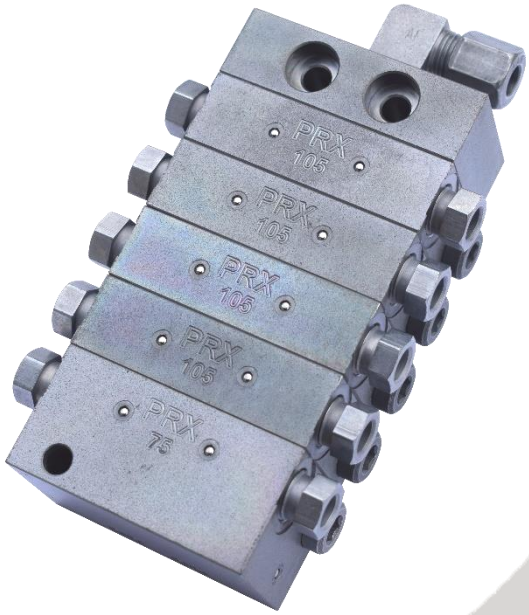
TriboTec



PRX

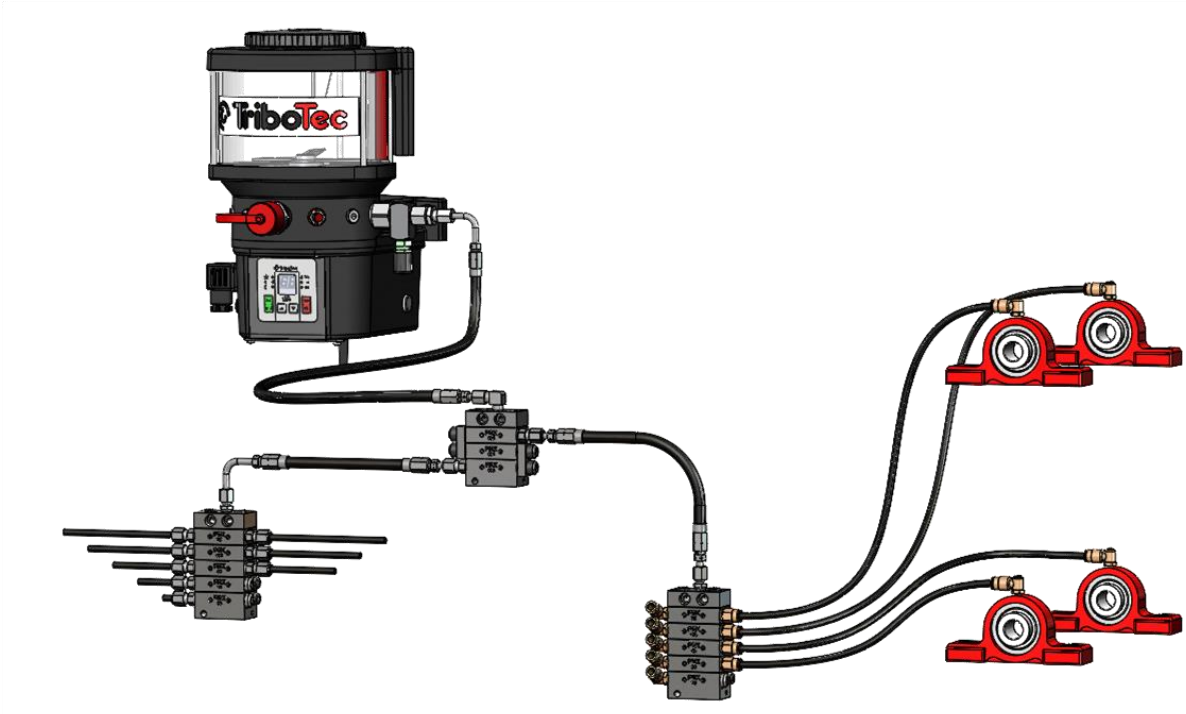
PROGRESSIVE DISTRIBUTOR

PURPOSE

PRX series progressive distributor are the lubrication element of central lubrication systems, which are subsequently referred to as progressive distributor circuits. They are also recommended for use in lubrication circuits with a larger range, i.e. also for circuits with several tens lubricated points.
PRX progressive distributors are section distributors with a selectable nominal dose for each section from 25 to 105 mm^3 /stroke. The maximum working pressure is 300 bar.

