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Sensing and Control
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Sensing and Control

Honeywell Inc.

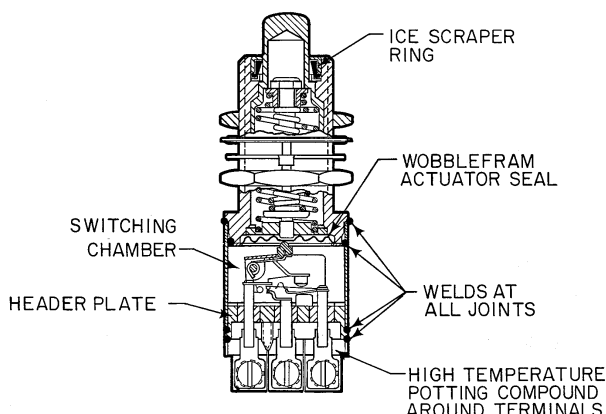
11 West Spring Street

Freeport, IL 61032

Position Sensors

HR Series

High Temperature Hermetically Sealed Switches



FEATURES

- Enclosure seal: Sealed per MIL-S-8805, enclosure design Symbol 5*
- Terminal strength: 15 lbs. (66,7N)
- Strength of actuating means: 35 lbs. (156N)
- Strength of mounting bushing: 15 in. lbs. (1,7Nm)
- Vibration: 10 to 58 Hz at .060 in. (1,52mm) D.A. 58 to 500 Hz at 20 gs
- Shock: 100 gs, .006 sec. sawtooth pulse
- Also meets moisture resistance, explosion, and salt spray requirements.
- Temperature range: -85°F to +600°F (-65°C to +315°C)
- Modifications: Receptacle termination is available. Temperature rating may be lowered because of receptacle limitations or customer-specified leadwire.

* Watertight test not applicable per MIL-S-8805.

GENERAL INFORMATION

HR switches combine maximum sealing, high (600°F, 315°C) temperature capabilities, and rugged, heavy duty, corrosion-resistant construction to provide reliable switching in the most demanding applications.

MOUNTING

Plunger actuator switches bushing mount through 3/4 inch (19,1mm) diameter holes. Lock washer, keying washer, and wire lock hexagon mounting nuts lock the switches in their mounting.

Rotary actuator switches mount through 1 1/2 inch (11,9mm) diameter holes. A lock washer, wire lock hexagon nut, and locating pins on the top of the housing prevent switch rotation.

ACTUATORS

Plunger

For in-line actuation. An ice scraper ring clears the actuator with each operation. Material is stainless steel.

Roller plunger

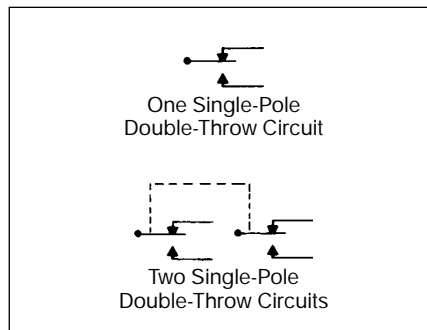
For cam and slide actuation not to exceed 20° rise. Roller adjusts laterally in 45° increments. An ice scraper ring clears the actuator with each operation. Material is stainless steel.

ELECTRICAL RATING

MS24594-1 ratings apply when MIL-S-8805/41 is invoked.

Voltage	Amperage	
	Ind.	Res.
28 DC	2	5

CIRCUITRY



Position Sensors



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HR Series

High Temperature Hermetically Sealed Switches

Characteristics: O.F. – Operating Force; R.F. – Release Force;
P.T. – Pretravel; O.T. – Overtravel; D.T. – Differential Travel.

HR ORDER GUIDE

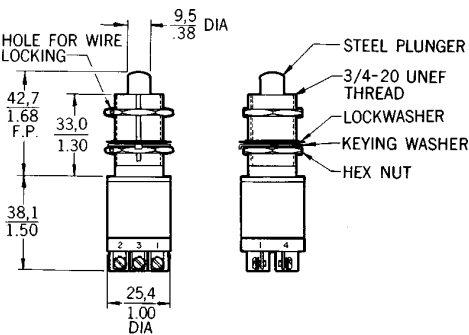
	Catalog Listing	Actuator	Circuitry	Terminals ¹	Characteristics					Weight g oz.
					O.F. Newtons lbs.	R.F. min. Newtons lbs.	P.T. max. mm inches	O.T. min. mm inches	D.T. max. mm inches	
	12HR1-S ² (MS24594-1)	Plunger	(2)SPDT	Screw	26,7-53,4 6-12	22,2 5	1,27 .050	6,35 .250	0,38 .015	127 4.5
	12HR8-6	Plunger	SPDT	Leadwire	26,7-53,4 6-12	22,2 5	1,27 .050	6,35 .250	0,38 .015	284 10
	22HR1-S	Roller Plunger	(2)SPDT	Screw	26,7-53,4 6-12	22,2 5	1,27 .050	6,35 .250	0,38 .015	142 5

Notes:
¹ Screw terminals are 4-48 NF x .188 inch screw with sems washers. Leadwire terminals are 6 foot (1,8mm).
² Meets MIL-S-8805/41 specification.

MOUNTING DIMENSIONS (For reference only)

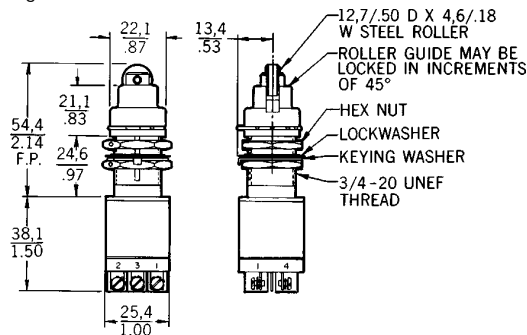
12HR1-S

Fig. 1



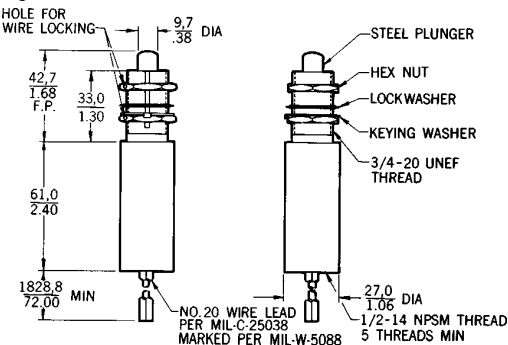
22HR1-2

Fig. 2



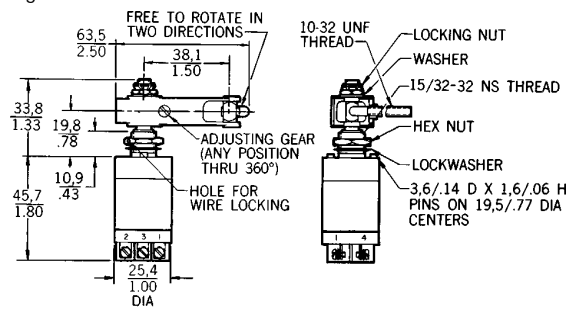
12HR8-6

Fig. 3



41HR1-S

Fig. 4



Key: 0,0 = mm
0.00 = inches