HARDWARE PERFORMANCE SHEET

Name of sponsor:	Abloy Oy		
Product name:	Double door solution narrow stile, Europrofile		
File:	PHO10172A	**Revision:**	-
Date:	2025-12-16		
Pages:	6	**Enclosure:**	13
References:	LSK / CAN		

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Sponsor information

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This Hardware Performance Sheet relates only to the specified hardware. The report should only be reproduced in extenso - in extracts only with a written agreement with Danish Institute of Fire and Security Technology - DBI.

General principle of the Hardware Performance Sheet

This document is composed in accordance with the European Standard:

- EN 16035:2023

The objective of the Hardware Performance Sheet is to compose a reliable performance verification system for building hardware, needed to permit the door and/or openable window manufacturers the use of alternative hardware components.

A Hardware Performance Sheet together with test evidence can be used as documentation for an Extended Application report, prior to CE-marking.

Test reports

This Hardware Performance Sheet is based on the following test evidence:

Name of Laboratory	Name of sponsor	File	Standard	Issue date
Danish Institute of Fire and Security Technology - DBI	Abloy Oy	PGA12801A	EN 1634-1:2014 + A1:2018	2025-10-22
Danish Institute of Fire and Security Technology - DBI	Abloy Oy	PGA12802A	EN 1634-1:2014 + A1:2018	2025-10-22

Determination of data for the interchangeability

Building hardware identification

Line	Feature	Required indication	Additional information
1.1	HPS no. / version	PHO10172A	
1.2	Date	2025-12-16	
1.3	Prepared by	Danish Institute of Fire and Security Technology	
1.4	Manufacturer	Abloy Oy Wahlforssinkatu 20, P.O.B. 108 80101 Joensuu Finland	
1.5	Type of building hardware	Electromechanically and mechanical operated lock solution for double leaf doors	
1.6	Product line	Double door solution narrow stile, Europrofile: PE420 / PE460 / PE260 / PE060 mounted in primary door PE920 / PE923 mounted in secondary door	See remarks below
1.7	Relevant EN standard or EAD	EN 14846:2008	
1.8	Classification/ performance	Classification: F Characteristic: Suitability for use on fire/smoke doors	
1.9	Test evidence used	PGA12801A PGA12802A	
	Remarks	The tested lock in the primary door was motor lock PE420, 55 mm deep. The alternative locks solenoid PE460, microswitch PE260 or mechanical PE060 have the same dimensions and latch configurations as the tested and are identical to PE420 except for the amount of electronics, with the tested model containing the most. The tested electromechanically operated lock was PE923 (consisting of LE945, PE941, LE935) with a PCB 825119 for controlling the lock and a wire. The alternative lock mechanical operated PE920 (consisting of LE945, LE931, LE935) has the same dimensions and latch configurations as the tested and is identical to PE923 except for the PCB and the wire.	

Test evidence used

This table gives information about the test evidence of the building hardware as described in the previous table.

Line	Feature	Required indication/ properties	Additional information
2.1	HPS no.	PHO10172A	1.1
2.2	No. of test evidence	PGA12801A PGA12802A	1.9
2.3	Product version	PE420/40 PE923 (PE941, LE945, LE935)	
2.4	Main dimensions of the specific building hardware	PE420 Forend: 24 x 300 x 3 mm. Lockcase: 55 x 254 x 20.5 mm PE923-PE941 Forend: 25 x 213 + 45 x 3 mm Lockcase: 43.5 x 149 x 17 mm PE923-LE945 Forend: 24/(30) x 383.5 x 3 mm Lockcase: 50 x 300 x 19 mm PE923-LE935 Forend: 28 x 140 + 72 x 2.5 mm Lockcase: 49 x 70 x 25 mm	See enclosure
2.5	Fixing, building hardware to element	Each part is mounted with two screws to secure the front plate to the door leaf frame.	
2.6	Settings	-	
2.7	Type of doorset or openable window	Double leaf metal framed glazed doorset	
2.8	Type and material of the element frame	Metal framed glazed doorset with steel frames	
2.9	Element frame thickness	50 mm	
2.10	Mode of operation	Side hinged doorset	
2.11	Mounting position building hardware	Mortice mounted	
2.12	Building hardware is mounted on	PE420 was mounted in the primary door PE923 (LE945, PE941, LE935) was mounted in the secondary door	
2.13	Leaf mass	82 kg (excluding hardware)	
2.14	Leaf width	1075 mm (incl. 20 mm rebate on all edges)	
2.15	Leaf height	2250 mm (incl. 20 mm rebates on all edges)	
2.16	Leaf thickness	50 mm	
2.17	Thermal separation	-	
2.18	Insulation layer	The core of the door profiles and frame profiles was without any insulation material	
2.19	Intumescent layer	The hardware was tested without any intumescent seal. The doorset was tested without any intumescent seal.	
2.20	Seals or gaskets	Sealing SP 40035 cloroprene was positioned in vertical and top edges of door leaf and frame profiles.	

