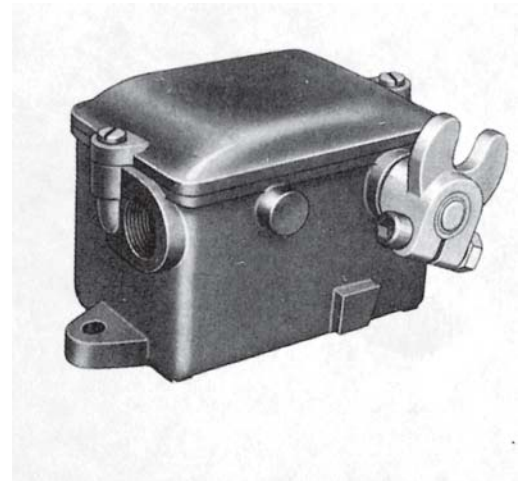
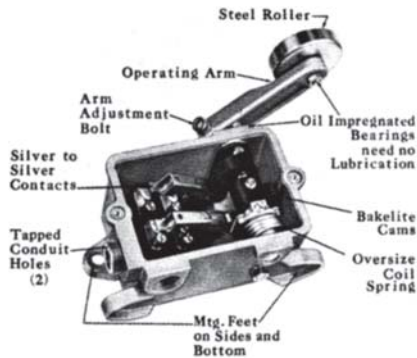


Description	Page Number
Limit Switches - Type	102HL G2
	102TL G4
	102RS G6
	102CHL G7
	102BST G8
Master Switch - Type	101FS G9
	101SD G13
Palm Buttons - Type	100RN G15



Right Hand Shown



Lever Travel is 50°
Each Direction



Application

Type 102HL and HLD Hatchway Limit Switches are designed as pilot circuit devices for all heavy duty applications to limit travel or set up function at predetermined positions. On Type HL single acting switches, the lever operates in one direction only; while on Type HLD double acting switches, it operates in two directions with a variety of contact sequences.

Features:

- Double Break removable Silver-to-Silver Contacts.
- Each contact may be independently changed from normally open to normally closed and vice versa without disassembly.
- Operating Arm on most models may be field changed to the other side by reversing the shaft.
- Oil impregnated bearings at contact finger pivot points.
- Oil impregnated shaft bearings need no lubrications.

Type HL Single Acting Hatchway - Limit Switch

Right Hand ²								
Type	Contacts	Poles	Standard Enclosures Catalog No.	Price ¹	Dust-tight Enclosure Catalog No.	Price ¹	Watertight Enclosure Catalog No.	Price ¹
HLA-1	NO or NC	1	A102-41252A-1	\$ 402.	A102-231414A-1	\$ 474.	A102-54634A-1	\$ 582.
HLA-2	2 NO or 2 NC	2	A102-41251A-1	438.	A102-231413A-1	510.	A102-54635A-1	618.
HLA-3	1 NO & 1 NC	2	A102-41251A-3	582.	A102-231413A-3	654.	A102-54635A-3	768.
HLA-30	1 NO & 1 NC overlapping ⁴	2	A102-54268A-1	582.	A102-273562A-1	654.	A102-68866A-1	768.
Left Hand ²								
HLLA-1	NO or NC	1	A102-41252A-3	402.	A102-231414A-3	474.	A102-54634A-3	582.
HLLA-2	2 NO or 2 NC	2	A102-41251A-4	438.	A102-231413A-4	510.	A102-54635A-4	618.
HLLA-3	1 NO & 1 NC	2	A102-41251A-6	582.	A102-231413A-6	654.	A102-54635A-6	768.
HLLA-30	1 NO & 1 NC overlapping ⁴	2	A102-54268A-2	582.	A102-273562A-2	654.	A102-68866A-2	768.

Any 1 or 2 pole switch may be converted from right to left hand and vice versa using a screwdriver.

Note:

1. Price includes operating lever and standard steel roller.
2. Type HLA-1, 2 & 44, HLLA-1 & 2 contacts are normally closed when shipped from the factory. To change to normally open, loosen cam and rotate 180°.
3. Any 1 or 2 pole switch may be converted from right to left hand and vice versa using a screwdriver.
4. Overlapping contacts are not convertible.

Limit Switch Electrical Ratings

25 Amp - 600V AC Maximum Heavy Pilot Duty 600V AC A600, 250V DC Maximum N300.			
Volts	Current - Amperes		
	Carry	Break	Inrush/ Make
110-120V AC	25	6.0	6.0
220-240V AC	25	3.0	3.0
440-480V AC	25	1.5	1.5
550-600V AC	25	1.2	1.2
115-125V DC	10	2.2	2.2
230-250V DC	10	1.1	1.1

Ordering Information

- Use complete catalog number when ordering. If modification is required, state in full detail on the order.

Modifications:

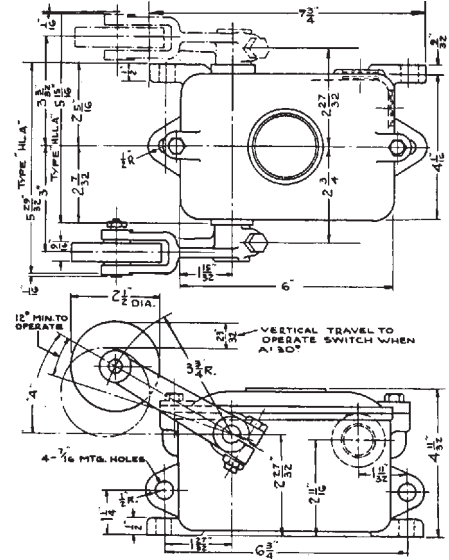
- Omit standard lever and roller, Deduct \$ 24.
- Phenolic composition roller, 2 1/2" dia., on standard lever in place of standard steel roller, A102-426105A . . . Add \$ 30.
- Five-inch lever with standard steel roller, in place of standard lever and roller, A102-248096A . . . Add \$ 162.
- Seven-inch dia., composition roller on 5" lever, in place of standard lever and roller, A102-75993A . . . Add \$ 294.

