

2 Position switches

2A Position switches for heavy duty



FD series

▶ 3



FP series

▶ 3



FL series

▶ 3



FC series

▶ 3

2B Position switches for normal duty



FR series

▶ 5



FM series

▶ 5



FX series

▶ 5



FZ series

▶ 5

3 Man-machine interface

3A Single foot switches PX-PA series



▶ 13

3B Modular multiple foot switches PC series



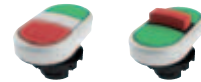
▶ 14

3C Pushbuttons PU-PL series



▶ 16

3D Double and triple pushbuttons PD-PT series



▶ 16

4 Safety devices

4A Safety switches with separate actuator



With separate actuator

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With separate actuator

▶ 21

4B Safety magnetic sensors



Coded magnetic sensors

▶ 21

4C Hinge operating safety switches



Hinge switches

▶ 22



For hinged protections

▶ 22



For hinged protections

▶ 22



With slotted hole lever

▶ 22

5 Safety modules



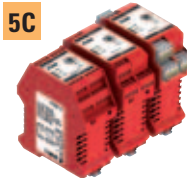
For emergency stop and gate monitoring CS AR series

▶ 25



For emergency stop, gate monitoring, safety mats and safety edges with 4 wires technology CS AR series

▶ 26



For emergency stop and gate monitoring with delayed contacts CS AT series

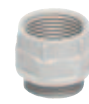
▶ 26



Safety timer module CS FS series

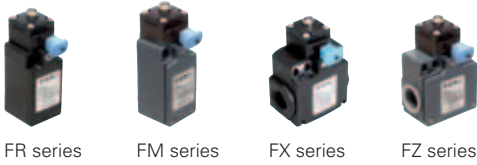
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6 Accessories ▶ 29



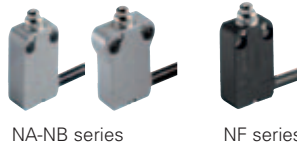


2B Position switches for normal duty applications, with reset



FR series ▶ 8 FM series ▶ 8 FX series ▶ 8 FZ series ▶ 8

2C Modular prewired switches



NA-NB series ▶ 9 NF series ▶ 9 MK series ▶ 11

2D Microswitches



▶ 11



3F Selectors SE-SL-SC series



▶ 17

3E Emergency pushbuttons PE series



▶ 18

3G Illuminated selectors IL series



▶ 18

3L Boxes ES series



▶ 18

3H Contact blocks CP-CF series



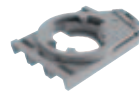
▶ 20

3I LED holders LP-LF series



▶ 20

3M Accessories



▶ 20



4D Switches with separate actuator with lock



With solenoid FG series ▶ 23 With solenoid FS series ▶ 23 With manual mechanical delay ▶ 23 With lock ▶ 23

4E Safety Handle



VF AP series ▶ 24

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▶ 19



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FD series

Housing made of metal
 One conduit entry PG 13,5 (M20 available)
 Protection degree IP67
 Marks:
 Ambient temperature: -25°C ... +80°C



- Snap action contacts 1NO+1NC
- Slow action contacts 1NO+1NC
- Slow action contacts 2NC
- Slow action contacts 1NO+2NC
- Snap action contacts 2NC-2NO

FD 501	FD 502	FD 505	FD 510	FD 511	FD 515	FD 516	FD 520
FD 601	FD 602	FD 605	FD 610	FD 611	FD 615	FD 616	
FD 901	FD 902	FD 905	FD 910	FD 911	FD 915	FD 916	
FD 2001	FD 2002	FD 2005	FD 2010	FD 2011	FD 2015	FD 2016	FD 2020
FD 201	FD 202	FD 205	FD 210	FD 211	FD 215	FD 216	FD 220

FL series

Housing made of metal
 Three conduit entries PG 13,5 (M20 available)
 Protection degree IP67
 Marks:
 Ambient temperature: -25°C ... +80°C



- Snap action contacts 1NO+1NC
- Slow action contacts 1NO+1NC
- Slow action contacts 2NC
- Slow action contacts 1NO+2NC
- Snap action contacts 2NC-2NO

FL 501	FL 502	FL 505	FL 510	FL 511	FL 515	FL 516	FL 520
FL 601	FL 602	FL 605	FL 610	FL 611	FL 615	FL 616	
FL 901	FL 902	FL 905	FL 910	FL 911	FL 915	FL 916	
FL 2001	FL 2002	FL 2005	FL 2010	FL 2011	FL 2015	FL 2016	FL 2020
FL 201	FL 202	FL 205	FL 210	FL 211	FL 215	FL 216	FL 220

FC series

Housing made of metal
 One conduit entry PG 11 (M16 available)
 Protection degree IP67
 Marks:
 Ambient temperature: -25°C ... +80°C



- Snap action contacts 1NO+1NC
- Slow action contacts 1NO+1NC
- Slow action contacts 2NC

FC 301	FC 302	FC 305	FC 310	FC 311	FC 315	FC 316	FC 320
FC 3301	FC 3302	FC 3305	FC 3310	FC 3311	FC 3315	FC 3316	FC 3320
FC 3401	FC 3402	FC 3405	FC 3410	FC 3411	FC 3415	FC 3416	FC 3420

FP series

Housing made of polymer glass-reinforced
 One conduit entry PG 13,5 (M20 available)
 Protection degree IP67
 Marks:
 Ambient temperature: -25°C ... +80°C



- Snap action contacts 1NO+1NC
- Slow action contacts 1NO+1NC
- Slow action contacts 2NC
- Slow action contacts 1NO+2NC
- Snap action contacts 2NC-2NO

FP 501	FP 502	FP 505	FP 510	FP 511	FP 515	FP 516	FP 520
FP 601	FP 602	FP 605	FP 610	FP 611	FP 615	FP 616	
FP 901	FP 902	FP 905	FP 910	FP 911	FP 915	FP 916	
FP 2001	FP 2002	FP 2005	FP 2010	FP 2011	FP 2015	FP 2016	FP 2020
FP 201	FP 202	FP 205	FP 210	FP 211	FP 215	FP 216	FP 220

Accessories

See on page 29.
 For the whole accessories list please see the general catalogue.





Round rod

With two stable positions

FD 521	FD 525	FD 531 ⊕	FD 532	FD 535	FD 536	FD 542 ⊕	FD 551 ⊕	FD 552 ⊖	FD 553-E11V9 ⊕	FD 576
		FD 631 ⊕	FD 632	FD 635	FD 636		FD 651 ⊖	FD 652 ⊖	FD 653-E11V9 ⊕	FD 676
		FD 931 ⊕	FD 932	FD 935	FD 936		FD 951 ⊖	FD 952 ⊖	FD 953-E11V9 ⊕	
FD 2021	FD 2025	FD 2031 ⊕	FD 2032	FD 2035	FD 2036		FD 2051 ⊖	FD 2052 ⊖	FD 2053-E11V9 ⊕	
FD 221	FD 225	FD 231	FD 232	FD 235	FD 236		FD 251	FD 252	FD 253-E11	FD 276

Round rod

With two stable positions

FL 521	FL 525	FL 531 ⊕	FL 532	FL 535	FL 536	FL 542 ⊕	FL 551 ⊕	FL 552 ⊖	FL 553-E11V9 ⊕	FL 576
		FL 631 ⊕	FL 632	FL 635	FL 636		FL 651 ⊖	FL 652 ⊖	FL 653-E11V9 ⊕	FL 676
		FL 931 ⊕	FL 932	FL 935	FL 936		FL 951 ⊖	FL 952 ⊖	FL 953-E11V9 ⊕	
FL 2021	FL 2025	FL 2031 ⊕	FL 2032	FL 2035	FL 2036		FL 2051 ⊖	FL 2052 ⊖	FL 2053-E11V9 ⊕	
FL 221	FL 225	FL 231	FL 232	FL 235	FL 236		FL 251	FL 252	FL 253-E11	FL 276

Round rod

FC 321	FC 325	FC 331	FC 332	FC 335	FC 336	FC 351	FC 352	FC 353-E11	FC 376
FC 3321	FC 3325	FC 3331 ⊕	FC 3332	FC 3335	FC 3336	FC 3351 ⊖	FC 3352 ⊖	FC 3353-E11V9 ⊕	FC 3376
FC 3421	FC 3425	FC 3431 ⊕	FC 3432	FC 3435	FC 3436	FC 3451 ⊖	FC 3452 ⊖	FC 3453-E11V9 ⊕	FC 3476

Round rod

With two stable positions

FP 521	FP 525	FP 531 ⊕	FP 532	FP 535	FP 536	FP 542 ⊕	FP 551 ⊖	FP 552 ⊖	FP 553-E11V9 ⊕	FP 576
		FP 631 ⊕	FP 632	FP 635	FP 636		FP 651 ⊖	FP 652 ⊖	FP 653-E11V9 ⊕	FP 676
		FP 931 ⊕	FP 932	FP 935	FP 936		FP 951 ⊖	FP 952 ⊖	FP 953-E11V9 ⊕	
FP 2021	FP 2025	FP 2031 ⊕	FP 2032	FP 2035	FP 2036		FP 2051 ⊖	FP 2052 ⊖	FP 2053-E11V9 ⊕	
FP 221	FP 225	FP 231	FP 232	FP 235	FP 236		FP 251	FP 252	FP 253-E11	FP 276

Position switches without actuator, see page 7

Items with code on the green background are available in stock



FR series

Housing made of polymer glass-reinforced
 One conduit entry PG 13,5 (M20 available)
 Protection degree IP67
 Marks:
 Ambient temperature: -25°C ... +80°C

- Snap action contacts 1NO+1NC
- Slow action contacts 1NO+1NC
- Slow action contacts 2NC
- Slow action contacts 1NO+2NC
- Snap action contacts 2NC-2NO

FR 501	FR 502	FR 505	FR 507	FR 508	FR 513	FR 515	FR 515-1
FR 601	FR 602	FR 605	FR 607	FR 608	FR 613	FR 615	FR 615-1
FR 901	FR 902	FR 905	FR 907	FR 908	FR 913	FR 915	FR 915-1
FR 2001	FR 2002	FR 2005	FR 2007	FR 2008	FR 2013	FR 2015	FR 2015-1
FR 201	FR 202	FR 205	FR 207	FR 208	FR 213	FR 215	FR 215-1

Polymer roller
Stainless steel roller

FX series

Housing made of polymer glass-reinforced
 Two conduit entries PG 13,5 (M20 available)
 Protection degree IP67
 Marks:
 Ambient temperature: -25°C ... +80°C

- Snap action contacts 1NO+1NC
- Slow action contacts 1NO+1NC
- Slow action contacts 2NC
- Slow action contacts 1NO+2NC
- Snap action contacts 2NC-2NO

FX 501	FX 502	FX 505	FX 507	FX 508	FX 513	FX 515	FX 515-1
FX 601	FX 602	FX 605	FX 607	FX 608	FX 613	FX 615	FX 615-1
FX 901	FX 902	FX 905	FX 907	FX 908	FX 913	FX 915	FX 915-1
FX 2001	FX 2002	FX 2005	FX 2007	FX 2008	FX 2013	FX 2015	FX 2015-1
FX 201	FX 202	FX 205	FX 207	FX 208	FX 213	FX 215	FX 215-1

Polymer roller
Stainless steel roller

FM series

Housing made of metal
 One conduit entry PG 13,5 (M20 available)
 Protection degree IP67
 Marks:
 Ambient temperature: -25°C ... +80°C

- Snap action contacts 1NO+1NC
- Slow action contacts 1NO+1NC
- Slow action contacts 2NC
- Slow action contacts 1NO+2NC
- Snap action contacts 2NC-2NO

FM 501	FM 502	FM 505	FM 507	FM 508	FM 513	FM 515
FM 601	FM 602	FM 605	FM 607	FM 608	FM 613	FM 615
FM 901	FM 902	FM 905	FM 907	FM 908	FM 913	FM 915
FM 2001	FM 2002	FM 2005	FM 2007	FM 2008	FM 2013	FM 2015
FM 201	FM 202	FM 205	FM 207	FM 208	FM 213	FM 215

Stainless steel roller

FZ series

Housing made of metal
 Two conduit entries PG 13,5 (M20 available)
 Protection degree IP67
 Marks:
 Ambient temperature: -25°C ... +80°C

- Snap action contacts 1NO+1NC
- Slow action contacts 1NO+1NC
- Slow action contacts 2NC
- Slow action contacts 1NO+2NC
- Snap action contacts 2NC-2NO

FZ 501	FZ 502	FZ 505	FZ 507	FZ 508	FZ 513	FZ 515
FZ 601	FZ 602	FZ 605	FZ 607	FZ 608	FZ 613	FZ 615
FZ 901	FZ 902	FZ 905	FZ 907	FZ 908	FZ 913	FZ 915
FZ 2001	FZ 2002	FZ 2005	FZ 2007	FZ 2008	FZ 2013	FZ 2015
FZ 201	FZ 202	FZ 205	FZ 207	FZ 208	FZ 213	FZ 215

Stainless steel roller

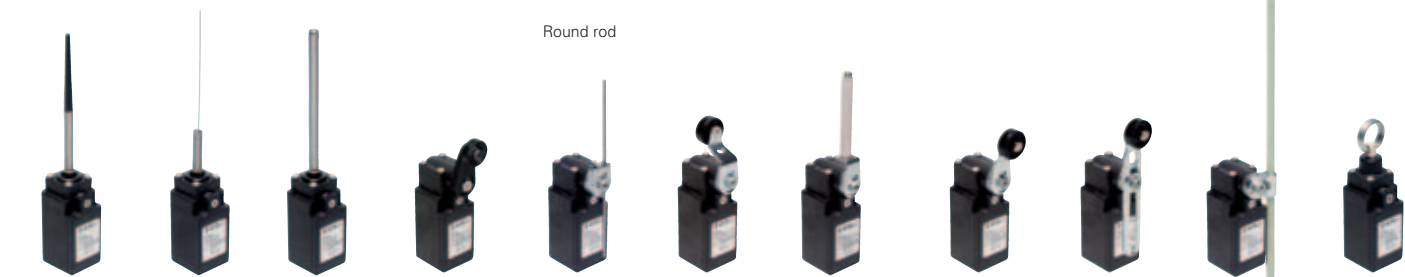
Accessories

See on page 29.
 For the whole accessories list please see the general catalogue.





