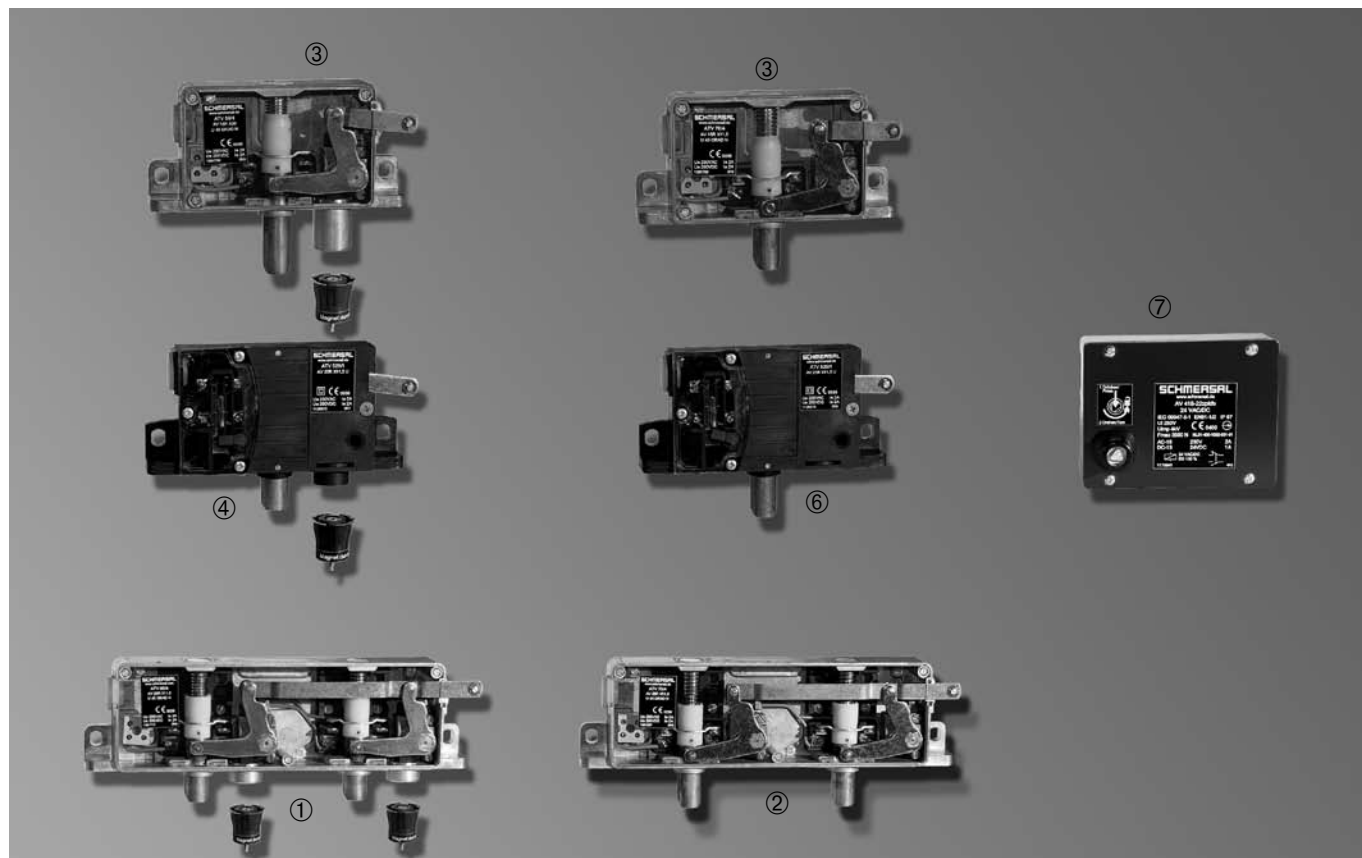


Introduction	5-2
AV 15	5-6
AV 20	5-10
AV 18	5-12
AV 21	5-14
AV 25	5-16
AV 28	5-18
AV 415	5-20
Accessories	5-21
Reference table technical data	5-24

Door locking devices



Door locking devices with and without certified locking device

The lift door locking devices of the AV series are used for monitoring and locking 1- and 2-leaf lift landing doors. These safety locking devices meet the requirements of the Lift Directive 95/16/CE and of EN 81-1.

The door locking devices are available with light-metal die-cast and thermoplastic enclosure, with one or two locking elements, with right-side or left-side version, with lever, pull strap or built-in bearing blocks. The safety function can be monitored through the transparent cover. The locking bolt has a 22-mm travel, which guarantees that the mandatory engagement depth of 16 mm is safely maintained after the lowering

of the door. The emergency release can be operated from outside by means of a triangular key.

