

Industrial Automation Guide 2016



Industrial Products & Systems

industrial.omron.eu

Targeted Technologies

Creating maximum output with minimum input

By identifying the many ways of innovation in specific industries we developed the 'targeted technologies' concept. It's a way of thinking about technology in a prioritized format. Prioritized according to our customers' most pressing needs. The result? A set of solutions that make immediate impact on the core of our customers' businesses. A set of solutions that hit the target every time. Take a look at the examples on our website.

industrial.omron.eu/technologies



Welcome to our world

Our best-in-class devices for your automation system

Welcome to Omron's world of advanced industrial automation. The INDUSTRIAL AUTOMATION GUIDE is your essential tool to select best-in-class devices for your automation system. It highlights our core competences in sensing, control, visualisation, motion and panel components.

Of course, Omron offers a much larger range of products than you can find on the attached DVD. For more information on services and company competence visit our website.

Here you will find:

- Latest product news
- Technical product specifications
- 2D / 3D CAD Library
- Customer references
- Technology concepts
- Supporting product documentation
- Knowledge Base - "myOmron"
- Events Calendar
- Contact information

Find information fast!

Quick Links shortens your search. Quick Links are unique codes assigned to Omron products listed in this guide. Enter Quick Link codes in the search box on industrial.omron.eu to access detailed information on products in this guide.



Industrial Automation Guide 2016

	Omron at a glance	3
	The 361° Approach	4
	Sysmac: A fully integrated platform	6
	Product selection table	8
Automation systems	Machine automation controller	12
	Programmable logic controllers (PLC)	26
	Remote I/O	54
	Human machine interfaces (HMI)	68
	I/O cables and terminal blocks	82
	Ethernet cables and accessories	91
Motion & Drives	Motion controllers	96
	Servo systems	112
	Robots	170
	Frequency inverters	202
Sensing	Photoelectric sensors	236
	Mark and Color sensors	278
	Lightcurtains and area sensors	284
	Fiber optic sensors and amplifiers	292
	Inductive sensors	324
	Mechanical sensors/Limit switches	344
	Rotary encoders	358
	Cable connectors	366
Quality control & Inspection	Inspection & Ident systems	370
	Measurement sensors	426
Safety	Emergency stop and control devices	462
	Safety limit switches	472
	Safety door switches	480
	Safety sensors	506
	Safety logic control systems	544
	Safety outputs	566
Control components	Temperature controllers	574
	Power supplies	596
	Uninterruptible power supplies (UPS)	614
	Timers	622
	Counters	632
	Programmable relays	642
	Digital panel indicators	650
	Energy monitoring devices	660
	Photovoltaic	674
Switching components	Electromechanical relays	682
	Solid state relays	696
	Low voltage switchgear	706
	Monitoring products	722
	Pushbutton switches	750
Software	Software	766
	Outline of Major Standards	772
	Index	775

“To the machine the work of the machine,
to man the thrill of further creation.”

Kazuma Tateisi, founder of Omron

Omron at a glance

200.000 products ranging
input, logic and output

Sensing, Control Systems, Visualization, Drives, Robots, Safety,
Quality Control & Inspection, Control and Switching Components

7%

Investment in Research & Development

Innovation track
record of 80 years

Top 150 global patent assignee

1.200 employees dedicated to R&D

11.000 + issued and pending patents

37.000

Employees worldwide

210

Locations worldwide

22

Countries in EMEA

Working for the
benefit of society



Close to your needs

Technical training & seminars, technical support, Automation Technology Centers, online community (MyOmron), online catalogues and technical documentation, customer service & sales support, inter-operability labs (Tsunagi), safety services, repairs.

Your needs, our focus

Solutions perfectly matching your needs

We asked ourselves: 'What do you need in sensors and components?' Well, first you need reliability. Then a variety and choice of performance levels. You may also want advanced functionality, with special features defined by you – or you may want standardized solutions, with highly competitive prices.

Whatever it is, it can all add up to a wish list that is difficult to fulfil. Until now. That's because our new 361° Approach not only provides a complete all-round offer without gaps, it also puts you at the very centre of the product selection process. It's an approach that leads to a Perfect Match – one with the extra degree of confidence that comes from choosing Omron.

361° in one view



Quality



Line-up



Application



Customization



Global availability



Specs

	Quality	Line-up	Application	Customization	Global availability	Specs
PRO^{plus}	Premium	Tailored	Special	Yes	Yes	Application oriented
PRO	Premium	Complete	Advanced	Yes	Yes	Above Standard
LITE	Premium	Standard	Basic	No	No	Basic
	'Quality' refers to the standard of manufacturing and the materials used – this translates into reliability	'Line-up' refers to the number of model types	'Application' indicates the complexity of the automation	'Customization' is the possibility to modify the product		'Specs' refers to the choice of performance levels

The extra degree of advantage

Three distinct lines of sensors and components

Three distinct lines

361° Approach offers three distinct lines within each sensor or component product category. LITE products are cost-effective without any compromise in quality. PRO products represent the “install & forget” option, offering longer lifetime, higher protection, and more features. While PROplus products are designed for specific applications or customer demands.

