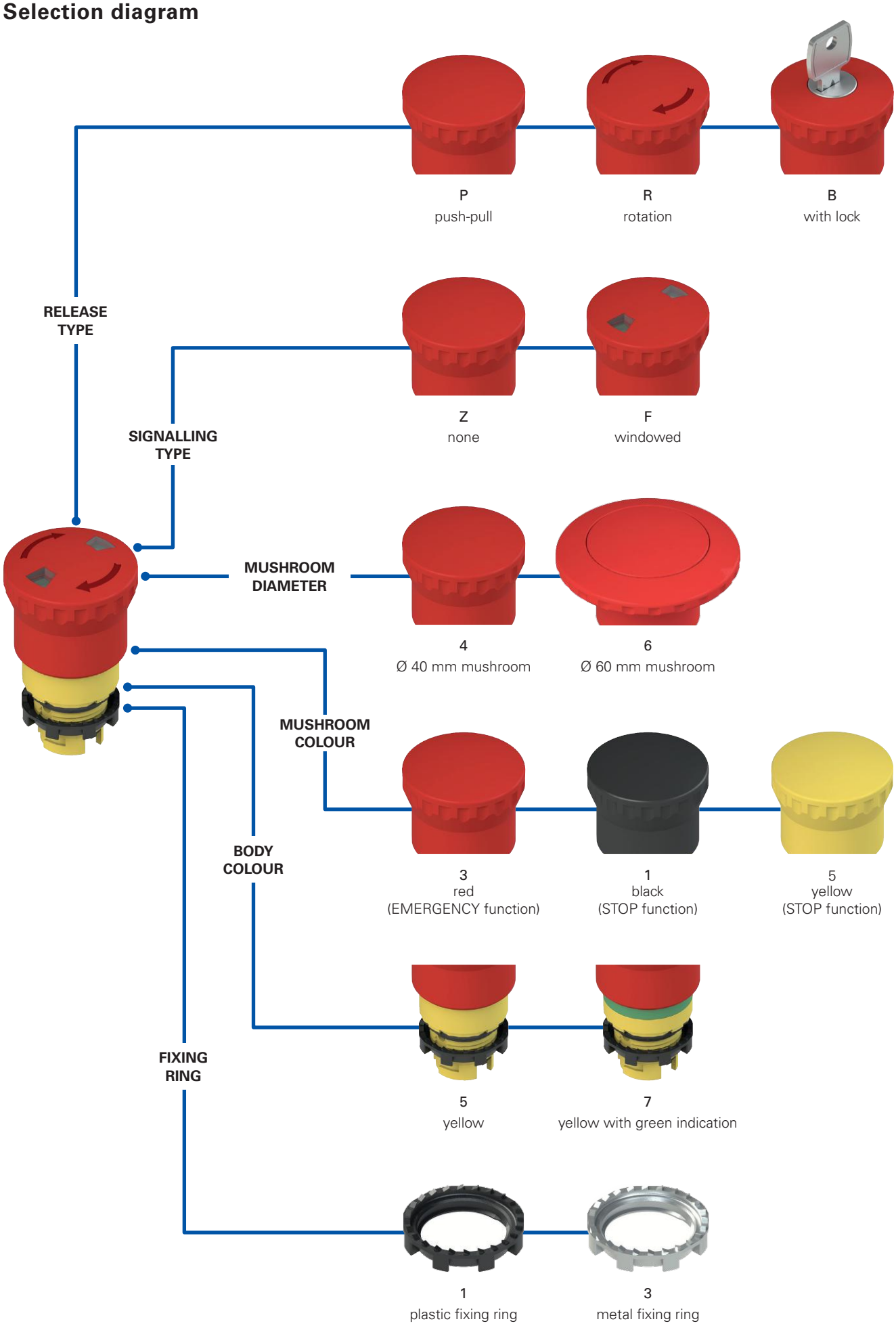
Selection diagram



Code structure

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

article: E2 1PERZ4531 — options: -T6

Fixing ring and shaped ring	
1	plastic fixing ring (standard)
2	plastic fixing ring and shaped ring
3	metal fixing ring
4	metal fixing ring and shaped ring

Release type	
P	push-pull
R	rotary release
B	key release with key 333 (standard) (1)
C	key release with key 335 (1)
...	...
M	key release with key 455 (1)

