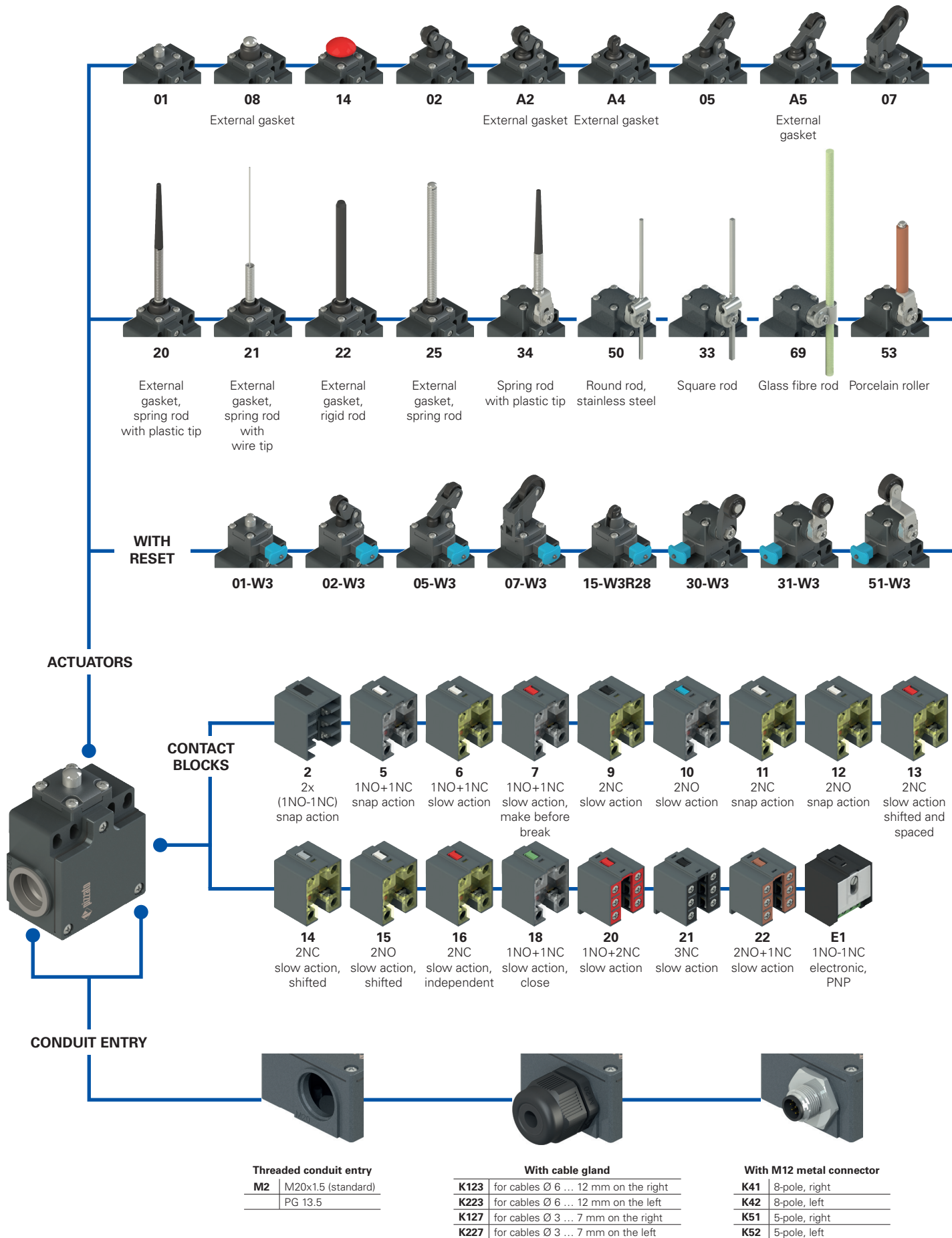
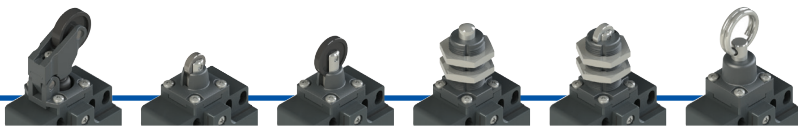
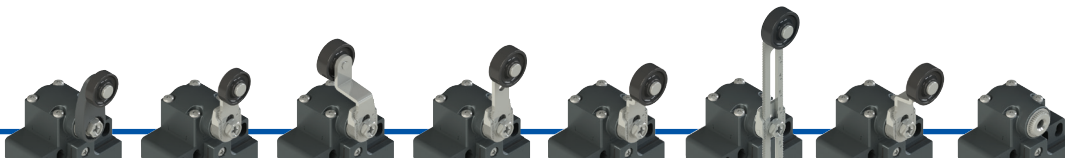


Selection diagram

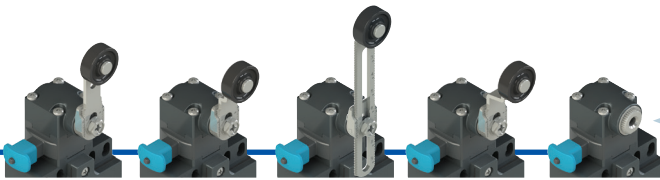




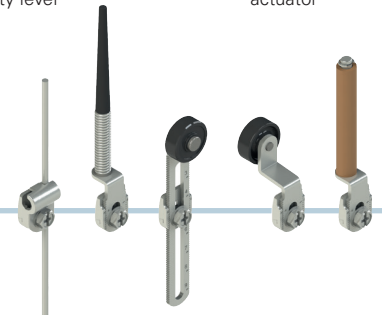
- A7**  
External gasket
- 15-R28**  
Steel roller, Ø 12 mm, with self-lubrication
- 16**  
Roller Ø 20 mm
- 12**
- 13**  
Steel roller, Ø 12 mm, with self-lubrication
- 76**  
Rope switch for signalling



- 30**
- 31**
- 51**
- 52**
- 54**
- 56**  
Adjustable safety lever
- 57**
- 38**  
Without actuator



- 52-W3**
- 54-W3**
- 56-W3**
- 57-W3**
- 38-W3**  
Without actuator



**SEPARATE ACTUATORS**  
See page 101

### 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  
**FZ 502-W3GM2K51R23T6**

#### Ambient temperature

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

#### Housing

**FZ** metal, two conduit entries

#### Contact block

- 5** 1NO+1NC, snap action
- 6** 1NO+1NC, slow action
- 7** 1NO+1NC, slow action, make before break
- ... ..

#### Actuators

- 01** short plunger
- 02** roller lever
- 05** angled lever with roller
- ... ..

#### Reset

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

#### Contact type

- silver contacts (standard)
- G** silver contacts, 1 µm gold coating
- G1** silver contacts, 2.5 µm gold coating (not for contact block 2, 20, 21, 22)

#### Pre-installed cable glands or connectors

- no cable gland or connector (standard)
  - K123** cable gland for cables Ø 6 ... 12 mm on the right
  - K51** M12 metal connector, 5-pole, right
- For the complete list of possible combinations please contact our technical department.