Optimized reliability

All three lines are backed by the Omron commitment to quality, so even when you need a price-competitive advantage, you can be confident that they will never let you down.

Solutions that perfectly match your needs

The 361° Approach ensures that you can quickly and easily identify the perfect match solution to your needs – nothing more, nothing less.

Optimized costs

Your sensor and component costs are also minimized – because it eliminates over-specification.

Why an extra 1°?

The extra degree is what you get when you do business with Omron, and that means different things to different customers – all depending on their needs. For example, if you need specification advice, the extra degree is ‘service’. But ultimately, to everyone it means “an extra degree of confidence in the perfect match”.



Sysmac: A fully integrated platform

Integration and Functionality

Sysmac is an integrated automation platform dedicated to providing complete control and management of your automation plant. At the core of this platform, the Machine Controller series offers synchronous control of all machine devices and advanced functionality such as motion, robotics and database connectivity. This multidisciplinary concept allows you to simplify solution architecture, reduce programming and optimize productivity.



Machine Automation Controller

FACTORY
AUTOMATION

MACHINE
CONTROL



Motion



Filling line

- Motion Control: Integrated within the IDE, and operating in real-time
- Standard PLCopen Function Blocks plus Omron generated motion FB's
- Direct Synchronous control for Position, Speed and Torque



Safety



Assembly

- All safety related data is synchronized with the whole network
- Safety functions such as muting, guard locking, EDM and valve monitoring are simple to manage

- ✓ **One Integrated Development Environment software** for Configuration, Programming, Simulation and Monitoring



Information



- Sysmac communicates in real-time with Databases such as SQL
- Secure Data: In the event of a server going down or losing communications, data is automatically stored in internal memory
- Sysmac operates with Databases at high speed [1000 table element/ 100 ms] ensuring realistic Big Data Processing to improve productivity and aid predictive maintenance etc.

✓ Integrated Automation Control:

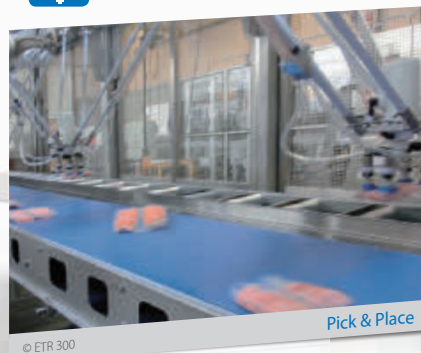
The Sysmac platform is scalable and provides the performance and functionality for a wide range of solutions from simple machines through to manufacturing cells

Vision



- Higher resolution images available without increasing the vision processing time
- Shape search technology: Provides more stable and accurate object detection for Pick & Place projects

Robotics



- Up to 8 Delta robots with one controller
- Time-based Robotic Function Blocks make programming easier

Sensing



- Full control of the process parameter setting and predictive maintenance functions
- High precision detection and positioning data synchronized on the network

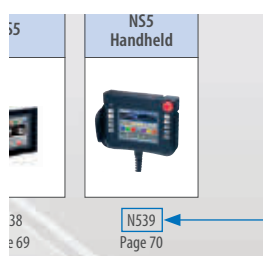
Product selection table

Automation systems				
	12 Machine automation controller	26 Programmable logic controllers (PLC)	54 Remote I/O	68 Human machine interfaces (HMI)
				
	96 Motion controllers	112 Servo systems	170 Robots	202 Frequency inverters
Sensing				
	236 Photoelectric sensors	278 Mark and Color sensors	284 Lightcurtains and area sensors	292 Fiber optic sensors and amplifiers
				
	370 Inspection & Ident systems	426 Measurement sensors		
Safety				
	462 Emergency stop and control devices	472 Safety limit switches	480 Safety door switches	506 Safety sensors
				
	574 Temperature controllers	596 Power supplies	614 Uninterruptible power supplies (UPS)	622 Timers
Switching components				
	682 Electromechanical relays	696 Solid state relays	706 Low voltage switchgear	722 Monitoring products
				
	766 Software			
Software				

Safety

Find information fast!

Quick Links shortens your search. Quick Links are unique codes assigned to Omron products listed in this guide. Enter Quick Link codes in the search box on industrial.omron.eu to access detailed information on products in this guide.



