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Safety Limit Switches



Safety Switches



Cable Pull Switches



Micro Switches



Push Buttons
Indicator Lights



Vehicles Switches



ATEX/EXX Switches



Foot Switches



Signaling Device



Load Cells



Pendant/Control Stations



Proximity Sensors



Photoelectric Sensors



2019

Industrial Control Components

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Safety Limit Switches

Product Family	SMN/SMN4	SND4-NH	SND4/SN4	SND2
Product Picture				
Body Dimensions (mm) LxWxH	26 x 34 x 21 / 30 x 30 x 45	30.5 x 32 x 62	30.5 x 32 x 62	50.5 x 32.5 x 50.5
Enclosure Material	Fiber-reinforced plastic	Fiber-reinforced plastic	Fiber-reinforced plastic or Zinc alloy	Fiber-reinforced plastic
Characteristics	- Conforms to EN50047 - Miniature size - Positive opening contact - Galvanically separated contacts - Cable entry: M16, PG11	- Conforms to EN50047 - Hall-effect sensor with output of 0-5VDC - Input voltage 10-30VDC - Cable entries: PG 13.5, M20, 1/2NPT	- Conforms to EN50047 - Positive opening contact - Galvanically separated contacts - Cable entry: PG13.5, M20 1/2NPT	- EN50047 compatible - Positive opening contact - Galvanically separated contacts - Cable entries (2 opening): M16, PG13.5, 1/2NPT, M20
Contact Configuration (available in snap and slow action)	1NO/1NC, 2NO, 2NC	1NO/1NO, 2NO, 2NC, 3NO, 3NC, 2NO/1NC, 2NC/1NO, 2NO/2NC	1NO/1NC, 2NO, 2NC, 3NO, 3NC, 2NO/1NC, 2NC/1NO, 2NO/2NC	1NO/1NO, 2NO, 2NC, 3NO, 3NC, 2NO/1NC, 2NC/1NO, 2NO/2NC
IP/NEMA Ratings	IP66 / NEMA 4, 4X, 6	IP67 / NEMA 4, 4X, 6	IP67 / NEMA 4, 6	IP67 / NEMA 4, 4X, 6
Contact Ratings	A600/Q300	A600/Q300	A600/Q300	A600/Q300
Actuator	20+ actuator heads including: plunger, roller, roller lever, rod, spring wire etc	20+ actuator heads including: plunger, roller, roller lever, rod, spring wire etc	20+ actuator heads including: plunger, roller, roller lever, rod, spring wire etc	20+ actuator heads including: plunger, roller, roller lever, rod, spring wire etc
Certificates				

Product Family	SN2	SND6/SN6	Wireless Limit Switch	SN63
Product Picture				
Body Dimensions (mm) LxWxH	52 x 31 x 64	40.5 x 40 x 74	40 x 42.5 x 78	57 x 36 x 70
Enclosure Material	Zinc alloy	Fiber-reinforced plastic or Zinc alloy	Zinc alloy	Zinc alloy
Characteristics	- EN50047 compatible - 3 conduit openings - Positive opening contact - Galvanically separated contacts - Cable entry: PG13.5, M20 1/2NPT	- Conforms to EN50041 - Positive opening contact - Galvanically separated contacts - Cable entry: PG13.5, M20, 1/2NPT	- Reliable, flexible and secure wireless transmission - Variety of antenna options - Extremely long battery life	- Compatible to EN50041 - 3 conduit openings - Positive opening contact - Galvanically separated contacts - Cable entry: PG13.5, 1/2NPT, M20
Contact Configuration (available in snap and slow action)	1NO/1NC, 2NO, 2NC, 3NO, 3NC, 2NO/1NC, 2NC/1NO, 2NO/2NC	1NO/1NC, 2NO, 2NC, 3NO, 3NC, 2NO/1NC, 2NC/1NO, 2NO/2NC		1NO/1NO, 2NO, 2NC, 3NO, 3NC, 2NO/1NC, 2NC/1NO, 2NO/2NC
IP/NEMA Ratings	IP67 / NEMA 4, 6	IP67 / NEMA 4, 4X, 6	IP68	IP67 / NEMA 4, 6
Contact Ratings	A600/Q300	A600/Q300		A600/Q300
Actuator	20+ actuator heads including: plunger, roller, roller lever, rod, spring wire etc	20+ actuator heads including: plunger, roller, roller lever, rod, spring wire etc	20+ actuator heads including: plunger, roller, roller lever, rod, spring wire etc	20+ actuator heads including: plunger, roller, roller lever, rod, spring wire etc
Certificates				



Product Family	HMS/HLS/HNS Heavy Duty NEMA Style	CP8104 Heavy Duty Limit Switch	AZ8 Compact Limit Switch	SN62 Limit Switch
Product Picture				
Body Dimensions (mm) LxWxH	42 x 44.6 x 80 42 x 44.6 x 102.5	100 x 61 x 120	28 x 25 x 64	40 x 40.4 x 69.3
Enclosure Material	Zinc alloy	Aluminum alloy	Zinc cast base/plastic cover	Aluminum alloy
Characteristics	- NEMA style heavy duty - Plug-in style - Cable entry: M20, 1/2NPT, 3/4NPT	- Oversize heavy duty - Various contact configuration - Maximum rating: 25A/600V - Three conduit opening	- Compact size - Premolded flexible cable gland or M12 conduit	- Compatible to EN50041 - Positive opening contact - Galvanically separated contacts - Cable entry: PG13.5, 1/2NPT, M20
Contact Configuration	HMS: 1NO/1NC HNS/ HLS: 1NO/1NC, 2NO/2NC	1NO/1NC, 2NO, 2NC, 3NO/3NC, 4NO/4NC	1NO/1NC	1NO/1NO, 2NO, 2NC, 3NO, 3NC, 2NO/1NC, 2NC/1NO, 2NO/2NC
IP/NEMA Ratings	IP67 / NEMA 4, 6	IP67 / NEMA 4, 6	IP65 / NEMA 4,12,13	IP67 / NEMA 4, 6
Contact Ratings	A600/Q300	25A/600V, A600/Q300	A300/(10A/250V)	A600/Q300,
Actuator	20+ actuator heads including: plunger, roller, roller lever, rod, spring wire etc	20+ actuator heads including: plunger, roller, roller lever, rod, spring wire etc	plunger, roller, roller lever, rod, spring wire, cat whisker, wobble stick	20+ actuator heads including: plunger, roller, roller lever, rod, spring wire etc
Certificates				