APLICATION

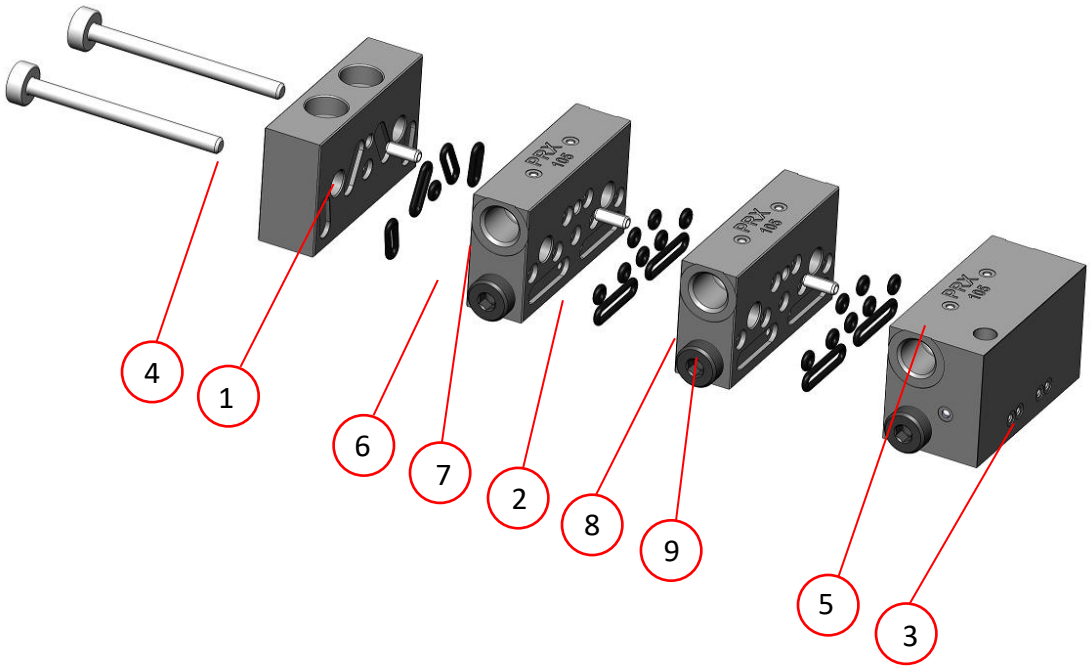
Lubrication circuits with progressive distributors are usually applied for permanent, regular lubrication of various machines, machine technologies and equipment. They are also applied for lubrication of mobile machines and equipment, e.g. for construction, agricultural, municipal and transport equipment.



Tribotec progressive lubrication system
with PMP lubricator and PRX progressive distributors.

DESCRIPTION

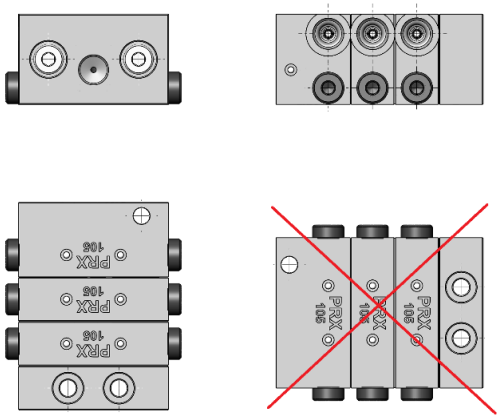
The PRX progressive distributor is a unit-construction section consisting of an inlet section and 3 to 12 optional working sections. The last section is always closing. The first section (initial element), the working sections (middle elements) and the closing section (end element) form a complete distributor. Each element (expect for the initial elements) has a maximum of 2 outlets running horizontally on the side of the element. The individual outlets can be connected to each other to achieve the desired delivery quantity from a particular outlet. Opposite outlets of one element can be combined into one outlet (internal element arrangement) to achieve double the delivery quantity. The adjacent outlets of individual element can be connected by means of external connecting bridges to achieve the sum of the nominal doses of the connected outlets. A numerical value is indicated on each element to determine the amount of lubricant to be delivered from the outlet. The progressive distributor with element size PRX 75 and 105 can be equipped with an optical (signal pin) or electrical (non-contact switch 10 - 65 V DC) indication of operation. End element could be equipped with lubrication nipple according to DIN 71412 for extra lubrication, example: end element PRX 105 nip.



