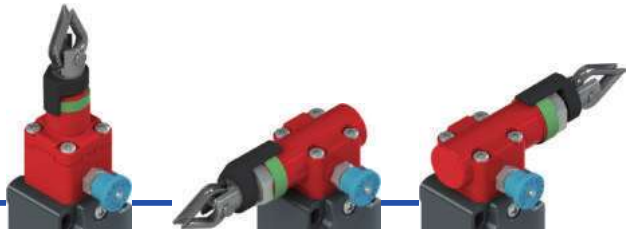
Arret d'Urgence à Câble
BASIC LINE 603x



6035 | 6034 AUG | 6035 AUD

STD | FL

CONTACT BLOCKS

9 2NC slow action | **18** 1NO+1NC slow action | **20** 1NO+2NC slow action | **21** 3NC slow action

22 2NO+1NC slow action | **33** 1NO+1NC slow action | **34** 2NC slow action

SIGNALLING LIGHT

Red | Yellow

CONDUIT ENTRIES

Threaded conduit entry PG13.5 (standard) | With cable gland | With M12 plastic connector | With M12 metal connector

Product options

Sold separately as accessory

article | options | options

6034-E7GM2K50T6

Ambient temperature	
	-25°C … +80°C (standard)
T6	-40°C … +80°C

Pre-installed cable glands or connectors	
	no cable gland or connector (standard)
K23	cable gland for cables Ø 6 … 12 mm
…	……………………
K50	M12 metal connector, 5-pole
…	……………………

For the complete list of possible combinations please contact our technical department.

Contact blocks	
69	2NC, slow action
60	1NO+1NC, slow action
61	1NO+2NC, slow action
62	3NC, slow action
63	2NO+1NC, slow action
64	1NO+1NC, slow action
65	2NC, slow action

Actuating head	
35	longitudinal head
34AUG	left transversal head
34AUD	right transversal head

Threaded conduit entry	
M2	M20x1.5 (standard)
	PG 13.5

Actuating force	
	standard
E7	initial 20 N...final 40 N (only head 78)
E9	initial 13 N...final 75 N (only head 83-84)

Contact type	
	silver contacts (standard)
G	silver contacts with 1 µm gold coating
G1	Silver contacts, 2.5 µm gold coating (not for contact blocks 20, 21, 22, 33, 34)

Arret d'urgence à câble BASIC LINE 603x

Main features

- Metal or plastic housing, from one to three conduit entries
- Protection degree IP67
- In compliance with EN ISO 13850
- 7 contact blocks available
- Versions with vertical or horizontal actuation
- Versions with assembled M12 connector
- Versions with gold-plated silver contacts

Quality marks:

IMQ approval: EG605
UL approval: E131787
CCC approval: 2020970305002282
EAC approval: RU C-IT.УТ03.B.00035/19

Technical data

Housing

FP series housing made of glass fibre reinforced technopolymer, self-extinguishing, shock-proof and with double insulation: ⧈
FD, FL and FC series: metal housing, baked powder coating.

FD, FP, FC series: one threaded conduit entry:	M20x1.5 (standard)
FL series: three threaded conduit entries:	M20x1.5 (standard)
Protection degree:	IP67 acc. to EN 60529 with cable gland of equal or higher protection degree

General data

SIL (SIL CL) up to:	SIL 3 acc. to EN 62061
Performance Level (PL) up to:	PL e acc. to EN ISO 13849-1
Safety parameters:	
B_{10D}:	2,000,000 for NC contacts
Mission time:	20 years
Ambient temperature:	-25°C … +80°C (standard) -40°C … +80°C (T6 option)
Max. actuation frequency:	1 cycle / 6 s
Mechanical endurance:	1 million operating cycles
Max. actuation speed:	0.5 m/s
Min. actuation speed:	1 mm/s
Tightening torques for installation:	see page 379
Wire cross-sections and wire stripping lengths:	see page 399

In compliance with standards:
IEC 60947-5-1, IEC 60947-5-5, IEC 60947-1, IEC 60204-1, EN ISO 14119, EN ISO 12100, IEC 60529, EN ISO 13850, EN 418, EN IEC 63000, UL 508, CSA 22.2 No.14.
Approvals:
EN 60947-5-1, UL 508, CSA 22.2 No.14 , GB/T14048.5

Compliance with the requirements of:
Machinery Directive 2006/42/EC, 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.