Performance level(s) related to the evidence fire resistance

Line	Feature	Required indication/ properties		Additional information
3.1	Related HPS no. and test evidence used	PHO10172A		1.1 1.9
3.2	Fire resistance test	EN 1634-1:2014 + A1:2018		
3.3	No. test report	PGA12801A PGA12802A		
3.4	Notified test body	0845		
3.5	Direction of test exposure	Both directions towards the furnace		
3.6	Precondition test	25 manually open/close cycles		In accordance with EN 16034
3.7	Classification	E 120 13 minutes of overrun		In accordance with EN 13501-2
3.8	Observations during the test related to hardware	Time/ minutes	Visual observations	
		35	Drops of material from hinge side of panic bar – PGA12802A	
		87	Each lock covers on the panic bar melt and drops fall – PGA12802A	
		128	Small glowing drop of metal fall from meeting edge – PGA12802A	
		133	Test stopped	
3.9	Applicable EXAP Standard	EN 15269-5:2024+A1:2016		
3.10	Data confirmed by	NB 0845 - Danish Institute of Fire and Security Technology.		

Remarks

This report has only been printed in a PDF-version. DBI has not issued a hard copy version.

All values mentioned in this report are nominal values, production tolerances are not considered.

Danish Institute of Fire and Security Technology

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Fire product familying Double door solution narrow stile, Europrofile

DBI
PHO10172A

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11/12/2025

ABLOY

Contents

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1 Double door solutions, Europrofile

The concealed double door solutions consist of products for passive door and active door.
The products specification is based on desired operation of the doors. The choice of passive door products is based on mechanical solution PE920 or electric solution PE923. The electric solution PE923 is for hinged doors with swing door automatics and the top lock is electrically controlled. The linear dimensions are the same in mechanical and electric passive door products.
The active door lock can be PE420 motor, PE460 solenoid, PE260 microswitch or PE060 mechanical lock. The linear dimensions are the same in all active door locks. The same applies with the material which keeps the door closed.

