### ASO Safety Solutions SENTIR Edges



#### Selecting the Edge Profile

ASO Safety Solutions offers several sizes of safety edges to fit most applications, including automatic gate, door, and machine applications. The size (profile) of the edge should be selected based on the application and overtravel permitted by the profile. If the edge experiences overtravel beyond the allowed amount, damage may occur. An additional important deciding factor to consider when determining which profile to use is sensitivity. Sensitivity is the amount of force required to activate the unit.

Where greater actuating forces or overtravel requirements are needed, a safety bumper may be the preferred approach.

Profile Series	Test Speed (10 mm/sec [0.4 in/sec]*		Tested according to DIN EN ISO 13856-2, Test Unit round 80mm, Actuating Point C3, Temp 20°C	
15mm x 10mm [0.6 in x 0.4 in]	Force (F) Required for Actuation (A)	42.9 N [9.64 lbf]	F(N) c	
	Actuation Distance c	1.8 mm [0.07 in]	450 B1 C C C C C C C C C C C C C C C C C C	
	Overtravel Distance d to 250N	1.0 mm [0.04 in]	250 150 A	
	Overtravel Distance f to 400N	2.0 mm [0.08 in]	50 0 0,5 c1 1,5 2 d 2,5 3 3,5 4 4,5 5 e e s	
	Overtravel Distance h-c to 600N	2.8 mm [0.11 in]		
15mm x 25 mm [0.6 in x 1.0 in]	Force (F) Required for Actuation (A)	43N [9.67 lbf]	F[N] C	
	Actuation Distance c	3.7 mm [0.15 in]	450 B2 350 B1	
	Overtravel Distance d to 250N	7.6 mm [0.30 in]		
	Overtravel Distance f to 400N	9.3 mm [0.37 in]	50 0 $c$ $2$ $4$ $6$ $d$ $8$ $10$ $12$ $14$ $16e$	
	Overtravel Distance h-c to 600N	10.9 mm [0.43 in]	<u>e</u> f <u>b</u> s(nm)	
25mm x 30mm [1.0 in x 1.2 in]	Force (F) Required for Actuation (A)	35N [7.87 lbf]	F[N] C	
	Actuation Distance c	5.1 mm [0.20 in]	450 B2 350 B1	
$\infty$	Overtravel Distance d to 250N	13.1 mm [0.52 in]		
	Overtravel Distance f to 400N	15.4 mm [0.61 in]	0 c 5 10 d 15 20 25 e c 5 [mm]	
	Overtravel Distance h-c to 600N	17.3 mm [0.68 in]	g h	
25mm x 30mm [1.0 in x 1.2 in]	Force (F) Required for Actuation (A)	54.3 N [12.21 lbf]	F[N] C	
	Actuation Distance c	10.0 mm [0.39 in]	450 350 B1	
	Overtravel Distance d to 250N	15.5 mm [0.61 in]		
	Overtravel Distance f to 400N	18.1 mm [0.71 in]	50 c 5 10 125 20 25 30 35 e 5 [mm]	
	Overtravel Distance h-c to 600N	20.7 mm [0.81 in]	g h t t t t t t t t t t t t t t t t t t	
25mm x 45mm [1.0 in x 1.8 in]	Force (F) Required for Actuation (A)	63.1 N [14.19 lbf]	F(N) C	
	Actuation Distance c	7.2 mm [0.28 in]	450 B1 B1	
	Overtravel Distance d to 250N	19.4 mm [0.76 in]	250 A A A A A A A A A A A A A A A A A A A	
	Overtravel Distance f to 400N	23.6 mm [0.93 in]	50 0 c 5 10 15 d 20 25 30 35 40 e [mm]	
	Overtravel Distance h-c to 600N	26.4 mm [1.04 in]	r f	
30mm x 70mm [1.2 in x 2.8 in]	Force (F) Required for Actuation (A)	44N [9.89 lbf]	F[N] C	
	Actuation Distance c	8.0 mm [0.31 in]	450 B2 350 B1	
	Overtravel Distance d to 250N	36.0 mm [1.42 in]		
	Overtravel Distance f to 400N	40.0 mm [1.57 in]	50 <u>c 10 20 d 30 50 60</u> s (nm)	
	Overtravel Distance h-c to 600N	43.0 mm [1.69 in]	f g h	

\* For other speed data, please refer to product data sheets. www.automationdirect.com

#### **ASO Safety Solutions Safety** Solutions 25mm x 45mm SENTIR Edges and End Caps



1502-2115

1804-1386

1804-1376

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SENTIR safety contact edges are pressure-sensitive sensors used to ensure the safety of closing edges at possible crushing or shearing points which are prone to accidents. They may be installed near automatic gates, machines and other facilities for handling equipment to detect conditions that could cause bodily harm or damage machinery.