Operating principle of the certified locking device

The European Lift Standard EN 81-1 stipulates that: „It shall be impossible, from positions normally accessible to persons, to move a lift with the landing door open or unlocked after a single action, which is not part of the normal operating sequence.“ Our door locking devices with magnetic certified locking device of the AV 15, AV 20 and AV 25 type meet this requirement. They are therefore admitted for passenger lifts.

Overview

	①	②	③	④	⑤	⑥	⑦
	AV 25	AV 28	AV 15	AV 20	AV 18	AV 21	AV 415
1-leaf	—	—	●	●	●	●	●
2-leaf	●	●	—	—	—	—	—
With certified locking device	●	—	●	●	—	—	●
Without certified locking device	—	●	—	—	●	●	—
Metal enclosure	●	●	●	—	●	—	●
Thermoplastic enclosure	—	—	—	●	—	●	—
For construction hoists	—	—	—	—	—	—	●
Page	5-6	5-8	5-10	5-14	5-16	5-18	5-20

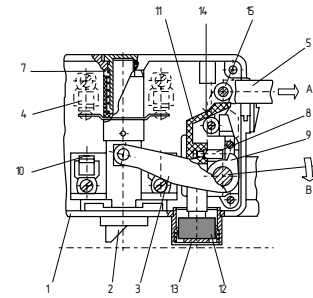
This table gives a general overview of the product range. The next pages include a detailed description of the individual components, as well as information about special versions.

Door locking devices

Certified locking device landing door opened and unlocked

With the landing door in open condition and the locking device's cam in released condition, the locking bolt (2) is pulled back by pulling the pull strap (5) in direction A or by swinging the roller lever in direction B against the force of the pressure spring (7). The locking device switch (10) is open. The locking piece (11) is mounted in the enclosure (1) and is moveable in axial direction; it is positioned with the rigidly connected permanent magnet (12) as illustrated. The positive actuation is obtained through the combined action of the roller (15), mounted on the angled lever (3) across the cam (14) on

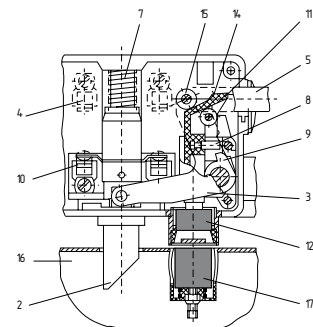
the locking piece (11). When the door is unlocked, the roller (15) pushes the locking piece (11) across the cam positively actuated (positively linked) into the locked position. The locking piece (11) is retained in locked position by the retaining plate (13) as a result of the adhesive magnetic force, whereby the locking catch (9) and the locking pin (8) face each other. The auxiliary contact (4) is closed.



Landing door closed and locked

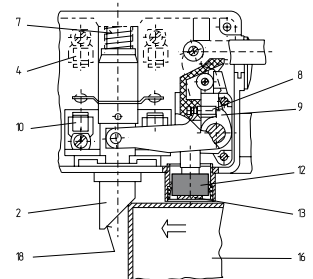
When the landing door (16) is closed, the unlocking magnet (12) and the door magnet (17) face each other with the same magnetic poles, thus repelling each other. The roller lever or the pull strap (5) is released, when the locking device cam is activated. The locking bolt (2) is pushed by the pressure spring (7), whereby the roller (15) releases the locking device (11) across the cam (14). This is pushed by the magnetic force, so that the locking pin (8) and the locking catch (9) are no longer engaged. The locking bolt (2) now engages unhindered the landing door (18). The locking bolt engagement

depth is 16 to 21 mm. The locking device switch (10) is closed; the auxiliary contact (4) is open.



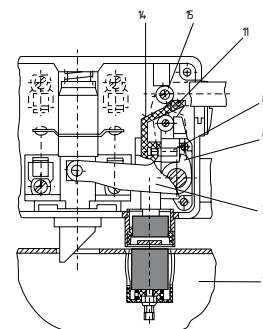
Landing door opened and certified locking device operational

If the locking device cam is activated before the landing door has been closed, the certified locking device becomes operational. Through the force of the pressure spring (7), the locking bolt (2) will be pushed forward, however only so far that the locking catch (9) meets the locking pin (8). The magnet (12) adheres to the retaining plate (13). In this position, the locking device switch (10) and the auxiliary contact (4) are opened. Through the inclined section (18) of the locking bolt (2), the landing door (16) can be closed so far until the locked condition is reached.



Door locking device actuated with the landing door closed and locked

With the landing door (16) in closed condition and the locking device cam in released condition, the roller (15), located on the angled lever (3), is positively actuated and led across the cam (14), so that the locking piece (11) with the locking pin (8), functioning with the locking catch (9), reaches the illustrated 'positively actuated locking stand-by'. The locking bolt engagement depth is 3 to 8 mm.