Electrical data

without connector

Thermal current (I_{th}):	10 A
Rated insulation voltage (U_i):	500 Vac 600 Vdc 400 Vac 500 Vdc (contact blocks 20, 21, 22, 33, 34)
Rated impulse withstand voltage (U_{imp}):	6 kV 4 kV (contact blocks 20, 21, 22, 33, 34)
Conditional short circuit current:	1000 A acc. to EN 60947-5-1
Protection against short circuits:	type aM fuse 10 A 500 V
Pollution degree:	3

Utilization category

Alternating current: AC15 (50÷60 Hz)

U_e (V)	250	400	500
I_e (A)	6	4	1

Direct current: DC13

U_e (V)	24	125	250
I_e (A)	3	0.55	0.3

with M12 connector, 4 and 5-pole

Thermal current (I_{th}):	4 A
Rated insulation voltage (U_i):	250 Vac 300 Vdc
Protection against short circuits:	type gG fuse 4 A 500 V
Pollution degree:	3

Utilization category

Alternating current: AC15 (50÷60 Hz)

U_e (V)	24	120	250
I_e (A)	4	4	4

Direct current: DC13

U_e (V)	24	125	250
I_e (A)	3	0.55	0.3

with M12 connector, 8-pole

Thermal current (I_{th}):	2 A
Rated insulation voltage (U_i):	30 Vac 36 Vdc
Protection against short circuits:	type gG fuse 2 A 500 V
Pollution degree:	3

Utilization category

Alternating current: AC15 (50÷60 Hz)

U_e (V)	24
I_e (A)	2

Direct current: DC13

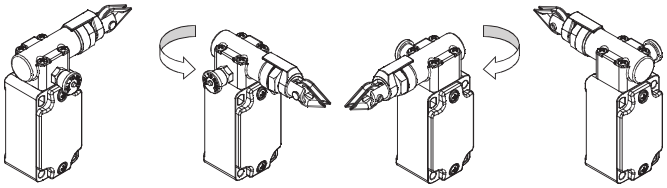
U_e (V)	24
I_e (A)	2

Arret d'urgence à câble BASIC LINE 603x

Description

These rope-operated safety switches are installed on machines or conveyor belts and allow the machine to be brought to an emergency stop from any point and with any pull on the rope. This means significant cost savings for medium and large machines, since multiple emergency-stop buttons can be replaced with a single switch. They are equipped with a self-control function that constantly checks the correct function and signals a possible loosening or breaking of the rope through the opening of the contacts. These safety switches keep the contacts open after activation until the reset is performed, even if the rope is released.

Head with variable orientation



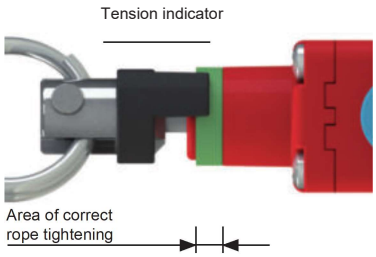
For all switches, the head can be adjusted in 90° steps after removing the four fastening screws.

Extended temperature range

-40°C

These devices are also available in a special version suitable for an ambient operating temperature range from -40ºC up to +80°C. They can therefore be used for applications in cold stores, sterilisers and other equipment with low temperature environments. The special materials used to produce these versions retain their characteristics even under these conditions, thereby expanding the installation possibilities.