Round rod



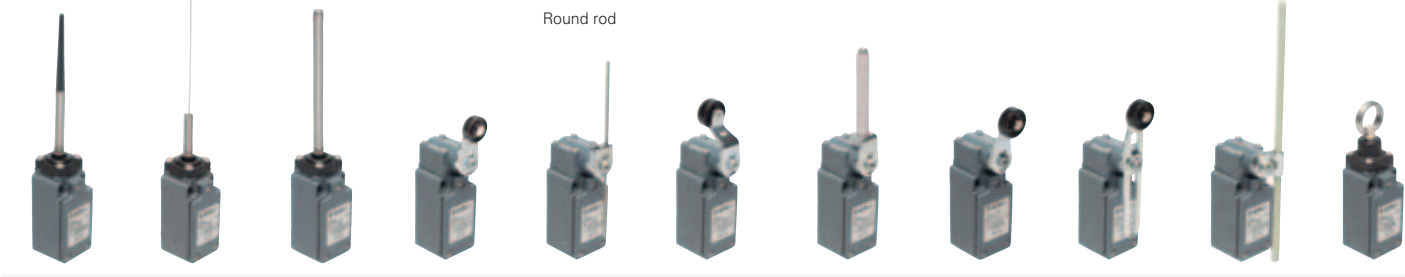
FR 520	FR 521	FR 525	FR 530 ⊕	FR 550	FR 551 ⊕	FR 553-E0V9 ⊕	FR 554 ⊕	FR 555	FR 569	FR 576
			FR 630 ⊕	FR 650	FR 651 ⊕	FR 653-E0V9 ⊕	FR 654 ⊕	FR 655	FR 669	FR 676
			FR 930 ⊕	FR 950	FR 951 ⊕	FR 953-E0V9 ⊕	FR 954 ⊕	FR 955	FR 969	
FR 2020	FR 2021	FR 2025	FR 2030 ⊕	FR 2050	FR 2051 ⊕	FR 2053-E0V9 ⊕	FR 2054 ⊕	FR 2055	FR 2069	
FR 220	FR 221	FR 225	FR 230	FR 250	FR 251	FR 253-E0	FR 254	FR 255	FR 269	FR 276

Round rod



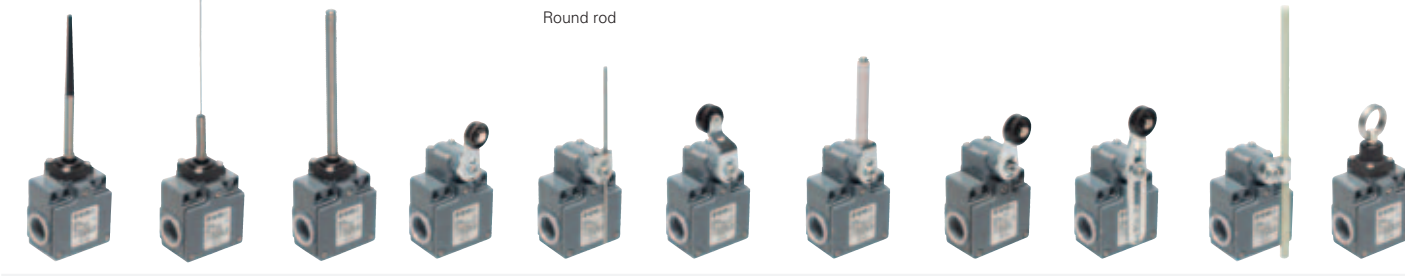
FX 520	FX 521	FX 525	FX 530 ⊕	FX 550	FX 551 ⊕	FX 553-E0V9 ⊕	FX 554 ⊕	FX 555	FX 569	FX 576
			FX 630 ⊕	FX 650	FX 651 ⊕	FX 653-E0V9 ⊕	FX 654 ⊕	FX 655	FX 669	FX 676
			FX 930 ⊕	FX 950	FX 951 ⊕	FX 953-E0V9 ⊕	FX 954 ⊕	FX 955	FX 969	
FX 2020	FX 2021	FX 2025	FX 2030 ⊕	FX 2050	FX 2051 ⊕	FX 2053-E0V9 ⊕	FX 2054 ⊕	FX 2055	FX 2069	
FX 220	FX 221	FX 225	FX 230	FX 250	FX 251	FX 253-E0	FX 254	FX 255	FX 269	FX 276

Round rod



FM 520	FM 521	FM 525	FM 531 ⊕	FM 550	FM 551 ⊕	FM 553-E0V9 ⊕	FM 554 ⊕	FM 555	FM 569	FM 576
			FM 631 ⊕	FM 650	FM 651 ⊕	FM 653-E0V9 ⊕	FM 654 ⊕	FM 655	FM 669	FM 676
			FM 931 ⊕	FM 950	FM 951 ⊕	FM 953-E0V9 ⊕	FM 954 ⊕	FM 955	FM 969	
FM 2020	FM 2021	FM 2025	FM 2031 ⊕	FM 2050	FM 2051 ⊕	FM 2053-E0V9 ⊕	FM 2054 ⊕	FM 2055	FM 2069	
FM 220	FM 221	FM 225	FM 231	FM 250	FM 251	FM 253-E0	FM 254	FM 255	FM 269	FM 276

Round rod



FZ 520	FZ 521	FZ 525	FZ 531 ⊕	FZ 550	FZ 551 ⊕	FZ 553-E0V9 ⊕	FZ 554 ⊕	FZ 555	FZ 569	FZ 576
			FZ 631 ⊕	FZ 650	FZ 651 ⊕	FZ 653-E0V9 ⊕	FZ 654 ⊕	FZ 655	FZ 669	FZ 676
			FZ 931 ⊕	FZ 950	FZ 951 ⊕	FZ 953-E0V9 ⊕	FZ 954 ⊕	FZ 955	FZ 969	
FZ 2020	FZ 2021	FZ 2025	FZ 2031 ⊕	FZ 2050	FZ 2051 ⊕	FZ 2053-E0V9 ⊕	FZ 2054 ⊕	FZ 2055	FZ 2069	
FZ 220	FZ 221	FZ 225	FZ 231	FZ 250	FZ 251	FZ 253-E0	FZ 254	FZ 255	FZ 269	FZ 276



FD, FL, FC, FP series

Position switches without actuator

Housing made of polymer glass-reinforced or metal

One or three conduit entries PG 13,5 (M20 available)

Protection degree IP67

Marks:



Snap action contacts 1NO+1NC	FD 538	FD 558	FL 538	FL 558	FC 338	FC 358	FP 538	FP 558
Slow action contacts 1NO+1NC	FD 638	FD 658	FL 638	FL 658	FC 3338	FC 3358	FP 638	FP 658
Slow action contacts 2NC	FD 938	FD 958	FL 938	FL 958	FC 3438	FC 3458	FP 938	FP 958
Slow action contacts 1NO+2NC	FD 2038	FD 2058	FL 2038	FL 2058			FP 2038	FP 2058
Snap action contacts 2NC-2NO	FD 238	FD 258	FL 238	FL 258			FP 238	FP 258

Loose actuators

Round rod Square rod



VF L31	VF L32	VF L33	VF L34	VF L35	VF L36	VF L51	VF L52	VF L53	VF L56	VF L57
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Attention! These loose actuators must be used with FD, FL, FC and FP series only.



FR, FX, FM, FZ series

Position switches without actuator

Housing made of polymer glass-reinforced or metal

One or two conduit entries PG 13,5 (M20 available)

Protection degree IP67

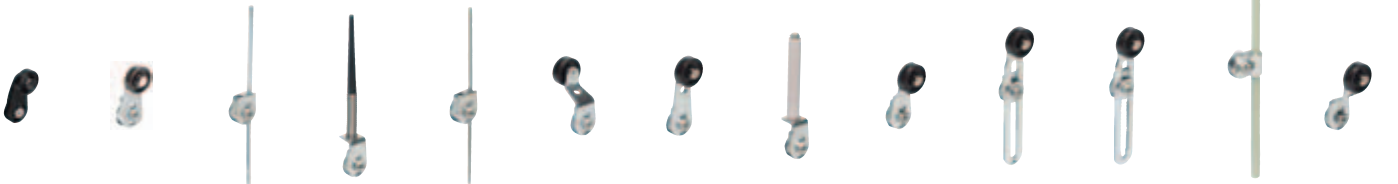
Marks:



Snap action contacts 1NO+1NC	FR 538	FX 538	FM 538	FZ 538				
Slow action contacts 1NO+1NC	FR 638	FX 638	FM 638	FZ 638	FR 638-W3	FX 638-W3	FM 638-W3	FZ 638-W3
Slow action contacts 2NC	FR 938	FX 938	FM 938	FZ 938	FR 938-W3	FX 938-W3	FM 938-W3	FZ 938-W3
Slow action contacts 1NO+2NC	FR 2038	FX 2038	FM 2038	FZ 2038	FR 2038-W3	FX 2038-W3	FM 2038-W3	FZ 2038-W3
Snap action contacts 2NC-2NO	FR 238	FX 238	FM 238	FZ 238				

Loose actuators

Square rod Round rod



VF LE30	VF LE31	VF LE33	VF LE34	VF LE50	VF LE51	VF LE52	VF LE53	VF LE54	VF LE55	VF LE56	VF LE69	VF LE57
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Attention! These loose actuators must be used with FR, FX, FM and FZ series only.

Accessories

See on page 29.
For the whole accessories list please see the general catalogue.





FR series

Housing made of polymer glass-reinforced

One conduit entry PG 13,5 (M20 available)

Protection degree IP67

Marks:

Ambient temperature: -25°C ... +80°C



contacts 1NO+1NC

contacts 2NC

contacts 1NO+2NC

FR 601-W3 FR 602-W3 FR 605-W3 FR 607-W3 FR 615-W3 FR 630-W3 FR 651-W3 FR 654-W3
 FR 901-W3 FR 902-W3 FR 905-W3 FR 907-W3 FR 915-W3 FR 930-W3 FR 951-W3 FR 954-W3
 FR 2001-W3 FR 2002-W3 FR 2005-W3 FR 2007-W3 FR 2015-W3 FR 2030-W3 FR 2051-W3 FR 2054-W3

FX series

Housing made of polymer glass-reinforced

Two conduit entries PG 13,5 (M20 available)

Protection degree IP67

Marks:

Ambient temperature: -25°C ... +80°C



contacts 1NO+1NC

contacts 2NC

contacts 1NO+2NC

FX 601-W3 FX 602-W3 FX 605-W3 FX 607-W3 FX 615-W3 FX 630-W3 FX 651-W3 FX 654-W3
 FX 901-W3 FX 902-W3 FX 905-W3 FX 907-W3 FX 915-W3 FX 930-W3 FX 951-W3 FX 954-W3
 FX 2001-W3 FX 2002-W3 FX 2005-W3 FX 2007-W3 FX 2015-W3 FX 2030-W3 FX 2051-W3 FX 2054-W3

FM series

Housing made of metal

One conduit entry PG 13,5 (M20 available)

Protection degree IP67

Marks:

Ambient temperature: -25°C ... +80°C



contacts 1NO+1NC

contacts 2NC

contacts 1NO+2NC

FM 601-W3 FM 602-W3 FM 605-W FM 607-W3 FM 615-W3 FM 631-W3 FM 651-W3 FM 654-W3
 FM 901-W3 FM 902-W3 FM 905-W3 FM 907-W3 FM 915-W3 FM 931-W3 FM 951-W3 FM 954-W3
 FM 2001-W3 FM 2002-W3 FM 2005-W3 FM 2007-W3 FM 2015-W3 FM 2031-W3 FM 2051-W3 FM 2054-W3

FZ series

Housing made of metal

Two conduit entries PG 13,5 (M20 available)

Protection degree IP67

Marks:

Ambient temperature: -25°C ... +80°C



contacts 1NO+1NC

contacts 2NC

contacts 1NO+2NC

FZ 601-W3 FZ 602-W3 FZ 605-W3 FZ 607-W3 FZ 615-W3 FZ 631-W3 FZ 651-W3 FZ 654-W3
 FZ 901-W3 FZ 902-W3 FZ 905-W3 FZ 907-W3 FZ 915-W3 FZ 931-W3 FZ 951-W3 FZ 954-W3
 FZ 2001-W3 FZ 2002-W3 FZ 2005-W3 FZ 2007-W3 FZ 2015-W3 FZ 2031-W3 FZ 2051-W3 FZ 2054-W3



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 integrate in any standard actuation head
- Contact blocks 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 the maximum flexibility during the assembling.






NA series

Housing made of metal
 Cable length 2 m
 Distance between fixing holes 20 mm
 Protection degree IP67
 Marks:



Snap action contacts 1NO+1NC	NA B110AB-DN2 NA B110BB-DN2 NA B110EB-DN2 NA B110FB-DN2 NA B110HB-DN2 NA B110HE-DN2 NA B112KC-DN2 NA B112KD-DN2
Snap action contacts 1NO+2NC	NAB120AB-DN2 NAB120BB-DN2 NAB120EB-DN2 NAB120FB-DN2 NAB120HB-DN2 NAB120HE-DN2 NAB122KC-DN2 NAB122KD-DN2
Snap action contacts 2NO+2NC	NAB220AB-DN2 NAB220BB-DN2 NAB220EB-DN2 NAB220FB-DN2 NAB220HB-DN2 NAB220HE-DN2 NAB222KC-DN2 NAB222KD-DN2
Slow action contacts 1NO+1NC	NAG110AB-DN2 NAG110BB-DN2 NAG110EB-DN2 NAG110FB-DN2 NAG110HB-DN2 NAG110HE-DN2 NAG112KC-DN2 NAG112KD-DN2
Slow action contacts 1NO+2NC	NAG120AB-DN2 NAG120BB-DN2 NAG120EB-DN2 NAG120FB-DN2 NAG120HB-DN2 NAG120HE-DN2 NAG122KC-DN2 NAG122KD-DN2
Slow action contacts 1NO+2NC	NAG220AB-DN2 NAG220BB-DN2 NAG220EB-DN2 NAG220FB-DN2 NAG220HB-DN2 NAG220HE-DN2 NAG222KC-DN2 NAG222KD-DN2




<p>Housing NB series (Distance fixing holes 25 mm)</p>  <p>In order to buy a NB series product: substitute on above mentioned codes NA with NB. Example: NA B110AA-DN2 → NB B110AA-DN2</p>	<p>M12 connector output from right</p>  <p>In order to buy a product with M12 connector output from right substitute on above mentioned codes DN2 with DMK. Example: NA B110AA-DN2 → NA B110AA-DMK</p>	<p>M12 connector output from bottom</p>  <p>In order to buy a product with M12 connector output from bottom substitute on above mentioned codes DN2 with SMK. Example: NA B110AA-DN2 → NA B110AA-SMK</p>
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NF series


Housing made of polymer glass-reinforced
 Cable length 2 m
 Distance between fixing holes 20 mm
 Protection degree IP67
 Marks:



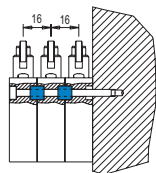
Snap action contacts 1NO+1NC	NF B110AB-DN2 NF B110BB-DN2 NF B110EB-DN2 NF B110FB-DN2 NF B110HB-DN2 NF B110HE-DN2 NF B112KC-DN2 NF B112KD-DN2
Snap action contacts 1NO+2NC	NFB120AB-DN2 NFB120BB-DN2 NFB120EB-DN2 NFB120FB-DN2 NFB120HB-DN2 NFB120HE-DN2 NFB122KC-DN2 NFB122KD-DN2
Snap action contacts 2NO+2NC	NFB220AB-DN2 NFB220BB-DN2 NFB220EB-DN2 NFB220FB-DN2 NFB220HB-DN2 NFB220HE-DN2 NFB222KC-DN2 NFB222KD-DN2
Slow action contacts 1NO+1NC	NFG110AB-DN2 NFG110BB-DN2 NFG110EB-DN2 NFG110FB-DN2 NFG110HB-DN2 NFG110HE-DN2 NFG112KC-DN2 NFG112KD-DN2
Slow action contacts 1NO+2NC	NFG120AB-DN2 NFG120BB-DN2 NFG120EB-DN2 NFG120FB-DN2 NFG120HB-DN2 NFG120HE-DN2 NFG122KC-DN2 NFG122KD-DN2
Slow action contacts 1NO+2NC	NFG220AB-DN2 NFG220BB-DN2 NFG220EB-DN2 NFG220FB-DN2 NFG220HB-DN2 NFG220HE-DN2 NFG222KC-DN2 NFG222KD-DN2

<p>M12 connector output from right</p>  <p>In order to buy a product with M12 connector output from right substitute on above mentioned codes DN2 with DMK. Example: NA B110AA-DN2 → NA B110AA-DMK</p>	<p>M12 connector output from bottom</p>  <p>In order to buy a product with M12 connector output from bottom substitute on above mentioned codes DN2 with SMK. Example: NA B110AA-DN2 → NA B110AA-SMK</p>	<p>AMP superseal 1,5 connector</p>  <p>In order to buy a product with AMP type connector output substitute on above mentioned codes DN2 with SAK. Example: NA B110AA-DN2 → NA B110AA-SAK</p>
--	--	--

Accessories




By interposing spacers between the switches, it is possible to join two or more prewired switches, preventing them from moving one against the other.



Article	Description
VF DT1F	Spacers for NA-NF series
VF D16B	Spacers for NB series

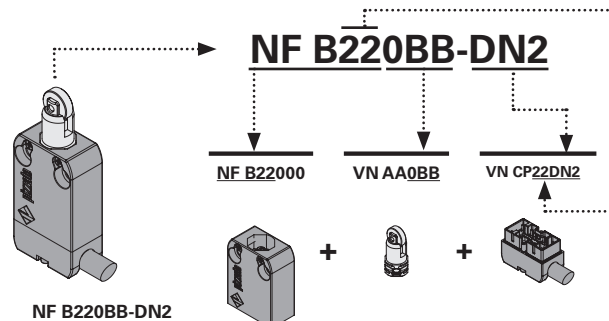
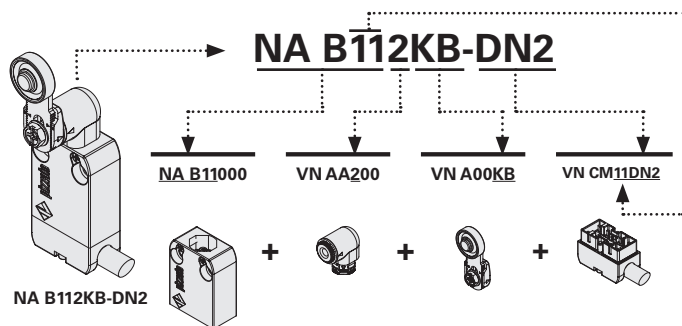
10 pcs pack. Only orders for quantities multiple of the packs are accepted.

Accessories
 See on page 29.
 For the whole accessories list please see the general catalogue.





Examples of article code composition



Housings

metal housing NA (Distance fixing holes 20 mm) metal housing NB (Distance fixing holes 25 mm) polymer housing NF (Distance fixing holes 20 mm)



NA B11000	⊕ 1NO+1NC	R	NB B11000	⊕ 1NO+1NC	R	NF B11000	⊕ 1NO+1NC	R
NA G11000	⊕ 1NO+1NC	L	NB G11000	⊕ 1NO+1NC	L	NF G11000	⊕ 1NO+1NC	L
NA B12000	⊕ 1NO+2NC	R	NB B12000	⊕ 1NO+2NC	R	NF B12000	⊕ 1NO+2NC	R
NA G12000	⊕ 1NO+2NC	L	NB G12000	⊕ 1NO+2NC	L	NF G12000	⊕ 1NO+2NC	L
NA B22000	⊕ 2NO+2NC	R	NB B22000	⊕ 2NO+2NC	R	NF B22000	⊕ 2NO+2NC	R
NA G22000	⊕ 2NO+2NC	L	NB G22000	⊕ 2NO+2NC	L	NF G22000	⊕ 2NO+2NC	L

Connector with cable

metal connectors for NA and NB housing polymer connectors for NF housing



VN CM11DN2	1NO+1NC	VN CP11DN2	1NO+1NC	2
VN CM11DN5	1NO+1NC	VN CP11DN5	1NO+1NC	5
VN CM12DN2	1NO+2NC	VN CP12DN2	1NO+2NC	2
VN CM12DN5	1NO+2NC	VN CP12DN5	1NO+2NC	5
VN CM22DN2	2NO+2NC	VN CP22DN2	2NO+2NC	2
VN CM22DN5	2NO+2NC	VN CP22DN5	2NO+2NC	5

Contacts type:
R = snap action **L** = slow action

M12 or AMP connector

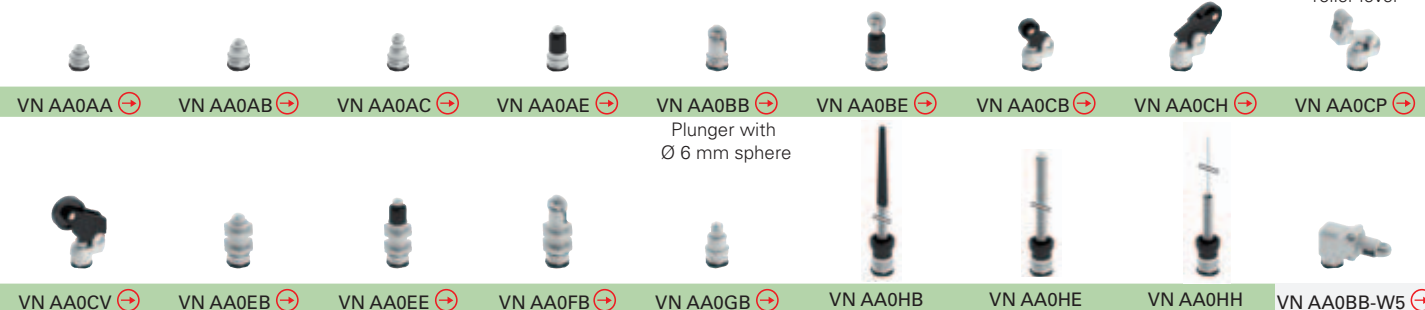
M12 connector from right for NA and NB housing M12 connector from bottom for NA and NB housing M12 connector from right for NF housing M12 connector from bottom for NF housing AMP super seal 1,5 connector for NF housing



VN CM11DMK	1NO+1NC	VN CM11SMK	1NO+1NC	VN CP11DMK	1NO+1NC	VN CP11SMK	1NO+1NC	VN CP11SAK	1NO+1NC
VN CM22DMK	2NO+2NC	VN CM22SMK	2NO+2NC	VN CP22DMK	2NO+2NC	VN CP22SMK	2NO+2NC	VN CP02SAK	2NC

Actuators

Unidirectional roller lever



Revolving levers

ATTENTION: These loose actuators can be used with products of series NA, NB and NF only.



Installation for persons protection applications:

In order to obtain a safety switch with positive opening ⊕, assemble housings having the positive opening symbol next to the code ⊕ with actuators having the positive opening symbol next to the code ⊕.
Example:
VN A00KB ⊕ + VN AA200 ⊕ + NA B11000 ⊕

Items with code on the green background are available in stock



MK V series

Housing made of polymer glass-reinforced

Positive opening ⊕ versions

Protection degree from IP20 to IP65

Marks:

Direct action

10 pcs pack



Screw terminals (IP40)

MK V11D01 MK V11D02 MK V11D03 MK V11D04 **MK V11D05 ⊕** MK V11D06 ⊕ MK V11D08 ⊕

Screw terminals (IP65)

MK V12D01 MK V12D02 MK V12D03 MK V12D04 MK V12D05 ⊕ MK V12D06 ⊕ MK V12D08 ⊕

Direct action



Screw terminals (IP40)

MK V11D09 ⊕ **MK V11D10 ⊕** **MK V11D12 ⊕** MK V11D13 ⊕ **MK V11D15 ⊕** MK V11D17 ⊕ MK V11D18 ⊕

Screw terminals (IP65)

MK V12D09 ⊕ MK V12D10 ⊕ MK V12D12 ⊕ MK V12D13 ⊕ MK V12D15 ⊕ MK V12D17 ⊕ MK V12D18 ⊕

Direct action



Screw terminals (IP40)

MK V11D19 ⊕ **MK V11D30** MK V11D31 **MK V11D32** **MK V11D35** MK V11D37 **MK V11D40**

Screw terminals (IP65)

MK V12D19 ⊕ MK V12D30 MK V12D31 MK V12D32 MK V12D35 MK V12D37 MK V12D40

Direct action



Screw terminals (IP40)

MK V11D42 **MK V11D45** MK V11D46 MK V11D47 MK V11D53 MK V11D59

Screw terminals (IP65)

MK V12D42 MK V12D45 MK V12D46 MK V12D47 MK V12D53 MK V12D59

Back direct action



Screw terminals (IP40)

MK V11F30 MK V11F31 ⊕ MK V11F32 MK V11F40 MK V11F42 ⊕ **MK V11F45 ⊕** MK V11F46 ⊕

Screw terminals (IP65)

MK V12F30 MK V12F31 ⊕ MK V12F32 MK V12F40 MK V12F42 ⊕ MK V12F45 ⊕ MK V12F46 ⊕

Back direct action



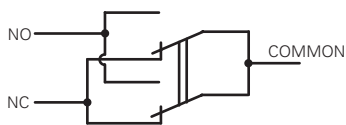
Screw terminals (IP40)

MK V11F47 ⊕ **MK V11F49 ⊕** MK V11F59 ⊕

Screw terminals (IP65)

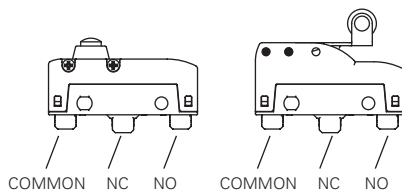
MK V12F47 ⊕ MK V12F49 ⊕ MK V12F59 ⊕

Wire diagram

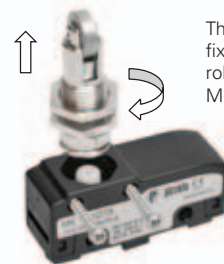


Contacts with single interruption and double contacts

With direct and back direct action (F, D)



Rotating actuators



Thanks to the patented new lateral fixing system, it's possible to rotate the roller of microswitches MK ●●15 and MK ●●17 in 90° steps.

Terminals type



V (Example: MK V11D04)
screw terminals with self-lifting plate



H (Example: MK H11D04)
6,3 mm vertical faston

Protection degree

Protection degree:

IP20 (with protection VF C01 - VF C03)
IP40 (with protection VF MKC●1● - VF C02)
IP65 (with protection VF MKC●22 - VF MKC●23)

Items with code on the green background are available in stock



MK H series

Housing made of polymer glass-reinforced
 Positive opening ⊖ versions
 Protection degree from IP20 to IP65
 Marks: CE c UL US AB24

Direct action

10 pcs pack



Faston terminals (IP40)
 Faston terminals (IP65)

MK H11D01	MK H11D02	MK H11D03	MK H11D04	MK H11D05 ⊖	MK H11D06 ⊖	MK H11D08 ⊖
MK H12D01	MK H12D02	MK H12D03	MK H12D04	MK H12D05 ⊖	MK H12D06 ⊖	MK H12D08 ⊖

Direct action



Faston terminals (IP40)
 Faston terminals (IP65)

MK H11D09 ⊖	MK H11D10 ⊖	MK H11D12 ⊖	MK H11D13 ⊖	MK H11D15 ⊖	MK H11D17 ⊖	MK H11D18 ⊖
MK H12D09 ⊖	MK H12D10 ⊖	MK H12D12 ⊖	MK H12D13 ⊖	MK H12D15 ⊖	MK H12D17 ⊖	MK H12D18 ⊖

Direct action



Faston terminals (IP40)
 Faston terminals (IP65)

MK H11D19 ⊖	MK H11D30	MK H11D31	MK H11D32	MK H11D35	MK H11D37	MK H11D40
MK H12D19 ⊖	MK H12D30	MK H12D31	MK H12D32	MK H12D35	MK H12D37	MK H12D40

Direct action



Faston terminals (IP40)
 Faston terminals (IP65)

MK H11D42	MK H11D45	MK H11D46	MK H11D47	MK H11D53	MK H11D59
MK H12D42	MK H12D45	MK H12D46	MK H12D47	MK H12D53	MK H12D59

Back direct action



Faston terminals (IP40)
 Faston terminals (IP65)

MK H11F30	MK H11F31 ⊖	MK H11F32	MK H11F40	MK H11F42 ⊖	MK H11F45 ⊖	MK H11F46 ⊖
MK H12F30	MK H12F31 ⊖	MK H12F32	MK H12F40	MK H12F42 ⊖	MK H12F45 ⊖	MK H12F46 ⊖

Back direct action



Faston terminals (IP40)
 Faston terminals (IP65)

MK H11F47 ⊖	MK H11F49 ⊖	MK H11F59 ⊖
MK H12F47 ⊖	MK H12F49 ⊖	MK H12F59 ⊖

Protections (terminals covers)

10 pcs pack. Only orders for quantities multiple of the packs are accepted.



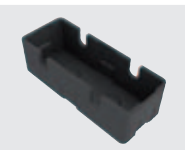
Protection terminal cover for faston terminals snap-in assembled and with wire trap cable gland. It allows the installation of more switches side by side.



Protection terminal cover for vertical screw terminals snap-in assembled and with wire trap cable gland. It allows the installation of more switches side by side.