Product Family	SN31 Pre-wired (IP67)	SN32 Pre-wired (IP67)	SM31/SM31N Modular(IP67)	SM32/SM32N Modular(IP67)
Product Picture				
Body Dimensions (mm) LxWxH	30 x 16 x 50	40 x 16 x 50	30 x 16 x 50	30 x 16 x 50
Enclosure Material	Zinc alloy	Zinc alloy	Zinc alloy or fiber reinforced plastics	Zinc alloy or fiber reinforced plastics
Characteristics	- Epoxy potted - Positive opening contact - Galvanically separated contacts - Mounting spacing: 20mm	- Epoxy potted - Positive opening contact - Galvanically separated contacts - Mounting spacing: 25mm	- Epoxy potted - Positive opening contact - Galvanically separated contacts - Mounting spacing: 20mm	- Epoxy potted - Positive opening contact - Galvanically separated contacts - Mounting spacing: 25mm
Contact Configuration	1NO/1NC (snap or slow action)	1NO/1NC (snap or slow action)	1NO/1NC, 2NO, 2NC, 2NO/1NC 2NC/1NO, 2NO/2NC (snap or slow action)	1NO/1NC, 2NO, 2NC, 2NO/1NC 2NC/1NO, 2NO/2NC (snap or slow action)
IP/NEMA Ratings	IP67 / NEMA 4, 6	IP67 / NEMA 4, 6	IP67 / NEMA 4, 6	IP67 / NEMA 4, 6
Contact Ratings	A300/Q300	A300/Q300	B300/R300	B300/R300
Actuator	10+ actuator heads including: plunger, roller, roller lever, rod, spring wire etc	10+ actuator heads including: plunger, roller, roller lever, rod, spring wire etc	10+ actuator heads including: plunger, roller, roller lever, rod, spring wire etc	10+ actuator heads including: plunger, roller, roller lever, rod, spring wire etc
Certificates				



Product Family	SNB/SNBP Crane Limit Switches	SNH Belt Alignment Switches	6098 Elevator Limit Switches	SF9 Enclosed Limit Switches
Product Picture 				
Body Dimensions (mm) LxWxH	SNB: 77 x 35.6 x 81 SNBP: 73 x 37 x 81	85 x 53 x 85	80 x 40 x 140	101.6 x 33 x 54.8
Enclosure Material	Zinc or Plastic	Zinc alloy	Galvanized steel	Aluminum Die Cast
Characteristics	- Positive opening contact - Galvanically separated contacts - Cable entry: M20, 1/2NPT PG13.5	- Positive opening contact - Galvanically separated contacts - Cable entry: 1/2NPT, M20 PG13.5	- Self-cleaning contacts - Automatic safety tripping mechanism	- Left or right-handed actuator - Sealed or unsealed actuators - Momentary or maintained
Contact Configuration	2NO/2NC, 4NC	1NO/1NC, 2NO, 2NC	1NC, 1NO, 2NC, 2NO	SPDT/DPDT
IP/NEMA Ratings	IP66 / NEMA 4	IP54 / NEMA 5	IP20	IP65 / NEMA 4
Contact Ratings	A600/Q300	A600/Q300	5A 120/250VAC 2.5A 120/250VDC	10A, 15A, 20A, 25A /250V
Actuator	Double-cross rods	actuator heads including: roller lever, adj. roller lever, rod, double-cross rods		10+ actuator heads including: plunger, roller, roller lever, rod, spring wire etc
Certificates				

Product Family	SN1 Precision Limit Switches	SN9 Enclosed Limit Switches	SP9 Enclosed Limit Switches	SN5/SMN5 Limit Switches
Product Picture 				
Body Dimensions (mm) LxWxH	44.5 x 18 x 32.4	86 x 25.5 x 44.6	93 x 51.3 x 65	33 x 33x 60.5
Enclosure Material	Zinc alloy	Aluminum alloy	Aluminum Die Cast	Zinc alloy
Characteristics	- Compact size - High sealability - High sensitivity - Built-in cable gland - Cable gland fit 6-9mm dia. cable wires - M12 quick connector type available	- Large wiring enclosure - High repeatability - Large breaking power - Cable entry: 1/2NPT, M20	- Mounts from 4 sides - Robust construction - Large wiring enclosure	- All metal construction - Positive opening contact - Galvanically separated contacts - Cable entry: M16, PG11 or pre-molded flexible cable gland
Contact Configuration	SPDT	SPDT/DPDT	SPDT/DPDT	1NO/1NC, 2NO, 2NC (Snap action or Slow action)
IP/NEMA Ratings	IP67 / NEMA 4, 6	IP60 or IP65 (NEMA 4)	IP65 / NEMA 4	IP65 (NEMA 4)
Contact Ratings	5A 250VAC / 5A 30VDC	10A, 15A, 20A, 25A (125, 250, 480V)		A600/Q300
Actuator	10+ actuator heads including: plunger, roller, roller lever, rod, spring wire etc	actuator heads including: plunger, roller, roller lever, rod, spring wire etc	actuator heads including: plunger, roller, roller lever, rod, spring wire etc	plunger, roller, roller lever, rod, spring wire, wobble stick
Certificates				

