

Industrial Electrical Controls



Crane & Hoist Control

Springer Controls is the North American distributor for **Tecno Elettrica Ravasi (TER)** of Italy. **TER** is a world leader in the manufacturing of crane and hoist controls. **Springer / TER** offer many different models of pendant controls and push button stations to the North American market. The **Mike** pendant control station has 4-15 positions for buttons, selectors, pilot lights or potentiometers. 1 or 2 speed contacts available. The light weight construction and ergonomic design make it easy to hold in one hand, while operating the controls with the other. A unique labeling feature allows the control labels to be placed on the buttons themselves and/or off to the sides.

Springer Controls stocks most models and parts in the U.S. to customize and build out the controls for immediate shipment.



MIKE PENDANT

springercontrols.com



MIKE PENDANT CONTROL STATION

The **Mike** pendant control station has 4-15 positions for buttons, selectors, pilot lights or potentiometers. 1 or 2 speed contacts available. The light weight construction and ergonomic design make it easy to hold in one hand, while operating the controls with the other. With up to 15 positions for controls or indicators, and a unique labeling feature allows the control labels to be placed on the buttons themselves and/or off to the sides. The **Mike** can handle the most complicated and diverse control requirements.

Features

- Reduced installation and wiring time and costs: the cable inlet and the switches fitted in the base of the control station are separated from the actuators, mounted on the cover.
- Innovative suspension system with concealed cables to enable rapid, correct, ergonomic installation.
- Rubber pushbuttons with symbol disks to ensure protection against dust and prevent jamming when the control station is used in harsh environments.
- The emergency stop mushroom pushbutton complies with standard ISO 13850.
- Positive opening NC contacts for safety functions.
- Mechanical life of pushbuttons and switches: 10 million operations.
- IP protection degree: IP66, IP67 and IP69K.
- IK protection degree: IK08.
- NEMA protection degree: Mike is classified Type 1, 4 and 4X.
- Extreme temperature resistance: -40° F to +176° F (-40° C to +80° C).
- All materials and components used are wear resistant and guarantee protection of the unit against water and dust.

Options

- Available in configuration from 4 to 15 actuators.
- Available with specific protection for actuators mounted on the bottom of the control station.
- 1NO or 1NC switches, LEDs voltage 24/48 Vac/dc or 110/230 Vac and 110 Vdc, and potentiometers.
- Mechanical interlock to prevent simultaneous operation of opposite functions.
- Wide range of actuators in different colors: one or two speed pushbuttons, selector switches and key-selector switches in various operation configurations, pilot lights, impulse or latched mushroom pushbuttons with rotation or key-operated release.
- One speed pushbuttons and selector switches available in illuminated version in a range of colors.
- Latched on-off maintained pushbutton to give an effective visual perception of the activated function.
- Available with labels (symbols and lettering) to be applied next to the actuators or with pushbuttons with two-color moulded permanent symbols.

Certifications

- CE marking, cULus* marking and EAC certification.
- Mike is available, upon request, with the SIL1 certification (Safety Integrity Level 1), according to Standard IEC 61508.



Fill-in the "request form" for a custom product configuration

* Not available on all versions.

SPECIFICATIONS FOR MIKE PENDANT STATION

Certifications

Conformity to Community Directives	2014/35/UE Low Voltage Directive
	2006/42/CE Machinery Directive
Conformity to CE Standards	EN 60204-1 Safety of machinery - Electrical equipment of machines
	EN 60947-1 Low-voltage switch-gear and control-gear
	EN 60947-5-1 Low-voltage switch-gear and control-gear Control circuit devices and switching elements Electromechanical control circuit devices
	EN 60529 Degrees of protection provided by enclosures
Conformity to cULus Standards	ISO 13850 Safety of machinery - Emergency stop - Principles for design
	CSA-C22 No 14-13 Industrial Control Equipment
	UL 508 Industrial Control Equipment
SIL1	IEC 61508:2010 Part 2-4-6-7 Functional safety of electrical / electronic / programmable electronic safety-related systems
Markings and Homologations	  

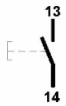
General Technical — Specifications

Ambient temperature	Storage: -40°F / +176°F (-40°C / +80°C)
	Operational: -13°F / +176°F (-25°C / +80°C)
IP protection degree	IP 66 / IP 67 / IP 69K
IK protection degree	IK 08
NEMA protection degree	Type 1, 4 and 4X
Insulation category	Class II
Cable entry	Rubber cable sleeve (Ø 8÷26 mm)
	Cable clamp M20
Operating positions	Any position
Mechanical life	1 speed pushbutton: 10 x 10 ⁶ operations
	2 speed pushbutton: 10 x 10 ⁶ operations
	Illuminated pushbutton: 10 x 10 ⁶ operations

* Not available on all versions.

SPECIFICATIONS FOR MIKE PENDANT STATION

Technical Specifications — Switches

SCC Part No. →	PRSL1800PI	PRSL1801PI
Utilisation category	AC 15	
Rated operational current	3 A	
Rated operational voltage	250 Vac	
Rated thermal current	10 A	
Rated insulation voltage	300 Vac	
Electrical Reliability EN 60947-5-4	$\lambda < 2.5 \times 10^{-8}$ at 24 V, 5mA, 5×10^6 cycles	
Mechanical life	1 x 10 ⁶ operations	
Connections	Screw-type terminals	
	2 x 0.5 mm ² - 2 x 1.5 mm ² - 1 x 2.5 mm ²	
Wires	(UL - (c)UL: use 140°F (60°C) or 167°F (75°C) copper (CU) conductor and stiff or flexible wire 14-22AWG)	
Tightening torque	0.5 Nm	
Microswitch type	Double break, slow action	Double break, slow action
Contacts	1NO	1NC (All NC contacts are of the positive opening operation type )
Scheme		
Markings and Homologations	  	