Door locking devices

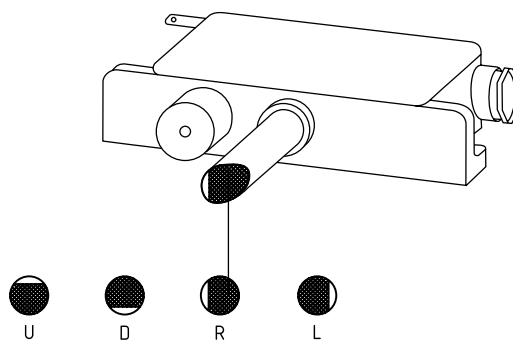
Definition “right” and “left”

When looking at the switch from inside the lift cage, the unlocking side defines the arrangement. In the left-hand version, the release is located to the left, in the right-hand version to the right.

Definition of “Inclined section”

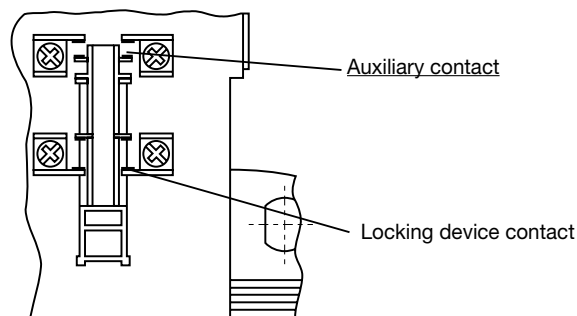
Put the component in front of you, the bolt facing down, so that you can read the identification label. In this way, you can define the arrangement of the inclined section, i.e. the direction from which the door is coming.

Usually, bottom-side (U) inclined sections are used; right-hand side (R), left-hand side (L) and cover-side (D) versions are rather rarely used.

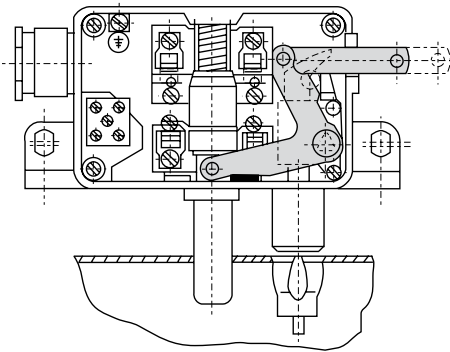


Auxiliary contact K

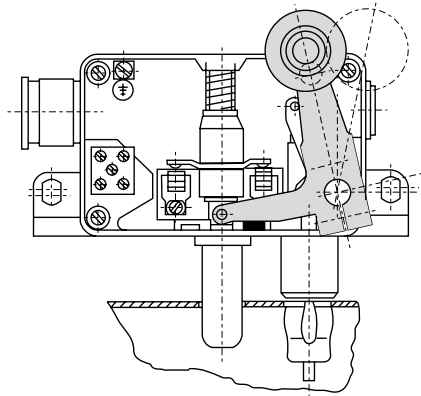
The auxiliary contact K shows the top position of the switch. This enables detecting which guard is unlocked. It is always the top contact. Door locking devices AV 20 and AV 21 are equipped with an auxiliary contact by default; for the AV 25, AV 28, AV 15 and AV 18 versions, it is available as an option.



