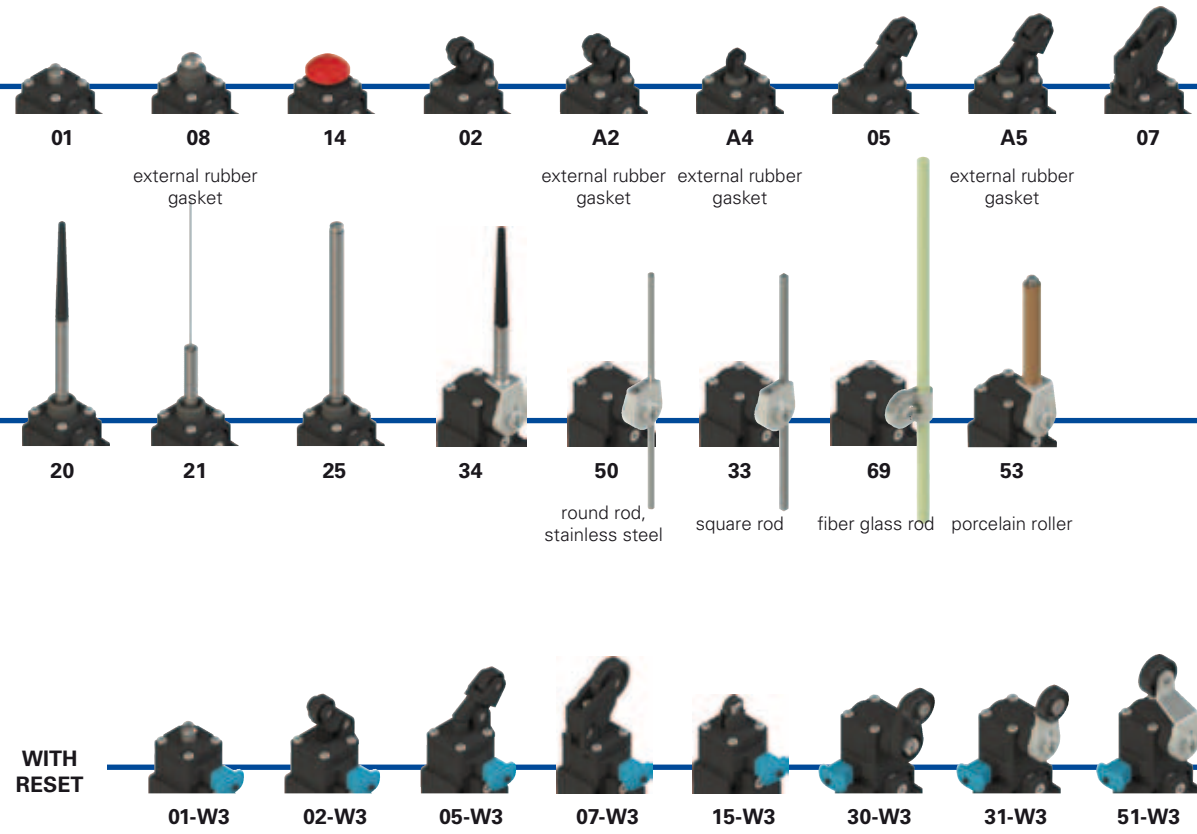
Selection diagram



ACTUATORS

CONTACT BLOCKS

3 1NO-1NC snap action

33 1NO+1NC, slow action

34 2NC slow action

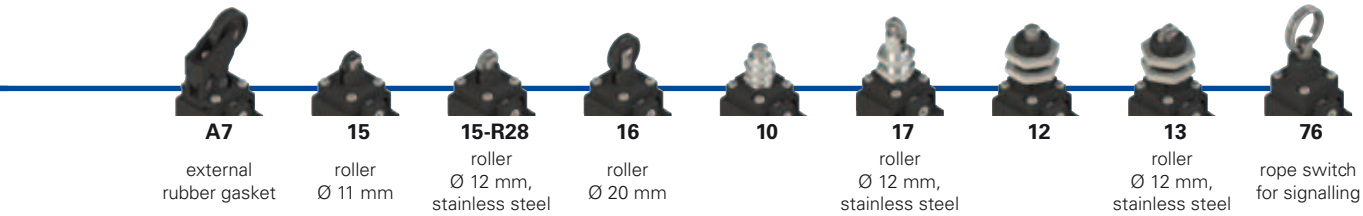
CONDUIT ENTRY

Threaded conduit entry	
M1	M16x1.5 (standard)
	PG 11

With cable gland	
K24	for cables from Ø 5 to Ø 10 mm
K28	for cables Ø 3...Ø 7 mm

product options

accessory sold separately



A7 external rubber gasket

15 roller Ø 11 mm

15-R28 roller Ø 12 mm, stainless steel

16 roller Ø 20 mm

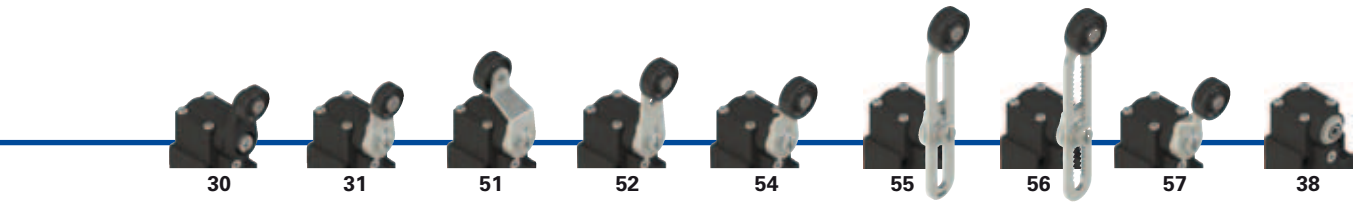
10

17 roller Ø 12 mm, stainless steel

12

13 roller Ø 12 mm, stainless steel

76 rope switch for signalling



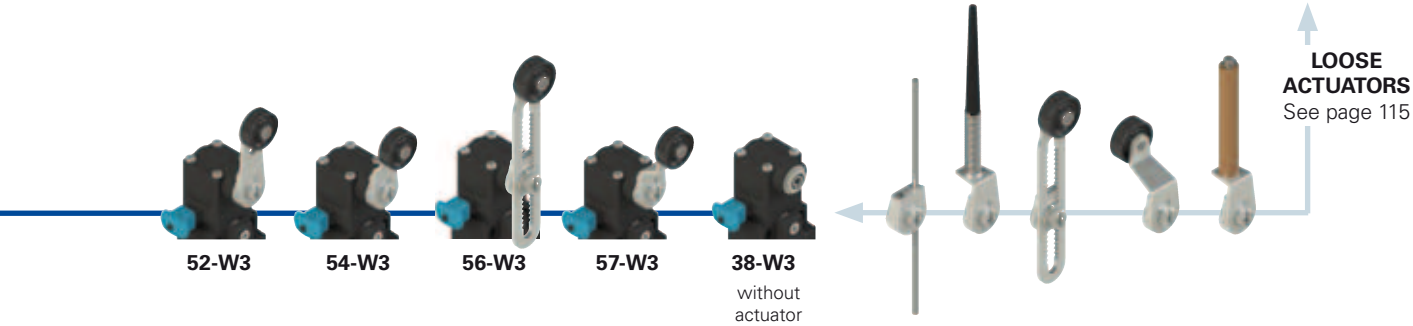
30 **31** **51** **52** **54**

55 adjustable lever

56 adjustable safety lever

57

38 without actuator



52-W3 **54-W3** **56-W3** **57-W3**

38-W3 without actuator

LOOSE ACTUATORS
See page 115

Code structure

Attention! The feasibility of a code number does not mean the effective availability of a product. Please contact our sales office.

article | options | options

FK 302-W3XGM1K24R23T6

Housing

FK	technopolymer, one conduit entry

Contact blocks

3	1NO-1NC, snap action
33	1NO+1NC, slow action
34	2NC, slow action

Actuators

01	short plunger
02	roller lever
05	angled roller lever
...	.....

Reset

	without reset (standard)
W3	simultaneous reset
W4	simultaneous reset, increased force

External metallic parts

	zinc-plated steel (standard)
X	stainless steel

Contact type

	silver contacts (standard)
G	silver contacts with 1 µm gold coating (not for contact block 2)

Threaded conduit entry

M1	M16x1.5 (standard)
	PG 11

Pre-installed cable glands

	without cable gland (standard)
K24	cable gland for cables Ø 5...Ø 10 mm
K28	cable gland for cables Ø 3...Ø 7 mm

Please contact our technical service for the complete list of possible combinations.

Ambient temperature

	-25°C ... +80°C (standard)
T6	-40°C ... +80°C

Rollers

	standard roller
R28	stainless steel, Ø 12 mm (for actuators A4, 15)
R23	stainless steel, Ø 14 mm (for actuators A2, 02, A5, 05, 30, 31, 51, 52, 54, 55, 56, 57)
R24	stainless steel, Ø 20 mm (for actuators 30, 31, 51, 52, 54, 55, 56, 57)
R25	technopolymer, Ø 35 mm (for actuators 30, 31, 51, 52, 54, 55, 56, 57)
R5	rubber, Ø 40 mm (for actuators 30, 31, 51, 52, 54, 55, 56, 57)
R26	rubber, Ø 50 mm (for actuators 51, 52, 54, 55, 56, 57)
