



GLAA01C



Actual product appearance may vary.

Global Limit Switches Series GLS: Top Roller Plunger, 1NC 1NO SPDT Snap Action, 0.5 in - 14NPT conduit

Features

- Designed to IEC standard for world-wide applications
- UL, CSA, and CE
- International conduit sizes
- Direct PLC interface compatible (two circuit)
- Modular construction reduces maintenance parts costs
- Designed for ease of installation
- Variety of basic switch versions
- Wide choice of actuators

Potential Applications

- Machine tools: metal fabrication equipment, presses, transfer lines and special machinery
- Material handling equipment: conveyors, elevators, cranes, and hoists
- Packaging machinery and process equipment
- Textile machinery
- Construction machinery and equipment, vehicles and lift trucks

Description

The GLS series limit switches are specifically designed for world-wide applications and are supported by Honeywell global resources for sale and after sale service.

Product Specifications	
Availability	Global
Operating Force (O.F.)	16,0 N [3.60 lb]
Pretravel (P.T.)	2,5 mm [0.10 in]
Overtravel (O.T.)	4,5 mm [0.18 in]
Differential Travel (D.T.)	0,9 mm [0.035 in]
Product Type	EN50041/47 Global Limit Switch
Actuator	Top Roller Plunger
Lever Style	None
Circuitry	1NC 1NO SPDT Snap Action
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	EN 50041
Series Name	GLS DIN
Shock	50 g per IEC 68-2-27c (w/o Actuator)
Vibration	10 g per IEC 68-2-6 (w/o Actuator)
Sealing	NEMA 1, 4, 12, 13 IP67
Approvals	UL, CSA, CE
CSA File #	LR94369-3
UL File #	E37138 & E157416
Mechanical Life	15 million
Operating Temperature Range	-25 °C to 85 °C [-13 °F to 185 °F]
Agency Approvals and Standards	IEC 947-5-1, EN60947-5-1, UL508
UNSPSC Code	302119
UNSPSC Commodity	302119 Switches and controls and relays
Sealed	Industrial
Operating Position (O.P.)	48,0 mm [1.89 in]

