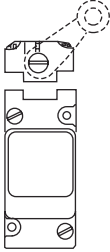



Heavy Duty, Industrial Single Pole and Two Pole Class 9007—Type C

All Type C Switches Are Rated NEMA 6P and UL Type 6P

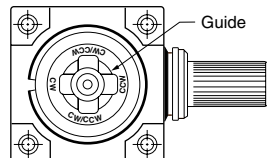
 Select Turret Head		 Lever Arm Type						Side Plunger Type			
		Standard Pre-travel Spring Return	Low Differential Spring Return	Neutral Position		Extra Light Operating Torque Spring Return	Maintained Contact	Side Roller Plunger Spring Return Vertical Roller ■ Type	Side Push Rod Plunger Spring Return	Side Push Rod Plunger Adjustable Spring Return	Side Push Rod Plunger Maintained Contact
				Standard Pre-travel Spring Return	Low Differential Spring Return						
Standard	Low Differential	Standard	Low Differential	Extra Light	Maintained	Side Roller	Side Push	Side Push	Side Push		
Basic Switch	Contacts	Type	Type	Type	Type	Type	Type	Type	Type	Type	
Standard Box Plug-in	1 N.O. 1 N.C.	C54B2	C54A2	...	...	C54N2	C54C	C54F	C54G	C54GD	C54H
	2 N.O. 2 N.C.	C62B2	C62A2	...	...	C62N2	C62C	C62F	C62G	C62GD	C62H
	2 N.O.—2 N.C. Neutral Position	...	...	C68T10	C68T5	...	...	...	...	...	...
	2 N.O.—2 N.C. Two Stage	C66B2	C66A2	...	...	C66N2	...	C66F	C66G	C66GD	...
Compact Box Plug-in	1 N.O. 1 N.C.	C52B2	C52A2	...	...	C52N2	C52C	C52F	C52G	C52GD	C52H
UL Listed for Hazardous Location Division I Class I Groups B,C,D Class II Groups E, F and G	1 N.O. 1 N.C.	CR53B2	CR53A2	...	...	CR53N2	CR53C	CR53F	CR53G	CR53GD	CR53H
	2 N.O. 2 N.C.	CR61B2	CR61A2	...	...	CR61N2	CR61C	CR61F	CR61G	CR61GD	CR61H
	2 N.O.—2 N.C. Neutral Position	...	...	CR67T10	CR67T5	...	...	...	...	...	...
	2 N.O.—2 N.C. Two Stage	CR65B2	CR65A2	...	...	CR65N2	...	CR65F	CR65G	CR65GD	...
Flush Mounting	1 N.O. 1 N.C.	CF53B2	CF53A2	...	...	CF53N2	CF53C	CF53F	CF53G	...	CF53H
	2 N.O. 2 N.C.	CF61B2	CF61A2	...	...	CF61N2	CF61C	CF61F	CF61G	...	CF61H
	2 N.O.—2 N.C. Neutral Position	...	...	CF67T10	CF67T5	...	...	...	...	...	...
	2 N.O.—2 N.C. Two Stage	CF65B2	CF65A2	...	...	CF65N2	...	CF65F	CF65G	...	...
Head Only	Type Number	B	A	T10	T5	N	C	F	G	GD	H
	Pre-travel	10°	5°	10°	5°	10°	45°	0.08"		0.14"	
Nominal Operating Data	Pre-travel Two Stage	First Stage	10°	5°	...	...	10°	...	0.08"		...
		First to Second Stage	2½°	1½°	...	...	2½°	...	0.02"		...
	Total Travel	90°	90°	90°	90°	90°	90°	0.25"		0.25"	
	Differential	4°	2°	4°	2°	4°	...	0.03"		...	
	Reverse Overtravel	90°	90°	90°	90°	90°	...	...		...
	Operating Torque/Force—1 Pole & 2 Pole	4 in-lb	4 in-lb	4 in-lb	4 in-lb	25 in-oz	3 in-lb	4 lbs.		7 lbs.	
	Repeat Accuracy—Linear travel of cam (1½" lever arm)	± 0.002"	± 0.001"	± 0.002"	± 0.002"	± 0.002"	± 0.002"	0.001"		...	
Plug-in Replacement Units	To order basic switch and head less the plug-in receptacle base, substitute the letters "CO" for the first "C" in the type number. Example: Open type replacement for Type C54B2 is Type CO54B2 .										

▲ These devices are factory set to operate the contacts in both the CW and CCW directions. **Mode of operation** is field convertible to CW only or CCW only. To order factory converted devices—for CCW only operation, change the "2" at the end of the type number to "1" (Example: C54B2 becomes C54B1); for CW only operation, delete the "2" at the end of the type number (Example: C54B2 becomes C54B).

Mode Change—Lever Arm Type

Mode of operation is easily convertible to clockwise, counterclockwise, or both. Simply point the arrow to the letters representing the desired direction—CW, CCW, or CW/CCW. All parts are captive.