Quick Link

Safety

Emergency stop and control devices	462	G9SE	553
Selection table	464	Safety guard switching unit	
Standard pushbutton switches		G9SX-GS/A4EG	554
A16	753	Limited speed monitoring unit	
A22N	755	G9SX-LM	556
Emergency stop pushbutton switches		Standstill monitoring unit	
A165E	467	G9SX-SM	558
A22E	468	Programmable safety controllers	
Rope pull emergency stop switches		G9SP-N_	559
ER-series rope pulls	469	NX-Safety stand alone modular I/O system	562
Safety limit switches	472	NE1A-SCPU_	563
Selection table	474	NX Safety distributed	564
Safety limit switch with metal housing		Compact non-contact door switch/flexible safety unit	
D4B	475	G9SX-NS	544
Safety limit switch with plastic housing		Safety outputs	566
D4N	477	Selection table	569
Safety door hinge switch		Free potential outputs	
D4NH	479	G7SA	570
Safety limit switch with manual reset		G7S_-E	571
D4N-_R	473	Motion	
Safety door switches	480	MX2	212
Selection table	482	Accurax G5	117
Non-contact switches			
F3S-TGR-N_C	484		
F3S-TGR-N_R	487		
F3S-TGR-N_M/-N_U	490		
F3S-TGR-S_A/-S_D	492		
F3S-TGR-N_X	495		
Safety door switches			
D4NS	497		
D4BS	498		
F3S-TGR-KM15/-KM16/-KH16	499		
Guard-lock safety door switch			
D4NL	501		
D4SL-N	502		
F3S-TGR-KHL1	504		
F3S-TGR-KHL3	505		
Compact non-contact door switch/flexible safety unit			
D40A/G9SX-NS	480		
Safety sensors	506		
Selection table	508		
Safety light curtain			
Slim housing			
F3SJ-E	510		
F3SJ-B	514		
F3SJ-A	518		
Robust housing			
F3S-TGR-CL	524		
F3SG-RA	529		
F3SG-RE	534		
F3S-TGR-CL_-K_	507		
F3S-TGR-CL_-K_C	507		
Muting actuators			
F39-TGR-MCL	538		
F3W-MA	539		
Safety laser scanner			
OS32C	541		
Safety logic control systems	544		
Selection table	546		
Safety relay units			
G9SA	549		
G9SB	550		
G9SR	551		
G9SX	552		