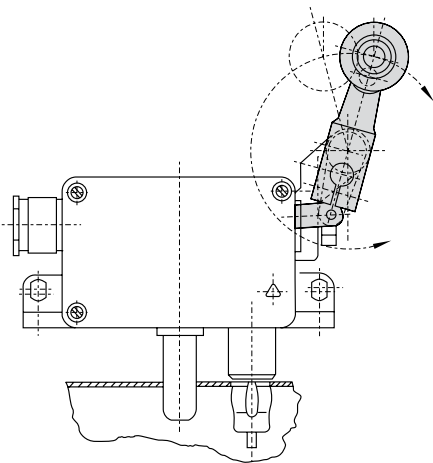
Version R with pull strap



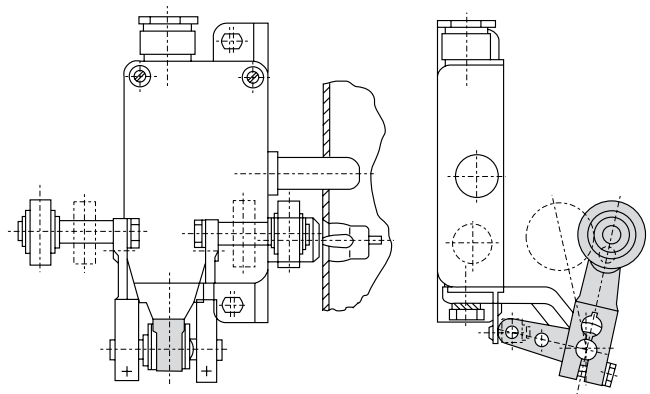
Version RH with roller lever



RB with roller lever and bearing block B

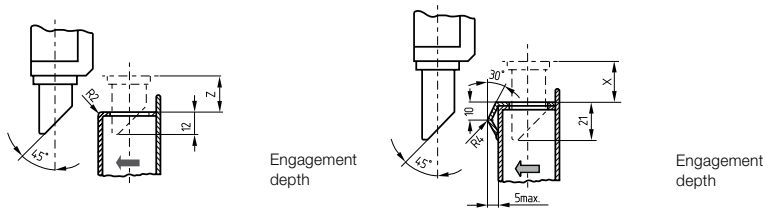


Version LB2 with roller lever



Closing ability of the door according to DIN EN 81 / X dimension

The inclined section of the locking bolt allows the required closing ability of the door as required by DIN EN 81, paragraph 7.7.2.2. Corresponding to the chosen engagement depth (12 or 21 mm), the door edge must be rounded off to an edge length of 30 mm in the area of the locking bolt or provided with a fender or inclined section, if necessary. The corresponding "X"- or "Z"- dimensions are to be determined when ordering.



- larger penetration depth for balancing the tolerance of dimension "X", for example, through lowering the door.

Door locking devices

AV 15

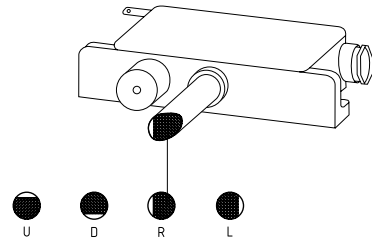


- For 1-leaf doors
- With certified locking device
- With metal enclosure
- Emergency release with triangular key M5

Technical data

Standards:	EN 81, Directive 95/16/EG
Enclosure:	Light-metal die-cast
Protection class:	IP 20, IP 41
Locking bolt:	brass D = 18 mm
Contact material:	silver
Switching element:	changeover contact with double break, galvanically separated contact bridges
U_{imp} :	6 kV
U_i :	400 VAC
I_{th} :	10 A
Utilisation category:	AC-15, DC-13
I_e/U_e :	2 A/230 VAC; 2A/200 VDC
Short-circuit protection:	6 A (slow blow)
Emergency release:	with triangular key M5 to DIN 22417
Permanent magnet:	ceramic-oxide magnet with high coercive field intensity
Ambient temperature:	- 15 °C ... + 70 °C
X-dimension:	11.5, 20, 30, 40, 45 mm
Actuating force at the linkage F_a :	7 N
Actuating force at the linkage F_e :	16 N

Note



Inclined section at locking bolt – Variants

Approvals



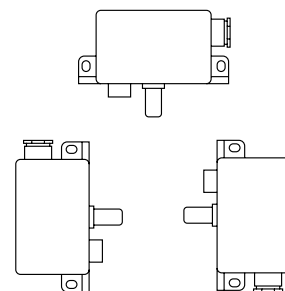
Ordering data

AV 15 ①②③④⑤ ⑥⑦④5°N⑧

N°	Add	Description
①	L / R	Left-hand version / Right-hand version with Pull strap
②	H/H92/ H105 B/B2	Lever H65, H92, H105 Bearing block B, B2 without auxiliary contact with auxiliary contact
③	K	Protection class IP 20
④	IP 41	Protection class IP 41 without cable gland
⑤	E4 E1	Cable gland M20 Cable entry (5 holes)

N°	Add	Description
⑥	X...	X-dimension = 11,5, 20, 30, 40, 45 mm
⑦	U D R L	Inclined section at locking bolt 45° bottom-side Inclined section at locking bolt 45° cover-side Inclined section at locking bolt 45° right-hand side Inclined section at locking bolt 45° left-hand side
⑧	GB215	back-side mounting holes frontal M8 mounting holes

Mounting positions



Door locking devices

Actuator with roller lever and bearing block, version RB

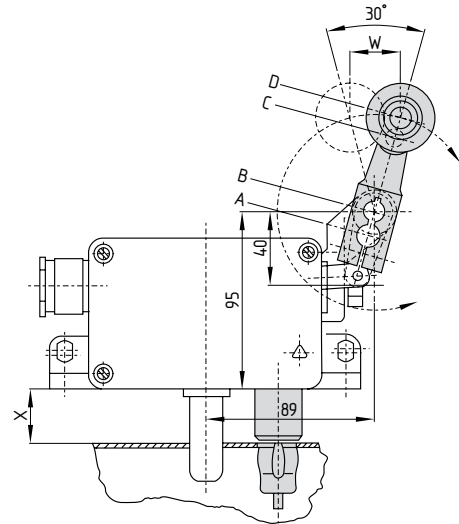
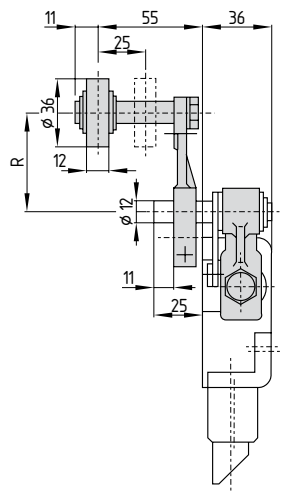
Shown:

- Right-hand version
The left-hand version is mirror-image
- Cable entry E1

Lever position	B-C	B-D	A-D	A-D	A-D
R [mm]	41	52	65	92	105
W [mm]	21	27	34	47	54

Actuating force at the roller

Initial [N]	6	5	4	2.8	2.5
Final [N]	10	8	6	4.3	3.8
Cam travel [mm]	25	30	40		



Door locking devices

Actuator with roller lever and bearing block B2, version LB2

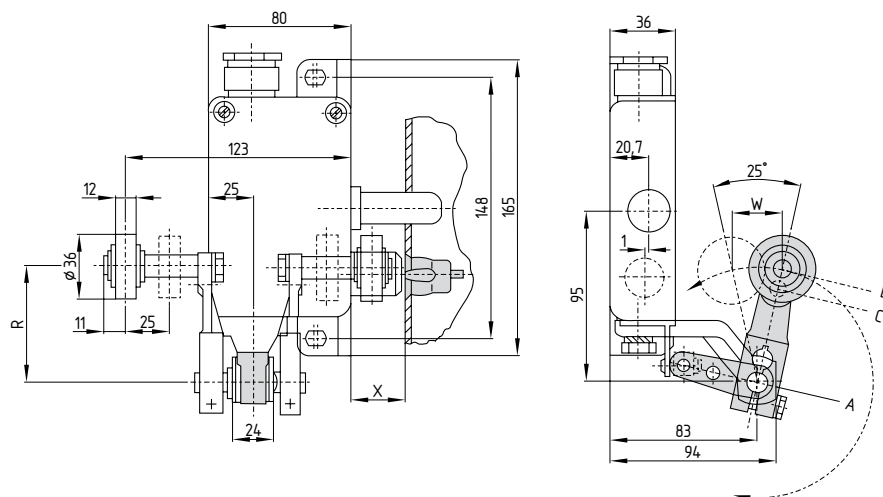
Shown:

- Right-hand version
The left-hand version is mirror-image
- Cable entry E1

Lever position	A-C	A-D	A-D	A-D
R [mm]	54	65	92	105
W [mm]	23.5	28	40	46

Actuating force at the roller

Initial [N]	5.5	4.5	3.3	2.8
Final [N]	9	7	5.1	4.5
Cam travel [mm]	25	30		



Door locking devices

AV 20

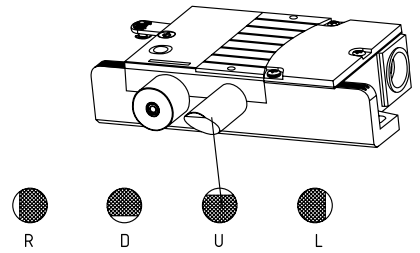


- For 1-leaf doors
- With certified locking device
- With thermoplastic enclosure
- With auxiliary contact
- Emergency release with triangular key M5

Technical data

Standards:	EN 81, Directive 95/16/EC
Enclosure:	glass-fibre reinforced thermoplastic, self-extinguishing
Protection class:	IP 54
Locking bolt:	Brass D = 18 mm
Contact material:	silver
Switching element:	changeover contact with double break, galvanically separated contact bridges
U_{imp} :	6 kV
U_i :	500 VAC
I_{th} :	10 A
Utilisation category:	AC-15, DC-13
I_e/U_e :	2 A/230 VAC; 2 A/200 VDC
Short-circuit protection:	6 A (slow blow)
Emergency release:	with triangular key M5 to DIN 22417
Permanent magnet:	ceramic-oxide magnet with high coercive field intensity
Ambient temperature:	- 15 °C ... + 70 °C
X-dimension:	11.5, 20, 30, 40, 45 mm
Actuating force at the linkage F_a :	17 N
Actuating force at the linkage F_e :	38 N