SIDE ROTARY

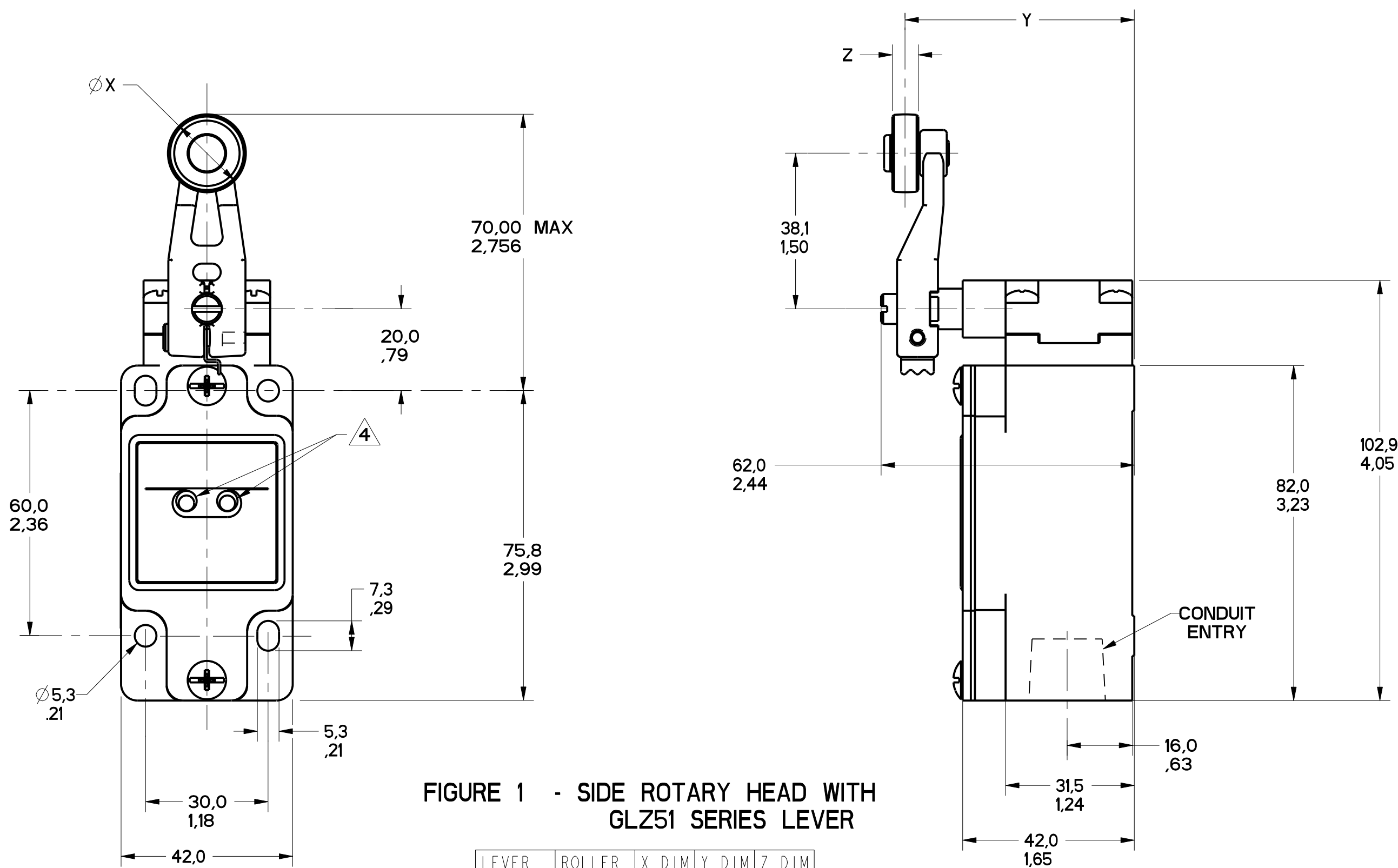


FIGURE 1 - SIDE ROTARY HEAD WITH GLZ51 SERIES LEVER

LEVER	ROLLER MATL	X DIM	Y DIM	Z DIM
GLZ51A	NYLON	19,1 .75	55,9 2.20	6,4 .25
GLZ51B	STEEL	19,1 .75	55,9 2.20	6,4 .25
GLZ51Y	RUBBER	50,0 1.97	66,1 2.60	10,0 .39