Emergency stop and control devices

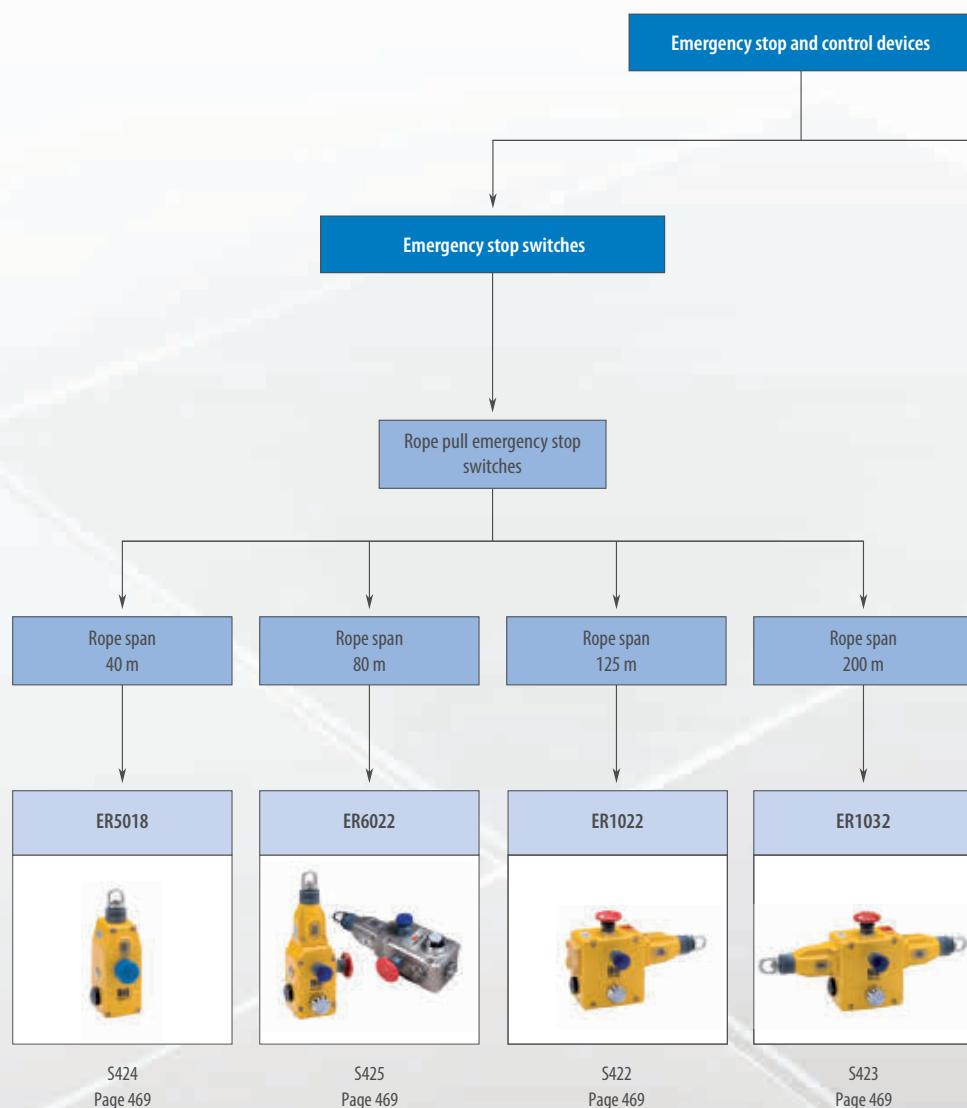
INTERACT WITH YOUR MACHINE

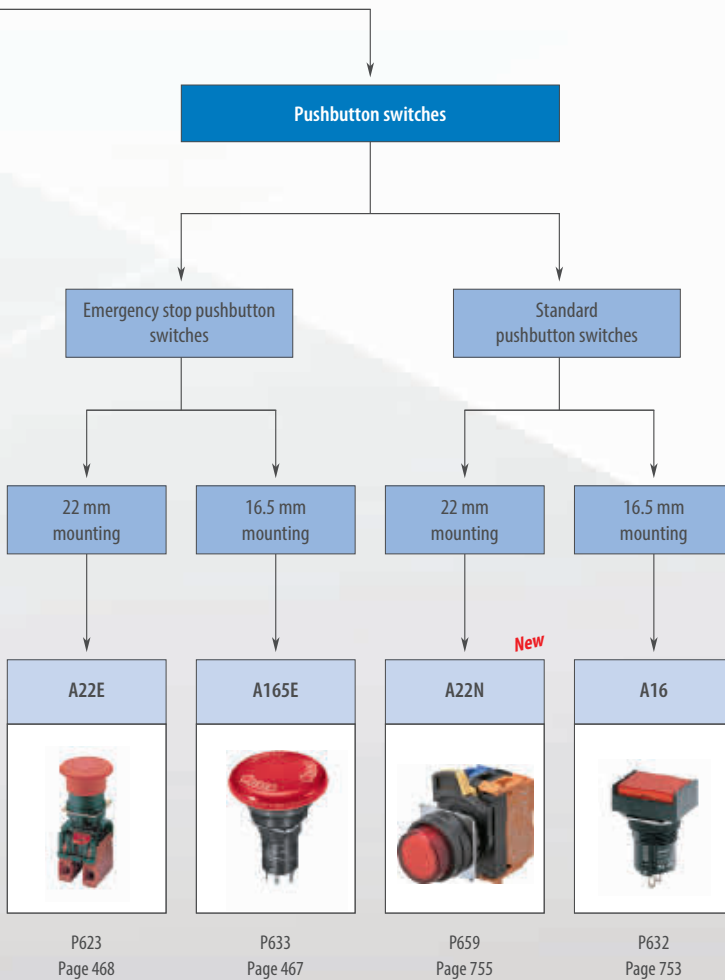
Emergency stop rope pull switches

Conveyor systems require Emergency stop function along the whole length of the machine. Rope pull emergency stop switches provide this function along the whole line with minimal wiring effort. Long rope spans, simple tensioning of the rope and a range of accessories in stainless steel support fast installation and enhanced durability.





Emergency stop pushbutton switches



Emergency stop switches are used to prevent movements that would endanger workers' hands. They are used in industrial applications such as switchboards, two-hand-operation consoles and all other kinds of machines.









Selection table

Category		Pushbutton switch	
			
Model		A16	A22N
Selection criteria	Mounting	Nut-mounting	
	Size	16 mm	22 mm
	Shape		
Pushbutton color	Incandescent lamp-lighted	Red	■
		Yellow	■
		Green	■
		White	■
		Blue	■
	LED-lighted	Red	■
		Yellow	■
		Green	■
		White	■
		Blue	■
	Non-lighted	Red	■
		Yellow	■
		Green	■
		White	■
		Blue	■
Features	Momentary operation	■	■
	Self-holding	■	■
	Number of contacts	2	6
	IP rating	IP65	IP66
	Legend plate	■	■
Switch ratings [A]	125 VAC	5	10
	250 VAC	3	6
	30 VDC	3	10
	Rated resistive load	5 A at 125 VAC, 3 A at 250 VAC, 3 A at 30 VDC	10 A at 120 VAC 6 A at 240 VAC
Terminals	Solder	■	—
	PCB	—	—
	Screw-less Clamp	—	—
Operating voltage	5 VAC/VDC	■	—
	12 VAC/VDC	■	—
	24 VAC/VDC	■	■
	120/240 VAC	—	■
Form	SPDT	■	—
	DPDT	■	—
	SPST-NO	—	■
	SPST-NC	—	■
	SPST-NO + SPST-NC	—	■
	DPST-NO	—	■
	DPST-NC	—	■
Page/Quick Link		753/P632	755/P659