R27	rubber, protruding, Ø 50 mm (for actuators 55, 56)

Main features

- Technopolymer housing, one conduit entry
- Protection degree IP67
- 3 contact blocks available
- 46 actuators available
- Versions with stainless steel external parts
- Versions with gold-plated silver contacts

Technical data

Housing

Housing made of fiber glass reinforced technopolymer, self-extinguishing, shock-proof and with double insulation: ⧈
One threaded conduit entry: M16x1.5 (standard)
Protection degree: IP67 according to EN 60529 with cable gland having equal or higher protection degree

General data

Ambient temperature: -25°C … +80°C
Max. actuation frequency: 3600 operating cycles[1]/hour
Mechanical endurance: 20 million operating cycles[1]
Mounting position: any
Safety parameters:
B_{10d}: 40,000,00 for NC contacts
Mechanical interlock, not coded: type 1 according to EN ISO 14119
Tightening torques for installation: see pages 235-246

(1) One operation cycle means two movements, one to close and one to open contacts, as defined in EN 60947-5-1.

Cable cross section (flexible copper strands)

Contact block 33, 34:	min.	1 x 0.34 mm²	(1 x AWG 22)
	max.	2 x 1.5 mm²	(2 x AWG 16)
Contact block 3:	min.	1 x 0.5 mm²	(1 x AWG 20)
	max.	2 x 1.5 mm²	(2 x AWG 16)

In conformity with standards:
IEC 60947-5-1, EN 60947-5-1, EN 60947-1, IEC 60204-1, EN 60204-1, EN ISO 14119, EN ISO 12100, IEC 60529, EN 60529, UL 508, CSA 22.2 No.14 .
Approvals:
IEC 60947-5-1, UL 508, CSA 22.2 No.14, GB14048.5-2001.

Markings and quality marks:

IMQ approval: EG610
UL approval: E131787
CCC approval: 2007010305230013
EAC approval: RU C-IT ДМ94.B.01024

In conformity with the requirements of:
Low Voltage Directive 2006/95/EC, Machinery Directive 2006/42/EC and EMC Directive 2004/108/EC.
Positive contact opening in conformity with standards:
IEC 60947-5-1, EN 60947-5-1.

Installation for safety applications:
Use only switches marked with the symbol ⊖ aside the product code. Always connect the safety circuit to the **NC contacts** (normally closed contacts: 11-12, 21-22 or 31-32) as stated in **standard EN 60947-5-1, encl. K, par. 2**. Actuate the switch **at least up to the positive opening travel** shown in the travel diagrams on page 240. Operate the switch **at least with the positive opening force**, indicated between brackets below each article, aside the minimum force value.