Indicator for rope adjustment



All switches are provided with a green ring that shows the area of the correct tightening of the rope. The installer has only to tighten the rope until the black indicator will be in the middle of the green area. With this setting, the switch can be reset by pulling the blue knob to close the electrical safety contacts.

If the tension (or loosening) on the rope is so high that the black indicator exits the green area, the electrical safety contacts will open and the reset device will trigger.

Laser engraving

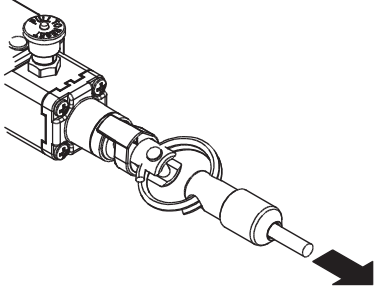
All devices are marked using a dedicated indelible laser system. These engravings are therefore suitable for extreme environments too. Thanks to this system that does not use labels, the loss of plate data is prevented and a greater resistance of the marking is achieved over time.

Protection degree IP67

IP67

These devices are designed to be used in the toughest environmental conditions and they pass the IP67 immersion test acc. to EN 60529. They can therefore be used in all environments where maximum protection degree of the housing is required.

Reduced actuating force



These switches can be supplied with reduced hardness internal springs on request. The force required to actuate the switch can thereby be reduced without changing the actuating path of the electrical contacts. This is particularly advantageous for smaller spans, but must, however, always make use of rope pulleys.

Indicator for the state of the reset

If the tension indicator is in the green area, the electrical safety contacts can be closed by pulling the blue knob. The reset status can be identified quickly by the green ring under the blue knob.

Features approved by IMQ

Rated insulation voltage (Ui):	500 Vac 400 Vac (for contact blocks 2, 11, 12, 20, 21, 22, 28, 29, 30, 33, 34, 37)
Conventional free air thermal current (Ith):	10 A
Protection against short circuits:	type aM fuse 10 A 500 V
Rated impulse withstand voltage (U_{imp}):	6 kV 4 kV (for contact blocks 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 (Ue):	400 Vac (50 Hz)
Operating current (Ie):	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.

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

Use 60 or 75°C copper (Cu) conductor and wire size range 12, 14 AWG, stranded or solid.

The terminal tightening torque of 7.1 lb in (0.8 Nm).

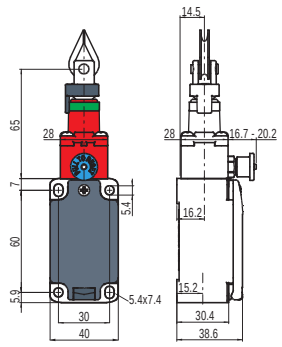
For FP series: the hub is to be connected to the conduit before the hub is connected to the enclosure.

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

Arret d'urgence à câble BASIC LINE 603x

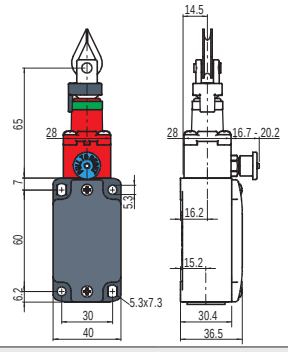
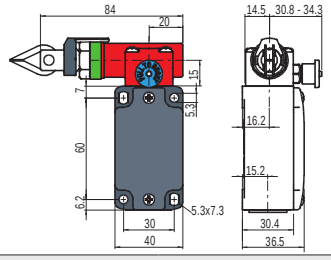
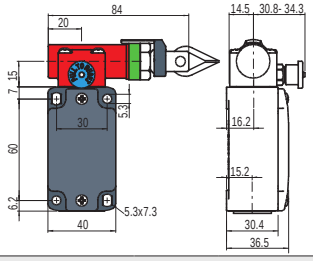
Contact type:
L = slow action