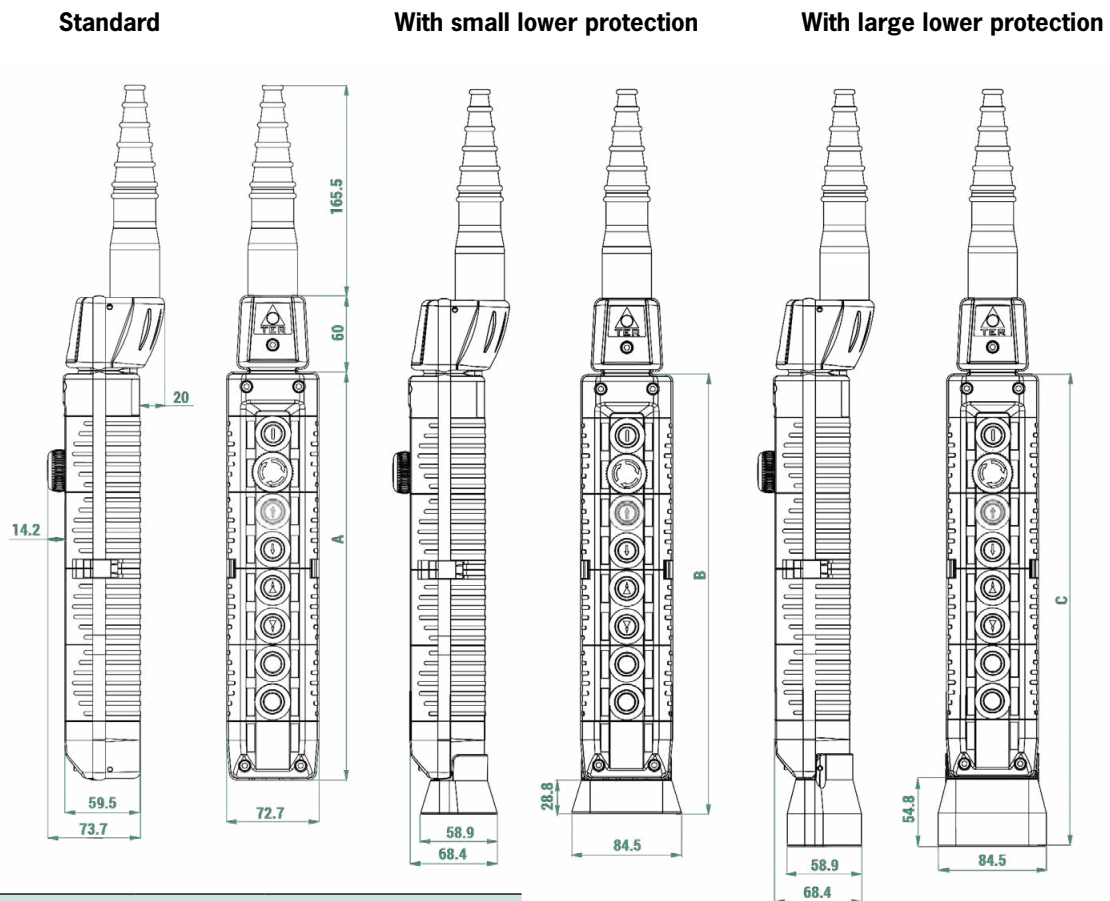
Technical Specifications — LEDs

SCC Part No. →	PRSL 1820PI	PRSL1821PI
Rated operational voltage		
Rated current consumption		
Scheme		
Markings and Homologations	  	

Technical Specifications — Potentiometers

SCC Part No. →	PRSL 1893PI	PRSL 1891PI	PRSL1892PI
Potentiometer with support			
Ohmic value	1 kΩ	4.7 kΩ	10 kΩ
Life time	15 x 10 ³ movements (minimum)		
Operational ambient temperature	-13°F / +158°F (-25°C / +70°C)		
Mechanical angle	300°		
Actual electrical angle	267°		
Ohmic value tolerance	±20%		

MIKE PENDANT - OVERALL DIMENSIONS (mm)



No. of actuators	Dimensions (mm)		
	A	B	C
4	201	229.8	255.8
5	201	229.8	255.8
6	261	289.8	315.8
7	261	289.8	315.8
8	321	349.8	375.8
9	321	349.8	375.8
12	441	469.8	495.8
13	441	469.8	495.8
14	501	529.8	555.8
15	501	529.8	555.8

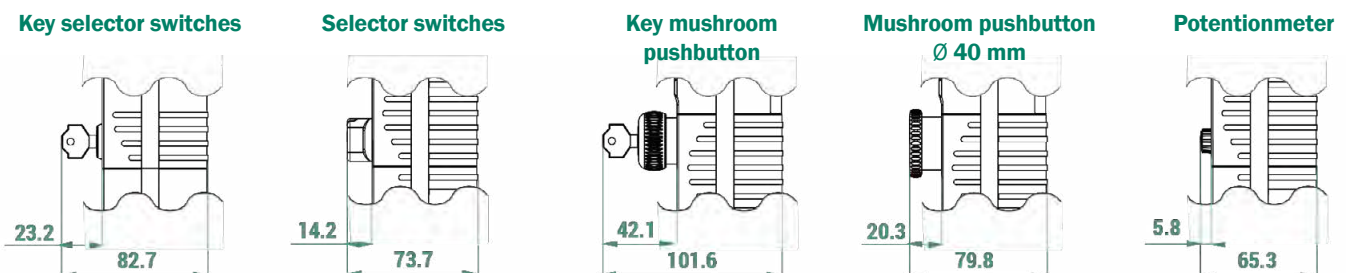
1 mm = 0.03937 inches

1 inch = 25.4 mm

Formula:

- divide the mm length value by 25.4
- multiply the inch length value by 25.4

Actuators



Dimensions of all mushroom pushbuttons refer to the released position.