Article	Description	Prot. degr.
VF MKCH11	without gasket for cables from Ø 5 to Ø 7,5 mm	IP40
VF MKCH12	without gasket for cables from Ø 4 to Ø 7,5 mm	IP40
VF MKCH13	without gasket for cables from Ø 2 to Ø 5 mm	IP40
VF MKCH22	with gasket for cables from Ø 4 to Ø 7,5 mm	IP65
VF MKCH23	with gasket for cables from Ø 2 to Ø 5 mm	IP65

Article	Description	Prot. degr.
VF MKCV11	without gasket for cables from Ø 5 to Ø 7,5 mm	IP40
VF MKCV12	without gasket for cables from Ø 4 to Ø 7,5 mm	IP40
VF MKCV13	without gasket for cables from Ø 2 to Ø 5 mm	IP40
VF MKCV22	with gasket for cables from Ø 4 to Ø 7,5 mm	IP65
VF MKCV23	with gasket for cables from Ø 2 to Ø 5 mm	IP65



Protection terminal cover for screw terminals.
 Protection degree IP20.



Protection terminal cover for screw terminals with cable gland PG9 for multipolar cables from Ø 5 to Ø 7 mm.
 Protection degree IP40.



Protection terminal cover for screw terminals snap-in assembled. It allows the installation of more switches side by side.
 Protection degree IP20.

Article	Description
VF C01	Protection terminal

Article	Description
VF C02	Protection terminal

Article	Description
VF C03	Protection terminal



PA, PX series

With M25 hole for VF KIT31

Housing made of polymer glass-reinforced
 One conduit entry PG 13,5 (M20 available)
 Two lateral knock out conduit entries
 Protection degree IP53 or IP65
 Marks: (contact block)



Snap action contacts 1NO+1NC	PX 10110	PA 20100	PX 10110-B
Snap action contacts 2NO+2NC	PX 10210	PA 20200	PX 10210-B
Slow action contacts 1NO+1NC	PX 10310	PA 20300	PX 10310-B

Code structure

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

article **PX 10110-AM2** options

Foot switches	
PX	with pedal actuator protection
PA	without pedal actuator protection

Protections color	
1	yellow RAL 1023
2	red RAL 3020
4	grey RAL 7040
5	black (on request)
6	blue RAL 5017 (on request)

Threaded conduit entry	
	PG 13,5 (standard)
M2	M20

Accessories (only PX series)	
	No accessories (standard)
A	Supplied with polymer carrying rod (400 mm)
B	With M25 hole for VF KIT31
C	With M25 hole for VF KIT31 complete with stabilizing plate
D	Supplied with polymer carrying rod (660 mm)

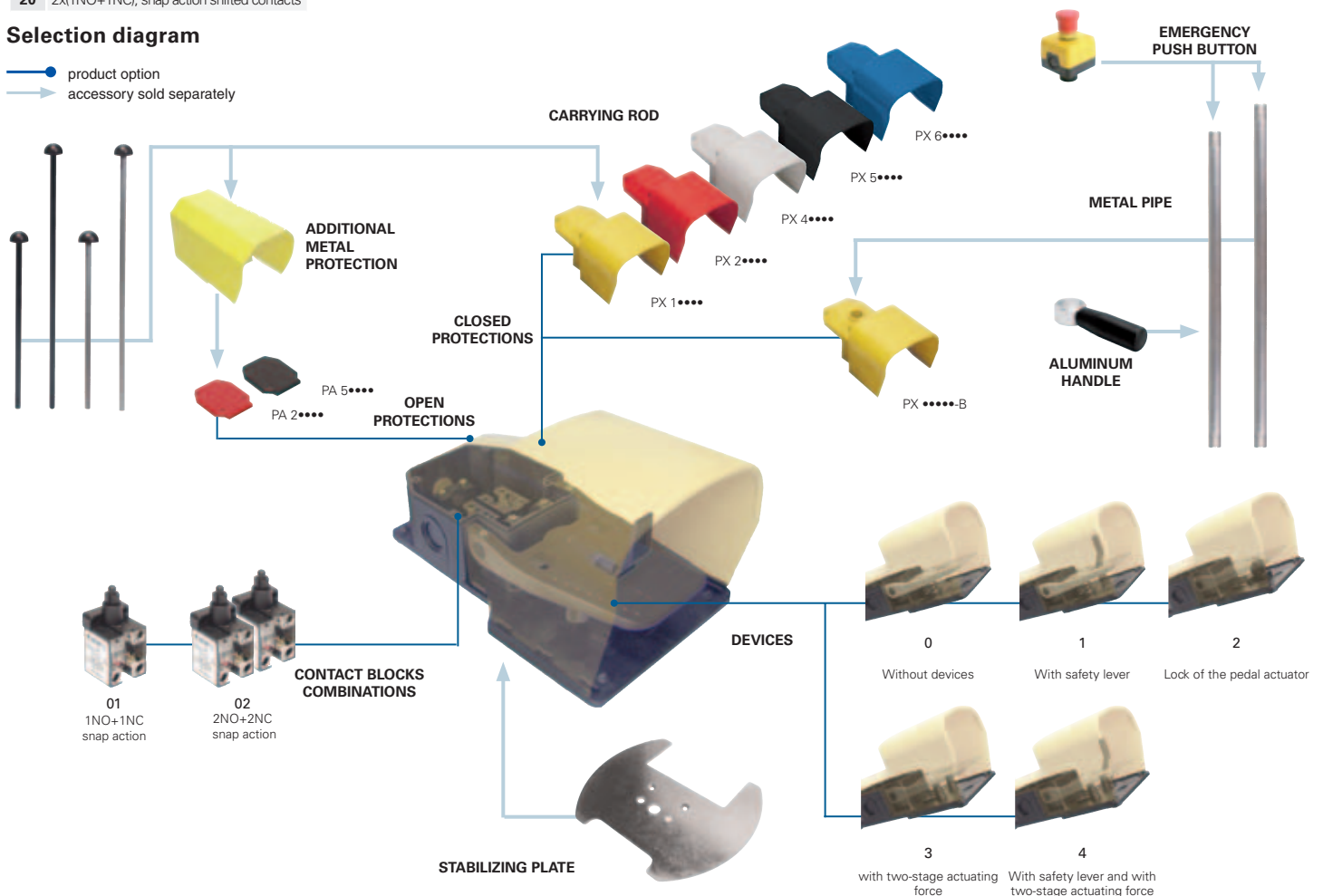
Contact blocks combinations	
01	1NO+1NC, snap action
02	2x(1NO+1NC), snap action
03	1NO+1NC, slow action
04	2x(1NO+1NC), slow action
05	2x2NO, slow action
06	2x2NC, slow action
07	2NC, slow action
08	2NO, slow action
09	1NO+1NC, slow action overlapped contacts
20	2x(1NO+1NC), snap action shifted contacts

Devices	
0	Without devices
1	With safety lever
2	Lock of the pedal actuator
3	Without safety lever and with two-stage actuating force (only for contact block combination 20)
4	With safety lever and with two-stage actuating force (only for contact block combination 20)

Protection degrees	
0	IP53
1	IP65

Selection diagram

product option
 accessory sold separately





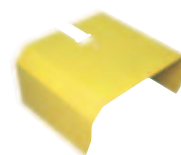
Auxiliary devices for modular multiple foot switches



VF KIT20	VF KIT30	VF KIT21 (L=400 mm) VF KIT22 (L=660 mm)	VF KIT25 (L=400 mm) VF KIT26 (L=660 mm)
Foot switches joining devices made of polymer thermoplastic resin with a hole for a carrying rod, supplied with nuts, gaskets and self-tapping screws to fasten two single foot switches. Protection degree IP65	Foot switches joining devices made of polymer thermoplastic resin with threaded hole M25x1,5 supplied with nuts, gaskets and self-tapping screws to fasten two single foot switches. Protection degree IP65	Carrying rod (to be connected to VF KIT20) supplied with the self-tapping screw to fasten it.	Metal carrying rod (to be joined to VF KIT20) supplied with the self-tapping screw to fasten it.



VF KIT31 (L=660 mm) VF KIT29 (L=740 mm)	VF KIT18	VF KIT32 (1NC) ⊖ VF KIT33 (1NC+1NO) ⊖ VF KIT34 (2NC) ⊖ VF KIT35 (ø 20 mm hole)	VF KIT50
Metal pipe ø 25 mm with threaded ends M25x1,5 supplied with brass nuts and gaskets.	M25x1,5 brass nuts, use with VF KIT31 or VF KIT29 for commercial boxes. 10 pieces in each pack.	Emergency push button kit with mechanical positive action complying with IEC 60947-5-1 and EN 418, to be combined with VF KIT31 or VF KIT29. Protection degree IP65	Handle kit for pipe kit (VF KIT31 or VF KIT29).

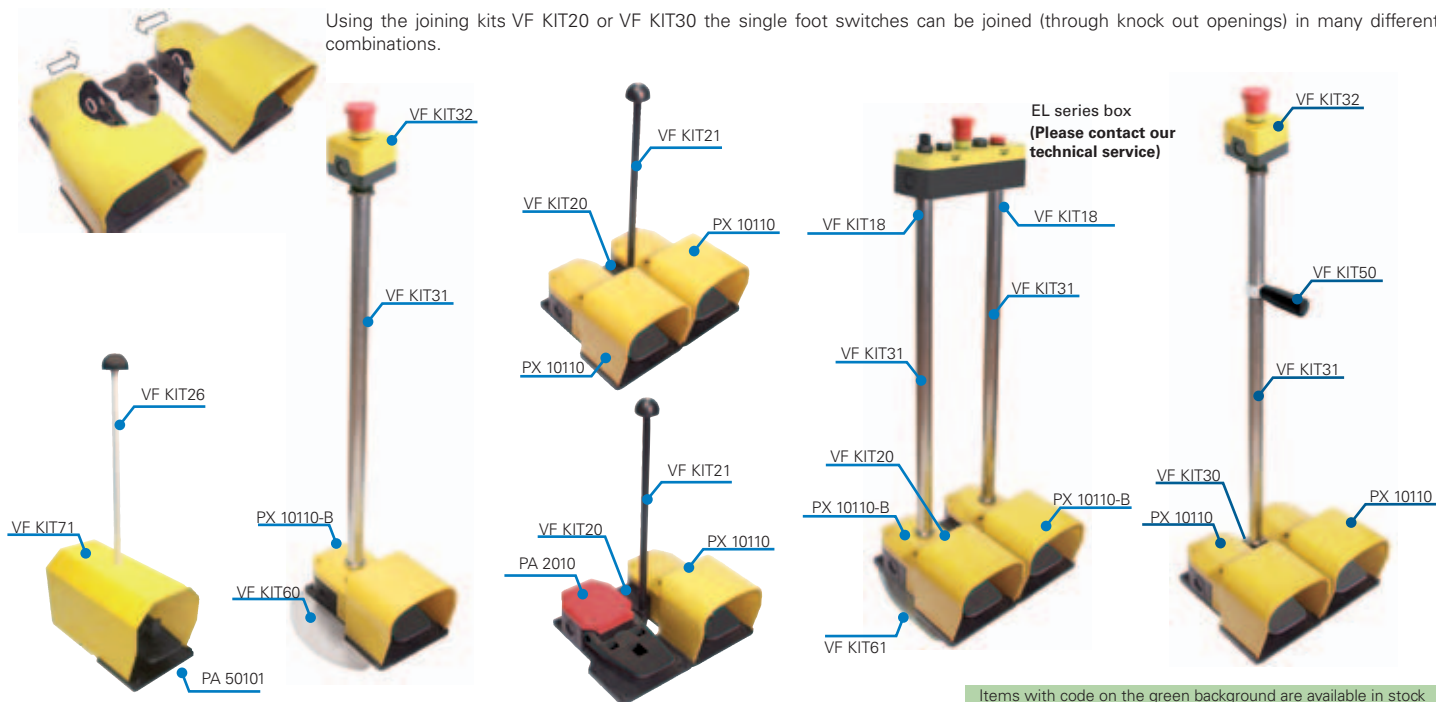


VF KIT60	VF KIT61	VF KIT71	VF KIT81	VF B501 ⊖ (1NC+1NO, snap action) VF B601 ⊖ (1NC+1NO, slow action)
Metallic stabilizing plate for single foot switches	Metallic stabilizing plate for double switches	Additional metal protection for PA series. For heavy-duty work environment, oversize dimensions for safety shoes. Not applicable with VF KIT60.	Additional metal protection for PC series. For heavy-duty work environment, oversize dimensions for safety shoes. Not applicable with VF KIT61.	Additional contact block for foot switches (all foot switches are supplied with contact blocks).

Modular multiple foot switches PC series



Using the joining kits VF KIT20 or VF KIT30 the single foot switches can be joined (through knock out openings) in many different combinations.



Items with code on the green background are available in stock

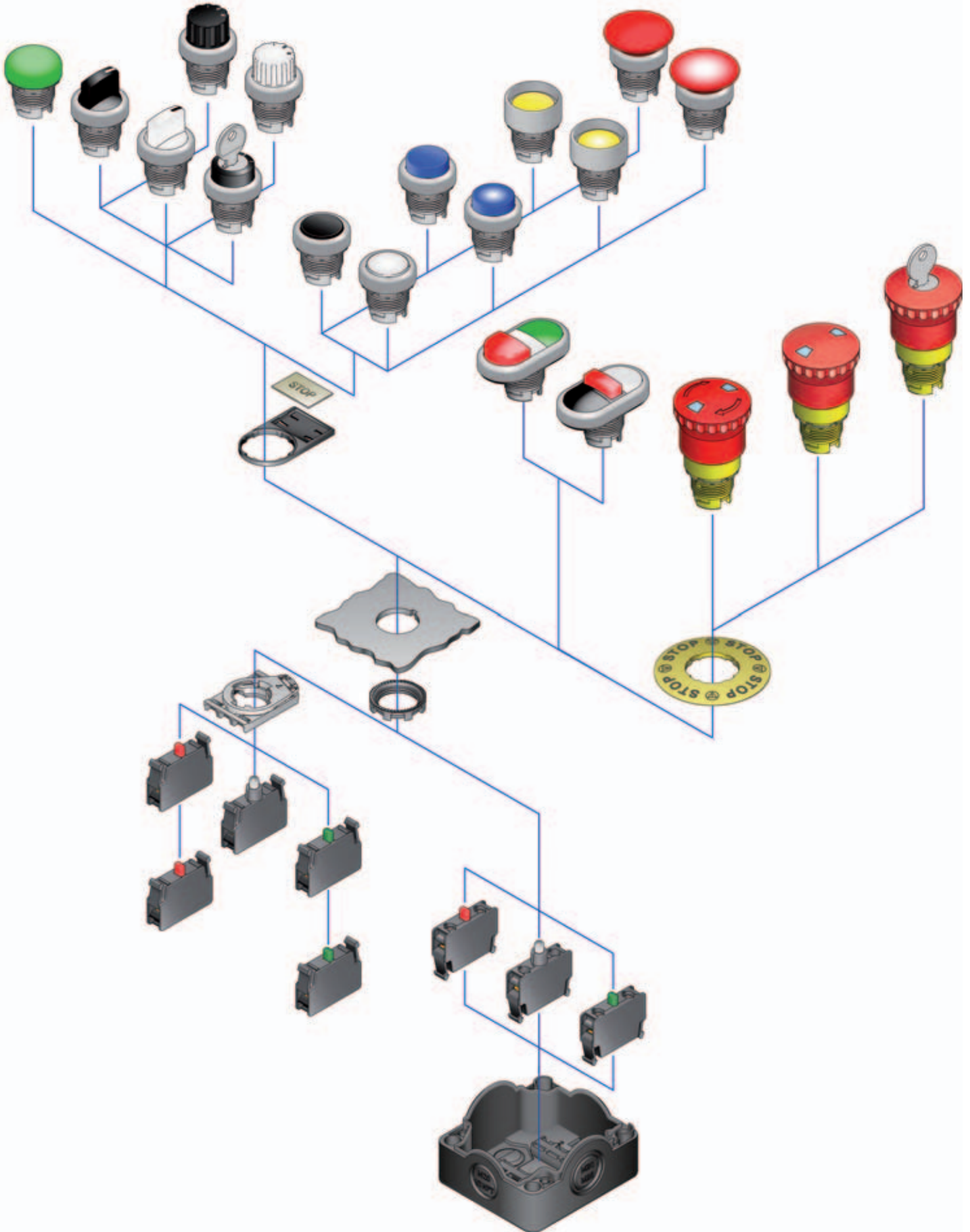


Elegance and functionality in one single series: Pizzato Elettrica extends its products range by introducing EROUND, the innovative line of control and signalling devices.