Micro Switches, Limit Switches and Door Contacts

Product Family	SSD4 Latching Limit Switch	SND4121 Door Interlock	SXP Door Interlock	EDC-5/ EDC-6 Door Contact
Product Picture				
Body Dimensions (mm) LxWxH	40 x 35 x 106	30 x 31 x 62	30 x 12.4 x 30 (33.6)	50 x 16(19) x 24.5
Enclosure Material	Fiber-reinforced plastic	Plastic (94-V0)	Plastic (94-V0)	Plastic (94-V0)
Characteristics	- Conforms to EN50047 - Positive opening contact - Remote reset - Galvanically separated contacts - 3-Conduit entries: M16	- Conforms to EN50047 - Positive opening contact	- Long service life - Pull to test function - Double break Positive opening contact : SXP1	- Self-cleaning double break contact for long service life - Positive opening contact
Contact Configuration	1NO/1NC, 2NO, 2NC, 3NO 3NC, 2NC/1NO	1NO/1NO, NC, 3NC, 2NC/1NO	SPDT OR DPDT	1NC,2NC
IP/NEMA Ratings	IP66	IP67 (NEMA 4,6)	IP40	
Contact Ratings	A600/Q300	A600/Q300	A300 (10A, 300V)	2A/230VAC; 2A/200VDC
Certificates				
Product Family	ZP3/ZP3W Miniature Snap Switch	ZA/ZB4 Miniature Snap Switch	ZP4 Miniature Snap Switch	ZM4 Micro Switches
Product Picture				
Body Dimensions (mm) LxWxH	20x15.3x6.4	20x15.3x6.4	20 x 10 x 6.4	19.8 x 11.2 x 6.3
Current Rating	0.1A, 5A, 10A, 125/250VAC	0.1A, 1A, 10A ,125/250VAC 1/2 HP ,125VAC , 3/4 HP 250VAC	0.1A, 5A, 10A , 125/250VAC	0.1A, 5A ,10A ,125/250VAC
Characteristics	- Long service life - Low current switching - Low contact resistance - Water-proof(only ZP3W)	- Long service life - Low current switching - Low contact resistance - Double-break	- Long service life - Low current switching - Low contact resistance - Double-break	- Long service life - Wide choice of head - Low force option - Positive opening option - Double-break
Product Family	X3/X4 Sub-Miniature	X3M Miniature Snap Switch	ZM3 Miniature Snap Switch	ZM3M Miniature Snap Switch
Product Picture				
Body Dimensions (mm) LxWxH	12.7x8.9x5.1	12.7x5x8.9	19.8x12.4x6.4	19.8x6.4x9
Current Rating	X3(5A/7A 250VAC , 1A 125VAC)	X3(5A/7A 250VAC , 1A 125VAC)	0.1,1,5,11A,1/4HP 125/250VAC 5A 30VDC	0.1,1,5,11A,1/4HP 125/250VAC 5A 30VDC
Characteristics	- Low current switching - Low contact resistance - Choice of terminals or wire leads - Available in commercial & military grades	- Low current switching - Low contact resistance - Choice of terminals or wire leads - Available in commercial & military grades	- Low current switching - Low contact resistance - Choice of terminals or wire leads - Available in commercial & military grades	- Low current switching - Low contact resistance - Choice of terminals or wire leads - Available in commercial & military grades
Certificates				

Micro Switches

Product Family	VA-16G/VS-16G VB-16G/VM-16G	VS-W	VS16-AC/VM16-AC ZM3-AC	VC
Product Picture				
Body Dimensions (mm) LxWxH	27.8 x 10.3 x 13.1	15.9 x 10.3 x 33	Various	30 x 10.5 x 28.3
Current Rating	16A 1/2HP 125/250VAC	16A 1/2HP 125/250VAC	16A 1/2HP 125/250VAC	16A 1/2HP 125/250VAC
Characteristics	- Long service life - Wide choice of head - Low force option - Positive opening option	- Long service life - Various heads - Wide choice of op. force - IP67	- Various design for different applications - Available for commercial & military grades	- Positive open contact - Quick connector or pre-wired cable - IP67 for prewired version
Product Family	Z-15/20/25G	ZY-10G/ZD-10G	ZS-15G	SW31/32
Product Picture				
Body Dimensions (mm) LxWxH	49.2 x 17.5 x 24	49.2 x 17.4 x 26.5	49.2 x 17.4 x 24.3	64 x 21 x 32.5
Current Rating	15A/20A/25A 125/250/480VAC	10A 1/2HP 125/250VAC	15A 125/250/480VAC	10A 1/2HP 125/250VAC
Characteristics	- Long service life - Wide choice of heads	- High temperature rating - 5 terminals (share common) ZY or 6 terminals ZD	- IP67 water-proof - Positive opening contact - Long service life	- Long-life mechanism - Double break - High temperature rating
Contact Configuration	SPDT	2NO/2NC	1NO/1NC	1NO/1NC, 2NO/2NC
Product Family	LS	SLD-7	S-72	S-13/14/19/20
Product Picture				
Body Dimensions (mm) LxWxH	50 x 20.6 x 10.5	35 x 11 x 17.2(28.8)	23.2 x 10.2 x 22.6	46.3 x 15.8 x 16.3 46.3 x 15.8 x 28.6
Current Rating	5A	15A 1/2HP 125/250VAC	10A 125/250VAC	15A/25A 250VAC
Characteristics	- Completely sealed - Momentary or maintained - Different actuators	- Long service life - Prewired - IP67 (NEMA 4, 4X, 6)	- Long service life - Prewired - IP67 (NEMA 4, 4X, 6)	- Long-life mechanism - Low cost - High temperature rating
Contact Configuration	1NO/1NC or 2NO/2NC	SPDT	SPDT	1NO/1NO, 2NO/2NO
Product Family	TS-01	ZT1H	ZX10	SN7
Product Picture				
Body Dimensions (mm) LxWxH	54.6 x 38.1 x 4.8	49.2 x 32 x 17.4	49.2 x 17.5 x 24	54 x 21.4 x 43
Current Rating	5A/7A 250VAC	1A 125/250VAC	10A/125VDC; 3A/250VDC	10A 250VAC
Characteristics	- Verify ejector plate return in plastic injection molds - Slim design to fit anywhere	- High temperature rating of -65°C to 400°C - Platinum alloy contact	- Arc extinguishing design - Higher DC current capacity - Mounting same as Z series	- Compact size - Built-in cable gland - Fit 8.5 - 10.5mm cables
Contact Configuration	1NO/1NC	1NO/1NC	1NO/1NC	SPDT