Other key codes on request.
(1) Not available with windowed signalling

Signalling type	
Z	none
F	windowed

Mushroom diameter	
4	Ø 40 mm mushroom
6	Ø 60 mm mushroom

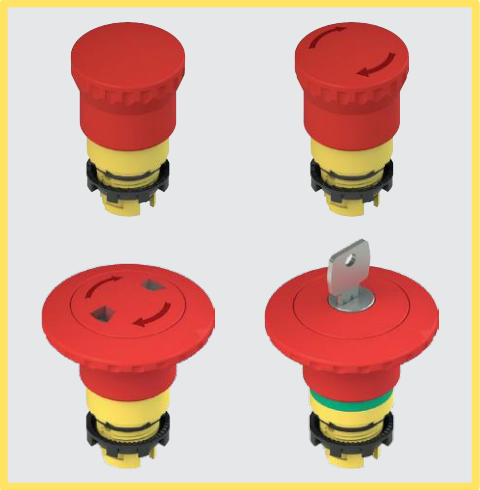
Body colour	
5	yellow (standard)
7	yellow with green indication

Actuator type	
1	for 3-slot base
4	for 4-slot base

Mushroom button colour	
1	black (1)
3	red (standard)
5	yellow (1) (2)

(1) Not available with windowed signalling
(2) Available with a rotary release or push-pull

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



Main features
- Protection degrees IP67 and IP69K
- 3 different release modes
- Windowed version
- -40°C versions

Quality marks:

IMQ approval:
- Low Voltage Directive: CA02.04805
- Machinery Directive: CA02.07001

UL approval: E131787
EAC approval: RU Д-IT.PA07.B.37848/24

Features approved by UL

For Use on a Flat Surface of a Type 1, 4X, 12 and 13
Tightening torque 2.0 Nm

Technical data

General data

Protection degree:	IP67 acc. to EN 60529 IP69K acc. to ISO 20653
Ambient temperature:	-25°C … +80°C (standard) -40°C … +80°C (T6 option)
Safety parameter B_{10D}:	600,000
Mechanical endurance:	300,000 operating cycles
Max. actuation frequency:	3600 operating cycles/hour
Actuation travel:	4 mm (NO contact), 4 mm (NC contact)
Actuating force:	30 N
Actuating force at limit of travel:	Push-pull 18.5 N (without contacts) Rotary release, 35 N (without contacts)
Maximum travel:	9 mm
Tightening torque of the fixing ring:	2.5 … 3 Nm
Utilization requirements:	See page 179

In compliance with standards:
IEC 60947-1, IEC 60947-5-1, IEC 60947-5-5, IEC 60204-1, EN 60947-1, EN 60947-5-1, EN 60947-5-5, EN 60204-1, EN IEC 63000, EN ISO 13850, UL 508, CSA C22.2 No. 14.

⚠ **Installation for safety applications:**
Use only contact blocks marked with the symbol ⊖. The safety circuit must always be connected to **NC contacts** (normally closed contacts: .1-.2).

Compliance with the requirements of:
Machinery Directive 2006/42/EC, RoHS Directive 2011/65/EU.
Positive contact opening in conformity with standards:
IEC 60947-5-1, EN 60947-5-1.

Features approved by IMQ

Protection degree:	IP67, IP69K
Compatible NC contact blocks:	E2 CP01G2V●, E2 CF01G2V●, E2 CP01K2V●, E2 CF01K2V●, E2 CP01G2S●, E2 CP01K2S●, E2 CP01G2M●, E2 CF01G2M●, E2 CP01K2M●, E2 CF01K2M●, E2 CP01S2V●, E2 CF01S2V●, E2 CP11G2V●, E2 CF11G2V●, E2 CP02G2V●, E2 CF02G2V●

In compliance with standards: EN 60947-1:2007 + A1:2011 + A2:2014; EN 60947-5-1:2017 + AC:2020-05; EN 60947-5-5:1997 + A1:2005 + A11:2013 + A2:2017.

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

General data

60 mm mushroom-head button



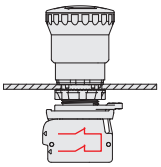
Emergency stop buttons from the EROUND range are also available with a 60 mm diameter collar. Like the standard (40 mm) versions, the 60 mm buttons are available in standard or windowed versions, with push-pull, rotary or key release. The 60 mm mushroom-head buttons are compatible with EA, ES, and EL AN series housings.