Progressive distributor PRX

1. initial element; 2. middle element; 3. end element; 4. tie rod;
5. pin; 6. o-ring 5,8x1,5; 7. o-ring 7,5x1,5; 8. o-ring 2,5x1,5; 9. o-ring 11,5x1,5

The PRX progressive distributor is mounted to a flat surface with the piston in horizontal position.

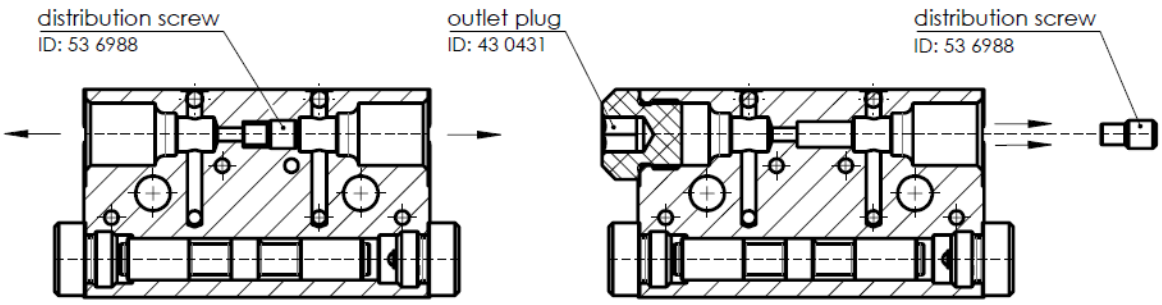


Mounting position

OPERATION

By feeding pressure lubricant into the inlet of the progressive distributor, the individual pistons in the elements are gradually moved to their stop positions and at the same time the lubricant under the pistons is pushed out of the outlets. This function is repeated as long as lubricant is supplied to the progressive distributor. A progressive distributor equipped with a run signal has a pin on the corresponding piston which moves with the piston and visualizes the operation of the distributor (visual signalling) or performs non-contact (inductive) switching of the electrical control circuit. When designing the lubrication circuit, it is recommended that the pins of one distributor be connected to lubricated points with similar backpressures, so that even minimal variations in the nominal dose are eliminated.

Distribution screw - in the case of lubricant outlet grease (double dose) is necessary for the correct operation of the distribution to remove the screw.



Distribution screw

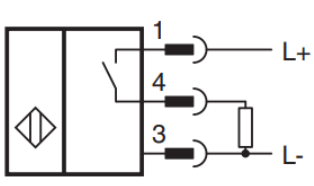
TECHNICAL DATE

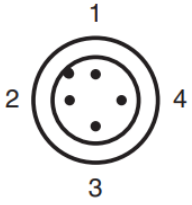
Technical parameters of the PRX progressive distributor

Maximum working pressure		300 bar
Maximum number of cycles		180/min
Minimum number of outlets		6
Maximum number of outlets		24
Inlet fitting		M10x1; ∅ 4, 6
Outlet fitting		M10x1; ∅ 4, 6
Operating temperature		-20 °C to +70 °C
Lubricant:	Grease Oil	max. NLGI 2 min. 50 mm^2/s
Nominal sensor voltage		10 – 65 V DC, 300 mA
Weight:	Initial element Middle element End element	0,14 kg 0,15 kg 0,26 kg
Nominal delivery dose:	PRX 25 PRX 45 PRX 75 PRX 105	25 mm^3/stroke 45 mm^3/stroke 75 mm^3/stroke 105 mm^3/stroke

Nominal delivery dose tested with NLGI consistency class 2 lubricant at temperature + 20 °C and a back pressure of 250 bar.