#### Threaded conduit entry

- M2** M20x1.5 (standard)
- PG 13.5

#### Rollers

- standard roller
- R28** Steel, with self-lubrication, Ø 12 mm (for actuators A4, 15)
- R44** 316L stainless steel, Ø 12 mm (for actuators A4, 13, 15)
- R23** Steel, with self-lubrication, Ø 14 mm (for actuators A2, 02, A5, 05, 30, 31, 51, 52, 54, 55, 56, 57)
- R43** 316L stainless steel, Ø 14 mm (for actuators A2, 02, A5, 05, 30, 31, 51, 52, 54, 55, 56, 57)
- R24** Steel, with self-lubrication, Ø 20 mm (for actuators 30, 31, 51, 52, 54, 55, 56, 57)
- R41** 316L stainless steel, Ø 20 mm (for actuators 30, 31, 51, 52, 54, 55, 56, 57)
- R36** Steel, with self-lubrication, Ø 16 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

- Metal housing, two conduit entries
- Protection degree IP67
- 17 contact blocks available
- 44 actuators available
- Versions with M12 connector
- Versions with gold-plated silver contacts

### Quality marks:



IMQ approval:	EG610
UL approval:	E131787
CCC approval:	2021000305000101
EAC approval:	RU C-IT.YT03.B.00035/19

### Technical data

#### Housing

Metal housing, powder-coated

Two threaded conduit entries:

M20x1.5 (standard)

Protection degree:

IP67 acc. to EN 60529 (with cable gland of equal or higher protection degree)

#### General data

Ambient temperature:

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

Max. actuation frequency:

3600 operating cycles/hour

Mechanical endurance:

20 million operating cycles

Mounting position:

any

Safety parameter  $B_{10D}$ :

40,000,000 for NC contacts

Mechanical interlock, not coded:

type 1 acc. to EN ISO 14119

Tightening torques for installation:

see page 231

Wire cross-sections and

wire stripping lengths:

see page 249

#### In compliance 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, EN IEC 63000, UL 508, CSA C22.2 No. 14.

#### Approvals:

IEC 60947-5-1, UL 508, CSA C22.2 No. 14, GB/T14048.5.

#### Compliance with the requirements of:

Low Voltage Directive 2014/35/EU, EMC Directive 2014/30/EU,

RoHS Directive 2011/65/EU.

#### 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  $\ominus$  symbol beside the product code. Always connect the safety circuit to the **NC contacts** (normally closed contacts: 11-12, 21-22 or 31-32) as required by **EN ISO 14119, paragraph 5.4** for specific interlock applications and **EN ISO 13849-2 tables D3** (well-tried components) and **D.8** (fault exclusions) for safety applications in general. Actuate the switch **at least up to the positive opening travel** shown in the travel diagrams on page 232. Actuate the switch **at least with the positive opening force**, reported in brackets below each article, next to the actuating force value.

**⚠ If not expressly indicated in this chapter, for correct installation and utilization of all articles see the instructions given on pages 227 to 242.**

	Electrical data	Utilization category
without connector	Thermal current ( $I_{th}$ ):	10 A
	Rated insulation voltage (U):	500 Vac 600 Vdc 400 Vac 500 Vdc (contact blocks 2, 11, 12, 20, 21, 22)
	Rated impulse withstand voltage ( $U_{imp}$ ):	6 kV 4 kV (contact blocks 20, 21, 22)
	Conditional short circuit current: Protection against short circuits: Pollution degree:	1000 A acc. to EN 60947-5-1 type aM fuse 10 A 500 V 3
with M12 connector, 5-pole	Thermal current ( $I_{th}$ ):	4 A
	Rated insulation voltage (U):	250 Vac 300 Vdc
	Protection against short circuits: Pollution degree:	type gG fuse 4 A 500 V 3
with M12 connector, 8-pole	Thermal current ( $I_{th}$ ):	2 A
	Rated insulation voltage (U):	30 Vac 36 Vdc
	Protection against short circuits: Pollution degree:	type gG fuse 2 A 500 V 3
		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) 3 0.55 0.3
		Alternating current: AC15 (50÷60 Hz)
		Ue (V) 24 120 250
		Ie (A) 4 4 4
		Direct current: DC13
		Ue (V) 24 125 250
		Ie (A) 3 0.55 0.3
		Alternating current: AC15 (50÷60 Hz)
		Ue (V) 24
		Ie (A) 2
		Direct current: DC13
		Ue (V) 24
		Ie (A) 2



### Features approved by IMQ

Rated insulation voltage (U<sub>i</sub>): 500 Vac  
 400 Vac (for contact blocks 2, 11, 12, 20, 21, 22, 28, 29, 30, 37, 33, 34)

Conventional free air thermal current (I<sub>th</sub>): 10 A

Protection against short circuits: type aM fuse 10 A 500 V

Rated impulse withstand voltage (U<sub>imp</sub>): 6 kV  
 4 kV (for contact blocks 20, 21, 22, 28, 29, 30, 33, 34)

Protection degree of the housing: IP67

MV terminals (screw terminals)

Pollution degree: 3

Utilization category: AC15

Operating voltage (U<sub>e</sub>): 400 Vac (50 Hz)

Operating current (I<sub>e</sub>): 3 A

Forms of the contact element: Za, Za+Za, X+X, Zb, Y+Y, Y+Y+X, Y+Y+Y, Y+X+X, Y, X.

Positive opening of contacts on contact blocks 5, 6, 7, 8, 9, 11, 13, 14, 16, 17, 18, 19, 20, 21, 22, 28, 29, 30, 33, 34, 37, 38, 39, 66.

In compliance with standards: EN 60947-1, EN 60947-5-1, fundamental requirements of the Low Voltage Directive 2014/35/EU.

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

### Features approved by UL

Electrical Ratings: Q300 pilot duty (69 VA, 125-250 V dc)  
 A600 pilot duty (720 VA, 120-600 V ac)

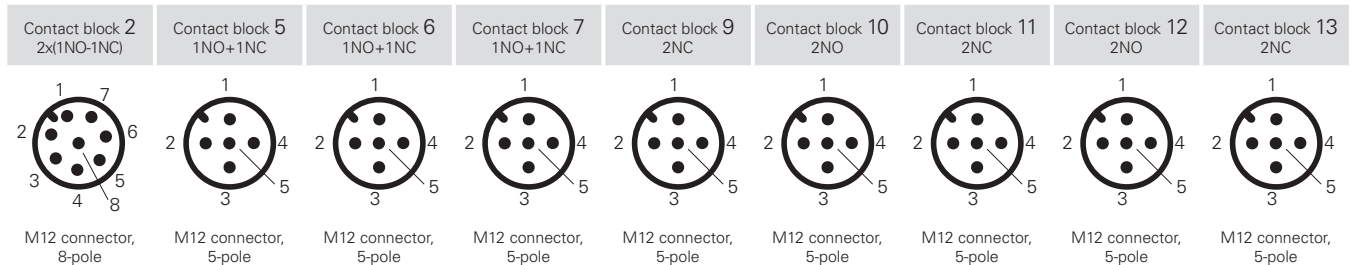
Environmental Ratings: Types 1, 4X, 12, 13

For all contact blocks except 2 and 3 use 60 or 75°C copper (Cu) conductors, rigid or flexible, wire size 12, 14 AWG. Tightening torque for terminal screws of 7.1 lb in (0.8 Nm).

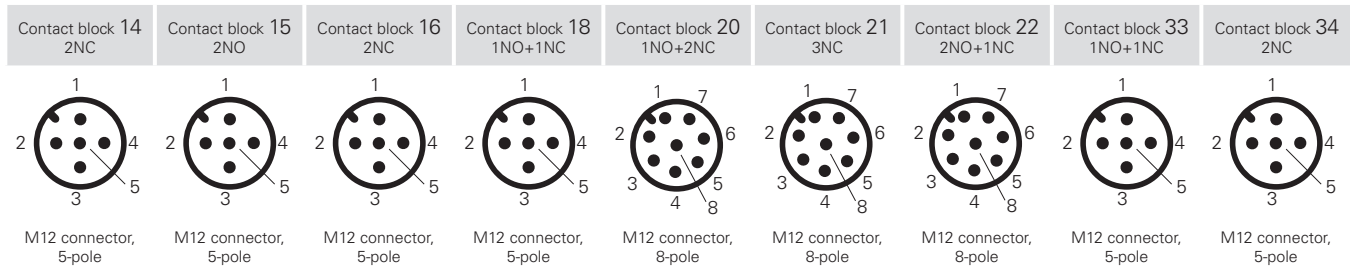
For contact blocks 2 and 3 use 60 or 75°C copper (Cu) conductors, rigid or flexible, wire size 14 AWG. Tightening torque for terminal screws of 12 lb in (1.4 Nm).