GLZ54J: 200,00 / 7.870 MAX
GLZ54K: 140,00 / 5.510 MAX
ALUMINUM ROD

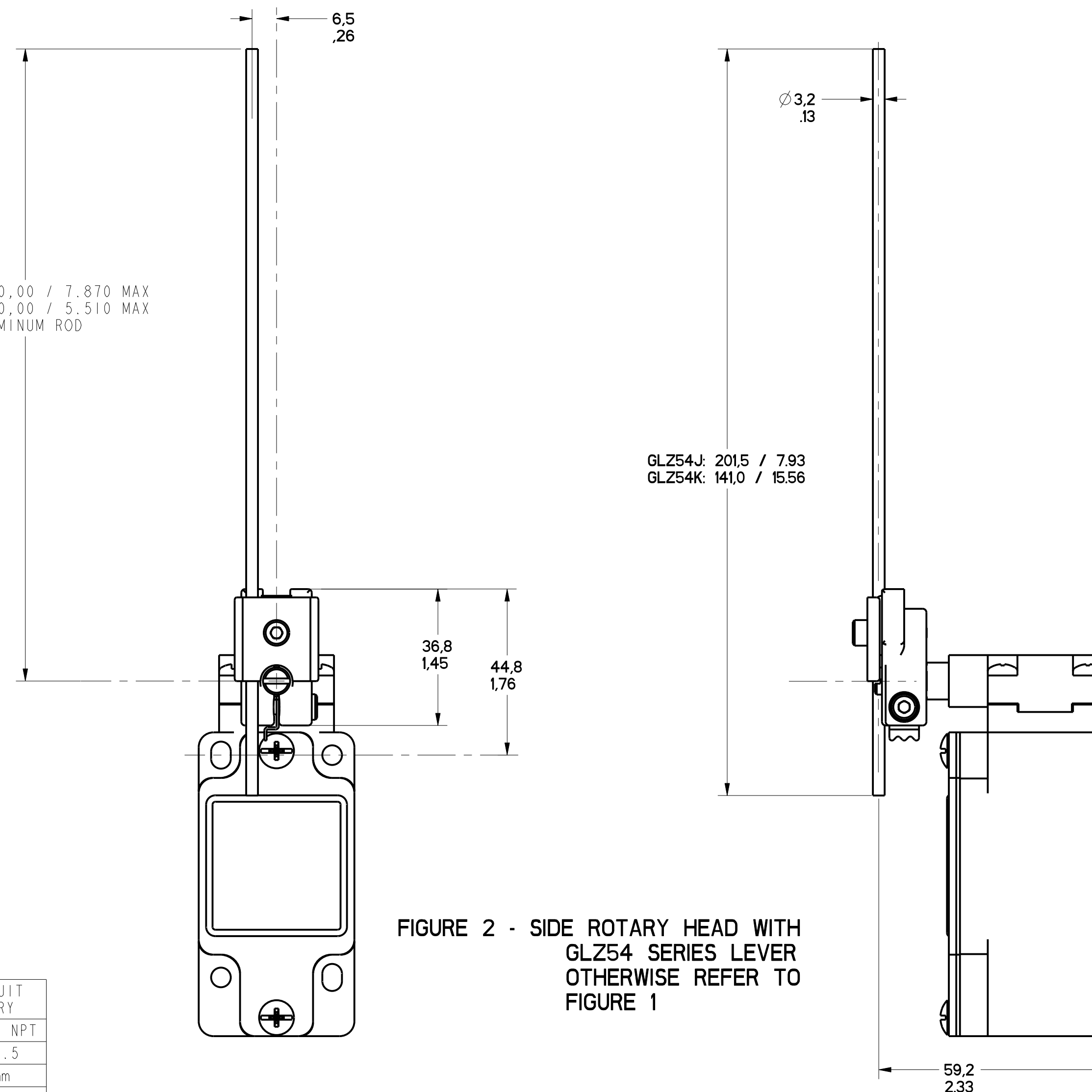


FIGURE 2 - SIDE ROTARY HEAD WITH GLZ54 SERIES LEVER OTHERWISE REFER TO FIGURE 1

FIGURE	CATALOG LISTING	CONDUIT ENTRY
1A	GL*A SERIES	1/2-14 NPT
1B	GL*B SERIES	PG13.5
1C	GL*C SERIES	20mm
1D	GL*D SERIES	PF1/2

ELECTRICAL RATING			
AC		DC	
A600 Ue	AC15 Ie	O300 Ue	DC13 Ie
(VOLTS)	(AMPS)	(VOLTS)	(AMPS)
120	6	24	2.8
240	3	125	.55
380	1.9	250	.27
480	1.5		
500	1.4		
600	1.2		

ENVIRONMENTAL RATING	
IP67	
NEMA/UL TYPES 1, 4, 12, 13	

- NOTES
- HEADS MAY BE INDEXED IN 90° INCREMENTS
 - LEVERS MAY BE KEYED TO THE SHAFT AT 90° INCREMENTS. THEY MAY ALSO BE ATTACHED, BUT NOT KEYED ANYWHERE ON THE SHAFT.
 - FOR ADDITIONAL LEVERS SEE "M" DRAWING CHART GLZ5
 - THE LEFT INDICATOR IS GREEN AND INDICATES "POWER ON" IT IS ON GLH SERIES PRODUCTS ONLY. THE RIGHT INDICATOR IS YELLOW AND INDICATES "OUTPUT STATUS" IT IS ON GLF AND GLH SERIES PRODUCTS ONLY.
 - THE MAXIMUM VOLTAGE, V_e OF GLF AND GLH SERIES PRODUCTS IS THE MAXIMUM RATED VOLTAGE OF INDICATION LIGHTS
 - FREE POSITION, OPERATE POINT, OVERTRAVEL AND PRETRAVEL ALL TO EN50041
 - CAM TRAVEL FOR FIG 9 ONLY APPLIES WHEN LEVER IS ADJUSTED TO 38,1 / 1.50
 - THE MAXIMUM VOLTAGE, V_e OF "06" AND "36" BASIC SWITCH CODE IS 500V (A500) TEMPERATURE RANGE
 - (ALL PRODUCTS EXCEPT W/SIDE ROTARY OPERATING HEAD)
OPERATING: -25°C TO +85°C / -13°F TO +185°F
STORAGE: -40°C TO +85°C / -40°F TO +185°F
 - (PRODUCTS W/SIDE ROTARY OPERATING HEAD)
OPERATING: -40°C TO +85°C / -40°F TO +185°F
STORAGE: -40°C TO +85°C / -40°F TO +185°F

CATALOG LISTING	BODY DIMENSIONS, FIGURE	HEAD DIMENSIONS, FIGURE	HEAD ACTUATION, FIGURE
GLA****	I	N/A	N/A
GLF****	I	N/A	N/A
GLH****	I	N/A	N/A
GLA****	1A	N/A	N/A
GLB****	1B	N/A	N/A
GLC****	1C	N/A	N/A
GLD****	1D	N/A	N/A
GL****A1*	I	1	8
GL****A2*	I	3	9
GL****A4*	I	2	10
GL****A5*	I		8
GL****B	I	4	11
GL****C	I	5	13A, 13B
GL****D	I	6	14A, 14B
GL****E7A	I	7A	12
GL****E7B	I	7	12
GL****E7C	I	7E	15
GL****E7D	I	7B	12
GL****K8A	I	7C	15
GL****K8B	I	7D	15
GL****K8C	I	7	15