Wiring diagram inductive switch





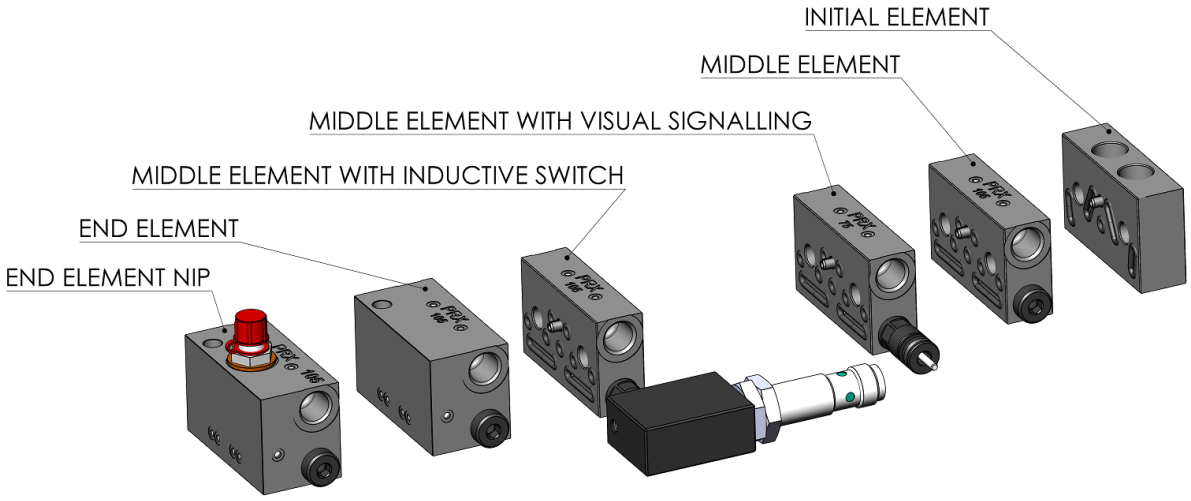
EN 60947-5-2

1	BN
2	WH
3	BU
4	BK

CONFIGURATION

PRX progressive distributor configuration

ID	TYP	DELIVERY
8 53 7010	Initial element PRX	-
8 53 7001	Middle element PRX 25	25 mm^3/stroke
8 53 7002	Middle element PRX 45	45 mm^3/stroke
8 53 7003	Middle element PRX 75	75 mm^3/stroke
8 53 7004	Middle element PRX 105	105 mm^3/stroke
8 53 7005	End element PRX 25	25 mm^3/stroke
8 53 7006	End element PRX 45	45 mm^3/stroke
8 53 7007	End element PRX 75	75 mm^3/stroke
8 53 7008	End element PRX 105	105 mm^3/stroke
8 53 7124	End element PRX 25 nip	25 mm^3/stroke
8 53 7125	End element PRX 45 nip	45 mm^3/stroke
8 53 7126	End element PRX 75 nip	75 mm^3/stroke
8 53 7127	End element PRX 105 nip	105 mm^3/stroke
8 53 7100	Middle element PRX 75 with inductive switch	75 mm^3/stroke
8 53 7101	Middle element PRX 105 with inductive switch	105 mm^3/stroke
8 53 7102	End element PRX 75 with inductive switch	75 mm^3/stroke
8 53 7103	End element PRX 105 with inductive switch	105 mm^3/stroke
8 53 7104	Middle element PRX 75 with visual signalling	75 mm^3/stroke
8 53 7105	Middle element PRX 105 with visual signalling	105 mm^3/stroke
8 53 7106	End element PRX 75 with visual signalling	75 mm^3/stroke
8 53 7107	End element PRX 105 with visual signalling	105 mm^3/stroke



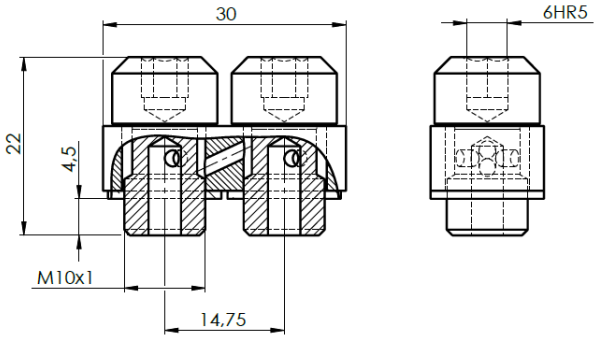
Configuration PRX

ACCESSORIES

It is recommended to use non-return valves at the outlet of the progressive distributor due to the different back pressures of the lubricant in the circuit.

Connecting bridge

Code	Type	Thread
8 53 7083	Bridge 2 PRX	M10x1



The connecting bridge is used to connect individual working elements and to increase the required lubricant dose at the output of the working section by the lubricant dose from the next connected working elements.