Type HLD - Double Acting Hatchway - Limit Switch

Poles ²	Contacts Sequence ³		Standard Enclosure		Dust-tight Enclosure		Ship. Weight
	CCW	CW	Catalog No.	Price ¹	Catalog No.	Price ¹	
1			HLD-1	\$ 660.	HLD-5	\$ 726.	11 lbs.
2			HLD-2	738.	HLD-6	804.	
2			HLD-3	738.	HLD-7	804.	
2		as specified	HLD-4	780.	HLD-8	846.	
Poles	Contacts Sequence		Watertight Enclosure		Ship. Weight		
	CCW	CW	Catalog No.	Price			
1			HLD-9	\$ 858.	12 lbs.		
2			HLD-10	936.			
2			HLD-11	936.			
2		as specified	HLD-12	978.			

HLA-1, 2, 3 & 30, HLLA-1, 2, 3 & 30, Standard and Dust-tight Enclosures

12° min. to operate std. 1 & 2 pole switches.
Switches with overlapping contacts require 22° min.

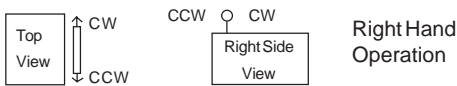


Cams are \$38.00 each and included under JC80

Contact Sequence

Cam No.	As Supplied		Converted To:	
	CCW	CW	CCW	CW
A102-277623				
A102-277624				
A102-277625				

Contact Closed Contact Open

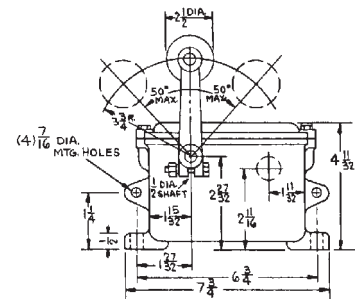
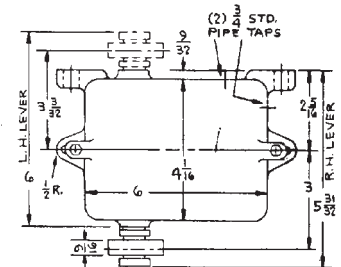


Limit Switch Electrical Ratings

25 Amp - 600V AC Maximum Heavy Pilot Duty 600V AC A600, 250V DC Maximum N300.			
Volts	Current - Amperes		
	Carry	Break	Inrush/ Make
110-120V AC	25	6.0	6.0
220-240V AC	25	3.0	3.0
440-480V AC	25	1.5	1.5
550-600V AC	25	1.2	1.2
115-125V DC	10	2.2	2.2
230-250V DC	10	1.1	1.1

HLD-1, 2, 3 & 4 in Standard Enclosure HLD-5, 6, 7 & 8 in Dust-tight Enclosure

Spare Parts		JC 80
Movable Contact	A101-028965	\$26.00
Torsen Spring	A101-062988	\$25.00
1 Pole Base	A102-041256A	\$90.00
2 Pole Base	A102-041255A	\$156.00
Std. Arm & Roller	A102-302350A	\$122.00
5" Lever with Steel Roller	JC32 A102-248096A	\$270.00
5" Lever with 7" Dia. Composition Roller	A102-075993A	402.00



Notes:

- Price includes operating lever and standard steel roller.
- All contacts are NC when shipped from the factory. To change to NO, loosen cam and rotate 180°.
- Any 1 or 2 pole switches may be converted from right to left hand and vice versa, using a screwdriver.

Ordering Information

- Use complete catalog number when ordering.
- Modifications on page G2. If modifications are required, state in full detail on the order.



Application

Type 102TL Track Type Limit Switches are designed as pilot circuit devices for all heavy duty applications to limit travel or set up functions at predetermined positions.

Operation

The contacts of these switches make and break very quickly due to the snap action of the toggle type operating mechanism. The operating arm is secured to a hollow outer shaft that fits over the camshaft. When the arm is tripped, it turns the outer shaft which actuates the toggle mechanism. The toggle mechanism does not change position until the operating lever is past the midpoint of its travel; then it snaps over and turns the camshaft quickly. Since the cams are fastened rigidly to the camshaft, they in turn impart snap action opening and closing to the contacts. Force to operate switch is approximately 25 inch-pounds.

Angular Travel

Total angular travel of the arm from one tripped position to the other is 90°. However, the contacts are actuated when the arm moves 60°, the balance of the travel is to clear the arm so that the linear operator may pass over.

Features:

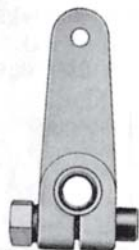
Double Break removable Silver-to-Silver Contacts.

- Each contact may be independently changed from normally open to normally closed and vice versa without disassembly.
- Operating Arm adjustable on shaft.
- Oil impregnated bearings at contact finger pivot points.
- Cast weatherproof enclosure standard. Dust-tight and watertight

Available Levers:



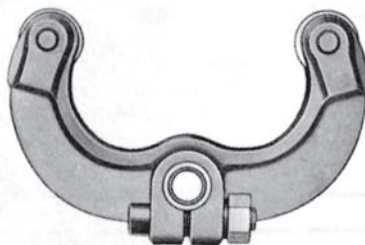
Part # A102-054262
TLSF Straight
Fork Lever



Part # A102-054261
TLS Rod or
Chain Type Lever



A102-460805A-1 \$214
TLRS Straight Roller Lever



Part # 102-54260A \$366
TLF Roller Fork
Lever

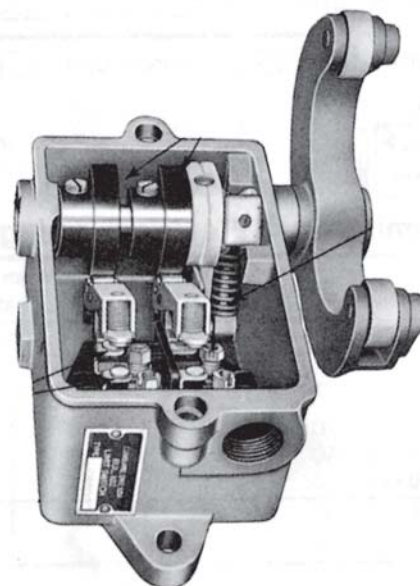


TLSF-11 or 22 with Straight Fork Lever

- enclosures are also available for all types.
- Contact wearing parts completely interchangeable with same parts in Type 101SD Master Switch, 101FS Foot Switch, and 102HL & CHL Limit Switch.

