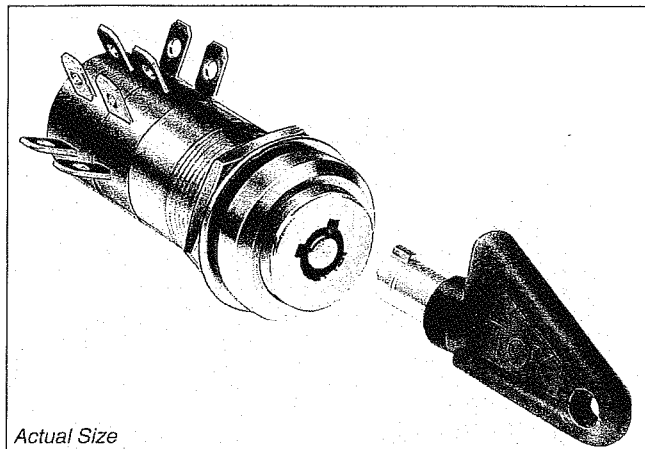


TOK P2 Series



The construction of the P2 series is based on moulded packets each containing one or two pairs of contacts, which may be assembled to give multiple switching functions. Normally a maximum of 6 packets may be incorporated. The design is very flexible and allows a lot of variations.

The P2 & K2 series represent outstanding quality and value for a wide range of control and security applications. Their small size has proven invaluable to manufacturers of electronic test, office, industrial and security equipment. Contacts are of fine silver on phosphor-bronze spring leaves, operated by a rotary cam.

The P2 & K2 series are available with spindle, knob or a large range of locks from general-purpose to very high security.

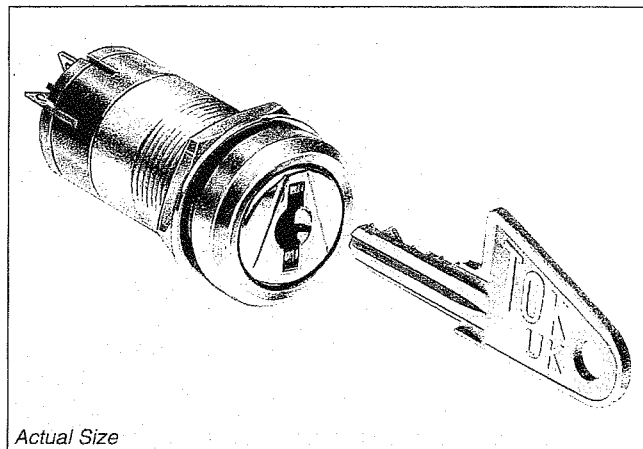
Lock 3F

A 5-disc general-purpose lock having a diecast body with brass wards. The lock face has a polished chrome plated finish. Key differs are available coded TOK 1 to TOK 100.

Lock 3T

Similar to lock 3F but with a special reverse key section, exclusive to TOK, with 200 differs.

TOK K2 Series



General constructions and materials of the K2 series are similar to the P2 series. Terminals are rear entry rather than side entry; this restricts the switches to a single packet (one or two contact pairs)

Lock 3D

6-disc lock offering 2,000 differs, with limited key-free, key-trapped options.

Lock 3R

7-pin radial lock offering high security with 75,000 differs. Recorded key changes available.

Lock 3S

10-pin radial lock offering very high security with 2,000,000 differs. Recorded key changes available.

SPECIFICATIONS FOR P2 & K2 SERIES

Maximum Voltage	250Vac	No of Packets	P2: up to 6 (12 contact pairs) up to 2 for spring return
Electrical Rating			K2: 1 (1 or 2 contact pairs)
50,000 Operations:	250Vac 2A 0.7 PF 12Vdc 10A Resistive	Contacts	Standard: fine silver Alternative: gold-plated 5 microns on 1 micron nickel
UL/CSA 65°C:	250Vac 2A 125Vac 4A 12Vdc 10A	Terminals	Silver-plated for soldering 4.8mm x 0.8mm push-on connector
Voltage Proof	2kV for 1 minute (terminals to earth)	Moulding Material	Self extinguishing glass-filled nylon.
Initial Contact Resistance	< 20m Ohms	Approvals	UL/CSA
Temperature Range	-20°C +85°C	Key entries	0°, 90°, 180° & 270°
Indexing	45° or 90° detent angle Spring return angle 40°		The key is always trapped in spring-biased positions.
No of switch positions	2 to 4 x 90°, 2 to 8 x 45°	Keys supplied	2 keys per lock as standard
Fixing	Single hole with lock nut and tablock washer or double 'D'		