Category		Emergency stop pushbutton switches	
			
Model		A165E	A22E
Selection criteria Features	Housing	Plastic	
	Protection class	IP65	
	Operating temperature range	–10 to 55°C	–20 to 70°C
	Head size	30 mm, 40 mm	30 mm, 40 mm, 60 mm
	Conformity	EN 60947-5-1	
	Max. rope span	—	
	Conduit size M20	—	
	Additional E-Stop button	—	
	LED indicator beacon	—	
	Stainless steel housing	—	
	Explosion proof housing	—	
	Lighted head	■	—
	Push lock – pull reset	—	■
Application	E-Stop application	■	
	General safety application	■	
Contact configuration	SPST (NC)	■	
	DPST (NC)	■	
	SPST (NO) + SPST (NC)	—	■
	TPST (NC)	■	—
Page/Quick Link		467/P633	468/P623

Category		Rope pull switches			
					
Model		ER 5018	ER 6022	ER 1022	ER 1032
Selection criteria	Housing	Metal			
	Protection class	IP67			
	Operating temperature range	-25 to 80°C			
	Head size	-			
	Conformity	EN60947-5-1:2004, EN60947-5-5:1997+A1:2005; EN60204-1; EN ISO 13850:2006			
Features	Max. rope span	40 m	80 m	125 m	200 m
	Conduit size M20	■			
	Additional E-Stop button	■			
	LED indicator beacon	-	■	■	■
	Stainless steel housing	-	Available	-	-
	Explosion proof housing	-	■	■	■
	Lighted head	-			
	Push lock – pull reset	-			
	Push lock, turn reset	-			
	Push lock, lock key reset	-			
Application	E-Stop application	■			
	General safety application	■			
Contact configuration	2NC+1NO	■	■	-	-
	3NC	■	■	-	-
	4NC+2NO	-	-	■	■
Page/Quick Link		469/S424	469/S425	469/S422	469/S423

■ Standard

□ Available

- No/not available



Emergency stop switch

The A165E line-up offers E-Stop switches with various head types. For flexible application, a wide range of accessories is provided. To set up easy installation and maintenance, various contact combinations are available.

- Direct opening mechanism with minimum contact separation of 3 mm
- Safety lock mechanism prevents misuse
- Short mounting depth
- Modular construction; easy installation using snap-in switch

Ordering information

Switches	Rated voltage	Pushbutton color	Pushbutton size	Terminal	Contact	Order code
						Standard load (125 VAC at 5 A, 250 VAC at 3 A, 30 VDC at 3 A)
LED	24 VDC	Red	30 dia.	Solder terminal	SPST-NC	A165E-LS-24D-01
None	—				DPST-NC	A165E-LS-24D-02
					SPST-NC	A165E-S-01
					DPST-NC	A165E-S-02
					TPST-NC	A165E-S-03U
LED	24 VDC		40 dia.		SPST-NC	A165E-LM-24D-01
None	—				DPST-NC	A165E-LM-24D-02
					SPST-NC	A165E-M-01
					DPST-NC	A165E-M-02
					TPST-NC	A165E-M-03U

Note: The above models have a surface indication of "RESET." Models with "STOP" indication are also available. For further information, contact your Omron representative.

Accessories (order separately)

Item	Type	Precautions	Order code
Yellow plate	Yellow, 45 dia.	Use this as an emergency stop nameplate.	A16Z-5070
Panel plug	Round	Used for covering the panel cutouts for future panel expansion.	A16ZT-3003
Tightening tool	—	Useful for repetitive mounting. Be careful not to tighten excessively.	A16Z-3004
Extractor	—	Convenient for extracting the switch and lamp.	A16Z-5080

Specifications

Rated voltage	Resistive load	
	A165E series	A165E_U series
125 VAC	5 A	1 A
250 VAC	3 A	0.5 A
30 VDC	3 A	1 A
Minimum applicable load	150 mA at 5 VDC	1 mA at 5 VDC

Features	Characteristics
Operating force (OF) max.	14.7 N
Releasing force (RF) min.	0.1 N·m
Pretravel (PT)	3.5±0.5 mm (3±0.5 mm in case of A165E_U series)

Emergency stop switch		
Allowable operating frequency	Mechanical	20 operations/minute max.
	Electrical	10 operations/minute max.
Insulation resistance	100 MΩ min. (at 500 VDC)	
Dielectric strength	1,000 VAC, 50/60 Hz for 1 min between terminals of same polarity 2,000 VAC, 50/60 Hz for 1 min between terminals of different polarity and also between each terminal and ground 1,000 VAC, 50/60 Hz for 1 min between lamp terminals ^{*1}	
Durability	Mechanical	100,000 operations min.
	Electrical	100,000 operations min.
Ambient temperature	Operating: -10 to 55°C (with no icing or condensation) Storage: -25 to 65°C (with no icing or condensation)	
Protection against electric shock	Class II	

^{*1} LED not mounted. Test them with the LED removed.



