

'i-press' Limit Switches

General Description

Craig & Derricott's limit switches are sold under the tradename of 'Miniswitches'. The name is used to suggest that these devices are a scale up from microswitches, and this is indeed the case with all items being of industrial quality and very robust in construction.

The basic modules are available three forms:-

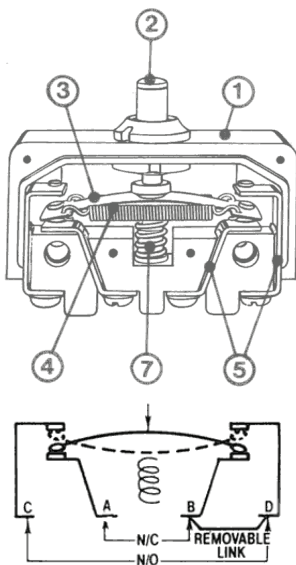
- Single pole snap-action, change-over (4 terminal)
- Double pole snap-action, change-over (8 terminal)
- Single pole, positive break, change-over (4 terminal)

All modules can be supplied in die-cast enclosures incorporating various forms of lever, lever/roller or ball actuator. Many other optional features are also available to special order.

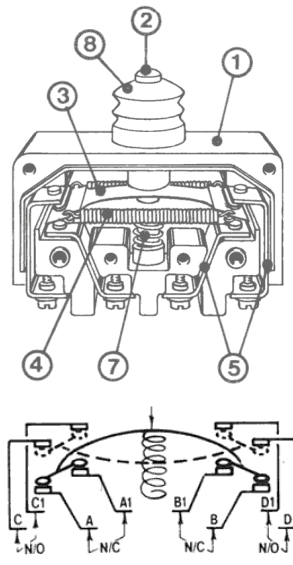
If you feel you would like to discuss your specific application, please contact our technical sales team who will be pleased to discuss your requirements.

Basic Construction

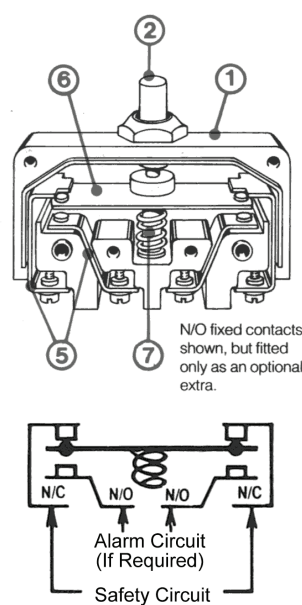
Single Pole Snap-Action



Double Pole Snap-Action



Single Pole Positive Break



- 1 Black phenolic case moulding
- 2 Plunger can be moulded or of hardened mild steel. Incorporates overtravel mechanism.
- 3 Switching blades of beryllium copper with fine silver contact tips.
- 4 Stainless steel tension springs.
- 5 Fixed contacts are plated brass with fine silver contact tips.
- 6 Rigid plated brass contact bridge with fine silver contact tips.
- 7 Stainless steel moving contact return spring.
- 8 Silicon bellows (when fitted)

Electrical Ratings

BS EN 60947-5 applicable to snap-action and positive break modules

Thermal Rating (I_{th})	20A
Switching Capacity - 250V AC15	6A
CTI of body mouldings	>600
Terminal screws	M3.5
Max. cable size	2.5 mm ²
Ingress protection (IPxx)	A & B models - IP40 C & D models - IP65*
Mechanical life	Single pole models up to 10×10^6 Double pole models up to 1×10^6

* with the exception of ball actuators



Typical OEM product based upon the 'D' range, incorporating gland, sealing bung and pre-wired cable and plug.