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Left Hand Shown:



TLF-22, 2 Contacts, Cover Removed

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Type TL Snap Action - Limit Switch

Type	Operating Lever	Contacts ²	Standard Enclosure Catalog No.	Price ¹	Dust-tight Enclosure Catalog No.	Price ¹	Watertight Enclosure Catalog No.	Price ¹
TLS-11	Rod or Chain	1	A102-80579A-1	\$ 846.	A102-80579A-2	\$ 918.	A102-80580A	\$ 1746.
TLS-22	Rod or Chain	2	A102-80581A-1		A102-80581A-2		A102-80582A	
TLSR-11	Straight or Roller	1	A102-80591A-1	\$ 900.	A102-80591A-2	\$ 972.	A102-80592A	1824.
TLSR-22	Straight or Roller	2	A102-80593A-1		A102-80593A-2		A102-80594A	
TLF-11	Roller Fork	1	A102-80575A-1	900.	A102-80575A-2	972.	A102-80576A	1824.
TLF-22	Roller Fork	2	A102-80577A-1		A102-80577A-2		A102-80578A	
TLSF-11	Straight Fork	1	A102-80583A-1	900.	A102-80583A-2	972.	A102-80584A	1824.
TLSF-22	Straight Fork	2	A102-80585A-1		A102-80585A-2		A102-80586A	

Note:

1. Price includes limit switch complete with operating lever.
2. Contacts can be changed from open to close by rotating cam 180°.

Ordering Information:

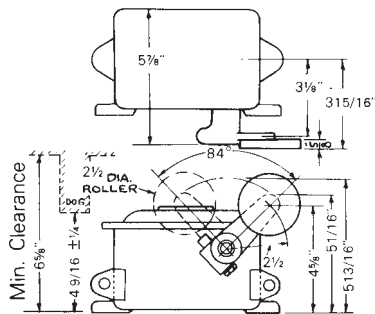
- Use complete catalog number when ordering.

Limit Switch Electrical Ratings

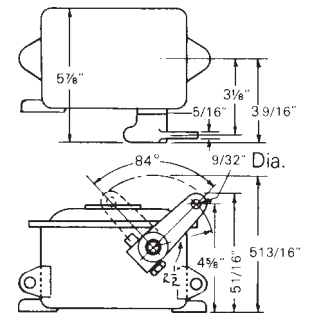
25 Amp - 600V AC Maximum Heavy Pilot Duty 600V AC A600, 250V DC Maximum N300.			
Volts	Current - Amperes		
	Carry	Break	Inrush/ Make
110-120V AC	25	6.0	6.0
220-240V AC	25	3.0	3.0
440-480V AC	25	1.5	1.5
550-600V AC	25	1.2	1.2
115-125V DC	10	2.2	2.2
230-250V DC	10	1.1	1.1

Approximate Outline Dimensions

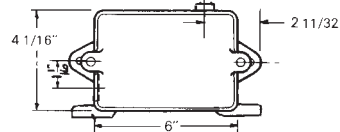
TLSR Straight Roller Lever



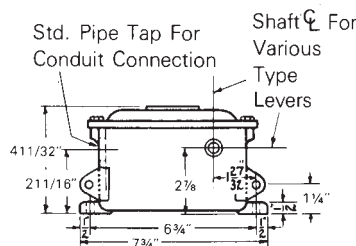
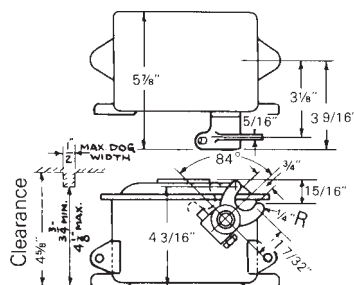
TLS Rod or Chain Type Lever



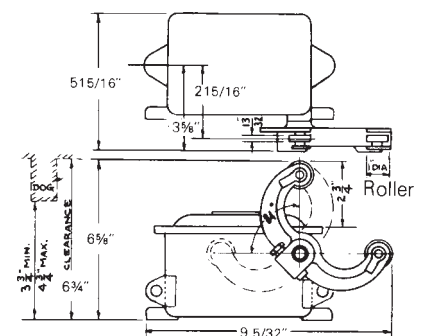
Enclosure Dimensions Only
(Same for all types)

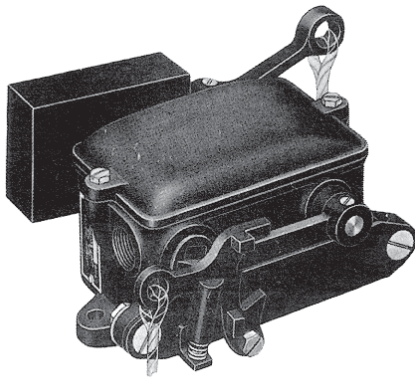


TLSF Straight Fork Lever



TLF Roller Fork Lever





Application

Type 102RS Rubber Calender Safety Switch is a pilot circuit device used chiefly in the Rubber Industry as an emergency stop arrangement on Calenders, and similar motor driven machinery.

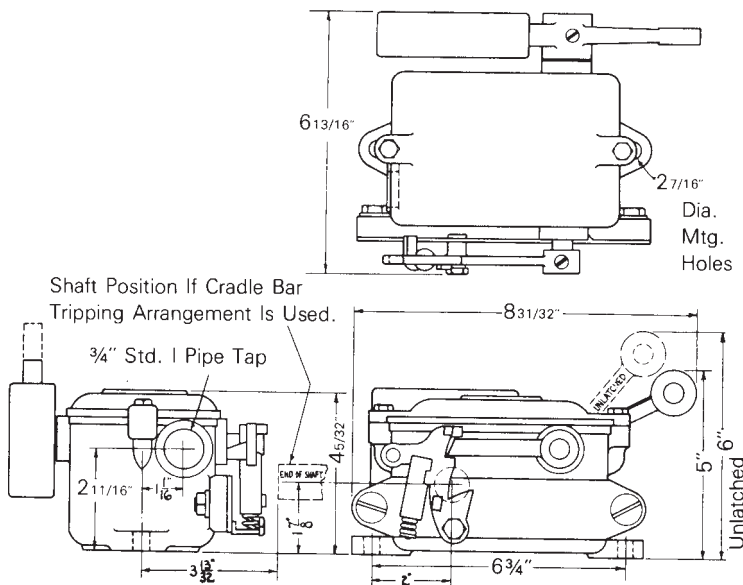
Features:

- Gravity Operated.
- Double break removable silver-to-silver contacts.
- Can be mounted horizontally or vertically.
- Oil impregnated shaft bearings need no lubrication.
- Contact wearing parts completely interchangeable with same parts in type 101SD Master Switches, type 101FS Foot Switches and type 102HL, CHL, TL Limit Switches.
- Dust-tight enclosure is standard.