K2-3F, K2-3T, K2-3D

10.2 MAX PANEL (0.40")
22.23 (0.875")
5.50 (0.218")
33.30 (1.312")
39.70 (1.562")
Ø19.05 (0.750")
9.50 (0.374")
Ø19.10 (0.752")
+0.1 (0.752")
17.20 (0.675")
Ø3.20 (0.125")
PANEL CUT OUT

P2-3F, P2-3T, P2-3D

R 15.9 (0.625")
P = No OF PACKETS x B.70 (0.343")
P* + 28.60 (1.125")
28.60 (1.125")
8.70 (0.343")
4.77 (0.188")
KEY PROJECTION FROM LOCK FACE
3T, 3F = 23.2 (0.913")
3D = 25.4 (1.000")
3R = 36.0 (1.417")
3S = 34.0 (1.339")
3S LOW PROFILE KEY (*N* SUFFIX) = 24.5 (0.965")
(THREAD Ø0.75x26 TPI WHIT FORM)
PANEL CUT OUT AS ABOVE

K2 & P2-3R, 3S

2.54 (0.10")
PANEL CUT OUT AS ABOVE

K2 & P2-3N

6.35 (0.25")
4.77 (0.188")
PANEL CUT OUT AS ABOVE

K2 & P2-1N

(0.375" x 32 TPI WHIT FORM THREAD)
13.60 (0.536")
K2 = 30.30 (1.193")
P2 = 17.45 (0.687") + P
P = 8.70 (0.343") x No OF PACKETS
7.87 (0.310")
5.50 (0.218")
Ø19.05 (0.750")
Ø6.35 (0.250")
Ø1.60 (0.063")
HOLE FOR ANTI-ROTATION PIN IF REQUIRED, USE SUFFIX *X*
7.65 (0.300")
Ø9.50 (0.375")
PANEL CUT OUT

TYPICAL APPLICATION

Photo courtesy of KAC Alarms

KEYS

3F/3T KEY
13.00 (0.512")
41.40 (1.63")
10.16 (0.40")
11.50 (0.453")
3D KEY
46.00 (1.811")
13.25 (0.521")
42.00 (1.653")
3R KEY
3S KEY
40.00 (1.575")
16.00 (0.630")
3S KEY *N* SUFFIX
30.50 (1.200")

TOK P2 & K2 Series

CODING SYSTEM

P2 or K2	3F	B	A																																																																																					
RANGE	ACTUATOR	KEY CODE	KEY TRAPPING																																																																																					
P2 or K2	Key 3F5-disc lock general purpose 3T5-disc lock medium security 3D6-disc lock high security 2,000 differs Key on request 3RRadial 7-pin lock high security 75,000 differs 3SRadial 10-pin lock very high security 2,000,000 differs Knob 1N6.35mm (0.25") dia shaft, 3/8" bush fixing, no knob supplied 3NIntegral chrome knob, nut and bezel fixing	Not applicable to 1N and 3N actuator variants For 3F Actuators TOK 1 to TOK 100 B TOK 1 Key D TOK 3 Key E TOK 4 Key F TOK 5 Key H TOK 7 Key K TOK 9 Key L TOK 10 Key M All switches in batch with different keys i.e. 'locks to differ' N Specified key code other than B to L For 3T Actuators Range of 200 differs exclusive to TOK M All switches in batch with different keys i.e. 'locks to differ' N Specified key code For 3D, 3R, 3S Actuators M All switches in batch with different keys i.e. 'locks to differ' N Specified key code	Not applicable to 1N and 3N actuator variants • Indicates the indexed position in which the key is trapped. <table><tr><td></td><td colspan="4">90° Positions</td></tr><tr><td></td><td>←</td><td>↑</td><td>→</td><td>↓</td></tr><tr><td>A</td><td colspan="4">Free in all indexed positions</td></tr><tr><td>B</td><td></td><td>●</td><td></td><td></td></tr><tr><td>C</td><td></td><td></td><td>●</td><td></td></tr><tr><td>D</td><td></td><td></td><td></td><td>●</td></tr><tr><td>E</td><td>●</td><td></td><td></td><td></td></tr><tr><td>F</td><td>●</td><td></td><td>●</td><td>●</td></tr><tr><td>G</td><td></td><td>●</td><td>●</td><td>●</td></tr><tr><td>H</td><td>●</td><td>●</td><td>●</td><td></td></tr><tr><td>J</td><td>●</td><td>●</td><td></td><td>●</td></tr><tr><td>K</td><td></td><td>●</td><td>●</td><td></td></tr><tr><td>L</td><td></td><td></td><td>●</td><td>●</td></tr><tr><td>M</td><td>●</td><td></td><td></td><td>●</td></tr><tr><td>N</td><td>●</td><td>●</td><td></td><td></td></tr><tr><td>P</td><td></td><td>●</td><td></td><td>●</td></tr><tr><td>Q</td><td>●</td><td></td><td>●</td><td></td></tr></table> Keys are always trapped in spring-biased positions. Functions spring-biased only, use code 'A'.		90° Positions					←	↑	→	↓	A	Free in all indexed positions				B		●			C			●		D				●	E	●				F	●		●	●	G		●	●	●	H	●	●	●		J	●	●		●	K		●	●		L			●	●	M	●			●	N	●	●			P		●		●	Q	●		●	
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☐ STANDARD ITEMS