Selection Mode Arrow

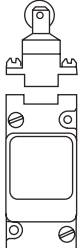













- Can be converted to horizontal roller type in the field. To order horizontal roller version add the letter "H" at the end of the equivalent vertical roller version type number (Example: C54F would become C54FH).
- ◆ To lock the nut in the desired position, crimp the slot near the bottom of the nut.

Acceptable Wire Sizes: 12–22 AWG
 Recommended Terminal Clamp Torque 7 in-lb
 Lever arms p. 19-9, 19-10
 Electrical ratings p. 19-2
 Special features p. 19-7, 19-8

Heavy Duty Turret Head Type C—Class 9007

All Type C Switches Are Rated NEMA 6P And UL Type 6P

Select Turret Head	Top Plunger Type				Wobble Stick Type					Plug-in Unit Less Head	Plug-in Receptacle Only		
	Top Roller Plunger Spring Return	Top Push Rod Plunger Spring Return	Top Push Rod Plunger Adjustable Spring Return	Palm Operated	Universal	Wobble Stick DELRIN Extension	Wobble Stick Wire Extension	Wobble Stick Coil Spring Extension	Cat Whisker				
													
Select Basic Switch	Contacts	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	
Standard Box Plug-in	1 N.O. 1 N.C.	C54D	C54E	C54ED	C54R▲	C54JKC	C54J	C54K	C54KC	C54L	CO54	CT54	
	2 N.O. 2 N.C.	C62D	C62E	C62ED	C62R▲	C62JKC	C62J	C62K	C62KC	C62L	CO62	CT62	
	2 N.O.—2 N.C. Neutral Position	...	...	...	...	...	...	...	...	...	CO68	CT62
	2 N.O.—2 N.C. Two Stage	C66D	C66E	C66ED	C66R▲	C66JKC	C66J	C66K	C66KC	C66L	CO66	CT62	
Compact Box Plug-in	1 N.O. 1 N.C.	C52D	C52E	C52ED	C52R▲	C52JKC	C52J	C52K	C52KC	C52L	CO52	CT52	
UL Listed for Hazardous Location Division I Class I Groups B,C,D Class II Groups E, F and G	1 N.O. 1 N.C.	CR53D	CR53E	CR53ED	CR53R▲	CR53JKC	CR53J	CR53K	CR53KC	CR53L	...	...
	2 N.O. 2 N.C.	CR61D	CR61E	CR61ED	CR61R▲	CR61JKC	CR61J	CR61K	CR61KC	CR61L	...	...
	2 N.O.—2 N.C. Neutral Position	...	...	...	...	...	...	...	...	...	...	...
	2 N.O.—2 N.C. Two Stage	CR65D	CR65E	CR65ED	CR65R▲	CR65JKC	CR65J	CR65K	CR65KC	CR65L	...	...
Head Only	Type Number	D	E	ED	R▲	JKC	J	K	KC	L	...	...
Nominal Operating Data	Pre-travel	0.08"				10° (Any Direction)				20°	...	...
	Pre-travel Two Stage	First Stage	0.08"				10° (Any Direction)				20°
		First to Second Stage	0.01"				4°				5°
	Total Travel	0.25"				90°				90°	...	...
	Differential	0.02"				3°				6°	...	...
	Reverse Overtravel	...				...				...	...	...
	Operating Torque/Force—1 Pole and 2 Pole	3 lbs.				3 in-lb				7 in-oz	...	...
Repeat Accuracy—Linear travel of cam	± 0.001"				...				...	...	...
Plug-in Replacement Units	To order basic switch and head less the plug-in receptacle base, substitute the letters "CO" for the first "C" in the type number. Example: Open type replacement for Type C54D is Type CO54D .												

- ▲ Price does not include mushroom button. Must be ordered separately. See page 19-8.
- To lock the nut in the desired position, crimp the slot near the bottom of the nut.
- ◆ DELRIN is a registered trademark of DuPont.
- ★ Wobble stick extensions are available separately for the universal head or as replacements for complete devices as follows:

Description	Type	Price
DELRIN extension	WJ	
Wire extension	WK	
Coil Spring extension	WKC	

Types C and CF  File CCN E42259 NKCR  File Class LR25490 3211-03 

Type CR  File CCN E10054 NOIV  File Class LR26817 3218-02



Compact Box Hazardous Location Standard Box Flush Mounting

Acceptable Wire Sizes: 12–22 AWG
Recommended Terminal Clamp Torque 7 in-lb

Heavy Duty, Industrial Reed Contact

Class 9007—Type C

Heavy Duty Precision Turret Head Type

Can be used with standard industrial relays and starters to NEMA size 4.

UL Listed for Class I, II and III Division 2 Groups B, C, D, F and G hazardous locations. They can also be used as inputs to intrinsically safe systems.