The new series, ergonomically studied to consent a comfortable and easy use of the devices, presents a particularly pleasant line with high attention to details making the products suitable for applications also on machineries with refined design.

EROUND devices thanks to their shape and functionality guarantee max reliability and adaptability to any application.

Almost all of the devices besides having protection degree IP67 have successfully passed the test for protection degree IP69K according to standard DIN 40050.





PU series Pushbuttons

Protection degree IP67 and IP69K
Ambient temperature -25°C ... +80°C



Actuator colour and marking	Spring-return button / satin chrome ring			
	Flush	Projecting	Booted	Mushroom
without lens	E2 1PU2R0290	-	E2 1PU2P0290	-
black	E2 1PU2R1290	E2 1PU2S1290	E2 1PU2P1290	E2 1PU2F1490
white	E2 1PU2R2290	E2 1PU2S2290	E2 1PU2P2290	E2 1PU2F2490
red	E2 1PU2R3290	E2 1PU2S3290	E2 1PU2P3290	E2 1PU2F3490
green	E2 1PU2R4290	E2 1PU2S4290	E2 1PU2P4290	E2 1PU2F4490
yellow	E2 1PU2R5290	E2 1PU2S5290	E2 1PU2P5290	E2 1PU2F5490
blue	E2 1PU2R6290	E2 1PU2S6290	E2 1PU2P6290	E2 1PU2F6490
red with black ring	E2 1PU2R329L1	E2 1PU2S329L1	-	E2 1PU2F349L1
green with black ring	E2 1PU2R429L2	E2 1PU2S429L2	E2 1PU2P429L2	E2 1PU2F449L2
black with black ring	E2 1PU2R129L1	E2 1PU2S129L1	-	E2 1PU2F149L1
white with black ring	E2 1PU2R229L2	E2 1PU2S229L2	E2 1PU2P229L2	E2 1PU2F249L2

PL series Illuminated pushbuttons

Protection degree IP67 and IP69K
Ambient temperature -25°C ... +80°C



Actuator colour and marking	Spring-return button / satin chrome ring			
	Flush	Projecting	Booted	Mushroom
without lens	E2 1PL2R0290	-	E2 1PL2P0290	-
white	E2 1PL2R2290	E2 1PL2S2290	E2 1PL2P2290	E2 1PL2F2490
red	E2 1PL2R3290	E2 1PL2S3290	E2 1PL2P3290	E2 1PL2F3490
green	E2 1PL2R4290	E2 1PL2S4290	E2 1PL2P4290	E2 1PL2F4490
yellow	E2 1PL2R5290	E2 1PL2S5290	E2 1PL2P5290	E2 1PL2F5490
blue	E2 1PL2R6290	E2 1PL2S6290	E2 1PL2P6290	E2 1PL2F6490
orange	E2 1PL2R8290	E2 1PL2S8290	E2 1PL2P8290	E2 1PL2F8490
red with black ring	E2 1PL2R329L1	E2 1PL2S329L1	-	E2 1PL2F349L1
green with black ring	E2 1PL2R429L2	E2 1PL2S429L2	E2 1PL2P429L2	E2 1PL2F449L2
white with black ring	E2 1PL2R229L1	E2 1PL2S229L1	-	E2 1PL2F249L1
white with black ring	E2 1PL2R229L2	E2 1PL2S229L2	E2 1PL2P229L2	E2 1PL2F249L2

For ordering a stay-put pushbutton substitute in the article codes 1PU2 with 1PU1. Example: E2 1PU2R0210 → E2 1PU1R0210
For ordering a black ring pushbutton substitute in the article codes 9 with 1. Example: E2 1PU2R0290 → E2 1PU1R0210
Contact our Technical Dept. for customized markings.



Double and triple pushbuttons



PD/PT series Double/triple pushbuttons

Protection degree IP67
Ambient temperature -25°C ... +80°C



Actuator colour and marking	Spring-return button / satin chrome ring	
	Flush upper pushbutton Flush central element Flush lower pushbutton	Flush upper pushbutton Flush central element Projecting lower pushbutton
green pushbutton white indicator light red pushbutton	E2 1PDRL90423	E2 1PDSL90423
"I" green pushbutton white indicator light "O" red pushbutton	E2 1PDRL9AAAD	E2 1PDSL9AAAD
"START" green pushbutton white indicator light "STOP" red pushbutton white pushbutton	E2 1PDRL9AAAP	E2 1PDSL9AAAP
white pushbutton white indicator light black pushbutton	E2 1PDRL90221	E2 1PDSL90221
"I" white pushbutton white indicator light "O" black pushbutton	E2 1PDRL9AAAA	E2 1PDSL9AAAA
"START" white pushbutton white indicator light "STOP" black pushbutton	E2 1PDRL9AAAN	E2 1PDSL9AAAN
"↑" black pushbutton white indicator light "↓" black pushbutton	E2 1PDRL9AAAB	E2 1PDSL9AAAB

Actuator colour and marking	Spring-return button / satin chrome ring	
	Flush upper pushbutton Projecting central pushbutton Flush lower pushbutton	
"I" green pushbutton "STOP" red pushbutton	E2 1PTRS9AAAY	
"II" green pushbutton "←" green pushbutton "STOP" red pushbutton	E2 1PTRS9AAAZ	
"→" green pushbutton "↔" white pushbutton "STOP" red pushbutton "←" black pushbutton	E2 1PTRS9AABD	
"↑" green pushbutton "STOP" red pushbutton "↓" green pushbutton	E2 1PTRS9AABA	
"↑" white pushbutton "STOP" red pushbutton "↓" black pushbutton	E2 1PTRS9AABE	
"↑" black pushbutton "STOP" red pushbutton "↓" black pushbutton	E2 1PTRS9AABF	
"+" green pushbutton "STOP" red pushbutton "-" green pushbutton	E2 1PTRS9AABB	

For ordering a black ring pushbutton substitute in the article codes 9 with 1. Example: E2 1PDRL90423 → E2 1PDRL10423
Contact our Technical Dept. for customized markings.

Items with code on the green background are available in stock



SE series Selectors

Protection degree IP67 and IP69K
Ambient temperature -25°C ... +80°C



Position	Satin chrome ring					
	● black	○ white	● red	● green	● yellow	● blue
	E2 1SE12AVA19AB	E2 1SE12AVA29AB	E2 1SE12AVA39AB	E2 1SE12AVA49AB	E2 1SE12AVA59AB	E2 1SE12AVA69AB
	E2 1SE12EVA19AB	E2 1SE12EVA29AB	E2 1SE12EVA39AB	E2 1SE12EVA49AB	E2 1SE12EVA59AB	E2 1SE12EVA69AB
	E2 1SE13ACE19AB	E2 1SE13ACE29AB	E2 1SE13ACE39AB	E2 1SE13ACE49AB	E2 1SE13ACE59AB	E2 1SE13ACE69AB
	E2 1SE13ECE19AB	E2 1SE13ECE29AB	E2 1SE13ECE39AB	E2 1SE13ECE49AB	E2 1SE13ECE59AB	E2 1SE13ECE69AB
	E2 1SE13FCE19AB	E2 1SE13FCE29AB	E2 1SE13FCE39AB	E2 1SE13FCE49AB	E2 1SE13FCE59AB	E2 1SE13FCE69AB
	E2 1SE13GCE19AB	E2 1SE13GCE29AB	E2 1SE13GCE39AB	E2 1SE13GCE49AB	E2 1SE13GCE59AB	E2 1SE13GCE69AB

For ordering a black ring selector substitute in the article codes 9 with 1. Example: E2 1SE12AVA19AB → E2 1SE12AVA11AB

SL series Illuminated selectors

Protection degree IP67 and IP69K
Ambient temperature -25°C ... +80°C



Position	Satin chrome ring					
	○ white	● red	● green	● yellow	● blue	● orange
	E2 1SL12AVD29AB	E2 1SL12AVD39AB	E2 1SL12AVD49AB	E2 1SL12AVD59AB	E2 1SL12AVD69AB	E2 1SL12AVD89AB
	E2 1SL12EVD29AB	E2 1SL12EVD39AB	E2 1SL12EVD49AB	E2 1SL12EVD59AB	E2 1SL12EVD69AB	E2 1SL12EVD89AB
	E2 1SL13ACH29AB	E2 1SL13ACH39AB	E2 1SL13ACH49AB	E2 1SL13ACH59AB	E2 1SL13ACH69AB	E2 1SL13ACH89AB
	E2 1SL13ECH29AB	E2 1SL13ECH39AB	E2 1SL13ECH49AB	E2 1SL13ECH59AB	E2 1SL13ECH69AB	E2 1SL13ECH89AB
	E2 1SL13FCH29AB	E2 1SL13FCH39AB	E2 1SL13FCH49AB	E2 1SL13FCH59AB	E2 1SL13FCH69AB	E2 1SL13FCH89AB
	E2 1SL13GCH29AB	E2 1SL13GCH39AB	E2 1SL13GCH49AB	E2 1SL13GCH59AB	E2 1SL13GCH69AB	E2 1SL13GCH89AB

For ordering a black ring selector substitute in the article codes 9 with 1. Example: E2 1SL12AVD29AB → E2 1SL12AVD21AB

SC series Key selectors

Protection degree IP67 and IP69K
Ambient temperature -25°C ... +80°C



Actuator colour and marking	Position	3 positions		Actuator colour and marking	Position	3 positions		Actuator colour and marking	Position	2 positions	
		Satin chrome ring				Satin chrome ring				Satin chrome ring	
● black		E2 1SC3ACE19AA		● black		E2 1SC3HCE19AA		● black		E2 1SC2AVA19AA	
		E2 1SC3BCE19AA				E2 1SC3LCE19AA				E2 1SC2BVA19AA	
		E2 1SC3CCE19AA				E2 1SC3MCE19AA				E2 1SC2CVA19AA	
		E2 1SC3DCE19AA				E2 1SC3NCE19AA				E2 1SC2DVA19AA	
		E2 1SC3ECE19AA				E2 1SC3PCE19AA				E2 1SC2ACA19AA	
		E2 1SC3FCE19AA				E2 1SC3QCE19AA					
		E2 1SC3GCE19AA				E2 1SC3RCE19AA					

Legend

- Stay-put
- Spring-return
- Key withdrawal position

For ordering a black ring selector substitute in the article codes 9 with 1. Example: E2 1SC2AVA19AA → E2 1SC2AVA11AA

Selector standard colour in above mentioned codes is BLACK. Other colours on request.

Key selectors can be customized with inscriptions and symbols.

All selectors keys have the PY333 code. Other codes on request.



PE series

Emergency pushbuttons

Protection degree IP67 and IP69K
Ambient temperature -25°C ... +80°C



Body colour and marking	Push-pull	Turn to release	Push-pull with mechanical indicator	Turn to release with mechanical indicator	Release with key Key number PY333
yellow	E2 1PEPZ4531	E2 1PERZ4531	E2 1PEPF4531	E2 1PERF4531	E2 1PEBZ4531
yellow with 4 green indicating lines	E2 1PEPZ4731	E2 1PERZ4731	E2 1PEPF4731	E2 1PERF4731	E2 1PEBZ4731

Label with shaped hole

5 pcs pack



Ø 60 mm	VE TF32A5700	VE TF32A5101	VE TF32A5102	VE TF32A5109	VE TF32A5120	VE TF32G5100	VE TF32G5103
Ø 90 mm	VE TF32D5700	VE TF32D5101	VE TF32D5102	VE TF32D5109	VE TF32D5120		

Indicator lights



IL series

Indicator lights

Protection degree IP67 and IP69K
Ambient temperature -25°C ... +70°C



white	red	green	yellow	blue	orange
E2 1ILA210	E2 1ILA310	E2 1ILA410	E2 1ILA510	E2 1ILA610	E2 1ILA810

Boxes



ES series

Boxes

Self-extinguishing polymer housing
Protection degree IP67 and IP69K
Ambient temperature -40°C ... +80°C
4 lateral conduit entries + 2 base conduit entries




ES 31001	ES 31000	ES 32000	ES 33000	ES 34000	ES 36000
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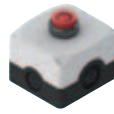
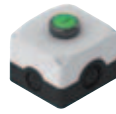
Items with code on the green background are available in stock














ES AC series

Complete boxes












Self-extinguishing polymer housing 
 Protection degree IP67 and IP69K
 Ambient temperature -25°C ... +70°C
 4 lateral conduit entries + 2 base conduit entries



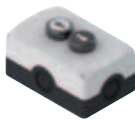
Actuator colour and marking	Contacts	Flush pushbutton Black ring	Projecting pushbutton Black ring
 green	Slow action contacts 1NO	ES AC31001	-
 red	Slow action contacts 1NC	ES AC31002 	ES AC31017 
 green	Slow action contacts 1NO	ES AC31015	-
 red	Slow action contacts 1NC	ES AC31016 	ES AC31018 





















