

# NKK Rotary Switches

## NKK MR SERIES: HALF-INCH PROCESS SEALED ROTARY SWITCHES

- Power rating: 125VAC for MRA, MRX, & MRY; 28VAC for MRF & MRK
- Shaft actuated switches are supplied with knob and mounting hardware



RoHS Compliant

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Poles and Circuits	Power Rating	Price Each			
					1	25	50	100
<b>Shaft Actuated w/ PC Terminals</b>								
633-MRA112A	MRA112-A	A	SP, 2-12 positions	250mA	9.83	9.45	9.21	8.37
633-MRA206A	MRA206-A	A	DP, 2-6 positions	250mA	13.82	12.09	11.90	11.44
633-MRA403A	MRA403-A	A	4P, 2-3 positions	250mA	15.31	14.03	13.60	12.71
<b>Low Profile Shaft Actuated w/ PC Terminals</b>								
633-MRK112A	MRK112-A	B	SP, 2-12 positions	0.4VA	11.80	10.32	9.52	9.14
633-MRK206A-RO	MRK206-A	B	DP, 2-6 positions	0.4VA	10.25	9.93	9.60	9.31
633-MRK403A-RO	MRK403-A	B	4P, 2-3 positions	0.4VA	13.26	12.97	12.26	11.12
<b>Shaft Actuated (w/ PC Turret Terminals) (Not Process Sealed)</b>								
633-MRX108A-RO	MRX108-A	C	SP, 2-8 positions	2A	13.35	12.91	12.50	11.92
633-MRX204A-RO	MRX204-A	C	DP, 2-4 positions	2A	14.11	13.64	13.20	12.60

## NKK HIGH CAPACITY ROTARY SWITCHES

- Number of Positions: 2-11
- Nonshorting Circuits (Shorting Circuits are also available, call for details)

- D-Flat Shaft
- 30° Indexing
- HS, TS, and PS Series



RoHS Compliant

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Pole	Number of Terminals	Termination	Price Each			
						1	25	50	100
<b>Resistive Load: 6A @ 125/250VAC</b>									
633-TS-1N-RO	TS1N	D	1	1 COM, 11 LOAD	Screw terminals	30.69	29.53	28.61	27.88
633-TS-2N-RO	TS2N	D	2	2 COM, 22 LOAD	Screw terminals	45.12	43.45	42.07	41.00
633-TS-3N-RO	TS3N	D	3	3 COM, 33 LOAD	Screw terminals	53.18	51.18	49.58	48.33
633-TS-5N-RO	TS5N	D	5	5 COM, 55 LOAD	Screw terminals	107.67	95.86	93.74	89.01
<b>Resistive Load: 12A @ 125VAC; 6A @ 250VAC</b>									
633-HS16-1N-RO	HS16-1N	E	1	1 COM, 11 LOAD	Solder lug	19.42	18.70	18.10	17.65
633-HS16-2N	HS16-2N	E	2	2 COM, 22 LOAD	Solder lug	26.59	24.80	24.06	23.04
633-HS16-3N-RO	HS16-3N	E	3	3 COM, 33 LOAD	Solder lug	34.16	32.89	31.86	31.06
633-HS16-4N-RO	HS16-4N	E	4	4 COM, 44 LOAD	Solder lug	59.74	57.51	55.71	54.30
<b>Resistive Load: 30A @ 125/250VAC</b>									
633-PS-1N-RO	PS1N	F	1	1 COM, 11 LOAD	Screw terminals	36.63	31.67	31.23	29.22
633-PS-3N-RO	PS3N	F	3	3 COM, 33 LOAD	Screw terminals	74.32	71.99	69.82	68.10
633-PS-4N-RO	PS4N	F	4	4 COM, 44 LOAD	Screw terminals	86.97	84.26	80.14	74.97
<b>Knobs</b>									
Description									
633-AT431	AT431	G		Large Knob, Black		3.46	3.43	3.30	3.08
633-AT432	AT432	H		Small Knob, Black		3.84	3.63	3.52	3.27

## NKK FR SERIES: 10MM ULTRA-THIN DIP ROTARY SWITCHES

### Specifications:

- Power Rating: 100mA @ 5VDC switching; 100mA @ 50VDC non-switching
- Contact resistance: 100mΩ max.
- Insulation resistance: 1000MΩ min. @ 250VDC
- Dielectric strength: 250VAC min. for 1 minute

### Features:

- Environmentally friendly
- Slim: .150" (3.8mm) body
- Highly visible legends
- Gold plated contacts
- Actuator knob available for screwdriver adjusted