Note: Because reed switches are operated by a magnet, they should not be installed in areas where strong magnetic fields may be present. The devices should always be checked for proper operation after installation

All Type C Switches Are Rated NEMA 6P And UL Type 6P

Select Turret Head	Lever Arm Type					Side Plunger Type				Plug-in Unit Less Head	Plug-in Receptacle Only
	Standard Pre-travel Spring Return	Low Differential Spring Return	Extra Light Operating Torque Spring Return	Maintained Contact	Side Roller Plunger Spring Return Vertical Roller Type	Side Push Rod Plunger Spring Return	Side Push Rod Plunger Adjustable Spring Return	Side Push Rod Plunger Maintained Contact			
Standard Box Plug-in	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type
Head Only	Type Number	B	A	N	C	F	G	GD	H	...	...
Nominal Operating Data	Pre-travel	13°	7°	13°	45°	0.110"		0.14"		...	...
	Total Travel	90°	90°	90°	90°	0.25"		0.25"		...	...
	Differential	7°	4°	7°	...	0.07"		...		...	...
	Reverse Overtravel	90°	90°	90°	...	...		...		...	...
	Operating Torque/Force	4 in-lb	4 in-lb	25 in-oz	3 in-lb	4 lbs.		7 lbs.		...	...
Repeat Accuracy—Linear travel of cam (1½" lever arm)	± 0.006"	± 0.003"	± 0.006"	± 0.006"	± 0.003"		...		...	...

Select Turret Head	Top Plunger Type					Wobble Stick Type					Plug-in Unit Less Head	Plug-in Receptacle Only
	Top Roller Plunger Spring Return	Top Push Rod Plunger Spring Return	Top Push Rod Plunger Adjustable Spring Return	Palm Operated	Universal	Wobble Stick DELRIN Extension	Wobble Stick Wire Extension	Wobble Stick Coil Spring Extension	Cat Whisker			
Standard Box Plug-in	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type
Head Only	Type Number	D	E	ED	R	JKC	J	K	KC	L
Nominal Operating Data	Pre-travel	0.100"		13° (Any Direction)		25°		...		...	...
	Total Travel	0.25"		90°		90°		...		...	...
	Differential	0.05"		11°		18°		...		...	...
	Operating Torque/Force	4 lbs.		3 in-lb		7 in-oz		...		...	...
	Repeat Accuracy—Linear travel of cam	± 0.003"		...		...		...		...	...

Plug-in Replacement Units: To order basic switch and head less the plug-in receptacle base, substitute the letters "CO" for the first "C" in the type number. **Example:** Open type replacement for Type C84B2 is Type **CO84B2**.


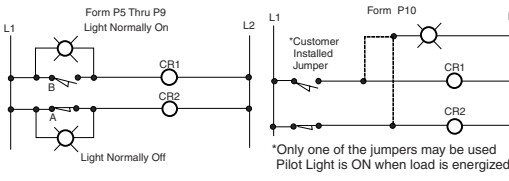


- ▲ These devices are factory set to operate the contacts in **both the CW and CCW** directions. **Mode of operation** is field convertible to CW only or CCW only. **To order factory converted devices—** for CCW only operation, change the "2" at the end of the type number to "1" (Example: C84B2 becomes C84B1); for CW only operation, delete the "2" at the end of the type number (Example: C84B2 becomes C84B).
- Can be converted to horizontal roller type in the field. To order horizontal roller version add the letter "H" at the end of the equivalent vertical roller version type number (Example: C84F would become C84FH).
- ◆ Price does not include mushroom button. Must be ordered separately from page 19-8.
- ★ To lock the nut in the desired position, crimp the slot near the bottom of the nut.
- ▼ Plug-in units less head are not available as separate units. Order complete plug-in replacement units instead. Plug-in replacement units include the plug-in unit and head.
- △ **Wobble stick extensions** are available separately for the universal head or as replacements for complete devices. See bottom of page 19-6.

Acceptable Wire Sizes: 12–22 AWG
Recommended Terminal Clamp Torque : 7 in-lb



Factory Modifications (Forms) Type C—Class 9007

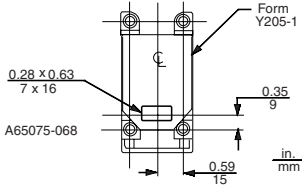

Special Features (Do not apply to Types CF or CR unless noted)—Not Field Installable, Except Where Noted

