



SICATRON

elektronik & automation



Beratung und Service

- Kompetente technische Beratung
- Exzellente Produktqualität,
- höchste Prozessdynamik,
- maximale Kundenorientierung
- Maßgeschneiderte Angebote ob kleine oder große Mengen
- Persönliche Bestellannahme
- besten Service für den Ablauf Ihrer Bestellungen

Fon
+49 (0) 2331-473329-0

Fax
+49 (0) 2331-473329 200

info@sicatron.de

Beschaffung und Logistik

Sicatron bietet Ihnen alle Aspekte der Beschaffung und Bevorratung mit einer breiten Produktpalette elektromechanischer und elektronischer Komponenten sowie Subsysteme.

Basierend auf unserer langjährigen Erfahrung, mit maximaler Leistung und persönlichem Engagement entwickeln wir für Sie wirtschaftliche und individuelle Lösungen.

Sie haben alles aus einer Hand, ob Standardprodukt oder kundenspezifische Lösungen.

Unser Partner:

saia-burgess

JOHNSON
ELECTRIC

Systemlösungen

Sicatron plant und entwickelt mit Ihnen - vom Schalter bis zum kompletten Subsystem (Kabelkonfektion).



ROHS konforme Produkte

Schaltechnik | Steuerungstechnik | Systemlösungen | Kabelkonfektion | Beschaffung /Logistik

Fon +49 (0) 2331 473329-0 Fax +49 (0) 2331 473329 200 info@sicatron.de www.sicatron.de

Joystick

Range:	Type	Popular Products	Page
Snap-action Microswitches	700	S 721001 S 741001 S 722001 S 742001 D 721001 D 741001 D 722001 D 742001	302
	J8	J84111113 J82111113 J84112113 J82112113 J82211113 J84211113	305
	H70	H701000 H702000 H701010 H702010	308
Snap-action Microswitches / Potentiometer	C700	C702000 C710000	311
Terminology			315



700

Joystick

Microswitches

700

Panel cut-out (mm) $\varnothing 22 \times 20$

Characteristics

- single or double pole
- choice of directional gating options
- miniature or subminiature microswitch types

Rating

- up to 15 A, 250 VAC, miniature microswitches (380 series)
- up to 6 A, 250 VAC, subminiature microswitches (290 series)

Dimensions (mm) $55 \times 55 \times 55.2$, miniature microswitches (380 series)
 $41.3 \times 41.3 \times 51.2$, subminiature microswitches (290 series)

Actuator ■ knob

Approvals ENEC, UL and CSA (switch only)



