lights		•
Weather proof HPU enclosure	•	
Custom painted finish		•
PLC Programming	•	
Battery backup		•
Electrical Power Voltages:		
208-240 Volt AC, 3-Phase, 60 Hertz	•	
115-120 Volt AC, Single-Phase		•
208-240 Volt AC, Single Phase		•
380 Volt AC, 3-Phase		•
440-480 Volt AC, 3-Phase		•

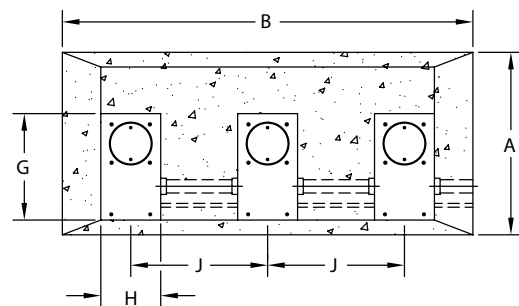
# Dimensions (mm)

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>	<i>J</i>
1219	2743	1387	762	273	1235	711	400	<914

FRONT VIEW



TOP VIEW



ISOMETRIC VIEW