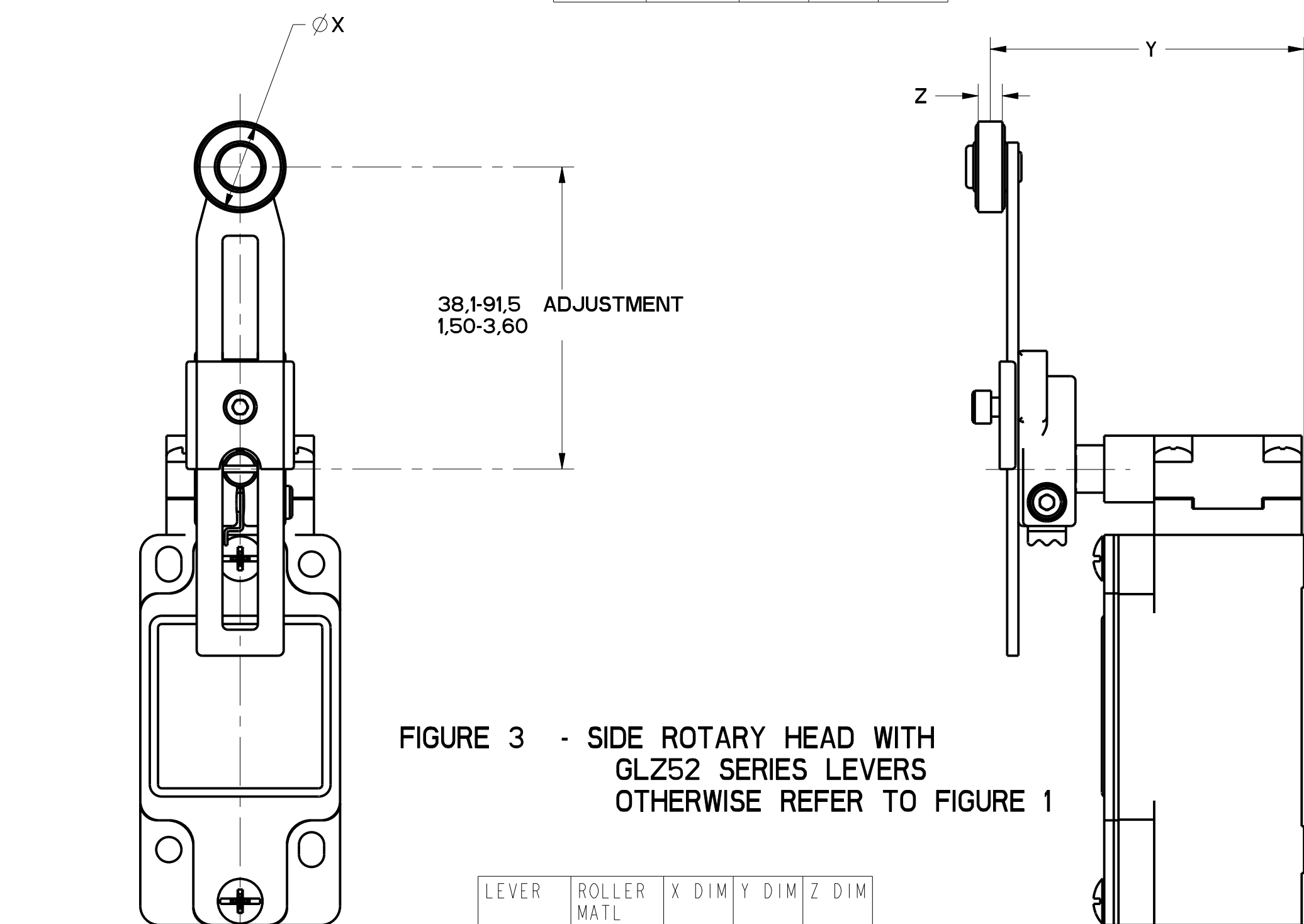


FIGURE 3 - SIDE ROTARY HEAD WITH GLZ52 SERIES LEVERS OTHERWISE REFER TO FIGURE 1

LEVER	ROLLER MATL	X DIM	Y DIM	Z DIM
GLZ52A	NYLON	19,1 .75	65,9 2.59	6,4 .25
GLZ52B	STEEL	19,1 .75	65,9 2.59	6,4 .25
GLZ52D	NYLON	38,1 1.5	65,9 2.59	6,4 .25
GLZ52E	NYLON	19,1 .75	79,37 3.125	33,07 1.300
GLZ52W	RUBBER	40,0 1.6	71,5 2.81	12,7 .5
GLZ52Y	RUBBER	50,0 1.97	68,8 2.71	10,0 .39

MGL SERIES CHART 1
 DRAWING NUMBER: 12
 ISSUE: 12
 DATE: 08/19/88
 CHECKED: MDM
 APPROVED: MDM
 RELEASE NO. PR-201782
 P.T.C./CAD
 S.A.V. 2/MAR/86
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 07AUG86
 08FEB88

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SWITCH, ENCLOSED

CATALOG LISTING
GL SERIES CHART 1

THIRD ANGLE PROJECTION

SCALE: FULL

DO NOT SCALE PRINT

TOLERANCES

APPLY TO DESIGN UNITS. CONVERSIONS ARE ONLY FOR REFERENCE, UNLESS NOTED. TOLERANCES ARE:

	SI METRIC	US CUSTOMARY
NO PLACES	±.04	±.0005
ONE PLACE	±.05	±.001
TWO PLACES	±.02	±.0005
THREE PLACES	±.01	±.0005
ANGLES	±.2°	