Emergency stop switch

The A22E line-up of E-Stop switches offers various head types as well as lighted models. E-stop shrouds and control boxes as accessories provide flexibility in application.

- Direct opening mechanism with minimum contact separation of 3 mm
- Safety lock mechanism prevents misuse
- Easy mounting of switch block
- Lighted models for easy diagnosis and maintenance
- Modular design for flexibility in application

Ordering information

Non-lighted models

Description	Output	Color of cap	Order code
30-dia. head Push-lock Turn-reset	SPST-NC	Red	A22E-S-01
	SPST-NO/SPST-NC		A22E-S-11
	DPST-NC		A22E-S-02
40-dia. head Push-lock Turn-reset	SPST-NC		A22E-M-01
	SPST-NO/SPST-NC		A22E-M-11
	DPST-NC		A22E-M-02
60-dia. head Push-lock Turn-reset	SPST-NC		A22E-L-01
	SPST-NO/SPST-NC		A22E-L-11
	DPST-NC		A22E-L-02

Lighted models

Description	Output	Lighting	Rated voltage	Color of cap	Order code
40-dia. head Push-lock Turn-reset	SPST-NC	LED	24 VAC/VDC	Red	A22EL-M-24A-01
	SPST-NO/SPST-NC		24 VAC/VDC		A22EL-M-24A-11
	DPST-NC		24 VAC/VDC		A22EL-M-24A-02
40-dia. head Push-lock Turn-reset	SPST-NC		220 VAC		A22EL-M-T2-01
	SPST-NO/SPST-NC		220 VAC		A22EL-M-T2-11
	DPST-NC		220 VAC		A22EL-M-T2-02

Accessories (Order separately)

Item	Classification	Remarks	Order code
Control boxes (enclosures)	One hole	Material: Polycarbonate resin	A22Z-B101
	One hole, yellow box (for emergency stop)		A22Z-B101Y
	Two holes		A22Z-B102
	Three holes		A22Z-B103
Legend plates for emergency stop	60-dia. black letters on yellow back-ground	"EMERGENCY STOP" is indicated on the plate.	A22Z-3466-1
	90-dia. black letters on yellow back-ground		A22Z-3476-1
Lock plate	Locks the mounting latch of the switch assembly	–	A22Z-3380

Specifications

Contacts (standard load)

Rated carry current	Rated voltage	Rated current (A)			
		AC15	AC12	DC13	DC12
10	24 VAC	10	10	–	–
	220 VAC	3	6	–	–
	24 VDC	–	–	1.5	10
	220 VDC	–	–	0.2	0.6

- Note**
- Rated current values are determined according to the testing conditions. The above ratings were obtained by conducting tests under the following conditions.
 - (1) Ambient temperature: $20 \pm 2^\circ\text{C}$
 - (2) Ambient humidity: $65\% \pm 5\%$
 - (3) Operating frequency: 20 operations/minute
 - Minimum applicable load: 10 mA at 5 VDC

Contacts (microload)

Rated applicable load	Minimum applicable load
50 mA at 5 VDC (resistive load)	1 mA at 5 VDC

Characteristics

Item	Emergency stop switches	
	Non-lighted model: A22E	Lighted model: A22EL
Dielectric strength	2,500 VAC, 50/60 Hz for 1 min between terminals of same polarity	
	2,500 VAC, 50/60 Hz for 1 min between terminals of different polarity and also between each terminal and ground	
Durability	Mechanical	Momentary operation: 300,000 operations min.
	Electrical	300,000 operations min.
Degree of protection	IP65 (oil-resistant)	IP65



Emergency stop switch

- Tension indicator – the tension indicator makes the system easy to set up and to maintain the proper rope tension
- Heavy-duty housing – the die-cast housing and stainless steel eye nut makes the ER-series rope pull switches suitable for demanding industrial applications
- Vibration tolerant – the snap-acting switch contacts protect against nuisance tripping due to vibration
- Integral E-stop – the E-stop button provides emergency stopping capability at the extreme end of the installation and is field serviceable
- ER6022 available in stainless steel housing
- ER6022, ER1022 and ER1032 available in explosion proof housing

