# **CSW30H Series (30mm) Hazardous Duty General Standards**

WEG hazardous duty series CSW30H also offers a wide selection of operators and pilot devices for hazardous duty applications (Class 1, Division 2 and Zone 2). This series offers a wide selection of hermetically sealed reed and factory sealed contact blocks for superior corrosion resistance.

- NEMA 4, IP65 Rated¹
- Fits 1-13/64 (30.5mm) hole without notch required
- Contact blocks snap-in (fast & easy assembly)
- Up to 8 contact blocks for non-illuminated operators and up to 4 contact blocks for illuminated operators
- LED lamps with built-in leakage protection
- Same simple part numbering system as 22mm series

WEG Hazardous duty Pilots Devices are specially engineered for Class 1, Division 2 and Zone 2.

Wide selection of hermetically sealed reed and factory sealed contact block.

An all-polyester construction with nickel-plated or stainles steel metal parts for superior corrision resistance.

Logic Reeds are hermetically sealed, Providing needed dependability for harsh environments.

Logic Reeds provide great operation for low power level (resistive loads only), especially PLC inputs.

### **Added Security - Optional Features**

Rubber Boots add an additional layer of protection from corrisive chemicals left behind from hands on operations or washdown environments.

## **Added Security - Standard Features**

All Hazardous duty Push Buttons comes standard with a screw tightening mounting bracket to ensure the contact



**Pushbuttons and Pilot Lights** CSW30H Series (30mm) Hazardous Duty

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### **Pushbuttons**

Circuit Protection

Disconnect Switches

**Protectors** Motor

Contactors

Overloads

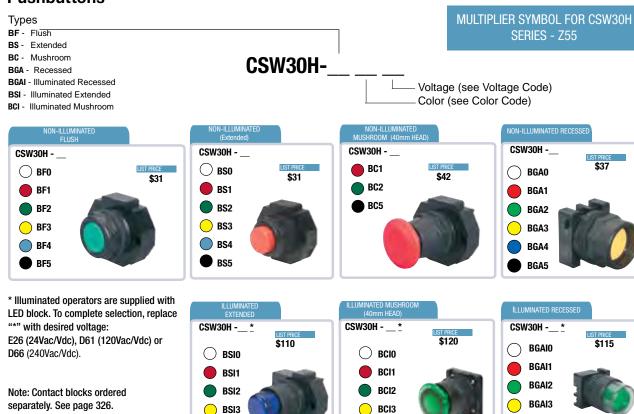
Enclosed Starters Relays

Terminal Blocks

Factor Correction

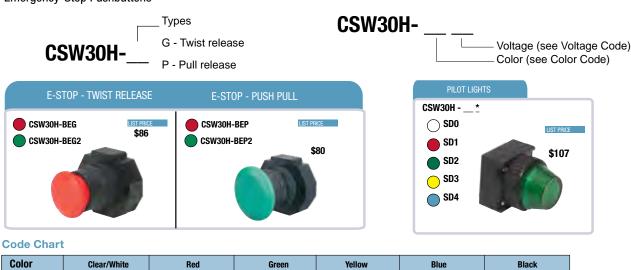
Code

Symbol



BSI4

**Emergency-Stop Pushbuttons** 



2

BCI4

LED Block Voltage				
E26	24Vac/Vdc			
D61	120Vac/Vdc			
D66	240Vac//dc			

n

1

Note: Contact blocks ordered separately. See page 326

4

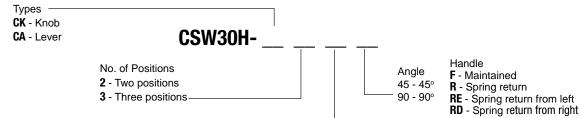
3

**BGAI4** 

5

CSW30H Series (30mm) Hazardous Duty

### **Selector Switches**



KNOB	LEVER	POSITION	DIAGRAM
LIST PRICE Maintained \$44 Spring Return \$62.00	LIST PRICE Maintained \$44 Spring Return \$62		
CSW30H-CK2F90	CSW30H-CA2F90	1~1	1
CSW30H-CK2R90	CSW30H-CA2R90	1	1
CSW30H-CK3F45	CSW30H-CA3F45	1 0 11	2 & 3
CSW30H-CK3R45	CSW30H-CA3R45	<0	2 & 3
CSW30H-CK3RE45	CSW30H-CA3RE45	1<0,11	2 & 3
CSW30H-CK3RD45	CSW30H-CA3RD45	ı	2 & 3

Catalog Number	List Price	Multiplier
CSW30-FCR	\$15	Z5
CSW30-ECR	\$15	
CSW30-PLCR	\$15	