Limit Switch Electrical Ratings

25 Amp - 600V AC Maximum Heavy Pilot Duty 600V AC A600, 250V DC Maximum N300.			
Current - Amperes			
Volts	Carry	Break	Inrush/ Make
110-120V AC	25	6.0	6.0
220-240V AC	25	3.0	3.0
440-480V AC	25	1.5	1.5
550-600V AC	25	1.2	1.2
115-125V DC	10	2.2	2.2
230-250V DC	10	1.1	1.1

Approximate Dimensions



Ordering Information

- Use complete catalog number when ordering. If modification is required, state in full detail on the order.
- Modifications:**
- If cradle bar tripping arrangement is desired, add the following to the catalog number, "including part number A102-66747A tripping bar"Add \$ 72.

Rubber Calender

Type	Contacts	Poles	Dust-tight Enclosure Catalog No.	Price ¹
RS22	2 NC	2	A102-66750A	\$ 1224.

Note:

1. Price includes limit switch complete with cable, cable weight and counterweight.



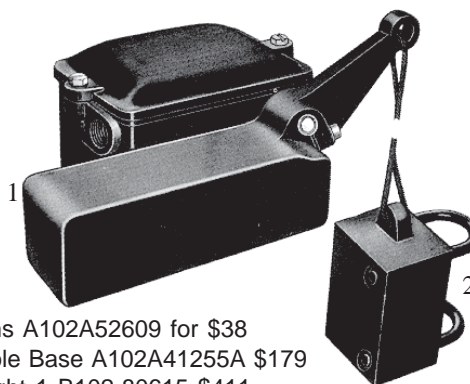
Application

The Type 102CHL pilot circuit limit switches are designed for mounting beneath the hoisting mechanism of electrically operated cranes to serve as upper limit safety stop switches. Such a safety device is necessary to prevent the hook from being raised into the hoisting mechanism where it would cause damage.

Enclosure - Standard die cast aluminum enclosures.

Dust-tight Enclosures - Dust-tight enclosures can be furnished at an additional charge for the dust seal gasket.

Watertight - Watertight enclosures are also available. The same heavy case is specially fitted with watertight bushings and seals to meet NEMA watertight tests.



- Cams A102A52609 for \$38
- 2 Pole Base A102A41255A \$179
- Weight 1 B102-80615 \$411
- Weight 2 A102-54265 \$340

Features:

- Toggle type snap action.
- Double break removable Silver-to-Silver Contacts.
- Contact wearing parts completely interchangeable with same parts in Type 101SD Master Switch, Type 101FS Foot Switches and Type 102HL and TL Limit Switches.
- Each contact may be independently changed from N.O. to N.C. and vice versa without disassembly, by turning cams on shaft 180°.
- Operating arm adjustable on shaft.
- Automatic reset when hook is lowered.
- Die cast aluminum enclosure standard.



Type 102CHL Crane Hook - Limit Switch

Type	Contacts	Poles	Standard Enclosure Catalog No.	Price ¹	Watertight Enclosure Catalog No.	Price ¹
CHL-22	2 NC	2	A102-80886A	\$ 1392.	A102-80887A	\$2256.

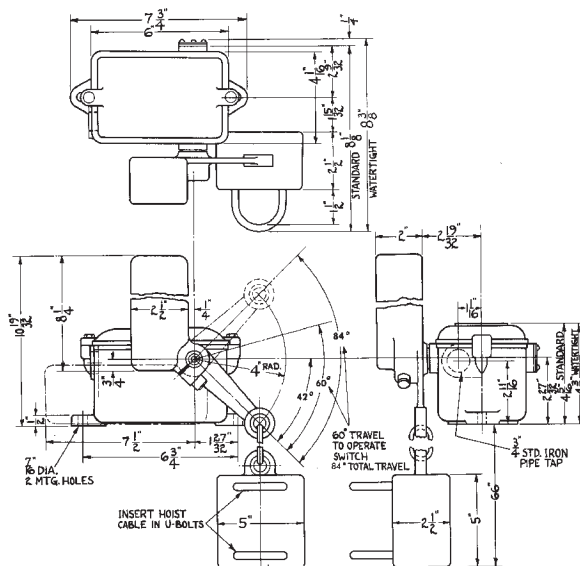
Limit Switch Electrical Ratings

25 Amp - 600V AC Maximum Heavy Pilot Duty 600V AC A600, 250V DC Maximum N300.			
Volts	Current - Amperes		
	Carry	Break	Inrush/ Make
110-120V AC	25	6.0	6.0
220-240V AC	25	3.0	3.0
440-480V AC	25	1.5	1.5
550-600V AC	25	1.2	1.2
115-125V DC	10	2.2	2.2
230-250V DC	10	1.1	1.1

Note:

1. Price includes limit switch complete with cable, cable weight and counterweight. Approximate shipping weight is 45 lbs.

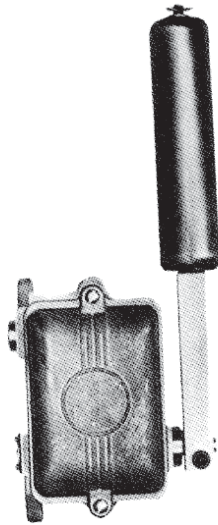
Approximate Dimensions



Ordering Information

- Use complete catalog number.
- If dust-tight enclosure is desired, add \$66 to the standard enclosure price. Use the same catalog number as for standard enclosure and specify "Dust-tight" on the order.

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Application

The Type 102BST Switch is a pilot device used for special protection against side movement of conveyor belts.