Position and marking	Contacts	Two positions black selector Black ring
	Slow action contacts 1NO	ES AC31019
	Slow action contacts 1NO	ES AC31044
	Slow action contacts 2NO	ES AC31045
	Slow action contacts 2NO	ES AC31046






Contacts	Push-Pull	Turn to release	Key release
Slow action contacts 1NC	ES AC31004 	ES AC31003 	ES AC31022 
Slow action contacts 2NC	ES AC31009 	ES AC31005 	ES AC31023 
Slow action contacts 1NO+1NC	ES AC31010 	ES AC31006 	ES AC31011 
Slow action contacts 1NO+2NC	-	ES AC31021 	ES AC31024 

Position and marking	Contacts	Two positions key black selector Black ring
	Slow action contacts 1NO	ES AC31020
	Slow action contacts 2NO	ES AC31047



 1NO	Flush white upper pushbutton	 1NO	Flush green upper pushbutton	 1NO	Flush green upper pushbutton	 1NO	Flush white upper pushbutton	 LED	Red upper indicator light 12 ... 30 Vac/dc	 1NO	Flush green upper pushbutton
 1NO	Flush black lower pushbutton	 1NC 	Projecting red lower pushbutton	 1NC 	Projecting red lower pushbutton	 1NC 	Projecting red central pushbutton	 1NO	Flush green central pushbutton	 1NC 	Projecting red central pushbutton
						 1NO	Flush black lower pushbutton	 1NC 	Projecting red lower pushbutton	 1NO	Flush green lower pushbutton
ES AC32012		ES AC32010		ES AC32011		ES AC33017		ES AC33013		ES AC33016	

Legend

-  Stay-put
-  Spring-return
-  Key withdrawal position

Contact blocks



3H

CP/CF series Contact blocks

Protection degree IP20
Ambient temperature -40°C ... +80°C
Positive opening NC contacts according to IEC 6097-5-1
Marks:

10 pcs pack



Contact blocks	Panel fixing
Slow action contacts 1NC	E2 CP01G2V1 0 1.1 ⊕2.1 5
Slow action contacts 1NO	E2 CP10G2V1 0 2.5 5
Slow action 1NC late break	E2 CP01K2V1 0 2.5 ⊕3.5 5
Slow action 1NO early make	E2 CP10L2V1 0 1.5 5

Contact blocks	Base fixing
Slow action contacts 1NC	E2 CF01G2V1 0 1.1 ⊕2.1 5
Slow action contacts 1NO	E2 CF10G2V1 0 2.5 5
Slow action 1NC late break	E2 CF01K2V1 0 2.5 ⊕3.5 5
Slow action 1NO early make	E2 CF10L2V1 0 1.5 5

LED holders



3I

LP/LF series LED holders

Protection degree IP20
3 power supply: 12 ... 30 Vac/dc, 120 Vac, 230 Vac
Ambient temperature -25°C ... +70°C
Marks:

5 pcs pack



LED colour	Actuator colour	Panel fixing		
		Operation voltage		
		12 ... 30 Vac/dc	120 Vac	230 Vac
white	white / yellow	E2 LP1A2V1	E2 LP3A2V1	E2 LP4A2V1
red	red	E2 LP1A3V1	E2 LP3A3V1	E2 LP4A3V1
green	green	E2 LP1A4V1	E2 LP3A4V1	E2 LP4A4V1
blue	blue	E2 LP1A6V1	E2 LP3A6V1	E2 LP4A6V1
orange	orange	E2 LP1A8V1	E2 LP3A8V1	E2 LP4A8V1

LED colour	Actuator colour	Base fixing		
		Operation voltage		
		12 ... 30 Vac/dc	120 Vac	230 Vac
white	white / yellow	E2 LF1A2V1	E2 LF3A2V1	E2 LF4A2V1
red	red	E2 LF1A3V1	E2 LF3A3V1	E2 LF4A3V1
green	green	E2 LF1A4V1	E2 LF3A4V1	E2 LF4A4V1
blue	blue	E2 LF1A6V1	E2 LF3A6V1	E2 LF4A6V1
orange	orange	E2 LF1A8V1	E2 LF3A8V1	E2 LF4A8V1

Attention! Comply with the combination between Led and actuators colours.

Accessories



3M



Article	VE GF121A	VE GF720A	VE CH121A1	E2 1BAC11	VE TR4A970	VE PT32A00A0	VE CA1A1	E2 1TA1A110	VE GP22A5A	VE GP22F5A
Description	Polymer fixing ring. 20 pcs packs	Metal fixing ring. 20 pcs packs	Polymer fixing tool for VE GF fixing rings	Fixing adapter for E2 CP contact block and E2 LP LED holder. 10 pcs packs	18x27 mm label without marking for cutter or laser engraving. 100 pcs packs.	Label holder with shaped hole, for 18x27 mm label, without label 10 pcs packs	Protection hood for flush pushbutton. 10 pcs packs	Black banking plug for Ø 22 mm holes. 10 pcs packs	Cylindrical yellow protection guard with 4 slots Ø 40x20 mm	Rectangular open yellow 66x38 h35 mm protection guard

Items with code on the green background are available in stock



**Switches with separate actuator
FD, FL, FC and FP series**

Housing made of polymer glass-reinforced or metal
One or three conduit entries PG 13,5 (M20 available)
Protection degree IP67
Marks:



Slow action contacts 1NO+1NC	FD 693		FL 693		FC 3393		FP 693	
Slow action contacts 2NC	FD 993		FL 993		FC 3493		FP 993	
Slow action contacts 1NO+2NC	FD 2093		FL 2093				FP 2093	

Separate actuators



VF KEYF VF KEYF1 VF KEYF2 VF KEYF3 VF KEYF7 VF KEYF8

Attention! These loose actuators must be used with FD, FL, FC and FP series only.

**Switches with separate actuator
FR, FX, FK and FW series**

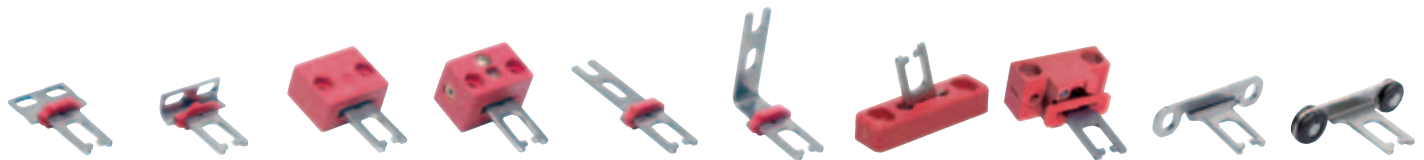
Housing made of polymer glass-reinforced
One or two conduit entries PG 13,5 (M20 available)
Protection degree IP67
Marks:

3 conduit entries M20



Slow action contacts 1NO+1NC	FR 693		FX 693		FK 3393		FW 3392-M2	
Slow action contacts 2NC	FR 993		FX 993		FK 3493		FW 3492-M2	
Slow action contacts 1NO+2NC	FR 2093		FX 2093				FW 2092-M2	

Separate actuators



VF KEYD VF KEYD1 VF KEYD2 VF KEYD3 VF KEYD5 VF KEYD6 VF KEYD7 VF KEYD8 VF KEYD10 VF KEYD11

Attention! These loose actuators must be used with FR, FX, FK and FW series only.



**Safety magnetic sensor
SR series**

Housing made of polymer glass-reinforced
2 m cable or integrated M8 connector versions
Protection degree IP67 and IP69K
Marks:

with M8 connector

with M8 connector



contacts 2NC (with closed protection)	SR BD40AN2-B02F	SR BD40ALK-B02F	SR AD40AN2-A01N	SR AD40ALK-A01N
Actuation distance	8 mm	8 mm	5 mm	5 mm



For safety applications connect exclusively with the safety modules here indicated
See technical details at page 25.

- CS AR-01•E02 CS AR-94••••• CS MF•••••
- CS AR-02•E02 CS AR-95•••••
- CS AR-05••••• CS AT-0•••••
- CS AR-06••••• CS AT-1•••••
- CS AR-08••••• CS AT-3•••••
- CS AR-46•024 CS FS-5•••••



Hinged switches

HP AA series

Metal housing, 2 m cable with output from top, from, bottom or from back
M12 connector versions

Protection degree IP67 and IP69K

Marks:

Slow action contacts 1NO+2NC



HP AA052F-2SN HP AA052F-2AN HP AA052F-2PN HP AA052F-KSM HP AA052F-KAM

Additional hinge



HC AA HC LL

Hinged switches

HP AB series

Metal housing, 2 m cable with output from top, from, bottom or from back
M12 connector versions

Protection degree IP67 and IP69K

Marks:

Slow action contacts 1NO+2NC



HP AB052F-2SN HP AB052F-2AN HP AB052F-2PN HP AB052F-KSM HP AB052F-KAM

HC AB

Switches for hinged protections

FD, FL and FC series

Housing made of metal
One or three conduit entries PG 13,5 (M20 available)

Protection degree IP67

Marks:

Slow action contacts 1NO+1NC

Slow action contacts 2NC

Slow action contacts 1NO+2NC



FD 1895 FL 1895 FC 3395
FD 995 FL 995 FC 3495
FD 2095 FL 2095

Switches for hinged protections

FR, FX, FK, FM and FZ series

Housing made of polymer or metal
One or two conduit entries PG 13,5 (M20 available)

Protection degree IP67

Marks:

Slow action contacts 1NO+1NC

Slow action contacts 2NC

Slow action contacts 1NO+2NC



FR 1896 FX 1896 FK 3396 FM 1896 FZ 1896
FR 996 FX 996 FK 3496 FM 996 FZ 996
FR 2096 FX 2096 FM 2096 FZ 2096

Switches with slotted hole lever

FR, FX series

Housing made of polymer
One or two conduit entries PG 13,5 (M20 available)

Protection degree IP67

Marks:

Slow action contacts 1NO+1NC

Slow action contacts 2NC

Slow action contacts 1NO+2NC



FR 18C1 FR 18C2 FR 18C3 FX 18C1 FX 18C2 FX 18C3
FR 9C1 FR 9C2 FR 9C3 FX 9C1 FX 9C2 FX 9C3
FR 20C1 FR 20C2 FR 20C3 FX 20C1 FX 20C2 FX 20C3

Switches with slotted hole lever

FM, FZ series

Housing made of metal
One or two conduit entries PG 13,5 (M20 available)

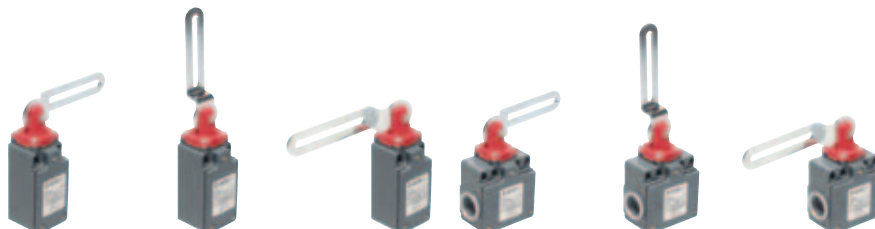
Protection degree IP67

Marks:

Slow action contacts 1NO+1NC

Slow action contacts 2NC

Slow action contacts 1NO+2NC



FM 18C1 FM 18C2 FM 18C3 FZ 18C1 FZ 18C2 FZ 18C3
FM 9C1 FM 9C2 FM 9C3 FZ 9C1 FZ 9C2 FZ 9C3
FM 20C1 FM 20C2 FM 20C3 FZ 20C1 FZ 20C2 FZ 20C3

Items with code on the green background are available in stock



Switches with solenoid FG series

Housing made of metal
 4 poles contact blocks
 Actuator holding force 2500 N
 Protection degree IP67
 Signaling LED
 Three conduit entries M20
 Marks:

contacts 1NO+1NC (solenoid)+1NO+1NC (actuator)
 contacts 2NC (solenoid)+1NO+1NC (actuator)
 contacts 3NC (solenoid)+1NC (actuator)

Locked actuator with **De-energized** 24 Vac/dc solenoid



FG 60AD1D0A
 FG 60BD1D0A
 FG 60CD1D0A

Locked actuator with **Energized** 24 Vac/dc solenoid



FG 60AD1E0A
 FG 60BD1E0A
 FG 60CD1E0A

Locked actuator with **De-energized** 24 Vac/dc solenoid. **With lock release device.**



FG 60AD5D0A
 FG 60BD5D0A
 FG 60CD5D0A

Locked actuator with **De-energized** 24V ac/dc solenoid. **With lock release device and release push button.**



FG 60AD6D0A
 FG 60BD6D0A
 FG 60CD6D0A

Locked actuator with **De-energized** 24 Vac/dc solenoid. **With release push button.**



FG 60AD7D0A
 FG 60BD7D0A
 FG 60CD7D0A

Separate actuators



VF KEYF20



VF KEYF21



VF KEYF22



VF KEYF28

Attention! These loose actuators must be used with FG series only.

Switches with solenoid FS series

Housing made of polymer glass-reinforced
 Three conduit entries PG 13,5 (M20 available)
 Protection degree IP66
 Marks:

contacts 1NO+1NC (solenoid)
 contacts 1NO+2NC (solenoid)
 contacts 1NO+1NC (solenoid)+1NC (actuator)

Locked actuator with **De-energized** 24 Vac/dc solenoid



FS 1896D024
 FS 2096D024
 FS 2896D024

Locked actuator with **Energized** 24 Vac/dc solenoid



FS 1898D024
 FS 2098D024
 FS 2898D024



FS 1896E024
 FS 2096E024
 FS 2896E024

Separate actuators



VF KEYF



VF KEYF1



VF KEYF2



VF KEYF3



VF KEYF7



VF KEYF8

Attention! These loose actuators must be used with FD, FS and FP series only.