**DIAGRAM 3 - Hermetically Sealed Block** 

Note: Contact blocks ordered separately. See page 326

	DIAGRAM 1 - Hermetically &						
	Factory Sealed Block						
HANDLE POSITION Auxiliary Mouting							
I	II	Contact	Position				
0	Х	NO	Either				
Х	0	NC	Either				
0	Х	NO & NC	Either				
Х	0	NU & NU	Eitilei				

DIAGRAM 2 - Factory Sealed Block						
HAN	IDLE POSIT	TION	Auxiliary	Mouting		
ı	0	II	Contact	Position		
Х	0	0	NO & NC	Left		
0	Х	0	NU & NU			
0	0	Х	NO & NC	D'. L		
0	Х	0	NO & NC	Right		

HANDLE POSITION		Auxiliary	Mouting	Н	ANDLE POS	ITION	Auxiliary	
	0	-	Contact	Position	I	0	II	Contact
	0	0	NO & NC	Left	Х	0	0	NO
)	Х	0	NU & NU	Leit	0	0	х	NO
)	0	Х	NO & NC	Dight	0	Х	Х	NC
)	Х	0	NU & NU	Right	Х	Х	0	NC
				_	Х	0	Х	2N0
					0	х	0	2NC
					Х	0	Х	early make
					0	Х	Х	late break

X = CLOSEDO = OPEN

General Information

Disconnect Switches

Contactors

Overloads

Enclosed Starters

Relays

Mouting Position Left Right Left

Right wired in parallel

wired in

series Either Left

Right

Pushbuttons and Pilot Lights

Terminal Blocks

0

late break

Motor Protectors

Contactors

Overloads

Enclosed Starters

Relays

## Шед

CSW30H Series (30mm) Hazardous Duty

## **Factory Sealed / Hermetically Sealed Contact Blocks**

Circuit Protection Disconnect Switches









Auxiliary Contact Blocks - Factory Sealed (720VA) Product Decsription	Catalog Number	List Price	Multiplier
Linear devices - 1NO & 1NC	BC11FS-CSW30H	6400	755
For rotary devices only - 1NO & 1NC	BC11FSR-CSW30H	\$120	Z55
Auxiliary Contact Blocks - Hermetically Sealed (360VA inductive Product Decsription	re)		
Power reed - 1NO	BC10PR-CSW30H	405	
Power reed - 1NC	BC01PR-CSW30H	\$95	
Power reed - 2NO	BC20PR-CSW30H		Z55
Power reed - 2NC	BC02PR-CSW30H	\$150	
Power reed - 1NO & 1NC	BC11PR-CSW30H		
Auxiliary Contact Blocks - Hermetically Sealed (180VA inductive Product Decsription	re)		
Mid-power reed - 1NO	BC10MP-CSW30H	<b>67</b> 5	
Mid-power reed - 1NC	BC01MP-CSW30H	<b>\$75</b>	
Mid-power reed - 2NO	BC20MP-CSW30H		Z55
Mid-power reed - 2NC	BC02MP-CSW30H	\$130	
Mid-power reed - 1NO & 1NC	BC11MP-CSW30H		
Auxiliary Contact Blocks - Hermetically Sealed (40VA inductive Product Decsription	e / 100W resistive)		
Mid-logic reed - 1NO	BC10ML-CSW30H	645	
Mid-logic reed - 1NC	BC01ML-CSW30H	\$45	
Mid-logic reed - 2NO	BC20ML-CSW30H		Z55
Mid-logic reed - 2NC	BC02ML-CSW30H	\$70	
Mid-logic reed - 1NO & 1NC	BC11ML-CSW30H		
Auxiliary Contact Blocks - Hermetically Sealed (40W resistive) Product Decsription			
Logic reed - 1NO	BC10LR-CSW30H	ėno.	755
Logic reed - 1NC	BC01LR-CSW30H	\$28	Z55

Terminal Blocks

Power Factor Correction

Contactors

Overloads

### **Technical Data**

FACTORY SEALED: Contact Blocks are Certified as "Explosion Proof". Devices employing this method of protection are designed so that all electrical parts are enclosed in a switch housing that is capable of withstanding, without damage, an explosion of a specified gas or vapor/air mixture which may occur during the operation of the switch. Further, the explosion internal to the switch body is controlled so that the hot gases are extinguished and cooled before they are allowed to escape to the surrounding atmosphere.