Distribution screw

Code	Type	Thread
53 6988	Distribution screw	M4x0,7

Outlet plug

Code	Type	Thread
43 0431	Outlet plug	M10x1

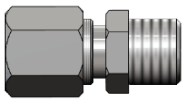
Double cone olive + cap screw

max. pressure 45 bar

Code	Type	Ø	Thread	Function
425 001 075 006	Screw	6	M10x1	output
425 001 074 006	Olive	6	-	output

Straight connector – DIN 2353

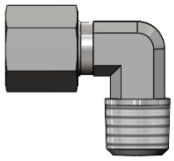
max. pressure 100 bar



Code	Type	Ø	Thread	Function
425 000 006 008	GE 6 LL	6	M10x1	input / output
425 000 006 007	GE 4 LL	4	M10x1	input / output

Elbow connector – DIN 2353

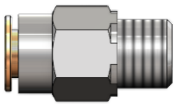
max. pressure 100 bar



Code	Type	Ø	Thread	Function
425 000 006 027	WE 6 LL	6	M10x1	input / output
425 000 006 026	WE 4 LL	4	M10x1	input / output

Straight connector push-in

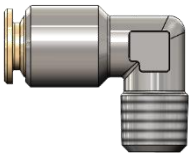
max. pressure 250 bar



Code	Type	Ø	Thread	Function
425 000 001 614	GEPM 6	6	M10x1	input / output
425 000 001 414	GEPM 4	4	M10x1	input / output

Elbow connector push-in

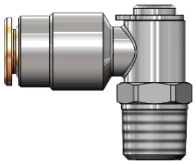
max. pressure 250 bar



Code	Type	Ø	Thread	Function
425 000 001 624	WEPM 6	6	M10x1	input / output
425 000 001 424	WEPM 4	4	M10x1	input / output

Elbow connector rotary push-in

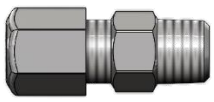
max. pressure 250 bar



Code	Type	Ø	Thread	Function
425 000 001 634	WERM 6	6	M10x1	input / output
425 000 001 434	WERM 6	4	M10x1	input / output

Non-return valve – DIN 2353

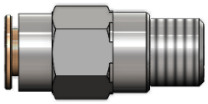
max. pressure 100 bar



Code	Type	Ø	Thread	Function
425 000 006 061	NRV 6	6	M10x1	output

Non-return valve push-in

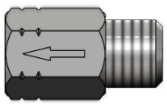
max. pressure 150 bar



Code	Type	Ø	Thread	Function
425 000 002 661	NRVP 6	6	M10x1	output

Non-return valve with internal thread

max. pressure 300 bar



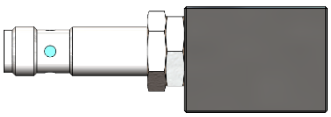
Code	Type	Ø	Thread	Function
1 14 0508	NRV M10x1	6	M10x1k	output

Tie-rods

Code	Type	Number of elements
53 7113	Tie-rod 3	3
53 7114	Tie-rod 4	4
53 7115	Tie-rod 5	5
53 7116	Tie-rod 6	6
53 7117	Tie-rod 7	7
53 7118	Tie-rod 8	8
53 7119	Tie-rod 9	9
53 7120	Tie-rod 10	10
53 7121	Tie-rod 11	11
53 7122	Tie-rod 12	12

2 pieces of tie-rods are required to complete the progressive manifold of the same parameter, for the appropriate number of working elements.