Technopolymer housing

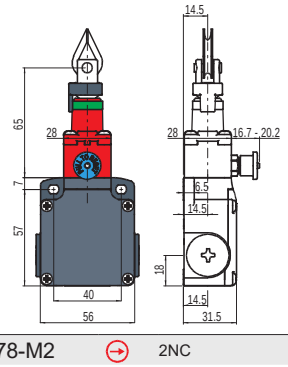
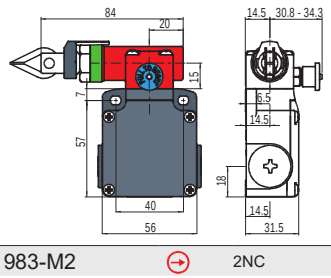
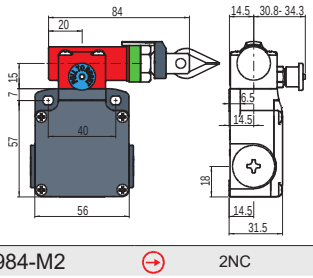


Contact blocks			
9	L	FP 978-M2	2NC
18	L	FP 1878-M2	1NO+1NC
20	L	FP 2078-M2	1NO+2NC
21	L	FP 2178-M2	3NC
22	L	FP 2278-M2	2NO+1NC
33	L	FP 3378-M2	1NO+1NC
34	L	FP 3478-M2	2NC
Actuating force		Initial 63 N … final 83 N (90 N⊖)	
Travel diagrams		Page 214 - group 1	

Contact type:
L = slow action

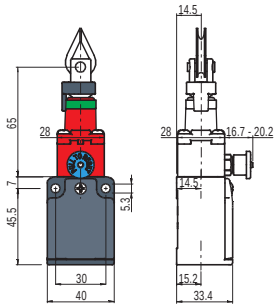
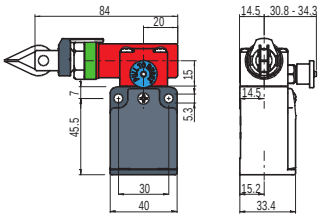
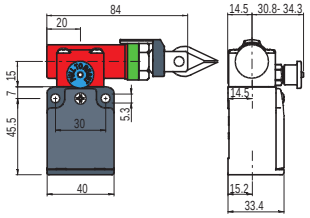
	Metal housing	Metal housing	Metal housing
			
Contact blocks			
9 L	FD 978-M2 2NC	FD 983-M2 2NC	FD 984-M2 2NC
18 L	FD 1878-M2 1NO+1NC	FD 1883-M2 1NO+1NC	FD 1884-M2 1NO+1NC
20 L	FD 2078-M2 1NO+2NC	FD 2083-M2 1NO+2NC	FD 2084-M2 1NO+2NC
21 L	FD 2178-M2 3NC	FD 2183-M2 3NC	FD 2184-M2 3NC
22 L	FD 2278-M2 2NO+1NC	FD 2283-M2 2NO+1NC	FD 2284-M2 2NO+1NC
33 L	FD 3378-M2 1NO+1NC	FD 3383-M2 1NO+1NC	FD 3384-M2 1NO+1NC
34 L	FD 3478-M2 2NC	FD 3483-M2 2NC	FD 3484-M2 2NC
Actuating force	Initial 63 N … final 83 N (90 N⊖)	Initial 147 N … final 235 N (250 N⊖)	Initial 147 N … final 235 N (250 N⊖)
Travel diagrams	Page 214 - group 1	Page 214 - group 2	Page 214 - group 2