MIKE STANDARD PENDANT CONTROL STATIONS

Standard control stations are not supplied with symbol label sheet. Order PRET0215PE separately.. Standard control stations are not cULus certified (consult factory for cULus certification). All contact/switches are cULus certified.

4 Actuators

	Reset-Alarm button	Latched mushroom pushbutton	Black buttons mechanically interlocked between pairs		Cover Color	SCC Part No.
	No.2 PRSL1800PI 1 NO + 1 NO	No.1 PRSL1801PI 1 NC	No.1 PRSL1800PI 1 NO	No.2 PRSL1800PI 1 NO + 1 NO		
						
	1	1	2			
	1	1	2			
	1	1		2	Yellow	F70AY12020000001
	1	1		2	Black	F70AB12020000001
	1	1		2	Yellow	F70AY12000200001
	1	1		2	Black	F70AB12000200001

6 Actuators

	Reset-Alarm button	Latched mushroom pushbutton	Black buttons mechanically interlocked between pairs		Cover Color	SCC Part No.
	No.2 PRSL1800PI 1 NO + 1 NO	No.1 PRSL1801PI 1 NC	No.1 PRSL1800PI 1 NO	No.2 PRSL1800PI 1 NO + 1 NO		
						
	1	1	4			
	1	1	4			
	1	1		2	Yellow	F70EY12040000002
	1	1		2	Black	F70EB12040000001
	1	1		2	Yellow	F70EY12000400002
	1	1		2	Black	F70EB12000400001

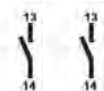
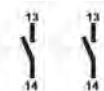
8 Actuators

	Reset-Alarm button	Latched mushroom pushbutton	Black buttons mechanically interlocked between pairs		Cover Color	SCC Part No.
	No.2 PRSL1800PI 1 NO + 1 NO	No.1 PRSL1801PI 1 NC	No.1 PRSL1800PI 1 NO	No.2 PRSL1800PI 1 NO + 1 NO		
						
	1	1	6			
	1	1	6			
	1	1		6	Yellow	F70BY12060000001
	1	1		6	Black	F70BB12060000001
	1	1		6	Yellow	F70BY12000600001
	1	1		6	Black	F70BB12000600001

STANDARD MIKE PENDANT CONTROL STATIONS

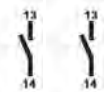
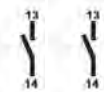
12 Actuators



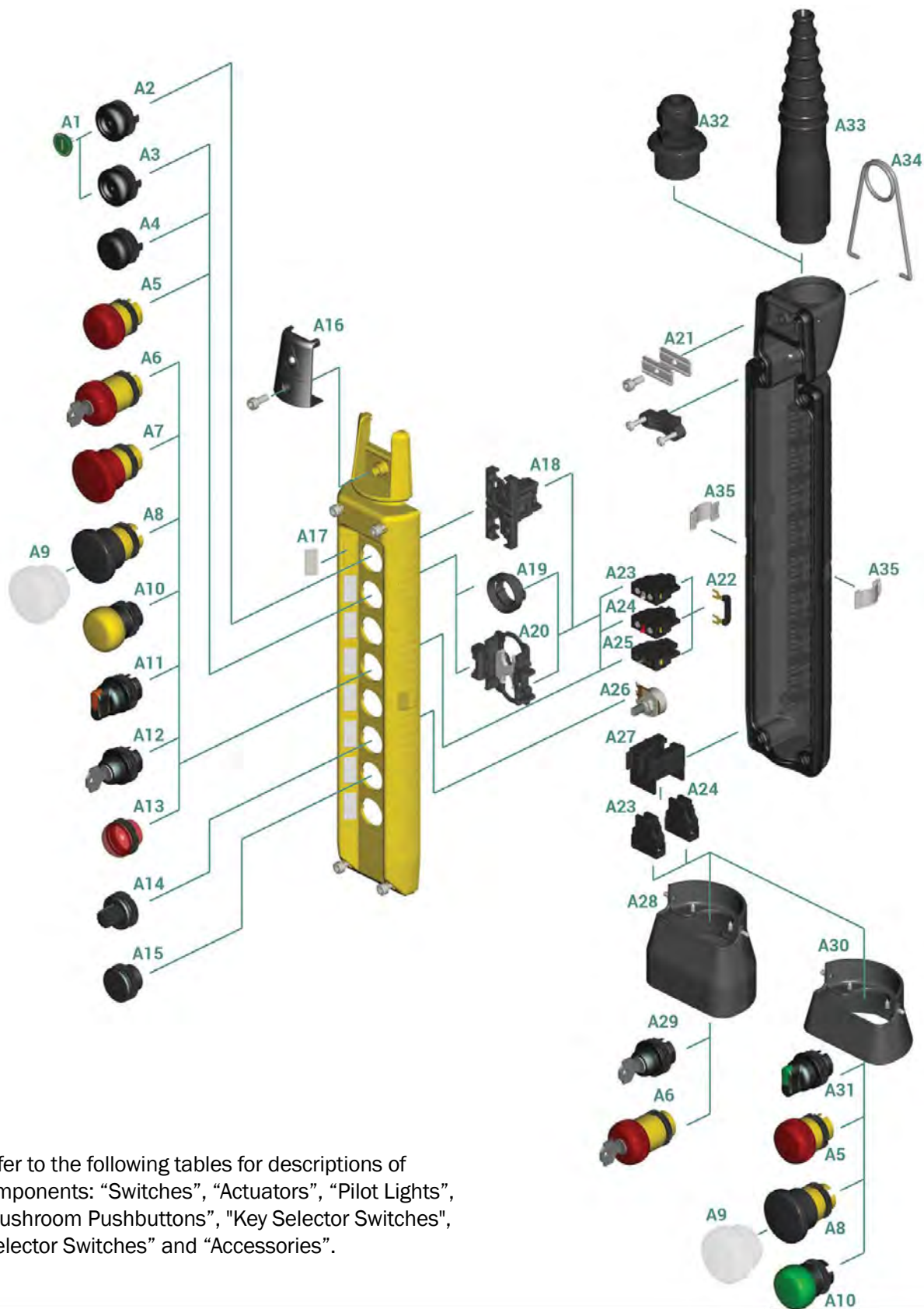
Reset-Alarm button	Latched mushroom pushbutton	Black buttons mechanically interlocked between pairs		Cover Color	SCC Part No.
		No.1 PRSL1800PI 1 NO	No.2 PRSL1800PI 1 NO + 1 NO		
No.2 PRSL1800PI 1 NO + 1 NO	No.1 PRSL1801PI 1 NC	No.1 PRSL1800PI 1 NO	No.2 PRSL1800PI 1 NO + 1 NO		
					