ATEX, Class I, Class II Switches for Hazardous Environment

Product Family	EEX-S31/S32/S35/S36	X3V/X4V	EEX-SN6/SND6	EEX-SN31/32
Product Picture				
Dimensions (mm)	25.5 x 11 x 46.2 24 x 9 x 25	40 x 18 x 10	52 x 33 x 64	40 x 42 x 78
Characteristics	 II 2G EEx d IIC Gb  I M2 EEx d I Mb 94V-0 plastic	 II 2G EEx d IIC Gb  I M2 EEx d I Mb	 II 2G EEx d IIC Gb  I M2 EEx d I Mb	 II 2G EEx d IIC Gb  I M2 EEx d I Mb
Contact Ratings	A300/Q300	250VAC	A300/Q300	A300/Q300
IP/NEMA Ratings	IP67	IP54	IP67	IP67

Product Family	EEX-SND2/SN6	EEX-CP71/81	EEX-PB30 (CSP)	EXX-MP
Product Picture				
Dimensions (mm)	Various	Various	Various	Various
Characteristics	 II 2G EEx d IIC Gb  I M2 EEx d I Mb	 II 2G EEx d IIC Gb  I M2 EEx d I Mb	 II 2G EEx d IIC Gb  I M2 EEx d I Mb - Pushbutton, Selector - Emergency Stop - Control Stations	 II 2G EEx d IIC Gb  I M2 EEx d I Mb
Contact Ratings	A300/Q300	5A, 125-250VAC	A300/Q300	400mA/250V
IP/NEMA Ratings	IP67	IP67	IP67	IP67

Product Family	HXC	SP9-EX	HES	HEX
Product Picture				
Dimensions (mm)	101.6 x 101.6 x 101.4	93 x 51.3 x 65	69 x 53.5 x 155.5	73 x 52 x 142
Characteristics	- Class I and Class II - Explosion-proof - Cable entry: M20, 1/2NPT, 3/4NPT - SPDT, DPDT or 2-stage - Various head styles	- Class I and Class II - Explosion-proof - Cable entry: 1/2NPT - 1NO/1NC or 2NO/2NC - Various head styles	- Class I and Class II - Explosion-proof - Cable entry: M20, 1/2NPT, 3/4NPT - 1NO/1NC, 2NO/2NC - Various head styles	- Class I and Class II - Explosion-proof - Cable entry: M20, 1/2NPT, 3/4NPT - 1NO/1NC, 2NO/2NC - Various head styles
Contact Ratings	10A, 15A, 20A, 125/250V	15A, 20A, 25A 125/250/480V	A300/Q300	A300/Q300
IP/NEMA Ratings	NEMA 2,4,4X,6,6P,7,9,12,13	NEMA 1, 7, 9	NEMA 2,4,4X,6,6P,7,9,12,13	NEMA 2,4,4X,6,6P,7,9,12,13



Safety Switches



Product Family	SMN4191 Key Interlock Switches	SND2191/SN6191 Key Interlock Switches	SM31N-91 Key Interlock Switches	Hinge Safety Switch
Product Picture				
Body Dimensions (mm) LxWxH	30 x 30 x 45 30 x 31x 62	58 x 31.8 x 94 40 x 42 x 78	30 x 16 x 50	Various
Enclosure Material	Fiber-reinforced plastic	Fiber-reinforced plastic or Metal zinc die cast	Fiber-reinforced plastic	Fiber-reinforced plastic
Characteristics	- Conform to EN50047 - Positive opening contact - Galvanically separated contacts - Cable entry: PG11,M16, PG13.5,1/2NPT, M20	- EN50041/EN50047 compatible - Positive opening contact - Galvanically separated contacts - Cable entry: PG13.5, M20 1/2NPT	- Epoxy potted - Positive opening contact - Galvanically separated contacts - Mounting spacing: 20mm	- Conform to EN50047 - Positive opening contact - Galvanically separated contacts - Cable entry: PG13.5, M20 1/2NPT
Contact Configuration	1NO/1NC, 2NC/1NO, 2NC, 3NC	1NO/1NC, 2NC/1NO, 2NC, 3NC	1NO/1NC, 2NO, 2NC, 2NO/1NC, 2NC/1NO, 2NO/2NC	1NO/1NC, 2NO, 2NC, 3NO, 3NC, 2NO/1NC, 2NC/1NO
IP/NEMA Ratings	IP67 / NEMA 4, 4X	IP67 / NEMA 4, 4X	IP67 / NEMA 4, 6	IP65 / NEMA 4, 4X, 6
Contact Ratings	A600/Q300	A600/Q300	B300/R300	A600/Q300
Actuator	SND-K1 SND-K2 SND-K3			
Certificates				

Product Family	SS6191/SSD6191 Solenoid Key Interlock	SS6291 Elevator Safety Interlock	RDS1 Safety Switch	MP Magnetic Safety
Product Picture				
Body Dimensions (mm) LxWxH	40 x 46 x 194	40 x 42 x 78	91 x 25 x 20	Various
Enclosure Material	Fiber-reinforced plastic or Metal zinc die cast	Zinc alloy	Fiber-reinforced plastic	Fiber-reinforced plastic
Characteristics	- Solenoid: 24V, 120 or 240V - Positive opening contact - Power-to-lock or power-to-unlock - Optional indicator light - Cable entry: 1/2NPT, M20	- Conform to EN50041 - Positive opening contact - Up to 6 contacts - Cable entry: 1/2NPT, M20 - 4-direction installation	- Safety category: Up to SIL 3 (EN62061) PL e and Category 4 (EN113849-1) - Connecting up to 32 sensor in series - with two safety inputs and two safety output	- Non-Contact - Coded magnet - 10 million operations - Switching distance: 6-15mm, 9-18mm - Ratings: 400mA, 100VAC/DC, 24v,10mA
Contact Configuration	2NO/2NC, 3NC/1NO, 4NC			
IP/NEMA Ratings	IP66 / NEMA 4, 4X	IP67 / NEMA 4, 6		IP67 / NEMA 4, 4X, 6
Contact Ratings	A600/Q300 SN-K1	SN-K2 SN-K3 SN-K4	SS6-SHK	
Actuator				
Certificates				