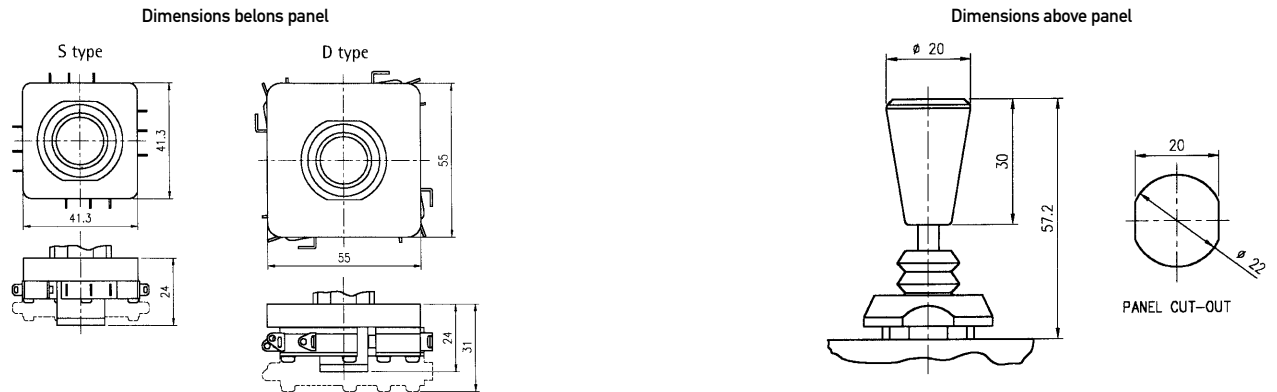
Popular products

Ordering Reference	Panel cut-out	Dimensions	Directional gating	Number of poles	Switch type	Terminal Type	Electrical rating ENEC	UL/CSA
S 721001	$\varnothing 22 \times 20$	$41.3 \times 41.3 \times 81.2$	2 way gate at 180°	1 pole	292/20/150	Solder	6 A, 250 VAC, 25E3, T85	6 A, 250 VAC
S 741001	$\varnothing 22 \times 20$	$41.3 \times 41.3 \times 81.2$	4 way gate at 90°	1 pole	292/20/150	Solder	6 A, 250 VAC, 25E3, T85	6 A, 250 VAC
S 722001	$\varnothing 22 \times 20$	$41.3 \times 41.3 \times 81.2$	2 way gate at 180°	2 pole	292/20/150	Solder	6 A, 250 VAC, 25E3, T85	6 A, 250 VAC
S 742001	$\varnothing 22 \times 20$	$41.3 \times 41.3 \times 81.2$	4 way gate at 90°	2 pole	292/20/150	Solder	6 A, 250 VAC, 25E3, T85	6 A, 250 VAC
D 721001	$\varnothing 22 \times 20$	$55 \times 55 \times 88.2$	2 way gate at 180°	1 pole	382/25/10	Solder	15 (4) A, 250 VAC, 10E3, T85	15 A, $\frac{1}{2}$ HP, 125/250 VAC
D 741001	$\varnothing 22 \times 20$	$55 \times 55 \times 88.2$	4 way gate at 90°	1 pole	382/25/10	Solder	15 (4) A, 250 VAC, 10E3, T85	15 A, $\frac{1}{2}$ HP, 125/250 VAC
D 722001	$\varnothing 22 \times 20$	$55 \times 55 \times 88.2$	2 way gate at 180°	2 pole	382/25/10	Solder	15 (4) A, 250 VAC, 10E3, T85	15 A, $\frac{1}{2}$ HP, 125/250 VAC
D 742001	$\varnothing 22 \times 20$	$55 \times 55 \times 88.2$	4 way gate at 90°	2 pole	382/25/10	Solder	15 (4) A, 250 VAC, 10E3, T85	15 A, $\frac{1}{2}$ HP, 125/250 VAC

Specifications

Switch	380 series miniature snap-action microswitches (D type below) or 290 series subminiature snap-action microswitches (S type below)
Body and fixing nut	Nylon 6.6
Spindle	Nylon 6.6 reinforced with stainless steel
Sealing cowl	Neoprene
Knob	Phenolic
Spring	Spring steel

Dimensions



Recommended maximum electrical ratings

Approvals held	None
Electrical rating	D – 15 A, 250 VAC S – 6 A, 250 VAC
Switch Type	D – 382/25/10 (solder) or 383/25/10 (faston) with gold flashed contacts S – 292/20/150 (solder) or 291/20/150 (faston) with gold flashed contacts
Temperature rating	T85 °C
Insulation resistance	>1250 V
Tracking resistance	PTI KB 250

J8

Joystick

Microswitches

J8

Panel cut-out (mm)	Ø 22.5
Characteristics	■ choice of directional gating options ■ choice of microswitch functions
Rating	up to 16 A, 250 VAC up to 5 A, 250 VAC
Dimensions (mm)	up to 74.5 × 74.5 × 105 up to Ø 60 × 60 × 103.5
Actuator	■ knob
Approvals	ENEC, UL and CSA (switch only)