RoHS Compliant

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit	Terminal	Price Each			
					1	25	50	100
<b>Shaft Actuated</b>								
633-FR01KC10P	FR01KC10P	I	BCD, Complement	Straight PCB	3.18	2.87	2.65	2.56
633-FR01KC16P	FR01KC16P	I	Hexadecimal, Complement	Straight PCB	3.18	2.87	2.65	2.56
633-FR01KR10P	FR01KR10P	J	BCD, Real	Straight PCB	3.00	2.70	2.50	2.41
633-FR01KR16P	FR01KR16P	J	Hexadecimal, Real	Straight PCB	3.00	2.70	2.50	2.41
633-FR01KR10H	FR01KR10H-S	J	BCD, Real	R/A PCB	3.25	2.48	2.34	2.21
633-FR01KR16H	FR01KR16H	J	Hexadecimal, Real	R/A PCB	3.94	3.18	3.16	2.77
<b>Screwdriver Actuated</b>								
633-FR01FC10P	FR01FC10P	K	BCD, Complement	Straight PCB	3.18	2.87	2.65	2.56
633-FR01FC16P	FR01FC16P	K	Hexadecimal, Complement	Straight PCB	3.00	2.70	2.50	2.41
633-FR01FR16P	FR01FR16P	K	Hexadecimal, Real	Straight PCB	3.00	2.70	2.50	2.41
633-FR01FC16H	FR01FC16H	L	Hexadecimal, Complement	R/A PCB	3.94	3.55	3.16	2.77
633-FR01FR10H	FR01FR10H	L	BCD, Real	R/A PCB	3.73	3.36	2.99	2.62
<b>Snap-On Knob for Screwdriver Actuated</b>								
633-AT4180	AT4180	M	Snap-On Knob	-	.66	.59	.53	.51

## NKK FRO2 SERIES: 10MM ULTRA-THIN SMT DIP ROTARIES

### Features:

- Slim: .150" (3.8mm) body has the lower profile in the industry and allows close stacking of PC Boards.
- Highly visible legends and choice of screwed or shaft actuators with arrow position indication provide trouble free code setting.
- Detent mechanism gives crisp, positive action for accurate switch setting.
- Use of heat resistant resin allows infrared convection reflow soldering.
- Gull-winged terminals ensure mechanical stability during soldering and simplify solder joint inspection.
- Cam activated movable contact and gold contacts assure contact reliability and continuity



RoHS Compliant

For quantities greater than listed, call for quote.

MOUSER STOCK NO.	NKK Part No.	Fig.	Circuit	Price Each			
				1	25	50	100
633-FR02KC16P-R	FR02KC16P-R	I	Complement Coded, Hexadecimal	4.00	3.09	2.83	2.72
633-FR02KR10P-R	FR02KR10P-R	I	Real Coded, Decimal	4.18	3.23	2.96	2.84
633-FR02KR10P-S	FR02KR10P-S	I	Real Coded, Decimal	4.00	3.09	2.83	2.72
633-FR02KR16P-R	FR02KR16P-R	I	Real Coded, Hexadecimal	4.00	3.09	2.83	2.72
633-FR02KR16P-S	FR02KR16P-S	I	Real Coded, Hexadecimal	4.00	3.09	2.83	2.72
633-FR02KC10P-S	FR02KC10P-S	I	Complement Coded, Decimal	4.00	3.09	2.83	2.72
633-FR02KC16P-S	FR02KC16P-S	I	Complement Coded, Hexadecimal	4.00	3.09	2.83	2.72
633-FR02KC10P-R	FR02KC10P-R	I	Orange Actuator, Complement Coded, Decimal	4.18	3.23	2.96	2.84

**DIMENSIONS: in.**

**A**: Shaft actuated, top view. Dimensions: .394, .197, .669, .63, .398, .472.  
**B**: Shaft actuated, side view. Dimensions: .394, .217, .398, .472.  
**C**: Low profile shaft actuated, top view. Dimensions: .787, .22, .681, .551.  
**D**: Low profile shaft actuated, side view. Dimensions: .61, .55, .87, .47, .73, .24, .10, .75.  
**E**: High capacity, top view. Dimensions: .59, .55, .96, .39, .28 max., .250, .24, .10, .75.  
**F**: High capacity, side view. Dimensions: .59, .55, .96, .69, .59 max., .299, .24, .10, .75.  
**G**: Knob, top view. Dimensions: .77, .94, .118, .224.  
**H**: Knob, side view. Dimensions: .61, .83, .98, .161.  
**I**: Shaft actuated, top view. Dimensions: .15, .276, .394, .154, .394.  
**J**: Shaft actuated, side view. Dimensions: .394, .394, .15, .276.  
**K**: Screwdriver actuated, top view. Dimensions: .15, .394, .13, .394.  
**L**: Screwdriver actuated, side view. Dimensions: .394, .394, .15, .258.  
**M**: Snap-on knob, top view. Dimensions: .083, .378, .031.

NKK Rotary Switches