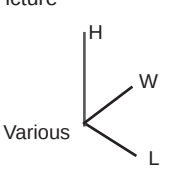
Cable Pull Switches

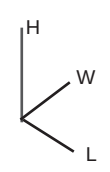
Product Family	SN4170/SND4170	SN6170/SND6170	SN2170	SN6271
 Actuating force	 20N	 50N 80N	 20N	 150N
Body Dimensions (mm) LxWxH	30 x 31 x 62	40 x 42 x 78	52 x 33 x 64	40 x 40.4 x 69.3
Enclosure Material	Fiber-reinforced plastic or zinc alloy	Fiber-reinforced plastic or zinc alloy	Zinc alloy	Aluminum alloy
Characteristics	- Max span 5 meters (16 ft) - One-way or two-way actuation - Pull-on/pull-off option - Lock and resettable option - Cable entry: M20, PG13.5 1/2NPT	- Max span 15 meters (49 ft) - One-way or two-way actuation - Lock and resettable option - Cable entry: PG13.5, 1/2NPT, M20	- Max span 5 meters (16 ft) - Conforms to EN50047 - Positive opening contact - Galvanically separated contacts - Cable entry: PG13.5, M20 1/2NPT (x3)	- Max span 30 meters (98 ft) - Compatible to EN50041 - Positive opening contact - Galvanically separated contacts - Cable entry: PG13.5, 1/2NPT, M20
Contact Configuration	1NO/1NC, 2NO, 2NC, 3NO, 3NC, 2NO/1NC, 2NC/1NO	1NO/1NC, 2NO, 2NC, 3NO, 3NC, 2NO/1NC, 2NC/1NO	1NO/1NO, 2NO, 2NC, 3NO, 3NC, 2NO/1NC, 2NC/1NO	1NO/1NO, 2NO, 2NC, 3NO, 3NC, 2NO/1NC, 2NC/1NO
IP/NEMA Ratings	IP67 / NEMA 4, 4X, 6	IP67 / NEMA 4, 6	IP67 / NEMA 4, 6	IP67 / NEMA 4, 6
Contact Ratings	A600/Q300	A600/Q300	A600/Q300	A600/Q300
Actuator				Actuator can be on the left or right side.
Certificates				

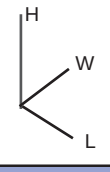
Product Family	CP7170/8170	HES/HEX Explosion-proof	HNS	CP-61 Anti-Two-Block Switch
 Product Picture	 250N	 80N	 80N	
Body Dimensions (mm) LxWxH	72 x 61 x 120	100 x 61 x 120	42 x 44.6 x 102.5	187.5 x 64 x 36
Enclosure Material	Aluminum alloy	Aluminum alloy	Zinc alloy	Aluminum alloy
Characteristics	- Max span 80 meters (262 ft) for CP7170 - Max span 160 meters (524 ft) for CP8170 - Options: E-stop, indicator - Positive opening contact - Galvanically separated contacts	- Max span 160 meters (524 ft) - Options: E-stop, indicator - Positive opening contact - Galvanically separated contacts	- Max span 30 meters (98ft) - Heavy duty body	- Prevents unintentional contact between hook block and boom point - Electrical switch is completely sealed twice (both inside and outside housing) - Protective bracket
Contact Configuration	1NO/1NC, 2NO, 2NC, 3NO, 3NC, 2NO/1NC, 2NC/1NO	3NC/1NO, 2NO/2NC	3NC/1NO, 2NO/2NC	1NO/1NO, 2NO/2NC
IP/NEMA Ratings	IP67 / NEMA 4	IP67 / NEMA 4	IP67 / NEMA 4, 6	IP69K
Contact Ratings	A600/Q300	A600/Q300	A600/Q300	A600/Q300
Actuator		Actuator can be on left right or both direction	Actuator can be on the left or right side.	Actuator can be on the left or right side.
Certificates				

Switches for Vehicles and Transportation



Product Family	ISP/INP/IMN Ignition Switches	DXP PTO Switches	PS Plunger Switches	DSW Seat Switches
Product Picture 				
Body Dimensions (mm) LxWxH	Various	30 x 31 x 62	118 x 36 x 92	30 x 31 x 62
Enclosure Material	Zinc or Plastic	Plastic	Plastic	Plastic
Characteristics	- Easy snap-in or nut mount - Available in 2, 3 or 4 pos - Variety of standard circuit configuration available	- Easy snap-in installation - Standard .032 x .250 blade terminals	- Easy snap-in installation - Standard .032 x .250 blade terminals	- Easy snap-in installation - Standard .032 x .250 blade terminals
Contact Configuration	Various	2NO/2NC, 3NO/3NC,	1NO, 1NC, 1NO/1NC, 2NC	1NO, 1NC, 1NO/1NC, 2NC
IP/NEMA Ratings	IP55(front)/IP53(back)	IP53 (or IP67)	IP53	IP53
Contact Ratings	20A/14VDC, 5A/60VDC	5A, 10A/14VDC	3A/14VDC	3A/14VDC