Special Features		Form	Price Addition
<p>Optional Shaft Equipped With Type T-FT Hub: Any lever arm Type C, CF or CR switch can be furnished with an optional shaft and hub combination which will accept the lever arms normally used with Type T and FT limit (position) switches. To order, add S9 as suffix to the device type number. For example, to order a 9007 C54B2 with this modification, order as a 9007 C54B2-S9. For details about the switches and lever arms that can be furnished with this modification, see the appropriate product catalog.</p> <p>HUB ONLY: Can be field installed on any Type C lever type switch. Class 9007 Type S9, \$6.00 each.</p>		Add S9 as a Suffix to the Device Type Number	
 <p>LED Pilot Light, 24-120 Volts AC or DC on Plug-In Type Switch (Type C52, C54, C62, C64, C66, C68 or ▲): Addition of LED pilot light in parallel with N.O. contact (light normally on) Addition of LED pilot light in parallel with N.C. contact (light normally off) Addition of two LED pilot lights, one in parallel with N.O. contact (light normally on), one in parallel with N.C. contact (light normally off) Addition of two LED pilot lights in parallel with N.O. contacts (lights normally on) (Types C62, C64, C66 or C68 only) Addition of two LED pilot lights in parallel with N.C. contacts (lights normally off) (Types C62, C64, C66, or C68 only) Addition of one isolated LED pilot light (light on when load is energized) (Type C54 only. Not available with Y1901.)</p> <p>▲ Type C84 and C86 are available with P5 or P6 pilot lights only.</p>		P5 P6 P7 P8 P9 P10	
<p>Pre-Wired Receptacle: Single pole plug-in limit (position) switch furnished with pre-wired mini 5 pin Brad Harrison male receptacle (or interchangeable Crouse-Hinds receptacle at our convenience) No. 41310. For use with Brad Harrison female portable plug No. 41306, 41307, or 41308 (or equal). (Not available with P10 or for hazardous locations).....</p> <p>Single Pole—Y1905: Same as Y1901 but with different wire color coding</p> <p>Tamperproof Screws—Complete Switch Only Single Pole—Same as Y1901 but with tamperproof screws on head and body</p> <p>Other versions with different wiring diagrams per automotive requirements are available.</p> <p>Wiring Diagrams Form Y190.....</p> <p>Forms Y1901 and Y1903 Form Y1905</p> <p>Orange- 3 4 -Red White- 3 4 -Black White- 1 2 -Black Orange- 1 2 -Red</p> <p>Green- Green-</p> <p>Mating plug and cables available—also see product catalog.</p>		Y1901 Y1905 Y1903	
<p>Dust Boot: Lever type limit (position) switch furnished with a boot around the shaft for additional protection against abrasive dusts, dirt, grit and sand. Available on all Type C and CR lever type switches</p> <p>Dust Boot Only: Can be field installed on any Type C and CR lever type switch. Class 9007 Type BT3,</p>		Y33	
<p>Potted Limit (Position) Switch Or Plug-In Receptacle Only: With Individual Wires Single pole plug-in limit (position) switch or receptacle pre-wired with five #16 wires five feet long and wire entry completely sealed with Epoxy Resin</p> <p>Two pole plug-in limit (position) switch or receptacle pre-wired with nine #16 wires five feet long and wire entry completely sealed with Epoxy Resin</p> <p>With STOWA Cord Single pole plug-in limit (position) switch or receptacle pre-wired with five conductor #16 STOWA cord eight feet long and wire entry completely sealed with Epoxy Resin</p> <p>Single Pole—Y1855: Same as Y1851 but with different wire color coding</p> <p>Two pole plug-in limit (position) switch or receptacle pre-wired with nine conductor #16 STOWA cord eight feet long and wire entry completely sealed with Epoxy Resin</p> <p>Two Pole—Y1856: Same as Y1852 but with different wire color coding</p> <p>Tamperproof Screws—Complete Switch Only With Individual Wires Same as Y1841 but with tamperproof screws on head and body</p> <p>Same as Y1842 but with tamperproof screws on head and body</p> <p>With STOWA Cord Same as Y1851 but with tamperproof screws on head and body</p> <p>Same as Y1852 but with tamperproof screws on head and body</p> <p>Same as Y1855 but with tamperproof screws on head and body</p> <p>Same as Y1856 but with tamperproof screws on head and body</p> <p>Other versions with different wiring diagrams per automotive requirements are available.</p> <p>Forms Y1851 and Y1853 Forms Y1852 and Y1854 Forms Y1855 and Y1857 Forms Y1856 and Y1858</p> <p>Red- 3 4 -Orange Orange- 4 8 -Brown White-3 4 -Black Yellow- 4 8 -Black White- 1 2 -Black Red- 3 7 -Yellow Orange- 1 2 -Red Brown- 3 7 -White Green- Black- 2 6 -Blue Red- 2 6 -Blue White- 1 White- 1 5 -Pink Orange- 1 5 -Pink Green- Green- Green-</p>		Y1841 Y1842 Y1851 Y1855 Y1852 Y1856 Y1843 Y1844 Y1853 Y1854 Y1857 Y1858	
<p>Conduit Seal Only (Field Installable): Conduit seal fits in conduit entrance and excludes liquids: 5 hole seal—Part #3103248801</p> <p>9 hole seal—Part #3103281501</p>			

Factory Modifications (Forms)

Class 9007—Type C

Special Features (Do not apply to Types CF or CR unless noted)—Not Field Installable, Except Where Noted