Contact type:
L = slow action

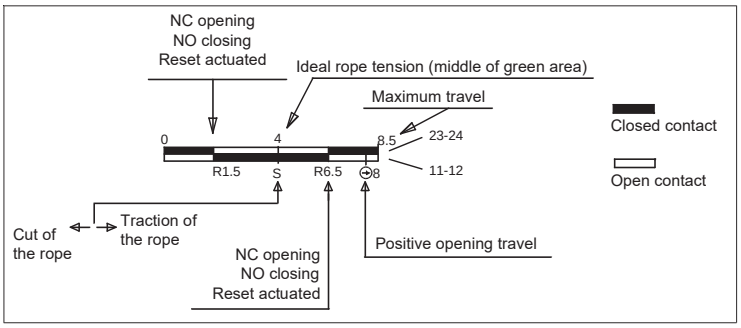
	Metal housing	Metal housing	Metal housing
			
Contact blocks			
9 L	FL 978-M2 2NC	FL 983-M2 2NC	FL 984-M2 2NC
18 L	FL 1878-M2 1NO+1NC	FL 1883-M2 1NO+1NC	FL 1884-M2 1NO+1NC
20 L	FL 2078-M2 1NO+2NC	FL 2083-M2 1NO+2NC	FL 2084-M2 1NO+2NC
21 L	FL 2178-M2 3NC	FL 2183-M2 3NC	FL 2184-M2 3NC
22 L	FL 2278-M2 2NO+1NC	FL 2283-M2 2NO+1NC	FL 2284-M2 2NO+1NC
33 L	FL 3378-M2 1NO+1NC	FL 3383-M2 1NO+1NC	FL 3384-M2 1NO+1NC
34 L	FL 3478-M2 2NC	FL 3483-M2 2NC	FL 3484-M2 2NC
Actuating force	Initial 63 N … final 83 N (90 N⊖)	Initial 147 N … final 235 N (250 N⊖)	Initial 147 N … final 235 N (250 N⊖)
Travel diagrams	Page 214 - group 1	Page 214 - group 2	Page 214 - group 2

All values in the drawings are in mm

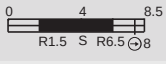
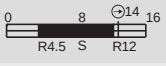
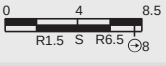
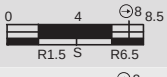
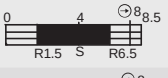
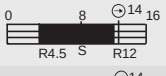
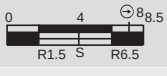
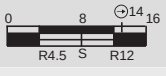
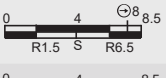
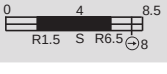
Arret d'urgence à câble BASIC LINE 603x

Contact type: L = slow action	Contact blocks	Metal housing	Metal housing	Metal housing
				
33 L		FC 3378-M2 ⊖ 1NO+1NC	FC 3383-M2 ⊖ 1NO+1NC	FC 3384-M2 ⊖ 1NO+1NC
34 L		FC 3478-M2 ⊖ 2NC	FC 3483-M2 ⊖ 2NC	FC 3484-M2 ⊖ 2NC
Actuating force		Initial 63 N … final 83 N (90 N⊖)	Initial 147 N … final 235 N (250 N⊖)	Initial 147 N … final 235 N (250 N⊖)
Travel diagrams		Page 214 - group 1	Page 214 - group 2	Page 214 - group 2

How to read travel diagrams



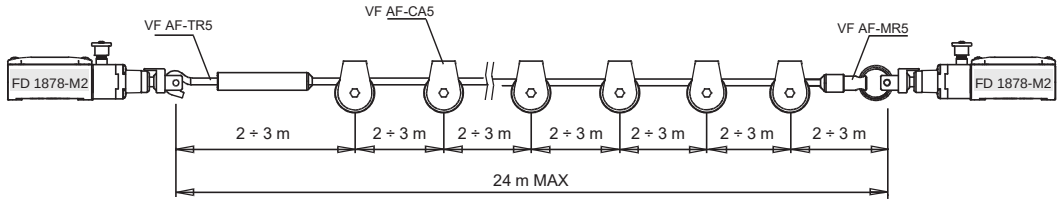
Travel diagrams table

Contact blocks		Group 1	Group 2
9 2NC			
18 1NO+1NC			
20 1NO+2NC			
21 3NC			
22 2NO+1NC			
33 1NC+1NO			
34 2NC			