N.B. Not every permutation within the coding system leads to feasible or existing switches. Please contact us for more information.

P2 & K2 Switches not covered by the coding system or exceeding 15 characters are allocated a special part number e.g. P2-3FB-11825

CODING SYSTEM

TOK P2 & K2 Series

1		01						G			
No OF POLES		SWITCHING FUNCTION						SUFFIXES			
Specify NUMBER of poles required		The 'code' determines: • Description of switching function • Number of packets per pole. The 'number of poles' required times the 'packets per pole' gives the length of the switch in terms of number of packets, e.g. with 4 poles and code 01: 'Number of Poles' 4, 'Code' 01 gives 'Packets per Pole' 0.5; $4 \times 0.5 = 2$ packets • Actuator position and angle between them • Whether a spring return mechanism is fitted to provide a momentary switching function 'mom'. • Different circuits 'a', 'b', 'c', 'd', 'a+b' and position 'OFF' All switching functions are supplied 'Break-Before-Make', unless specified otherwise.						Suffixes are only required for specific designs, for example: A: Denotes 45° indexed function formerly biased only C: Screw clamp connections (P2 only, limited functions) S: Make-Before-Break contacts G: Gold-plated contacts J: Bezel finished black K: Followed by the number of keys required per lock. (Use only when requirement differs from two). X: Anti-rotation pin (1N only) PREFIX U: UL/CSA approvals: e.g. UP2-3FBA-101			
No of Poles available as standard with		Switching Function		Packets per Pole	Angle of Movement	Position of actuator viewed from front					
P2	K2	Code	Description								
1 to 12	1 or 2	01	Off-On	0.5	90°		OFF	a			
1 to 4	1 or 2	03	Off-On (spring return to Off)	0.5	40°		OFF	a/mom			
1 or 2	1	06	*, + Changeover (spring return to a)	1	40°		a	b/mom			
1 or 2	1	08	*, Changeover with centre Off (Spring return to Off)	1	40°	a mom	OFF	b mom			
1 to 6	1	09	*, + Changeover	1	90°		a	b			
1 to 6	1	23	* Changeover with centre Off	1	90°	a	OFF	b			
1 to 4	n/a	47	+ 3 Circuit Selective, no Off	1.5	90°	a	b	c			
1 to 3	n/a	57	+ 4 Circuit Selective, no Off	2	90°	a	b	c	d		
1 or 2	1	67	Motor Control, Stop-Normal-Start (Spring return Start-to-Normal only)	1	90°/40°	OFF	a	a+b mom			
• + Make-Before-Break contacts available (see suffix S) • * The end user must connect the terminals externally to provide the specified function • a, b, c and d indicate pairs of contacts • Spring-biased functions use 40° movement and the key is trapped in biased positions • Other switching functions available on request											

1. Ordering example: switch with key P2 - 3F B A - 1 01 - K6

Range: P2 Series _____

Actuator: 5-disc lock, general purpose _____

Key Code: TOK 1 Key _____

Key trapping: Key Free in all indexed positions _____

Number of poles: One _____

Switching function: OFF-ON _____

Suffix: 6 Keys per lock _____

2. Ordering example: switch with knob P2 - 3N - 2 09 - G

Range: P2 Series _____

Actuator: Integral chrome knob _____

Number of poles: Two _____

Switching function: Changeover _____

Suffix: Gold-plated contacts _____