**Enabling Switches** 

## **HS1C Full Size Solenoid Locking Switches**

### **Key features:**

- Rugged aluminum die-cast housing
- 1500N locking retention force
- Flexible Installation: The actuator can be accessed from two directions
- Select from four different circuit configurations







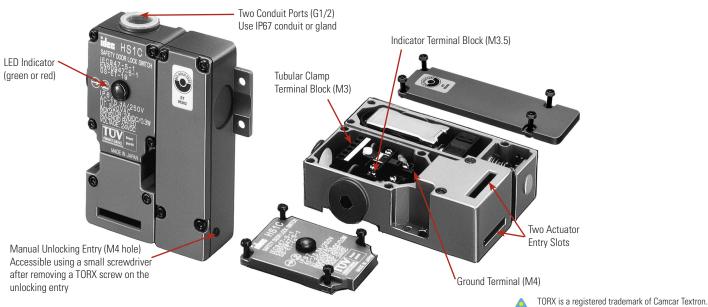








### **HS1C Series Functionality**



#### Part Numbers (Mechanical Spring Lock Only)

Contact Configuration	Indicator LED	Part Number
Monitor Circuit  Adain Circuit	Green	HS1C-R44R-G
Solenoid Power Indicator Contacts are linked to the solenoid mechanically.	Red	HS1C-R44R-R
Monitor Circuit  Main Circuit	Green	HS1C-R144R-G
Contacts are linked to the solenoid mechanically.	Red	HS1C-R144R-R

Contact Configuration	Indicator LED	Part Number
Monitor Circuit  A - 7 - 3  Main Circuit	Green	HS1C-R244R-G
Solenoid Power Indicator Contacts are linked to the solenoid mechanically.	Red	HS1C-R244R-R
Monitor Circuit  A T A Main Circuit	Green	HS1C-R344R-G
Solenoid Power Indicator Contacts are linked to the solenoid mechanically.	Red	HS1C-R344R-R



Standard stock items in bold

#### **Actuator Kevs & Accessories**

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Appearance	Part Number	Description		
	HS9Z-A1	Straight Actuator		
	HS9Z-A2	Right-angle Actuator		
	HS9Z-A3	Adjustable Actuator		

Appearance	Part Number	Description
<b>/</b>	HS9Z-T1	Key Wrench (included with switch)
	HS9Z-P1	Conduit Opening Plug (G1/2)

**Solenoid Locking Safety Switches** 

# **Specifications**

specifications					
Conforming to Standards		EN1088, IEC60947-5-1, EN60947-5-1, GS-ET-19, UL508, GB 140485.5 (CCC approval), CSA C22.2 No. 14			
Operating Temperature		−20 to +40°C (no freezing)			
Storage Temp	erature	−40 to +80°C			
Relative Humi	dity	40 to 85% (no condensation)			
Altitude		2,000m maximum			
Rated Insulati	on Voltage (U <sub>i</sub> )	300V (between LED or solenoid and ground: 60V)			
Impulse With	stand Voltage (U <sub>imp</sub> )	4 kV (between LED or solenoid and ground: 2.5 kV)			
Insulation Resistance		Between live and dead metal parts: $100~\text{M}\Omega$ minimum Between live metal part and ground: $100~\text{M}\Omega$ minimum Between live metal parts: $100~\text{M}\Omega$ minimum Between terminals of the same pole: $100~\text{M}\Omega$ minimum			
Electric Shock	k Protection Class	Class 1 (IEC61140)			
Pollution Deg	ree	3 (IEC60947-5-1)			
Degree of Pro	tection	IP67 (IEC60529)			
Vibration	Operating Extremes	10 to 55 Hz, amplitude 0.5 mm			
Resistance	Damage Limits	60 m/sec <sup>2</sup> (approx. 6G)			
Shock Resista	nnce	1,000 m/s² (approx. 100G)			
Actuator Rete	ntion Force	1,500N minimum			
Actuator Ope	rating Speed	0.05 to 1.0m/s			
Direct Openin	g Travel	11mm minimum			
Direct Openin	g Force	20N minimum			
Thermal Current (I <sub>th</sub> )		Main circuit: 10A, Auxiliary circuit: 3A			
Contact Opening Distance		Main circuit: 1.7 mm max., Auxiliary circuit: 1.2 mm min.			
Operating Frequency		900 operations/hour max.			
Mechanical Life		1,000,000 operations			
Electrical Life		100,000 operations (rated load)			
Conditional Short-circuit Current		100A (IEC60947-5-1)			
Recommended Short Circuit Protection		250V, 10A fuse (Type D01 based on IEC60269-1, 60269-2)			



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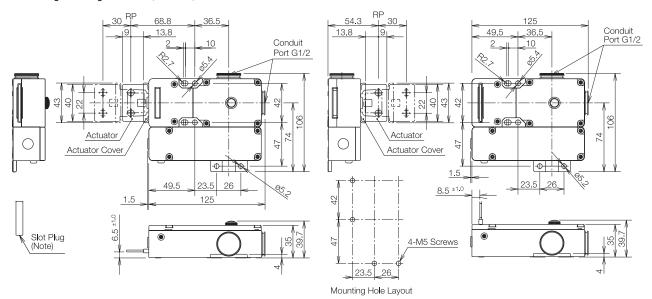
Solenoid Unit	Operating Voltage	24V DC (100% duty cycle)
	Current	415mA (initial value)
	Coil Resistance	58Ω (at 20°C)
	Energizing Voltage	Rated voltage x 85% maximum (at 20°C)
	De-energizing Voltage	Rated voltage x 10% minimum (at 20°C)
	Continuous Applicable Voltage	Rated voltage x 110%
	Insulation Class	Class B
Indicator	Operating Voltage	24V DC
	Current	10 mA
	Light Source	LED lamp
	Lens Color	Red or Green
Weight (approx.)		660g

Solenoid Locking Safety Switches

### **Contact Ratings**

	Operation	Operating Voltage (Ue)		30V	125V	250V
	Main Circuit	AC	Resistive load (AC12)	10A	10A	6A
			Inductive load (AC15)	10A	5A	3A
		DC	Resistive load (DC12)	6A	_	_
			Inductive load (DC13)	ЗА	0.9A	_
	Auxiliary Circuit	AC	Resistive load (AC12)	_	3A	3A
			Inductive load (AC15)	-	-	3A
		DC	Resistive load (DC12)	3A	_	_
			Inductive load (DC13)	-	0.9A	_

#### Dimensions (mm) HS1C-R44R-\* - using the straight actuator (HS9Z-A1)



HS1C-R44R-\* - using the Right-angle actuator (HS9Z-A2)

