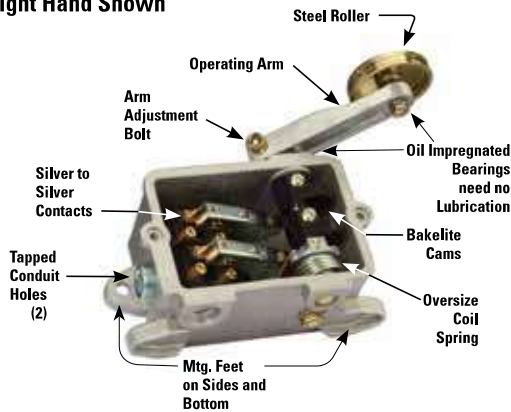


MILL DUTY PRODUCTS

Limit Switch



Right Hand Shown



Lever Travel is 50°
Each Direction

Type HL Single Acting Hatchway - Limit Switch

Right Hand²

Type	Contacts	Poles	Standard Enclosures Catalog No. ¹	Dust-tight Enclosure Catalog No. ¹	Watertight Enclosure Catalog No. ¹
HLA-1	NO or NC	1	A102-41252A-1	A102-231414A-1	A102-54634A-1
HLA-2	2 NO or 2 NC	2	A102-41251A-1	A102-231413A-1	A102-54635A-1
HLA-3	1 NO & 1 NC	2	A102-41251A-3	A102-231413A-3	A102-54635A-3
HLA-30	1 NO & 1 NC overlapping ⁴	2	A102-54268A-1	A102-273562A-1	A102-68866A-1
Left Hand ²					
HLLA-1	NO or NC	1	A102-41252A-3	A102-231414A-3	A102-54634A-3
HLLA-2	2 NO or 2 NC	2	A102-41251A-4	A102-231413A-4	A102-54635A-4
HLLA-3	1 NO & 1 NC	2	A102-41251A-6	A102-231413A-6	A102-54635A-6
HLLA-30	1 NO & 1 NC overlapping ⁴	2	A102-54268A-2	A102-273562A-2	A102-68866A-2

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

Note:

1. 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.

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.

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

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.
- Phenolic composition roller, 2 1/2" dia., on standard lever in place of standard steel roller, A102-426105A
- Five-inch lever with standard steel roller, in place of standard lever and roller, A102-248096A
- Seven-inch dia., composition roller on 5" lever, in place of standard lever and roller, A102-75993A

MILL DUTY PRODUCTS

General Information



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.

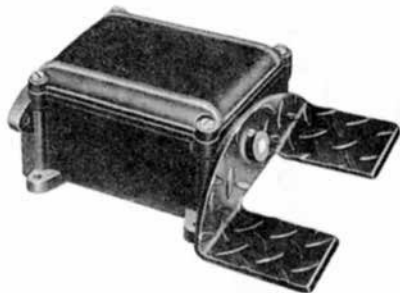
Enclosures

Two pole foot switches have cast aluminum enclosures.

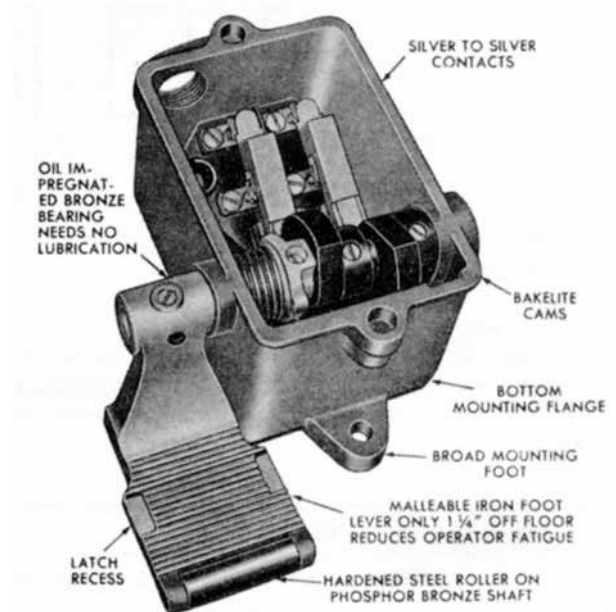
Watertight enclosures are available for all types except Type FWLSA-22. The same heavy case is specially fitted with watertight bushings and seals to meet NEMA watertight tests.

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.
- 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.



FRSA-22, 2 Pole 3 Position



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