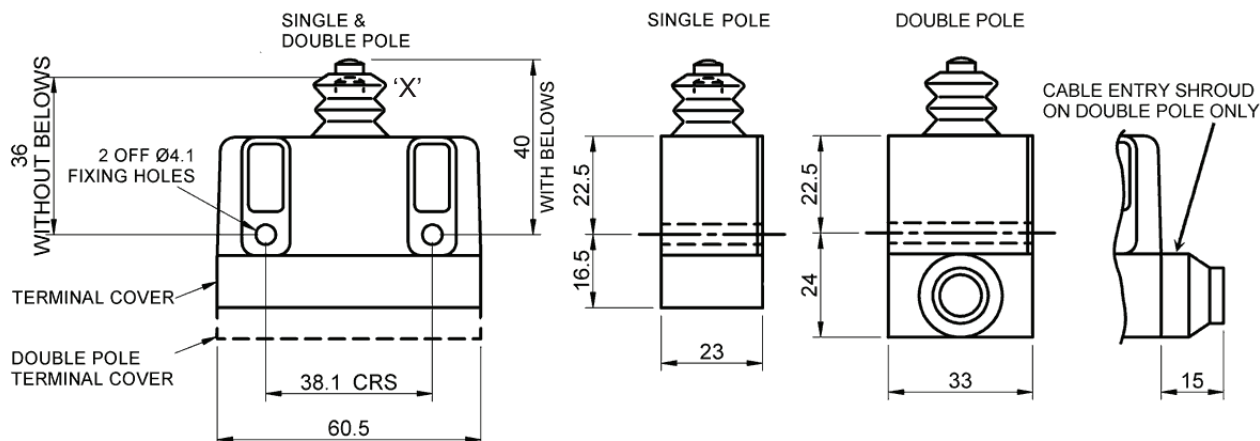
Technical Data Sheet

'i-press' Limit Switches

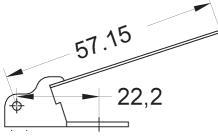
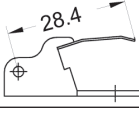
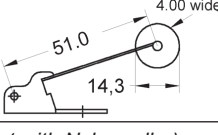
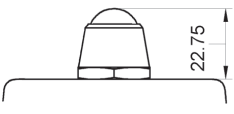
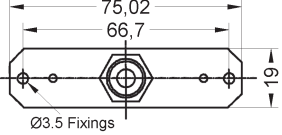
Product Data

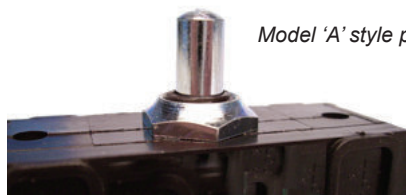
Model 'A' Moulded case body - without bellows

Model 'B' Moulded case body - with bellows



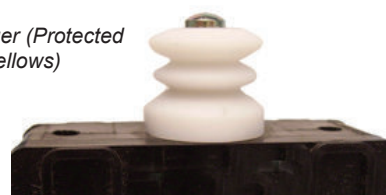
Catalogue Nos.

Description	Model Type 'A' (No Bellows)			Model Type 'B' (With Bellows)		
	SP Snap Action	DP Snap Action	SP Positive Break	SP Snap Action	DP Snap Action	SP Positive Break
Plunger only (As above)	A	DA	S/A	B	DB	S/B
Plain Lever Matl - Phosphur Bronze Width - 14.5	 A1	DA1	S/A1	B1	DB1	S/B1
Plain Lever (Short) Matl - Phosphur Bronze Width - 14.5	 A1/9	DA1/9	-	-	-	-
Lever/Roller Matl - Phosphur Bronze Lever Mild Steel roller	 A2	DA2	S/A2	B2	DB2	S/B2
Lever/Roller (As above but with Nylon roller)	A2N	-	-	B2N	-	-
Ball Actuator Matl - Ball/ Stainless Steel Housing/ Plated Brass	 A3	DA3	S/A3	-	-	-
Accessories						
Top Mounting Plate Material - Plated Steel	 .../P	.../P	.../P	.../P	.../P	.../P



Model 'A' style plunger (Unprotected)

Model 'B' style plunger (Protected with silicon rubber bellows)

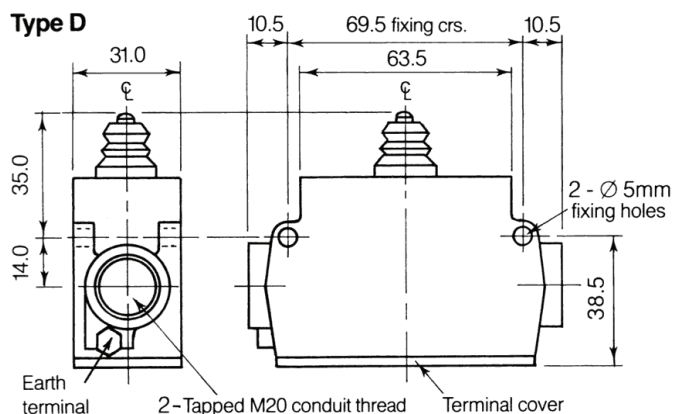
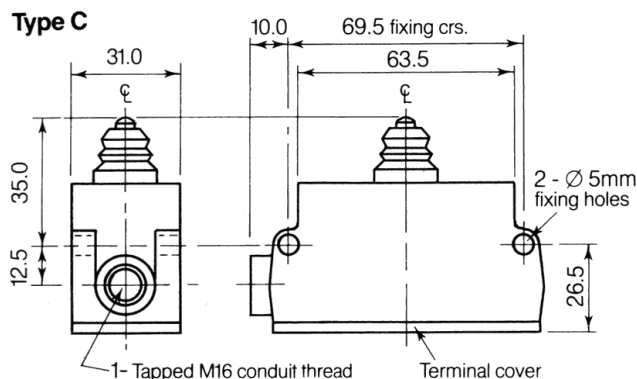