⚠ **If not expressly indicated in this chapter, for correct installation and utilization of all articles see chapter utilization requirements from page 235 to page 246.**

Electrical data

without connector

Thermal current (Ith): 10 A
Rated insulation voltage (Ui): 500 Vac 600 Vdc
400 Vac 500 Vdc (contact blocks 33, 34)
Rated impulse withstand voltage (U_{imp}): 6 kV
4 kV (contact block 33, 34)
Conditional short circuit current: 1000 A according to EN 60947-5-1
Protection against short circuits: type aM fuse 10 A 500 V
Pollution degree: 3

Utilization category

Alternating current: AC15 (50÷60 Hz)

Ue (V)	250	400	500
Ie (A)	6	4	1

Direct current: DC13

Ue (V)	24	125	250
Ie (A)	6	1.1	0.4

Characteristics approved by IMQ

Rated insulation voltage (Ui): 500 Vac
400 Vac (for contact blocks 33, 34)
Conventional free air thermal current (Ith): 10 A
Protection against short circuits: type aM fuse 10 A 500 V
Rated impulse withstand voltage (U_{imp}): 6 kV
4 kV (for contact blocks 33, 34)
Protection degree of the housing: IP67
MV terminals (screw terminals)
Pollution degree 3
Utilization category: AC15
Operating voltage (Ue): 400 Vac (50 Hz)
Operating current (Ie): 3 A
Forms of the contact element: Zb, Y+Y
Positive opening of contacts on contact blocks 33, 34

In conformity with standards: EN 60947-1, EN 60947-5-1+ A1:2009, fundamental requirements of the Low Voltage Directive 2006/95/EC.

Please contact our technical service for the list of approved products.

Characteristics approved by UL

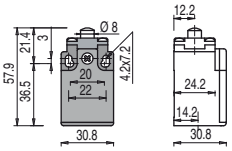
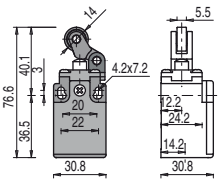
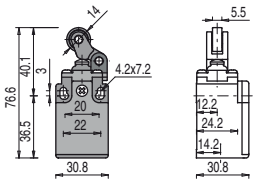
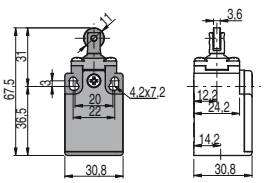
Utilization categories Q300 (69 VA, 125 … 250 Vdc)
A600 (720 VA, 120 … 600 Vac)
Data of housing type 1, 4X "indoor use only", 12, 13
For all contact blocks except 2 and 3 use 60 or 75°C copper (Cu) conductor, rigid or flexible, wire size AWG 12/14. Terminal tightening torque of 7.1 lb in (0.8 Nm).
For contact blocks 2 and 3 use 60 or 75 °C copper (Cu) conductor, rigid or flexible, wire size AWG 14. Terminal tightening torque of 12 lb in (1.4 Nm).

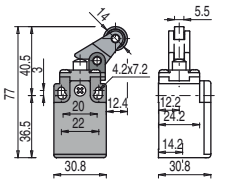
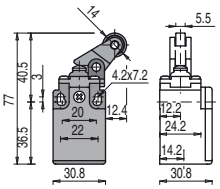
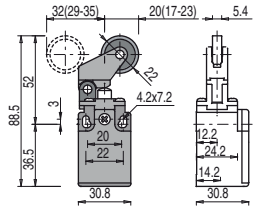
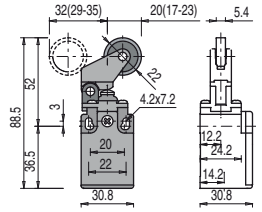
In conformity with standard: UL 508, CSA 22.2 No.14

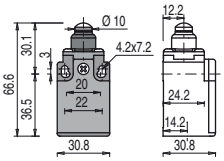
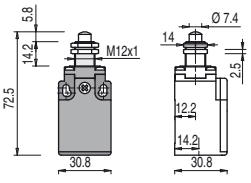
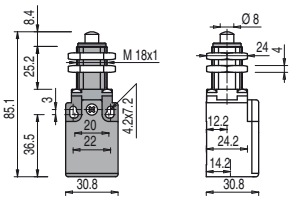
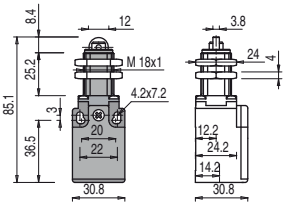
Please contact our technical service for the list of approved products.

Contact type:

R = snap action
L = slow action

Contact blocks					
			With stainless steel roller on request	With external rubber gasket With stainless steel roller on request	With external rubber gasket With Ø 12 mm stainless steel roller on request
					
3	R	FK 301-M1 1NO-1NC	FK 302-M1 1NO-1NC	FK 3A2-M1 1NO-1NC	FK 3A4-M1 1NO-1NC
33	L	FK 3301-M1 ⊕ 1NO+1NC	FK 3302-M1 ⊕ 1NO+1NC	FK 33A2-M1 ⊕ 1NO+1NC	FK 33A4-M1 ⊕ 1NO+1NC
34	L	FK 3401-M1 ⊕ 2NC	FK 3402-M1 ⊕ 2NC	FK 34A2-M1 ⊕ 2NC	FK 34A4-M1 ⊕ 2NC
Max. speed		page 239 - type 4	page 239 - type 3	page 239 - type 3	page 239 - type 5
Min. force		5 N (25 N ⊕)	4 N (25 N ⊕)	4.3 N (25 N ⊕)	4.3 N (25 N ⊕)
Travel diagrams		page 240 - group 1	page 240 - group 2	page 240 - group 2	page 240 - group 1

Contact blocks					
		With stainless steel roller on request	With external rubber gasket With stainless steel roller on request		With external rubber gasket
					
3	R	FK 305-M1 1NO-1NC	FK 3A5-M1 1NO-1NC	FK 307-M1 1NO-1NC	FK 3A7-M1 1NO-1NC
33	L	FK 3305-M1 ⊕ 1NO+1NC	FK 33A5-M1 ⊕ 1NO+1NC	FK 3307-M1 ⊕ 1NO+1NC	FK 33A7-M1 ⊕ 1NO+1NC
34	L	FK 3405-M1 ⊕ 2NC	FK 34A5-M1 ⊕ 2NC	FK 3407-M1 ⊕ 2NC	FK 34A7-M1 ⊕ 2NC
Max. speed		page 239 - type 3	page 239 - type 3	page 239 - type 3	page 239 - type 3
Min. force		4 N (25 N ⊕)	4.3 N (25 N ⊕)	4 N (25 N ⊕)	3 N (25 N ⊕)
Travel diagrams		page 240 - group 2	page 240 - group 2	page 240 - group 3	page 240 - group 3