Operation

One Switch is mounted on each side of the conveyor belt with the lever mounted roller close to the belt edge. If the belt tends to move either side due to misalignment of its rollers, the belt edge moves the limit switch lever arm. After a selected number of degrees of lever movement the normally open contact in the switch closes. This can operate a warning system, either a light or audio signal. If the fault is not corrected and the belt moves the lever arm to large degree, a second contact, normally closed, will open and shut down the system. The type BST switch can save untold down time and expense in torn and damaged conveyor belts. Also when used in conjunction with the Type RS Safety Limit Switch, they form a team of safety devices that provide protection to both the operators and belts. The Type BST Switch uses a NEMA Type 4 Watertight enclosure. The Type BST-22 has an 8" Stainless Steel Roller with Nylon Bushings, mounted on a lever arm so that the middle of the roller has a $9\frac{3}{8}$ " radius.

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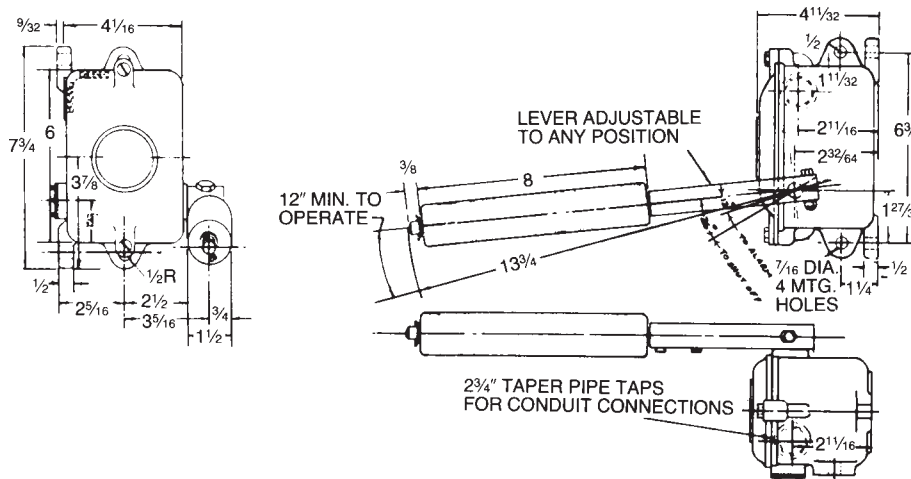
Type 102BST Belt Side Travel - Limit Switch

Type	Contacts ¹	Shaft Type	Operator Type	Dust tight Enclosure Catalog No.	Price
BST-22-R	2	Standard	8" long stainless steel roller with nylon bushing	A102-351409A-1	\$ 1392.

Note:

- One normally open and one normally closed overlapping contacts.
Lever only A102-463807A \$ 820 x JC80

Approximate Dimensions



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Application

Type 101 FS Foot Operated Master Switches are used on applications requiring a rugged foot operated pilot circuit device.



Weatherproof enclosures are standard on all types.

Dust tight enclosures can be furnished at an additional charge for the dust seal gasket.

Features

- Double Break removable Silver-to-Silver Contacts.
- Contact wearing parts completely interchangeable with the same parts in Type 101SD Master Switch, and Type 102HL, TL and CHL Limit Switch.
- Each contact may be independently changed from NO to NC and vice versa without disassembly.

Enclosures

Two pole foot switches have cast aluminum enclosures.

Watertight enclosures are available for all types except Type FWLSA-22. The same heavy case is specially fitted with watertight bushings and seals to meet NEMA watertight tests.

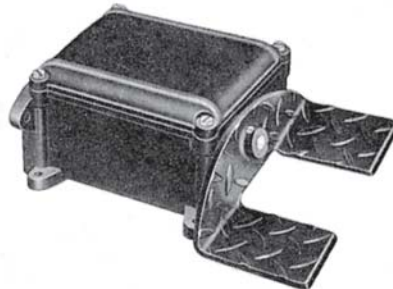
- Oil impregnated bearings at contact finger pivot points.
- Oil impregnated shaft bearings need no lubrications
- Malleable iron operating pedal.
- Spring return standard.
- Cast Weatherproof enclosure standard.