1	1	10		Yellow	F70CY12100000001
1	1	10		Black	F70CB12100000001
1	1		10	Yellow	F70CY12001000001
1	1		10	Black	F70CB12001000001

12 Actuators



Reset-Alarm button	Latched mushroom pushbutton	Black buttons mechanically interlocked between pairs		Cover Color	SCC Part No.
		No.1 PRSL1800PI 1 NO	No.2 PRSL1800PI 1 NO + 1 NO		
No.2 PRSL1800PI 1 NO + 1 NO	No.1 PRSL1801PI 1 NC	No.1 PRSL1800PI 1 NO	No.2 PRSL1800PI 1 NO + 1 NO		
					
1	1	12		Yellow	F70DY12120000001
1	1	12		Black	F70DB12120000001
1	1		12	Yellow	F70DY12001200001
1	1		12	Black	F70DB12001200001

MIKE PENDANT - ASSEMBLY DRAWING



Refer to the following tables for descriptions of components: "Switches", "Actuators", "Pilot Lights", "Mushroom Pushbuttons", "Key Selector Switches", "Selector Switches" and "Accessories".

MIKE PENDANT - ACCESSORY PARTS

Switches

Ref.	Drawing	Description	Scheme	SCC Part No.
A23		1 NO switch		PRSL1800PI
A24		1 NC switch		PRSL1801PI
A25		LED 24/48 Vac/DC		PRSL1820PI
		LED 110/230 Vac and 110 Vdc		PRSL1821PI

Mushroom Pushbuttons

Ref.	Drawing	Description	Head color	SCC Part No.
A5		Latched mushroom pushbutton for emergency stop	Red	PRSL1880PI
A6		Key mushroom pushbutton	Red	PRSL1890PI
A7		Latched mushroom pushbutton for emergency stop Ø 40 mm with yellow base	Red	PRSL1881PI
A8		Impulse mushroom pushbutton Ø 40 mm with yellow base	Black	PRSL1883PI
A10		Impulse mushroom pushbutton Ø 33 mm with black base	Red	PRSL1885ROC
			Blue	PRSL1885BLC
			Yellow	PRSL1885GIC
			Green	PRSL1885VEC
			Orange	PRSL1885ARC
			Black	PRSL1885NEC

Actuators

Ref.	Drawing	Description	SCC Part No.
A1		Disk for pushbutton	PRTA_----- See disk table
A2		Pushbutton for latched ON-OFF maintained actuator	PRSL1803PI
A3		2 speed pushbutton	PRSL1810PI
		1 speed pushbutton	PRSL1811PI
		1 speed illuminated pushbutton	PRSL1815PI
A4		1 speed black pushbutton	PRSL1806PI
		1 speed gray pushbutton	PRSL1807PI
		2 speed black pushbutton	PRSL1808PI
		2 speed gray pushbutton	PRSL1809PI
A15		Blanking plug	PRSL1845PI
A18		Latched ON-OFF maintained actuator	PRSL1804PI

Potentiometers

Ref.	Drawing	Description	SCC Part No.
A14 + A26		Potentiometer 4.7 kΩ	PRSL1891PI
		Potentiometer 10 kΩ	PRSL1892PI
		Potentiometer 1 kΩ	PRSL1893PI

Pilot Lights

Ref.	Drawing	Description	SCC Part No.
A13		White	PRSL1844PI
		Green	PRSL1841PI
		Blue	PRSL1846PI
		Red	PRSL1840PI
		Yellow	PRSL1842PI
		Orange	PRSL1843PI

MIKE PENDANT - ACCESSORY PARTS

Key Selector Switches

Ref.	Drawing	Positions	Spring return	Maintained positions	Pull-out position	SCC Part No.
A12 A29		0/1	X		0	PRSL1867PI
		0/1		X	0	PRSL1868PI
A12		1/0/2	X		0	PRSL1869PI
				X	0	PRSL1870PI
		0/1/1+2	X		0	PRSL1871PI
				X	0	PRSL1072PI
		1/2 change-over	X		1	PRSL1073PI
				X	1	PRSL1074PI
		1/1+2/2	X		1+2	PRSL1075PI
				X	1+2	PRSL1076PI