Popular products

Ordering Reference	Panel cut-out	Dimensions	Directional gating	Number of poles	Actuating modus	Switch type	Terminal Type	Electrical rating ENEC	UL/CSA
J84 111 113	Ø 22.5	74.5 × 74.4 × 94.7	4 way gate at 90°	1 pole	Normal	XG03-88	Solder	16 (6) A, 250 VAC, 5E4, T85	15 A, 250 VAC
J82 111 113	Ø 22.5	74.5 × 74.4 × 94.7	2 way gate at 180°	1 pole	Normal	XG03-88	Solder	16 (6) A, 250 VAC, 5E4, T85	15 A, 250 VAC
J84 112 113	Ø 22.5	74.5 × 74.4 × 94.7	4 way gate at 90°	1 pole	Lift to operate	XG03-88	Solder	16 (6) A, 250 VAC, 5E4, T85	15 A, 250 VAC
J82 112 113	Ø 22.5	74.5 × 74.4 × 94.7	2 way gate at 180°	1 pole	Lift to operate	XG03-88	Solder	16 (6) A, 250 VAC, 5E4, T85	15 A, 250 VAC
J82 211 113	Ø 22.5	74.5 × 74.4 × 105	2 way gate at 180°	2 pole	Normal	XG03-88	Solder	16 (6) A, 250 VAC, 5E4, T85	15 A, 250 VAC
J84 211 113	Ø 22.5	74.5 × 74.4 × 105	4 way gate at 90°	2 pole	Normal	XG03-88	Solder	16 (6) A, 250 VAC, 5E4, T85	15 A, 250 VAC

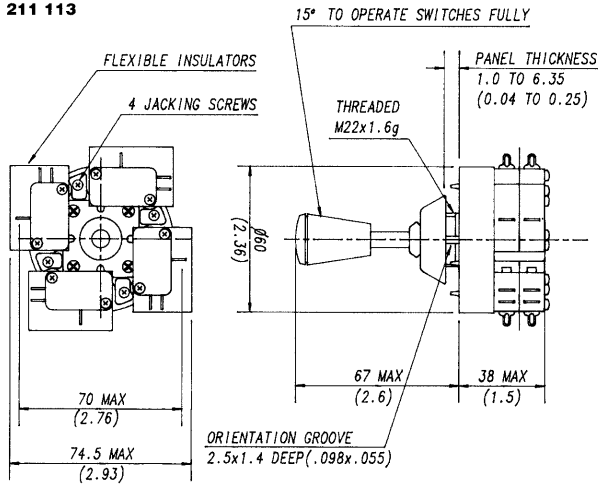
Specifications

Top plate	Glass fibre reinforced polyamide (PA. 6.6)
Control rod	Steel chrome plated
Bezel/knob	Phenolic
Cowl/'O' ring	Silicon rubber
Temperature range	-40°C to +85°C
Mechanical life	5 × 10 ⁵ cycles minimum
Type of protection	Cowl and 'O' ring provide front of panel sealing. For details of insert switch protection refer to the appropriate section
Mounting	via single hole 22.5 mm (0.89 in) dia
Insert switches	V4NCT7 – Sub-miniature XG03-88 – Miniature (Other types may be possible please consult SAIA-Burgess Electronics)