FSVA-11, 22 or 33, 1 or 2 Pole with Latch, Vertical Mounting



FSLA-11, 22 or 33, 1 or 2 Pole with Latch, Horizontal Mounting



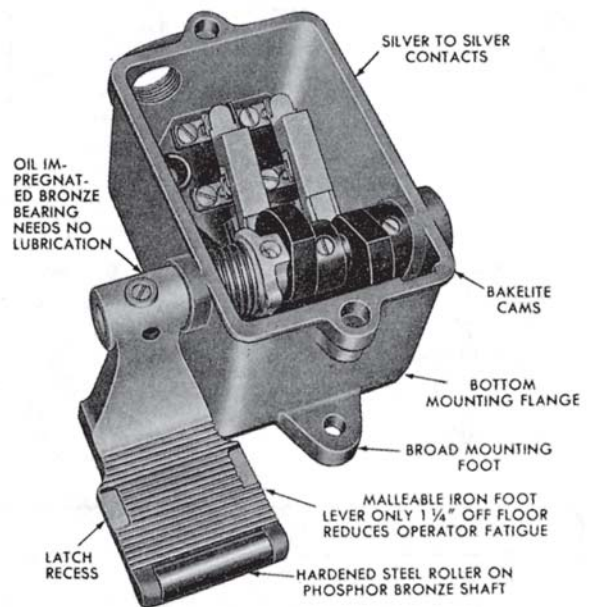
FRSA-22, 2 Pole 3 Position



FWSA-22, 2 Pole Sequence Operation



FWLSA-22, 2 Pole, Sequence Operation with Latch



FSA-22, 2 Pole Horizontal Mounting, Left Hand, Open View

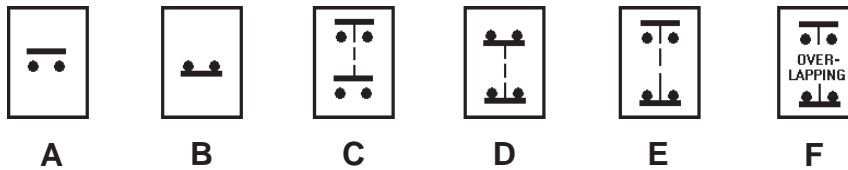


Type 101FS - Foot Operated

Standard NEMA 1 Enclosure

Type	Poles	Contact Arrangement	Contact Symbol	Special Features	Mounting Arrangement	Pedal Arrangement	Catalog No.	Price ¹	Dim. Ref & ² Ship Weight
FSA-11	1	NO or NC	A or B	-----	Horizontal or Vertical	R.H. or L.H.	A101-55171A-2	\$ 654.	1 & 2
FSA-22	2	Both NO or NC	C or D	-----			A101-55172A-2	738.	
FSA-33	2	1 NO & 1 NC	E	-----			A101-55172A-2	738.	
FSA-330	2	1 NO & 1 NC Overlapping	F	Overlapping			A101-46250A	(3)	
FSLA-11	1	NO or NC	A or B	With latch	Vertical Only	R.H. or L.H.	A101-55173A	690.	1
FSLA-22	2	Both NO or NC	C or D				A101-55174A	768.	
FSLA-33	2	1 NO & 1 NC	E				A101-55174A	768.	
FSVA-11	1	NO or NC	A or B	With latch	Vertical Only	R.H. or L.H.	A101-55175A	768.	2
FSVA-22	2	Both NO or NC	C or D				A101-55176A	846.	
FSVA-33	2	1 NO & 1 NC	E				A101-55176A	846.	
FSA-22S	2	2 NO or 2 NC - Sequence operation	---	Contacts operate in Sequence	Horizontal or Vertical	R.H. or L.H.	A101-46250A	738	1&2
FSA-33S	2	1 NO or 1 NC - Sequence operation	---						
FRSA-22	2	1 forward, 1 reverse and an off point	---	Double treadle foot pedal for reverse operating	Horizontal Only	R.H. or L.H.	A101-62266A	900.	3

Contact Symbols



Note:

- Price includes switch complete with operating pedal.
- Page G12 for Dimension reference and shipping weight.
- Overlapping Contacts:

Standard switches provide for only one contact closed at a time. If overlapping is required, one contact must close before the other contact opens. Type FSA-330 switches have overlapping contacts. If the degree and/or point of overlap is not specified, price in quantities of 1 or more is \$ 738. If purchaser specifies degree and/or point of overlap: Price in quantities of 5 or less is \$900.00. Price in quantities of 6 or more is \$738.

Ordering Information

- Use complete catalog number when ordering. If modifications are required, state in full detail on the order.
- Note:**
- Type 101FS does not meet the safety standards for press applications.

Modifications

For Dust tight use same catalog number as for a standard enclosure and specify "Dust tight" on order.
Floor plate

Price
\$ 84.
42.

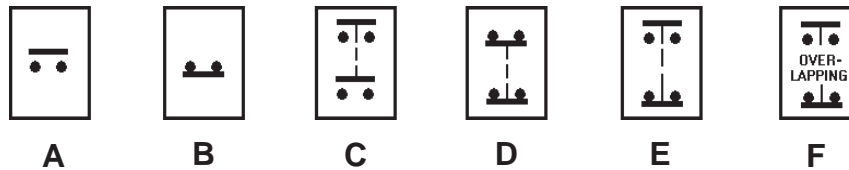


Type 101FS - Foot Operated NEMA 4 Enclosure

Type	Poles	Contact Arrangement	Contact Symbol	Special Features	Mounting Arrangement	Pedal Arrangement	Catalog No.	Price ¹	Dim. Ref & Ship Weight ²
FSA-11	1	NO or NC	A or B	-----	Horizontal or Vertical	R.H. only	A101-60224A	\$ 846.	1 & 2
FSA-22	2	Both NO or NC	C or D	-----			A101-60225A	924.	
FSA-33	2	1 NO & 1 NC	E	-----			A101-60225A	924.	
FSA-11	1	NO or NC	A or B	-----		L.H. only	A101-60226A	846.	
FSA-22	2	Both NO or NC	C or D	-----			A101-60227A	924.	
FSA-33	2	1 NO & 1 NO	E	-----			A101-60227A	924.	
FSLA-11	1	NO or NC	A or B	With Latch	Horizontal Only	R.H. only	A101-60228A	900.	1
FSLA-22	2	Both NO or NC	C or D				A101-60229A	978.	
FSLA-33	2	1 NO & 1 NC	E				A101-60229A	978.	
FSLA-11	1	NO or NC	A or B		L.H. only	A101-60230A	900.		
FSLA-22	2	Both NO or NC	C or D			A101-60231A	978.		
FSLA-33	2	1 NO & 1 NC	E			A101-60231A	978.		
FSVA-11	1	NO or NC	A or B	Vertical Only	R.H. only	A101-62868A	978.	2	
FSVA-22	2	Both NO or NC	C or D			A101-77635A	1056.		
FSVA-33	2	1 NO & 1 NC	E			A101-77635A	1056.		
FRSA-22	2	1 forward, 1 reverse and an off point	---	Double treadle foot pedal for reverse operating	Horizontal Only	R.H. or L.H.	A101-62267A	1110.	3

G

Contact Symbols



Notes:

- 1. Price includes switch complete with operating pedal.
- 2. Page G12 for Dimension reference and shipping weight.

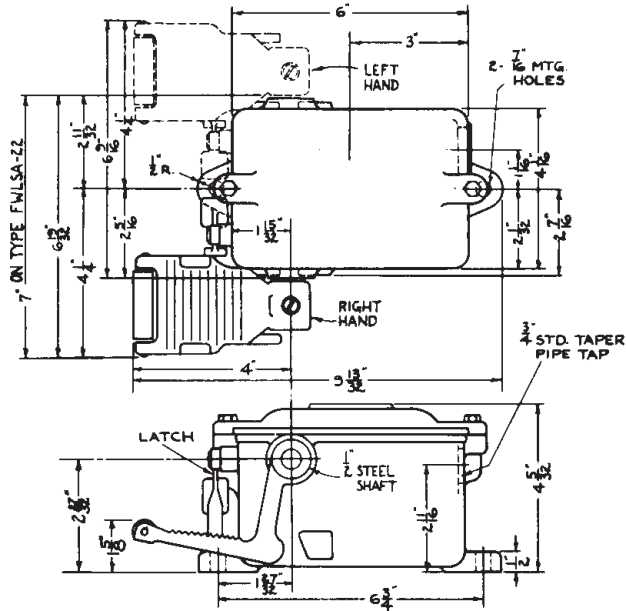
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3

Ordering Information	Modifications	Price
<ul style="list-style-type: none"> ● Use complete catalog number when ordering. If modifications are required, state in full detail on the order. <p>Note:</p> <ul style="list-style-type: none"> ● Type 101FS does not meet the safety standards for press applications. 	For Dust tight use same catalog number as for a standard enclosure and specify "Dust tight" on order. Floor plate	\$ 84. 42.