Selector Switches

Ref.	Drawing	Positions	Color		SCC Part No.
			Transparent	Full	
A11 A31		0/1 Spring return	White		PRSL1855BI
			Green		PRSL1855VE
			Blue		PRSL1855BL
			Red		PRSL1855RO
			Yellow		PRSL1855GI
			Orange		PRSL1855AR
		0/1 Maintained	White		PRSL1856BI
			Green		PRSL1856VE
			Blue		PRSL1856BL
			Red		PRSL1856RO
			Yellow		PRSL1856GI
			Orange		PRSL1856AR
		0/1 Spring return		White	PRSL1855BIC
				Green	PRSL1855VEC
				Blue	PRSL1855BLC
				Red	PRSL1855ROC
				Yellow	PRSL1855GIC
				Orange	PRSL1855ARC
		0/1 Maintained		White	PRSL1856BIC
				Green	PRSL1856VEC
				Blue	PRSL1856BLC
				Red	PRSL1856ROC
				Yellow	PRSL1856GIC
				Orange	PRSL1856ARC

MIKE PENDANT - ACCESSORY PARTS

Selector Switches

Ref.	Drawing	Positions	Color		SCC Part No.
			Transparent	Full	
A11		1/0/2 Spring return	White		PRSL1857BI
			Green		PRSL1857VE
			Blue		PRSL1857BL
			Red		PRSL1857RO
			Yellow		PRSL1857GI
			Orange		PRSL1857AR
		1/0/2 Maintained	White		PRSL1858BI
			Green		PRSL1858VE
			Blue		PRSL1858BL
			Red		PRSL1858RO
			Yellow		PRSL1858GI
			Orange		PRSL1858AR
		1/0/2 Spring return		White	PRSL1857BIC
				Green	PRSL1857VEC
				Blue	PRSL1857BLC
				Red	PRSL1857ROC
				Yellow	PRSL1857GIC
				Orange	PRSL1857ARC
		1/0/2 Maintained		White	PRSL1858BIC
				Green	PRSL1858VEC
				Blue	PRSL1858BLC
				Red	PRSL1858ROC
				Yellow	PRSL1858GIC
				Orange	PRSL1858ARC

Selector Switches

Ref.	Drawing	Positions	Color		SCC Part No.
			Transparent	Full	
A11		1/2 Spring return	White		PRSL1861BI
			Green		PRSL1861VE
			Blue		PRSL1861BL
			Red		PRSL1861RO
			Yellow		PRSL1861GI
			Orange		PRSL1861AR
		1/2 Maintained	White		PRSL1862BI
			Green		PRSL1862VE
			Blue		PRSL1862BL
			Red		PRSL1862RO
			Yellow		PRSL1862GI
			Orange		PRSL1862AR
		1/2 Spring return		White	PRSL1861BIC
				Green	PRSL1861VEC
				Blue	PRSL1861BLC
				Red	PRSL1861ROC
				Yellow	PRSL1861GIC
				Orange	PRSL1861ARC
		1/2 Maintained		White	PRSL1862BIC
				Green	PRSL1862VEC
				Blue	PRSL1862BLC
				Red	PRSL1862ROC
				Yellow	PRSL1862GIC
				Orange	PRSL1862ARC

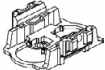
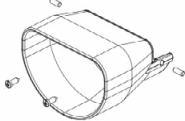
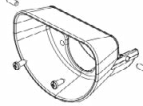
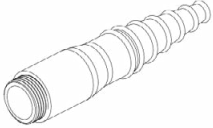
MIKE PENDANT - ACCESSORY PARTS

Selector Switches

Ref.	Drawing	Positions	Color		SCC Part No.
			Transparent	Full	
A11		1/1+2/2 Spring return	White		PRSL1863BI
			Green		PRSL1863VE
			Blue		PRSL1863BL
			Red		PRSL1863RO
			Yellow		PRSL1863GI
			Orange		PRSL1863AR
		1/1+2/2 Maintained	White		PRSL1864BI
			Green		PRSL1864VE
			Blue		PRSL1864BL
			Red		PRSL1864RO
			Yellow		PRSL1864GI
			Orange		PRSL1864AR
		1/1+2/2 Spring return		White	PRSL1863BIC
				Green	PRSL1863VEC
				Blue	PRSL1863BLC
				Red	PRSL1863ROC
				Yellow	PRSL1863GIC
				Orange	PRSL1863ARC
		1/1+2/2 Maintained		White	PRSL1864BIC
				Green	PRSL1864VEC
				Blue	PRSL1864BLC
				Red	PRSL1864ROC
				Yellow	PRSL1864GIC
				Orange	PRSL1864ARC
		0/1/1+2 Spring return	White		PRSL1859BI
			Green		PRSL1859VE
			Blue		PRSL1859BL
			Red		PRSL1859RO
			Yellow		PRSL1859GI
			Orange		PRSL1859AR
		0/1/1+2 Maintained	White		PRSL1860BI
			Green		PRSL1860VE
			Blue		PRSL1860BL
			Red		PRSL1860RO
			Yellow		PRSL1860GI
			Orange		PRSL1860AR
		0/1/1+2 Spring return		White	PRSL1859BIC
				Green	PRSL1859VEC
				Blue	PRSL1859BLC
				Red	PRSL1859ROC
				Yellow	PRSL1859GIC
				Orange	PRSL1859ARC
		0/1/1+2 Maintained		White	PRSL1860BIC
				Green	PRSL1860VEC
				Blue	PRSL1860BLC
				Red	PRSL1860ROC
				Yellow	PRSL1860GIC
				Orange	PRSL1860ARC