Dimensions

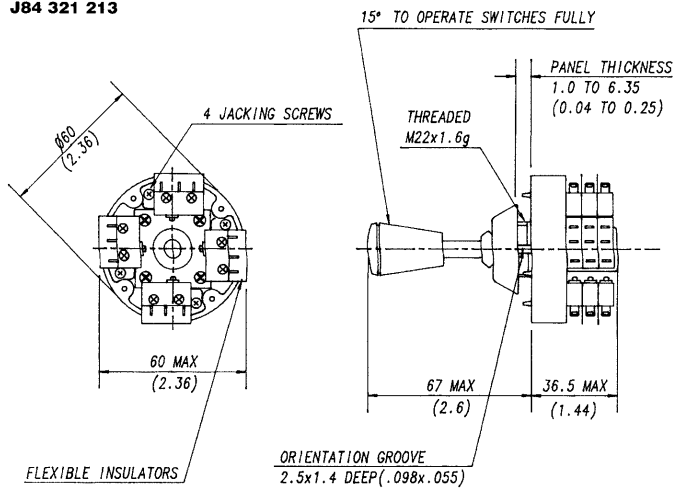
Dimensions below panel

J84 211 113



Dimensions above panel

J84 321 213



Recommended maximum electrical ratings

	Voltage	Voltage (V)	Resistive load (A)	Inductive load (A)	
V4NCT7	AC	up to 250	5	2	See pages 52 to 55
	DC	up to 30	5	3	
	DC	up to 50	1	1	
	DC	up to 75	0.75	0.75	
XG03-88	AC	up to 250	16	6	See pages 70 to 73
	DC	up to 30	12	7	
	DC	up to 50	3	1.5	
	DC	up to 75	1	0.6	
	DC	up to 125	0.5	0.3	
	DC	up to 250	0.3	0.2	

Type coding key for standard products

Basic type	J8	Example: J8	0	1	1	1	113
Number of gates	0	Ungated (stirring action)					
	2	2 gates at 180°					
	4	4 gates at 90°					
Number of switches mounted per gate	1	1 × V4NCT7 or 2 × XG03-88					
	2	2 × V4NCT7 or 2 × XG03-88					
	3	3 × V4NCT7 only					
Type of action	1	Momentary					
	2	Latching					
	4	Stirring					
Mode of operation	1	Normal (Direct push)					
	2	Lift to operate					
Type of micro switches fitted	113	XG03-88					
	213	V4NCT7					



H70

Panel Mounted

Joystick

H70

Panel cut-out (mm) $\varnothing 36.8 \times 22.2$

Characteristics

- single axis joystick controllers
- positive movement to full travel – central dead band
 - single or double pole versions

Rating 250 VAC, 6 A

Dimensions (mm) $60 \times 31.9 \times 57.1$

Actuator ■ paddle style

Approvals ENEC, UL and CSA (switch only)



Popular products

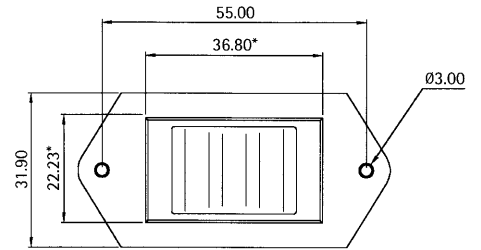
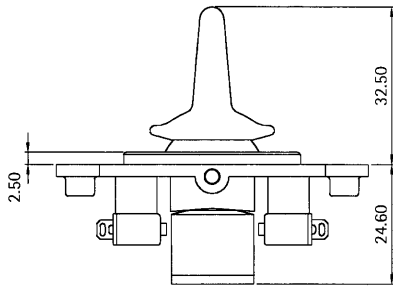
Ordering Reference	Panel cut-out	Dimensions	Directional gating	Number of poles	Actuating modus	Switch type	Terminal Type	Electrical rating ENEC	UL/CSA
H701000	36.8×22.23	$64 \times 31.9 \times 57.1$	2 way gate at 180°	1 pole	Normal	292/20/150	Solder	6 A, 250 VAC, 25E3, T85	6 A, 250 VAC
H702000	36.8×22.23	$64 \times 31.9 \times 57.1$	2 way gate at 180°	2 pole	Normal	292/20/150	Solder	6 A, 250 VAC, 25E3, T85	6 A, 250 VAC
H701010	36.8×22.23	$64 \times 31.9 \times 57.1$	2 way gate at 180°	2 pole	Normal	291/20/150	Faston	6 A, 250 VAC, 25E3, T85	6 A, 250 VAC
H702010	36.8×22.23	$64 \times 31.9 \times 57.1$	2 way gate at 180°	2 pole	Normal	291/20/150	Faston	6 A, 250 VAC, 25E3, T85	6 A, 250 VAC