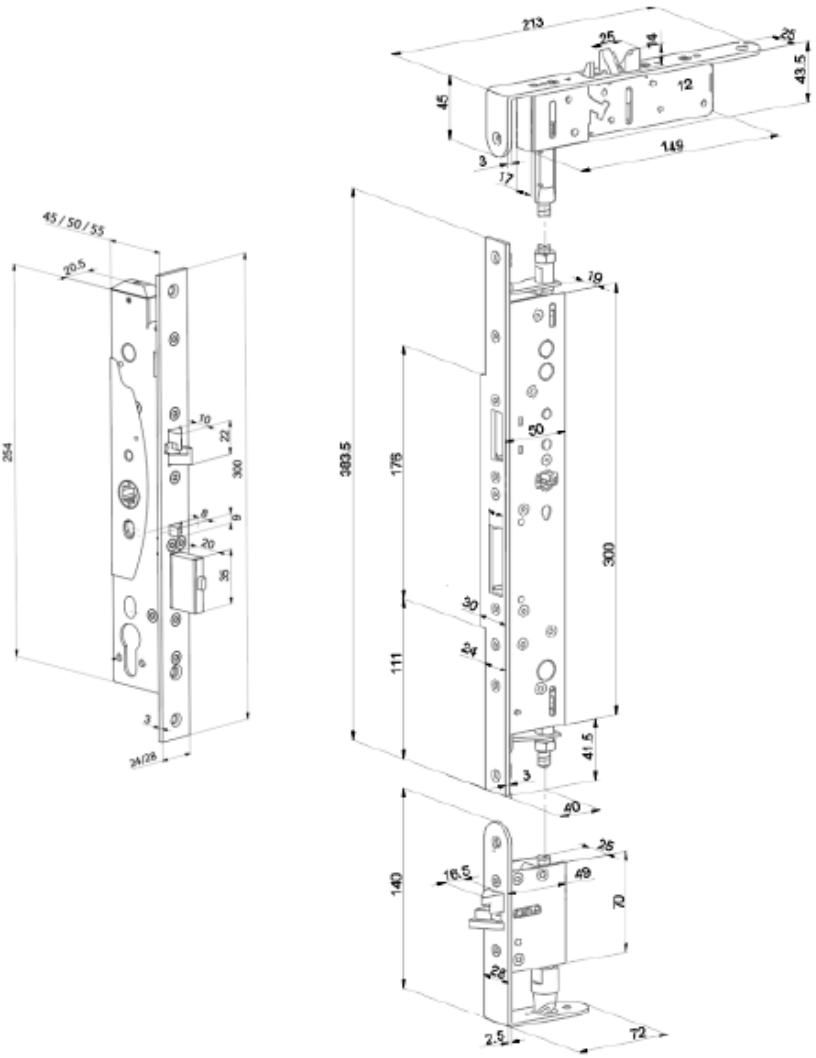


Figure 1. Active door lock left, passive door solution right

1.1 Products and main features active door locks

The active doors fire family consist of:

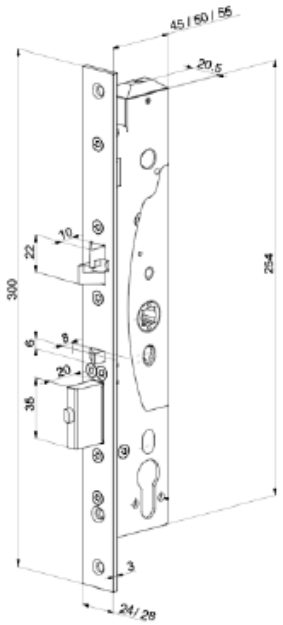
- PE420 motor lock
- PE460 handle controlled (solenoid)lock
- PE260 microswitch lock.
- PE060 mechanical lock

1.1.1 Dimensions and materials

Forend: 24 mm x 300 mm x 3 mm
Lockcase: 55 mm x 254 mm x 20.5 mm

Bolt/latch projections:

- Double action latch 10 mm
- Deadbolt 20 mm



Part	Material
Forend	Steel
Deadbolt	Steel
Double action latch	Steel
Lock case, lock cover	Steel

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Figure 2. Main dimensions PE420, PE460, PE260, PE060

The linear dimensions are the same in all models as well as material of the bolt, the latch, lock case and cover.

1.1.2 Drilling

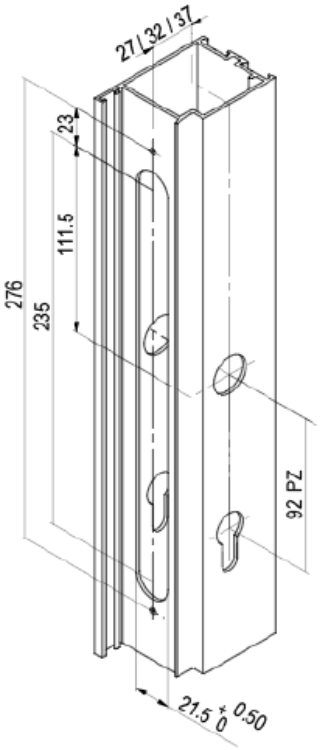

Figure 3. PE420, PE460, PE260, PE060 drilling. The cylinder and lever handle drilling are determined by the selected hardware.

1.1.3 Combustible material (electronics)

Product /Assembly drawing	Motor gear (including PCB) 816350	Solenoid (including PCB) 60006541	Sensor board EL460 952291	Flex circuit board 951096
PE420 / 814806 2	x			x
PE460 / 814912 3		x	x	x
PE260 / 814949 2			x	x
PE060 / 815058 2				

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PE420 contains the most electronic components compared to other models. The PE460 solenoid lock, PE260 microswitch lock includes reduced amount flammable material.

1.2 Parts and main features passive door

Passive door solution consists of three main components: LE931/PE941 top lock, LE945 centre lock, LE935 bottom latch.

