

HS1 Series

Miniature hat switch

MAIN FEATURES

- One or two axis
- MOM-OFF-MOM switching
- Positive tactile feedback
- Optional pushbutton feature
- IP67 above panel sealing
- Made in the USA



The HS1 Series is a miniature multidirectional switching joystick with optional pushbutton feature. Featuring an elastomer actuator to provide user comfort and IP67 above panel sealing, the HS1 Series is well suited for both indoor and outdoor applications. This momentary switching joystick may be specified for 2-way, 3-way, 4-way, 5-way, 8-way or 9-way operation. It's supplied with a 28awg mounting cable and connection is conveniently made through the bottom of the joystick body.

SPECIFICATIONS*

MECHANICAL (X & Y) AXIS	
Angular travel:	6° total (3° each direction from center)
Expected life:	100k min
Centering:	Momentary
Mass/weight:	11 grams
Switch mechanism:	Tactile
Max vertical load:	60 lbF
Max horizontal load:	40 lbF**
Mounting torque:	.3Nm min. applied to nut

* Specifications subject to change without notice

** Measured 0.45" above panel surface

04252024mp

Ruffy Controls, Inc.
3258 Grey Hawk Ct., Carlsbad, CA 92010
ruffycontrols.com

For more information: sales@ruffycontrols.com

SCAN TO
ORDER TODAY



HS1 Series

Miniature hat switch

SPECIFICATIONS

ELECTRICAL	
Minimum contact rating:	10 μ A @ 1V DC
Maximum contact rating:	50mA @ 24V DC
Initial contact resistance:	100m Ω MAX
Insulation resistance:	100M Ω MIN @ 100V DC
Dielectric strength:	500V AC FOR 1 MINUTE
Thermal shock:	PER EIA-364-32C

ENVIRONMENTAL	
Operating temperature:	-30°C to +85°C
Storage temperature:	-30°C to +85°C
Above panel sealing:	IP67*

* Above panel sealing. All configurations. Product is static

MATERIALS	
Plastic housing:	Mineral & glass filled nylon
Boots/actuators:	Silicone (with tear resistant additive)

CONNECTIONS:	
Housing body:	PCB header (JST BM06B-SRSS-TB)
Mating wire harness:	10" 28AWG PTFE to six position connector housing (JST SHR-06V-S-B)

04252024mp

Ruffy Controls, Inc.
3258 Grey Hawk Ct., Carlsbad, CA 92010
ruffycontrols.com

For more information: sales@ruffycontrols.com

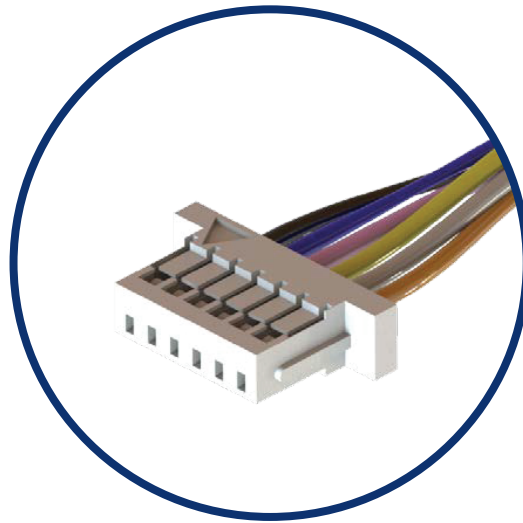
**SCAN TO
ORDER TODAY**



HS1 Series

Miniature hat switch

PINOUT & MATING WIRE HARNESS



10" CABLE PROVIDED

WIRE COLOR & DESCRIPTION		
PIN #	COLOR	DESCRIPTION
1	BLACK	Common
2	BLUE	X + Switch
3	PINK	X - Switch
4	YELLOW	Y + Switch
5	GREY	Y - Switch
6	ORANGE	Top Switch (optional)

04252024mp

Ruffy Controls, Inc.
 3258 Grey Hawk Ct., Carlsbad, CA 92010
ruffycontrols.com

For more information: sales@ruffycontrols.com

**SCAN TO
ORDER TODAY**



HS1 Series

Miniature hat switch

HS1 SERIES PART NUMBER CODE

HS1
Series



Round Cap



Castle Cap

LIMITER & ACTUATOR OPTION

1	2-WAY, CASTLE CAP
2	3-WAY (2-WAY + TOP BUTTON, ROUND CAP)
3	3-WAY (2-WAY + TOP BUTTON, CASTLE CAP)
4	4-WAY, CASTLE CAP
5	5-WAY (4-WAY + TOP BUTTON, ROUND CAP)
6	5-WAY (4-WAY + TOP BUTTON, CASTLE CAP)
8	8-WAY, CASTLE CAP
9	9-WAY (8-WAY + TOP BUTTON, ROUND CAP)
10	9-WAY (8-WAY + TOP BUTTON, CASTLE CAP)

04252024mp

Ruffy Controls, Inc.
 3258 Grey Hawk Ct., Carlsbad, CA 92010
ruffycontrols.com

For more information: sales@ruffycontrols.com

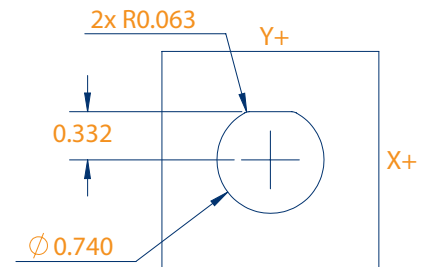
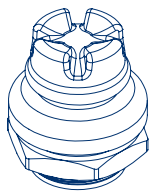
**SCAN TO
ORDER TODAY**



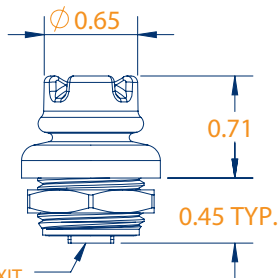
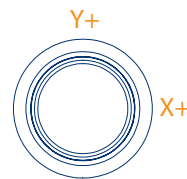
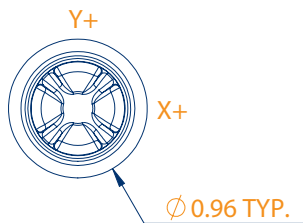
HS1 Series

Miniature hat switch

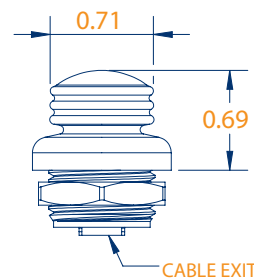
PANEL CUTOUT DIMENSIONS



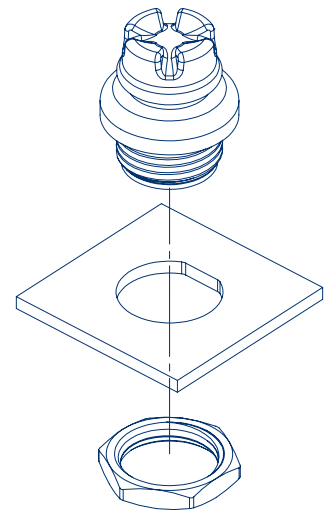
PANEL DIMENSIONS



OPTION 1 (2-WAY)
OPTION 3 (3-WAY)
OPTION 4 (4-WAY)
OPTION 6 (5-WAY)
OPTION 8 (8-WAY)
OPTION 10 (9-WAY)



OPTION 2 (3-WAY)
OPTION 9 (9-WAY)



04252024mp