Ordering information

Standard models

Aluminum die-cast housing

E-Stop	Indicator beacon	Contacts	Wiring entry	Order code
Not included	–	2 N/C + 1 N/O	3 × M20	44506-4010 ER5018-021M
Not included	–	3 N/C	3 × M20	44506-4030 ER5018-030M
Included	–	2 N/C + 1 N/O	3 × M20	44506-4110 ER5018-021ME
Included	–	3 N/C	3 × M20	44506-4130 ER5018-030ME
Not included	Not included	2 N/C + 1 N/O	3 × M20	44506-5010 ER6022-021M
Not included	Not included	3 N/C + 1 N/O	3 × M20	44506-5050 ER6022-031M
Not included	Included (24 VDC)	2 N/C + 1 N/O	3 × M20	44506-5110 ER6022-021ML
Not included	Included (24 VDC)	3 N/C + 1 N/O	3 × M20	44506-5150 ER6022-031ML
Included	Not included	2 N/C + 1 N/O	3 × M20	44506-5210 ER6022-021ME
Included	Not included	3 N/C + 1 N/O	3 × M20	44506-5250 ER6022-031ME
Included	Included (24 VDC)	2 N/C + 1 N/O	3 × M20	44506-5410 ER6022-021MEL
Included	Included (24 VDC)	3 N/C + 1 N/O	3 × M20	44506-5450 ER6022-031MEL
Included	Included (24 VDC)	4 N/C + 2 N/O	4 × M20	44506-6410 ER1022-042MELL
Included	Included (24 VDC)	4 N/C + 2 N/O	4 × M20	44506-6510 ER1022-042MELR
Included	Included (24 VDC)	4 N/C + 2 N/O	4 × M20	44506-7410 ER1032-042MEL

Stainless steel housing

E-Stop	Indicator beacon	Contacts	Wiring entry	Order code
Not included	Not included	2 N/C + 2 N/O	3 × M20	44506-5810 ER6022-022MSS
Not included	Not included	3 N/C + 1 N/O	3 × M20	44506-5830 ER6022-031MSS
Not included	Included	2 N/C + 2 N/O	3 × M20	44506-5910 ER6022-022MLSS
Not included	Included	3 N/C + 1 N/O	3 × M20	44506-5930 ER6022-031MLSS
Included	Not included	2 N/C + 2 N/O	3 × M20	44506-5850 ER6022-022MESS
Included	Not included	3 N/C + 1 N/O	3 × M20	44506-5870 ER6022-031MESS
Included	Included	2 N/C + 2 N/O	3 × M20	44506-5950 ER6022-022MELSS
Included	Included	3 N/C + 1 N/O	3 × M20	44506-5970 ER6022-031MELSS

Explosion proof models

Aluminum die-cast housing

E-Stop	Indicator beacon	Contacts	Wiring entry	Order code
Not included	Not included	1 N/C + 1 N/O	pre-wired, 3 m	44506-5600 XER6022-011C3
Not included	Not included	1 N/C + 1 N/O	pre-wired, 3 m	44506-6600 XER1022-011C3L
Not included	Not included	1 N/C + 1 N/O	pre-wired, 3 m	44506-6610 XER1022-011C3R
Not included	Not included	1 N/C + 1 N/O	pre-wired, 3 m	44506-7600 XER1032-011C3

Stainless steel housing

E-Stop	Indicator beacon	Contacts	Wiring entry	Order code
Not included	Not included	1 N/C + 1 N/O	pre-wired, 3 m	44506-5610 XER6022-011C3SS
Not included	Not included	2 N/C	pre-wired, 3 m	44506-5620 XER6022-020C3SS

Accessories

Item	Applicable model	Order code
Replacement Lid	ER5018	44506-3700 SM06-SL400
	ER6022	44506-5700 SM06-SL500
	ER6022-SS stainless steel	44506-5730 SM06-SLXER6022SS
Replacement Lid/LED, 24 VDC	ER1022	44506-6710 SM06-SL710
	ER1032	44506-7710 SM06-SL711
	ER6022-SS stainless steel	44506-5740 SLER6022LSS