Special Features	Form	Price Addition																																																																										
<p>Manifold Mounting: Receptacle is furnished with a wiring hole and a gasket on the base. Available on standard <i>and</i> compact types. Replaces existing Type B installations if new hole is drilled to match knockout. Supersedes Type C with Form Y205.</p> 	Y2051																																																																											
<p>Special Chemical Resistant Coating (Includes fluoro-carbon [VITON] seals—Y140, and stainless steel head and body screws)</p>	L3																																																																											
<p>Low Temperature—Lever Types Only: Limit (Position) switch will operate in an ambient temperature range of -40° F to 185° F (standard limit switch ambient temperature range is -20° F to 185° F). Minimum temperature is based on the absence of freezing moisture or water.</p>	Y128																																																																											
<p>Fluoro-carbon (VITON) Gaskets And Seals Substitution of fluoro-carbon (VITON) gaskets and seals on: Lever arm type, standard box (shaft seals on lever arm types are fluoro-carbon (VITON) as standard) Lever arm type, compact box (shaft seals on lever arm types are fluoro-carbon (VITON) as standard) Plunger type, standard box Plunger type, compact box Substitution of fluoro-carbon (VITON) boot only on plunger type switches.</p> <p>Note: Fluoro-carbon (VITON) has been shown to resist sunlight aging problems.</p>	Y140 Y140 Y140 Y140 Y1401																																																																											
<p>Direct Acting Contacts: One pole, normally closed, slow make-slow break, direct acting contact mechanism substituted for standard snap switch on Types C52, C54, CF53 and CR53 devices. This mechanism was designed for use in emergency overtravel applications. The movable contact of this basic switch unit is acted upon directly by the actuating mechanism of the limit switch and is not dependent upon the force exerted by a snap switch blade or spring to open the circuit. Because these contacts are slow make-slow break, they are best suited for applications where they are not actuated during normal operation, but only if abnormal overtravel is encountered.</p> <p>Note: Direct acting contacts described above are supplied on the 9007 CLS1 hoist overtravel switch as standard.</p>																																																																												
<p>Electrical Contact Ratings</p> <table border="1"> <thead> <tr> <th rowspan="3">Volts</th> <th colspan="5">AC—NEMA A600</th> <th colspan="4">DC</th> </tr> <tr> <th colspan="5">Max. Current—35% Power Factor</th> <th colspan="4">Maximum Current</th> </tr> <tr> <th colspan="2">Make</th> <th colspan="2">Break</th> <th rowspan="2">Continuous Carrying A</th> <th rowspan="2">Volts</th> <th colspan="2">Make or Break</th> <th rowspan="2">Continuous Carrying A</th> </tr> <tr> <th>A</th> <th>VA</th> <th>A</th> <th>VA</th> <th>A</th> <th>VA</th> </tr> </thead> <tbody> <tr> <td>120</td> <td>60</td> <td>7200</td> <td>6</td> <td>720</td> <td>10</td> <td>125</td> <td>1.1/0.55 ▲</td> <td>138/69 ▲</td> <td>5/2.5 ▲</td> </tr> <tr> <td>240</td> <td>30</td> <td>7200</td> <td>3</td> <td>720</td> <td>10</td> <td>...</td> <td>...</td> <td>...</td> <td>...</td> </tr> <tr> <td>480</td> <td>15</td> <td>7200</td> <td>1.5</td> <td>720</td> <td>10</td> <td>250</td> <td>0.27</td> <td>67.5</td> <td>2.5</td> </tr> <tr> <td>600</td> <td>12</td> <td>7200</td> <td>1.2</td> <td>720</td> <td>10</td> <td>600</td> <td>0.10</td> <td>60</td> <td>2.5</td> </tr> </tbody> </table> <p>▲ Type C52 compact unit ratings at 125 Vdc—same ratings as C54, CF53 and CR53 at other voltages.</p>	Volts	AC—NEMA A600					DC				Max. Current—35% Power Factor					Maximum Current				Make		Break		Continuous Carrying A	Volts	Make or Break		Continuous Carrying A	A	VA	A	VA	A	VA	120	60	7200	6	720	10	125	1.1/0.55 ▲	138/69 ▲	5/2.5 ▲	240	30	7200	3	720	10	480	15	7200	1.5	720	10	250	0.27	67.5	2.5	600	12	7200	1.2	720	10	600	0.10	60	2.5		
Volts		AC—NEMA A600					DC																																																																					
		Max. Current—35% Power Factor					Maximum Current																																																																					
	Make		Break		Continuous Carrying A	Volts	Make or Break		Continuous Carrying A																																																																			
A	VA	A	VA	A			VA																																																																					
120	60	7200	6	720	10	125	1.1/0.55 ▲	138/69 ▲	5/2.5 ▲																																																																			
240	30	7200	3	720	10																																																																			
480	15	7200	1.5	720	10	250	0.27	67.5	2.5																																																																			
600	12	7200	1.2	720	10	600	0.10	60	2.5																																																																			
<p>Substitution of direct acting contact unit for snap switch of single pole switch</p>  <p>Direct Acting Contact Mechanism (Shown without Cover)</p>	Y1561																																																																											

