

NS2-0 / NSB2-0

Heavy Mill Duty AC & DC Rotary Master Switches

Construction:

The **TYPE NS2/NSB2-0** Rotary Master Switch features the same rugged design components and versatility as the NS2/NSB2 series of Joysticks. They provide precise directional, proportional speed, and step control of AC/DC drives and Electro-Hydraulic valves.

Application:

Applications include In-plant Process Control, Mining Vehicles, Conveyor and Lift Systems.

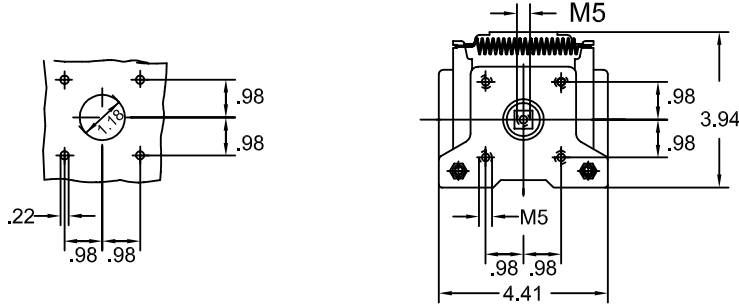
Features:

- **Rugged Construction:** Brass bearings and square steel operating shaft.
- **Mechanical Life:** 10 million cycles with friction brake.
- **Design Flexibility:** Combination of custom contact sequences, detents, spring return, potentiometers, and electronics.
- **Handles:** Teardrop and chrome steel ball lever.
- **Precise Step Control:** Up to 7-0-7 individually detented steps.
- **Contacts:** (10) 25A 600 VAC double pole, field replaceable contacts or 2A 250 VDC DC contacts with magnetic blow outs. Gold, dry circuit contacts available upon request.
- **Potentiometers:** .5 watt 5 million revolution conductive plastic potentiometers furnished standard.
- **Electronics:**
 - ESS-420: 4-20 milli-amp transmitter.
 - ESS0.10.10: 0-10 and ± 10 V amplifiers
 - OGR8G-M1: 8 Bit gray code Encoder
 - PFC/PFC-CR: Proportional Feathering Control electronic amplifiers for operation of Electro-Hydraulic Proportional Valves.
- **Enclosures:** Variety of standard steel and cast aluminum control consoles are available; NEMA 1, 3R, 4, 4x, 12 and 13.