Switches with manual mechanical delay FD, FP series

Housing made of polymer glass-reinforced or metal
 One conduit entry PG 13,5 (M20 available)
 Protection degree IP67
 Marks:

Slow action contacts 1NO+1NC
 Slow action contacts 2NC
 Slow action contacts 1NO+2NC

With actuator **locking/unlocking** manually timed (20 s)



FD 6R2
 FD 9R2
 FD 20R2



FP 6R2
 FP 9R2
 FP 20R2

With actuator **locking/unlocking** manually timed (10 s)



FD 6R2-L10
 FD 9R2-L10
 FD 20R2-L10

Switches with lock FD, FP series

Housing made of polymer glass-reinforced or metal
 One conduit entry PG 13,5 (M20 available)
 Protection degree IP67
 Marks:

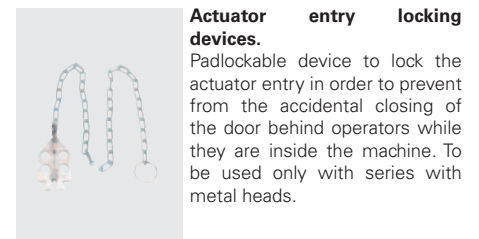
Slow action contacts 1NO+1NC
 Slow action contacts 1NO+2NC



FD 1899
 FD 2099

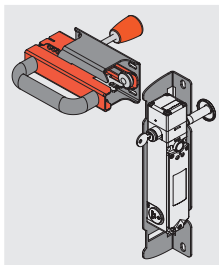


FP 1899
 FP 2099



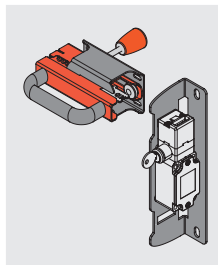
Actuator entry locking devices.
 Padlockable device to lock the actuator entry in order to prevent from the accidental closing of the door behind operators while they are inside the machine. To be used only with series with metal heads.

Article	Description
VF KB1	Actuator entry locking device for FD, FL, FC and FS series only
VF KB2	Actuator entry locking device for FG series only



Safety handle composed of:
 - emergency opening internal lever
 - plate for FG series
 - plastic handle

Switch not included.
 See page 23.



Safety handle composed of:
 - emergency opening internal lever
 - plate for FD series
 - plastic handle

Switch not included.
 See page 23.

Article	Description
VF AP-S13BP-300	Safety handle for FG series

Article	Description
VF AP-S13AP-300	Safety handle for FD series

Rope safety switches



Rope switches for emergency stop FD, FL, FC and FP series

Housing made of polymer glass-reinforced or metal
 One or three conduit entries PG 13,5 (M20 available)
 Protection degree IP67
 Marks:

contacts 1NO+1NC
 contacts 2NC
 contacts 1NO+2NC

Longitudinal head				Transversal head			

Rope switches for simple stop FD, FL, FC and FP series

Housing made of polymer glass-reinforced or metal
 One or three conduit entries PG 13,5 (M20 available)
 Protection degree IP67
 Marks:

contacts 1NO+1NC
 contacts 2NC
 contacts 1NO+2NC

Longitudinal head				Transversal head	

Rope installation accessories



Article	VF AF-TR5	VF AF-TR8	VF AF-MR5	VF AF-ME78	VF AF-ME80	VF F05-100	VF AF-IF1GR03	VF AF-CA5	VF AF-CA10
Description	Adjustable stay bolt	Stay bolt	End clamp	Safety spring for longitudinal heads	Safety spring for transversal heads	Ø 5 mm rope 100 m roll	Rope function indicators. Text "STOP"	Pulley	Angular pulley

Rope installation accessories kits, FAST line



Article	Kit content
VF AF-KT10M0	1x VF AF -TR5 1x VF AF -MR5 1x VF F05-010
VF AF-KT20M0	1x VF AF -TR5 1x VF AF -MR5 1x VF F05-020
VF AF-KT35M0	1x VF AF -TR5 1x VF AF -MR5 1x VF F05-035

Items with code on the green background are available in stock



The CS series safety modules have been studied with clear aims of safety and reliability for the product. The design, development and production of these units have been faced with the passion for quality that distinguishes Pizzato Elettrica, adding further controls where possible. Maximum safety is the basic principle for this range of products.

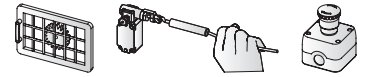
During the design phase, principles of over-sizing were adopted, and the circuit schemes have been checked by independent third party institutes. Also the selection of the components used has been made with accurate quality aims, and the basic parts, such as relays with forced guided contacts, have been chosen among the best brands existing. The production phase itself, completely developed within the company Pizzato Elettrica, is supervised with a functional testing on 100% of the production. Every single piece produced is verified in a computerised testing station that prints the safety module label, identified from a unique serial number, only when the product passes every test.

Pizzato Elettrica has improved also the more practical aspects, using compact housings and with LED signals of the operation state of the modules.

Particular attention has been paid to the connection possibilities, allowing the customer to choose between fixed clamps or plug-in connectors and screw or spring terminals. Finally, the range of products provides different supply tensions with a wide tolerance on nominal values to avoid any problem in the less industrialised countries.

5A

Safety modules for emergency stop and gate monitoring



Product code	Supply voltages	Output contacts instantaneous	For applications up to			Autom. or manual start	Monitored start	Type of inputs (7)				Kind of connection (4)			Housing dimensions (mm)
			PL	SIL	Saf. Cat.			1	2	3	4	V	M	X	
CS AR-01V024	24 Vac/dc	2NO+1NC	e	3	4	■	■	■	-	-	-	■	■	■	22,5 x 114
CS AR-01V120	120 Vac	2NO+1NC	e	3	4	■	■	■	-	-	-	■	■	■	22,5 x 114
CS AR-01V230	230 Vac	2NO+1NC	e	3	4	■	■	■	-	-	-	■	■	■	22,5 x 114
★ CS AR-01VE02	10 ... 30 Vdc	2NO+1NC	e	3	4	■	■	■	-	-	■	■	■	■	22,5 x 114
CS AR-02V024	24 Vac/dc	3NO	e	3	4	■	■	■	-	-	-	■	■	■	22,5 x 114
CS AR-02V120	120 Vac	3NO	e	3	4	■	■	■	-	-	-	■	■	■	22,5 x 114
CS AR-02V230	230 Vac	3NO	e	3	4	■	■	■	-	-	-	■	■	■	22,5 x 114
★ CS AR-02VE02	10 ... 30 Vdc	3NO	e	3	4	■	■	■	-	-	■	■	■	■	22,5 x 114
CS AR-04V024	24 Vac/dc	3NO+1NC	e	3	4	■	■	■	-	-	-	■	■	■	22,5 x 114
CS AR-04V120	120 Vac	3NO+1NC	e	3	4	■	■	■	-	-	-	■	■	■	22,5 x 114
CS AR-04V230	230 Vac	3NO+1NC	e	3	4	■	■	■	-	-	-	■	■	■	22,5 x 114
CS AR-05V024	24 Vac/dc	3NO+1NC	e	3	4	■	-	■	■	■	-	■	■	■	22,5 x 114
CS AR-05V120	120 Vac	3NO+1NC	e	3	4	■	-	■	■	■	-	■	■	■	22,5 x 114
CS AR-05V230	230 Vac	3NO+1NC	e	3	4	■	-	■	■	■	-	■	■	■	22,5 x 114
CS AR-06V024	24 Vac/dc	3NO+1NC	e	3	4	-	■	■	■	■	-	■	■	■	22,5 x 114
CS AR-06V120	120 Vac	3NO+1NC	e	3	4	-	■	■	■	■	-	■	■	■	22,5 x 114
CS AR-06V230	230 Vac	3NO+1NC	e	3	4	-	■	■	■	■	-	■	■	■	22,5 x 114
CS AR-07M024	24 Vac/dc	4NO+1NC	e	3	4	■	■	■	-	-	-	■	■	■	22,5 x 149
CS AR-08V024	24 Vac/dc	2NO	e	3	4	■	■	■	■	■	-	■	■	■	22,5 x 114
CS AR-08V120	120 Vac	2NO	e	3	4	■	■	■	■	■	-	■	■	■	22,5 x 114
CS AR-08V230	230 Vac	2NO	e	3	4	■	■	■	■	■	-	■	■	■	22,5 x 114
CS AR-20V024	24 Vac/dc	2NO	e	3	3	■	-	■	-	-	-	■	■	■	22,5 x 114
CS AR-20V120	120 Vac	2NO	e	3	3	■	-	■	-	-	-	■	■	■	22,5 x 114
CS AR-20V230	230 Vac	2NO	e	3	3	■	-	■	-	-	-	■	■	■	22,5 x 114
CS AR-21V024	24 Vac/dc	2NO	e	3	3	-	■	■	-	-	-	■	■	■	22,5 x 114
CS AR-21V120	120 Vac	2NO	e	3	3	-	■	■	-	-	-	■	■	■	22,5 x 114
CS AR-21V230	230 Vac	2NO	e	3	3	-	■	■	-	-	-	■	■	■	22,5 x 114
CS AR-22V024	24 Vac/dc	3NO+1NC	e	3	3	■	-	■	-	-	-	■	■	■	22,5 x 114
CS AR-22V120	120 Vac	3NO+1NC	e	3	3	■	-	■	-	-	-	■	■	■	22,5 x 114
CS AR-22V230	230 Vac	3NO+1NC	e	3	3	■	-	■	-	-	-	■	■	■	22,5 x 114
CS AR-23V024	24 Vac/dc	3NO+1NC	e	3	3	-	■	■	-	-	-	■	■	■	22,5 x 114
CS AR-23V120	120 Vac	3NO+1NC	e	3	3	-	■	■	-	-	-	■	■	■	22,5 x 114
CS AR-23V230	230 Vac	3NO+1NC	e	3	3	-	■	■	-	-	-	■	■	■	22,5 x 114
CS AR-24V024	24 Vac/dc	4NO+1NC	e	3	3	■	-	■	-	-	-	■	■	■	22,5 x 114
CS AR-25V024	24 Vac/dc	4NO+1NC	e	3	3	-	■	■	-	-	-	■	■	■	22,5 x 114
CS AR-40V024	24 Vac/dc	2NO	d	2	2	■	-	■	-	-	-	■	■	■	22,5 x 91
CS AR-41V024	24 Vac/dc	2NO	d	2	2	-	■	■	-	-	-	■	■	■	22,5 x 91
CS AR-46V024	24 Vac/dc	1NO	c	1	1	■	-	■	-	■	-	■	■	■	22,5 x 91

Code structure

CS AR-01V024

Kind of connection

V	screw terminals
M	connector with screw terminals
X	connector with spring terminals

Supply voltage

024	24 Vac/dc	±15%
120	120 Vac	±15%
230	230 Vac	±15%



V screw terminals



M connector with screw terminals



X connector with spring terminals



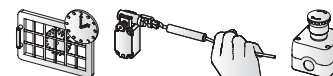
Safety modules for safety mats and safety edges with 4 wires technology



5B

Product code	Supply voltages	Output contacts instantaneous	For applications up to			Autom. or manual start	Monitored start	Type of inputs (7)				Kind of connection (4)			Housing dimensions (mm)
			PL	SIL	Saf. Cat.			Electromechanical	Electrosensible	Safety magnetic	4-wire	V	M	X	
CS AR-51V024	24 Vac/dc	2NO	e	3	4	■	■	■	-	-	■	■	■	■	22,5 x 114

Safety modules for emergency stop and gate monitoring with delayed contacts



5C

Product code	Supply voltages	Output contacts		For applications up to			Autom. or manual start	Monitored start	Type of inputs (7)				Kind of connection (4)			Housing dimensions (mm)
		instantaneous	delayed	PL	SIL	Saf. Cat.			Electromechanical	Electrosensible	Safety magnetic	4-wire	V	M	X	
CS AT-0(3)V024	24 Vac/dc	2NO+1NC	2NO	e	3	4 (2)	■	■	■	■	■	-	■	■	■	45 x 114
CS AT-0(3)V120	120 Vac	2NO+1NC	2NO	e	3	4 (2)	■	■	■	■	■	-	■	■	■	45 x 114
CS AT-0(3)V230	230 Vac	2NO+1NC	2NO	e	3	4 (2)	■	■	■	■	■	-	■	■	■	45 x 114
CS AT-1(3)V024	24 Vac/dc	3NO	2NO	e	3	4 (2)	■	■	■	■	■	-	■	■	■	45 x 114
CS AT-1(3)V120	120 Vac	3NO	2NO	e	3	4 (2)	■	■	■	■	■	-	■	■	■	45 x 114
CS AT-1(3)V230	230 Vac	3NO	2NO	e	3	4 (2)	■	■	■	■	■	-	■	■	■	45 x 114
CS AT-3(3)V024	24 Vac/dc	2NO	1NO	e	3	4 (2)	■	■	■	-	■	-	■	■	■	22,5 x 114



Safety timer module



5D

Product code	Supply voltages	Functions	Output contacts delayed	For applications up to			Autom. or manual start	Monitored start	Type of inputs (7)				Kind of connection (4)			Housing dimensions (mm)
				PL	SIL	Saf. Cat.			Electromechanical	Electrosensible	Safety magnetic	4-wire	V	M	X	
CS FS-1(3)V024	24 Vac/dc	delay on	1NO+2NC	①	①	①	-	-	■	-	-	-	■	■	■	22,5 x 114
CS FS-1(3)V120	120 Vac	delay on	1NO+2NC	①	①	①	-	-	■	-	-	-	■	■	■	22,5 x 114
CS FS-1(3)V230	230 Vac	delay on	1NO+2NC	①	①	①	-	-	■	-	-	-	■	■	■	22,5 x 114
CS FS-2(3)U024	24 Vdc	delay on	1NO+1NC+1CO	d	2	3	-	-	■	-	-	-	■	■	■	45 x 114
CS FS-2(3)V120	120 Vac	delay on	1NO+1NC+1CO	d	2	3	-	-	■	-	-	-	■	■	■	45 x 114
CS FS-3(3)U024	24 Vdc	delay off	1NO+1NC+1CO	d	2	3	-	-	■	-	-	-	■	■	■	45 x 114
CS FS-3(3)V120	120 Vac	delay off	1NO+1NC+1CO	d	2	3	-	-	■	-	-	-	■	■	■	45 x 114
CS FS-5(3)U024	24 Vdc	delay off	1NO+1NC+1CO	d	2	3	■	-	■	-	■	-	■	■	■	45 x 114
CS FS-5(3)V120	120 Vac	delay off	1NO+1NC+1CO	d	2	3	■	-	■	-	■	-	■	■	■	45 x 114

Legend

■ Available with this product	③ Delayed contacts releasing time	④ Kind of connection	⑤ Releasing time in absence of power supply
- Not available with this product	0 fixed time	V screw terminals	TF0.5 0,5 s fixed time
① Dependent from the base module	1 from 0,3 to 3 s, step 0,3 s	M connector with screw terminals	TF1 1 s fixed time
② Safety category 4 for instantaneous contacts, category 3 for delayed contacts	2 from 1 to 10 s, step 1 s	X connector with spring terminals	TF2 2 s fixed time
	3 from 3 to 30 s, step 3 s		TF3 3 s fixed time
	4 from 30 to 300 s, step 30 s		

⑥ Releasing time in absence of power supply

TF1	1 s fixed time
...
TF12	12 s fixed time

⑦ Type of inputs

	Electromechanical contacts
	Electrosensible devices with PNP output
	Safety magnetic sensor
	Safety mats and safety edges with 4 wires technology