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

### Wiring diagram for M12 connectors

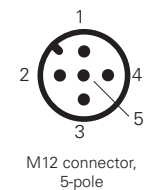


Contacts	Pin no.	Contacts	Pin no.	Contacts	Pin no.	Contacts	Pin no.	Contacts	Pin no.	Contacts	Pin no.	Contacts	Pin no.	Contacts	Pin no.	Contacts	Pin no.	Contacts	Pin no.		
NO	3-4	NC	1-2	NC	1-2	NC	1-2	NC	1-2	NO	1-2	NC	1-2	NO	1-2	NC	1-2	NO	1-2	NC (1°)	1-2
NC	5-6	NO	3-4	NO	3-4	NO	3-4	NC	3-4	NO	3-4	NC	3-4	NO	3-4	NO	3-4	NO	3-4	NC (2°)	3-4
NC	7-8	ground	5	ground	5	ground	5	ground	5	ground	5	ground	5	ground	5	ground	5	ground	5	ground	5
NO	1-2																				




Contacts	Pin no.	Contacts	Pin no.	Contacts	Pin no.	Contacts	Pin no.	Contacts	Pin no.	Contacts	Pin no.	Contacts	Pin no.	Contacts	Pin no.	Contacts	Pin no.	Contacts	Pin no.		
NC (1°)	1-2	NO (1°)	1-2	NC, lever to the right	1-2	NC	1-2	NC	3-4	NC	3-4	NC	3-4	NC	3-4	NC	1-2	NC	1-2	NC	1-2
NC (2°)	3-4	NO (2°)	3-4	NC, lever to the left	3-4	NO	3-4	NC	5-6	NC	5-6	NO	5-6	NO	5-6	NO	3-4	NC	3-4	NC	3-4
ground	5	ground	5	ground	5	ground	5	NO	7-8	NC	7-8	NO	7-8	ground	5	ground	5	ground	5	ground	5
								ground	1	ground	1	ground	1								

Contact block E1  
PNP







Contacts	Pin no.
+	1
-	3
NC	2
NO	4
ground	5

# FZ series position switches




- R** = snap action  
**L** = slow action  
**LO** = slow action, make before break  
**LS** = slow action, shifted  
**LV** = slow action, shifted and spaced  
**LI** = slow action, independent  
**LA** = slow action, close  
 = electronic, PNP

Contact block

		With steel roller with self-lubrication or 316L stainless steel on request	External gasket	External gasket
2 <b>R</b>	FZ 201-M2	2x(1NO-1NC)	FZ 202-M2	2x(1NO-1NC)
5 <b>R</b>	FZ 501-M2	1NO+1NC	FZ 502-M2	1NO+1NC
6 <b>L</b>	FZ 601-M2	1NO+1NC	FZ 602-M2	1NO+1NC
7 <b>LO</b>	FZ 701-M2	1NO+1NC	FZ 702-M2	1NO+1NC
9 <b>L</b>	FZ 901-M2	2NC	FZ 902-M2	2NC
10 <b>L</b>	FZ 1001-M2	2NO	FZ 1002-M2	2NO
11 <b>R</b>	FZ 1101-M2	2NC	FZ 1102-M2	2NC
12 <b>R</b>	FZ 1201-M2	2NO	FZ 1202-M2	2NO
13 <b>LV</b>	FZ 1301-M2	2NC	FZ 1302-M2	2NC
14 <b>LS</b>	FZ 1401-M2	2NC	FZ 1402-M2	2NC
15 <b>LS</b>	FZ 1501-M2	2NO	FZ 1502-M2	2NO
18 <b>LA</b>	FZ 1801-M2	1NO+1NC	FZ 1802-M2	1NO+1NC
20 <b>L</b>	FZ 2001-M2	1NO+2NC	FZ 2002-M2	1NO+2NC
21 <b>L</b>	FZ 2101-M2	3NC	FZ 2102-M2	3NC
22 <b>L</b>	FZ 2201-M2	2NO+1NC	FZ 2202-M2	2NO+1NC
E1 	FZ E101-M2	1NO-1NC	FZ E102-M2	1NO-1NC
Max. speed	page 231 - type 4		page 231 - type 3	
Actuating force	8 N (25 N  )		4.3 N (25 N  )	
Travel diagrams	page 232 - group 1		page 232 - group 2	

- R** = snap action  
**L** = slow action  
**LO** = slow action, make before break  
**LS** = slow action, shifted  
**LV** = slow action, shifted and spaced  
**LI** = slow action, independent  
**LA** = slow action, close  
 = electronic, PNP

Contact block

	With steel roller with self-lubrication or 316L stainless steel on request	External gasket	External gasket	External gasket
2 <b>R</b>	FZ 205-M2	2x(1NO-1NC)	FZ 2A5-M2	2x(1NO-1NC)
5 <b>R</b>	FZ 505-M2	1NO+1NC	FZ 5A5-M2	1NO+1NC
6 <b>L</b>	FZ 605-M2	1NO+1NC	FZ 6A5-M2	1NO+1NC
7 <b>LO</b>	FZ 705-M2	1NO+1NC	FZ 7A5-M2	1NO+1NC
9 <b>L</b>	FZ 905-M2	2NC	FZ 9A5-M2	2NC
10 <b>L</b>	FZ 1005-M2	2NO	FZ 10A5-M2	2NO
11 <b>R</b>	FZ 1105-M2	2NC	FZ 11A5-M2	2NC
12 <b>R</b>	FZ 1205-M2	2NO	FZ 12A5-M2	2NO
13 <b>LV</b>	FZ 1305-M2	2NC	FZ 13A5-M2	2NC
14 <b>LS</b>	FZ 1405-M2	2NC	FZ 14A5-M2	2NC
15 <b>LS</b>	FZ 1505-M2	2NO	FZ 15A5-M2	2NO
18 <b>LA</b>	FZ 1805-M2	1NO+1NC	FZ 18A5-M2	1NO+1NC
20 <b>L</b>	FZ 2005-M2	1NO+2NC	FZ 20A5-M2	1NO+2NC
21 <b>L</b>	FZ 2105-M2	3NC	FZ 21A5-M2	3NC
22 <b>L</b>	FZ 2205-M2	2NO+1NC	FZ 22A5-M2	2NO+1NC
E1 	FZ E105-M2	1NO-1NC	FZ E1A5-M2	1NO-1NC
Max. speed	page 231 - type 3		page 231 - type 3	
Actuating force	6 N (25 N  )		4 N (25 N  )	
Travel diagrams	page 232 - group 2		page 232 - group 3	

All values in the drawings are in mm

Accessories See page 207

→ The 2D and 3D files are available at [www.pizzato.com](http://www.pizzato.com)