Dimensional Information

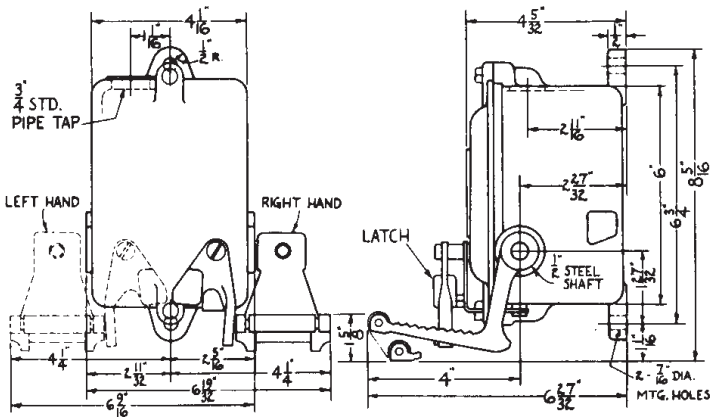
Reference No. 1 - Horizontal



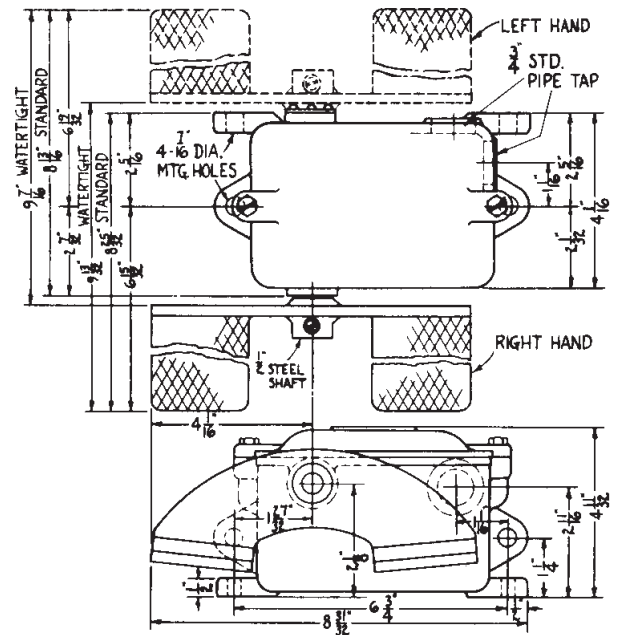
Shipping Weight (approx.)

Reference	Weight
No. 1	12 lbs.
No. 2	12 lbs.
No. 3	15lbs.

Reference No. 2 - Vertical



Reference No. 3 - Double Treadle



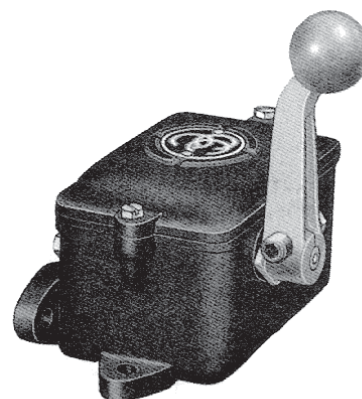


Type 101SD Master Switches are designed as pilot circuit devices for frequent operation with minimum maintenance on heavy duty application in all industries. The type SD units are sturdy devices constructed for heavy duty service where few control circuits are required. Type SD Switches are made in two frame sizes:

Type SD-2 is a single point device, one point either side of the off point, and there are two isolated contacts which can be opened or closed in various combinations.

For the usual circuit arrangements refer to page G14.

Type SD Master Switches are supplied in watertight enclosures; panel mounted units have angle brackets for back of panel mounting. Spring return to the off point is available.



Master Switch, Enclosed Type SD-2 Two Circuit

G

Mill Master Jr. - Master Switch

Standard Operation									
Type	Number of Operating Points	No. of Circuits	Reversing	Surface Mounting Catalog No.	Price ¹	Dim. Ref.	Panel Mounting Catalog No.	Price ²	Dim. Ref.
SD-2	1 (each direction)	2	yes	A101-88359A	\$ 798.	A	A101-88360A	\$ 1272.	C
	1 (one direction only)		no	A101-88363A			A101-88364A		
Spring Return Operation									
SD-2-S	1 (each direction) 1 (one direction only)	2	yes no	A101-88361A A101-88365A	1080.	A	A101-88362A A101-88366A	1512.	C

Notes:

1. Price includes master switch in watertight enclosure complete with operating handle.
 2. Price includes master switch in watertight enclosure complete with metal pistol grip handle, steel mounting plate and standard anular name plate. Specify nameplate markings; standard nameplate provides one marking for each point of the switch.
- Advise detailed cam development for each switch. Refer to page G14 for diagram of standard cam development.

Ordering Information:

- Use complete catalog number when ordering.
- Dimensional reference on page G14

3
8
0

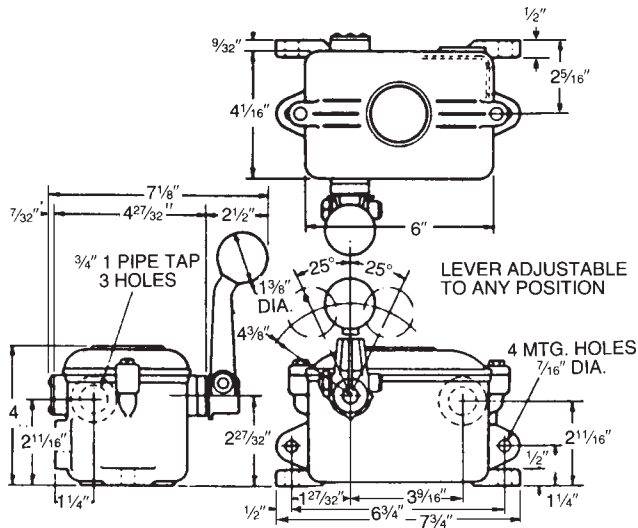


Shipping Weight (approx.)