HERMETICALLY SEALED: Contact Blocks are Certified as "Non-Incendive". Devices employing this method of protection are designed so that all electrical parts are a bonded part of the switch housing that forms an arcing chamber that is evacuated of all oxygen, filled with an inert gas, and then sealed to prohibit the exchange of gases with the surrounding environment. These devices are incapable of igniting the surrounding gases or vapor/air mixtures under normal operation. Devices of this type are suitable for use in Div. 2/ Zone 2 applications. Hermetically Sealed contact blocks are also extremely useful for switching low energy circuits or circuits applied in atmospheres containing oxidizing agents and pollutants that might effect the performance of silver switching and metal contact elements. Hermetically Sealed Switch performance is consistent and repeatable in almost any environment.

DIELECTRIC STRENGTH (MECHANICAL CONTACTS) 2200V for 1 Minute

Factory Sealed Contact Block						
Class I Div. 2 Gr. B,C, & D / Zone 2 Gr. IIB +H2						
Utilization Category						
	IEC	UL	Make	Break	Ith-Thermal	
			Rating	Rating	Current	
AC	AC-15	A600	7200VA	720VA	10A	
DC	DC-13	Q300	69VA	69VA	2.5A	

NOTE: For AC voltage below 72V AC the max, allowed switching current is 10A = Ith. For DC voltages below 28V DC the max. allowed switching current is 2.5A = Ith. For switching applications below 24V/40mA, Hermetic REED contacts are recommended.

Hermetically Sealed Power Reed Contact Block							
Class I Div. 2 Gr. A, B, C, & D/Zone 2 Gr. IIC							
	Utilization	Category					
	IEC	UL	Make	Break	lth-Thermal		
			Rating	Rating	Current		
AC	AC-15	B300	3600VA	360VA	5A		
	AC-15	C600	1800VA	180V	2.5A		
DC	DC-13	Q300	69VA	69VA	2.5A		

NOTE: For AC voltage below 72V AC the max. allowed switching current is 5A = Ith. For DC voltages below 28V DC the max. allowed switching current is 2.5A = Ith. Suitable for switching DRY Circuits and Low Energy Circuits (Less than 24V-40mA).

Hermetically Sealed mid-logic reed Contact Block					
Class I Div. 2 Gr. A, B, C, & D/Zone 2 Gr. IIC					
Utilization Category					
	IEC	UL	Inductive	Resistive	Ith-Thermal Current
AC	AC-12	250V Max.	40VA	100 Watt	3A

Suitable for switching DRY Circuits and Low Energy Circuits (Less than 24V-40mA).

	Hermetically Sealed Mid-Power Reed Contact Block						
	Class I Div. 2 Gr. A, B, C, & D/Zone 2 Gr. IIC						
	Utilization	Category					
	IEC UL		Make	Break	Ith-Thermal		
			Rating	Rating	Current		
AC	AC-15	C300	1800VA	180VA	2.5A		
DC	DC-13	Q150	69VA	69VA	2.5A		

NOTE: For AC voltage below 72VAC the max, allowed switching current is 2.5A = Ith. For DC voltages below 28VDC the max. allowed switching current is 2.5A = Ith Suitable for switching DRY Circuits and Low Energy Circuits (Less than 24V-40mA).

Hermetically Sealed logic reed Contact Block					
Class I Div. 2 Gr. A, B, C, & D/Zone 2 Gr. IIC					
	Utilization Category				
	IEC	UL	Inductive	Resistive	Ith-Thermal Current
AC		220V Max.	N/A	40 Watt	2A

Suitable for switching DRY Circuits and Low Energy Circuits (Less than 24V-40mA)

Indicating Lights	
Light Unit	T-Code
FV Incandescent Lights	T4A
FV LED Lights	T6 [No marking required]
Resistor Lights	T3C
Light Unit	T-Code
Resistor LED Lights	T6
Transformer Lights Incd. & LED	T4A
Multi-Voltage 20V-240V LED Light	T4A

Materials	
Thermoplastic Polyester and Polyester Blends (UV Stabilized for outdoor use)	Seals
Operator Housings	Neoprene Gaskets
Operator Caps and Handles –	Thermoplastic – Molded Neoprene and alloy de- rivitives
Non-Illuminated (Glass Reinforced Grades)	BUNA N – Rubber – Teflon Coated
Mounting Rings and Nuts	Thermoplastic – Elastomer Molded Seals
Thrust Washer	Fluorosilicone – Boots
Trim Washer	Metal: Stainless Steel
High Impact Polycarbonate (UV Stabilized for outdoor use)	Push Pull Bushings
Pilot Light Lens	Internal tubes for Maintained Devices
Transparent PB and Mushroom Caps	Detents for Maintained Devices
Custom Polymers	Stainless Steel Springs and Screws throughout
Certain CAM and Bearing parts are Teflon, Silicone, & Moly-Disulfide Impregnated for improved wearability	Aluminum Optional Mounting Nut
Fluorosilicone and Thermoplastic	
Neoprene Boot Accessories	]