Technical Data Sheet

‘i-press’ Limit Switches

Product Data

Model ‘C’ Die-Cast Mazak body - 1 x M16 Conduit entry
Model ‘D’ Die-Cast Mazak body - 2 x M20 Conduit entries



Catalogue Nos.

Description (<i>Fixed pivot point - small trunnion</i>)	Model Type ‘C’		Model Type ‘D’	
	SP Snap Action	SP Positive Break	SP Snap Action	SP Positive Break
Plunger only (As above)	C	S/C	D	S/D
Plain Lever Matl - Phosphur Bronze Width - 15.5	C1	S/C1	-	-
Lever/Roller Matl - Phosphur Bronze Lever Mild Steel roller	C2	S/C2	-	-
Ball Actuator Matl - Ball/ Stainless Steel Housing/ Plated Brass	C3	S/C3	D3	S/D3
Accessories				
Base Mounting Plate Material - Die Cast Mazak (Replaces existing terminal cover)	.../BM	.../BM	.../BM	.../BM

Photographs of typical products



C1 Miniswitch



C2 Miniswitch



C3 Miniswitch

Technical Data Sheet

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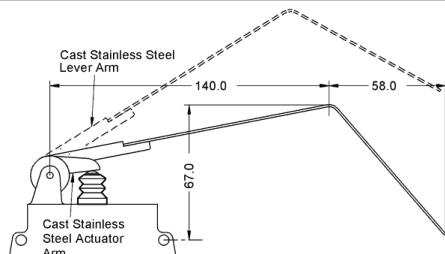
Catalogue Nos.

Description (*Adjustable pivot point - tall trunnion*)

Allows the setting point of the actuator arm to be adjusted over a wide angle.

Long Angled Lever

Matl - Spring Steel
Width - 15.9



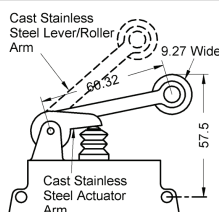
Model Type ‘D’	
SP Snap Action	SP Positive Break

D1/3

S/D1/3

Cast Lever/Roller

Matl - Cast Stainless Steel Arm
Plated Steel Roller



D2/2

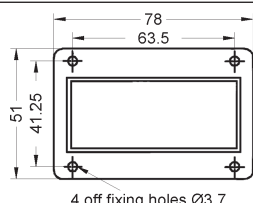
S/D2/2

Accessories

Base Mounting Plate

Material - Die Cast Mazak

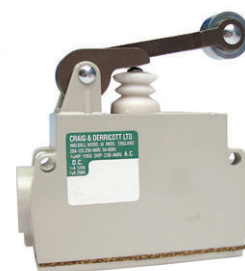
(Replaces existing terminal cover)



.../BM

.../BM

Photographs of typical products



D2/2 Miniswitch



Showing the actuating arm adjustment facility on the D2/2. To adjust, release locking nut, move the cast arm to the required set position re-tighten locking nut.

Encapsulated Limit Switches

Encapsulated limit switches fall into two main categories, block encapsulated and internally encapsulated.....

Block Encapsulated

The starting point for this range of products is the well proven 20A snap action Miniswitch. With its high power rating and generous sized contacts it is well suited to the encapsulation process.

Most of the items in this range have a cable pre-connected and sealed within the encapsulant, and in the case of most military applications, this will be a closely specified low toxicity product.

The very latest version in the range dispenses with the cable and incorporates a military multi-pin connector.

With single and double pole options as well as standard or gold flashed/plated contacts, the range can be modified to meet a specific requirement.



Internally Encapsulated



Internally encapsulated devices come in various formats. The item shown on the left is a pushbutton contact block in a moulded body with a pre-connected cable tail.

We can tailor products to suit your individual requirements, so please give us the application and let us recommend a solution.