

## **Honeywell Sensing and Control**



### LSH1A



Series HDLS Plug-in: Side Rotary; 1NC 1NO SPDT Snap Action; 0.5 in - 14NPT conduit

#### Order Lever Separately Actual product appearance may vary.

#### Features

- Wide variety of operating heads
- Field adjustable operating modes, for reduced inventory
- Convenience of on-the-spot adjustment instructions
- Complete choice of circuitry and electrical rating options

• Plug-in and non plug-in versions have identical operating characteristics and are dimensionally interchangeable

- Manifold (rear-wire) version
- Explosion-proof versions

• Low temperature versions to -40•C (-40•F)

- Captive head and body screws
- Designed to withstand seismic shock
- Stainless steel (NEMA 4X) versions
- Pre-leaded cable or pre-wired
- connector types
- Epoxy filled wash down (NEMA 6P) types
- Completely fluorocarbon (FC) sealed versions

Description

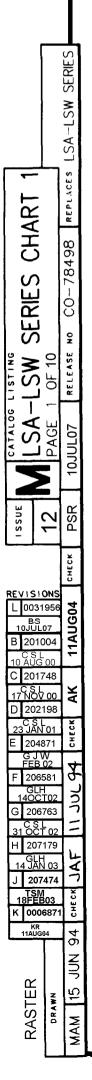
#### Potential Applications

- Machine Tools
- Material Handling
- Packaging
- Presses
- · Pulp and Paper
- Welding
- PLC Interface

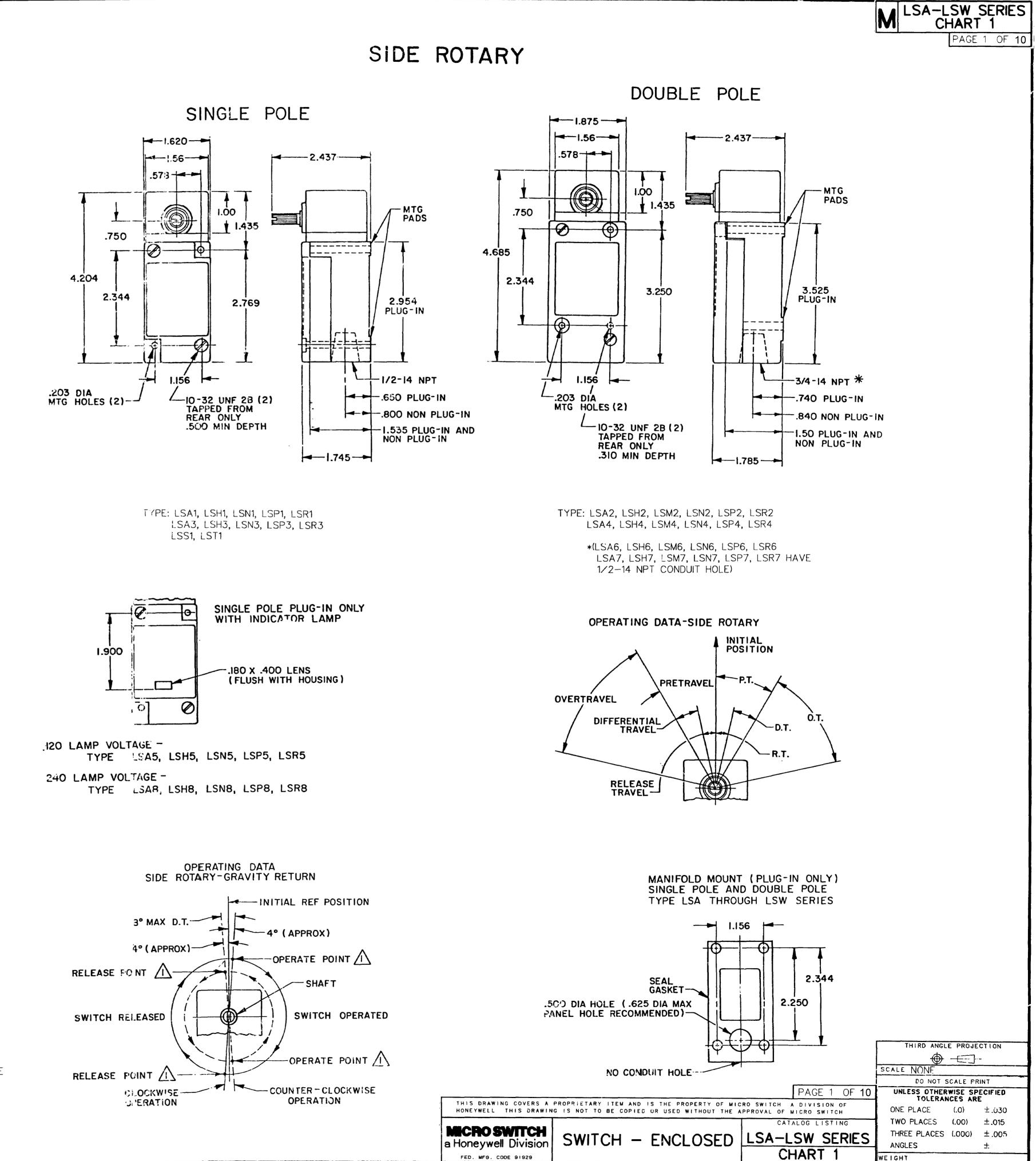
Sensing and Control offers the world's most advanced line of MICRO SWITCH™ heavy-duty limit switches. These switches include boss-and-socket head design for secure head-to-body retention, unique all-metal drive train for consistent operating characteristics even at high temperature (lasts longer without the need for frequent adjustment than drive trains with plastic parts,) self-lifting pressure plate terminals save wiring time, easily identified grounding terminal (inside) for compliance with OSHA and other regulatory agency standards, one piece flat gasket (seals better than gaskets that go around curves and corners, does not contact terminal pins to reduce chances of fluid migration,) front mounting and interchangeability of single- and double-pole switches, plug-in and non plug-in with one another and with other switch brands, tracking interchangeability of actuator levers for single- and double-pole switches, plug-in and non plug-in, twin shaft seals for an extra measure of protection, inner FC O-ring seal, outer Buna-N seal (all FC available,) FC shaft and diaphragm seals on side rotary switches, rugged corrosion-resistant zinc head and body are phosphate treated and epoxy finished, exclusive teller tab assures proper torque (when it cannot be moved the lever is tight enough to prevent slippage) and domestic and international conduit taps.