Luminous disc



The luminous disc can also be used in all situations when it is necessary to highlight the emergency stop button on the machine compared to the other devices, or where there are more mushrooms and it is necessary to know which one has been pressed. Provided with high luminosity, it is available in the versions with continuous or blinking light. Protected with protection degree IP67, it can be customised with writings or symbols upon request. For details see page 171.

Self-monitored contact



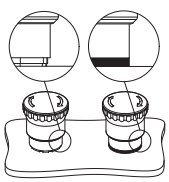
Specially designed for emergency mushroom buttons, the self-monitored contact makes it possible to reach a high level of self-control. Possible anomalies, such as the detachment from the emergency mushroom button, are immediately signalled by the opening of the safety circuit. This makes immediately evident failures that will be otherwise difficult to detect. Indeed, the detachment of a normal NC contact from the mushroom allows the machine to continue to function and makes the emergency stop unusable. For details see page 93.

Protection degrees IP67 and IP69K

IP69K
IP67

These devices are designed to be used under the toughest environmental conditions, and they pass the IP67 immersion test acc. to EN 60529. They can therefore be used in all environments where the maximum degree of protection is required for the housing. Due to their special design, these devices are suitable for use in equipment subjected to cleaning with high pressure hot water jets. These devices meet the IP69K test requirements according to ISO 20653 (water jets with 100 bar and 80°C).

Shaped ring



The shaped ring can be used when no label holder or other devices are applied; it prevents dirt and other residues from settling between the button and the panel or housing.
This turns out to be particularly useful in sectors where high standards of cleanness and hygiene are required.

Extended temperature range

-40°C

These devices are also available in a special version suitable for an ambient operating temperature range from -40°C 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.

Selection table for emergency stop buttons



Body and actuator colour		Push-pull	Rotary release	Windowed push-pull	Windowed rotary release	Key release Key coding 333
	Red mushroom Yellow body	E2 1PEPZ4531 (*)	E2 1PERZ4531 (*)	E2 1PEPF4531 (*)	E2 1PERF4531 (*)	E2 1PEBZ4531 (*)
	Red mushroom Yellow body with green indication	E2 1PEPZ4731 (*)	E2 1PERZ4731 (*)	E2 1PEPF4731 (*)	E2 1PERF4731 (*)	E2 1PEBZ4731 (*)
	Black mushroom Yellow body	E2 1PEPZ4511	E2 1PERZ4511	-	-	E2 1PEBZ4511
	Yellow mushroom Yellow body	E2 1PEPZ4551	E2 1PERZ4551	-	-	-

Attention! For safety applications, only use red mushrooms, black and yellow mushrooms can only be used for stop functions.
(*) To order the emergency stop button with a 60 mm mushroom head, modify the code as per the example: **E2 •PE••4••• → E2 •PE••6•••**

Complete units with emergency stop buttons



Body and actuator colour		Contacts pos. 2	Contacts pos. 3	Contacts pos. 1	Push-pull	Rotary release	Key release Key coding 333
	Red mushroom Yellow body	-	1NC ⊖	-	**E2 AC-DXBC1005** E2 1PEPZ4531 + E2 1BAC11 + E2 CP01G2V1	**E2 AC-DXBC1006** E2 1PERZ4531 + E2 1BAC11 + E2 CP01G2V1	**E2 AC-DXBC1007** E2 1PEBZ4531 + E2 1BAC11 + E2 CP01G2V1
	Red mushroom Yellow body	-	1NC ⊖ SELF-MONITORED	-	**E2 AC-DXBC1022** E2 1PEPZ4531 + E2 1BAC11 + E2 CP01S2V1	**E2 AC-DXBC1023** E2 1PERZ4531 + E2 1BAC11 + E2 CP01S2V1	**E2 AC-DXBC1024** E2 1PEBZ4531 + E2 1BAC11 + E2 CP01S2V1
	Red mushroom Yellow body	1NC ⊖	-	1NC ⊖	**E2 AC-DXBC1010** E2 1PEPZ4531 + E2 1BAC11 + E2 CP01G2V1 + E2 CP01G2V1	**E2 AC-DXBC1002** E2 1PERZ4531 + E2 1BAC11 + E2 CP01G2V1 + E2 CP01G2V1	**E2 AC-DXBC1011** E2 1PEBZ4531 + E2 1BAC11 + E2 CP01G2V1 + E2 CP01G2V1
	Red mushroom Yellow body	1NC ⊖	1NC ⊖	1NO	**E2 AC-DXBC1012** E2 1PEPZ4531 + E2 1BAC11 + E2 CP01G2V1 + E2 CP01G2V1 + E2 CP10G2V1	**E2 AC-DXBC1000** E2 1PERZ4531 + E2 1BAC11 + E2 CP01G2V1+ E2 CP01G2V1 + E2 CP10G2V1	**E2 AC-DXBC1013** E2 1PEBZ4531 + E2 1BAC11 + E2 CP01G2V1+ E2 CP01G2V1 + E2 CP10G2V1