Note



Inclined section at the locking bolt - Variants

Approvals



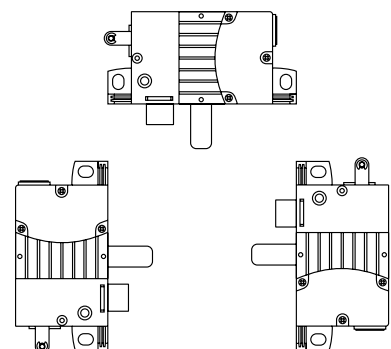
Ordering data

AV 20 ①②③④⑤⑥⑦

N°	Add	Description
①	L / R	Left-hand version / Right-hand version with Pull strap
②	H/H92/ H105 B/B2	Lever H65, H92, H105 Bearing block B, B2 without cable gland
③	E4 E2	Cable gland M20 Cable entry (4 Holes)
④	X...	X-dimension = 11.5, 20, 30, 40, 45 mm

N°	Add	Description
⑤	U D R L	Inclined section at locking bolt 45° bottom-side Inclined section at locking bolt 45° cover-side Inclined section at locking bolt 45° right-hand side Inclined section at locking bolt 45° left-hand side
⑥	2509	Metal triangular release key
⑦	GB215	back-side M8 mounting holes frontal M8 mounting holes

Mounting positions



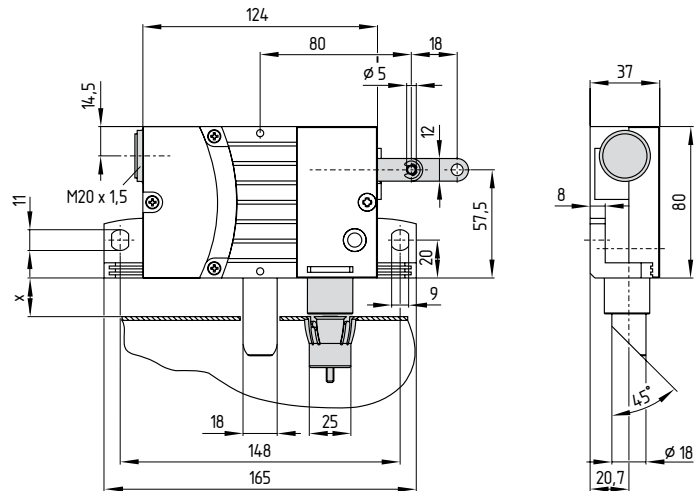
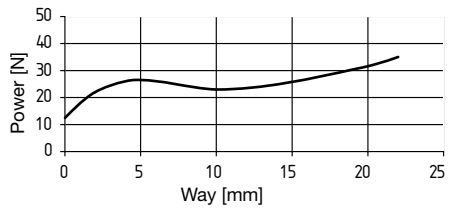
Door locking devices

Actuator with pull strap, version R

When ordering, please indicate the required X-dimension.

Standard dimensions: 11.5, 20, 30, 40 and 45 mm

The figure shows a door locking device in right-hand version; the left-hand version is mirror-image.



Note: The AV 20 series is available in all variants of the AV 15 series. The dimensions of both series are identical.

Door locking devices

AV 18



- For 1-leaf doors
- Without certified locking device
- With metal enclosure
- For service lifts
- Emergency release with triangular key M5

Technical data

Standards: EN 81, Directive 95/16/EC
 Enclosure: Light-metal die-cast
 Protection class: IP 20, IP 41
 Locking bolt: Brass D = 18 mm
 Contact material: silver
 Switching element: changeover contact with double break, galvanically separated contact bridges

U_{imp} : 6 kV
 U_i : 400 VAC
 I_{th} : 10 A
 A

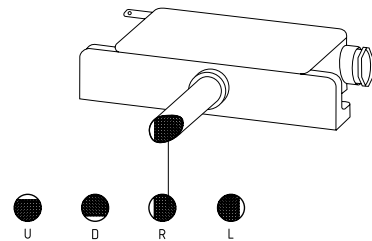
Utilisation category: AC-15, DC-13
 I_e/U_e : 2 A/230 VAC; 2A/200 VDC

Short-circuit protection: 6 A (slow blow)
 Emergency release: with triangular key M5 to DIN 22417

Ambient temperature: - 15 °C ... + 70 °C
 X-dimension: 11.5, 20, 30, 40, 45 mm

Actuating force at the linkage F_a : 7 N
 Actuating force at the linkage F_e : 16 N

Note



Inclined section at the locking bolt - Variants

Approvals



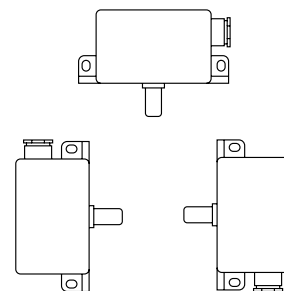
Ordering data

AV 18 ①②③④⑤ ⑥⑦⑧45°N⑧

N°	Add	Description
①	L / R	Left-hand version / Right-hand version with Pull strap
②	H/H92/ H105 B/B2	Lever H65, H92, H105 Bearing block B, B2
③	K	without auxiliary contact with auxiliary contact
④	IP 41	Protection class IP 20
⑤	E4 E1	Protection class IP 41 without cable gland Cable gland M20 Cable entry (5 Holes)