<b>Environmental Ratings</b>
Type 1, 2, 3, 3R, 4/4X, 12, 13, and IP65
Operating Temperature
-40 to +131° F (-40 to +55° C)
Storage Temperature
-40 to +185° F (-40 to +85° C)
Operating environments below freezing temperatures are assumed to be absent of

<b>Terminal &amp; Wiring Consideration</b>
Wire- AWG 22-12 CU
(Copper Only – Solid & Stranded) [.5 $\sim$ 4 mm2 ]
One or Two wires permitted per termination
Recommended Tightening Torque
7 lb-in (+3.0/-0.0 lb-in) — [ .8 Nm ]

freezing liquids or pollutants.

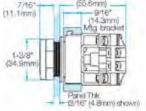
## **Pushbuttons and Pilot Lights**

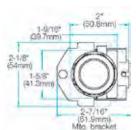
CSW30H Series (30mm) Hazardous Duty

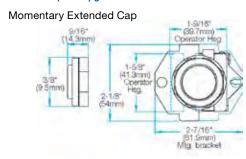
### **Momentary Non-Illuminated H-Line Push Buttons**

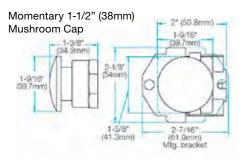
Fully-assembled operators come standard with one 3/16" (4.8mm) and three 1/16" (1.6mm) gaskets.

Non-Illuminated Operator (shown with Flush Cap & Factory Sealed Contact Block)





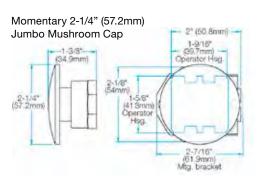




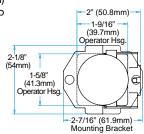




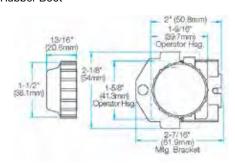
Met.



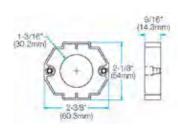




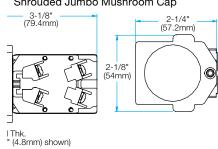
Momentary Fluorosilicone Rubber Boot



Non-Illuminated Push Button Mounting Bracket



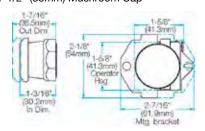
#### Momentary 2-1/4" (57.2mm) Shrouded Jumbo Mushroom Cap



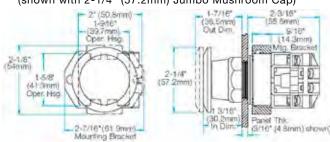
#### **Maintained non-Illuminated H-Line Push Buttons**

Fully-assembled operators come standard with one 3/16" (4.8mm) and three 1/16" (1.6mm) gaskets.

2-Position Push-Pull Maintained 1-1/2" (38mm) Mushroom Cap



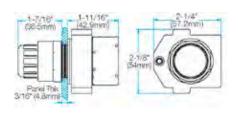
2-Position Push-Pull Maintained Operator (shown with 2-1/4" (57.2mm) Jumbo Mushroom Cap)



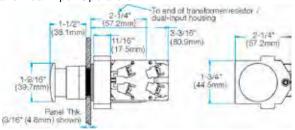
#### **Momentary Illuminated H-Line Push Buttons**

Fully-assembled operators come standard with one 3/16" (4.8mm) and three 1/16" (1.6mm) gaskets.

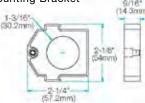
#### Illuminated Full Voltage Operator



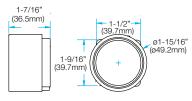
#### Illuminated Transformer, Resistor and Dual Input Operators



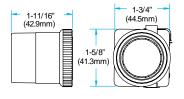
#### Illuminated Push Button Mounting Bracket



#### Illuminated Shrouded Mushroom Lens



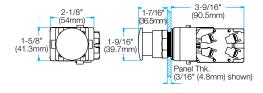
#### Illuminated Guarded Lens



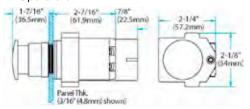
#### 2-Position Push-Pull Maintained Illuminated H-Line Push Buttons

Fully-assembled operators come standard with one 3/16" (4.8mm) and three 1/16" (1.6mm) gaskets.