DESIGN UNITS: SI METRIC US CUSTOMARY

WEIGHT

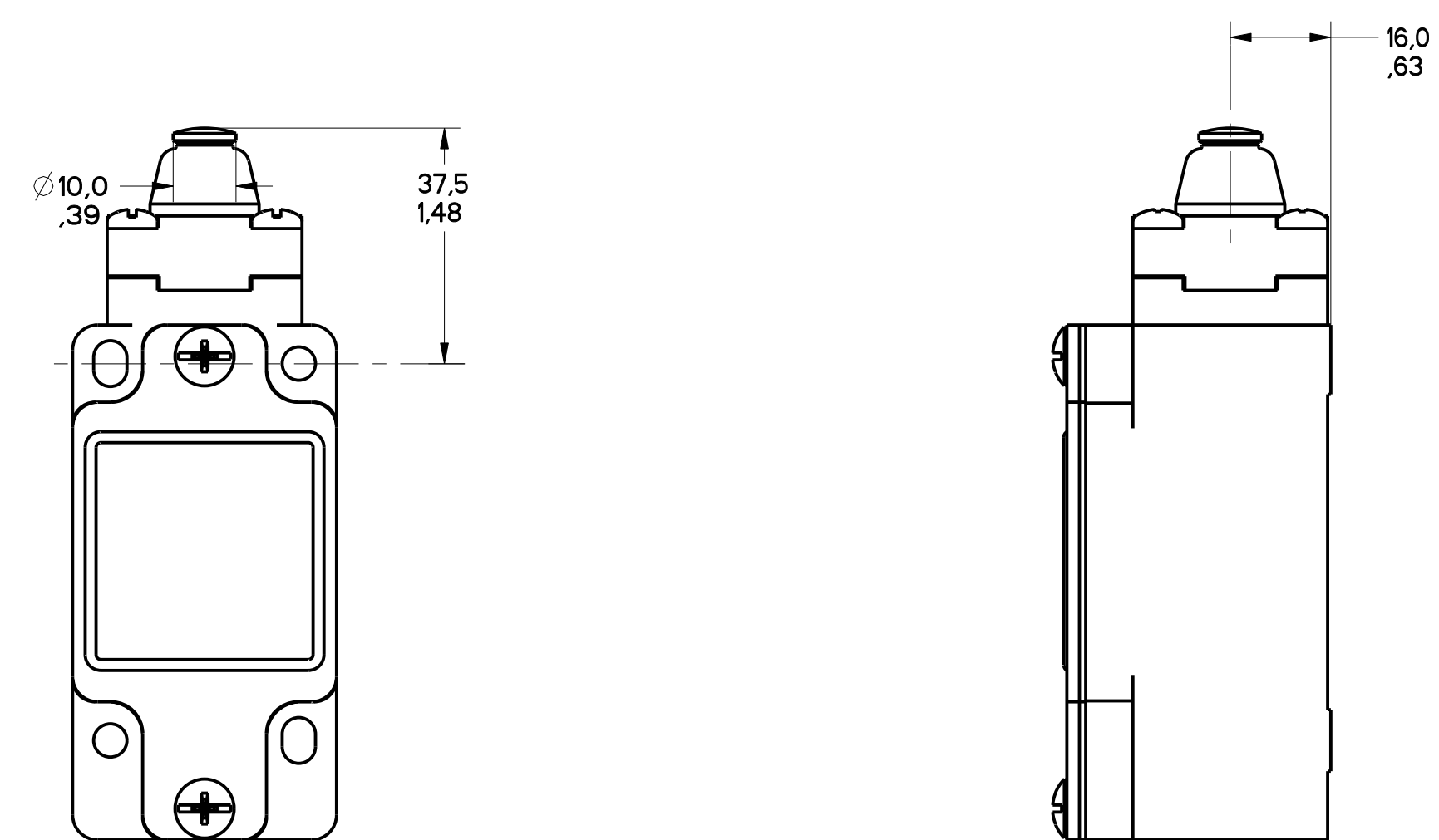


FIGURE 4 - TOP PIN PLUNGER HEAD
OTHERWISE REFER TO
FIGURE 1

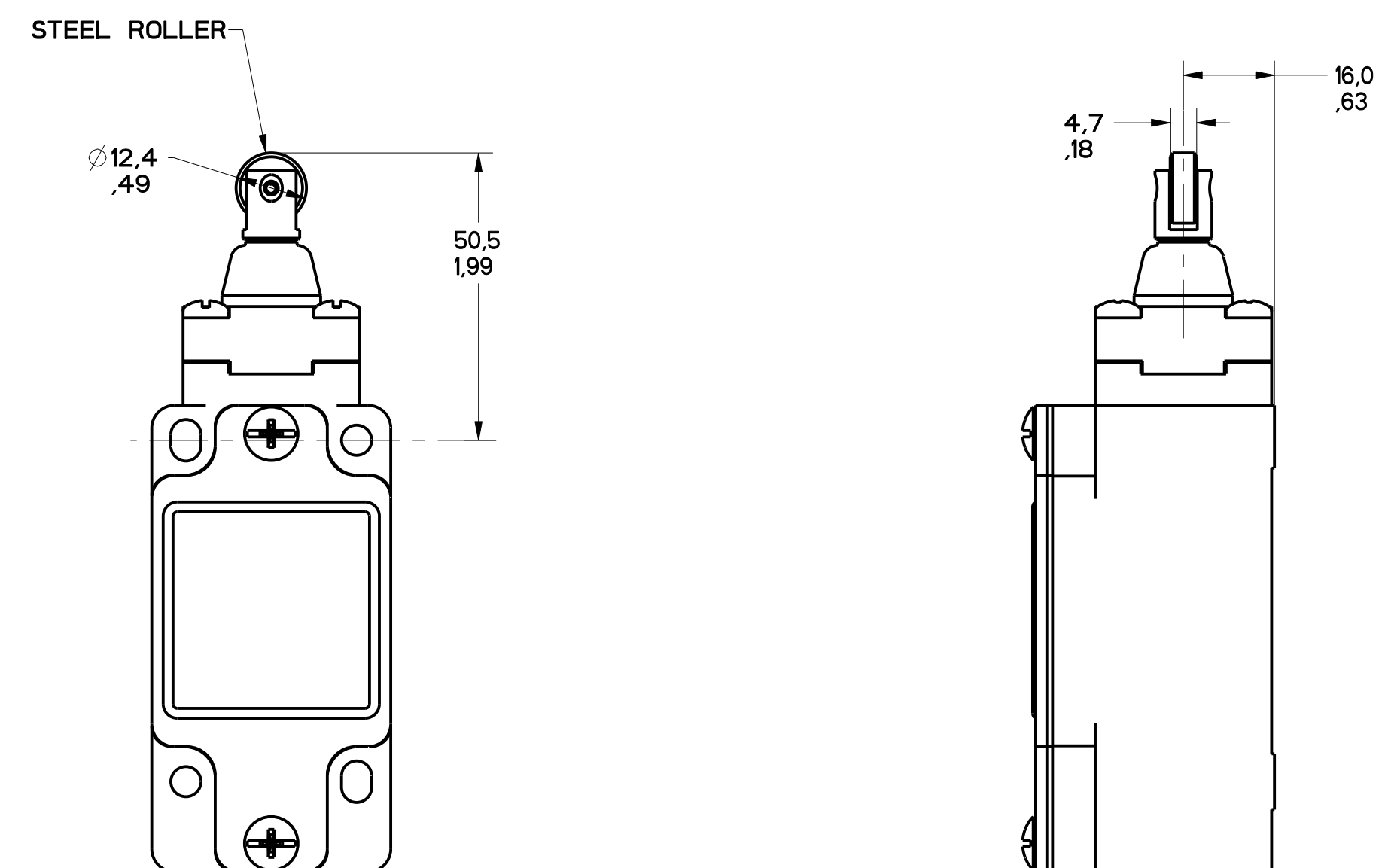


FIGURE 5 - TOP ROLLER PLUNGER HEAD
OTHERWISE REFER TO
FIGURE 1

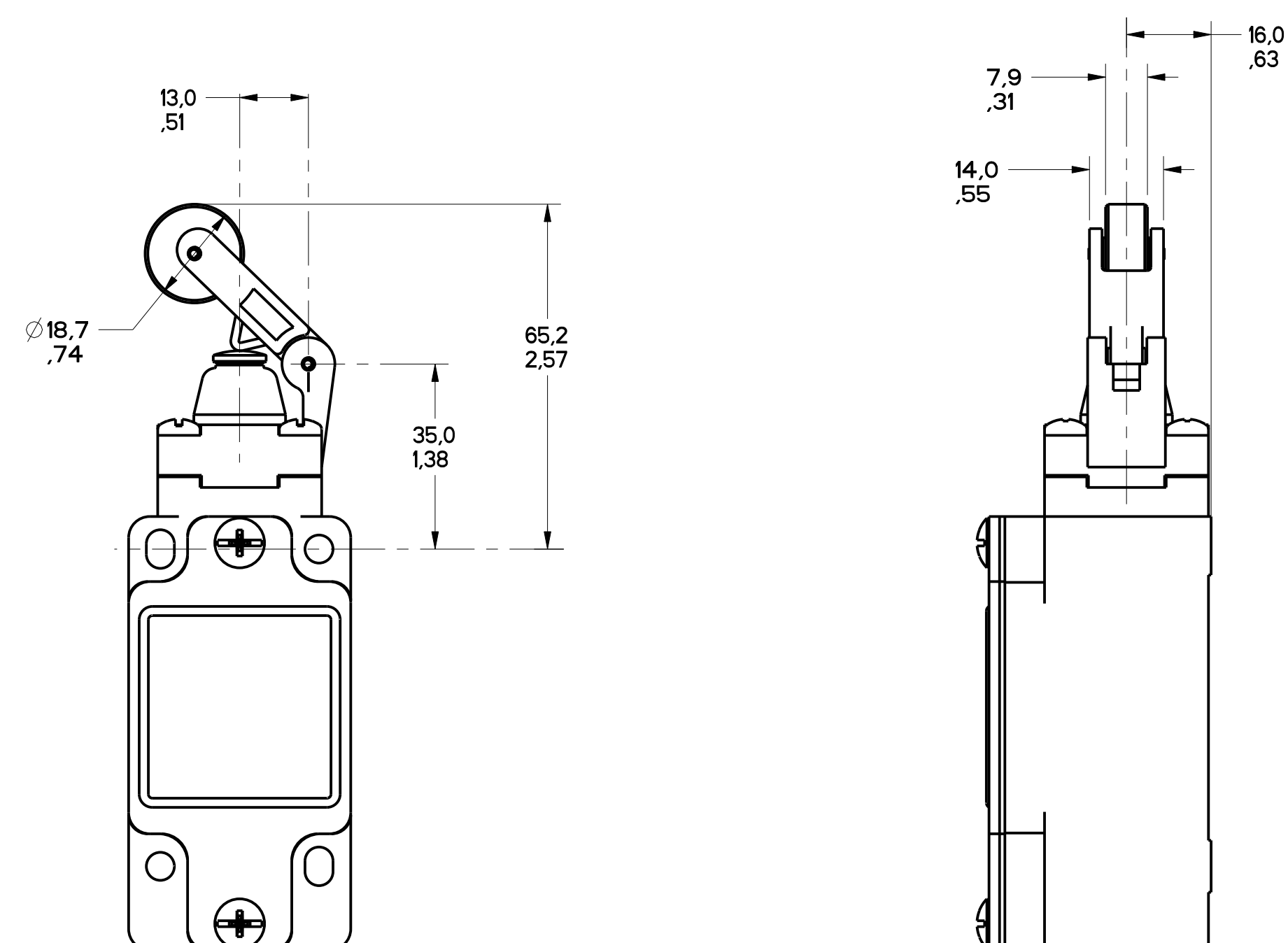


FIGURE 6 - TOP LEVER HEAD,
OTHERWISE REFER TO
FIGURE 1

MGL SERIES CHART 1
 DRAWING NUMBER: 2 OF 13
 RELEASE NO. PR-20782