Other combinations on request.
➔ For contact block features see page 87.

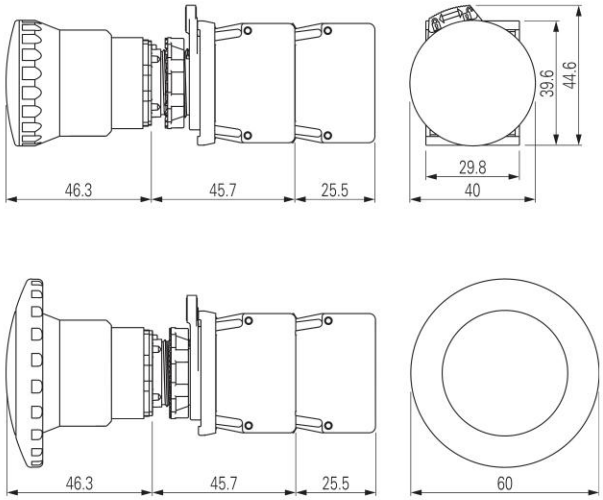
Locking keys

Article	Description
VE KE1A00-PY333	Locking key
	Order only if further keys besides the supplied one are needed. Key with key coding 333. Other codes on request.

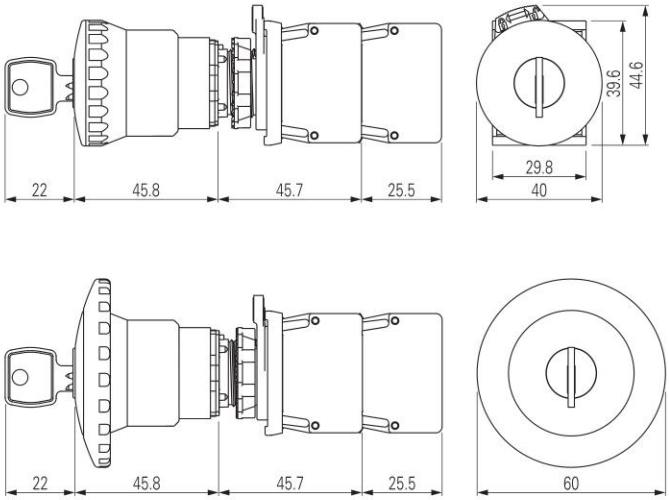
Dimensional drawings

All values in the drawings are in mm

Emergency stop button



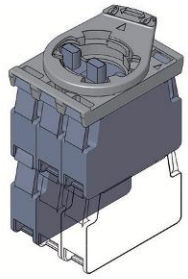
Emergency stop button with key release



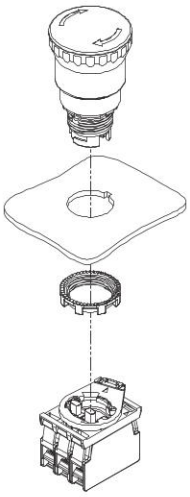
➔ The 2D and 3D files are available at **www.pizzato.com**

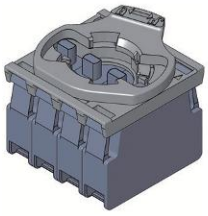
Maximum number of contact blocks

3-slot mounting adapter	4-slot mounting adapter
Emergency stop buttons E2 •PE•••••1	Emergency stop buttons E2 •PE•••••4

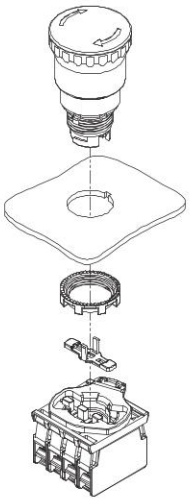


maximum number:
4 contact blocks
2 levels





maximum number:
4 contact blocks
1 level



The mounting of the actuator for 4-slot base must be carried out after fixing the button.