N°	Add	Description
⑥	X...	X-dimension = 11.5, 20, 30, 40, 45 mm
⑦	U D R L	Inclined section at locking bolt 45° bottom-side Inclined section at locking bolt 45° cover-side Inclined section at locking bolt 45° right-hand side Inclined section at locking bolt 45° left-hand side
⑧	GB215	back-side M8 mounting holes frontal M8 mounting holes

Mounting positions



Door locking devices

Actuator with roller lever, version RH

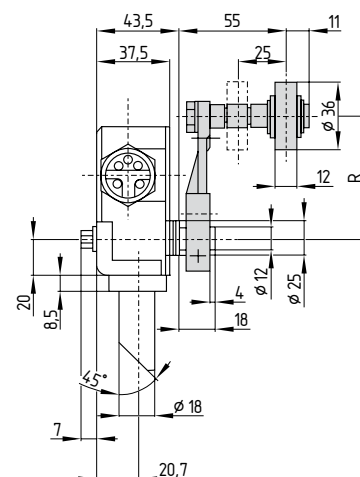
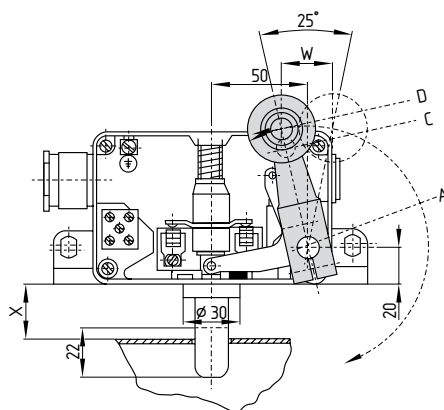
Shown:

- Right-hand version
The left-hand version is mirror-image
- without auxiliary contact
- Cable entry E1
- Triangular key M5 for emergency release on the rear

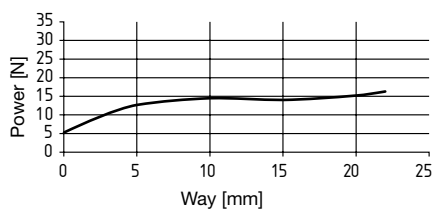
Lever position	A-C	A-D	A-D	A-D
R [mm]	54	65	92	105
W [mm]	23,5	28	40	46

Actuating force at the roller

Initial [N]	5.5	4.5	3.3	2.8
Final [N]	9	7	5.1	4.5
Cam travel [mm]	25	30		



Actuator with pull strap



Door locking devices

AV 21



- For 1-leaf doors
- Without certified locking device
- With thermoplastic enclosure
- With auxiliary contact k
- For service lifts
- ▶ Emergency release with triangular key M5

Technical data

Standards: EN 81, Directive 95/16/EC

Enclosure: glass-fibre reinforced thermoplastic, self-extinguishing

Protection class: IP 54

Locking bolt: Brass D = 18 mm

Contact material: silver

Switching element: changeover contact with double break, galvanically separated contact bridges

U_{imp} : 6 kV

U_i : 500 VAC

I_{th} : 10 A

Utilisation category: AC-15, DC-13

I_e/U_e : 2 A/230 VAC; 2 A/200 VDC

Short-circuit protection: 6 A (slow blow)

Emergency release: with triangular key M5 to DIN 22417

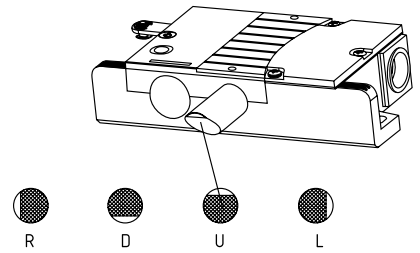
Ambient temperature: - 15 °C ... + 70 °C

X-dimension: 11.5, 20, 30, 40, 45 mm

Actuating force at the linkage F_a : 17 N

Actuating force at the linkage F_e : 38 N

Note



Inclined section at the locking bolt - Variants

Approvals



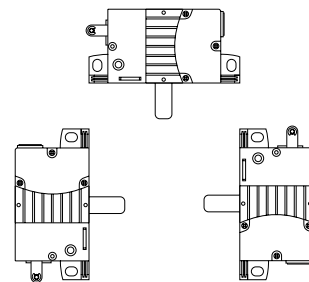
Ordering data

AV 21 ①②③④⑤⑥

N°	Add	Description
①	L / R	Left-hand version / Right-hand version with Pull strap
②	H/H92/ H105 B/B2	Lever H65, H92, H105 Bearing block B, B2 without cable gland
③	E4 E2	Cable gland M20 Cable entry (4 Holes)
④	X...	X-dimension = 11.5, 20, 30, 40, 45 mm