		External gasket							
Contact type <b>R</b> = snap action <b>L</b> = slow action <b>LO</b> = slow action, make before break <b>LS</b> = slow action, shifted <b>LV</b> = slow action, shifted and spaced <b>LI</b> = slow action, independent <b>LA</b> = slow action, close = electronic, PNP									
Contact block									
2	<b>R</b>	FZ 208-M2	2x(1NO-1NC)	FZ 212-M2	2x(1NO-1NC)	FZ 213-M2	2x(1NO-1NC)	FZ 214-M2	2x(1NO-1NC)
5	<b>R</b>	FZ 508-M2	1NO+1NC	FZ 512-M2	1NO+1NC	FZ 513-M2	1NO+1NC	FZ 514-M2	1NO+1NC
6	<b>L</b>	FZ 608-M2	1NO+1NC	FZ 612-M2	1NO+1NC	FZ 613-M2	1NO+1NC	FZ 614-M2	1NO+1NC
7	<b>LO</b>	FZ 708-M2	1NO+1NC	FZ 712-M2	1NO+1NC	FZ 713-M2	1NO+1NC	FZ 714-M2	1NO+1NC
9	<b>L</b>	FZ 908-M2	2NC	FZ 912-M2	2NC	FZ 913-M2	2NC	FZ 914-M2	2NC
10	<b>L</b>	FZ 1008-M2	2NO	FZ 1012-M2	2NO	FZ 1013-M2	2NO	FZ 1014-M2	2NO
11	<b>R</b>	FZ 1108-M2	2NC	FZ 1112-M2	2NC	FZ 1113-M2	2NC	FZ 1114-M2	2NC
12	<b>R</b>	FZ 1208-M2	2NO	FZ 1212-M2	2NO	FZ 1213-M2	2NO	FZ 1214-M2	2NO
13	<b>LV</b>	FZ 1308-M2	2NC	FZ 1312-M2	2NC	FZ 1313-M2	2NC	FZ 1314-M2	2NC
14	<b>LS</b>	FZ 1408-M2	2NC	FZ 1412-M2	2NC	FZ 1413-M2	2NC	FZ 1414-M2	2NC
15	<b>LS</b>	FZ 1508-M2	2NO	FZ 1512-M2	2NO	FZ 1513-M2	2NO	FZ 1514-M2	2NO
18	<b>LA</b>	FZ 1808-M2	1NO+1NC	FZ 1812-M2	1NO+1NC	FZ 1813-M2	1NO+1NC	FZ 1814-M2	1NO+1NC
20	<b>L</b>	FZ 2008-M2	1NO+2NC	FZ 2012-M2	1NO+2NC	FZ 2013-M2	1NO+2NC	FZ 2014-M2	1NO+2NC
21	<b>L</b>	FZ 2108-M2	3NC	FZ 2112-M2	3NC	FZ 2113-M2	3NC	FZ 2114-M2	3NC
22	<b>L</b>	FZ 2208-M2	2NO+1NC	FZ 2212-M2	2NO+1NC	FZ 2213-M2	2NO+1NC	FZ 2214-M2	2NO+1NC
E1		FZ E108-M2	1NO-1NC	FZ E112-M2	1NO-1NC	FZ E113-M2	1NO-1NC	FZ E114-M2	1NO-1NC
Max. speed		page 231 - type 4		page 231 - type 4		page 231 - type 2		page 231 - type 4	
Actuating force		8 N (25 N $\ominus$ )		8 N (25 N $\ominus$ )		8 N (25 N $\ominus$ )		8 N (25 N $\ominus$ )	
Travel diagrams		page 232 - group 1		page 232 - group 1		page 232 - group 1		page 232 - group 1	

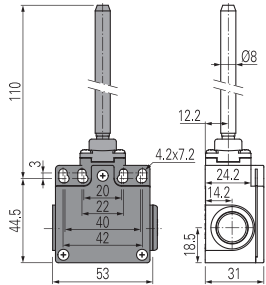
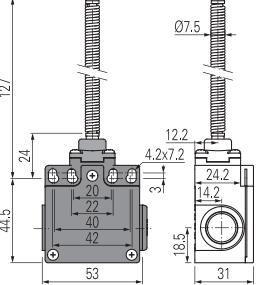
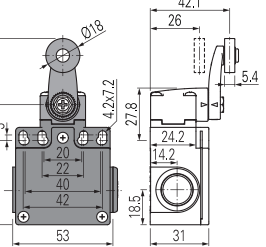
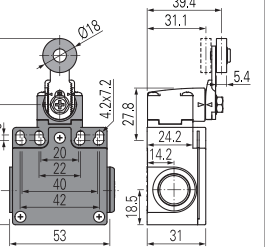
		External gasket		External gasket		Spring rod		Spring rod	
Contact type <b>R</b> = snap action <b>L</b> = slow action <b>LO</b> = slow action, make before break <b>LS</b> = slow action, shifted <b>LV</b> = slow action, shifted and spaced <b>LI</b> = slow action, independent <b>LA</b> = slow action, close = electronic, PNP									
Contact block									
2	<b>R</b>	FZ 215-M2R28	2x(1NO-1NC)	FZ 216-M2	2x(1NO-1NC)	FZ 220-M2	2x(1NO-1NC)	FZ 221-M2	2x(1NO-1NC)
5	<b>R</b>	FZ 515-M2R28	1NO+1NC	FZ 516-M2	1NO+1NC	FZ 520-M2	1NO+1NC	FZ 521-M2	1NO+1NC
6	<b>L</b>	FZ 615-M2R28	1NO+1NC	FZ 616-M2	1NO+1NC	/	/	/	/
7	<b>LO</b>	FZ 715-M2R28	1NO+1NC	FZ 716-M2	1NO+1NC	/	/	/	/
9	<b>L</b>	FZ 915-M2R28	2NC	FZ 916-M2	2NC	/	/	/	/
10	<b>L</b>	FZ 1015-M2R28	2NO	FZ 1016-M2	2NO	FZ 1020-M2	2NO	FZ 1021-M2	2NO
11	<b>R</b>	FZ 1115-M2R28	2NC	FZ 1116-M2	2NC	/	/	/	/
12	<b>R</b>	FZ 1215-M2R28	2NO	FZ 1216-M2	2NO	FZ 1220-M2	2NO	FZ 1221-M2	2NO
13	<b>LV</b>	FZ 1315-M2R28	2NC	FZ 1316-M2	2NC	/	/	/	/
14	<b>LS</b>	FZ 1415-M2R28	2NC	FZ 1416-M2	2NC	/	/	/	/
15	<b>LS</b>	FZ 1515-M2R28	2NO	FZ 1516-M2	2NO	/	/	/	/
18	<b>LA</b>	FZ 1815-M2R28	1NO+1NC	FZ 1816-M2	1NO+1NC	FZ 1820-M2	1NO+1NC	FZ 1821-M2	1NO+1NC
20	<b>L</b>	FZ 2015-M2R28	1NO+2NC	FZ 2016-M2	1NO+2NC	FZ 2020-M2	1NO+2NC	FZ 2021-M2	1NO+2NC
21	<b>L</b>	FZ 2115-M2R28	3NC	FZ 2116-M2	3NC	FZ 2120-M2	3NC	FZ 2121-M2	3NC
22	<b>L</b>	FZ 2215-M2R28	2NO+1NC	FZ 2216-M2	2NO+1NC	FZ 2220-M2	2NO+1NC	FZ 2221-M2	2NO+1NC
E1		FZ E115-M2R28	1NO-1NC	FZ E116-M2	1NO-1NC	FZ E120-M2	1NO-1NC	FZ E121-M2	1NO-1NC
Max. speed		page 231 - type 2		page 231 - type 2		1 m/s		1 m/s	
Actuating force		8 N (25 N $\ominus$ )		8 N (25 N $\ominus$ )		0.07 Nm		0.07 Nm	
Travel diagrams		page 232 - group 1		page 232 - group 1		page 232 - group 4		page 232 - group 4	

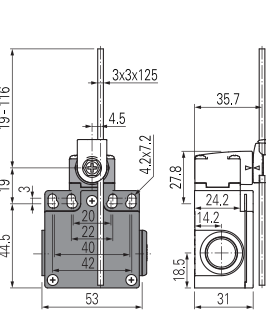
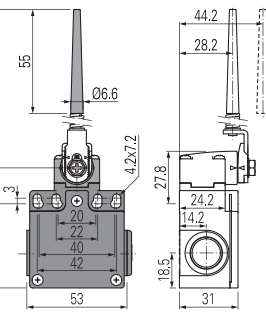
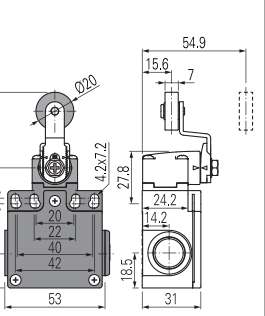
All values in the drawings are in mm