Main functions of the components

- Centre lock
  - The centre lock opens the passive door and releases the deadlocking on the active door
  - The top lock and bottom latch are mechanically connected to the centre lock with rods. When opened by the lever handle/panic bar, the bottom latch retracts and the top lock is released.
  - Opening the centre lock also opens the active door lock, releasing the trigger bolt and pressing the deadbolt inside the lock case.
- Bottom latch
  - Works like an automatic flush bolt. When the active door is closed, the bottom latch projects to keep the passive door latched. When the active door is open, the bottom latch retracts.
- Top lock
  - Keeps the top of the passive door locked.

Order code	Top lock	Centre lock	Bottom latch
PE920 Mechanical version	LE931 mechanical	LE945	LE935
PE923	PE941 electric	LE945	LE935

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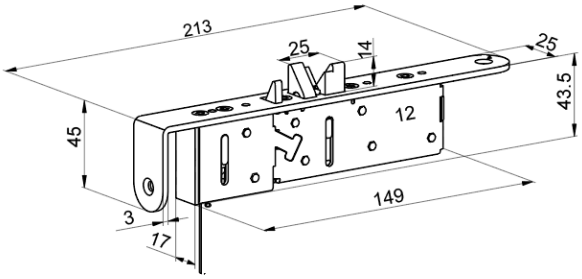
1.2.1 Dimensions and materials

Top lock LE931, LE941

Forend: 25 mm x 213 mm + 45 mm x 3 mm
Lockcase: 43.5 mm x 149 mm x 17 mm

Double action bolt projection 14 mm

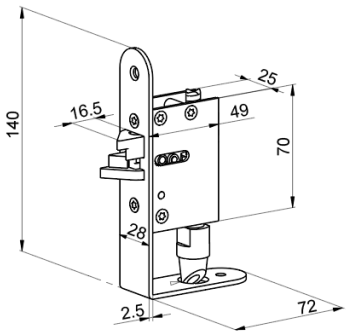


Part	Forend	Lockcase	Double action bolt
Material	Steel	Steel	Steel

Figure 4. Main dimensions of top lock and materials LE931, LE941

Bottom latch

Forend: 28 mm x 140 mm + 72 mm x 2.5 mm
Lockcase: 49 mm x 70 mm x 25 mm



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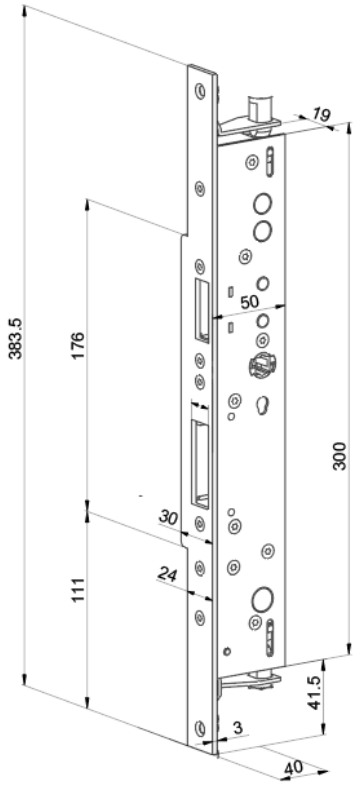
Part	Forend	Lockcase	Flush bolt
Material	Steel	Steel	Steel