Complete inductive switch

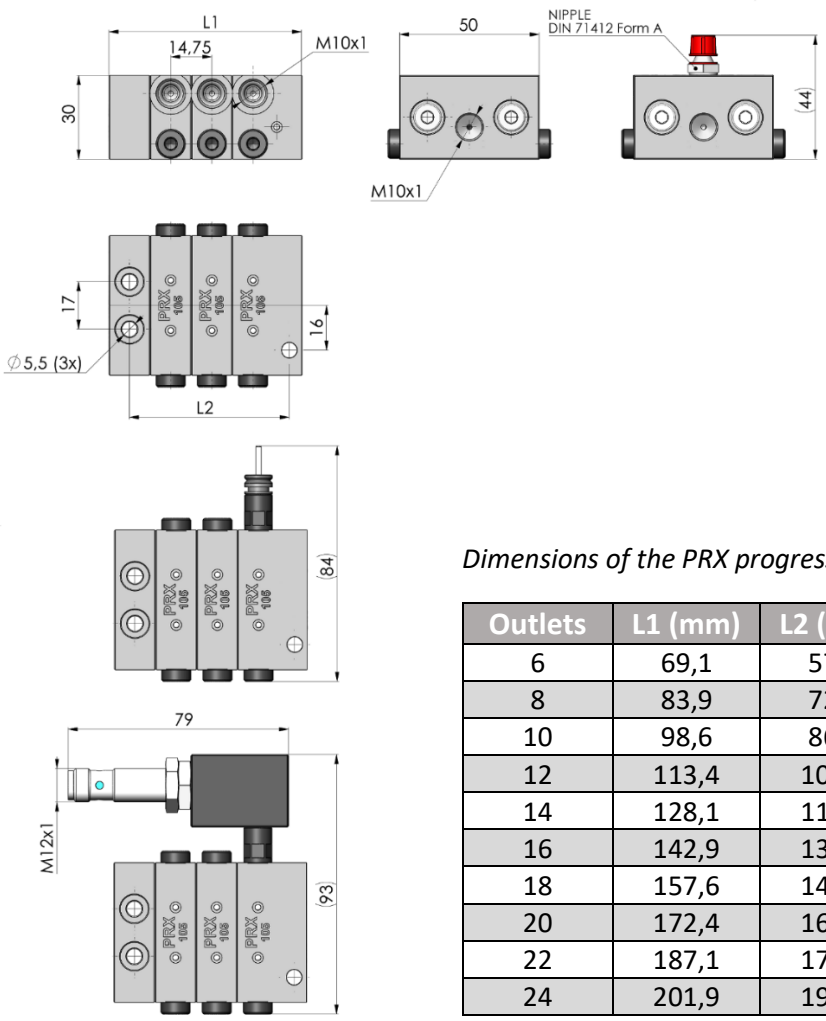


Code	Type	Thread	Function
8 53 7154	Inductive switch	M12x1	PNP

Connector

Code	Type	Lenght	Thread
425 531 920 010	Straight with cable	10 m	M12x1
425 531 189 934	Straight with cable	20 m	M12x1
425 531 920 001	Straight without cable	-	M12x1
425 531 050 050	Elbow without cable	-	M12x1

DIMENSIONAL DRAWING



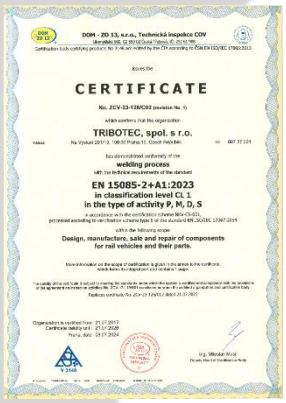
PRX dimensional drawing

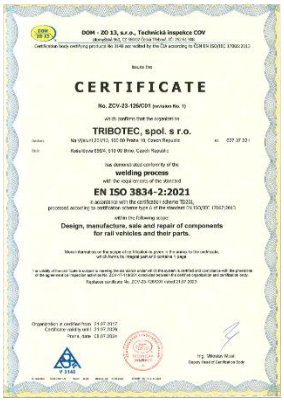
Dimensions of the PRX progressive distributor

Outlets	L1 (mm)	L2 (mm)
6	69,1	57,3
8	83,9	72,0
10	98,6	86,8
12	113,4	101,5
14	128,1	116,3
16	142,9	131,0
18	157,6	145,8
20	172,4	160,5
22	187,1	175,3
24	201,9	190,0

QUALITY ASSURANCE

Made in EU





We are manufacturer of central lubrication systems, lubrication technology, hydraulics and special systems for rail vehicles.

Our company builds on more than 80-year of tradition in mechanical engineering production; together with an emphasis on production quality and investments into technical development, this guarantees a high level of supplied products and services.

We provide project design based on customer requirements and technical specifications, delivery, installation and commissioning directly at the customer's site. Our after-sales services include service, preventive maintenance, spare parts supply and consultancy.

All the company's activities are carried out in accordance with the quality management system according to ISO 9001:2015 and the environmental management system to ISO 14001:2015. Other certified processes of our company include welding with CL1 level certification according to EN 15085-2+A1:2023.

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