Accessories See page 207

 → The 2D and 3D files are available at [www.pizzato.com](http://www.pizzato.com)

# FZ series position switches

Contact type	External gasket Rigid rod		External gasket Spring rod		With Ø 20 mm steel roller with self-lubrication or 316L stainless steel on request		Other rollers available. See page 102		
									
<b>R</b> = snap action <b>L</b> = slow action <b>LO</b> = slow action, make before break <b>LS</b> = slow action, shifted <b>LV</b> = slow action, shifted and spaced <b>LI</b> = slow action, independent <b>LA</b> = slow action, close <b>⚡</b> = electronic, PNP									
2	<b>R</b>	FZ 222-M2	2x(1NO-1NC)	FZ 225-M2	2x(1NO-1NC)	FZ 230-M2	2x(1NO-1NC)	FZ 231-M2	2x(1NO-1NC)
5	<b>R</b>	/		FZ 525-M2	1NO+1NC	FZ 530-M2	⊕ 1NO+1NC	FZ 531-M2	⊕ 1NO+1NC
6	<b>L</b>	/		/		FZ 630-M2	⊕ 1NO+1NC	FZ 631-M2	⊕ 1NO+1NC
7	<b>LO</b>	/		/		FZ 730-M2	⊕ 1NO+1NC	FZ 731-M2	⊕ 1NO+1NC
9	<b>L</b>	/		/		FZ 930-M2	⊕ 2NC	FZ 931-M2	⊕ 2NC
10	<b>L</b>	FZ 1022-M2	2NO	FZ 1025-M2	2NO	FZ 1030-M2	2NO	FZ 1031-M2	2NO
11	<b>R</b>	/		/		FZ 1130-M2	⊕ 2NC	FZ 1131-M2	⊕ 2NC
12	<b>R</b>	FZ 1222-M2	2NO	FZ 1225-M2	2NO	FZ 1230-M2	2NO	FZ 1231-M2	2NO
13	<b>LV</b>	/		/		FZ 1330-M2	⊕ 2NC	FZ 1331-M2	⊕ 2NC
14	<b>LS</b>	/		/		FZ 1430-M2	⊕ 2NC	FZ 1431-M2	⊕ 2NC
15	<b>LS</b>	/		/		FZ 1530-M2	2NO	FZ 1531-M2	2NO
16	<b>LI</b>	/		/		FZ 1630-M2	⊕ 2NC	FZ 1631-M2	⊕ 2NC
18	<b>LA</b>	FZ 1822-M2	⊕ 1NO+1NC	FZ 1825-M2	1NO+1NC	FZ 1830-M2	⊕ 1NO+1NC	FZ 1831-M2	⊕ 1NO+1NC
20	<b>L</b>	FZ 2022-M2	⊕ 1NO+2NC	FZ 2025-M2	1NO+2NC	FZ 2030-M2	⊕ 1NO+2NC	FZ 2031-M2	⊕ 1NO+2NC
21	<b>L</b>	FZ 2122-M2	⊕ 3NC	FZ 2125-M2	3NC	FZ 2130-M2	⊕ 3NC	FZ 2131-M2	⊕ 3NC
22	<b>L</b>	FZ 2222-M2	⊕ 2NO+1NC	FZ 2225-M2	2NO+1NC	FZ 2230-M2	⊕ 2NO+1NC	FZ 2231-M2	⊕ 2NO+1NC
E1	<b>⚡</b>	FZ E122-M2	1NO-1NC	FZ E125-M2	1NO-1NC	FZ E130-M2	1NO-1NC	FZ E131-M2	1NO-1NC
Max. speed	1 m/s		1 m/s		page 231 - type 1		page 231 - type 1		
Actuating force	0.12 Nm (0.25 Nm ⊕)		0.12 Nm		0.06 Nm (0.25 Nm ⊕)		0.06 Nm (0.25 Nm ⊕)		
Travel diagrams	page 232 - group 4		page 232 - group 4		page 232 - group 5		page 232 - group 5		

Contact type	Square rod, 3x3 mm		Round rod, Ø 3 mm, stainless steel		Other rollers available. See page 102			
								
<b>R</b> = snap action <b>L</b> = slow action <b>LO</b> = slow action, make before break <b>LS</b> = slow action, shifted <b>LV</b> = slow action, shifted and spaced <b>LI</b> = slow action, independent <b>LA</b> = slow action, close <b>⚡</b> = electronic, PNP								
2	<b>R</b>	FZ 233-M2	2x(1NO-1NC)	FZ 234-M2	2x(1NO-1NC)	FZ 251-M2	2x(1NO-1NC)	
5	<b>R</b>	FZ 533-M2	1NO+1NC	FZ 534-M2	1NO+1NC	FZ 551-M2	⊕ 1NO+1NC	
6	<b>L</b>	FZ 633-M2	1NO+1NC	FZ 634-M2	1NO+1NC	FZ 651-M2	⊕ 1NO+1NC	
7	<b>LO</b>	FZ 733-M2	1NO+1NC	FZ 734-M2	1NO+1NC	FZ 751-M2	⊕ 1NO+1NC	
9	<b>L</b>	FZ 933-M2	2NC	FZ 934-M2	2NC	FZ 951-M2	⊕ 2NC	
10	<b>L</b>	FZ 1033-M2	2NO	FZ 1034-M2	2NO	FZ 1051-M2	2NO	
11	<b>R</b>	FZ 1133-M2	2NC	FZ 1134-M2	2NC	FZ 1151-M2	⊕ 2NC	
12	<b>R</b>	FZ 1233-M2	2NO	FZ 1234-M2	2NO	FZ 1251-M2	2NO	
13	<b>LV</b>	FZ 1333-M2	2NC	FZ 1334-M2	2NC	FZ 1351-M2	⊕ 2NC	
14	<b>LS</b>	FZ 1433-M2	2NC	FZ 1434-M2	2NC	FZ 1451-M2	⊕ 2NC	
15	<b>LS</b>	FZ 1533-M2	2NO	FZ 1534-M2	2NO	FZ 1551-M2	2NO	
16	<b>LI</b>	FZ 1633-M2	2NC	FZ 1634-M2	2NC	FZ 1651-M2	⊕ 2NC	
18	<b>LA</b>	FZ 1833-M2	1NO+1NC	FZ 1834-M2	1NO+1NC	FZ 1851-M2	⊕ 1NO+1NC	
20	<b>L</b>	FZ 2033-M2	1NO+2NC	FZ 2034-M2	1NO+2NC	FZ 2051-M2	⊕ 1NO+2NC	
21	<b>L</b>	FZ 2133-M2	3NC	FZ 2134-M2	3NC	FZ 2151-M2	⊕ 3NC	
22	<b>L</b>	FZ 2233-M2	2NO+1NC	FZ 2234-M2	2NO+1NC	FZ 2251-M2	⊕ 2NO+1NC	
E1	<b>⚡</b>	FZ E133-M2	1NO-1NC	FZ E134-M2	1NO-1NC	FZ E151-M2	1NO-1NC	
Max. speed	1.5 m/s		1.5 m/s		1.5 m/s		page 231 - type 1	
Actuating force	0.06 Nm		0.06 Nm		0.06 Nm		0.06 Nm (0.25 Nm ⊕)	
Travel diagrams	page 232 - group 5		page 232 - group 5		page 232 - group 5		page 232 - group 5	

All values in the drawings are in mm

Accessories See page 207

→ The 2D and 3D files are available at [www.pizzato.com](http://www.pizzato.com)