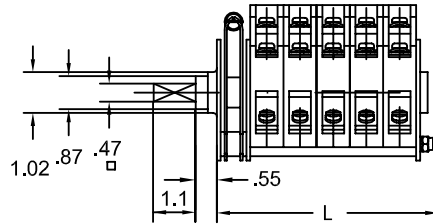


NS2/NSB2-O DIMENSIONS

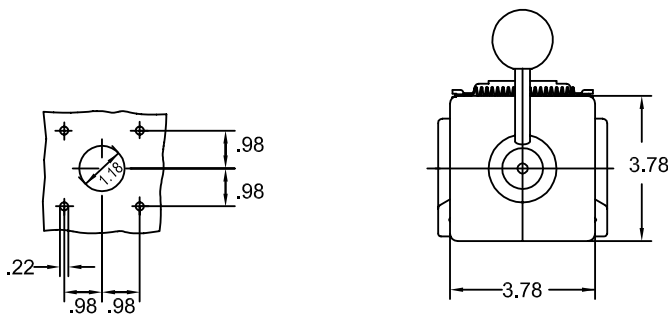
Panel Mounting Detail



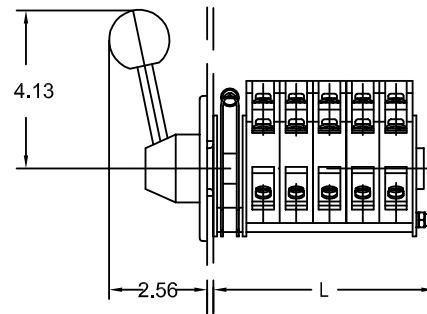
Insert Mounting Detail



Panel Mounting Detail



Mounting with 3.78 x 3.78" escutcheon plate



Number of double pole contact blocks

"L" dim. w/detent	NS2O1_	NS2O2_	NS2O3_	NS2O4_	NS2O5_	NS2O6_	NS2O7_	NS2O8_	NS2O9_	NS2O10_	
"L" dim. w/sp.ret.	NSOO1_R		NSOO2_R	NSOO3_R	NSOO4_R	NSOO5_R	NSOO6_R	NSOO7_R	NSOO8_R	NSOO9_R	NS2O10_R
Length "L"	2.44	3.31	4.17	5.04	5.91	6.77	7.64	8.50	9.37	10.24	11.10

Technical Data

MECHANICAL:

Operating Temperature: -25° to +70°C

Detented Positions: Up to 7-0-7 or 0-16 positions.

Operations: Rated duty cycle: 1000 operations per hour

Mechanical life: Maintained action: 10 million plus cycles.

Handle Travel: 0°-330°. Max. handle angle in cast enclosure ±120°.

Potentiometer Rotation: ±120°, 240° total.

ELECTRICAL:

Contacts: 10 double pole "snap in" blocks and up to 20 circuits furnished standard. (Consult factory if additional circuits are required.)

Terminals: M5 machine screw with saddle clamp.

Wire size: No. 12 AWG maximum

Rating AC NS2-0:

- a) AC continuous 25 amps @ 600 volts
- b) AC resistive 20 amps @ 240 volts
- c) AC inductive 14 amps @ 240 volts

Rating DC NSB2-0: (with magnetic blow out)

- a) DC resistive 5 amps @ 250 volts
- b) DC inductive 2 amps @ 250 volts

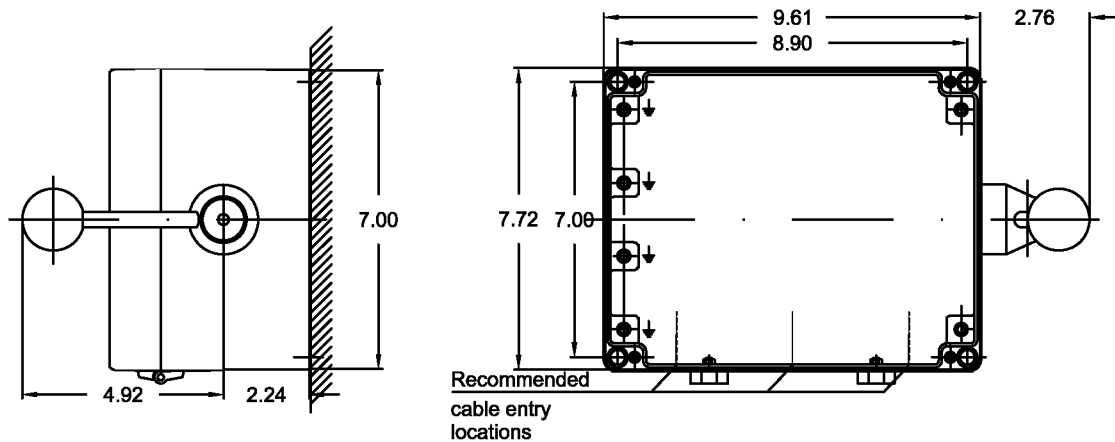
Maximum Switching Capacity AC:

- Making - 160 amps
- Breaking - (0.7PF) 160 amps @ 240 volts

Approvals: CSA file number: 15040

UL Recognized file number: E106738(m)

NS2/NSB2-O CAST HOUSING DIMENSIONS



With Detent		With Spring Return	
normal	1) Space Heater-Z Push-Button - P	normal	1) Space Heater-Z Push-Button - P
NS 207A G6	NS 207A GZP4	NS 207A GR4	NS 207A GRZP2
NS 207A G7	NS 207A GZP5	NS 207A GR5	NS 207A GRZP3
NS 210A G8	NS 210A GZP6	NS 210A GR6	
NS 210A G9	NS 210A GZP7	NS 210A GR7	

Maximum number of double pole contact blocks

1) Please specify voltage for space heater