Product Family	IHP/IHM Ignition Switches	TN8/TL8 Toggle Switches	VS/VT Shifter/Turn Signal	DHM DC Hour Meters
Product Picture 				
Body Dimensions (mm) LxWxH	Dia 40.6 x 40.64	Various	Various	Various
Enclosure Material	Zinc alloy or fiber reinforced plastic	Zinc and fiber-reinforced plastic	Plastic housing with Zinc cast column	Plastic
Characteristics	- 22mm nut mount - Available in 2, 3 or 4 pos - Variety of standard circuit configuration available - Screw terminal or Dephi connectors	- 1,2 and 4 pole circuitry - Available in industrial and mil grade - 2 and 3 positions - Maintained or momentary	- Column size: 38, 45, 55mm - 2,3,4 and 6 speeds - Wash, horn or drop-down - Integral packard, Deutsch, wire harness - Handle deak weight: 160lbs	- Rugged design for true time stamp - 0-9999 hours Automatically recycle to zero
IP/NEMA Ratings	IP55(front)/IP53(back)	IP67 / IP69K	IP67	IP65
Contact Ratings	20A/14VDC, 8A/24VDC	20A/24VDC, 15A/120VAC, 6A/230VAC	2A@12.8VDC (Solenoid load) arc suppression Operating Voltage: 3-32V	6-50VDC

Product Family	TL7 Toggle Switches	TR7 Rocker Switches	PP22 Emergency Stop	ATV Vehicle Switches
Product Picture 				
Body Dimensions (mm) LxWxH	28.6 x 16.5 x 55.8	43.3 x 24.3 x 51.0	22mm Mounting Hole	82 x 67 x 56.5
Enclosure Material	Zinc and fiber-reinforced plastic	Fiber-reinforced plastic	Plastic (94-V0)	Plastic (94-V0)
Characteristics	- 1,2 pole circuitry - Available in industrial and mil grade - 2 and 3 positions - Maintained or momentary	- Tough and reliable rocker switch - 1,2 pole circuitry - 2 and 3 positions - Maintained or momentary	- Robust design for harsh environment - Dual O-ring seal - Self cleaning, sliding contact - IP67	- Compact size - Built-in cable gland - Fit 8.5 -10.5mm cables - Custom Control product designed to meet customer requirements
Contact Ratings	20A/125VAC, 10A/250VAC, 1.5HP 125/250VAC	20A/125VAC, 10A/250VAC, 1.5HP 125/250VAC	12VDC, 24VDC, 48VDC, 120VAC, 240VAC	12VDC

Indicator Lights and 12/16/18/22/30mm Operators



Product Family	IL-1	IL-2	IL-3	IL-4
Product Picture		 M8x0.5	 M12x1	
	Indicator Lights	Indicator Lights	Indicator Lights	Indicator Lights
Mounting Hole Diameter	5/16" (8mm)	8.2mm	12.2mm	1/2" (12.7mm)
Available Colors	Red, blue, green, amber			
Lamp Voltage	6, 12, 24, 48, 120, 240V			
IP/NEMA Ratings	IP40 (IP65 with seal)	IP40 (IP65 with seal)	IP40 (IP65 with seal)	IP40

Product Family	IL-5	IL-6	MB22-FP	MB22-S2
Product Picture				
	Indicator Lights	Indicator Lights	Pushbuttons/Selectors	Mushroom/E-Stop
Mounting Hole Diameter	3/4" (18mm)	22mm	22mm	
Characteristics	- Available colors: red, blue, green, amber, white		- Available colors: red, blue, green, amber, black - 1NO/1NC or 1NO/1NO	
Lamp Voltage	6, 12, 24, 48, 120, 240, 380, 600V		24, 120, 240V	
IP/NEMA Ratings	IP65	IP40 (IP65 with seal)	IP40	

Product Family	PB16-EP	PB16-S2	PB16-SK2	PB16-ET
Product Picture				
	Pushbutton	Selector Switch	Key Selector Switch	Mushroom/E-Stop
Mounting Hole Diameter	16mm	16mm	16mm	16mm
Characteristics	- Available colors: red, blue, green, amber, white - 1NO/1NC or 2NO/2NC B300/R300		- 2 position or 3 position	- 1NO/1NC or 2NO/2NC
Lamp Voltage	24, 120, 240V			
IP/NEMA Ratings	IP40		IP40	

Product Family	PP12	PM16	CPB-12/22/30	CPB-45/60
Product Picture				
	Pushbuttons	Pushbuttons	Capacitive Pushbutton	Capacitive Pushbutton
Mounting Hole Diameter	12mm	16mm	12mm/22mm/30mm	45mm/60mm
Characteristics	- Available colors: red, blue, green, amber - 1NO/1NC - 5A/30VDC, 5A/125VAC	- Available colors: red, blue, green, amber - 1NO/1NC - 10A/30VDC, 10A/125VAC	- Stainless steel - Red/Green - Momentary or Maintained - Output: PNP or NPN	- Robustic plastic - Green - Momentary or Maintained - Output: PNP-NO or NPN
Lamp Voltage			24VDC, 120V or 250V	10-30VDC
IP/NEMA Ratings	IP67/IP68	IP67/IP68	IP69K	IP69K

22mm Operators (NEMA 4, 4X, 6, 6P, A600/Q600)



Product Family	EM22	PB22-S/SL	PB22-ES	PB22-ET
Product Picture				
	Emergency Stop	Selector Switch	Emergency Stop	Emergency Stop
Mounting Hole Diameter	22mm	22mm	22mm	22mm
Characteristics	- All metal construction - Push-pull - Resistant to impact, vibration and shock	- Plastic or metal - 3 or 2-position - Momentary or maintained	- Plastic or metal - Push-pull	- Plastic or metal - Turn release
Lamp Voltage	6, 12, 24, 120, 240V		6, 12, 24, 120, 240V	6, 12, 24, 120, 240V
IP/NEMA Ratings	IP67 and IP69K	IP67 (or IP69K)	IP67 (or IP69K)	IP67 (or IP69K)

Product Family	PB22-EPL	PB22-ETL	PB22-MFS	PB22-S2L/S3L
Product Picture				
Mounting Hole Diameter	22mm	22mm	22mm	22mm
Characteristics	- Available colors:red, blue, green, yellow, white - Standard and illuminated	- E-stop/turn release	- Available colors:red, green - Standard and illuminated	- Various switching - 1NO/1NC - Standard and illuminated
Lamp Voltage	6,12,24,120,240V		6,12,24,120,240V	
IP/NEMA Ratings	IP65	IP65	IP65	IP65