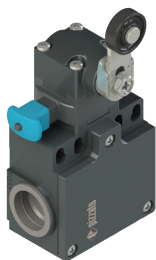
	Other rollers available. See page 102	Porcelain roller	Other rollers available. See page 102	Other rollers available. See page 102
<p>Contact type</p> <ul style="list-style-type: none"> <li><b>R</b> = snap action</li> <li><b>L</b> = slow action</li> <li><b>LO</b> = slow action, make before break</li> <li><b>LS</b> = slow action, shifted</li> <li><b>LV</b> = slow action, shifted and spaced</li> <li><b>LI</b> = slow action, independent</li> <li><b>LA</b> = slow action, close</li> <li><b>⏏</b> = electronic, PNP</li> </ul> <p>Contact block</p>				
2	<b>R</b> FZ 252-M2 2x(1NO-1NC)	<b>R</b> FZ 253-E0M2 2x(1NO-1NC)	<b>R</b> FZ 254-M2 2x(1NO-1NC)	<b>R</b> FZ 256-M2 2x(1NO-1NC)
5	<b>R</b> FZ 552-M2 ⊕ 1NO+1NC	<b>R</b> FZ 553-E0M2V9 ⊕ 1NO+1NC	<b>R</b> FZ 554-M2 ⊕ 1NO+1NC	<b>R</b> FZ 556-M2 ⊕ 1NO+1NC
6	<b>L</b> FZ 652-M2 ⊕ 1NO+1NC	<b>L</b> FZ 653-E0M2V9 ⊕ 1NO+1NC	<b>L</b> FZ 654-M2 ⊕ 1NO+1NC	<b>L</b> FZ 656-M2 ⊕ 1NO+1NC
7	<b>LO</b> FZ 752-M2 ⊕ 1NO+1NC	<b>LO</b> FZ 753-E0M2V9 ⊕ 1NO+1NC	<b>LO</b> FZ 754-M2 ⊕ 1NO+1NC	<b>LO</b> FZ 756-M2 ⊕ 1NO+1NC
9	<b>L</b> FZ 952-M2 ⊕ 2NC	<b>L</b> FZ 953-E0M2V9 ⊕ 2NC	<b>L</b> FZ 954-M2 ⊕ 2NC	<b>L</b> FZ 956-M2 ⊕ 2NC
10	<b>L</b> FZ 1052-M2 2NO	<b>L</b> FZ 1053-E0M2V9 2NO	<b>L</b> FZ 1054-M2 2NO	<b>L</b> FZ 1056-M2 2NO
11	<b>R</b> FZ 1152-M2 ⊕ 2NC	/	<b>R</b> FZ 1154-M2 ⊕ 2NC	<b>R</b> FZ 1156-M2 ⊕ 2NC
12	<b>R</b> FZ 1252-M2 2NO	<b>R</b> FZ 1253-E0M2V9 2NO	<b>R</b> FZ 1254-M2 2NO	<b>R</b> FZ 1256-M2 2NO
13	<b>LV</b> FZ 1352-M2 ⊕ 2NC	<b>LV</b> FZ 1353-E0M2V9 ⊕ 2NC	<b>LV</b> FZ 1354-M2 ⊕ 2NC	<b>LV</b> FZ 1356-M2 ⊕ 2NC
14	<b>LS</b> FZ 1452-M2 ⊕ 2NC	<b>LS</b> FZ 1453-E0M2V9 ⊕ 2NC	<b>LS</b> FZ 1454-M2 ⊕ 2NC	<b>LS</b> FZ 1456-M2 ⊕ 2NC
15	<b>LS</b> FZ 1552-M2 2NO	<b>LS</b> FZ 1553-E0M2V9 2NO	<b>LS</b> FZ 1554-M2 2NO	<b>LS</b> FZ 1556-M2 2NO
16	<b>LI</b> FZ 1652-M2 ⊕ 2NC	/	<b>LI</b> FZ 1654-M2 ⊕ 2NC	<b>LI</b> FZ 1656-M2 ⊕ 2NC
18	<b>LA</b> FZ 1852-M2 ⊕ 1NO+1NC	<b>LA</b> FZ 1853-E0M2V9 ⊕ 1NO+1NC	<b>LA</b> FZ 1854-M2 ⊕ 1NO+1NC	<b>LA</b> FZ 1856-M2 ⊕ 1NO+1NC
20	<b>L</b> FZ 2052-M2 ⊕ 1NO+2NC	<b>L</b> FZ 2053-E0M2V9 ⊕ 1NO+2NC	<b>L</b> FZ 2054-M2 ⊕ 1NO+2NC	<b>L</b> FZ 2056-M2 ⊕ 1NO+2NC
21	<b>L</b> FZ 2152-M2 ⊕ 3NC	<b>L</b> FZ 2153-E0M2V9 ⊕ 3NC	<b>L</b> FZ 2154-M2 ⊕ 3NC	<b>L</b> FZ 2156-M2 ⊕ 3NC
22	<b>L</b> FZ 2252-M2 ⊕ 2NO+1NC	<b>L</b> FZ 2253-E0M2V9 ⊕ 2NO+1NC	<b>L</b> FZ 2254-M2 ⊕ 2NO+1NC	<b>L</b> FZ 2256-M2 ⊕ 2NO+1NC
E1	<b>⏏</b> FZ E152-M2 1NO-1NC	<b>⏏</b> FZ E153-E0M2V9 1NO-1NC	<b>⏏</b> FZ E154-M2 1NO-1NC	<b>⏏</b> FZ E156-M2 1NO-1NC
Max. speed	page 231 - type 1	0.5 m/s	page 231 - type 1	page 231 - type 1
Actuating force	0.06 Nm (0.25 Nm ⊕)	0.03 Nm (0.25 Nm ⊕)	0.06 Nm (0.25 Nm ⊕)	0.06 Nm (0.25 Nm ⊕)
Travel diagrams	page 232 - group 5	page 232 - group 6	page 232 - group 5	page 232 - group 5

	Other rollers available. See page 102	Glass fibre rod	Rope switch for signalling
<p>Contact type</p> <ul style="list-style-type: none"> <li><b>R</b> = snap action</li> <li><b>L</b> = slow action</li> <li><b>LO</b> = slow action, make before break</li> <li><b>LS</b> = slow action, shifted</li> <li><b>LV</b> = slow action, shifted and spaced</li> <li><b>LI</b> = slow action, independent</li> <li><b>LA</b> = slow action, close</li> <li><b>⏏</b> = electronic, PNP</li> </ul> <p>Contact block</p>			
2	<b>R</b> FZ 257-M2 2x(1NO-1NC)	<b>R</b> FZ 269-M2 2x(1NO-1NC)	<b>R</b> FZ 276-M2 2x(1NO-1NC)
5	<b>R</b> FZ 557-M2 ⊕ 1NO+1NC	<b>R</b> FZ 569-M2 1NO+1NC	<b>R</b> FZ 576-M2 1NO+1NC
6	<b>L</b> FZ 657-M2 ⊕ 1NO+1NC	<b>L</b> FZ 669-M2 1NO+1NC	<b>L</b> FZ 676-M2 1NO+1NC
7	<b>LO</b> FZ 757-M2 ⊕ 1NO+1NC	<b>LO</b> FZ 769-M2 1NO+1NC	<b>LO</b> FZ 776-M2 1NO+1NC
9	<b>L</b> FZ 957-M2 ⊕ 2NC	<b>L</b> FZ 969-M2 2NC	<b>L</b> FZ 976-M2 2NO
10	<b>L</b> FZ 1057-M2 2NO	<b>L</b> FZ 1069-M2 2NO	<b>L</b> FZ 1076-M2 2NC
11	<b>R</b> FZ 1157-M2 ⊕ 2NC	<b>R</b> FZ 1169-M2 2NC	<b>R</b> FZ 1176-M2 2NO
12	<b>R</b> FZ 1257-M2 2NO	<b>R</b> FZ 1269-M2 2NO	<b>R</b> FZ 1276-M2 2NC
13	<b>LV</b> FZ 1357-M2 ⊕ 2NC	<b>LV</b> FZ 1369-M2 2NC	<b>LV</b> FZ 1376-M2 2NO
14	<b>LS</b> FZ 1457-M2 ⊕ 2NC	<b>LS</b> FZ 1469-M2 2NC	<b>LS</b> FZ 1476-M2 2NO
15	<b>LS</b> FZ 1557-M2 2NO	<b>LS</b> FZ 1569-M2 2NO	<b>LS</b> FZ 1576-M2 2NC
16	<b>LI</b> FZ 1657-M2 ⊕ 2NC	<b>LI</b> FZ 1669-M2 2NC	/
18	<b>LA</b> FZ 1857-M2 ⊕ 1NO+1NC	<b>LA</b> FZ 1869-M2 1NO+1NC	<b>LA</b> FZ 1876-M2 1NO+1NC
20	<b>L</b> FZ 2057-M2 ⊕ 1NO+2NC	<b>L</b> FZ 2069-M2 1NO+2NC	<b>L</b> FZ 2076-M2 2NO+1NC
21	<b>L</b> FZ 2157-M2 ⊕ 3NC	<b>L</b> FZ 2169-M2 3NC	<b>L</b> FZ 2176-M2 3NO
22	<b>L</b> FZ 2257-M2 ⊕ 2NO+1NC	<b>L</b> FZ 2269-M2 2NO+1NC	<b>L</b> FZ 2276-M2 1NO+2NC
E1	<b>⏏</b> FZ E157-M2 1NO-1NC	<b>⏏</b> FZ E169-M2 1NO-1NC	/
Max. speed	page 231 - type 1	1.5 m/s	0.5 m/s
Actuating force	0.06 Nm (0.25 Nm ⊕)	0.06 Nm	initial 20 N - final 40 N
Travel diagrams	page 232 - group 5	page 232 - group 5	page 232 - group 7