#### Illuminated Full Voltage Operator



#### Illuminated Transformer and Resistor Operators



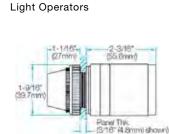
## **Pushbuttons and Pilot Lights**

### CSW30H Series (30mm) Hazardous Duty

#### **H-Line Pilot Lights**

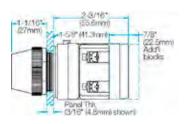
Fully-assembled operators come standard with one 3/16" (4.8mm) and two 1/16" (1.6mm) gaskets.

Full Voltage Pilot Light Operator (3/16" (4 Seren) showed



Transformer & Resistor Pilot

**Dual Input** Pilot Light Operator



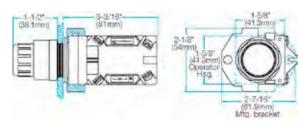
#### **Push-To-Test H-Line Pilot Lights**

Fully-assembled operators come standard with one 3/16" (4.8mm) and three 1/16" (1.6mm) gaskets.

#### Full Voltage Push-To-Test Operator

3-1/8" (79.4mm) 2-1/4" (57.2mm) 2-1/8" (54mm) Panel Thk (3/16" (4.8mm) shown)

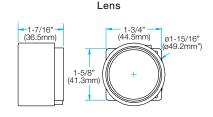
Transformer & Resistor Push-To-Test Operators



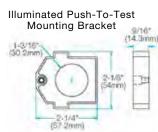
1-3/4" 1-11/16' (44.5mm) (42.9mm) 1-5/8" (41.3mm)

Guarded

Lens



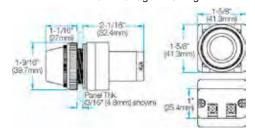
Shrouded Mushroom



#### Multi-Voltage H-Line Pilot Light

Fully-assembled operators come standard with four 1/16" (1.6mm) gaskets.

#### Multi-Voltage Pilot Light



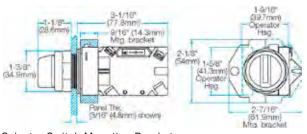
CSW30H Series (30mm) Hazardous Duty

## **H-line Selector Switches**

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#### Fully-assembled operators come standard with one 3/16" (4.8mm) and three 1/16" (1.6mm) gaskets.

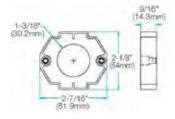
Selector Switch Operator (shown with standard handle)



1-1/8°-1° (25.4mm) Swing Radius

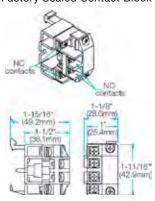
Selector Switch Lever Handle

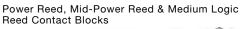
Selector Switch Mounting Bracket

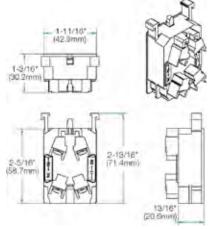


#### H-line contact blocks

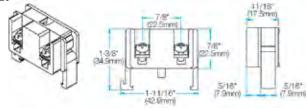
Factory Sealed Contact Block







#### Logic Reed Contact Block



Circuit Protection

Disconnect Switches

**Protectors** Motor

Contactors

Overloads

Enclosed Starters

Relays

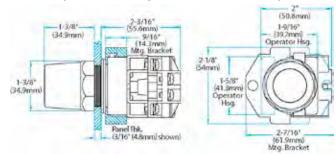
## **Pushbuttons and Pilot Lights** CSW30H Series (30mm) Hazardous Duty

#### Maintained Flush & Extended h-line Push Button Caps

Maintained Extended

Fully-assembled operators come standard with one 3/16" (4.8mm) and three 1/16" (1.6mm) gaskets. Push Button Cap

Maintained Flush Push Button Cap (shown with an operator and contact block)

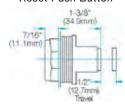




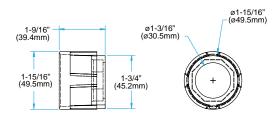
### **H-line Reset Push Button**

Fully-assembled operators come standard with one 3/16" (4.8mm) and three 1/16" (1.6mm) gaskets.

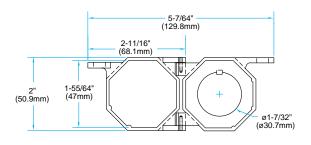
Reset Push Button

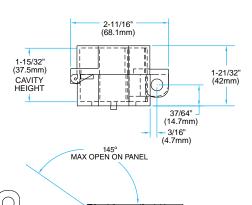


#### **GUARD ATTACHMENT**



#### Lock-off attachment





HINGE POINT

Terminal Blocks