



GLAA01A2A



Actual product appearance may vary.

Global Limit Switches Series GLS: Side Rotary With Roller - Adjustable, 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.)	0,330 N m [2.90 in lb]
Pretravel (P.T.)	26°
Overtravel (O.T.)	59°
Differential Travel (D.T.)	12°
Product Type	EN50041/47 Global Limit Switch
Actuator	Side Rotary
Lever Style	Roller - Adjustable
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]
Comment	Roller Material: Plastic
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.)	26°

SIDE ROTARY

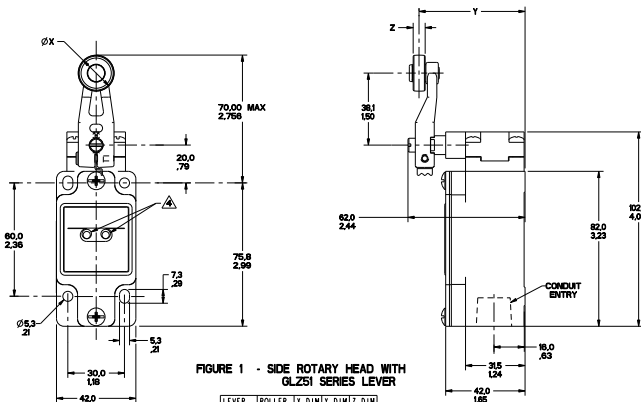


FIGURE 1 - SIDE ROTARY HEAD WITH GL251 SERIES LEVER

LEVER	ROLLER MATL	X DIM	Y DIM	Z DIM
GL251A	NYLON	18.1 .75	55.9 2.20	6.4 .25
GL251B	STEEL	18.1 .75	55.9 2.20	6.4 .25
GL251F	RUBBER	50.0 1.97	58.1 2.29	10.0 .39

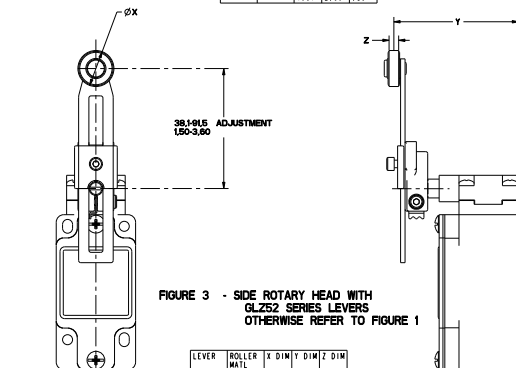


FIGURE 3 - SIDE ROTARY HEAD WITH GL252 SERIES LEVERS OTHERWISE REFER TO FIGURE 1

LEVER	ROLLER MATL	X DIM	Y DIM	Z DIM
GL252A	NYLON	19.1 .75	65.9 2.59	6.4 .25
GL252B	STEEL	19.1 .75	65.9 2.59	6.4 .25
GL252D	NYLON	38.1 1.5	65.9 2.59	6.4 .25
GL252E	NYLON	19.1 .75	39.2 1.55	10.0 .39
GL252W	RUBBER	40.0 1.6	71.5 2.81	12.7 .5
GL252Y	RUBBER	50.0 1.97	68.8 2.71	10.0 .39