(1) Positive opening only with actuator set to max. See page 102.  
All values in the drawings are in mm



## FZ series position switches with reset



The majority of switches can be equipped with a reset device (option W3) which enables the simultaneous actuation of actuator and contact block. The device is a module that is mounted between the body and the head of the switch that can be rotated independently from the head. The reset device has the following advantages:

- can be integrated into the majority of standard actuator heads;
- contact blocks with snap action are no more necessary because the tripping movement is executed by the reset device itself;
- can be rotated independently from the head ensuring maximum flexibility during installation;
- can be delivered with two different actuating forces: standard and increased for vibration applications;
- mechanical endurance: 1 million operating cycles.

Contact type		With steel roller with self-lubrication or 316L stainless steel on request		With steel roller with self-lubrication or 316L stainless steel on request		With steel roller with self-lubrication or 316L stainless steel on request		
<b>R</b> = snap action <b>L</b> = slow action								
Contact block								
2	<b>R</b> FZ 201-W3M2	2x(1NO-1NC)	FZ 202-W3M2	2x(1NO-1NC)	FZ 205-W3M2	2x(1NO-1NC)	FZ 207-W3M2	2x(1NO-1NC)
6	<b>L</b> FZ 601-W3M2	1NO+1NC	FZ 602-W3M2	1NO+1NC	FZ 605-W3M2	1NO+1NC	FZ 607-W3M2	1NO+1NC
9	<b>L</b> FZ 901-W3M2	2NC	FZ 902-W3M2	2NC	FZ 905-W3M2	2NC	FZ 907-W3M2	2NC
10	<b>L</b> FZ 1001-W3M2	2NO	FZ 1002-W3M2	2NO	FZ 1005-W3M2	2NO	FZ 1007-W3M2	2NO
20	<b>L</b> FZ 2001-W3M2	1NO+2NC	FZ 2002-W3M2	1NO+2NC	FZ 2005-W3M2	1NO+2NC	FZ 2007-W3M2	1NO+2NC
21	<b>L</b> FZ 2101-W3M2	3NC	FZ 2102-W3M2	3NC	FZ 2105-W3M2	3NC	FZ 2107-W3M2	3NC
22	<b>L</b> FZ 2201-W3M2	2NO+1NC	FZ 2202-W3M2	2NO+1NC	FZ 2205-W3M2	2NO+1NC	FZ 2207-W3M2	2NO+1NC
Max. speed	page 231 - type 4		page 231 - type 3		page 231 - type 3		page 231 - type 3	
Actuating force	4.5 N (25 N $\ominus$ )		4 N (25 N $\ominus$ )		4 N (25 N $\ominus$ )		2.5 N (25 N $\ominus$ )	
Travel diagrams	page 231 - group 1		page 231 - group 2		page 231 - group 2		page 231 - group 3	

Contact type		With $\varnothing$ 20 mm steel roller with self-lubrication or 316L stainless steel on request		Other rollers available. See page 102		Other rollers available. See page 102		
<b>R</b> = snap action <b>L</b> = slow action								
Contact block								
2	<b>R</b> FZ 215-W3M2R28	2x(1NO-1NC)	FZ 230-W3M2	2x(1NO-1NC)	FZ 231-W3M2	2x(1NO-1NC)	FZ 251-W3M2	2x(1NO-1NC)
6	<b>L</b> FZ 615-W3M2R28	1NO+1NC	FZ 630-W3M2	1NO+1NC	FZ 631-W3M2	1NO+1NC	FZ 651-W3M2	1NO+1NC
9	<b>L</b> FZ 915-W3M2R28	2NC	FZ 930-W3M2	2NC	FZ 931-W3M2	2NC	FZ 951-W3M2	2NC
10	<b>L</b> FZ 1015-W3M2R28	2NO	FZ 1030-W3M2	2NO	FZ 1031-W3M2	2NO	FZ 1051-W3M2	2NO
20	<b>L</b> FZ 2015-W3M2R28	1NO+2NC	FZ 2030-W3M2	1NO+2NC	FZ 2031-W3M2	1NO+2NC	FZ 2051-W3M2	1NO+2NC
21	<b>L</b> FZ 2115-W3M2R28	3NC	FZ 2130-W3M2	3NC	FZ 2131-W3M2	3NC	FZ 2151-W3M2	3NC
22	<b>L</b> FZ 2215-W3M2R28	2NO+1NC	FZ 2230-W3M2	2NO+1NC	FZ 2231-W3M2	2NO+1NC	FZ 2251-W3M2	2NO+1NC
Max. speed	page 231 - type 2		page 231 - type 1		page 231 - type 1		page 231 - type 1	
Actuating force	4.5 N (25 N $\ominus$ )		0.07 Nm (0.25 Nm $\ominus$ )		0.07 Nm (0.25 Nm $\ominus$ )		0.07 Nm (0.25 Nm $\ominus$ )	
Travel diagrams	page 231 - group 1		page 231 - group 4		page 231 - group 4		page 231 - group 4	

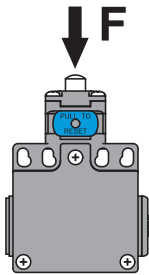
All values in the drawings are in mm

Accessories See page 207

→ The 2D and 3D files are available at [www.pizzato.com](http://www.pizzato.com)