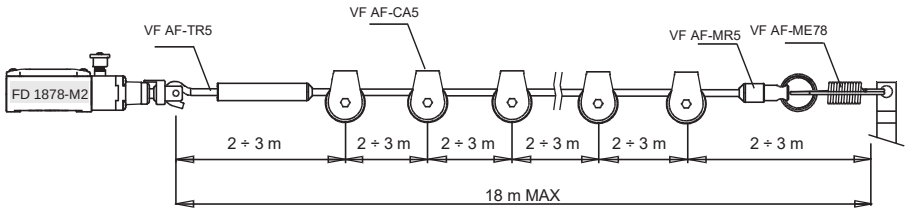
IMPORTANT:
In **safety applications**, actuate the switch **at least up to the positive opening travel** shown in the travel diagrams with symbol ⊖. Actuate the switch **at least with the positive opening force**, reported in brackets below each article, next to the actuating force value.

Application examples and max. rope length for switches with longitudinal head

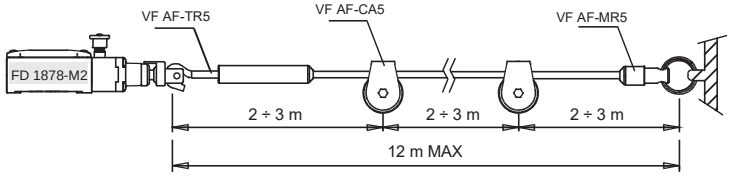
Example A



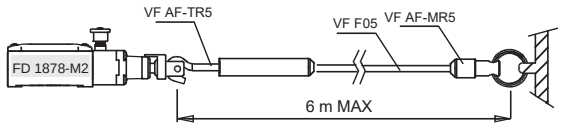
Example B



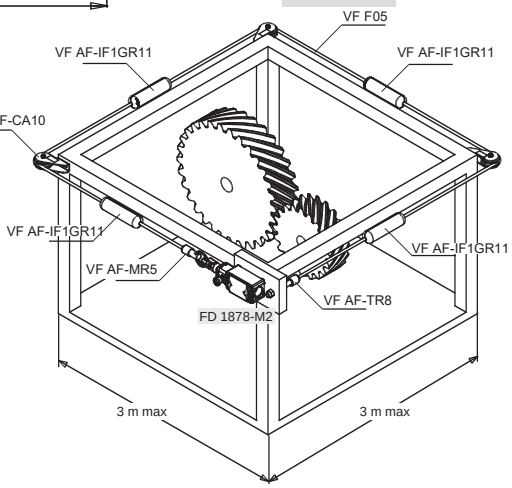
Example C



Example D

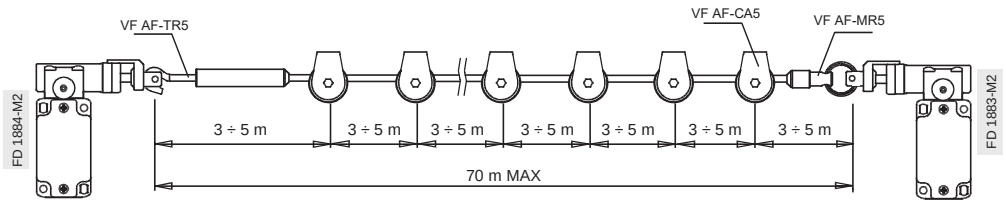


Example E

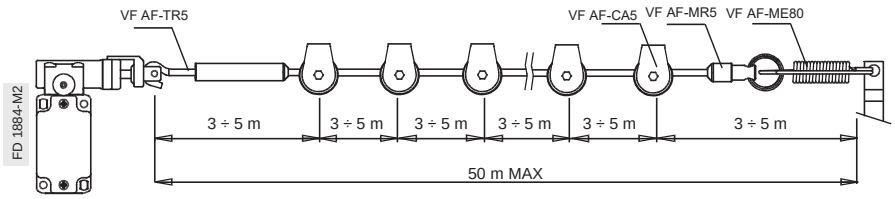


Application examples and max. rope length for switches with transversal head

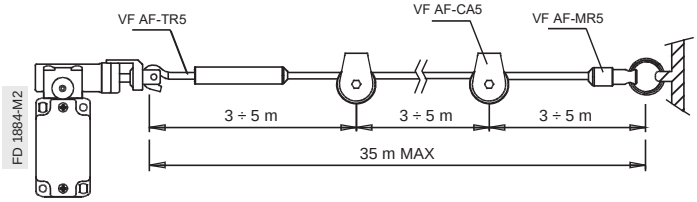
Example F



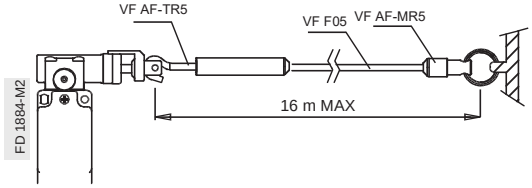