Contact blocks					
		With external rubber gasket	Fixed only by threaded head in vertical position		
					
3	R	FK 308-M1 1NO-1NC	FK 310-M1 1NO-1NC	FK 312-M1 1NO-1NC	FK 313-M1 1NO-1NC
33	L	FK 3308-M1 ⊕ 1NO+1NC	FK 3310-M1 ⊕ 1NO+1NC	FK 3312-M1 ⊕ 1NO+1NC	FK 3313-M1 ⊕ 1NO+1NC
34	L	FK 3408-M1 ⊕ 2NC	FK 3410-M1 ⊕ 2NC	FK 3412-M1 ⊕ 2NC	FK 3413-M1 ⊕ 2NC
Max. speed		page 239 - type 4	page 239 - type 4	page 239 - type 4	page 239 - type 2
Min. force		5 N (25 N ⊕)	5 N (25 N ⊕)	5 N (25 N ⊕)	5 N (25 N ⊕)
Travel diagrams		page 240 - group 1	page 240 - group 1	page 240 - group 1	page 240 - group 1

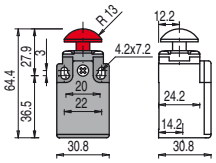
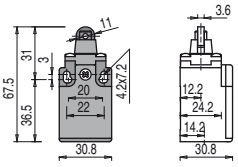
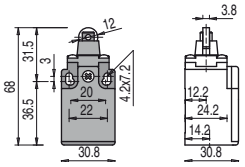
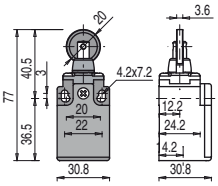
All measures in the drawings are in mm

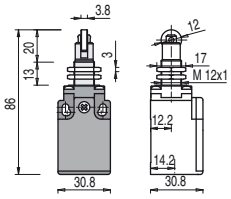
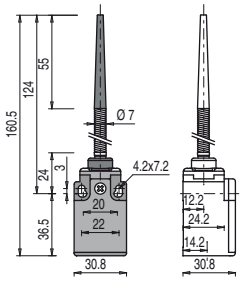
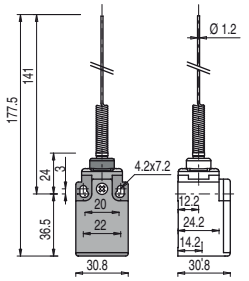
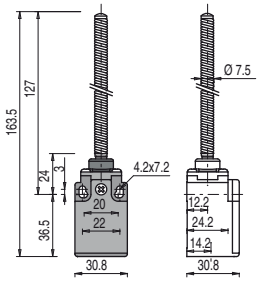
Accessories See page 225

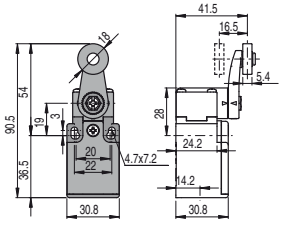
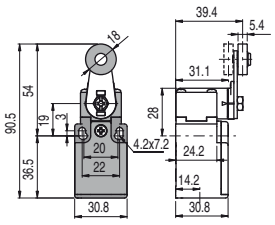
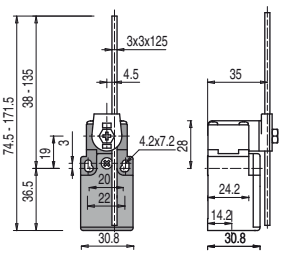
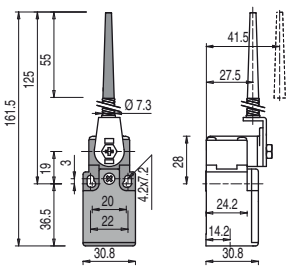
➔ The 2D/3D files are available at **www.pizzato.com**

Contact type:

R = snap action
L = slow action

Contact blocks					
					
			Roller, Ø 11 mm, technopolymer	Roller, Ø 12 mm, stainless steel	
3	R	FK 314-M1 1NO-1NC	FK 315-M1 1NO-1NC	FK 315-M1R28 1NO-1NC	FK 316-M1 1NO-1NC
33	L	FK 3314-M1 ⊖ 1NO+1NC	FK 3315-M1 ⊖ 1NO+1NC	FK 3315-M1R28 ⊖ 1NO+1NC	FK 3316-M1 ⊖ 1NO+1NC
34	L	FK 3414-M1 ⊖ 2NC	FK 3415-M1 ⊖ 2NC	FK 3415-M1R28 ⊖ 2NC	FK 3416-M1 ⊖ 2NC
Max. speed		page 239 - type 4	page 239 - type 2	page 239 - type 2	page 239 - type 2
Min. force		6 N (25 N ⊖)	5 N (25 N ⊖)	5 N (25 N ⊖)	5 N (25 N ⊖)
Travel diagrams		page 240 - group 1	page 240 - group 1	page 240 - group 1	page 240 - group 1

Contact blocks					
					
		Fixed only by threaded head in vertical position	With external rubber gasket	With external rubber gasket	With external rubber gasket
3	R	FK 317-M1 1NO-1NC	FK 320-M1 1NO-1NC	FK 321-M1 1NO-1NC	FK 325-M1 1NO-1NC
33	L	FK 3317-M1 ⊖ 1NO+1NC	FK 3320-M1 1NO+1NC	FK 3321-M1 1NO+1NC	FK 3325-M1 1NO+1NC
34	L	FK 3417-M1 ⊖ 2NC	FK 3420-M1 2NC	FK 3421-M1 2NC	FK 3425-M1 2NC
Max. speed		page 239 - type 2	1 m/s	1 m/s	1 m/s
Min. force		5 N (25 N ⊖)	0.05 Nm	0.05 Nm	0.1 Nm
Travel diagrams		page 240 - group 1	page 240 - group 4	page 240 - group 4	page 240 - group 4