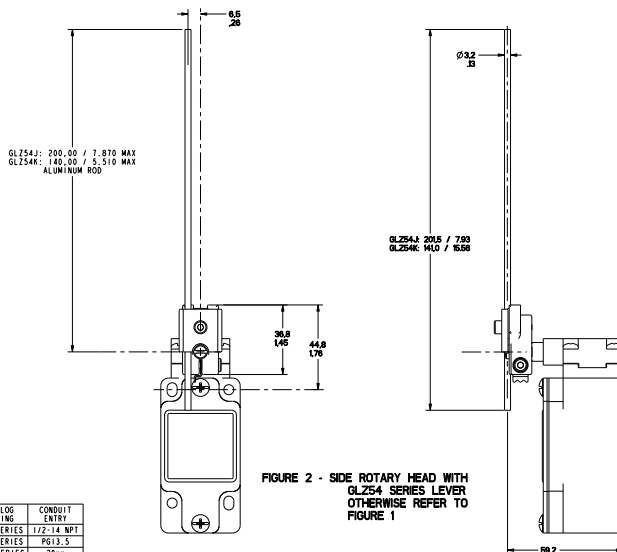


FIGURE 2 - SIDE ROTARY HEAD WITH GL254 SERIES LEVER OTHERWISE REFER TO FIGURE 1

GL254J: 200.00 / 7.870 MAX
GL254K: 140.00 / 5.510 MAX
ALUMINUM ROD

GL254J: 20.6 / 7.89
GL254K: 14.0 / 5.51

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 Δ / Δ / Δ			
AC		DC	
A600	AC15	O300	DC13
Ue	Ie	Ue	Ie
VOLTS	AMPS	VOLTS	AMPS
120	6	24	2.8
240	3	250	.27
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 REVEYED TO THE SHAFT AT 90° INCREMENTS, THEY MAY ALSO BE ATTACHED, BUT NOT KEYS ANYWHERE ON THE SHAFT.
 - FOR ADDITIONAL LEVERS SEE "M" DRAWING CHART GL25
- ⚠ 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 36.1 / 1.42
- ⚠ 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 / -15°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
GLP***	1A	N/A	N/A
GLR***	1B	N/A	N/A
GLC***	1C	N/A	N/A
GLD***	1D	N/A	N/A
GL***A1	I	1	9
GL***A2	I	3	9
GL***A4	I	2	10
GL***A5	I	4	8
GL***A6	I	4	11
GL***C	I	5	13A, 13B
GL***D	I	6	14A, 14B
GL***E1A	I	3A	12
GL***E7B	I	7	12
GL***E7C	I	7E	15
GL***E7D	I	7B	12
GL***K8B	I	7C	15
GL***K8B	I	7D	15
GL***K8C	I	7	15

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MICRO SWITCH
Honeywell Division

SWITCH, ENCLOSED

GL SERIES CHART 1

THIRD ANGLE PROJECTION	
SCALE	1:1
DO NOT SCALE PRINT	
TOLERANCES	
UNLESS OTHERWISE SPECIFIED	
FINISH	
UNLESS OTHERWISE SPECIFIED	
UNIT	MILLIMETERS
DECIMALS	0.00
FRACTIONS	1/32
ANGLES	10'
WEIGHT	

ANSI Y14.5M-1982 APPLIES

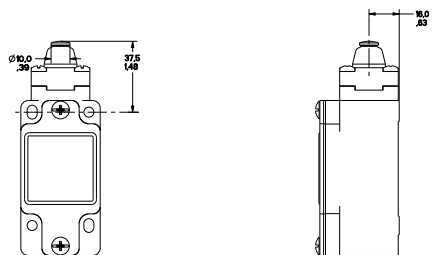


FIGURE 4 - TOP PIN PLUNGER HEAD
OTHERWISE REFER TO
FIGURE 1

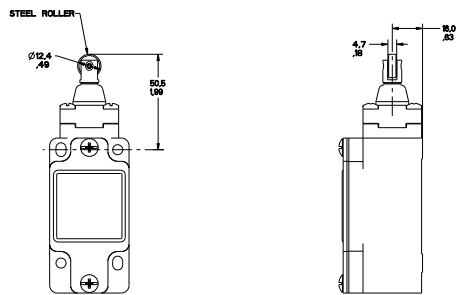


FIGURE 5 - TOP ROLLER PLUNGER HEAD
OTHERWISE REFER TO
FIGURE 1

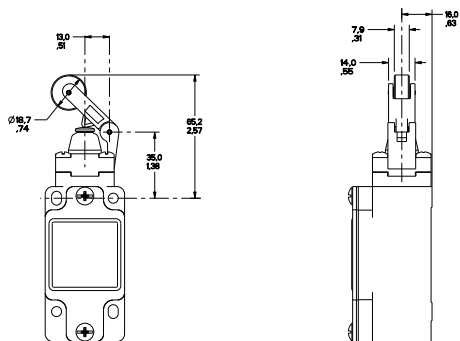


FIGURE 6 - TOP LEVER HEAD,
OTHERWISE REFER TO
FIGURE 1

PTC/CAD
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 DENVER, CO 80202
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MICROSWITCH Honeywell Division	SWITCH, ENCLOSED	GL SERIES CHART 1
ANSI Y14.5M-1982 APPLIES	TOLERANCES UNLESS OTHERWISE SPECIFIED: FRACTIONS DECIMALS ANGLES .005 .015 .010 .001 .002 .001 .01 .01 .01 .01 .01 .01	TYPED ANGLE PROJECTION SCALE FULL DO NOT SCALE PRINT TOLERANCES UNLESS OTHERWISE SPECIFIED: FRACTIONS DECIMALS ANGLES .005 .015 .010 .001 .002 .001 .01 .01 .01 .01 .01 .01