Item	Applicable model	Order code
Replacement Lid/LED	ER6022	44506-5710 SM06-SL510
Rope kit, 5 m, stainless steel	ER5018, ER6022, ER1022, ER1032	44506-2705 RK5
Rope kit, 10 m, stainless steel	ER5018, ER6022, ER1022, ER1032	44506-2710 RK10
Rope kit, 20 m, stainless steel	ER5018, ER6022, ER1022, ER1032	44506-2720 RK20
Rope kit, 50 m, stainless steel	ER5018, ER6022, ER1022, ER1032	44506-2750 RK50
Rope kit, 80 m, stainless steel	ER6022, ER1022, ER1032	44506-2780 RK80
Rope kit 100 m, stainless steel	ER6022, ER1022, ER1032	44506-2711 RK100
Rope kit 126 m, stainless steel	ER1032	44506-2726 RK126
Rope only, 5 m	ER5018, ER6022, ER1022, ER1032	44506-3705 R5M
Rope only, 10 m	ER5018, ER6022, ER1022, ER1032	44506-3710 R10M
Rope only, 20 m	ER5018, ER6022, ER1022, ER1032	44506-3720 R20M
Rope only, 50 m	ER5018, ER6022, ER1022, ER1032	44506-3750 R50M
Rope only, 100 m	ER5018, ER6022, ER1022, ER1032	44506-3711 R100M
Rope only, 126 m	ER5018, ER6022, ER1022, ER1032	44506-3726 R126M
Tensioner gripper, stainless steel	ER5018, ER6022, ER1022, ER1032	44506-4700 SM06-TG00
Eye bolt stainless steel, 8 per pack	ER5018, ER6022, ER1022, ER1032	44506-4710 SM06-EB10
Double loop clip, stainless steel, 4 per pack	ER5018, ER6022, ER1022, ER1032	44506-4720 SM06-DL20
Thimble stainless steel, 4 per pack	ER5018, ER6022, ER1022, ER1032	44506-4770 SM06-THSS
Turnbuckle, stainless steel	ER5018, ER6022, ER1022, ER1032	44506-4730 SM06-TB30
Spring, stainless steel	ER5018, ER6022, ER1022, ER1032	44506-4750 SM06-SP50
Rope pulley, stainless steel	ER5018, ER6022, ER1022, ER1032	44506-4780 SM06-RPSS
E-Stop mechanism	ER5018, ER6022, ER1022, ER1032	44506-4760 SM06-ES60
Yellow E-Stop Background Label	ER5018, ER6022, ER1022, ER1032	44506-4791 SM06-YLES

Specifications

Standard models

Item		Applicable model				
		ER5018	ER6022	ER6022SS	ER1022	ER1032
Electrical	Contact configurations	2 N/C + 1 N/O, 3 N/C	2 N/C + 1 N/O, 3N/C + 1N/O	3 N/C+1 N/O, 2 N/C+2 N/O	4 N/C + 2 N/O	4 N/C + 2 N/O
	Safety contacts	2 N/C, 3 N/C	2 N/C, 3 N/C		4 N/C	
	Switching ability	AC: 120 V–6 A, 240 V–3 A, inductive DC: 24 V–2.5 A, inductive				
	Auxiliary contacts	1 N/O		1 N/O, 2 N/O	2 N/O	
	Max. switching current/Volt/Amp	240 V/720 VA				
	Electrical life	1,000,000 minimum				
	LED indicator beacon	–	24 VDC			
Mechanical	Max. rope span	40 m	80 m	100 m	125 m	125 m each side
	Case material	Die-cast aluminum alloy		Die-cast 316 stainless steel casing	Die-cast aluminum alloy	
	Eye nut material	Stainless steel				
	Wiring entry	3 × M20			4 × M20	
	Mechanical life	1,000,000 minimum				
Environ- mental	Protection	IP67 (NEMA 6)				
	Operating temperature	–25 to 80°C				
	Cleaning	Water washdown				
Com- pliance	Standards	EN60947-5-1:2004, EN60947-5-5:1997+A1:2005; EN60204-1; EN ISO 13850:2006				
	Approvals/listings	CE marked for all applicable directives, UL and C-UL				

Explosion proof models

Item		Applicable model		
		XER6022	XER1022	XER1032
Electrical	Contact configuration	1 N/C + 1 N/O, 2 N/C		
	Safety contact	1 N/C, 2 N/C		
	Auxiliary contact	1 N/O		
	Rated voltage and current (AC15)	400 VAC/2 A AC, 250 VAC/4 A AC		
	Rated voltage and current (DC)	250 VDC/0.15 A DC		
	Switching ability	125 VAC/5 A, 250 VAC/5 A		
	AC ratings	Inductive load 125 VAC/3 A, 250 VAC/3 A		
	Switching ability	30 VDC/7 A, 250 VDC/0.15 A		
Compliance	DC ratings	Inductive load 30 VDC/5 A, 250 VDC/0.03 A		
	Ex-classification	II 2 G EEx d II C T6		
	Certification	PTB00 ATEX 1093X IBExU 01 ATEX 1007X		

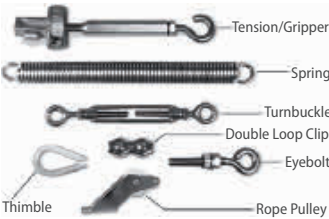
Accessories

RK rope tension kit



The RK rope tension kit comes with all of the required hardware for most installations. A spring is required as shown in the installation example below.

Installation Hardware



Individual hardware items may be purchased for specific installation requirements.