Markings and quality marks

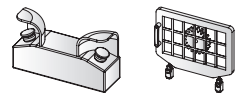


Items with code on the green background are available in stock



5E

Safety modules for bimanual controls or synchronism check



Product code	Supply voltages	Output contacts instantaneous	Safety category	Autom. or manual start	Monitored start	Type of inputs (2)				Kind of connection (4)			Housing dimensions (mm)
						Electromechanical	Electrosensible	Magnetic	4-wire	V	M	X	
CS DM-01V024	24 Vac/dc	3NO+1NC	IIIC (EN 547)	-	-	■	-	-	-	■	■	■	22,5 x 114
CS DM-01V120	120 Vac	3NO+1NC	IIIC (EN 547)	-	-	■	-	-	-	■	■	■	22,5 x 114
CS DM-01V230	230 Vac	3NO+1NC	IIIC (EN 547)	-	-	■	-	-	-	■	■	■	22,5 x 114
CS DM-02V024	24 Vac/dc	2NO	IIIC (EN 547)	-	-	■	-	-	-	■	■	■	22,5 x 114
CS DM-02V120	120 Vac	2NO	IIIC (EN 547)	-	-	■	-	-	-	■	■	■	22,5 x 114
CS DM-02V230	230 Vac	2NO	IIIC (EN 547)	-	-	■	-	-	-	■	■	■	22,5 x 114



5F

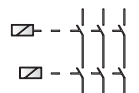
Safety module for standstill monitor



Product code	Supply voltages	Output contacts instantaneous	For applications up to			Autom. or manual start	Monitored start	Type of inputs (2)				Kind of connection (4)			Housing dimensions (mm)
			PL	SIL	Saf. Cat.			Electromechanical	Electrosensible	Magnetic	4-wire	V	M	X	
CS AM-01VE01	24 ... 230Vac/dc	2NO+1NC	d	2	3	-	-	-	-	-	-	■	■	■	45 x 114

5G

Expansion modules with instantaneous contacts or delayed contacts at de-energizing



Product code	Supply voltages	Output contacts			For applications up to			Releasing time at de-energization	Type of inputs (2)				Kind of connection (4)			Housing dimensions (mm)
		instantaneous	delayed	feedback	PL	SIL	Saf. Cat.		Electromechanical	Electrosensible	Magnetic	4-wire	V	M	X	
CS ME-01V024	24 Vac/dc	5NO+1NC	-	1NC	①	①	①	-	■	-	-	-	■	■	■	22,5 x 114
CS ME-02VU24	24 Vdc	4NO+2NC	-	1NC	①	①	①	-	■	-	-	-	■	■	■	22,5 x 114
CS ME-03U024	24 Vdc	3NO	-	1NC	①	①	①	-	■	■	-	-	■	■	■	22,5 x 91
CS ME-20VU24-TF⑤	24 Vdc	-	4NO+2NC	1NC	①	①	①	up to 3 s (fixed)	■	-	-	-	■	■	■	22,5 x 114
CS ME-30VU24-TF⑥	24 Vdc	-	4NO+2NC	1NC	①	①	①	up to 12 s (fixed)	■	-	-	-	■	■	■	45 x 114
CS ME-31VU24-TS12	24 Vdc	-	4NO+2NC	1NC	①	①	①	from 1 to 12 s (adjustable)	■	-	-	-	■	■	■	45 x 114

Code structure

CS AR-01V024

Kind of connection	
V	screw terminals
M	connector with screw terminals
X	connector with spring terminals

Supply voltage		
024	24 Vac/dc	±15%
120	120 Vac	±15%
230	230 Vac	±15%



V screw terminals



M connector with screw terminals



X connector with spring terminals

■ Available with this product
- Not available with this product

① Dependent from the base module
② Safety category 4 for instantaneous contacts, category 3 for delayed contacts

③ Delayed contacts releasing time
0 fixed time
1 from 0,3 to 3 s, step 0,3 s
2 from 1 to 10 s, step 1 s
3 from 3 to 30 s, step 3 s
4 from 30 to 300 s, step 30 s

④ Kind of connection
V screw terminals
M connector with screw terminals
X connector with spring terminals

⑤ Releasing time in absence of power supply
TF0.5 0,5 s fixed time
TF1 1 s fixed time
TF2 2 s fixed time
TF3 3 s fixed time

⑥ Releasing time in absence of power supply
TF1 1 s fixed time
TF12 12 s fixed time

⑦ Type of inputs
Electromechanical contacts
Electrosensible devices with PNP output
Safety magnetic sensor
Safety mats and safety edges with 4 wires technology

Markings and quality marks





GEMNIS

An increasing number of users requires products to carry out several safety functions without needing the complex management of a safety PLC or the complex wiring of many traditional safety modules. Such problems mainly arise when the safety functions are usually greater than 3 or 4, and/or when managing a safety PLC software (software purchase, training courses, programming of all modules, software management and filing, updates etc.) turns out to be difficult in relation to problem complexity.

Pizzato Elettrica introduces Gemnis, a series of electronic modules which are pre-programmed for specific customers' applications or for generic safety macro-functions commonly used in industrial contexts. The following pages list some of the products pre-programmed for generic macro-functions commonly addressed to the industrial sector. Such products can be freely purchased even individually. Any customer requiring a product pre-programmed on particular specifications can contact the Pizzato Elettrica technical department (minimum volumes are requested).

The resulting advantages for customers typically include simple product management (purchase of finished components) and reduced general costs (no software to be installed and managed, products immediately operative).

All the Gemnis series products are able to provide circuit solutions at SIL3 (EN 62061), PL_e (EN 13849) or category 4 (EN 954-1) levels. TÜV approval pending.

Product code	Functions provided	Safe outputs	Signalling outputs
CS MF201M0-P1	Monitoring of 2 guards in AND and 1 emergency stop with automatic or manual monitored start.	3 NO	4 PNP
CS MF202M0-P2	Monitoring of 4 guards in AND, 1 bypass selector, 1 emergency stop, automatic or manual monitored start, general enabling signal.	4 PNP	4 PNP
CS MF202M0-P3	Monitoring of 6 guards in AND (2NC contacts), 1 emergency stop, automatic or manual monitored start.	4 PNP	4 PNP
CS MF202M0-P4	Monitoring of 6 guards in AND (1NC+1NO contacts), 1 emergency stop, automatic or manual monitored start.	4 PNP	4 PNP
CS MF202M0-P5	Monitoring of 4 guards with independent outputs, 1 bypass selector, 1 emergency stop, automatic or manual monitored start, general enabling signal.	4 PNP	4 PNP
CS MF202M0-P6	Monitoring of 2 guards and 1 bypass, 1 emergency stop, automatic or manual monitored start, general enabling signal. Three instantaneous outputs and one output timed with a 4-setting selector. Selectable On/Off delay.	4 PNP	4 PNP
CS MF202M0-P7	Monitoring of 4 guards in AND with switches provided with door lock, "D" principle, 1 emergency stop, monitored start. Two instantaneous outputs and two outputs timed by means of a 4-setting selector.	4 PNP	4 PNP
CS MF202M0-P8	Monitoring of 4 guards in AND with switches provided with door lock, "E" principle, 1 emergency stop, monitored start. Two instantaneous outputs and two outputs timed by means of a 4-setting selector.	4 PNP	4 PNP

Legend



Monitoring of gate



Start function



Time selector



Monitoring of gate with lock



Bypass selector

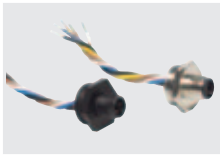


Enabling input



Emergency stop

Items with code on the green background are available in stock

**Male connector M12**

Protection degree IP67
Wall side thread PG 13,5 or M20 x 1,5

Article		Description
M20 x1,5 threading	VF CNM4MM	4 poles M12 connector made of metal
	VF CNM5MM	5 poles M12 connector made of metal
	VF CNM8MM	8 poles M12 connector made of metal
	VF CNP4MM	4 poles M12 connector made of plastic
	VF CNP5MM	5 poles M12 connector made of plastic
	VF CNP8MM	8 poles M12 connector made of plastic
PG 13,5 threading	VF CNM4PM	4 poles M12 connector made of metal
	VF CNM5PM	5 poles M12 connector made of metal
	VF CNM8PM	8 poles M12 connector made of metal
	VF CNP4PM	4 poles M12 connector made of plastic
	VF CNP5PM	5 poles M12 connector made of plastic

**Wiretrap cable gland**

The new design and technology allows this type of cable gland to offer a higher resistance to cable tractions. Every cable gland can also accept a wider diameter cable range.
Protection degree IP67.

10 pcs pack.

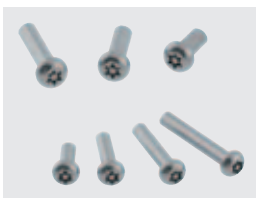
Article		Description
Metric threading	VF PAM25C7N	Cable glands M25x1,5 for 1 Ø 10 to Ø 17 mm cable
	VF PAM20C6N	Cable glands M20x1,5 for 1 Ø 6 to Ø 12 mm cable
	VF PAM20C5N	Cable glands M20x1,5 for 1 Ø 5 to Ø 10 mm cable
	VF PAM20C3N	Cable glands M20x1,5 for 1 Ø 3 to Ø 7 mm cable
	VF PAM16C5N	Cable glands M16x1,5 for 1 Ø 5 to Ø 10 mm cable
	VF PAM16C4N	Cable glands M16x1,5 for 1 Ø 4 to Ø 8 mm cable
	VF PAM16C3N	Cable glands M16x1,5 for 1 Ø 3 to Ø 7 mm cable
	VF PAM16C3N	Cable glands M16x1,5 for 1 Ø 3 to Ø 7 mm cable
PG threading	VF PAP13C6N	Cable glands PG 13,5 for 1 Ø 6 to Ø 12 mm cable
	VF PAP13C5N	Cable glands PG 13,5 for 1 Ø 5 to Ø 10 mm cable
	VF PAP13C3N	Cable glands PG 13,5 for 1 Ø 3 to Ø 7 mm cable
	VF PAP11C5N	Cable glands PG 11 for 1 Ø 5 to Ø 10 mm cable
	VF PAP11C4N	Cable glands PG 11 for 1 Ø 4 to Ø 8 mm cable
VF PAP11C3N	Cable glands PG 11 for 1 Ø 3 to Ø 7 mm cable	

**Chock plug for cable**

Chock plug for multipolar cable, threaded M20x1,5.
Protection degree IP54.

100 pcs pack.

Article	Description
VF PFM20C8N	Chock plug for cable from Ø 8 to Ø 12 mm, threaded M20
VF PFM20C4N	Chock plug for cable from Ø 4 to Ø 8 mm, threaded M20

**Safety screws**

These new screws have tamper-resistant Torx buttonheads. Devices fixed with this kind of screws cannot be removed or tampered by common tools. The safety screws are in stainless steel with different threaded body lengths available: they suit any application where devices are subjected to frequent washing or corroding substances are present.

10 pcs pack.

Article	Description
VF VAM4X15BX-X	M4X10 screw, tamper-resistant Torx T20, AISI 304
VF VAM4X15BX-X	M4X15 screw, tamper-resistant Torx T20, AISI 304
VF VAM4X20BX-X	M4X20 screw, tamper-resistant Torx T20, AISI 304
VF VAM4X25BX-X	M4X25 screw, tamper-resistant Torx T20, AISI 304
VF VAM5X10BX-X	M5X10 screw, tamper-resistant Torx T25, AISI 304
VF VAM5X15BX-X	M5X15 screw, tamper-resistant Torx T25, AISI 304
VF VAM5X20BX-X	M5X20 screw, tamper-resistant Torx T25, AISI 304

Items with code on the green background are available in stock

**Female connector M8 and M12**

- Self-locking vibration-damping ring nut.
- High flexibility wire suitable to be used in movable chains
- Protection degree IP68
- Gold plated contact (resistance < 5 mΩ)
- Connector body in polyurethane

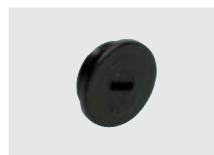
Article	Description
VF CA4PD3K	4 poles straight M8 connector, length 3 m
VF CA4PD5K	4 poles straight M8 connector, length 5 m
VF CA4PD3M	4 poles straight M12 connector, length 3 m
VF CA4PD5M	4 poles straight M12 connector, length 5 m
VF CA4PD0M	4 poles straight M12 connector, length 10 m
VF CA5PD3M	5 poles straight M12 connector, length 3 m
VF CA5PD5M	5 poles straight M12 connector, length 5 m
VF CA5PD0M	5 poles straight M12 connector, length 10 m
VF CA8PD5M	8 poles straight M12 connector, length 5 m
VF CA8PD0M	8 poles straight M12 connector, length 10 m

**Thread adapters**

With these adapters it is possible to offer to the customers the same product with different threaded cable entries, while only having to stock a single product and many kinds of adapters.

100 pcs pack.

Article	Description
VF ADPG13-PG11	Adapter from PG 13,5 to PG 11
VF ADPG13-M20	Adapter from PG 13,5 to M20
VF ADPG13-1/2NPT	Adapter from PG 13,5 to 1/2 NPT
VF ADPG11-1/2NPT	Adapter from PG 11 to 1/2 NPT
VF ADPG11-PG13	Adapter from PG 11 to PG 13,5
VF ADM20-1/2NPT	Adapter from M20 x 1,5 to 1/2 NPT

**Protection plugs**

Protection plug for threaded conduit entries.
Protection degree IP67.

100 pcs pack.

Article	Description
VF PTG13,5	Protection plug PG13,5
VF PTM20	Protection plug M20
VF PTG11	Protection plug PG11
VF PTM16	Protection plug M16x1,5

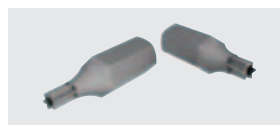
**Light indicators**

A light indicator is used in order to visualize a change of state of the electric contacts inside the switch. It can be installed only in the series FL, FX, FZ or FS by screwing it on one of the conduit entries not used for electric cables.

Protection degree IP67.

5 pcs pack.

Article	Description
VF ILI024GP	Light indicator yellow, 24 Vac/dc
VF ILI024RP	Light indicator red, 24 Vac/dc
VF ILI024VP	Light indicator green, 24 Vac/dc
VF ILX000GP	Light indicator yellow, without lamp
VF ILX000RP	Light indicator red, without lamp
VF ILX000VP	Light indicator green, without lamp

**Safety screws bits**

Safety screws bits, ¼" drive.

Article	Description
VF VAIT1T20	Bits for tamper-resistant Torx T20, M4 screw
VF VAIT1T25	Bits for tamper-resistant Torx T25, M5 screw

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LIFT
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