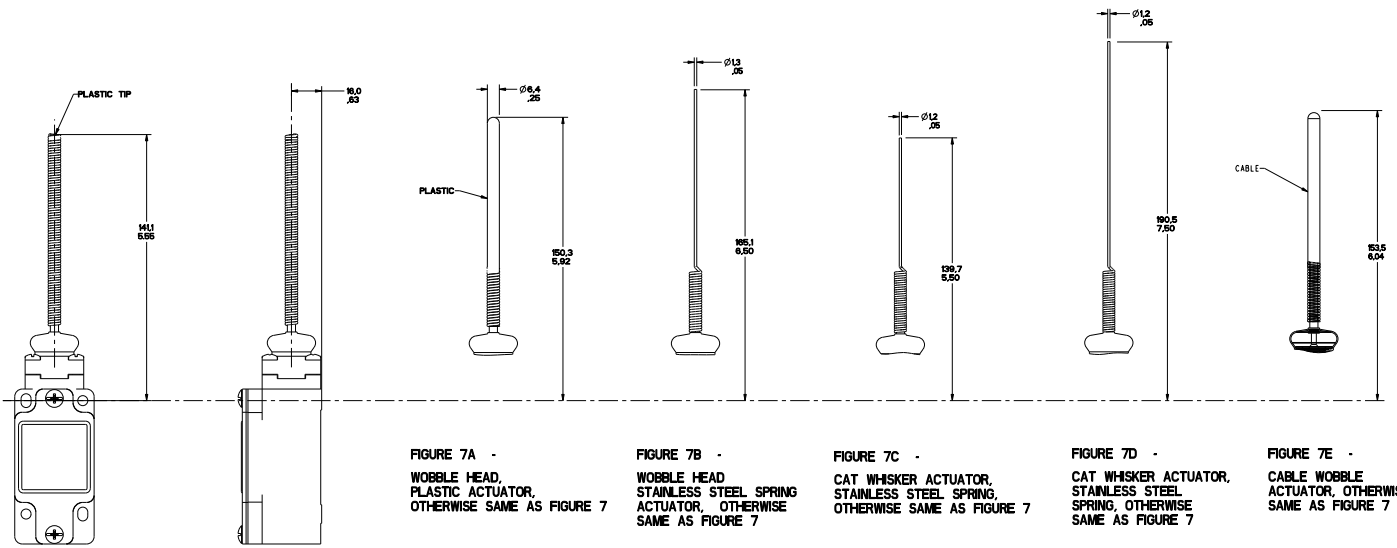


FIGURE 7A -
WOBBLE HEAD,
PLASTIC ACTUATOR,
OTHERWISE SAME AS FIGURE 7

FIGURE 7B -
WOBBLE HEAD
STAINLESS STEEL SPRING
ACTUATOR, OTHERWISE
SAME AS FIGURE 7

FIGURE 7C -
CAT WHISKER ACTUATOR,
STAINLESS STEEL SPRING,
OTHERWISE SAME AS FIGURE 7

FIGURE 7D -
CAT WHISKER ACTUATOR,
STAINLESS STEEL
SPRING, OTHERWISE
SAME AS FIGURE 7

FIGURE 7E -
CABLE WOBBLE
ACTUATOR, OTHERWISE
SAME AS FIGURE 7

FIGURE 7 - WOBBLE HEAD, AND CAT WISKER HEAD
COIL ACTUATOR,
OTHERWISE REFER TO
FIGURE 1

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 MICROSWITCH
 HONEYWELL DIVISION
 1982

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ANSI Y14.5M-1982 APPLIES		TOLERANCES UNLESS OTHERWISE SPECIFIED: FRACTIONS DECIMALS ANGLES .005 .015 .010 .001 .002 .001 .010 .010 .010	THIRD ANGLE PROJECTION SCALE: FULL DO NOT SCALE PRINT TOLERANCES UNLESS OTHERWISE SPECIFIED: FRACTIONS DECIMALS ANGLES .005 .015 .010 .001 .002 .001 .010 .010 .010

PTC/CAD
 11-12-13-14-21-22-23-24-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100-101-102-103-104-105-106-107-108-109-110-111-112-113-114-115-116-117-118-119-120-121-122-123-124-125-126-127-128-129-130-131-132-133-134-135-136-137-138-139-140-141-142-143-144-145-146-147-148-149-150-151-152-153-154-155-156-157-158-159-160-161-162-163-164-165-166-167-168-169-170-171-172-173-174-175-176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200-201-202-203-204-205-206-207-208-209-210-211-212-213-214-215-216-217-218-219-220-221-222-223-224-225-226-227-228-229-230-231-232-233-234-235-236-237-238-239-240-241-242-243-244-245-246-247-248-249-250-251-252-253-254-255-256-257-258-259-260-261-262-263-264-265-266-267-268-269-270-271-272-273-274-275-276-277-278-279-280-281-282-283-284-285-286-287-288-289-290-291-292-293-294-295-296-297-298-299-300-301-302-303-304-305-306-307-308-309-310-311-312-313-314-315-316-317-318-319-320-321-322-323-324-325-326-327-328-329-330-331-332-333-334-335-336-337-338-339-340-341-342-343-344-345-346-347-348-349-350-351-352-353-354-355-356-357-358-359-360-361-362-363-364-365-366-367-368-369-370-371-372-373-374-375-376-377-378-379-380-381-382-383-384-385-386-387-388-389-390-391-392-393-394-395-396-397-398-399-400-401-402-403-404-405-406-407-408-409-410-411-412-413-414-415-416-417-418-419-420-421-422-423-424-425-426-427-428-429-430-431-432-433-434-435-436-437-438-439-440-441-442-443-444-445-446-447-448-449-450-451-452-453-454-455-456-457-458-459-460-461-462-463-464-465-466-467-468-469-470-471-472-473-474-475-476-477-478-479-480-481-482-483-484-485-486-487-488-489-490-491-492-493-494-495-496-497-498-499-500-501-502-503-504-505-506-507-508-509-510-511-512-513-514-515-516-517-518-519-520-521-522-523-524-525-526-527-528-529-530-531-532-533-534-535-536-537-538-539-540-541-542-543-544-545-546-547-548-549-550-551-552-553-554-555-556-557-558-559-560-561-562-563-564-565-566-567-568-569-570-571-572-573-574-575-576-577-578-579-580-581-582-583-584-585-586-587-588-589-590-591-592-593-594-595-596-597-598-599-600-601-602-603-604-605-606-607-608-609-610-611-612-613-614-615-616-617-618-619-620-621-622-623-624-625-626-627-628-629-630-631-632-633-634-635-636-637-638-639-640-641-642-643-644-645-646-647-648-649-650-651-652-653-654-655-656-657-658-659-660-661-662-663-664-665-666-667-668-669-670-671-672-673-674-675-676-677-678-679-680-681-682-683-684-685-686-687-688-689-690-691-692-693-694-695-696-697-698-699-700-701-702-703-704-705-706-707-708-709-710-711-712-713-714-715-716-717-718-719-720-721-722-723-724-725-726-727-728-729-730-731-732-733-734-735-736-737-738-739-740-741-742-743-744-745-746-747-748-749-750-751-752-753-754-755-756-757-758-759-760-761-762-763-764-765-766-767-768-769-770-771-772-773-774-775-776-777-778-779-780-781-782-783-784-785-786-787-788-789-790-791-792-793-794-795-796-797-798-799-800-801-802-803-804-805-806-807-808-809-810-811-812-813-814-815-816-817-818-819-820-821-822-823-824-825-826-827-828-829-830-831-832-833-834-835-836-837-838-839-840-841-842-843-844-845-846-847-848-849-850-851-852-853-854-855-856-857-858-859-860-861-862-863-864-865-866-867-868-869-870-871-872-873-874-875-876-877-878-879-880-881-882-883-884-885-886-887-888-889-890-891-892-893-894-895-896-897-898-899-900-901-902-903-904-905-906-907-908-909-910-911-912-913-914-915-916-917-918-919-920-921-922-923-924-925-926-927-928-929-930-931-932-933-934-935-936-937-938-939-940-941-942-943-944-945-946-947-948-949-950-951-952-953-954-955-956-957-958-959-960-961-962-963-964-965-966-967-968-969-970-971-972-973-974-975-976-977-978-979-980-981-982-983-984-985-986-987-988-989-990-991-992-993-994-995-996-997-998-999-1000

FIGURES 8, 9, 10 SIDE ROTARY HEAD, ANGULAR ACTUATION							
CATALOG LISTING	CONTACT BLOCK DIAGRAM	NOMINAL TRAVELS AND RELATED TERMINALS CONTACT CLOSED, CONTACT OPEN, CONTACT CLOSED DIFFERENTIAL TRAVEL, ** POSITIVE OPENING TO IEC 947-5-1	MAXIMUM OPERATING FORCE LB-TN	MAXIMUM DISCONNECT FORCE LB-TN	MAX OPERATE DEGREE/S	MIN OPERATE DEGREE/S	MAX OPERATE FREQUENCY OPS/MIN
GL**01A GL**07A	SNAP - ACTION CONTACTS SINGLE POLE	21-22 26° 55+* 85° 13-14 12" DIFFERENTIAL TRAVEL	.330 2.9	.385 3.4	1290	13	250
GL**03A GL**33A	SLOW ACTING BREAK BEFORE MAKE	21-22 26+* 85° 13-14 38"	.330 2.9	.385 3.4	1290	13	250
GL**04A GL**34A	SLOW ACTING MAKE BEFORE BREAK	21-22 38+* 85° 13-14 26°	.330 2.9	.400 3.5	1290	13	250
GL**05A GL**35A	SLOW ACTING	13-14 38" 85° 23-24	.330 2.9	.385 3.4	1290	13	250
GL**06A GL**36A	SLOW ACTING	11-12 26+* 85° 21-22	.330 2.9	.385 3.4	1290	13	250
GL**20A GL**22A GL**24A GL**32A	SNAP ACTION CONTACTS DOUBLE POLE	11-12, 21-22 26° 55+* 85° 13-14, 23-24 12" DIFFERENTIAL TRAVEL	.330 2.9	.385 3.4	1290	13	250
GL**21A GL**25A GL**28A GL**31A	STEP SNAP ACTION CONTACTS DOUBLE POLE SEQUENTIAL	11-12 27 42 13-14 21-22 23-24 8" DIFFERENTIAL TRAVEL	.330 2.9	N/A	1290	13	250

SIDE ROTARY HEAD, CAM ACTUATION PER EN50041, FIGURES 8 AND 9							
CATALOG LISTING	CONTACT BLOCK DIAGRAM	NOMINAL TRAVELS AND RELATED TERMINALS CONTACT CLOSED, CONTACT OPEN, CONTACT CLOSED DIFFERENTIAL TRAVEL, ** POSITIVE OPENING TO IEC 947-5-1 DIMENSIONS IN mm	MAXIMUM OPERATING FORCE LB	MAXIMUM DISCONNECT FORCE LB	MAX OPERATE VEL. M/S	MIN OPERATE VEL. M/S	MAX OPERATE FREQUENCY OPS/MIN
GL**01A GL**07A	SNAP - ACTION CONTACTS SINGLE POLE	21-22 20 56** 85° 13-14 12" DIFFERENTIAL TRAVEL	9.7 2.2	11.4 2.6	.85 33.5	8.5 .33	250
GL**03A GL**33A	SLOW ACTING BREAK BEFORE MAKE	21-22 20+* 85° 13-14 32	9.7 2.2	11.4 2.6	.85 33.5	8.5 .33	250
GL**04A GL**34A	SLOW ACTING MAKE BEFORE BREAK	21-22 32 13-14 20	9.7 2.2	11.4 2.6	.85 33.5	8.5 .33	250
GL**05A GL**35A	SLOW ACTING	13-14 32* 85° 23-24	9.7 2.2	11.4 2.6	.85 33.5	8.5 .33	250
GL**06A GL**36A	SLOW ACTING	11-12 20+* 85° 21-22	9.7 2.2	11.4 2.6	.85 33.5	8.5 .33	250
GL**20A GL**22A GL**24A GL**32A	SNAP ACTION CONTACTS DOUBLE POLE	11-12, 21-22 20 56** 85° 13-14, 23-24 12" DIFFERENTIAL TRAVEL	9.7 2.2	11.8 2.7	.85 33.5	8.5 .33	250
GL**21A GL**25A GL**28A GL**31A	STEP SNAP ACTION CONTACTS DOUBLE POLE SEQUENTIAL	11-12 20 38.5 13-14 21-22 23-24 8.5" DIFFERENTIAL TRAVEL	9.7 2.2	N/A	.85 33.5	8.5 .33	250
GL**26J GL**27J GL**29J GL**30J	SNAP ACTION CONTACTS DOUBLE POLE CENTER NEUTRAL	11-12 16 13-14 21-22 23-24 8" DIFFERENTIAL TRAVEL	9.7 2.2	N/A	.85 33.5	8.5 .33	250

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 ANSI Y14.5M-1982 APPLIES