Contact block


Alternative position contact block

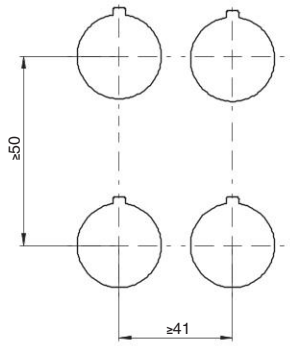
Actuator for 4-slot base

Packs of **10 pcs.**



Article	Description
VE AS1218	Closed long actuator for 4-slot mounting adapter. It must be installed after fixing the button to the wall. For E2 •PE•••••4 buttons.

Minimum distances for installation



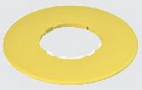
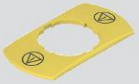
Accessories

➔ More ACCESSORIES on page 175

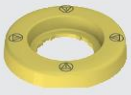
Labels with shaped hole

Packs of **5 pcs.**

Suitable for devices E2 •PE••••••.
In compliance with EN ISO 13850.
Can be turned in 90° steps.
Inscriptions in other languages available on request.
It does not alter the IP67 / IP69K protection degree of the associated device.

Article		Description
	VE TF32A5700	Label with shaped hole, Ø 60 mm yellow disc, no inscription, acc. to ISO 13850
	VE TF32D5700	Label with shaped hole, Ø 90 mm yellow disc, no inscription, acc. to ISO 13850
	VE TF32A5113	Label with shaped hole, Ø 60 mm yellow disc, inscription: ⏚, acc. to ISO 13850
	VE TF32D5113	Label with shaped hole, Ø 90 mm yellow disc, inscription: ⏚, acc. to ISO 13850
	VE TF32A5101	Label with shaped hole, Ø 60 mm yellow disc, inscription: STOP ⏚ EMERGENZA ⏚
	VE TF32D5101	Label with shaped hole, Ø 90 mm yellow disc, inscription: STOP ⏚ EMERGENZA ⏚
	VE TF32A5102	Label with shaped hole, Ø 60 mm yellow disc, inscription: EMERGENCY ⏚ STOP ⏚
	VE TF32D5102	Label with shaped hole, Ø 90 mm yellow disc, inscription: EMERGENCY ⏚ STOP ⏚
	VE TF32A5109	Label with shaped hole, Ø 60 mm yellow disc, inscription: STOP ⏚ STOP ⏚ STOP ⏚ STOP ⏚
	VE TF32D5109	Label with shaped hole, Ø 90 mm yellow disc, inscription: STOP ⏚ STOP ⏚ STOP ⏚ STOP ⏚
	VE TF32A5120	Label with shaped hole, Ø 60 mm yellow disc, inscription: STOP EMERGENZA ⏚ ARRET D'URGENCE ⏚ NOT AUS ⏚ EMERGENCY STOP ⏚
	VE TF32D5120	Label with shaped hole, Ø 90 mm yellow disc, inscription: STOP EMERGENZA ⏚ ARRET D'URGENCE ⏚ NOT AUS ⏚ EMERGENCY STOP ⏚
	VE TF32G5700	Label with shaped hole, yellow, 30x60 mm rectangular, no engraving, acc. to ISO 13850
	VE TF32G5121	Label with shaped hole, yellow, 30x60 mm rectangular, engraving: ⏚ ⏚, acc. to ISO 13850
	VE TF32G5103	Label with shaped hole, yellow, 30x60 mm rectangular, engraving: STOP ⏚
	VE TF32G5110	Label with shaped hole, yellow, 30x60 mm rectangular, engraving: STOP ⏚

Luminous disc



Yellow luminous disc, Ø 60 mm.
Data at page 171.