Contact type	Other rollers available. See page 102		Other rollers available. See page 102		Other rollers available. See page 102		Other rollers available. See page 102		
	<b>R</b> = snap action <b>L</b> = slow action								
Contact block									
2	<b>R</b>	FZ 252-W3M2	2x(1NO-1NC)	FZ 254-W3M2	2x(1NO-1NC)	FZ 256-W3M2	2x(1NO-1NC)	FZ 257-W3M2	2x(1NO-1NC)
6	<b>L</b>	FZ 652-W3M2	⊕ 1NO+1NC	FZ 654-W3M2	⊕ 1NO+1NC	FZ 656-W3M2	⊕ 1NO+1NC	FZ 657-W3M2	⊕ 1NO+1NC
9	<b>L</b>	FZ 952-W3M2	⊕ 2NC	FZ 954-W3M2	⊕ 2NC	FZ 956-W3M2	⊕ 2NC	FZ 957-W3M2	⊕ 2NC
10	<b>L</b>	FZ 1052-W3M2	2NO	FZ 1054-W3M2	2NO	FZ 1056-W3M2	2NO	FZ 1057-W3M2	2NO
20	<b>L</b>	FZ 2052-W3M2	⊕ 1NO+2NC	FZ 2054-W3M2	⊕ 1NO+2NC	FZ 2056-W3M2	⊕ 1NO+2NC	FZ 2057-W3M2	⊕ 1NO+2NC
21	<b>L</b>	FZ 2152-W3M2	⊕ 3NC	FZ 2154-W3M2	⊕ 3NC	FZ 2156-W3M2	⊕ 3NC	FZ 2157-W3M2	⊕ 3NC
22	<b>L</b>	FZ 2252-W3M2	⊕ 2NO+1NC	FZ 2254-W3M2	⊕ 2NO+1NC	FZ 2256-W3M2	⊕ 2NO+1NC	FZ 2257-W3M2	⊕ 2NO+1NC
Max. speed		page 231 - type 1		page 231 - type 1		page 231 - type 1		page 231 - type 1	
Actuating 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 231 - group 4		page 231 - group 4		page 231 - group 4		page 231 - group 4	

### Increased actuating force



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

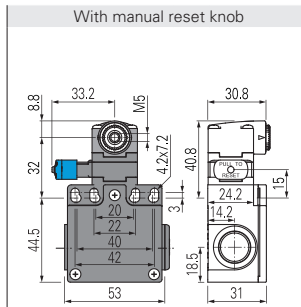
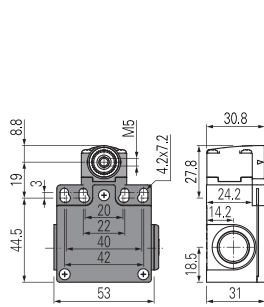
Actuators	Actuating force
01, 14, 15, 16	7 N
02, 05	6 N
07	3.5 N
30 ... 57	0.08 Nm

To order the switch with reset and increased actuating force, replace the -W3 option with -W4 in the order code.

Example: FZ 601-**W3**M2 → FZ 601-**W4**M2

## Position switches with swivelling lever without actuator

- Contact type
- R** = snap action
  - L** = slow action
  - LO** = slow action, make before break
  - LS** = slow action, shifted
  - LV** = slow action, shifted and spaced
  - LI** = slow action, independent
  - LA** = slow action, close
  - △** = electronic, PNP
- Contact block



### IMPORTANT

**For safety applications:** join only switches and actuators marked with symbol next to the product code. For more information about safety applications see details on page 225.

2	<b>R</b>	FZ 238-M2	2x(1NO-1NC)	FZ 238-W3M2	2x(1NO-1NC)
5	<b>R</b>	FZ 538-M2	1NO+1NC	/	/
6	<b>L</b>	FZ 638-M2	1NO+1NC	FZ 638-W3M2	1NO+1NC
7	<b>LO</b>	FZ 738-M2	1NO+1NC	/	/
9	<b>L</b>	FZ 938-M2	2NC	FZ 938-W3M2	2NC
10	<b>L</b>	FZ 1038-M2	2NO	FZ 1038-W3M2	2NO
11	<b>R</b>	FZ 1138-M2	2NC	/	/
12	<b>R</b>	FZ 1238-M2	2NO	/	/
13	<b>LV</b>	FZ 1338-M2	2NC	/	/
14	<b>LS</b>	FZ 1438-M2	2NC	/	/
15	<b>LS</b>	FZ 1538-M2	2NO	/	/
16	<b>LI</b>	FZ 1638-M2	2NC	/	/
18	<b>LA</b>	FZ 1838-M2	1NO+1NC	/	/
20	<b>L</b>	FZ 2038-M2	1NO+2NC	FZ 2038-W3M2	1NO+2NC
21	<b>L</b>	FZ 2138-M2	3NC	FZ 2138-W3M2	3NC
22	<b>L</b>	FZ 2238-M2	2NO+1NC	FZ 2238-W3M2	2NO+1NC
E1	<b>△</b>	FZ E138-M2	1NO-1NC	/	/
Actuating force		0.06 Nm (0.25 Nm )		0.07 Nm (0.25 Nm )	
Travel diagrams		page 232 - group 5		page 231 - group 4	

## Separate actuators

**IMPORTANT:** These separate actuators can be used only with items of the FR, FM, FX, FZ, FK, NA, NB and NF series.

Technopolymer roller Ø 18 mm	Technopolymer roller Ø 18 mm	Technopolymer roller Ø 14 mm	Technopolymer roller Ø 14 mm	Technopolymer roller Ø 20 mm	Technopolymer roller Ø 20 mm
VN A00KA	VN A00KB	VN A00KC	VN A00KD	VN A00KE	VN A00KF
Technopolymer roller Ø 20 mm	Technopolymer roller Ø 20 mm	Adjustable safety actuator with technopolymer roller	Adjustable square rod, 3x3x125 mm	Adjustable round rod Ø 3x125 mm	Adjustable glass fibre rod
VN A00KG	VN A00KH	VN A00KP	VN A00LB	VN A00LE	VN A00LH
Spring rod with plastic tip	Porcelain roller	Technopolymer roller Ø 14 mm	Technopolymer roller Ø 14 mm	Technopolymer roller Ø 20 mm	Adjustable safety lever with technopolymer roller Ø 20 mm
		With metallic parts in stainless steel			
VN A00LL	VN A00LP  (2)	VN A00KB-V38	VN A00KE-V38	VN A00KG-V38	VN A00KP-V38

All values in the drawings are in mm

Accessories See page 207

→ The 2D and 3D files are available at [www.pizzato.com](http://www.pizzato.com)

**Special separate actuators**
**IMPORTANT:** These separate actuators can be used only with items of the FR, FM, FX, FZ, FK, NA, NB and NF series.

Steel rollers, Ø 20 mm, with self-lubrication					
VN A00KB-R24 (1)	VN A00KE-R24 (1)	VN A00KF-R24 (1)	VN A00KG-R24 (1)	VN A00KH-R24 (1)	VN A00KP-R24 (1)

**Note:** To order with 316L stainless steel roller: replace R24 with R41 in the order numbers.

Technopolymer rollers, Ø 35 mm					
VN A00KB-R25 (1)	VN A00KE-R25 (1)	VN A00KF-R25 (1)	VN A00KG-R25 (1)	VN A00KH-R25 (1)	VN A00KP-R25 (1)

Rubber rollers, Ø 40 mm					
VN A00KB-R5 (1)	VN A00KE-R5 (1)	VN A00KF-R5 (1)	VN A00KG-R5 (1)	VN A00KH-R5 (1)	VN A00KP-R5 (1)

Rubber rollers, Ø 50 mm				
VN A00KE-R26 (1)	VN A00KF-R26 (1)	VN A00KG-R26 (1)	VN A00KH-R26 (1)	VN A00KP-R26 (1)

Protruding rubber rollers, Ø 50 mm
VN A00KP-R27 (1)

(1) The actuator cannot be rotated to the inside because it will hit the switch head upon actuation.

(2) The position switch obtained by assembling switch FZ •38-M2 (e.g. FZ 538-M2, FZ 638-M2, ...) with actuator VN A00LP will not present the same travel diagrams and actuating forces as switch FZ •53-E0M2V9 (e.g. FZ 553-E0M2V9, FZ 653-E0M2V9, ...).

**Note:** To check the correspondence with previous lever codes, please consult the table "Changed article codes" on page 289. Example: VF LE30 -> VN A00KA.