Product Specifications								
Availability	Global							
Operating Force (O.F.)	0,19 N m max. [1.7 in lb max.]							
Pretravel (P.T.)	9° max.							
Overtravel (O.T.)	66° min.							
Differential Travel (D.T.)	3° max.							
Product Type	MICRO SWITCH™ Heavy-Duty Limit Switches							
Actuator	Side Rotary							
Lever Style	Lever Not Included - Reference Lever Required Accessory							
Circuitry	1NC 1NO Single-Pole Double- Throw, Snap-Action, Double-Break							
Ampere Rating	10 A (Thermal)							
Supply Voltage	600 Vac and 250 Vdc max.							
Housing Material	Zinc Die-Cast							
Termination Type	0.5 in - 14NPT conduit							
Housing Type	HDLS Plug-in							
Series Name	HDLS							
Sealing	NEMA 1, 3, 4, 4X, 6, 6P, 12, 13							
Approvals	UL listed, CSA Certified, CE Certified, CCC Certified							
CSA File #	LR57326/Master Contract 152457							
UL File #	E37138							
Operating Temperature Range	-1 °C to 121 °C [30 °F to 250 °F]							
Comment	Low differential travel and low torque							
Agency Approvals and Standards	EN60947-1, EN60947-5-1							
UNSPSC Code	302119							
UNSPSC Commodity	302119 Switches and controls and relays							
Sealed	Industrial							