Contact blocks					
					
		With Ø 20 mm stainless steel roller on request	Other rollers available. See on page 116	Square rod, 3x3 mm	
3	R	FK 330-M1 1NO-1NC	FK 331-M1 1NO-1NC	FK 333-M1 1NO-1NC	FK 334-M1 1NO-1NC
33	L	FK 3330-M1 ⊖ 1NO+1NC	FK 3331-M1 ⊖ 1NO+1NC	FK 3333-M1 1NO+1NC	FK 3334-M1 1NO+1NC
34	L	FK 3430-M1 ⊖ 2NC	FK 3431-M1 ⊖ 2NC	FK 3433-M1 2NC	FK 3434-M1 2NC
Max. speed		page 239 - type 1	page 239 - type 1	1.5 m/s	1.5 m/s
Min. force		0.05 Nm (0.25 Nm ⊖)	0.05 Nm (0.25 Nm ⊖)	0.05 Nm	0.05 Nm
Travel diagrams		page 240 - group 5	page 240 - group 5	page 240 - group 5	page 240 - group 5

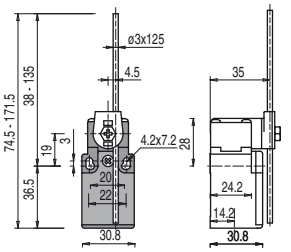
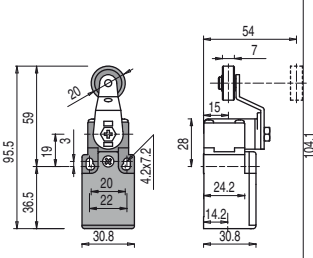
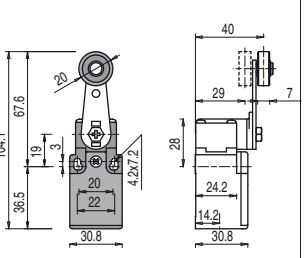
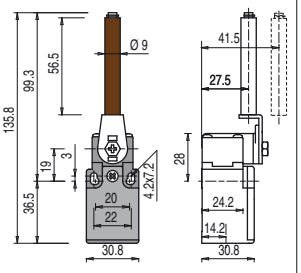
All measures in the drawings are in mm

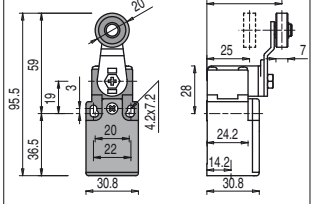
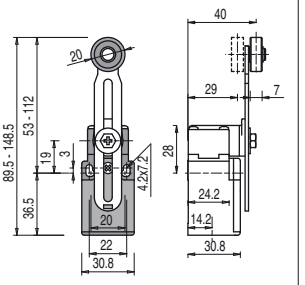
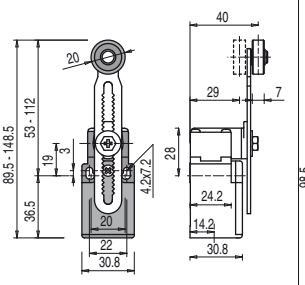
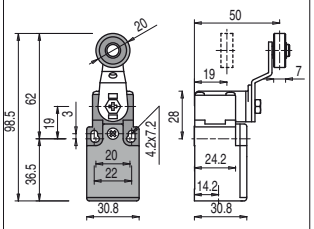
Accessories See page 225

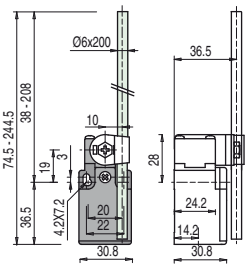
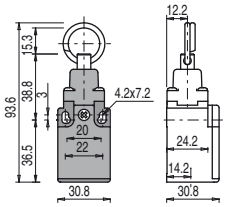
➔ The 2D/3D files are available at **www.pizzato.com**

Position switches **FK** series

Contact type:
R = snap action
L = slow action

Contact blocks		Round rod, Ø 3 mm, stainless steel	Other rollers available. See on page 116	Other rollers available. See on page 116	Porcelain roller
					
3	R	FK 350-M1 1NO-1NC	FK 351-M1 1NO-1NC	FK 352-M1 1NO-1NC	FK 353-E0M1 1NO-1NC
33	L	FK 3350-M1 1NO+1NC	FK 3351-M1 → 1NO+1NC	FK 3352-M1 → 1NO+1NC	FK 3353-E0M1V9 → 1NO+1NC
34	L	FK 3450-M1 2NC	FK 3451-M1 → 2NC	FK 3452-M1 → 2NC	FK 3453-E0M1V9 → 2NC
Max. speed		1.5 m/s	page 239 - type 1	page 239 - type 1	0.5 m/s
Min. force		0.05 Nm	0.05 Nm (0.25 Nm →)	0.05 Nm (0.25 Nm →)	0.02 Nm (0.25 Nm →)
Travel diagrams		page 240 - group 5	page 240 - group 5	page 240 - group 5	page 240 - group 6

Contact blocks		Other rollers available. See on page 116	Other rollers available. See on page 116	Other rollers available. See on page 116	Other rollers available. See on page 116
					
3	R	FK 354-M1 1NO-1NC	FK 355-M1 1NO-1NC	FK 356-M1 1NO-1NC	FK 357-M1 1NO-1NC
33	L	FK 3354-M1 → 1NO+1NC	FK 3355-M1 → (1) 1NO+1NC	FK 3356-M1 → 1NO+1NC	FK 3357-M1 → 1NO+1NC
34	L	FK 3454-M1 → 2NC	FK 3455-M1 → (1) 2NC	FK 3456-M1 → 2NC	FK 3457-M1 → 2NC
Max. speed		page 239 - type 1	page 239 - type 1	page 239 - type 1	page 239 - type 1
Min. force		0.05 Nm (0.25 Nm →)	0.05 Nm (0.25 Nm →)	0.05 Nm (0.25 Nm →)	0.05 Nm (0.25 Nm →)
Travel diagrams		page 240 - group 5	page 240 - group 5	page 240 - group 5	page 240 - group 5

Contact blocks		Fiber glass rod	Rope switch for signalling		
					
3	R	FK 369-M1 1NO-1NC	FK 376-M1 1NO-1NC		
33	L	FK 3369-M1 1NO+1NC	FK 3376-M1 1NO+1NC		
34	L	FK 3469-M1 2NC	FK 3476-M1 2NO		
Max. speed		1.5 m/s	0.5 m/s		
Min. force		0.05 Nm	initial 20 N - final 40 N		
Travel diagrams		page 240 - group 5	page 240 - group 7		

(1) Positive opening only with actuator set to max. See page 115.