H70

Specifications

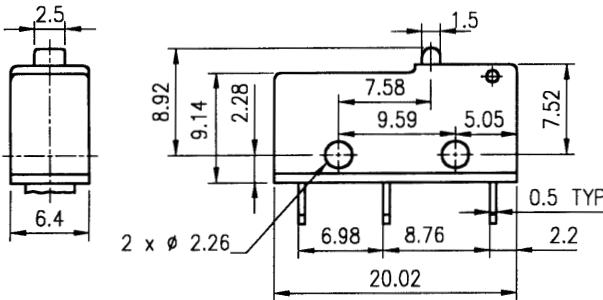
Switch	292/20/150 (solder) or 291/20/150 (faston)
Body and actuator	A.B.S
Spindle	Nylon 6.6
Spring	Stainless steel

Dimensions



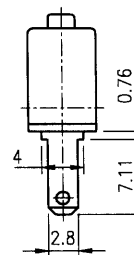
* Suitable panel cutter: RS stock number 543-709 can be supplied with order at extra cost

290 series subminiature switch

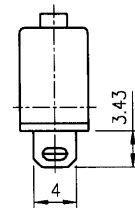


Terminal Reference

291
2.8 x 0.5
fast on



292
solder



Recommended maximum electrical ratings

Electrical rating	250 VAC, 6 A
Switch Type	292/20/150 (solder) or 291/20/150 (faston) with gold flashed contacts
Terminals	Solder or faston
Temperature rating	T85 °C
Insulation	>1250 V
Tracking resistance	PTI KB 250



Type coding key for standard products

Basic type	H 70	Single axis panel mounted joystick	Example: H70	1	0	0	0
Number of poles	1	Single pole					
	2	Double pole					
Spring return	0	Standard					
Terminal type	0	292 solder					
	1	291 faston					
Cowl	0	None					



C700

Joystick

Microswitch/Potentiometer

C700

Panel cut-out (mm) $\varnothing 12 \times 40$

Characteristics ■ choice of directional gating options to IP66 and IP67
■ choice of potentiometer, microswitch and switched knob functions

Rating up to 2 A, 250 VAC
up to 1 A, 250 VAC

Dimensions (mm) up to $58 \times 58 \times 93$

Actuator ■ knob

Approvals ENEC, UL and CSA (switch only)



Popular products, available upon request only

Ordering Reference	Panel cut-out	Dimensions	Directional gating	Number of poles	Switch type	Terminal Type	Electrical rating ENEC	UL/CSA
C702000	$\varnothing 12 \times 40$	$40.5 \times 50.0 \times 127$	2 way gate at 30°	1 pole	292/20/150	Solder	6 A, 250 VAC, 25E3, T85	6 A, 250 VAC
C710000	$\varnothing 12 \times 40$	$40.5 \times 50.0 \times 127$	2 way gate at 30°	Linearity +/-4%	Commercial Potentiometer	Solder	0.4W@40°C	6 A, 250 VAC