Adapters—Field Installable

Description	Class 9007	Price
Switch with adapter plate permitting substitution of any Type C switch with standard box for any Type T switch with Style B baseplate	Form Y147	
Adapter Plate Kit only (plate plus mounting screws) for above	Type BT1	
Adapter plate to allow direct substitution of Type C plunger switches for Type B plug-in plunger switches— use only if there is a problem in lining up cam tracks Standard Box Compact Box	Type CT10 ■ Type CT13 ♦	
Adapter Plate Kit permitting direct substitution of any Type C lever arm switch with standard box for ANY Type AW lever arm switch	Type CT11	
Conduit connection adapter—male 1/2" NPT on one end, female 20 mm on other end	Type CT12	

■ Dimensions: 0.22" x 2.94" x 1.54"
♦ Dimensions: 0.22" x 2.07" x 1.54"

Mushroom Button For Palm Operated Turret Head

Also see Type C Palm Operated Switches

Color	1 3/8" Dia. Button Type No.	2 1/4" Dia. Button Type No.	Price
Black	2358C6G3	...	
Red	2358C6G2	2358C22G3	
Green	2358C6G6	2358C22G6	
Yellow	2358C6G8	2358C22G8	

Lever Arms

Types AW and C—Class 9007

Standard roller is hardened oil-impregnated sintered iron.
 Bold face type numbers indicate the most commonly used lever arms.

Cast Zinc Lever Arms

Length of Arm (A)	Roller																
	Standard 3/4" Dia. (B) 1/4" Wide (C)		Standard 3/4" Dia. (B) 5/8" Wide (C)		Standard 5/8" Dia. (B) 1/4" Wide (C)		Standard 5/8" Dia. (B) 5/8" Wide (C)		Nylon 3/4" Dia. (B) 1/4" Wide (C)		Nylon 5/8" Dia. (B) 1/4" Wide (C)		Nylon 5/8" Dia. (B) 5/8" Wide (C)		Nylon 1" Dia. (B) 5/8" Wide (C)		
	Type	Price	Type	Price	Type	Price	Type	Price	Type	Price	Type	Price	Type	Price	Type	Price	Type	Price
7/8"	AA1	...	AA2	AA8	...	AA17
1 1/8"	BA11	BA12	...	BA1	...	BA2	...	BA18	...	BA8	...	BA17	...	BA13	...
1 1/2"	MA11	MA12	...	MA1	...	MA2	...	MA18	...	MA8	...	MA17	...	MA13	...
2"	CA11	CA12	...	CA1	...	CA2	...	CA18	...	CA8	...	CA17	...	CA13	...
2 1/2"	DA11	DA12	...	DA1	...	DA2	...	DA18	...	DA8	...	DA17	...	DA13	...
3"	EA11	EA12	...	EA1	...	EA2	...	EA18	...	EA8	...	EA17	...	EA13	...
Length of Arm (A)	Nylon 1" Dia. (B) 1/4" Wide (C)		Ball Bearing 1 1/16" Dia. (B) 1/4" Wide (C)		Standard 3/4" Dia. (B) 1/4" Wide (C) Roller on Opposite Side to Standard		Standard 5/8" Dia. (B) 1/4" Wide (C) Roller on Opposite Side to Standard		Standard 5/8" Dia. (B) 5/8" Wide (C) Roller on Opposite Side to Standard		Without Roller		Standard 3/4" Dia. (B) 1/4" Wide (C) (Countersunk Roller Pin)		Cable Operated With Eyebolt (3/4" I.D.) Instead of Roller		
	Type	Price	Type	Price	Type	Price	Type	Price	Type	Price	Type	Price	Type	Price	Type	Price	
7/8"	BA4	...	AA9	...	BA15	...	AA5	...	AA6	...	AA0	...	...	...	...	...
1 1/8"	MA4	...	BA9	...	MA15	...	BA5	...	BA6	...	BA0	...	...	...	...	...
1 1/2"	CA4	...	MA9	...	CA15	...	MA5	...	MA6	...	MA0	...	MA31	...	MA22	...	
2"	DA4	...	CA9	...	DA15	...	CA5	...	CA6	...	CA0	...	CA31	...	...	...
2 1/2"	EA4	...	DA9	...	EA15	...	DA5	...	DA6	...	DA0	...	DA31	...	...	...
3"	...	...	EA9	...	...	...	EA5	...	EA6	...	EA0	...	...	...	...	...