All measures in the drawings are in mm

Accessories See page 225

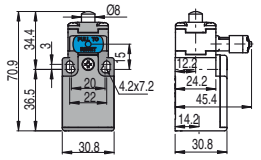
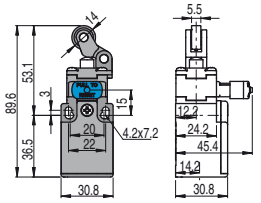
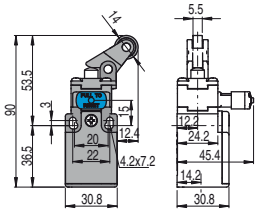
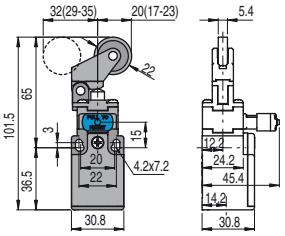
→ The 2D/3D files are available at **www.pizzato.com**

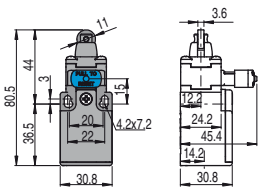
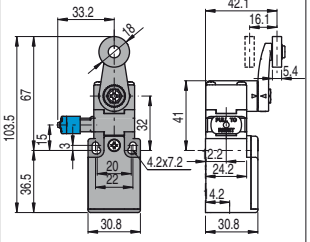
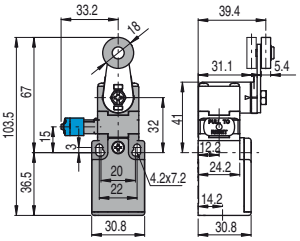
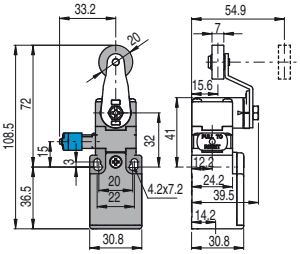
Pizzato Elettrica has developed a reset device code W3 to make perfectly simultaneous the actuator and the contact block tripping. The new device is a block inserted between the switch body and the head, and could be rotated independently from this last one. This new device has following advantages:

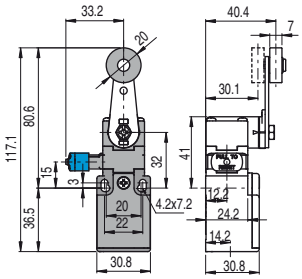
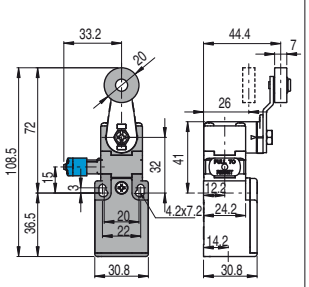
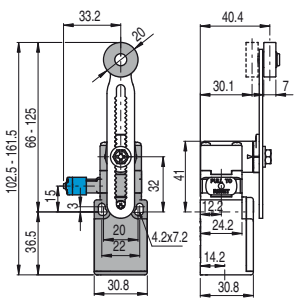
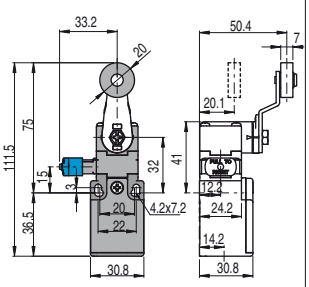
- The reset device can be integrated into almost all standard actuator heads
- Contact bllocks with snap action are no more necessary because the tripping movement is made by the reset device itself
- The reset device can be rotated independently from the head for maximum flexibility during installation
- Two driving forces: standard and increased for applications with vibrations
- Mechanical endurance: 1 million operating cycles.

Contact type:

R = snap action
L = slow action

Contact blocks					
			With stainless steel roller on request 	With stainless steel roller on request 	
33	L	FK 3301-W3M1 → 1NO+1NC	FK 3302-W3M1 → 1NO+1NC	FK 3305-W3M1 → 1NO+1NC	FK 3307-W3M1 → 1NO+1NC
34	L	FK 3401-W3M1 → 2NC	FK 3402-W3M1 → 2NC	FK 3405-W3M1 → 2NC	FK 3407-W3M1 → 2NC
Max. speed		page 239 - type 4	page 239 - type 3	page 239 - type 3	page 239 - type 3
Min. force		4.5 N (25 N →)	4 N (25 N →)	4 N (25 N →)	2.5 N (25 N →)
Travel diagrams		page 241 - group 1	page 241 - group 2	page 241 - group 2	page 241 - group 3

Contact blocks					
		With Ø 12 mm stainless steel roller on request 	With Ø 20 mm stainless steel roller on request 	Other rollers available. See on page 116 	Other rollers available. See on page 116 
33	L	FK 3315-W3M1 → 1NO+1NC	FK 3330-W3M1 → 1NO+1NC	FK 3331-W3M1 → 1NO+1NC	FK 3351-W3M1 → 1NO+1NC
34	L	FK 3415-W3M1 → 2NC	FK 3430-W3M1 → 2NC	FK 3431-W3M1 → 2NC	FK 3451-W3M1 → 2NC
Max. speed		page 239 - type 2	page 239 - type 1	page 239 - type 1	page 239 - type 1
Min. force		4.5 N (25 N →)	0.07 Nm (0.25 Nm →)	0.07 Nm (0.25 Nm →)	0.07 Nm (0.25 Nm →)
Travel diagrams		page 241 - group 1	page 241 - group 4	page 241 - group 4	page 241 - group 4

Contact blocks					
		Other rollers available. See on page 116 	Other rollers available. See on page 116 	Other rollers available. See on page 116 	Other rollers available. See on page 116 
33	L	FK 3352-W3M1 → 1NO+1NC	FK 3354-W3M1 → 1NO+1NC	FK 3356-W3M1 → 1NO+1NC	FK 3357-W3M1 → 1NO+1NC
34	L	FK 3452-W3M1 → 2NC	FK 3454-W3M1 → 2NC	FK 3456-W3M1 → 2NC	FK 3457-W3M1 → 2NC
Max. speed		page 239 - type 1	page 239 - type 1	page 239 - type 1	page 239 - type 1
Min. force		0.07 Nm (0.25 Nm →)	0.07 Nm (0.25 Nm →)	0.07 Nm (0.25 Nm →)	0.07 Nm (0.25 Nm →)
Travel diagrams		page 241 - group 4	page 241 - group 4	page 241 - group 4	page 241 - group 4