MIKE PENDANT - ACCESSORY PARTS

Accessories

Ref.	Drawing	Description	SCC Part No.
A9		Transparent protective cap for impulse mushroom pushbutton Ø 40 mm	PRGU6100PE
A16		Cable cover with TER logo	PRSL1832PI
		Blank cable cover	PRSL1836PI
A17		Label Sheet - Symbols	PRET0215PE
		Label Sheet - English	PRET0220EN
		Label Sheet - Spanish	PRET0220ES
A19		Button-switch spacer	PRSL8512PI
A20		Mechanical interlock	PRSL1850PI
A21		Complete wire clamp	PRSL1896PI
A22		Insulated connecting bridge - positions 3-4 (pack/5)	PRSL1911PI
		Insulated connecting bridge - positions 2-4 (pack/5)	PRSL1912PI
		Insulated connecting bridge - positions 1-4 (pack/5)	PRSL1913PI
		Insulated connecting bridge - positions 1-3 (pack/5)	PRSL1914PI
		Insulated connecting bridge - positions 1-2 (pack/5)	PRSL1915PI
		Insulated connecting bridge - positions 1-2-3 (pack/5)	PRSL1916PI
A27		1-2-3 switch holder	PRSL8750PI
A28		Large protection	PRSL1831PI
A30		Small protection	PRSL1830PI
A32		Cable clamp M20 with reduction	PRSL1910PI
A33		Cable sleeve	PRSL0145PE
A34		Hook	PRGA0012PE
A35		Closing clip	PRTR1035PE

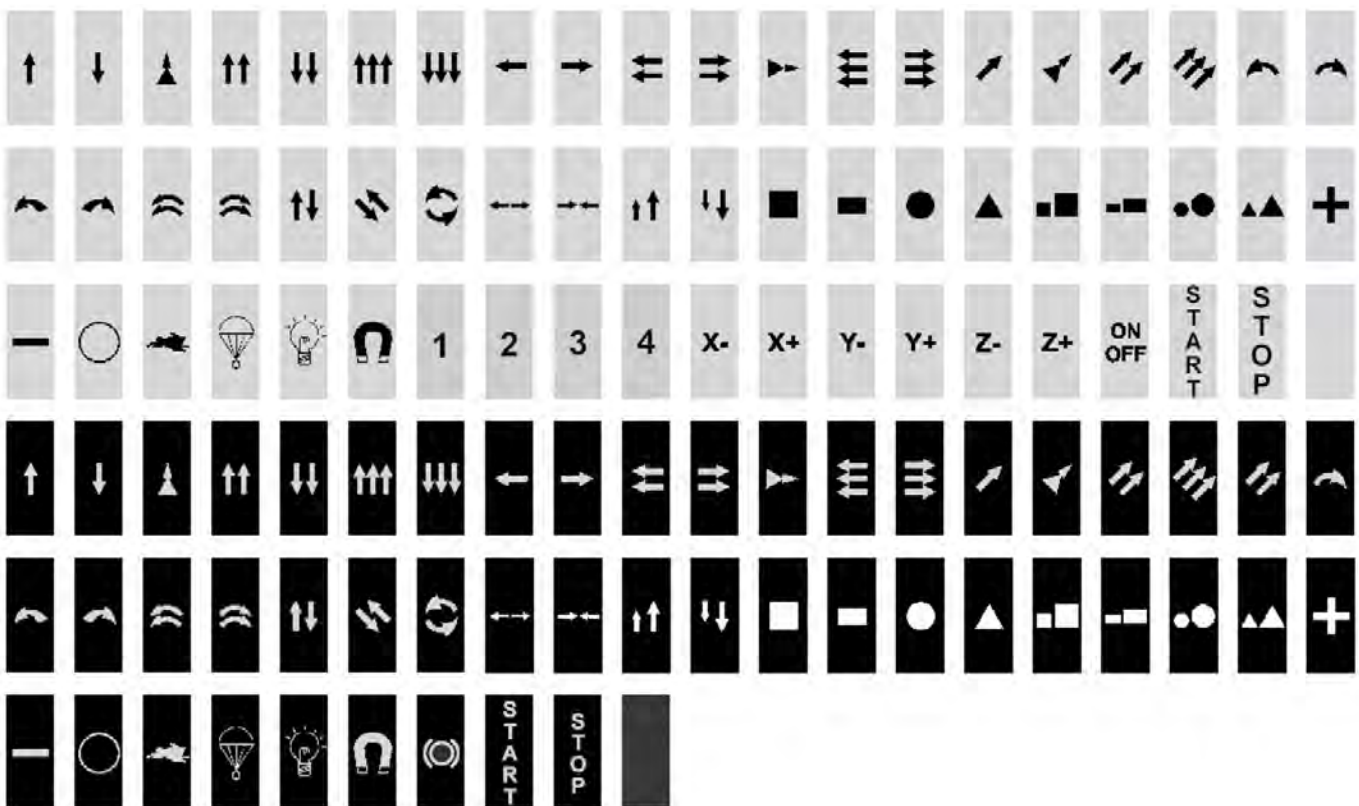
Full Color Disks



Transparent Disks



Label Sheet - Symbols (SCC Part No. → PRET0215PE)



MIKE PENDANT - ACCESSORY PARTS**Label Sheet - English (SCC Part No. → PRET0220EN)**