#### M8 Connector



for continuity.

#### Features

- Optimized material properties guarantee fast switching results.
- 4 edge lengths available that can be easily cut to fit any application
- Can wire in 2 or 4-wire circuits
- Requires aluminum mounting rail (included with 2ft and 5ft edges) and offered in varying lengths
- · Reference example connection drawings for easy product selection

ASO Safety Contact Edges - 25mm x 45mm						
Part Number	Price	Profile	Length	End Caps	Aluminum Mounting Rail	Drawing
<u>1502-2113</u>	\$51.00	25mm x 45mm [0.787 in x 1.77 in]	2ft [0.610 m]		Included	PDF
<u>1502-2114</u>	\$113.00	25mm x 45mm [0.787 in x 1.77 in]	5ft [1.52 m]	End caps not included; choose from table below Not included	Included	PDF
<u>1502-2115</u>	\$286.00	25mm x 45mm [0.787 in x 1.77 in]	20ft [6.10 m]		Not included	<u>PDF</u>
<u>1502-2610</u>	\$920.00	25mm x 45mm [0.787 in x 1.77 in]	82ft [25.00 m]	1	Not included	PDF

ASO Safety Contact Edge End Caps - 25mm x 45mm						
art Number	Price	Description	Connection	Drawing		
<u>804-1385</u> *	Retired	End cap for 25mm x 45mm safety contact edges	3-pin female M8 connector 1.65 ft [0.5 m] cable length	PDF		
<u>804-1375</u> *	Retired	End cap for 25mm x 45mm safety contact edges	3-pin male M8 connector 1.65 ft [0.5 m] cable length	PDF		
<u>804-0575</u>	Retired	Terminating resistor end cap for 25mm x 45mm safety contact edges, 8.2 $k\Omega$	NA	PDF		
<u>804-1386</u>	\$23.50	End cap for 25mm x 45mm safety contact edges	3-pin female M8 connector 1.65 ft [0.5 m] cable length	PDF		
<u>804-1376</u>	\$23.50	End cap for 25mm x 45mm safety contact edges	3-pin male M8 connector 1.65 ft [0.5 m] cable length	PDF		
<u>804-0576</u>	\$14.50	Terminating resistor end cap for 25mm x 45mm safety contact edges, 8.2 kΩ	NA	<u>PDF</u>		

ASO Safety Contact Edge Mounting Rails					
Part Number	Price	Description	Material	Contents	Drawing
2002-0230	\$102.00	Contact edge mounting rail	Aluminum	Package of 4 rails, each 5ft [1.52 m] length	PDF
2002-0231	\$17.50	Contact edge mounting rail	Aluminum	1 rail, 2ft [609.6 mm] length	PDF

2<u>002-0230</u>



ASO Safety Solutions Industrial Shears				
Part Number	Price	Description	Use With	Contents
<u>9501-0160</u>	\$93.00	Stainless steel industrial shears	Safety contact edges	1 shear

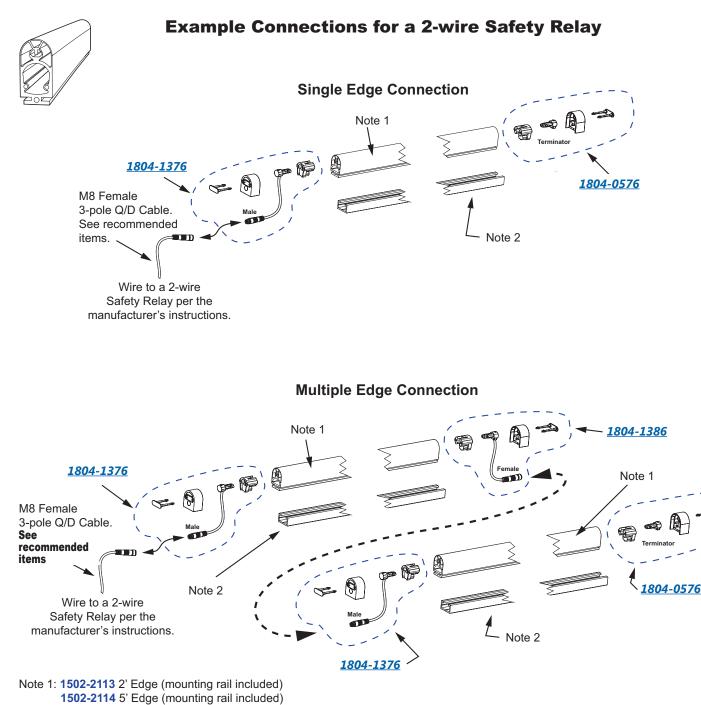
1804-0576

# ASO Safety Solutions Solutions Solutions 25mm x 45mm SENTIR Edges and End Caps

#### Selection

Use the following Example Connections drawings to help you select the correct components for your system.