All measures in the drawings are in mm

Accessories See page 225

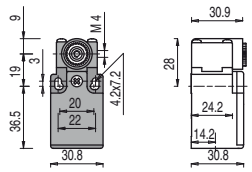
→ The 2D/3D files are available at **www.pizzato.com**

Position switches with revolving lever without actuator

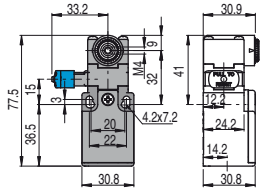
All measures in the drawings are in mm

Contact type:

R = snap action
L = slow action



With manual reset knob

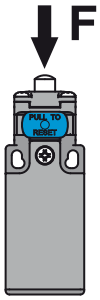


Contact blocks			
3	R	FK 338-M1 1NO-1NC	
33	L	FK 3338-M1 ⊖ 1NO+1NC	FK 3338-W3M1 ⊖ 1NO+1NC
34	L	FK 3438-M1 ⊖ 2NC	FK 3438-W3M1 ⊖ 2NC
Min. force		0.05 Nm (0.25 Nm ⊖)	0.07 Nm (0.25 Nm ⊖)
Travel diagrams		page 240 - group 5	page 241 - group 4

IMPORTANT

For safety applications: join only switches and actuators marked with symbol ⊖ aside the product code.
For more information about safety applications see details on page 235.

Increased actuating force



The switch can be delivered with increased actuating force (option W4). Ideal for applications with vibrations.

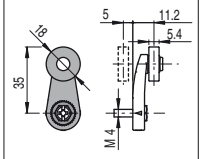
Actuators	Min. force
01, 14, 15, 16	7 N
02, 05	6 N
07	3.5 N
30 ... 57	0.08 Nm

Loose actuators

All measures in the drawings are in mm

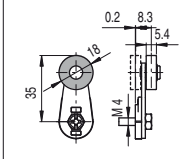
IMPORTANT: These loose actuators can be used with items of series FR, FM, FX, FZ and FK only.

Technopolymer roller Ø 18 mm



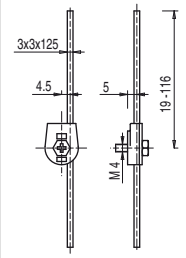
VF LE30 ⊖

Technopolymer roller Ø 18 mm



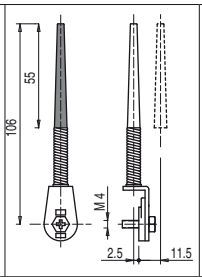
VF LE31 ⊖

Adjustable square rod, 3x3x125 mm



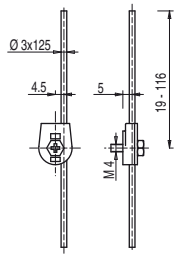
VF LE33

Flexible rod with pointed end



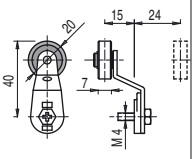
VF LE34

Adjustable round rod Ø 3x125 mm



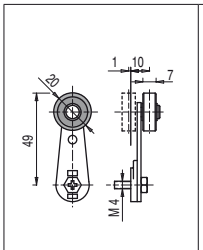
VF LE50

Technopolymer roller Ø 20 mm



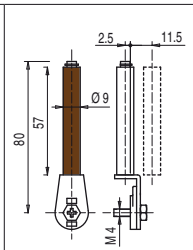
VF LE51 ⊖

Technopolymer roller Ø 20 mm



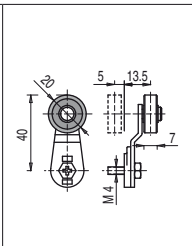
VF LE52 ⊖

Porcelain roller



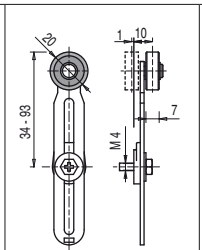
VF LE53 ⊖ (2)

Technopolymer roller Ø 20 mm



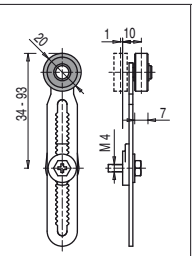
VF LE54 ⊖

Adjustable actuator with technopolymer roller



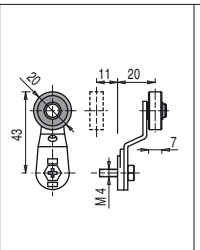
VF LE55 ⊖ (1)

Adjustable safety actuator with technopolymer roller



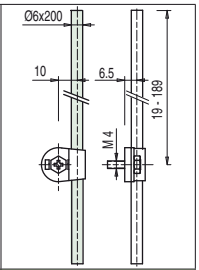
VF LE56 ⊖

Technopolymer roller Ø 20 mm



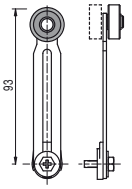
VF LE57 ⊖

Adjustable fiber glass rod



VF LE69

- (1) Actuator VF LE55 can only be used in safety applications if adjusted to its max. length, as shown in figure beside. If you need an adjustable lever for safety applications, use the adjustable safety lever VF LE56.
- (2) The position switch obtained by assembling switch FK •38-M1 (e.g. FK 338-M1, FK 3338-M1…) with actuator VF LE53 will not present the same travel diagrams and actuating forces as switch FK •53-E0M1V9 (e.g. FK 353-E0M1, FK 3353-E0M1V9…).
- (4) The actuator cannot be rotated to the inside because it will mechanically interfere with the switch head.