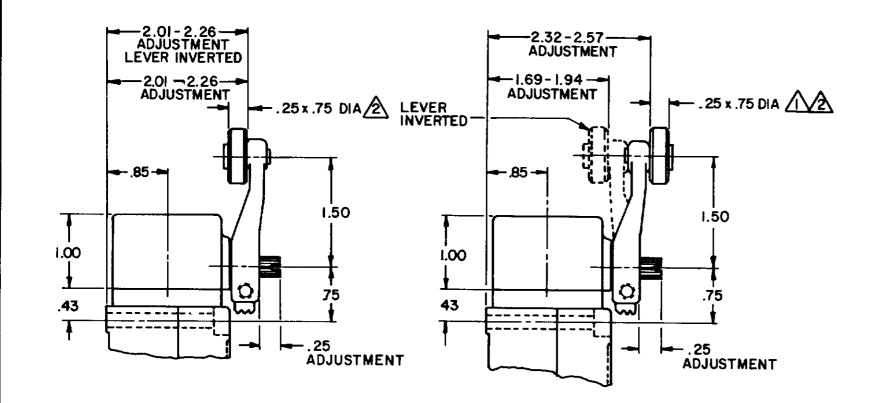
	LSA	4	LSR			LSN			Р	LSH	
OPERATING CHARACTER STICS	MOMĘNTARY		MOMENTARY LOW FORQUE		I	MAINTAINED	MOMENTARY LOW PRETRAVEL AND DIFF. TRAVFI		MOMENTARY LOW PRETRAVEL LAND LOW TORQUE		
PRETRAVEL(MAX)	15°		15°			650	90		90		
OVERTRAVEL(MIN)	60°		60°			20°	<b>6</b> 6°		6 <b>6</b> °		
DIFFERENTIAL TRAVEL(MAX)	SINGLE D POLE F 5°	OUBLE POLE 7°	SINGLE POLE 5°	DOUBLE PCLE 7°	,	40°	P	NGLE OLE 3º	DOUPLE POLE 4°	SINGLE POLE 3°	DOUF LE POLE 4°
TOTAL TRAVEL (REF)	7 5°		75°			90°	75°		75°		
OPERATING TORQUE(MAX)	4 IN. LBS		1.7 IN. LBS			4 IN. LBS	4 IN. LBS		1.7 IN. LBS		
FULL TRAVEL TORQUE(MAX)	4 IN. LBS		1.7 IN. LBS				4		! B <b>S</b>	1.7 IN. LBS	
			LSL			LSM	SM		ST	LSS	
OPERATING CHARACTERISTICS LOW PRETRAVEL		SEQUENCE DOUBLE POLE ONLY			CENTER NEUTRAL DOUBLE POLE ONLY				GRAVITY RETURN		
PRETRAVEL(MAX)	5°		1ST STEP 15° 2ND STEP 10° ADD'L		۲L	18°				NOT APPLICABLE	
OVERTRAVEL(MIN)	70°		48°			570		<u>60°</u>		NOT APPLICABLE	
DIFFERENTIAL TRAVEL(MAX)	SINGLE POLE 5°	DOUBLE POLE 4°	5°			10°		5°		12°	
TOIN TRAVEL (REF)	75°	)	7 5°			75°		75°		360°	
OPERATING TORQUE(MAX)	4 IN. I	LBS	4 IN. LBS			4 IN. LBS		12 IN-OZ		5 IN-OZ	
FULL TRAVEL 10.2QUE(MAX)	4 IN. LBS		4 IN. LBS			4 IN. LBS		12 IN-OZ		5 IN-OZ	