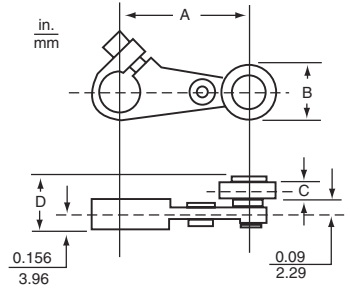
Cast Lever Arm

Flat Steel Lever Arms

Length of Arm (A)	Roller									
	Standard 5/8" Dia. (B) 1/4" Wide (C)		Standard 5/8" Dia. (B) 5/8" Wide (C)		Nylon 3/4" Dia. (B) 1/4" Wide (C)		Nylon 1" Dia. (B) 1/4" Wide (C)		None	
	Type	Price	Type	Price	Type	Price	Type	Price	Type	Price
7/8"	AA1S	...	AA2S	...	...	...	AA0S	...	...	...
1 1/8"	BA1S	...	BA2S	...	MA18S	...	BA4S	...	BA0S	...
1 1/2"	...	...	...	...	...	...	...	...	...	...
2"	CA1S	...	CA2S	...	...	...	CA4S	...	CA0S	...
2 1/2"	DA1S	...	DA2S	...	...	...	DA4S	...	DA0S	...
3"	EA1S	...	EA2S	...	...	...	EA4S	...	EA0S	...



Flat Steel Lever Arm



Cast Zinc Lever Arm Dimensions

A = Length of Lever Arm
 B = Roller Diameter
 C = Roller Width
 D = C + 5/16"

See price tables for A, B and C dimensions.
 Approximate shipping weights range from 1/8 lb. to 1/4 lb.

90° Forked Cast Zinc Lever Arms

Roller Position	Standard 3/4" Dia. (B) 1/4" Wide (C) Rollers	Standard 5/8" Dia. (B) 1/4" Wide (C) Rollers	Nylon 3/4" Dia. (B) 1/4" Wide (C) Rollers	Nylon 3/4" Dia. (B) 1" Wide (C) Rollers	Price	Ball Bearing 1 1/16" Dia. (B) 1/4" Wide (C) Rollers	Price
	Type	Type	Type	Type		Type	
Rollers on Same Side	LA4	LA1	LA16	LA10	...	LA7	...
R.H. Roller on Opp. Side	LA5	LA2	LA17	LA11	...	LA8	...
L.H. Roller on Opp. Side	LA6	LA3	LA18	LA12	...	LA9	...



90° Forked Arm 1 1/2" Length

One-Way Cast Zinc Roller Lever Arm

Length of Arm	1 1/4" Dia. (B) 1/4" Wide (C) Roller			
	Cast Arm		Flat Steel Arm	
	Type	Price	Type	Price
1 3/8"	BA3	...	BA3S	...
1 1/2"	MA3	...	MA3S	...
2"	CA3	...	CA3S	...
2 1/2"	DA3	...	DA3S	...
3"	EA3	...	EA3S	...



One-Way Roller Lever Arm

Offset Type Cast Zinc Lever Arms

Length of Arm	Std. Roller		Type	Price
	Dia. (B)	Width (C)		
2" Length 1/16" Offset	5/8"	1/4"	KA1 KA2 KA11 KA12	...
	5/8"	5/8"		
	3/4"	1/4"		
	3/4"	5/8"		
1 1/2" Length 7/8" Offset	3/4"	1/4"	KA18 KA21	...
	3/4"	1"		
	3/4"	1/4"		
5"	Std. Roller		Type	Price
	Dia. (B)	Width (C)		
5"	3/4"	1/4"	KB11 KB15	...
	3/4"	1/4"		



Offset Lever Arm 2" Length 1/16" Offset

One-Way Lever Arms

Length of Arm	Roller						Rod Type	
	Standard 3/4" Dia. (B) 1/4" Wide (C)		Nylon 3/4" Dia. (B) 1/4" Wide (C)		Ball Bearing 1 1/16" Dia. (B) 1/4" Wide (C)		Type	Price
	Type	Price	Type	Price	Type	Price	Type	Price
1 1/2"	RA11	...	RA18	...	RA9	...	...	...
5"	...	...	...	...	...	...	FA2	...



One-Way Lever Arm

▲ Recommended in place of Types BA7, CA7, DA7, EA7 and MA7 lever arms with steel rollers.
 If necessary, the latter arms can be furnished
 ■ Roller inside.

Lever Arms

Class 9007—Types AW and C

Standard roller is hardened oil-impregnated sintered iron.
 Bold face type numbers indicate the most commonly used lever arms.