Items with code on **green** background are stock items

Accessories See page 225

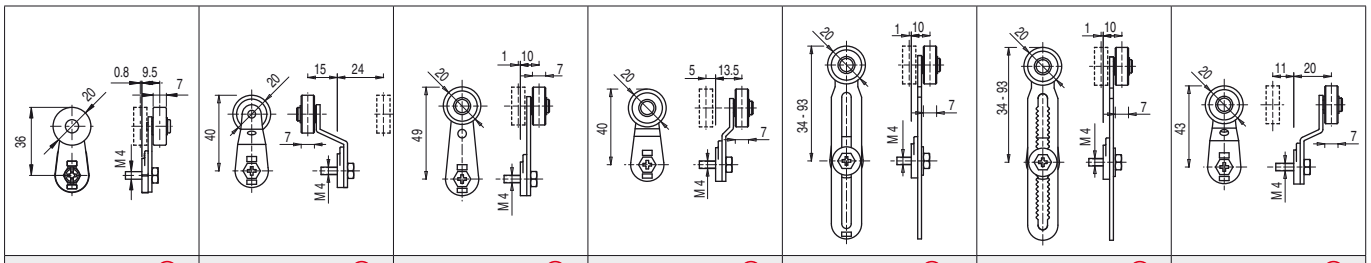
➔ The 2D/3D files are available at **www.pizzato.com**

Special loose actuators

All measures in the drawings are in mm

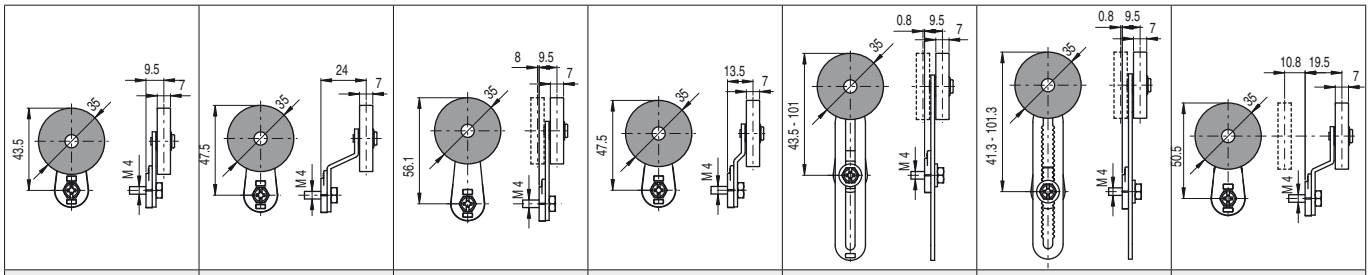
IMPORTANT: These loose actuators can be used with items of series FR, FM, FX, FZ and FK only.

Stainless steel rollers, Ø 20 mm



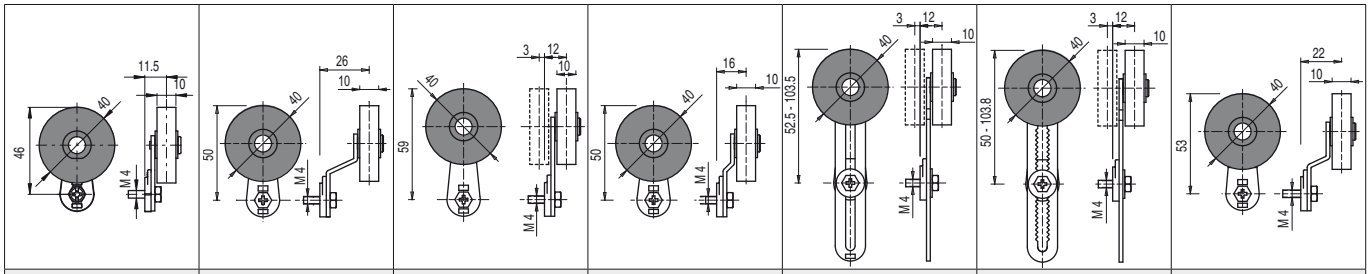
VF LE31-R24 | VF LE51-R24 | VF LE52-R24 | VF LE54-R24 | VF LE55-R24 (1) | VF LE56-R24 | VF LE57-R24

Technopolymer rollers, Ø 35 mm



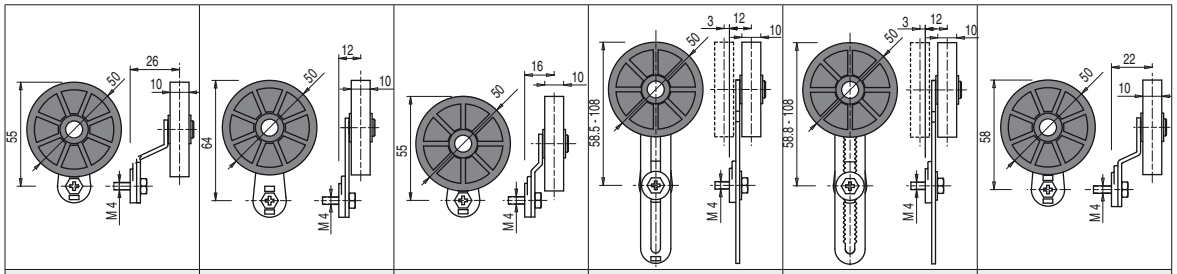
VF LE31-R25 (4) | VF LE51-R25 (4) | VF LE52-R25 | VF LE54-R25 (4) | VF LE55-R25 (1) | VF LE56-R25 | VF LE57-R25

Rubber rollers, Ø 40 mm



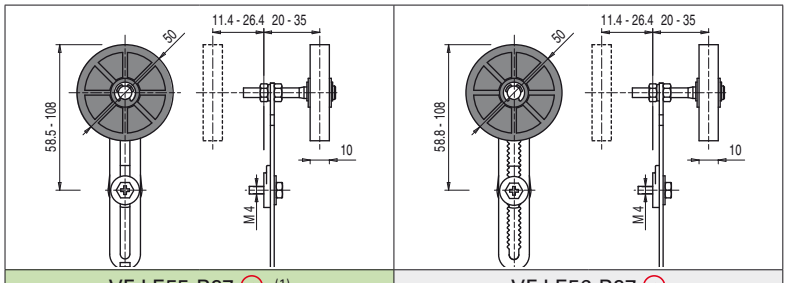
VF LE31-R5 (4) | VF LE51-R5 (4) | VF LE52-R5 | VF LE54-R5 (4) | VF LE55-R5 (1) | VF LE56-R5 | VF LE57-R5 (4)

Rubber rollers, Ø 50 mm



VF LE51-R26 (4) | VF LE52-R26 (4) | VF LE54-R26 (4) | VF LE55-R26 (1) | VF LE56-R26 | VF LE57-R26 (4)

Protruding rubber rollers, Ø 50 mm



VF LE55-R27 (1) | VF LE56-R27

Items with code on **green** background are stock items

Accessories See page 225

The 2D/3D files are available at **www.pizzato.com**