START	ALARM	RESET ALARM	RESET	STOP	LIGHT	RESET LINE	STOP LINE	START BUCKET	STOP BUCKET
BRAKE	BACK	UP	DOWN	UP LIFTING	DOWN LIFTING	UP LIFTING 1-2 SPEED	DOWN LIFTING 1-2 SPEED	UP LIFTING 3RD SPEED	DOWN LIFTING 3RD SPEED
UP LIFTING FAST	DOWN LIFTING FAST	LIFTING 2ND SPEED	LIFTING 3RDSPEED	UP AUXIL. LIFTING	DOWN AUXIL. LIFTING	UP MAIN LIFTING	DOWN MAIN LIFTING	UP FAST MAIN LIFTING	DOWN FAST MAIN LIFTING
UP AUXIL. LIFTING 1-2 S.	DOWN AUXIL. LIFTING 1-2 S.	UP MAIN LIFTING 1-2 S.	DOWN MAIN LIFTING 1-2 S.	UP WINCH	DOWN WINCH	UP WINCH 1-2 SPEED	DOWN WINCH 1-2 SPEED	UP FAST WINCH	DOWN FAST WINCH
UP SLOW RIGHT WINCH	DOWN SLOW RIGHT WINCH	UP FAST RIGHT WINCH	DOWN FAST RIGHT WINCH	UP SLOW LEFT WINCH	UP FAST LEFT WINCH	DOWN FAST LEFT WINCH	UP HOIST	DOWN HOIST	UP HOIST 1-2 SPEED
DOWN HOIST 1-2 SPEED	UP FAST HOIST	DOWN FAST HOIST	FORWARD	BACKWARD	FORWARD TROLLEY	BACKWARD TROLLEY	FORWARD FAST TROLLEY	BACKWARD FAST TROLLEY	FORWARD TROLLEY 1-2 S.
BACKWARD TROLLEY 1-2 S.	FORWARD BRIDGE	BACKWARD BRIDGE	FORWARD FAST BRIDGE	BACKWARD FAST BRIDGE	FORWARD BRIDGE 1-2 S.	BACKWARD BRIDGE 1-2 S.	FORWARD TRANSLATION	BACKWARD TRANSLATION	LEFT
RIGHT	LEFT TROLLEY	RIGHT TROLLEY	LEFT FAST TROLLEY	RIGHT FAST TROLLEY	LEFT TROLLEY 1-2 S.	RIGHT TROLLEY 1-2 S.	LEFT BRIDGE	RIGHT BRIDGE	LEFT FAST BRIDGE
DOWN SLOW LEFT WINCH	RIGHT FAST BRIDGE	LEFT BRIDGE 1-2 S.	RIGHT BRIDGE 1-2 S.	CCW ROTATION	CW ROTATION	CCW FAST ROTATION	CW FAST ROTATION	CCW ROTATION 1-2 S.	CW ROTATION 1-2 S.
CCW ROTATION 3RD SPEED	CW ROTATION 3RD SPEED	LEFT CTRL STATION	RIGHT CTRL STATION	TROLLEY LEFT	TROLLEY RIGHT	SLOW	FAST	FAST TROLLEY	FAST BRIDGE
FAST LIFTING	FAST ROTATION	WINCH MATCHING	OPEN	CLOSE	OPEN GRAPPLE	CLOSE GRAPPLE	OPEN BUCKET	CLOSE BUCKET	OPEN DOOR
CLOSE DOOR	SPEED UP	SPEED DOWN	RAISE	LOWER	LOAD	DOWNLOAD	ENERGIZE	DE-ENERGIZE	ENERGIZE MAGNET
DE-ENERGIZE MAGNET	APPROACH	CONSENT	AUTOMATIC	MANUAL	MAN-0-AUTO	OFF-MAN-AUTO	ON	OFF	ON-OFF
IN	OUT	NORTH	SOUTH	EAST	WEST	OVERLOAD	TARE	1-1+2-2	1-2-1+2
1+2	ON-OFF	A-A+B-B							

Label Sheet - Spanish (SCC Part No. → PRET0220ES)

MARCHA	ALARMA	MARCHA ALARMA	PARO	STOP	LUZ	MARCHA LINEA	PARO LINEA	MARCHA PALA	PARO PALA
FRENO	RETORNO	SUBIR	BAJAR	SUBIR ELEVACION	BAJAR ELEVACION	SUBIR ELEV. 1-2 VEL.	BAJAR ELEV. 1-2 VEL.	SUBIR ELEV. 3ª VEL.	BAJAR ELEV. 3ª VEL.
SUBIR ELEV. RAPIDA	BAJAR ELEV. RAPIDA	2ª VEL. ELEVACION	3ª VEL. ELEVACION	SUBIR AUX. ELEVACION	BAJAR AUX. ELEVACION	SUBIR ELEV. PRINCIPAL	BAJAR ELEV. PRINCIPAL	SUBIR ELEV. PRINC. RAPIDA	BAJAR ELEV. PRINC. RAPIDA
SUBIR AUX. 1-2 VEL.	BAJAR AUX. 1-2 VEL.	SUBIR PRINC. 1-2 VEL.	BAJAR PRINC. 1-2 VEL.	SUBIR POLIPASTO	BAJAR POLIPASTO	SUBIR POLIP. 1-2 VEL.	BAJAR POLIP. 1-2 VEL.	SUBIR POLIP. RAPIDO	BAJAR POLIP. RAPIDO
POLIP. DER. SUBIR LENTO	POLIP. DER. SUBIR LENTO	POLIP. DER. SUBIR RAPIDO	POLIP. DER. SUBIR RAPIDO	POLIP. IZQ. SUBIR LENTO	POLIP. IZQ. SUBIR RAPIDO	POLIP. IZQ. BAJAR RAPIDO	SUBIR GANCHO	BAJAR GANCHO	SUBIR GANCHO 1-2 VEL.
BAJAR GANCHO 1-2 VEL.	SUBIR GANCHO RAPIDO	BAJAR GANCHO RAPIDO	ADELANTE	ATRAS	ADELANTE CARRITO	ATRAS CARRITO	ADELANTE CARR. RAPIDO	ATRAS CARR. RAPIDO	ADELANTE CARR. 1-2 VEL.
ATRAS CARR. 1-2 VEL.	ADELANTE PUENTE	ATRAS PUENTE	ADELANTE PUENTE RAPIDO	ATRAS PUENTE RAPIDO	ADELANTE PUENTE 1-2 VEL.	ATRAS PUENTE 1-2 VEL.	ADELANTE TRASLACION	ATRAS TRASLACION	IZQUIERDA
DERECHA	IZQUIERDA CARRITO	DERECHA CARRITO	IZQUIERDA CARR. RAPIDO	DERECHA CARR. RAPIDO	IZQUIERDA CARR. 1-2 VEL.	DERECHA CARR. 1-2 VEL.	IZQUIERDA PUENTE	DERECHA PUENTE	IZQUIERDA PUENTE RAPIDO
POLIP. IZQUIER. BAJAR LENTO	DERECHA PUENTE RAPIDO	IZQUIERDA PUENTE 1-2 VEL.	DERECHA PUENTE 1-2 VEL.	IZQUIERDA ROTACION	DERECHA ROTACION	IZQUIERDA ROT. RAPIDA	DERECHA ROT. RAPIDA	IZQUIERDA ROT. 1-2 VEL.	DERECHA ROT. 1-2 VEL.
IZQUIERDA ROT. 3ª VEL.	DERECHA ROT. 3ª VEL.	BOTONERA IZQUIERDA	BOTONERA DERECHA	CARRITO IZQUIERDO	CARRITO DERECHO	LENTO	RAPIDO	CARRITO RAPIDO	PUENTE RAPIDO
ELEVACION RAPIDA	ROTACION RAPIDA	ACOPLAMIENTO POLIPASTO	ABRIR	CERRAR	ABRIR PINZA	CERRAR PINZA	ABRIR PALA	CERRAR PALA	ABRIR PUERTA
CERRAR PUERTA	ACELERAR	DESACELERAR	ELEVAR	DESCENDER	CARGAR	DESCARGAR	IMANTAR	DESIMANTAR	IMANTAR MAGNETO
DESIMANTAR MAGNETO	ACERCAR	CONFIRMAR	AUTOMATICO	MANUAL	MAN-0-AUTO	OFF-MAN-AUTO	ON	OFF	ON-OFF
IN	OUT	NORTE	SUR	ESTE	OESTE	SOBRECARGA	TARA	1-1+2-2	1-2-1+2
1+2	ON-OFF	A-A+B-B							