 REPLACES: MDX
 CHECK: BLP
 CHECK: G.H.
 26 AUG 83
 P.T.C./CAD
 W.L.S.

REV	DATE	BY	CHKD
A	01/15/83	W.L.S.	W.L.S.
B	02/03/83	W.L.S.	W.L.S.
C	02/27/83	W.L.S.	W.L.S.
D	03/04/83	W.L.S.	W.L.S.
E	03/17/83	W.L.S.	W.L.S.
F	03/21/83	W.L.S.	W.L.S.
G	03/21/83	W.L.S.	W.L.S.
H	03/21/83	W.L.S.	W.L.S.

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CATALOG LISTING

MICRO SWITCH
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SWITCH, ENCLOSED

GL SERIES CHART 1

DESIGN UNITS: SI METRIC US CUSTOMARY

WEIGHT

THIRD ANGLE PROJECTION			
SCALE: FULL			
DO NOT SCALE PRINT			
TOLERANCES			
APPLY TO DESIGN UNITS. CONCESSIONS ARE ONLY FOR REFERENCE, UNLESS NOTED. TOLERANCES ARE:			
	SI	US	US
NO PLACES	±.04	±.04	±.04
ONE PLACE	±.01	±.01	±.01
TWO PLACES	±.005	±.005	±.005
THREE PLACES	±.0005	±.0005	±.0005
ANGLES	±.2°	±.2°	±.2°