Figure 5. Main dimensions of bottom latch LE935

Centre lock

Forend: 24/(30) mm x 383.5 mm x 3 mm
Lockcase: 50 mm x 300 mm x 19 mm



Part	Forend	Lockcase
Material	Steel	Steel

Figure 6. Main dimensions and materials of centre lock LE945

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1.2.2 Drilling

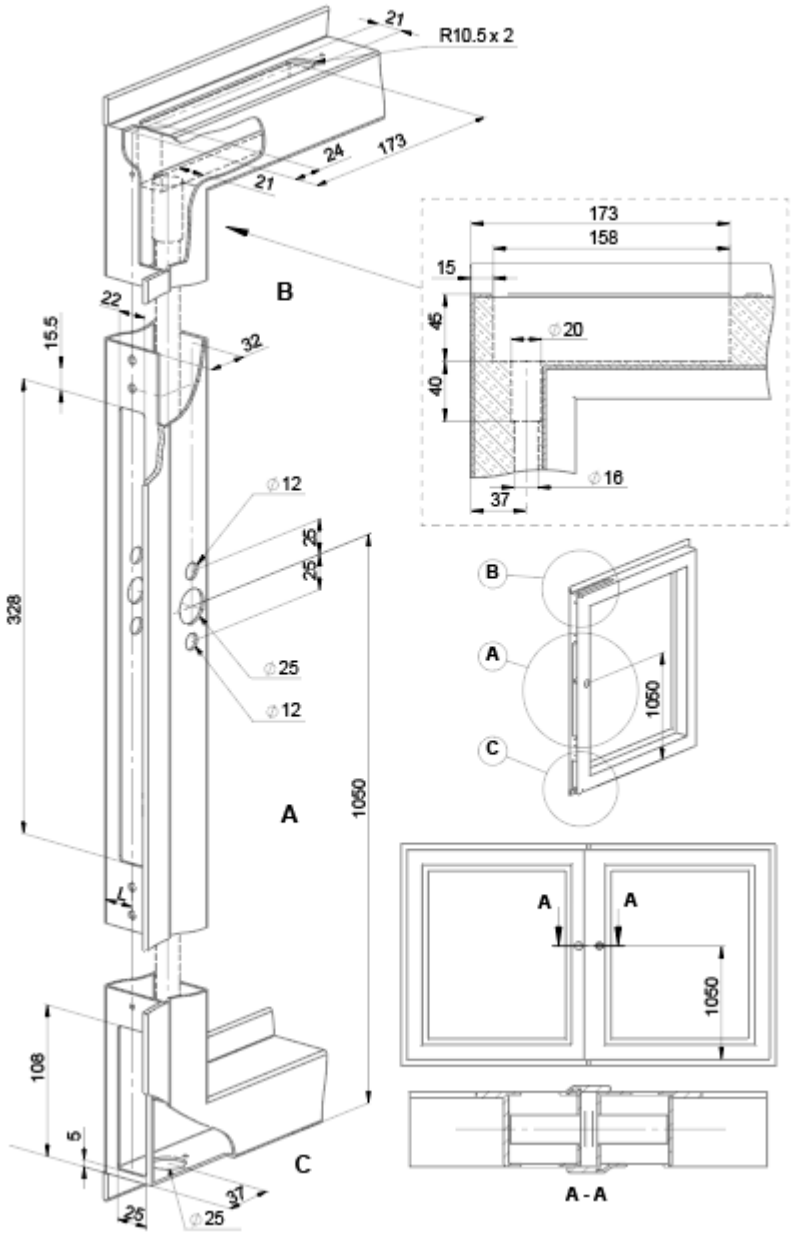

Figure 7. PE920, PE923 drilling. The lever handle/panic bar drilling are determined by the selected hardware.

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1.2.3 Combustile material (electronics)

Product /Assembly drawing	Solenoid (804434) including PCB 825119	Solenoid pull type 804434
Top lock LE931 / 813519 2		x
Top lock PE941 / 813174 5	x	

LE931 operates mechanically. It is a mechanical lock case that includes a solenoid, but the solenoid is not used for electrical control. The mechanical operation of the lock requires solenoid.
PE941 is an electrically controlled solenoid lock. Its electronics include a solenoid and a PCB for controlling the lock. Due the PCB and wiring, PE941 contains more flammable material.

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2 Summary

The linear dimensions are the same in all models, both in active and passive door products. The materials for the parts of the lock which are responsible for keeping the door in its closed position are the same in all models.

Active door locks
Our opinion is that PE420 with 40 mm backset represents all active door locks. It includes the most flammable material, and the backset 40 mm is the biggest model.
Active door locks are available with smaller linear dimensions. Fire test with larger linear dimensions allow use of EXAP standards for alternative locks e.g. EN 15269-5:2016+A1:2016: C1.1.

Passive door products
Our opinion is that PE923 represents also PE920. Both models are available only with one backset, but PE923 includes more flammable material.
Fire test with PE923 allows use of EXAP standards for alternative locks e.g. EN 15269-5:2016+A1:2016: C1.1.

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Attachments:

Assembly drawings

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PE060
Passive door products
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PE920

Dimensional drawings

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PE460
PE260
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Drilling

Material lists

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Manufacturers declaration

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