30mm Operators (IP65, NEMA 4, 4X, A600/Q600)



Product Family	PBM30-FP/EP/GP Pushbuttons	PBM30-S/SL Selector Switches	PBM30-MP Mushroom Buttons	PBM30-ES/ET Emergency Stop
Product Picture				
Characteristics	- Plastic or zinc die cast body - Available button colors: red, blue, green, amber, black, white, yellow - Extend, Flush or Guarded	- Plastic or zinc die cast body - Available knob colors: red, blue, green, amber, black - Maintained or momentary - 2, 3, 4 positions	- Plastic or zinc die cast body - Available colors: red, blue, green, amber, black, white, yellow	- Plastic or zinc die cast body - Styles: push-pull

Product Family	PBM30-SK Key Selector Switches	PBM30-VR Potentiometers	PBM30-JS Joy Stick Switches	PBM30-FP/EP-D/T Illuminated Pushbuttons
Product Picture				
Characteristics	- Maintained or momentary - 2, 3, 4 positions	- Available in: 1K, 2.5K, 5K, 10K, 25K	- Plastic or zinc die cast body - 3 or 5 positions - Maintained or momentary	- Plastic or zinc die cast body - Available colors: red, blue, green, amber, white, yellow, clear



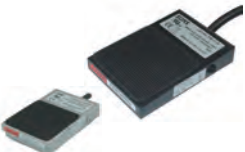
Control Stations/Pendant Stations/Signaling Device/Others



Product Family	CSP-22	CSP-30	CSZ-22/30	CSS
Product Picture				
	22mm Control Stations	30mm Control Stations	Control Stations	Pendant Stations
Dimensions (mm)	Various	Various	Various	
Characteristics	- Robust fiber reinforced plastic - Available 1 to 5 holes	- Robust fiber reinforced plastic - Available 1 to 3 holes	- Zinc or aluminum die cast - Available 1 to 6 holes	- Stainless steel - Available 1 to 20 holes - Accept custom order
Contact Ratings	A600/Q600	A600/Q600	A600/Q600	A600/Q600
IP/NEMA Ratings	IP65 / NEMA 4 / 4X	IP65 / NEMA 4 / 4X	IP65 / NEMA 4	IP65 / NEMA 4 / 4X
Product Family	CSD	CSN	CSB	CSH/CSE
Product Picture				
	Control Stations	Control Stations	Pendant Control Stations	Pendant Control Stations
Dimensions (mm)	52 x 55 x 97(131)	70 x 83 x 110	57 x 76 x 117	53x74x292 44x70x276
Characteristics	- Steel base/plastic cover - 1 or 3 buttons - Interlock, maintained opts	- Zinc die cast body - Interlock and maintained options are available	- 94V-0 plastic - Colors:red, yellow or black - Interlock & maintained opts	- 94V-0 plastic - 1-speed or 2-speed - Interlock, E-stop options
Contact Ratings	A600/P600	A600/P600	A600/P600	A600/P600
IP/NEMA Ratings	IP20 / NEMA 1	IP65 / NEMA 4	IP65 / NEMA 4 / 4X	IP65 / NEMA 4 / 4X
Product Family	CSG-22	800 700	TL-30/50/70/90	CB
Product Picture				
	Pendant Control Stations	Visual Signal/Rotating Beacons	Signaling Towers	Alarm Bells
Dimensions (mm)	Various	Various	30mm,50mm, 70mm, 90mm	4, 6, 8, 10 inches
Characteristics	- 94V-0 plastic - Up to 12 switch functions - 1-speed or 2-speed - Interlock options	- LED, Inandescent or strobe - Flashing or steady - Surface mount or pipe mount	- LED or strobe (universal voltage) - Flashing or steady - Sound module	- 6, 12, 24, 120, 240, 380V -Optional weather-proof backbox
IP/NEMA Ratings	IP65 / NEMA 4 / 4X	IP65	IP65	Indoor and Outdoor
Certificates				
Product Family	ESWL	118-F	FSC/FSV	TU TG TH TC
Product Picture				
	Emergency Lights for Elevator	Retiring CAM	Float Switches	Terminal Blocks
Dimensions	5-1/2 x 8-1/2 inch	742x50x84mm	Various	Various
Characteristics	- Wall surface mount - Stainless steel - LED	- 1.2A/110VDC, 2.4A/60VDC - Horizontal Force: 3 lbs - Horizontal Movement: 30mm (1.2 inch)	- 10,13,15A,120/250V - IP68	- Available 1 to 22 position - Current capacity: 15 to 150A
Certificates				

Industrial Foot Switches



Product Family	FS-1	FS-81	FS-9	FSC-31
Product Picture				
	Light Duty	Light to Medium Duty	Medium Duty	Medium to Heavy Duty
Dimensions (mm)	70 x 103.25 x 21.5	75 x 100 x 33 180 x 132 x 31 (twin)	70 x 80 x 36	89 x 142.5 x 54
Characteristics	- With nonskid pads - front or rear hinged style - Maintain style available - Stainless steel available	- Plastics or zinc cast body - Custom color available - SPDT, DPDT or 2-stage - Push-on/push-off available	- Plastics or zinc cast body - Custom color available - SPDT	- Zinc die cast body - Available in 1 or 2 pedals - SPDT, DPDT or 2-stage - Push-on/push-off available
Contact ratings	10A, 15A 250VAC	10A, 15A 250VAC	10A, 15A, 20A, 25A 250V	10A, 15A, 20A, 25A 250V
IP/NEMA Ratings	IP20 or IP68	IP20 or IP68	IP20 or IP68	IP65 or IP68