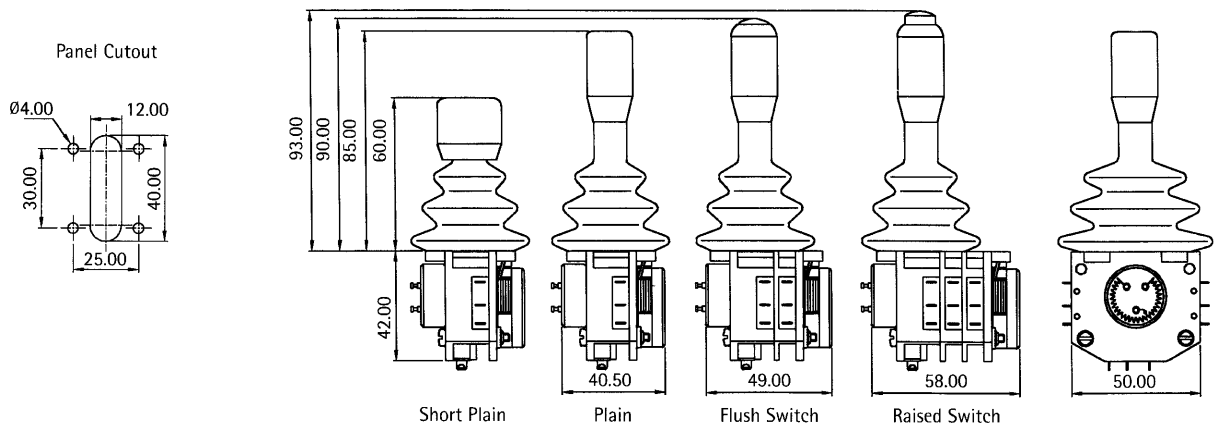


Specifications

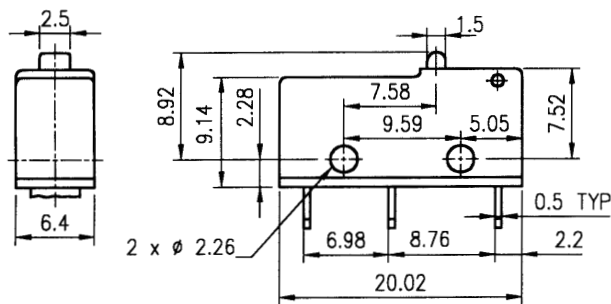
	Commercial Potentiometer	High Specification Potentiometer
Electrical Life	20,000 cycles	5,000,000 cycles
Tolerance	±20%	±20%
Linearity	±4%	±2%
Electrical Rotation	267° NOM	340° ±3%
Power Rating	0,4 W @ 40°C	1,0 W @ 70°C
Standard Value*	10 K	10 K

* Other values available to special order

Dimensions

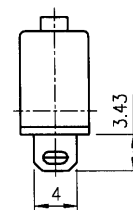


290 series subminiature switch



Terminal Reference

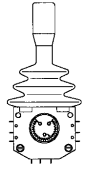
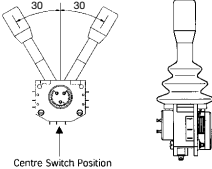
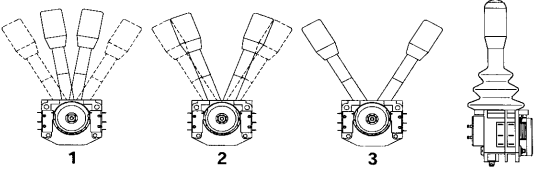
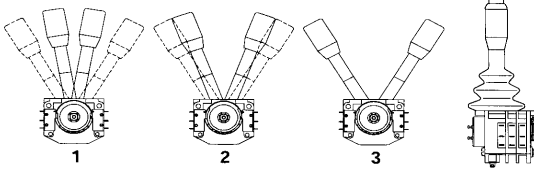
292 solder



Recommended maximum electrical ratings

IP Rating	Switched knob variants IP 66	
Switches	Subminiature Microswitches	Switch in Knob
Electrical Rating	(292/20/60) 2 A, 250 V, AC	1 A, 250 V, AC
Operational Life	5,000,000	1,000,000
Insulation Resistance	>1250 V	1050 V
Terminal Type	Solder*	Solder
Contacts	Silver/Gold flash	Silver Alloy/Gold Plated

Type coding key for standard products

Basic type	C 7	Potentiometer & Microswitch Joystick Range	Example: C700	0	0	0	0	0
Potentiometer Type	0 1 2	If no potentiometer is required (i.e. switching unit only) If a commercial grade potentiometer is required If a higher specification potentiometer is required						
Main Position Switch Option	0 1 2 3	If no switches are required (i.e. potentiometer unit only) If a switch is required in the centre position only If switches are required only at end of travel in both directions If both a centre switch and end of travel switches are required						
Second Pole Switch Options	0 1 2 3	If a second bank of switches is not required For 10° switch actuation For 20° switch actuation For 30° switch actuation						
Third Pole Switch Options	0 1 2 3	If a third bank of switches is not required For 10° switch actuation For 20° switch actuation For 30° switch actuation						
Knob Options	0 1 2 3	For a Plain Knob For a Knob with a Flush push button switch For a Knob with a Raised push button switch For a Short Plain Knob	(see page 308)					