Adjustable Length Lever Arms

Description	Adjustable Length Lever Arm Adj. from 7/8" to 4"											
	Roller											
	Standard 5/8" Dia. 1/4" Wide	Standard 5/8" Dia. 5/8" Wide	Nylon 5/8" Dia. 1/4" Wide	Without Roller	Price	Ball Brg. 1 1/16" Dia. 1/4" Wide	Nylon ▲ 1" Dia. 5/8" Wide	DELTRIN 1 5/8" Dia. 1/4" Wide	Price	Nylon 2" Dia. 1/4" Wide	Rubber Tire 2 1/8" Dia. 1/2" Wide	
Type	Type	Type	Type		Type	Type	Type		Type	Price	Type	Price
Non-bendable	HA1	HA2	HA4	HA0		HA24	HA22	...		...	...	...
Bendable	HA5	HA6	HA8	HA9		HA25	HA23	HA20		HA26		HA21

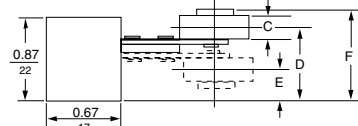
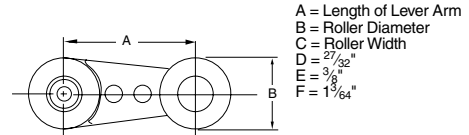
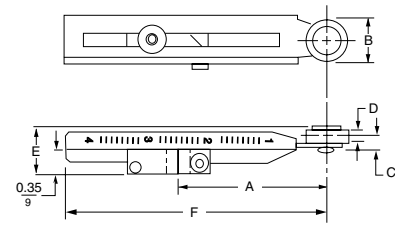
▲ Recommended in place of Types HA3 and HA7 lever arms with steel rollers. If necessary these arms can be furnished at

360° Angular Adjustable Lever Arms

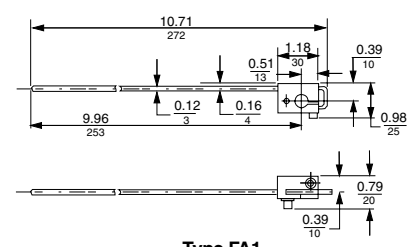
360° Angular Adjustable Lever Arm	Length of Arm	Roller (can be changed in the field from roller outside to roller inside position or vice versa)								Ball Bearing 1 1/16" Dia. 1/4" Wide	
		Standard 5/8" Dia. 1/4" Wide		Standard 3/4" Dia. 1/4" Wide		Nylon 5/8" Dia. 1/4" Wide		Nylon 3/4" Dia. 1/4" Wide		Price	Price
		Roller Outside	Roller Inside	Roller Outside	Roller Outside	Roller Outside	Roller Outside	Roller Outside	Roller Outside		
		Type	Type	Type	Type	Type	Type	Type	Type		
7/8"	AA1M	AA5M	AA11M	AA8M	AA18M	AA9M					
1 3/8"	BA1M	BA5M	BA11M	BA8M	BA18M	BA9M					
1 1/2"	MA1M	MA5M	MA11M	MA8M	MA18M	MA9M					
2"	CA1M	CA5M	CA11M	CA8M	CA18M	CA9M					
2 1/2"	DA1M	DA5M	DA11M	DA8M	DA18M	DA9M					
3"	EA1M	EA5M	EA11M	EA8M	EA18M	EA9M					

Rod Type Lever Arms

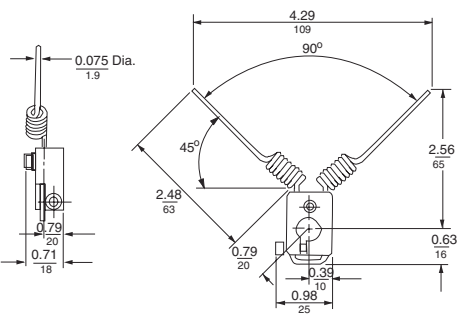
Rod Type Lever Arm	Rod	Type	Price
10" Stainless Steel Rod 12" Spring Rod, Steel 12" Spring Rod, DELTRIN Looped Rod Arm	10" Stainless Steel Rod	FA1	
	12" Spring Rod, Steel	FA3	
	12" Spring Rod, DELTRIN	FA5	
	Looped Rod Arm	FA6	
90° Forked Rod 2 1/2" Spring Rods, Steel		LA19	



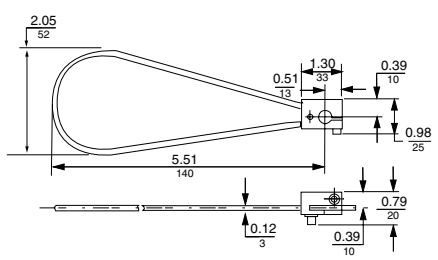
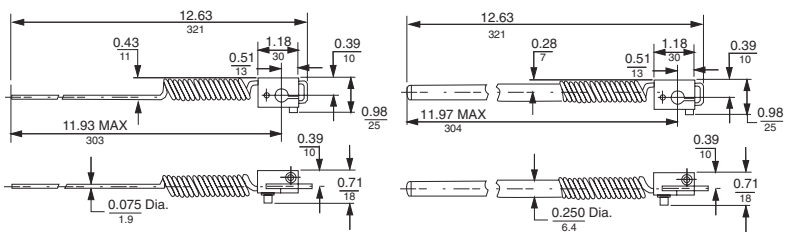
Approximate shipping weights range from 1/8" lb. to 1/4 lb.



Type FA1



Type LA19



Dual Dimensions: INCHES
 Millimeters