FIGURE 13A, ROLLER PLUNGER HEAD, PIN ACTUATION

CATALOG LISTING	CONTACT BLOCK DIAGRAM	NOMINAL TRAVELS AND RELATED TERMINALS CONTACT CLOSED, CONTACT OPEN, CONTACT CLOSED DIFFERENTIAL TRAVEL, ** POSITIVE OPENING TO IEC 947-5	MAXIMUM OPERATING FORCE $\frac{N}{LB}$	MAXIMUM DISCONNECT FORCE $\frac{N}{LB}$	MAX OPERATE VEL $\frac{m/s}{in/s}$	MIN OPERATE VEL $\frac{mm/s}{in/s}$	MAX OPERATE FREQUENCY OPS/MIN
GL**01C GL**07C	SNAP - ACTION CONTACTS SINGLE POLE 		$\frac{16}{3.6}$	$\frac{27}{6.0}$	$\frac{0.1}{3.9}$	$\frac{1.0}{.04}$	250
GL**03C GL**33C	SLOW ACTING BREAK BEFORE MAKE 		$\frac{16}{3.6}$	$\frac{27}{6.0}$	$\frac{0.1}{3.9}$	$\frac{1.0}{.04}$	250
GL**04C GL**34C	SLOW ACTING MAKE BEFORE BREAK 		$\frac{16}{3.6}$	$\frac{27}{6.0}$	$\frac{0.1}{3.9}$	$\frac{1.0}{.04}$	250
GL**05C GL**35C	SLOW ACTING 		$\frac{16}{3.6}$	$\frac{27}{6.0}$	$\frac{0.1}{3.9}$	$\frac{1.0}{.04}$	250
GL**06C GL**36C	SLOW ACTING 		$\frac{16}{3.6}$	$\frac{27}{6.0}$	$\frac{0.1}{3.9}$	$\frac{1.0}{.04}$	250
GL**20C GL**22C GL**24C GL**32C	SNAP ACTION CONTACTS DOUBLE POLE 		$\frac{16}{3.6}$	$\frac{37}{8.2}$	$\frac{0.1}{3.9}$	$\frac{1.0}{.04}$	250
GL**21C GL**25C GL**28C GL**31C	SNAP ACTION CONTACTS DOUBLE POLE SEQUENTIAL 		$\frac{16}{3.6}$	N/A	$\frac{0.1}{3.9}$	$\frac{1.0}{.04}$	250

FIGURE 13B, TOP ROLLER PLUNGER HEAD, CAM ACTUATION PER EN50041

CATALOG LISTING	CONTACT BLOCK DIAGRAM	NOMINAL TRAVELS AND RELATED TERMINALS CONTACT CLOSED, CONTACT OPEN, CONTACT CLOSED DIFFERENTIAL TRAVEL, ** POSITIVE OPENING TO IEC 947-5	MAXIMUM OPERATING FORCE $\frac{N}{LB}$	MAXIMUM DISCONNECT FORCE $\frac{N}{LB}$	MAX OPERATE VEL $\frac{m/s}{in/s}$	MIN OPERATE VEL $\frac{mm/s}{in/s}$	MAX OPERATE FREQUENCY OPS/MIN
GL**01C GL**07C	SNAP - ACTION CONTACTS SINGLE POLE 		$\frac{9.3}{2.1}$	$\frac{15.6}{3.5}$	$\frac{0.17}{6.7}$	$\frac{1.7}{.067}$	250
GL**03C GL**33C	SLOW ACTING BREAK BEFORE MAKE 		$\frac{9.3}{2.1}$	$\frac{15.6}{3.5}$	$\frac{0.17}{6.7}$	$\frac{1.7}{.067}$	250
GL**04C GL**34C	SLOW ACTING MAKE BEFORE BREAK 		$\frac{9.3}{2.1}$	$\frac{15.6}{3.5}$	$\frac{0.17}{6.7}$	$\frac{1.7}{.067}$	250
GL**05C GL**35C	SLOW ACTING 		$\frac{9.3}{2.1}$	$\frac{15.6}{3.5}$	$\frac{0.17}{6.7}$	$\frac{1.7}{.067}$	250
GL**06C GL**36C	SLOW ACTING 		$\frac{9.3}{2.1}$	$\frac{15.6}{3.5}$	$\frac{0.17}{6.7}$	$\frac{1.7}{.067}$	250
GL**20C GL**22C GL**24C GL**32C	SNAP ACTION CONTACTS DOUBLE POLE 		$\frac{9.3}{2.1}$	$\frac{21.4}{4.8}$	$\frac{0.17}{6.7}$	$\frac{1.7}{.067}$	250
GL**21C GL**25C GL**28C GL**31C	SNAP ACTION CONTACTS DOUBLE POLE SEQUENTIAL 		$\frac{9.3}{2.1}$	N/A	$\frac{0.17}{6.7}$	$\frac{1.7}{.067}$	250

MGL SERIES CHART 1
 DRAWING NUMBER: 9 OF 13
 RELEASE NO. PR-20782
 PTC/CAD
 W. L. S. OSWALD
 SAV
 12
 0005401
 0027986
 0023759
 0037216
 0019888

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SWITCH, ENCLOSED

CATALOG LISTING
GL SERIES CHART 1

THIRD ANGLE PROJECTION
SCALE: FULL
DO NOT SCALE PRINT
TOLERANCES
APPLY TO DESIGN UNITS. CONVERSIONS ARE ONLY FOR REFERENCE. UNLESS NOTED, TOLERANCES ARE:

NO. PLACES	TOL.	SI METRIC	NO. PLACES	TOL.
TWO PLACES	±.04	±.001	TWO PLACES	±.04
ONE PLACE	±.05	±.0015	ONE PLACE	±.05
THREE PLACES	±.005	±.0005	THREE PLACES	±.005

 DESIGN UNITS: SI METRIC US CUSTOMARY
 WEIGHT: