Product selection

FTN 1 31 X11 M

Thread dimension of lead exit

BLANK - M16 G1 - PG11
M - M20 G3 - PG13.5
N - 1/2NPT C - Connector

Contact types

1: 1NC/1NO Slow action------X11
2: 2NC Slow action----------W02
3: 1NC/1NO Snap action------Z11
4: 2NC/1NO Slow action------W12
5: 3NC Slow action----------W03

Head and actuators

Function

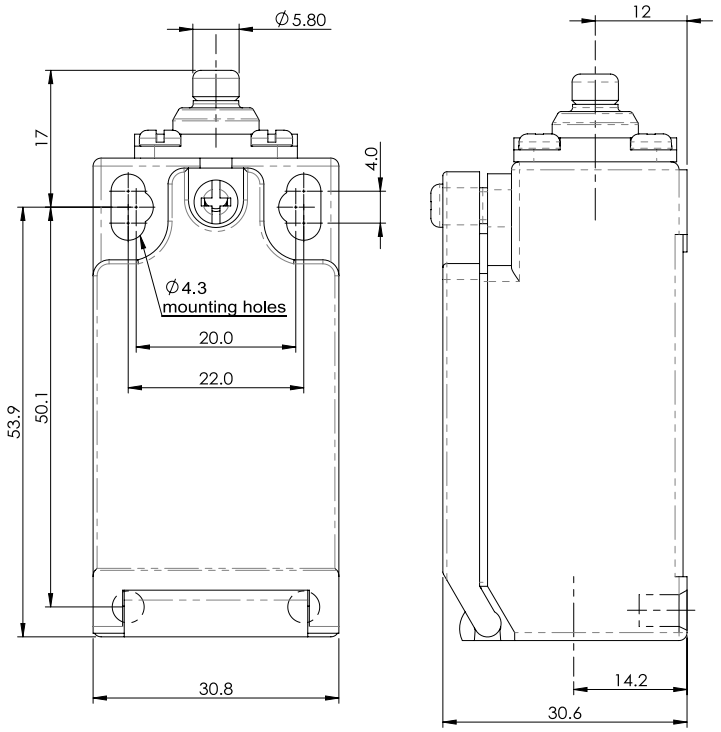
1 - Without reset function
1R - With reset function

Slow Action : Type "Zb"
Snap Action : Type "Za"

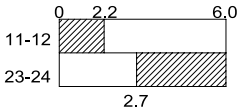


Specifications

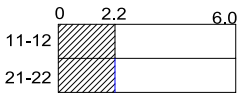
Standards	EN60947-5-1, UL508, EN50047, EN1088
Approvals	cULus, TUV and CE marked for all applicable directives
Positive opening operation	NC Contact
Utilization category	AC15 B300, DC13 Q300
Min current	5V, 5mA, DC
Thermal current (Ith)	10A
Rated insulation voltage	600V AC
Rated impulse withstand volt	2500V AC
Insulation ressistance	100MΩ min. (DC 500V)
Contact resistance	25mΩ max. (Initial)
Max switching speed	2500 mm/s
Max switching frequency	6000 operation per hour
Enclosure material	UL Approved glass-filled polybutylene terephthalate
Roller material	Various polymers
Enclosure protection	IP 67
Operating temperature	Min -25˚ C (-18˚ F) Max 80˚ C (+176˚ F)
Pollution degree	3
Protection against electric shock	Class II (Double insulation)
Mech. life expectancy	1 x 10^7 Cycles min
Electrically life expectancy	150,000 Cycles min
Vibration	IEC 68-2-6, 10-55Hz±1 Hz, Excursion : 0.35mm, 1octave/min
Conduit entry	Various (see product selection table)
Fixing	2 x M4



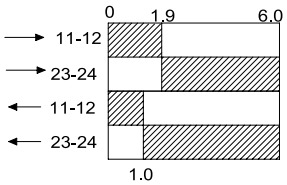
Operation diagrams



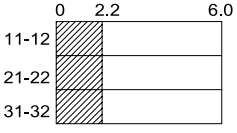
1NC/1NO BBM (Slow action)



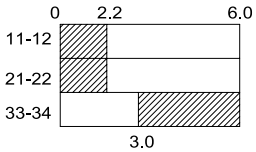
2NC (Slow action)



1NC/1NO (Snap action)



3NC Slow action



2NC/1NO BBM (Slow action)

GBV_DATASHEET_2017_Rev.0

ISS	NOTE	DESCRIPTION	GRID	DRW	APP	DATE

GIOVENZANA INTERNATIONAL B.V.

TITLE	FTN131 Short plastic end plunger with protective boot
FINISH	
MATERIAL:	
	Material must conform to RoHS Directive
PART NO.	FTN131
DWG NO.	FTN131
	A3

0.000˚±0.25˚	0.000±0.005	DRAWN	DATE
0.00˚±0.5˚	0.00±0.10		
0.0˚±1˚	0.0±0.20	CHECKED	DATE
0˚±2˚	0±0.50	APPROVER	DATE
ANGULAR	LINEAR		
TOLERANCE		SCALE 1:1	

Product selection

FTN 1 32 X11 M

Thread dimension of lead exit
BLANK - M16 G1 - PG11
M - M20 G3 - PG13.5
N - 1/2NPT C - Connector

Contact types
1: 1NC/1NO Slow action------X11
2: 2NC Slow action----------W02
3: 1NC/1NO Snap action------Z11
4: 2NC/1NO Slow action------W12
5: 3NC Slow action----------W03

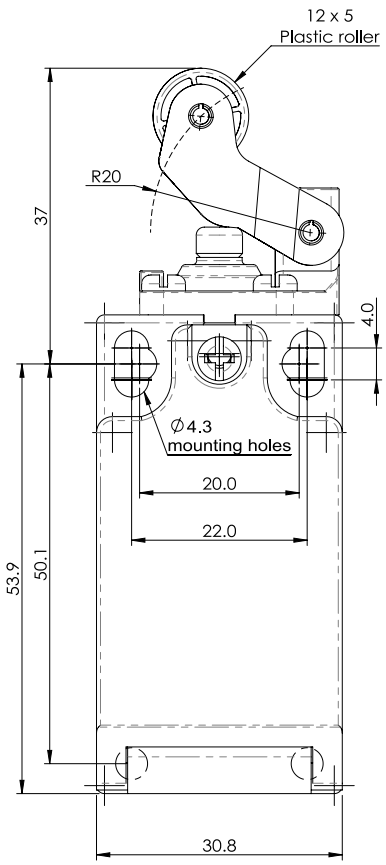
Head and actuators

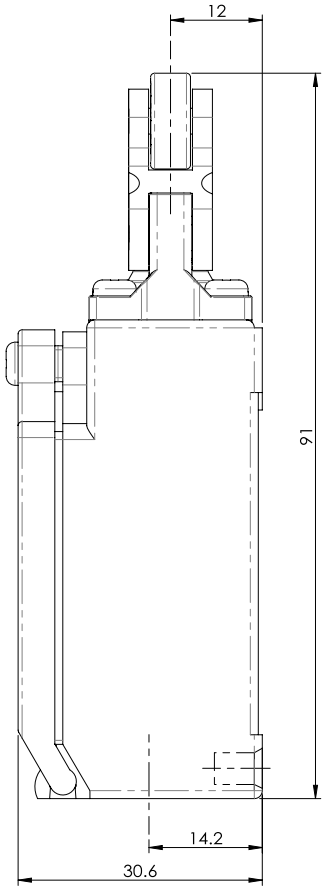
Function
1 - Without reset function
1R - With reset function

Slow Action : Type "Zb"
Snap Action : Type "Za"

Specifications

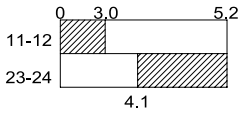
Standards	EN60947-5-1, UL508, EN50047, EN1088
Approvals	cULus, TUV and CE marked for all applicable directives
Positive opening operation	NC Contact
Utilization category	AC15 B300, DC13 Q300
Min current	5V, 5mA, DC
Thermal current (Ith)	10A
Rated insulation voltage	600V AC
Rated impulse withstand volt	2500V AC
Insulation ressistance	100MΩ min. (DC 500V)
Contact resistance	25mΩ max. (Initial)
Max switching speed	2500 mm/s
Max switching frequency	6000 operation per hour
Enclosure material	UL Approved glass-filled polybutylene terephthalate
Roller material	Various polymers
Enclosure protection	IP 67
Operating temperature	Min -25° C (-18° F) Max 80° C (+176° F)
Pollution degree	3
Protection against electric shock	Class II (Double insulation)
Mech. life expectancy	1 x 10^7 Cycles min
Electrically life expectancy	150,000 Cycles min
Vibration	IEC 68-2-6, 10-55Hz±1 Hz, Excursion : 0.35mm, 1octave/min
Conduit entry	Various (see product selection table)
Fixing	2 x M4



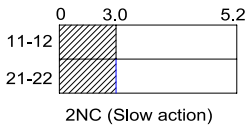




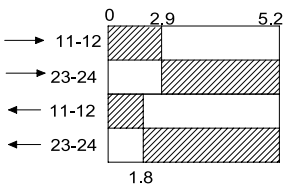
Operation diagrams



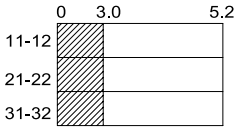
1NC/1NO BBM (Slow action)



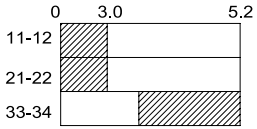
2NC (Slow action)



1NC/1NO (Snap action)



3NC Slow action



2NC/1NO BBM (Slow action)

GBV_DATASHEET_2017_Rev.0

ISS	NOTE	DESCRIPTION	GRID	DRW	APP	DATE

GIOVENZANA INTERNATIONAL B.V.

TITLE
FTN132 PA Roller lever plunger with protective boot horizontal action

FINISH

0.000°±0.25°	0.000±0.005
0.00°±0.5°	0.00±0.10
0.0°±1°	0.0±0.20
0°±2°	0±0.50
ANGULAR	LINEAR
TOLERANCE	

DRAWN DATE
CHECKED DATE
APPROVER DATE
SCALE 1:1

MATERIAL:
Material must conform to RoHS Directive
PART NO.
FTN132
DWG NO.
FTN132
A3

Product selection

FTN 1 33 X11 M

Thread dimension of lead exit

BLANK - M16 G1 - PG11
M - M20 G3 - PG13.5
N - 1/2NPT C - Connector

Contact types

1: 1NC/1NO Slow action------X11
2: 2NC Slow action----------W02
3: 1NC/1NO Snap action------Z11
4: 2NC/1NO Slow action------W12
5: 3NC Slow action----------W03

Slow Action : Type "Zb"
Snap Action : Type "Za"

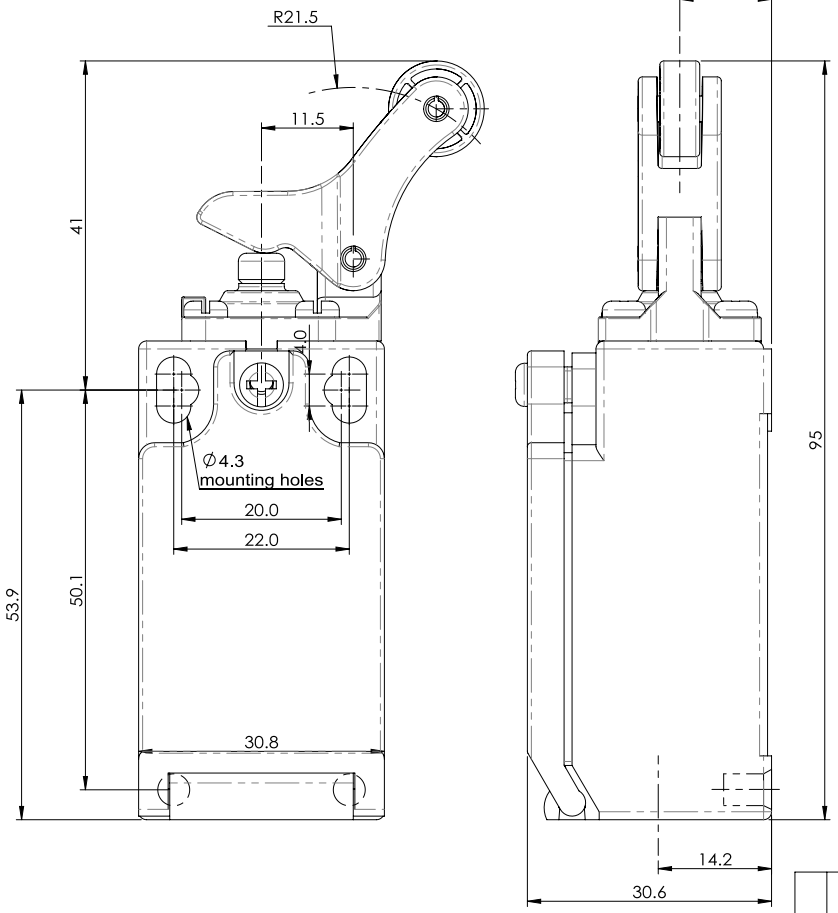
Head and actuators

Function

1 - Without reset function
1R - With reset function

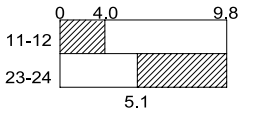
Specifications

Standards	EN60947-5-1, UL508, EN50047, EN1088
Approvals	cULus, TUV and CE marked for all applicable directives
Positive opening operation	NC Contact
Utilization category	AC15 B300, DC13 Q300
Min current	5V, 5mA, DC
Thermal current (Ith)	10A
Rated insulation voltage	600V AC
Rated impulse withstand volt	2500V AC
Insulation ressistance	100MΩ min. (DC 500V)
Contact resistance	25mΩ max. (Initial)
Max switching speed	2500 mm/s
Max switching frequency	6000 operation per hour
Enclosure material	UL Approved glass-filled polybutylene terephthalate
Roller material	Various polymers
Enclosure protection	IP 67
Operating temperature	Min -25˚ C (-18˚ F) Max 80˚ C (+176˚ F)
Pollution degree	3
Protection against electric shock	Class II (Double insulation)
Mech. life expectancy	1 x 10^7 Cycles min
Electrically life expectancy	150,000 Cycles min
Vibration	IEC 68-2-6, 10-55Hz±1 Hz, Excursion : 0.35mm, 1octave/min
Conduit entry	Various (see product selection table)
Fixing	2 x M4

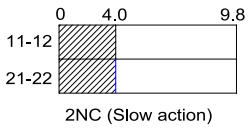




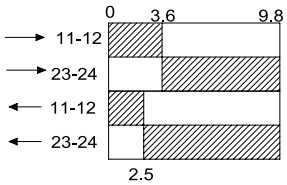
Operation diagrams



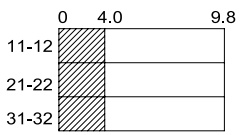
1NC/1NO BBM (Slow action)



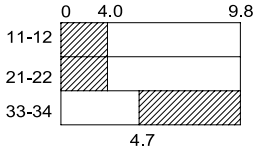
2NC (Slow action)



1NC/1NO (Snap action)



3NC Slow action



2NC/1NO BBM (Slow action)

GBV_DATASHEET_2017_Rev.0

ISS	NOTE	DESCRIPTION	GRID	DRW	APP	DATE

GIOVENZANA INTERNATIONAL B.V.

TITLE: FTN133 PA Roller lever plunger with protective boot vertical ctuation

FINISH

0.000˚±0.25˚	0.000±0.005	DRAWN	DATE
0.00˚±0.5˚	0.00±0.10		
0.0˚±1˚	0.0±0.20	CHECKED	DATE
0˚±2˚	0±0.50	APPROVER	DATE
ANGULAR	LINEAR		
TOLERANCE		SCALE 1:1	

MATERIAL:

Material must conform to RoHS Directive

PART NO. FTN133

DWG NO. FTN133 A3

Product selection

FTN 1 34 X11 M

Thread dimension of lead exit

BLANK - M16	G1 - PG11
M - M20	G3 - PG13.5
N - 1/2NPT	C - Connector

Contact types

1: 1NC/1NO Slow action------X11
2: 2NC Slow action----------W02
3: 1NC/1NO Snap action------Z11
4: 2NC/1NO Slow action------W12
5: 3NC Slow action----------W03

Slow Action : Type "Zb"
Snap Action : Type "Za"

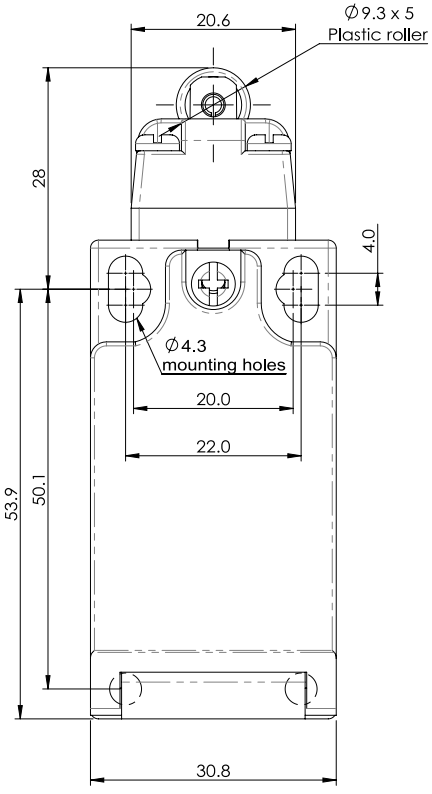
Head and actuators

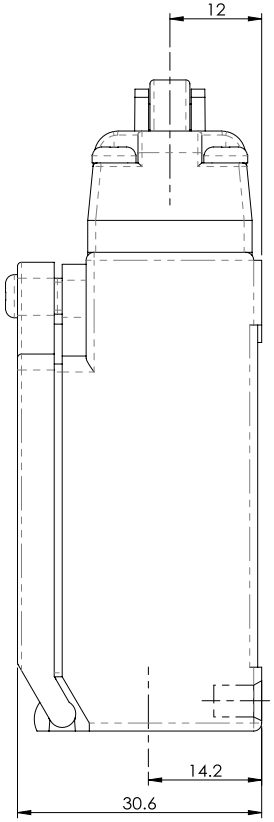
Function

1 - Without reset function
1R - With reset function

Specifications

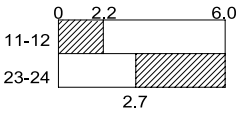
Standards	EN60947-5-1, UL508, EN50047, EN1088
Approvals	cULus, TUV and CE marked for all applicable directives
Positive opening operation	NC Contact
Utilization category	AC15 B300, DC13 Q300
Min current	5V, 5mA, DC
Thermal current (Ith)	10A
Rated insulation voltage	600V AC
Rated impulse withstand volt	2500V AC
Insulation ressistance	100MΩ min. (DC 500V)
Contact resistance	25mΩ max. (Initial)
Max switching speed	2500 mm/s
Max switching frequency	6000 operation per hour
Enclosure material	UL Approved glass-filled polybutylene terephthalate
Roller material	Various polymers
Enclosure protection	IP 67
Operating temperature	Min -25˚ C (-18˚ F) Max 80˚ C (+176˚ F)
Pollution degree	3
Protection against electric shock	Class II (Double insulation)
Mech. life expectancy	1 x 10^7 Cycles min
Electrically life expectancy	150,000 Cycles min
Vibration	IEC 68-2-6, 10-55Hz±1 Hz, Excursion : 0.35mm, 1octave/min
Conduit entry	Various (see product selection table)
Fixing	2 x M4



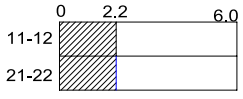




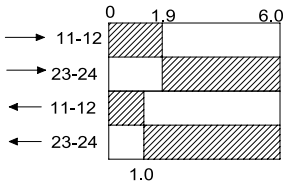
Operation diagrams



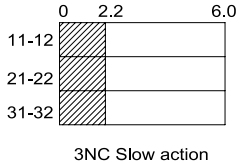
1NC/1NO BBM (Slow action)



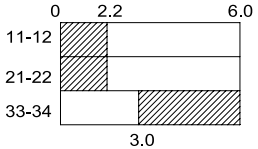
2NC (Slow action)



1NC/1NO (Snap action)



3NC Slow action



2NC/1NO BBM (Slow action)

GBV_DATASHEET_2017_Rev.0

ISS	NOTE	DESCRIPTION	GRID	DRW	APP	DATE

GIOVENZANA INTERNATIONAL B.V.

TITLE	FTN134 PA Roller lever plunger
FINISH	
MATERIAL:	
	Material must conform to RoHS Directive
PART NO.	FTN134
DWG NO.	FTN134
	A3

0.000˚±0.25˚	0.000±0.005	DRAWN	DATE
0.00˚±0.5˚	0.00±0.10		
0.0˚±1˚	0.0±0.20	CHECKED	DATE
0˚±2˚	0±0.50	APPROVER	DATE
ANGULAR	LINEAR		
TOLERANCE		SCALE 1:1	

Product selection

FTN 1 35 X11 M

Thread dimension of lead exit

BLANK - M16	G1 - PG11
M - M20	G3 - PG13.5
N - 1/2NPT	C - Connector

Contact types

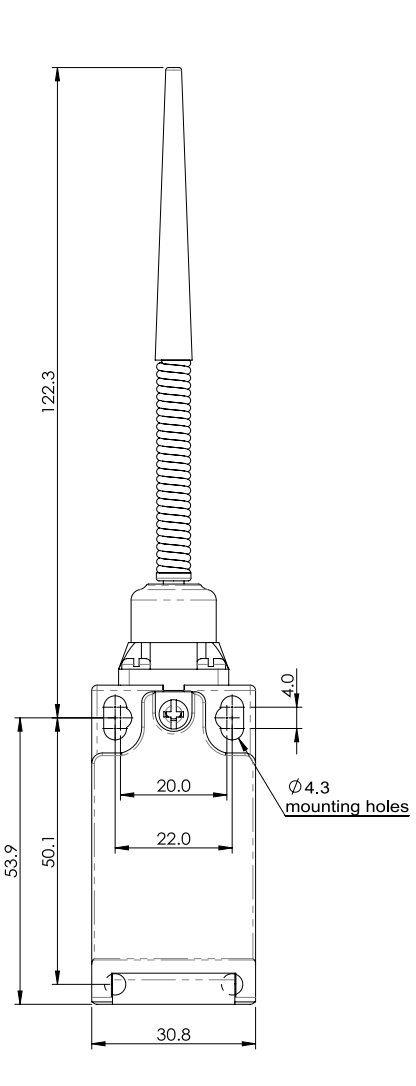
1: 1NC/1NO Slow action------X11
2: 2NC Slow action----------W02
3: 1NC/1NO Snap action------Z11
4: 2NC/1NO Slow action------W12
5: 3NC Slow action----------W03

Head and actuators

Function

1 - Without reset function
1R - With reset function

Slow Action : Type "Zb"
Snap Action : Type "Za"

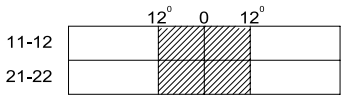




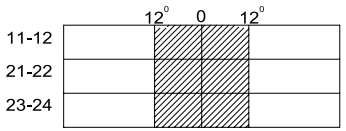
Specifications

Standards	EN60947-5-1, UL508, EN50047, EN1088
Approvals	cULus, TUV and CE marked for all applicable directives
Positive opening operation	NC Contact
Utilization category	AC15 B300, DC13 Q300
Min current	5V, 5mA, DC
Thermal current (Ith)	10A
Rated insulation voltage	600V AC
Rated impulse withstand volt	2500V AC
Insulation ressistance	100MΩ min. (DC 500V)
Contact resistance	25mΩ max. (Initial)
Max switching speed	2500 mm/s
Max switching frequency	6000 operation per hour
Enclosure material	UL Approved glass-filled polybutylene terephthalate
Roller material	Various polymers
Enclosure protection	IP 67
Operating temperature	Min -25˚ C (-18˚ F) Max 80˚ C (+176˚ F)
Pollution degree	3
Protection against electric shock	Class II (Double insulation)
Mech. life expectancy	1 x 10^7 Cycles min
Electrically life expectancy	150,000 Cycles min
Vibration	IEC 68-2-6, 10-55Hz±1 Hz, Excursion : 0.35mm, 1octave/min
Conduit entry	Various (see product selection table)
Fixing	2 x M4

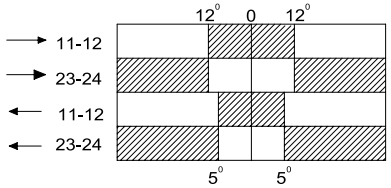
Operation diagrams



2NC (Slow action)



3NC (Slow action)



1NC/1NO (Snap action)

GBV_DATASHEET_2017_Rev.0

ISS	NOTE	DESCRIPTION	GRID	DRW	APP	DATE

GIOVENZANA INTERNATIONAL B.V.

TITLE	FTN135 Spring lever with tip in pa
FINISH	
MATERIAL:	
	Material must conform to RoHS Directive
PART NO.	FTN135
DWG NO.	FTN135
	A3

0.000˚±0.25˚	0.000±0.005	DRAWN	DATE
0.00˚±0.5˚	0.00±0.10		
0.0˚±1˚	0.0±0.20	CHECKED	DATE
0˚±2˚	0±0.50	APPROVER	DATE
ANGULAR	LINEAR		
TOLERANCE		SCALE 1:1	

Product selection

FTN 1 36 X11 M

Thread dimension of lead exit
BLANK - M16
M - M20
N - 1/2NPT
G1 - PG11
G3 - PG13.5
C - Connector

Contact types
1: 1NC/1NO Slow action------X11
2: 2NC Slow action----------W02
3: 1NC/1NO Snap action------Z11
4: 2NC/1NO Slow action------W12
5: 3NC Slow action----------W03

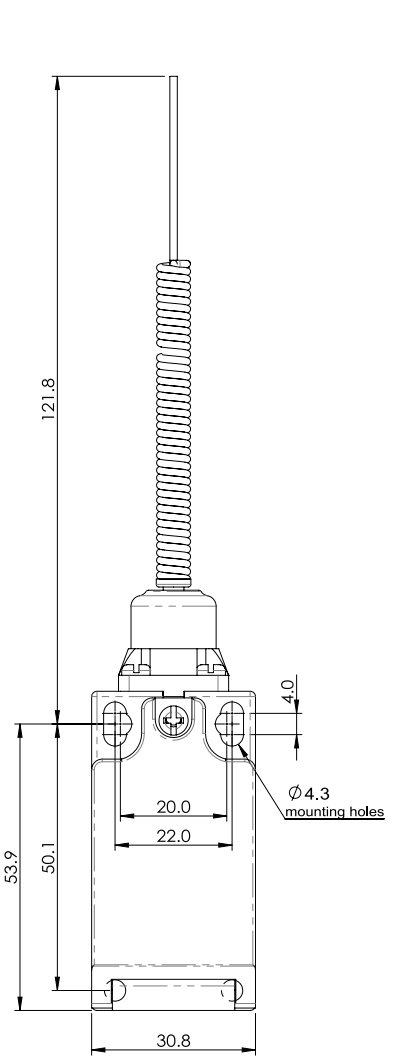
Head and actuators

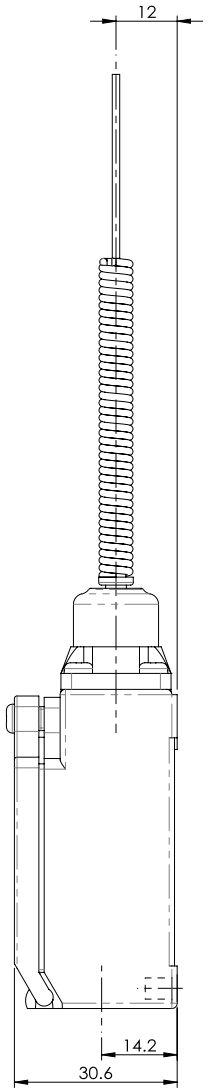
Function
1 - Without reset function
1R - With reset function

Slow Action : Type "Zb"
Snap Action : Type "Za"

Specifications

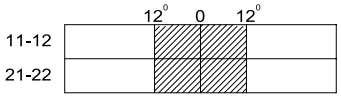
Standards	EN60947-5-1, UL508, EN50047, EN1088
Approvals	cULus, TUV and CE marked for all applicable directives
Positive opening operation	NC Contact
Utilization category	AC15 B300, DC13 Q300
Min current	5V, 5mA, DC
Thermal current (Ith)	10A
Rated insulation voltage	600V AC
Rated impulse withstand volt	2500V AC
Insulation ressistance	100MΩ min. (DC 500V)
Contact resistance	25mΩ max. (Initial)
Max switching speed	2500 mm/s
Max switching frequency	6000 operation per hour
Enclosure material	UL Approved glass-filled polybutylene terephthalate
Roller material	Various polymers
Enclosure protection	IP 67
Operating temperature	Min -25˚ C (-18˚ F) Max 80˚ C (+176˚ F)
Pollution degree	3
Protection against electric shock	Class II (Double insulation)
Mech. life expectancy	1 x 10^7 Cycles min
Electrically life expectancy	150,000 Cycles min
Vibration	IEC 68-2-6, 10-55Hz±1 Hz, Excursion : 0.35mm, 1octave/min
Conduit entry	Various (see product selection table)
Fixing	2 x M4



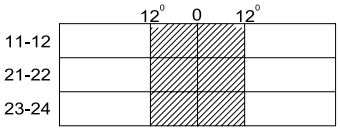




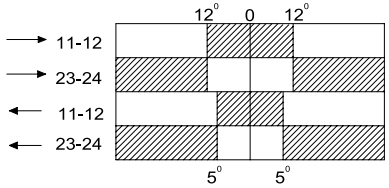
Operation diagrams



2NC (Slow action)



3NC (Slow action)



1NC/1NO (Snap action)

GBV_DATASHEET_2017_Rev.0

ISS	NOTE	DESCRIPTION	GRID	DRW	APP	DATE

GIOVENZANA INTERNATIONAL B.V.

TITLE: FTN136 CAT'S Whisker

FINISH

MATERIAL:

Material must conform to RoHS Directive

PART NO. FTN136

DWG NO. **FTN136**

A3

0.000˚±0.25˚	0.000±0.005
0.00˚±0.5˚	0.00±0.10
0.0˚±1˚	0.0±0.20
0˚±2˚	0±0.50
ANGULAR	LINEAR

TOLERANCE

DRAWN	DATE
CHECKED	DATE
APPROVER	DATE
SCALE	1:1

Product selection

FTN 1 37 X11 M

Thread dimension of lead exit

BLANK - M16 G1 - PG11
M - M20 G3 - PG13.5
N - 1/2NPT C - Connector

Contact types

1: 1NC/1NO Slow action------X11
2: 2NC Slow action----------W02
3: 1NC/1NO Snap action------Z11
4: 2NC/1NO Slow action------W12
5: 3NC Slow action----------W03

Head and actuators

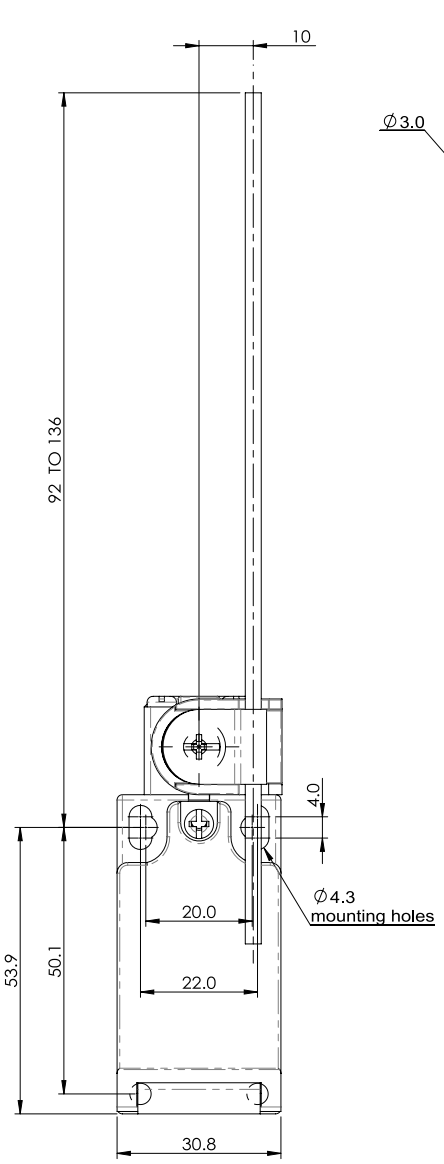
Function

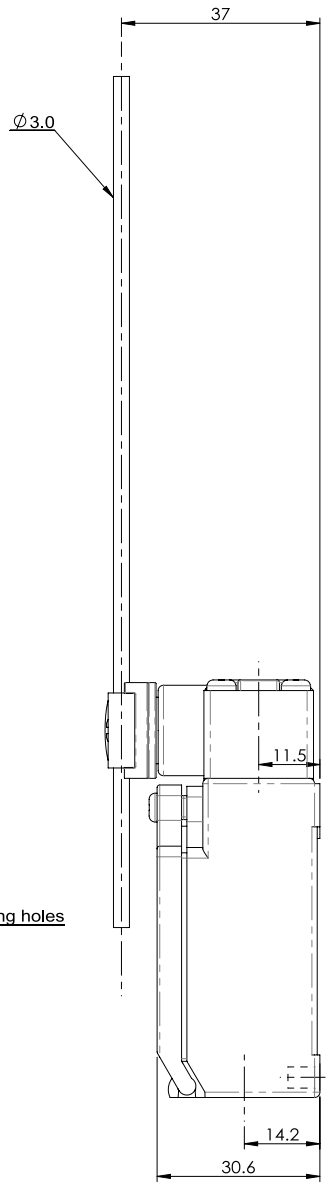
1 - Without reset function
1R - With reset function

Slow Action : Type "Zb"
Snap Action : Type "Za"

Specifications

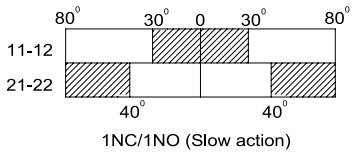
Standards	EN60947-5-1, UL508, EN50047, EN1088
Approvals	cULus, TUV and CE marked for all applicable directives
Positive opening operation	NC Contact
Utilization category	AC15 B300, DC13 Q300
Min current	5V, 5mA, DC
Thermal current (Ith)	10A
Rated insulation voltage	600V AC
Rated impulse withstand volt	2500V AC
Insulation ressistance	100MΩ min. (DC 500V)
Contact resistance	25mΩ max. (Initial)
Max switching speed	2500 mm/s
Max switching frequency	6000 operation per hour
Enclosure material	UL Approved glass-filled polybutylene terephthalate
Roller material	Various polymers
Enclosure protection	IP 67
Operating temperature	Min -25˚ C (-18˚ F) Max 80˚ C (+176˚ F)
Pollution degree	3
Protection against electric shock	Class II (Double insulation)
Mech. life expectancy	1 x 10^7 Cycles min
Electrically life expectancy	150,000 Cycles min
Vibration	IEC 68-2-6, 10-55Hz±1 Hz, Excursion : 0.35mm, 1octave/min
Conduit entry	Various (see product selection table)
Fixing	2 x M4



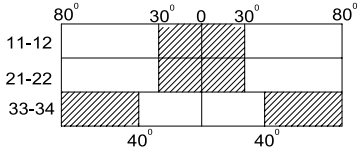




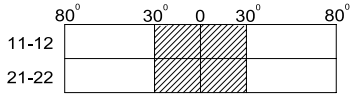
Operation diagrams



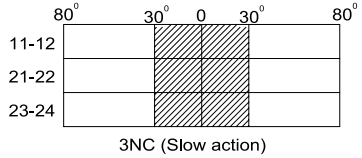
1NC/1NO (Slow action)



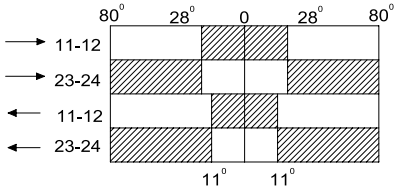
2NC/1NO (Slow action)



2NC (Slow action)



3NC (Slow action)



1NC/1NO (Snap action)

GBV_DATASHEET_2017_Rev.0

ISS	NOTE	DESCRIPTION	GRID	DRW	APP	DATE

GIOVENZANA INTERNATIONAL B.V.

TITLE	FTN137 Spring lever with tip in pa
FINISH	
MATERIAL:	
	Material must conform to RoHS Directive
PART NO.	FTN137
DWG NO.	FTN137
	A3

0.000˚±0.25˚	0.000±0.005	DRAWN	DATE
0.00˚±0.5˚	0.00±0.10		
0.0˚±1˚	0.0±0.20	CHECKED	DATE
0˚±2˚	0±0.50	APPROVER	DATE
ANGULAR	LINEAR		
TOLERANCE		SCALE 1:1	

Product selection

FTN 1 38 X11 M

Thread dimension of lead exit
BLANK - M16 G1 - PG11
M - M20 G3 - PG13.5
N - 1/2NPT C - Connector

Contact types
1: 1NC/1NO Slow action------X11
2: 2NC Slow action----------W02
3: 1NC/1NO Snap action------Z11
4: 2NC/1NO Slow action------W12
5: 3NC Slow action----------W03

Head and actuators

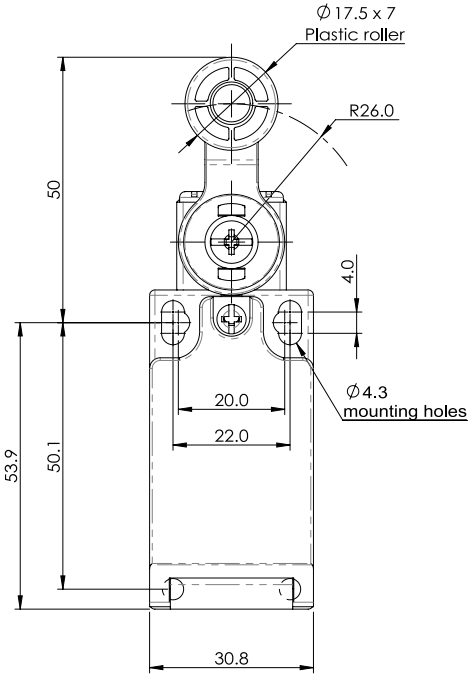
Function
1 - Without reset function
1R - With reset function

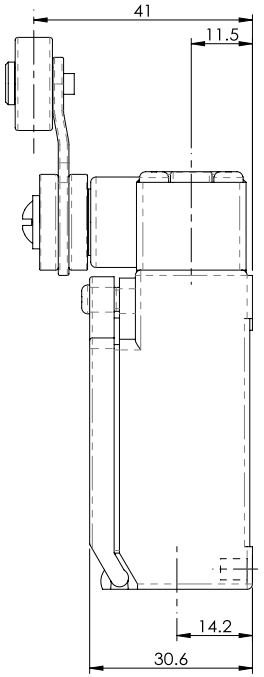
Slow Action : Type "Zb"
Snap Action : Type "Za"



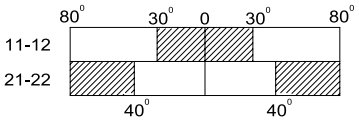
Specifications

Standards	EN60947-5-1, UL508, EN50047, EN1088
Approvals	cULus, TUV and CE marked for all applicable directives
Positive opening operation	NC Contact
Utilization category	AC15 B300, DC13 Q300
Min current	5V, 5mA, DC
Thermal current (Ith)	10A
Rated insulation voltage	600V AC
Rated impulse withstand volt	2500V AC
Insulation ressistance	100MΩ min. (DC 500V)
Contact resistance	25mΩ max. (Initial)
Max switching speed	2500 mm/s
Max switching frequency	6000 operation per hour
Enclosure material	UL Approved glass-filled polybutylene terephthalate
Roller material	Various polymers
Enclosure protection	IP 67
Operating temperature	Min -25˚C (-18˚F) Max 80˚C (+176˚F)
Pollution degree	3
Protection against electric shock	Class II (Double insulation)
Mech. life expectancy	1 x 10^7 Cycles min
Electrically life expectancy	150,000 Cycles min
Vibration	IEC 68-2-6, 10-55Hz±1 Hz, Excursion : 0.35mm, 1octave/min
Conduit entry	Various (see product selection table)
Fixing	2 x M4

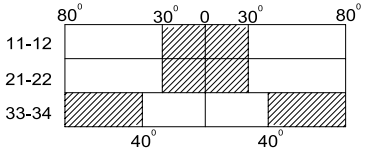




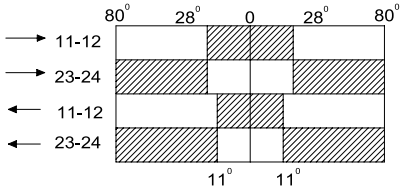
Operation diagrams



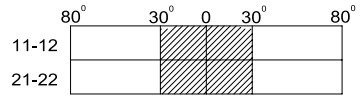
1NC/1NO (Slow action)



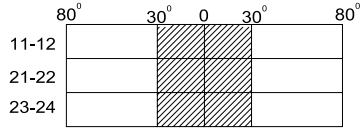
2NC/1NO (Slow action)



1NC/1NO (Snap action)



2NC (Slow action)



3NC (Slow action)

GBV_DATASHEET_2017_Rev.0

ISS	NOTE	DESCRIPTION	GRID	DRW	APP	DATE

GIOVENZANA INTERNATIONAL B.V.

TITLE: FTN138 18Ø PA Roller lever

FINISH

MATERIAL:

Material must conform to RoHS Directive

PART NO. FTN138

DWG NO. **FTN138** A3

0.000˚±0.25˚	0.000±0.005	DRAWN	DATE
0.00˚±0.5˚	0.00±0.10	CHECKED	DATE
0.0˚±1˚	0.0±0.20	APPROVER	DATE
0˚±2˚	0±0.50		
ANGULAR	LINEAR		
TOLERANCE		SCALE 1:1	

Product selection

FTN 1 39 X11 M

Thread dimension of lead exit

BLANK - M16 G1 - PG11
M - M20 G3 - PG13.5
N - 1/2NPT C - Connector

Head and actuators

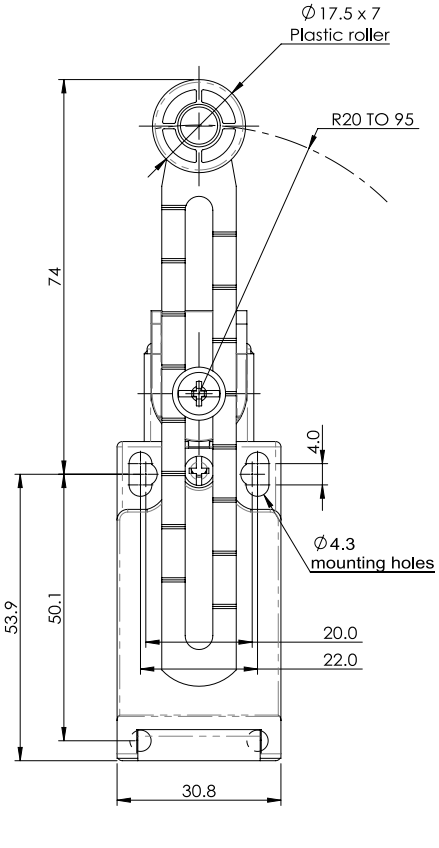
Function

1 - Without reset function
1R - With reset function

Contact types

1: 1NC/1NO Slow action------X11
2: 2NC Slow action----------W02
3: 1NC/1NO Snap action------Z11
4: 2NC/1NO Slow action------W12
5: 3NC Slow action----------W03

Slow Action : Type "Zb"
Snap Action : Type "Za"

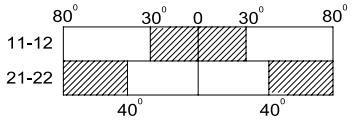




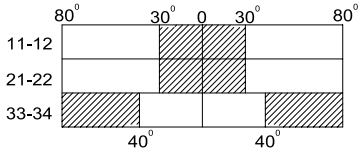
Specifications

Standards	EN60947-5-1, UL508, EN50047, EN1088
Approvals	cULus, TUV and CE marked for all applicable directives
Positive opening operation	NC Contact
Utilization category	AC15 B300, DC13 Q300
Min current	5V, 5mA, DC
Thermal current (Ith)	10A
Rated insulation voltage	600V AC
Rated impulse withstand volt	2500V AC
Insulation ressistance	100MΩ min. (DC 500V)
Contact resistance	25mΩ max. (Initial)
Max switching speed	2500 mm/s
Max switching frequency	6000 operation per hour
Enclosure material	UL Approved glass-filled polybutylene terephthalate
Roller material	Various polymers
Enclosure protection	IP 67
Operating temperature	Min -25˚ C (-18˚ F) Max 80˚ C (+176˚ F)
Pollution degree	3
Protection against electric shock	Class II (Double insulation)
Mech. life expectancy	1 x 10^7 Cycles min
Electrically life expectancy	150,000 Cycles min
Vibration	IEC 68-2-6, 10-55Hz±1 Hz, Excursion : 0.35mm, 1octave/min
Conduit entry	Various (see product selection table)
Fixing	2 x M4

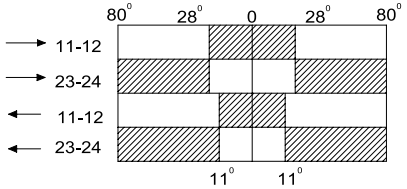
Operation diagrams



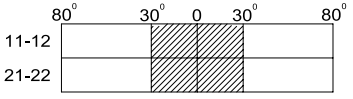
1NC/1NO (Slow action)



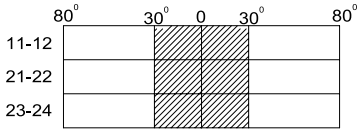
2NC/1NO (Slow action)



1NC/1NO (Snap action)



2NC (Slow action)



3NC (Slow action)

GBV_DATASHEET_2017_Rev.0

ISS	NOTE	DESCRIPTION	GRID	DRW	APP	DATE

GIOVENZANA INTERNATIONAL B.V.

TITLE: FTN139 Variable length roller lever 18Ø

FINISH

0.000˚±0.25˚	0.000±0.005
0.00˚±0.5˚	0.00±0.10
0.0˚±1˚	0.0±0.20
0˚±2˚	0±0.50
ANGULAR	LINEAR

TOLERANCE

DRAWN DATE
CHECKED DATE
APPROVER DATE
SCALE 1:1

MATERIAL:

Material must conform to RoHS Directive

PART NO. FTN139

DWG NO. **FTN139** A3

Product selection

FTN 1 40 X11 M

Thread dimension of lead exit

BLANK - M16	G1 - PG11
M - M20	G3 - PG13.5
N - 1/2NPT	C - Connector

Head and actuators

Function

1 - Without reset function
1R - With reset function

Contact types

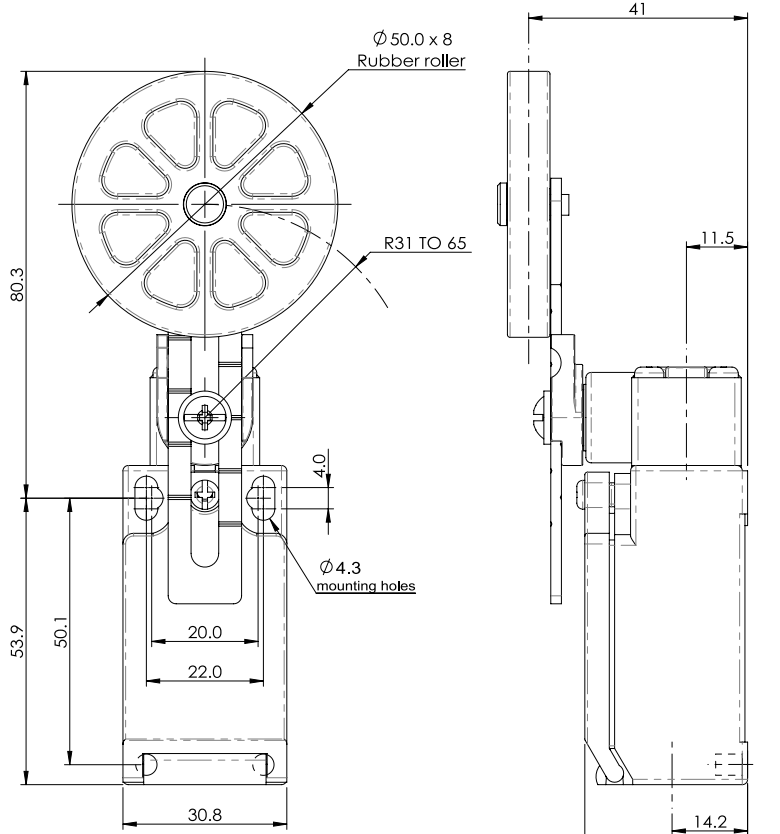
1: 1NC/1NO Slow action------X11
2: 2NC Slow action----------W02
3: 1NC/1NO Snap action------Z11
4: 2NC/1NO Slow action------W12
5: 3NC Slow action----------W03

Slow Action : Type "Zb"
Snap Action : Type "Za"

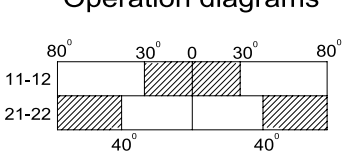


Specifications

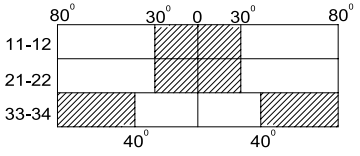
Standards	EN60947-5-1, UL508, EN50047, EN1088
Approvals	cULus, TUV and CE marked for all applicable directives
Positive opening operation	NC Contact
Utilization category	AC15 B300, DC13 Q300
Min current	5V, 5mA, DC
Thermal current (Ith)	10A
Rated insulation voltage	600V AC
Rated impulse withstand volt	2500V AC
Insulation ressistance	100MΩ min. (DC 500V)
Contact resistance	25mΩ max. (Initial)
Max switching speed	2500 mm/s
Max switching frequency	6000 operation per hour
Enclosure material	UL Approved glass-filled polybutylene terephthalate
Roller material	Various polymers
Enclosure protection	IP 67
Operating temperature	Min -25˚ C (-18˚ F) Max 80˚ C (+176˚ F)
Pollution degree	3
Protection against electric shock	Class II (Double insulation)
Mech. life expectancy	1 x 10^7 Cycles min
Electrically life expectancy	150,000 Cycles min
Vibration	IEC 68-2-6, 10-55Hz±1 Hz, Excursion : 0.35mm, 1octave/min
Conduit entry	Various (see product selection table)
Fixing	2 x M4



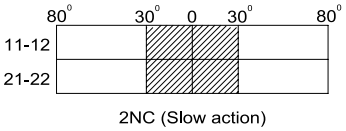
Operation diagrams



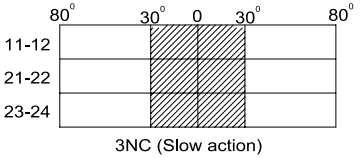
1NC/1NO (Slow action)



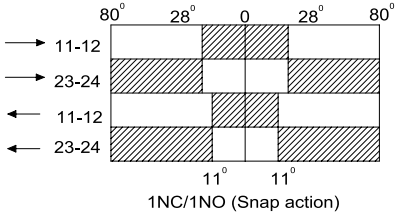
2NC/1NO (Slow action)



2NC (Slow action)



3NC (Slow action)



1NC/1NO (Snap action)

GBV_DATASHEET_2017_Rev.0

ISS	NOTE	DESCRIPTION	GRID	DRW	APP	DATE

GIOVENZANA INTERNATIONAL B.V.

TITLE	FTN140 Variable length rubber roller lever 50 Ø
FINISH	
MATERIAL:	
	Material must conform to RoHS Directive
PART NO.	FTN140
DWG NO.	FTN140

0.000˚±0.25˚	0.000±0.005
0.00˚±0.5˚	0.00±0.10
0.0˚±1˚	0.0±0.20
0˚±2˚	0±0.50
ANGULAR	LINEAR
TOLERANCE	

DRAWN	DATE
CHECKED	DATE
APPROVER	DATE
SCALE	1:1

A3

Product selection

FTN 1 40R X11 M

Thread dimension of lead exit

BLANK - M16	G1 - PG11
M - M20	G3 - PG13.5
N - 1/2NPT	C - Connector

Contact types

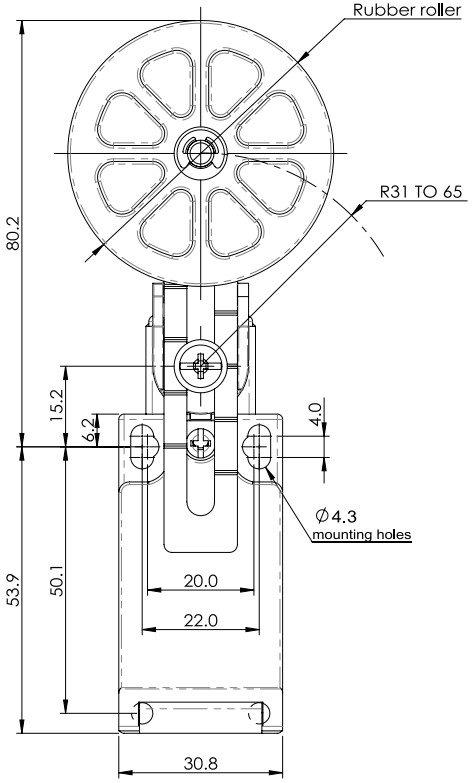
1: 1NC/1NO Slow action------X11
2: 2NC Slow action----------W02
3: 1NC/1NO Snap action------Z11
4: 2NC/1NO Slow action------W12
5: 3NC Slow action----------W03

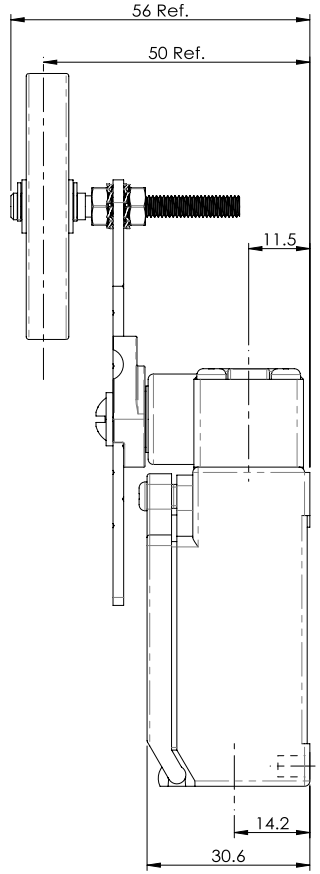
Head and actuators

Function

1 - Without reset function
1R - With reset function

Slow Action : Type "Zb"
Snap Action : Type "Za"



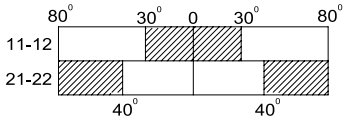




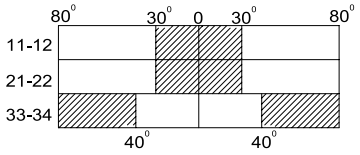
Specifications

Standards	EN60947-5-1, UL508, EN50047, EN1088
Approvals	cULus, TUV and CE marked for all applicable directives
Positive opening operation	NC Contact
Utilization category	AC15 B300, DC13 Q300
Min current	5V, 5mA, DC
Thermal current (Ith)	10A
Rated insulation voltage	600V AC
Rated impulse withstand volt	2500V AC
Insulation ressistance	100MΩ min. (DC 500V)
Contact resistance	25mΩ max. (Initial)
Max switching speed	2500 mm/s
Max switching frequency	6000 operation per hour
Enclosure material	UL Approved glass-filled polybutylene terephthalate
Roller material	Various polymers
Enclosure protection	IP 67
Operating temperature	Min -25˚ C (-18˚ F) Max 80˚ C (+176˚ F)
Pollution degree	3
Protection against electric shock	Class II (Double insulation)
Mech. life expectancy	1 x 10^7 Cycles min
Electrically life expectancy	150,000 Cycles min
Vibration	IEC 68-2-6, 10-55Hz±1 Hz, Excursion : 0.35mm, 1octave/min
Conduit entry	Various (see product selection table)
Fixing	2 x M4

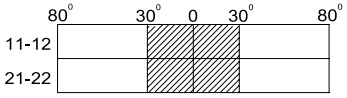
Operation diagrams



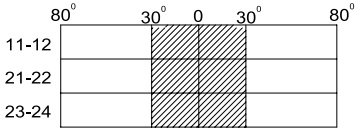
1NC/1NO (Slow action)



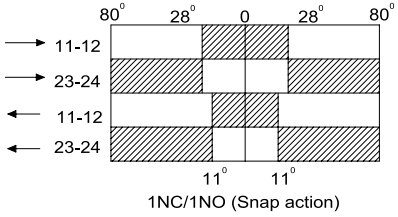
2NC/1NO (Slow action)



2NC (Slow action)



3NC (Slow action)



1NC/1NO (Snap action)

GBV_DATASHEET_2017_Rev.0

0.000˚±0.25˚	0.000±0.005	DRAWN	DATE	
0.00˚±0.5˚	0.00±0.10			
0.0˚±1˚	0.0±0.20	CHECKED	DATE	
0˚±2˚	0±0.50	APPROVER	DATE	
ANGULAR	LINEAR			
TOLERANCE		SCALE 1:1		

ISS	NOTE	DESCRIPTION	GRID	DRW	APP	DATE

GIOVENZANA INTERNATIONAL B.V.