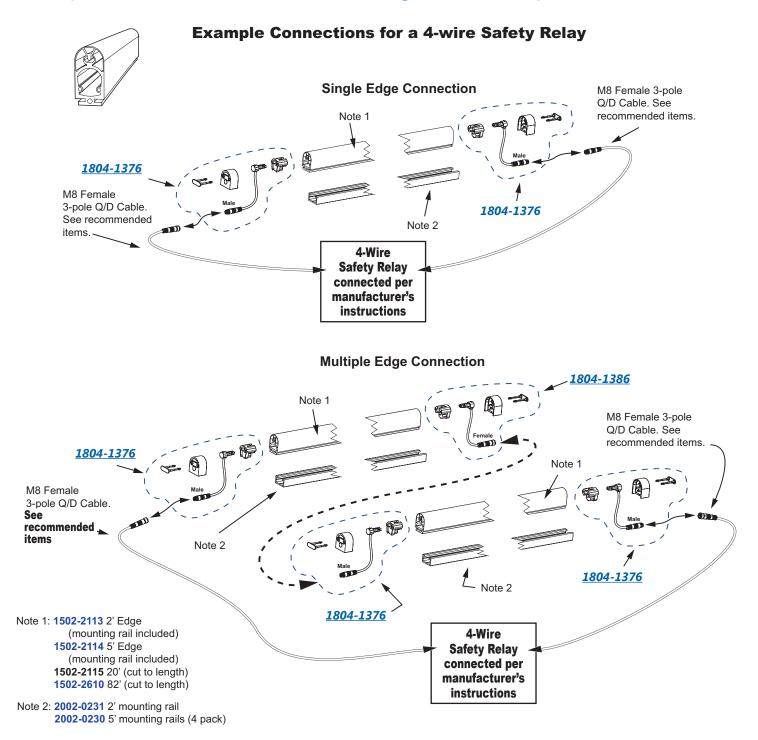
#### Example Connections - 25mm x 45mm edges and end caps



1502-2115 20' (cut to length) 1502-2610 82' (cut to length) Note 2: 2002-0231 2' mounting rail 2002-0230 5' mounting rails (4 pack)

## ASO Safety Solutions Solutions 25mm x 45mm SENTIR Edges and End Caps

Example Connections - 25mm x 45mm edges and end caps



### ASO Safety Solutions Solutions 25mm x 45mm SENTIR Edges and End Caps

#### SENTIR 25mm x 45mm Edges

CENTIN E CONTRA TONIN E E E E E E				
	General Specifications			
Material	TPE			
Material Hardness	68 Shore A			
Weight (per meter)	0.44 kg/m [0.31 lb/ft]			
Protection Class (Enclosure)	IP65			
Switching Cycles	>30,000 (UL 325)			
Switching Angle	±45°			
Actuation Resistance	≤ 500Ω			
Actuation Force	53.9N @ 100mm/s [3.9 in/s] approach speed			
Mechanical Life	10,000 cycles			
Electrical Capacity	24VDC, 10mA			
Max. Temperature Range	-25° to +75°C [-13° to +167°F]			
Operating Temperature	-10° to +50°C [+14° to +122°F]			
Max. Series Connection	5 contact edges or 100m [328.08 ft] based on the ASO safety relay 1114-0210			
Inactive End Region with Higher Forces	30mm [1.18 in]			
Connection Cables	LIY11Y 2 x 0.34 mm <sup>2</sup> (22AWG)			
Cable Material	PUR matte black			
Agency Approvals	UL Recognized file E341185, CE			

### **Safety Products**



Warning: Safety products sold by AutomationDirect are Safety components only. The purchaser/installer is solely responsible for the application of these components and ensuring all necessary steps have been taken to assure each application and use meets all performance and applicable safety requirements and/or local, national and/or international safety codes as required by the application. AutomationDirect cannot certify that our products, used solely or in conjunction with other AutomationDirect or other vendors' products, will assure safety for any application. Any person using or applying any products sold by AutomationDirect is responsible for learning the safety requirements for their individual application and applying them, and therefore assumes all risks, and accepts full and complete responsibility, for the selection and suitability of the product for their respective application.

AutomationDirect does not provide design or consulting services, and cannot advise whether any specific application or use of our products would ensure compliance with the safety requirements for any application.