Product Family	FS-5	FS-61	FS-62	FS-41 / FSM-41
Product Picture				
	Heavy Duty	Heavy Duty	Heavy Duty	Heavy Duty
Dimensions (mm)	100 x 200 x 85 157 x 228 x 140 (guarded)	70.5 x 220 x 62 164 x 240 x 157 (guarded)	192 x 220 x 62 275 x 254 x 151 (guarded)	110 x 170 x 50 160 x 180 x 137 (guarded)
Characteristics	- Iron cast based with aluminum cast guard - SPDT, DPDT or 2-stage - maintained, anti-trip options	- Die cast aluminum body - SPDT, DPDT or 2-stage (with pressure point) - Options: maintained, anti-trip, variable speed, emergency stop, potentiometer		- Die cast aluminum or fiber-reinforced plastics - SPDT, DPDT - Anti-trip, steel guard
Contact Ratings	15A, 20A, 25A, 250VAC	15A, 20A, 25A or A600/Q300	15A, 20A, 25A or A600/Q300	10A, 15A, 20A, 25A , 250VAC
IP/NEMA Ratings	IP65 / NEMA 4	IP65 / NEMA 4 (or IP67/NEMA 6)		IP68 / NEMA 6, 6P

Product Family	FS-81R	FS-81-C2	FSM-91-C2	FSC-31-C3
Product Picture				
	Rocker Style	Airval Switch	Airval Switch	Airval Switch
Dimensions (mm)	25 x 29 x 20	75 x 100 x 33	70 x 80 x 36	89 x 142.5 x 54
Characteristics	- Plastics or zinc cast body - SPDT x 2	- Plastics or zinc cast body - 1/8-27NPT ports - 2-way or 3-way - Up to 150 PSI	- Plastics or zinc cast body - 1/8-27NPT ports - 2-way or 3-way - Up to 150 PSI	- Plastics or zinc cast body - 1/8-27NPT ports - 2-way, 3-way or 4-way - Up to 150 PSI
Contact Ratings	10A, 15A, 120/250VAC			
IP/NEMA Ratings	IP20/IP68			

Product Family	AS-1	FAS-1	FAS-91	FWC-1
Product Picture				
	Air Switches	Air Switches	Air Switches	Welder Foot switch
Dimensions (mm)	25 x 29 x 20	117 x 72 x 32	70 x 80 x 36	292x118x103
Characteristics	- SPDT, DPDT - Momentary or Maintained	- SPDT, DPDT - Momentary or Maintained	- SPDT, DPDT - Momentary or Maintained	- 1K, 5K, 10K Potentiometer - 1 or 2 15A/250V switch
Contact Ratings	15A, 20A, 120/250VAC	15A, 20A, 120/250VAC	15A, 20A, 120/250VAC	
IP/NEMA Ratings	IP20	IP68	IP68	IP68





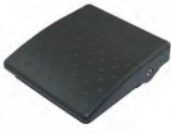
Medical Foot Switches

Featured Products (Available in Standard Switch Outputs or USB Outputs)

One Switch Function:



FS-81-SP



FS-21-10W



FS-1-10W-SS *



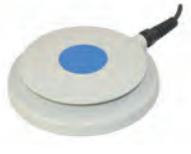
FS91-10W



FSBM-1-10



MED110



MED170

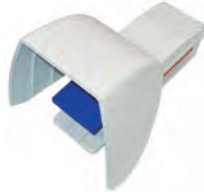
One Switch Functions:



FS81-SP-CS



FS61-SP *



FS61G-SP *



FS81-SP-W *



FS-82-SP(Twin)

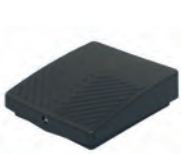


FSR-2



FS-71

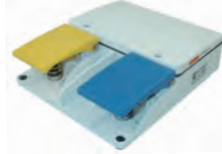
Two Switch Functions:



FS81R



FS82-SP



FS62-SP *



FS82-SP-W-S *



FS23-10W *



FS83-SP-W(P) *

Three Switch Functions:



FS81-SP(3-PEDAL)



FSB-3 *



FS-81-SP-W-B2



FS82-SP-M-B100M



FS82-SP-W-S-B1 *

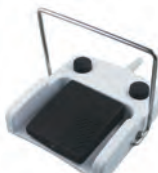
Four Switch Functions:



FS-82-SP-W-S-B2



FS-84-SP *



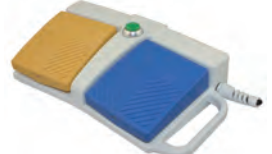
FS81R-W-B2 *



FS72-10W-B *



FS-83-SP-W-B2 *



FS82R-10W-B *

Five Switch Functions:

Six Switch Functions:



FSB-66 *



FS83R-10W-W *



FS73-10W *



FSR2-3 *



FSR11-10W-B2 *

Customized Solutions:



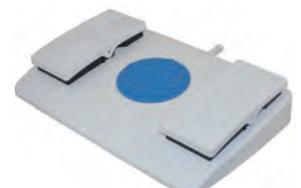
Surgical Microscope



Dental Control



CT Scanner



Multi-function



Proximity Sensors / Magnetic Switches

Product Family	SLS/SLC/SCC	SO-6	LC	MP-50
Product Picture				
	Proximity Sensors	Photoelectric Sensors	Load Cells	Bistable Magnetic Switches
Dimensions (mm)	17x17, 25x25, 30x30, 40x40 M8, M12, M18, M30	12.7 x 12.7	Aluminum, steel, stainless	104 x 52 x 47
Characteristics	- Shielded and non-shielded - Reverse polarity protection - Short circuit protection - Red LED indicators - 10-36VDC and 20-250VAC, 10-30VDC	- Internal current limiting resistor - Direct TTL interface - Buffer logic - Fast response time - Dust protective housing	- High accuracy, reliable - Various style for different applications - Offer custom solutions	- Aluminium enclosure - Actuating distance up to 50mm - Screw connection - Highly resistant to vibration - Available for actuation from front or side
Contact Ratings	100mA, 150mA, 200mA, 350mA			1A/120V 0.5A/250V
IP/NEMA Ratings	IP67		IP65, IP67	IP67
Certificates				