TITLE: FTN140R Variable length and rubber roller lever 50Φ

FINISH:

MATERIAL:

Material must conform to RoHS Directive

PART NO. FTN140R

DWG NO. **FTN140R** A3

Product selection

FTN 1 41 X11 M

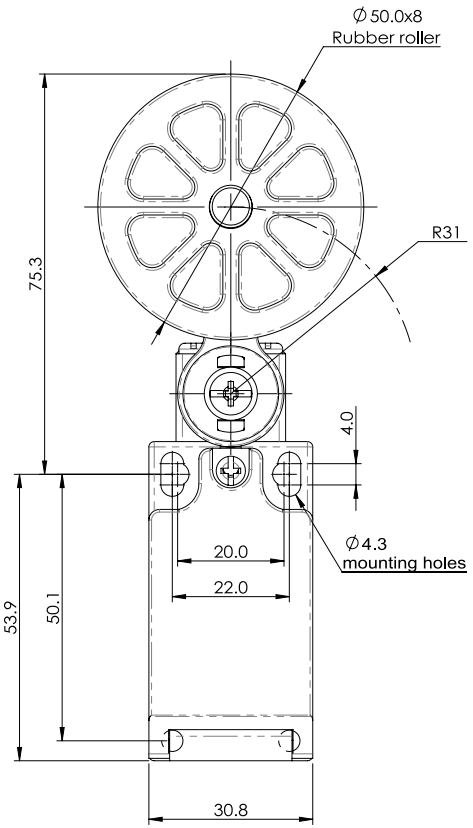
Thread dimension of lead exit
BLANK - M16 G1 - PG11
M - M20 G3 - PG13.5
N - 1/2NPT C - Connector

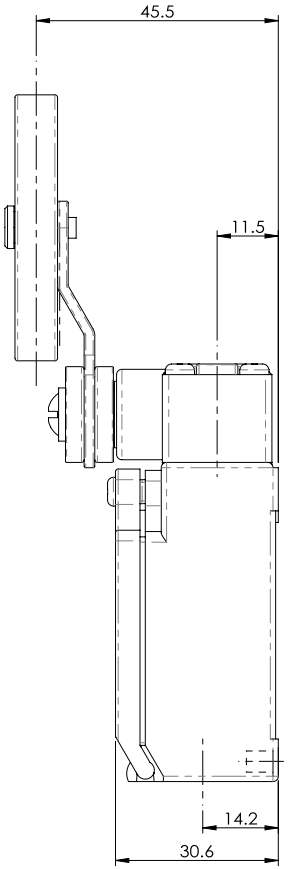
Contact types
1: 1NC/1NO Slow action------X11
2: 2NC Slow action----------W02
3: 1NC/1NO Snap action------Z11
4: 2NC/1NO Slow action------W12
5: 3NC Slow action----------W03

Head and actuators

Function
1 - Without reset function
1R - With reset function

Slow Action : Type "Zb"
Snap Action : Type "Za"



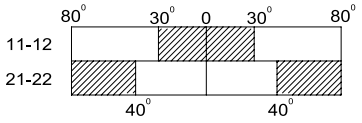




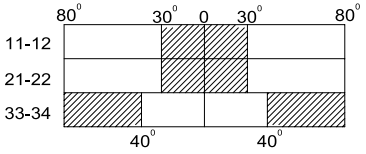
Specifications

Standards	EN60947-5-1, UL508, EN50047, EN1088
Approvals	cULus, TUV and CE marked for all applicable directives
Positive opening operation	NC Contact
Utilization category	AC15 B300, DC13 Q300
Min current	5V, 5mA, DC
Thermal current (Ith)	10A
Rated insulation voltage	600V AC
Rated impulse withstand volt	2500V AC
Insulation ressistance	100MΩ min. (DC 500V)
Contact resistance	25mΩ max. (Initial)
Max switching speed	2500 mm/s
Max switching frequency	6000 operation per hour
Enclosure material	UL Approved glass-filled polybutylene terephthalate
Roller material	Various polymers
Enclosure protection	IP 67
Operating temperature	Min -25˚ C (-18˚ F) Max 80˚ C (+176˚ F)
Pollution degree	3
Protection against electric shock	Class II (Double insulation)
Mech. life expectancy	1 x 10^7 Cycles min
Electrically life expectancy	150,000 Cycles min
Vibration	IEC 68-2-6, 10-55Hz±1 Hz, Excursion : 0.35mm, 1octave/min
Conduit entry	Various (see product selection table)
Fixing	2 x M4

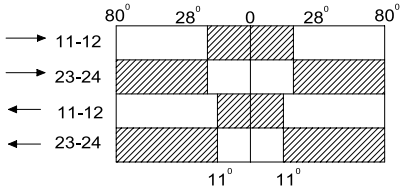
Operation diagrams



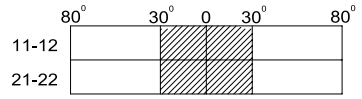
1NC/1NO (Slow action)



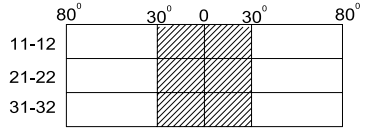
2NC/1NO (Slow action)



1NC/1NO (Snap action)



2NC (Slow action)



3NC (Slow action)

GBV_DATASHEET_2017_Rev.0

ISS	NOTE	DESCRIPTION	GRID	DRW.	APP.	DATE

GIOVENZANA INTERNATIONAL B.V.

TITLE: FTN141 50 Ø Rubber roller lever

FINISH:

0.000˚±0.25˚	0.000±0.05	DRAWN	DATE
0.00˚±0.5˚	0.00±0.10		
0.0˚±1˚	0.0±0.20	CHECKED	DATE
0˚±2˚	0±0.50	APPROVER	DATE
ANGULAR	LINEAR		
TOLERANCE		SCALE 1:1	

MATERIAL: ,

Material must conform to RoHS Directive

PART NO. FTN141

DWG NO. **FTN141** A3

Product selection

FTN 1 42 X11 M

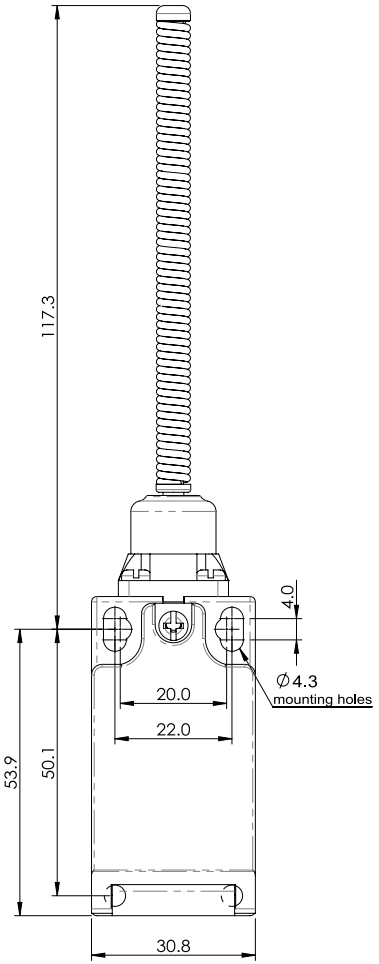
Thread dimension of lead exit
BLANK - M16 G1 - PG11
M - M20 G3 - PG13.5
N - 1/2NPT C - Connector

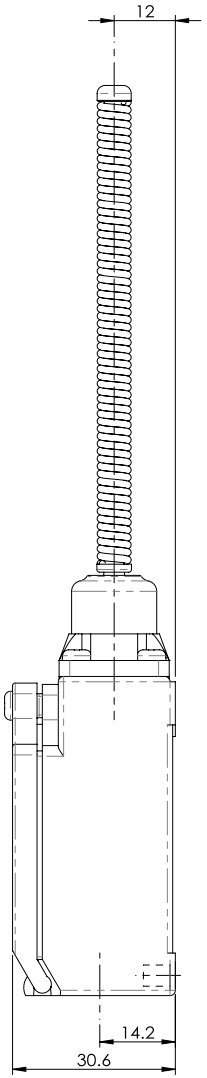
Head and actuators

Function
1 - Without reset function
1R - With reset function

Contact types
1: 1NC/1NO Slow action------X11
2: 2NC Slow action----------W02
3: 1NC/1NO Snap action------Z11
4: 2NC/1NO Slow action------W12
5: 3NC Slow action----------W03

Slow Action : Type "Zb"
Snap Action : Type "Za"



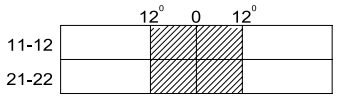




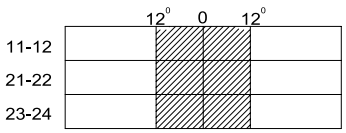
Specifications

Standards	EN60947-5-1, UL508, EN50047, EN1088
Approvals	cULus, TUV and CE marked for all applicable directives
Positive opening operation	NC Contact
Utilization category	AC15 B300, DC13 Q300
Min current	5V, 5mA, DC
Thermal current (Ith)	10A
Rated insulation voltage	600V AC
Rated impulse withstand volt	2500V AC
Insulation ressistance	100MΩ min. (DC 500V)
Contact resistance	25mΩ max. (Initial)
Max switching speed	2500 mm/s
Max switching frequency	6000 operation per hour
Enclosure material	UL Approved glass-filled polybutylene terephthalate
Roller material	Various polymers
Enclosure protection	IP 67
Operating temperature	Min -25° C (-18° F) Max 80° C (+176° F)
Pollution degree	3
Protection against electric shock	Class II (Double insulation)
Mech. life expectancy	1 x 10^7 Cycles min
Electrically life expectancy	150,000 Cycles min
Vibration	IEC 68-2-6, 10-55Hz±1 Hz, Excursion : 0.35mm, 1octave/min
Conduit entry	Various (see product selection table)
Fixing	2 x M4

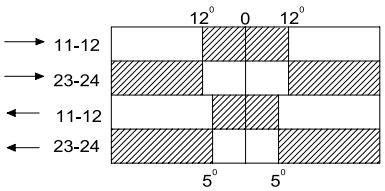
Operation diagrams



2NC (Slow action)



3NC (Slow action)



1NC/1NO (Snap action)

GBV_DATASHEET_2017_Rev.0

ISS	NOTE	DESCRIPTION	GRID	DRW	APP	DATE

GIOVENZANA INTERNATIONAL B.V.