MIKE PENDANT - REQUEST FORM FOR NON STANDARD CONTROL STATION

Instructions

(See next page for list of components and legends)

Fill in the chart according to the number of control elements required. Control stations are available with enclosures from 4 to 15 control elements. It is possible to assemble a control element on the bottom of the control station only with enclosures with an odd number of holes.

- 1 Control elements:** enter the number corresponding to the control element required (1 to 39) according to the legend. Eg.
- 2 Button disks:** for pushbuttons (1 to 3) enter the number corresponding to the disk required (50 to 88) according to the legend. Both full color disks and transparent disks (for illuminated buttons) are available. Eg.
- 3 Color of selectors, mushrooms, pilot lights:** for toggle selector switches (15 to 24), impulse mushroom pushbuttons (7) and pilot lights (11) enter the code corresponding to the color required according to the legend. Eg.
- 4** If you choose disks with arrows (legend 54 to 73), enter the direction of the arrow in the circle. Eg.
- 5 Switches, LEDs and potentiometers:** enter the number corresponding to the switch, LED or potentiometer required (90 to 93) according to the legend. It is possible to enter up to 3 switches per position. Eg.
- 2 speed pushbuttons can activate two switches on the first speed and one switch on the second speed.
- Selector switches can activate only two switches and possibly a LED
- ATTENTION: LEDs can be placed only in the central position and they are used for illuminated buttons and selector switches.
(See Control Element legend for switch activation).
- 6 Hook:** tick the box at the top or at the bottom if the hook is required. Eg. ☐ Hook ☐
- 7 Cable sleeve and cable clamp:** tick the box if the cable sleeve or the cable clamp are required.
Eg. ☐ Sleeve ☐
- 8 Mechanical interlock and ON-OFF actuator:** tick the boxes where the mechanical interlock (MI) between two control elements or the latched ON-OFF maintained actuator (LA) is required. Eg. ☐ MI ☐
- 9 Protection:** when a control element is mounted on the bottom of the control station, it is possible to use a protection; in this case tick the box corresponding to the protection required.
Eg. ☐ Shield ☐
- 10 Cover:** tick the box corresponding to the cover color required (the base of the enclosure is always black).
- 11 SIL 1 certified:** tick the box if you require SIL 1 certified units.
- 12 Label sheet:** stickers with letterings or symbols may be placed on the left and on the right of any control element. If label sheets are required, tick the corresponding box.
- 13 cULus certified:** tick the box if you require cULus certified units.

Control element on the bottom of the control station*

Control element 1

Color 3

Switches 5

Small Large None Protection 9

***ATTENTION:** only mushroom pushbuttons ref. 4, 5, 6 with one or two switches, or **non illuminated** selector switches ref. 15, 16, 30, 31 with only one switch can be assembled on the bottom of the control station. LEDs can not be mounted in this position.

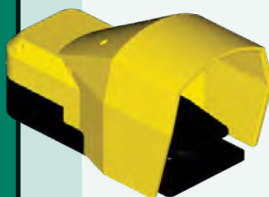
Cover 10 ☐ Yellow ☐ Black	SIL 1 certified 11 ☐
Label sheet 12 ☐ Symbols ☐ English ☐ Spanish	cULus certified 13 ☐

[illegible]



Welcome to the new edition of the Springer Controls Company, Inc. **Product Guide to MIKE Pendant Control Station.** This section reflects our continuing commitment to our customers to provide complete, up-to-date product information and technical data. We appreciate your choosing Springer Controls and we will continue to update this information as well as provide new products to meet today's demands for electrical control products.

Foot Switches



Rotary Gear Limit Switches



Industrial Joysticks



Position Limit Switches



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