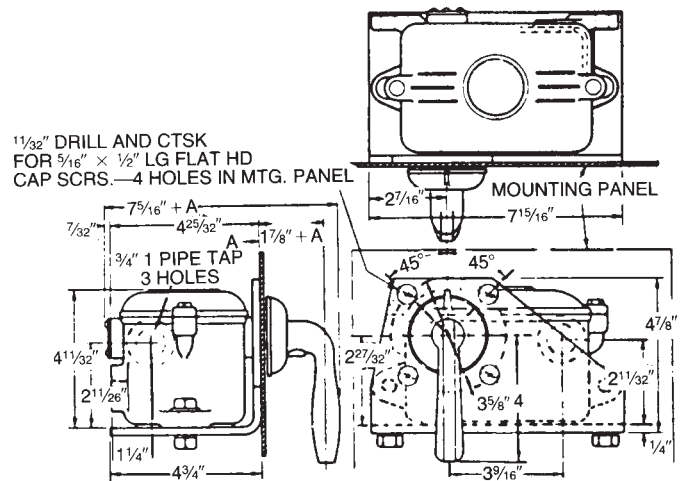
Reference	Weight
A & C	10 lbs.
Spring Return	
A & C	15 lbs.

Dimensional Information

Reference A - Surface Mounting



Reference C - Back of Panel Mounting



Standard Contact Sequence Diagrams

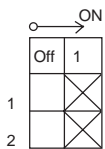


Figure 1
Type SD-2
Type SD-2-S

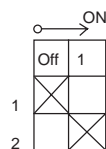


Figure 2
Type SD-2
Type SD-2-S

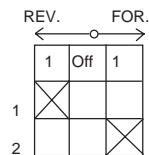


Figure 3
Type SD-2
Type SD-2-S





Mill Type Push Buttons (Heavy Duty) Type H Assembled

Features:

- Heavy cast enclosure and mushroom operating head.
- Oil impregnated bushing.
- Heavy duty Type H push button element with double break silver-to-silver wipe action contacts.
- Large electrical clearance.
- Push button stop independent of contacts. All shock absorbed by the cast case.
- All parts removable and replaceable with a screwdriver.



Type H Form RN
Unprotected



Type H Form RNG
With Guard Ring for
Palm Operation

Type H - Momentary Contact

Name Plate ² Marking	Contacts Available	Contact Symbol	Form RN - Without Guard Ring		Form RNG - With Guard Ring	
			Catalog Number	Price ¹	Catalog Number	Price ¹
None	1 N.O. and 1 N.C.	1	1RN-1	\$258.	1RNG-1	\$258.
None	2 N.O. and 2 N.C.	4	1RN-2	300.	1RNG-2	300.
Start	1 N.O. and 1 N.C.	1	1RN-3	258.	1RNG-3	258.
Stop	1 N.O. and 1 N.C.	1	1RN-4	258.	1RNG-4	258.
Emer Stop	1 N.O. and 1 N.C.	1	1RN-5	258.	1RNG-5	258.
On	1 N.O. and 1 N.C.	1	1RN-6	258.	1RNG-6	258.
Off	1 N.O. and 1 N.C.	1	1RN-7	258.	1RNG-7	258.
Forward	1 N.O. and 1 N.C.	1	1RN-8	258.	1RNG-8	258.
Reverse	1 N.O. and 1 N.C.	1	1RN-9	258.	1RNG-9	258.
Jog	1 N.O. and 1 N.C.	1	1RN-10	258.	1RNG-10	258.
Jog Forward	1 N.O. and 1 N.C.	1	1RN-11	258.	1RNG-11	258.
Jog Reverse	1 N.O. and 1 N.C.	1	1RN-12	258.	1RNG-12	258.
Reset	1 N.O. and 1 N.C.	1	1RN-13	258.	1RNG-13	258.
Run	1 N.O. and 1 N.C.	1	1RN-14	258.	1RNG-14	258.
Slow	1 N.O. and 1 N.C.	1	1RN-15	258.	1RNG-15	258.
Fast	1 N.O. and 1 N.C.	1	1RN-16	258.	1RNG-16	258.
Up	1 N.O. and 1 N.C.	1	1RN-17	258.	1RNG-17	258.
Down	1 N.O. and 1 N.C.	1	1RN-18	258.	1RNG-18	258.
Start	2 N.O. and 2 N.C.	4	1RN-19	300.	1RNG-19	300.
Stop	2 N.O. and 2 N.C.	4	1RN-20	300.	1RNG-20	300.
Emer Stop	2 N.O. and 2 N.C.	4	1RN-21	300.	1RNG-21	300.

Note:

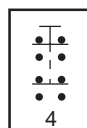
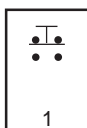
1. Price includes assembled push button station complete with element and nameplate as designated.
2. With Name Plate at top, case may be turned so that Conduit Opening is at top or bottom.

Contact Blocks			
INO & INC 2NO & 2NC	BA BB	\$ 62.00 \$104.00	JC80 Discount Schedule

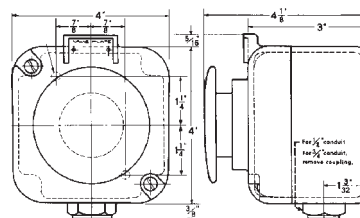
Maximum Contact Ratings (Per Pole)

Volts	AC (50 or 60 Hz)		DC (Inductive)
	Normal	Inrush	Normal
110-120	6.0	60	2.2
220-240	3.0	30	1.1
440-480	1.5	15	---
550-600	1.2	12	0.4

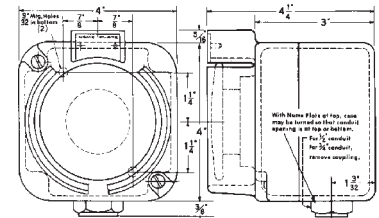
Contact Symbols



Dimensions



Form RN
Unprotected



Form RNG
With Guard Ring for
Palm Operation