TITLE	FTN142 Wobble stick
FINISH	
MATERIAL:	
	Material must conform to RoHS Directive
PART NO.	FTN142
DWG NO.	**FTN142**

0.000°±0.25°	0.000±0.005
0.00°±0.5°	0.00±0.10
0.0°±1°	0.0±0.20
0°±2°	0±0.50
ANGULAR	LINEAR
TOLERANCE	

DRAWN	DATE
CHECKED	DATE
APPROVER	DATE
SCALE	1:1

A3

Product selection

FTN 1 43 X11 M

Thread dimension of lead exit

BLANK - M16	G1 - PG11
M - M20	G3 - PG13.5
N - 1/2NPT	C - Connector

Contact types

1: 1NC/1NO Slow action------X11
2: 2NC Slow action----------W02
3: 1NC/1NO Snap action------Z11
4: 2NC/1NO Slow action------W12
5: 3NC Slow action----------W03

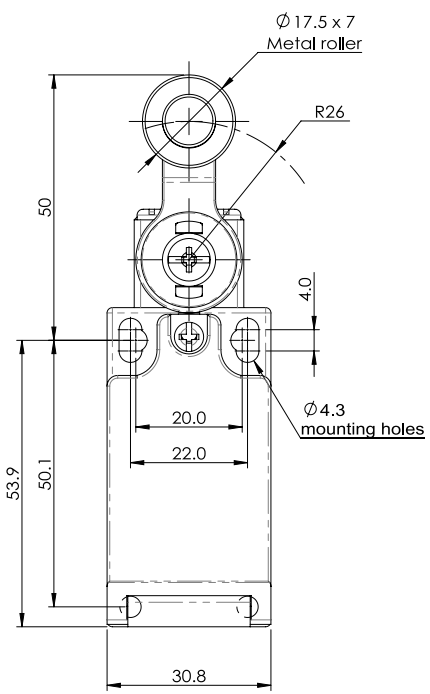
Head and actuators

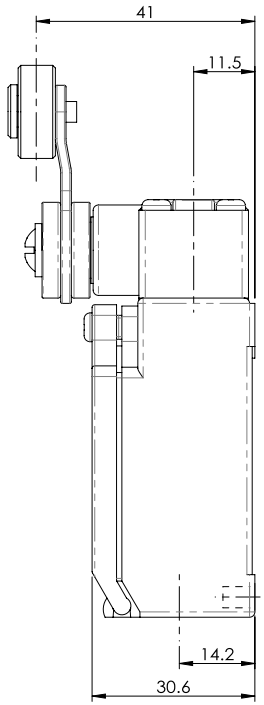
Function

1 - Without reset function
1R - With reset function

Slow Action : Type "Zb"
Snap Action : Type "Za"



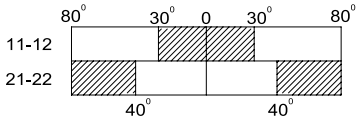




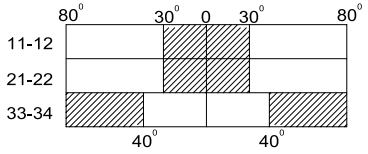
Specifications

Standards	EN60947-5-1, UL508, EN50047, EN1088
Approvals	cULus, TUV and CE marked for all applicable directives
Positive opening operation	NC Contact
Utilization category	AC15 B300, DC13 Q300
Min current	5V, 5mA, DC
Thermal current (Ith)	10A
Rated insulation voltage	600V AC
Rated impulse withstand volt	2500V AC
Insulation ressistance	100MΩ min. (DC 500V)
Contact resistance	25mΩ max. (Initial)
Max switching speed	2500 mm/s
Max switching frequency	6000 operation per hour
Enclosure material	UL Approved glass-filled polybutylene terephthalate
Roller material	Various polymers
Enclosure protection	IP 67
Operating temperature	Min -25˚ C (-18˚ F) Max 80˚ C (+176˚ F)
Pollution degree	3
Protection against electric shock	Class II (Double insulation)
Mech. life expectancy	1 x 10^7 Cycles min
Electrically life expectancy	150,000 Cycles min
Vibration	IEC 68-2-6, 10-55Hz±1 Hz, Excursion : 0.35mm, 1octave/min
Conduit entry	Various (see product selection table)
Fixing	2 x M4

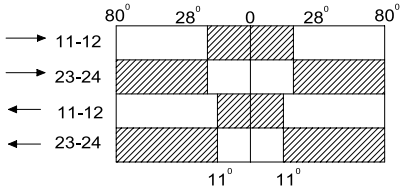
Operation diagrams



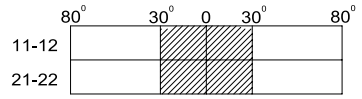
1NC/1NO (Slow action)



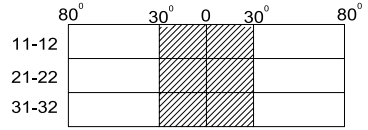
2NC/1NO (Slow action)



1NC/1NO (Snap action)



2NC (Slow action)



3NC (Slow action)

GBV_DATASHEET_2017_Rev.0

ISS	NOTE	DESCRIPTION	GRID	DRW.	APP.	DATE

GIOVENZANA INTERNATIONAL B.V.

TITLE: FTN143 Metal roller ahort lever18Ø

FINISH

MATERIAL:

Material must conform to RoHS Directive

PART NO. FTN143

DWG NO. **FTN143**

A3

0.000˚±0.25˚	0.000±0.05	DRAWN	DATE
0.00˚±0.5˚	0.00±0.10	CHECKED	DATE
0.0˚±1˚	0.0±0.20	APPROVER	DATE
0˚±2˚	0±0.50		
ANGULAR	LINEAR		
TOLERANCE		SCALE 1:1	

Product selection

FTN 1 44 X11 M

Thread dimension of lead exit

BLANK - M16 G1 - PG11
M - M20 G3 - PG13.5
N - 1/2NPT C - Connector

Head and actuators

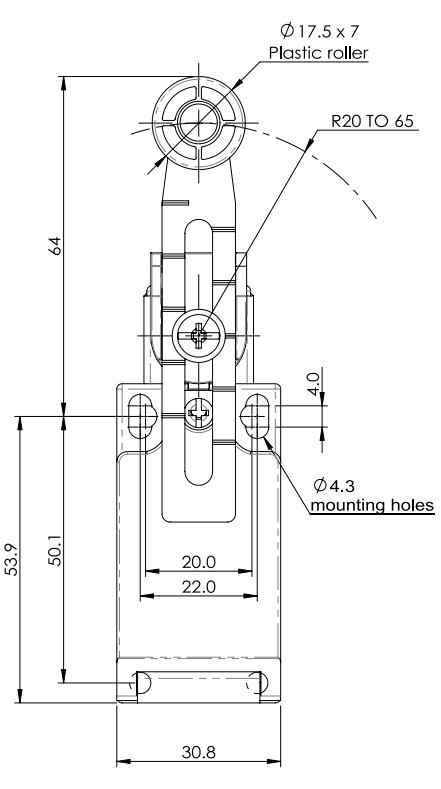
Function

1 - Without reset function
1R - With reset function

Contact types

1: 1NC/1NO Slow action------X11
2: 2NC Slow action----------W02
3: 1NC/1NO Snap action------Z11
4: 2NC/1NO Slow action------W12
5: 3NC Slow action----------W03

Slow Action : Type "Zb"
Snap Action : Type "Za"

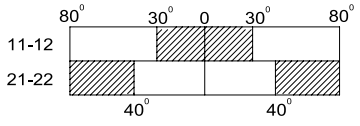




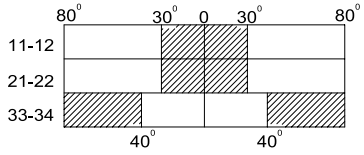
Specifications

Standards	EN60947-5-1, UL508, EN50047, EN1088
Approvals	cULus, TUV and CE marked for all applicable directives
Positive opening operation	NC Contact
Utilization category	AC15 B300, DC13 Q300
Min current	5V, 5mA, DC
Thermal current (Ith)	10A
Rated insulation voltage	600V AC
Rated impulse withstand volt	2500V AC
Insulation ressistance	100MΩ min. (DC 500V)
Contact resistance	25mΩ max. (Initial)
Max switching speed	2500 mm/s
Max switching frequency	6000 operation per hour
Enclosure material	UL Approved glass-filled polybutylene terephthalate
Roller material	Various polymers
Enclosure protection	IP 67
Operating temperature	Min -25˚C (-18˚F) Max 80˚C (+176˚F)
Pollution degree	3
Protection against electric shock	Class II (Double insulation)
Mech. life expectancy	1 x 10^7 Cycles min
Electrically life expectancy	150,000 Cycles min
Vibration	IEC 68-2-6, 10-55Hz±1 Hz, Excursion : 0.35mm, 1octave/min
Conduit entry	Various (see product selection table)
Fixing	2 x M4

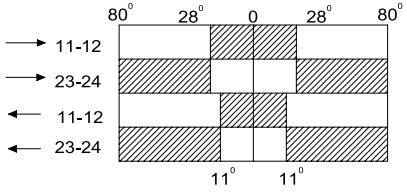
Operation diagrams



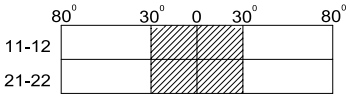
1NC/1NO (Slow action)



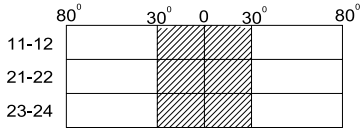
2NC/1NO (Slow action)



1NC/1NO (Snap action)



2NC (Slow action)



3NC (Slow action)

GBV_DATASHEET_2017_Rev.0

ISS	NOTE	DESCRIPTION	GRID	DRW	APP	DATE

GIOVENZANA INTERNATIONAL B.V.

TITLE: FTN144 Variable length roller lever 18Ø

FINISH

MATERIAL:

Material must conform to RoHS Directive

PART NO. FTN144

DWG NO. FTN144

A3

0.000˚±0.25˚	0.000±0.005	DRAWN	DATE
0.00˚±0.5˚	0.00±0.10	CHECKED	DATE
0.0˚±1˚	0.0±0.20	APPROVER	DATE
0˚±2˚	0±0.50		
ANGULAR	LINEAR	SCALE 1:1	
TOLERANCE			