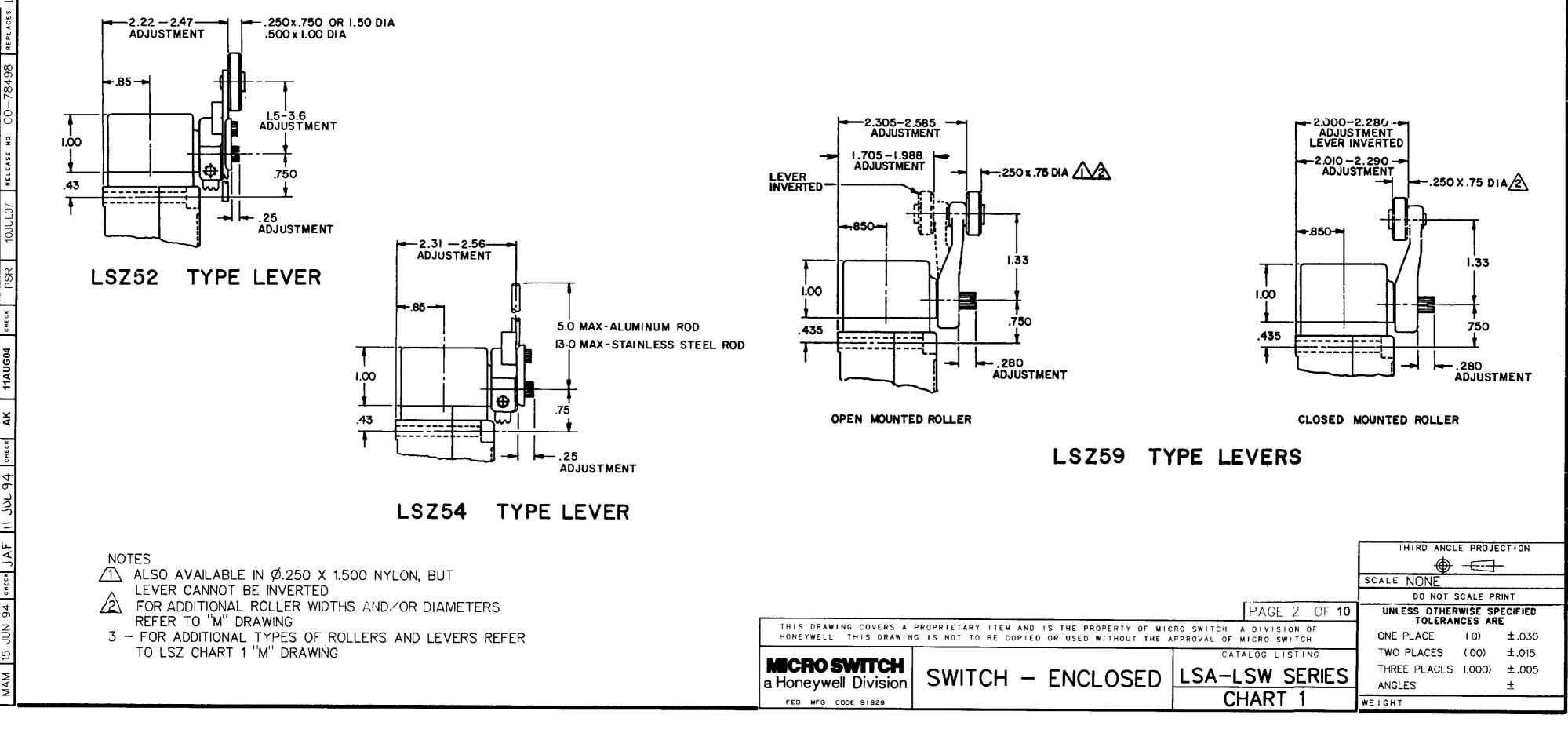
NOTE 1 OPERATE AND RELEASE POINTS WILL EXCHANGE LOCATIONS IF SHAFT IS ROTATED 180°



# SIDE ROTARY CAM TRACKING







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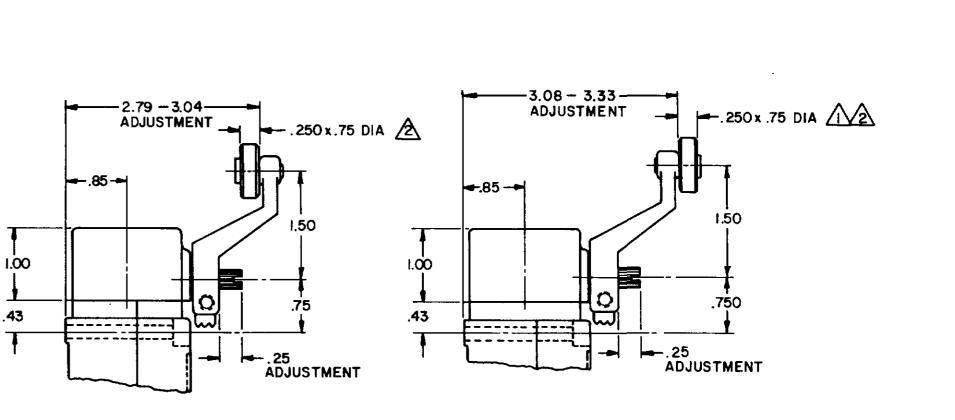
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RASTER





LSA-LSW SERIES

CHART 1

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