Example G



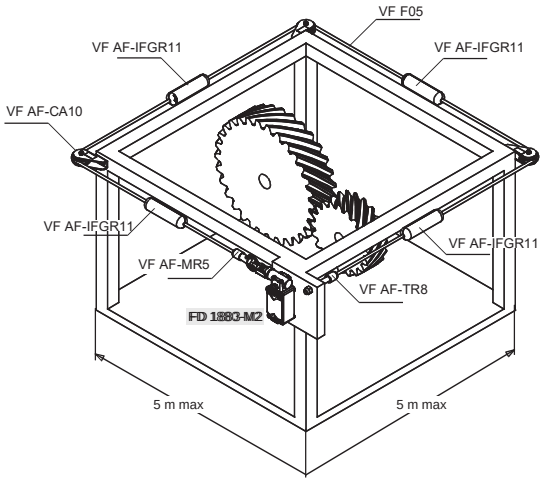
Example H



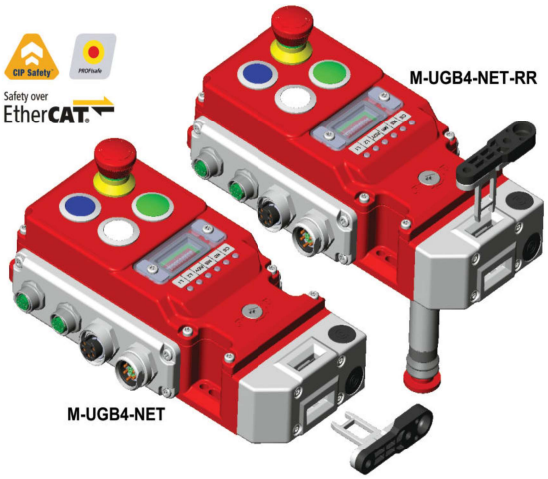
Example I



Example J



PRODUITS COMPLÉMENTAIRES



SERVICE SUR SITE

Prestation de services dans le domaine du pesage et sécurité : Contrôle , montage , étalonnage , dépannage ainsi que l'exécution de contrat de maintenance périodique. Nos techniciens ont acquis une grande expérience dans le domaine du pesage dynamique avec le respect des exigences réglementaires

Service sur site :
Vérification, Essais, Calibration

SAS TELEMETRIX
ZA PAVY II, 7 Rue du Bois Malhais
78640 Saint-Germain-De-La-Grange CEDEX France

Siège
Tél. (+33) 0972 11 00 03
Fax. (+33) 0972 11 00 57
contact@telemetrix.fr
export@telemetrix.fr

Agence SUD
(+33) 04 84 51 03 00

Export
Europe, Afrique, Asie...

www.telemetrix.fr

TeleMetrix

Votre interlocuteur