N°	Add	Description
⑤	U D R L	Inclined section at locking bolt 45° bottom-side Inclined section at locking bolt 45° cover-side Inclined section at locking bolt 45° right-hand side Inclined section at locking bolt 45° left-hand side
⑥	GB215	back-side M8 mounting holes frontal M8 mounting holes

Mounting positions



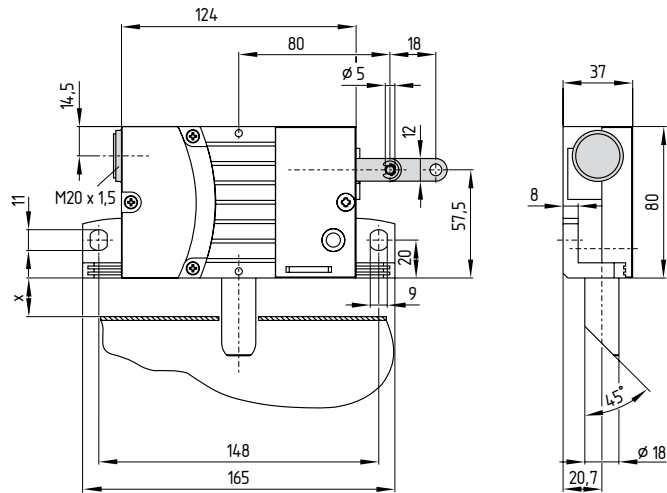
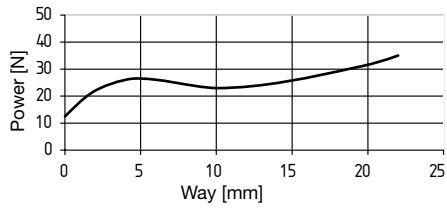
Door locking devices

Actuator with pull strap, version R

When ordering, please indicate the required X-dimension.

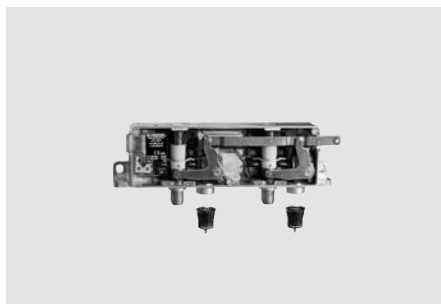
Standard dimensions: 11.5, 20, 30, 40 and 45 mm

The figure shows a door locking device in right-hand version; the left-hand version is mirror-image.



Door locking devices

AV 25



- For 2-leaf doors
- With certified locking device
- With metal enclosure
- Emergency release with triangular key M5
- With pull strap

Technical data

Standards: EN 81, Directive 95/16/EC
 Enclosure: Light-metal die-cast
 Protection class: IP 20
 Locking bolt: Brass D = 18 mm
 Contact material: silver
 Switching element: changeover contact with double break, galvanically separated contact bridges

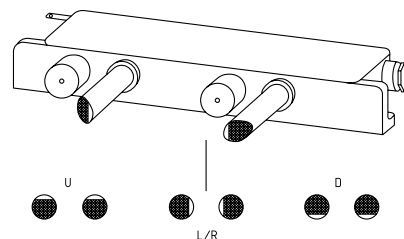
U_{imp} : 6 kV
 U_i : 400 VAC
 I_{th} : 10 A
 Utilisation category: AC-15, DC-13
 I_e/U_e : 2 A/230 VAC; 2A/200 VDC

Short-circuit protection: 6 A (slow blow)
 Emergency release: with triangular key M5 to DIN 22417
 Permanent magnet: ceramic-oxide magnet with high coercive field intensity

Ambient temperature: - 15 °C ... + 70 °C
 X-dimension: 11.5, 20, 30, 40, 45 mm

Actuating force at the linkage F_a : 17 N
 Actuating force at the linkage F_e : 30 N

Note



Inclined section at the locking bolt – Variants

Approvals



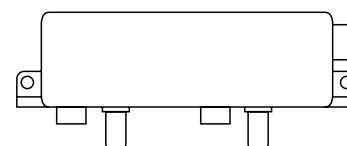
Ordering data

AV 25 ①②③④⑤⑥45°N⑥

N°	Add	Description
①	L	Left-hand version
	R	Right-hand version
②	K	without auxiliary contact with auxiliary contact
	E4	Cable gland M20
③	E1	Cable entry (5 Holes)
	X...	X-dimension = 11.5, 20, 30, 40, 45 mm

N°	Add	Description
⑤	U	Inclined section at locking bolt 45° bottom-side
	D	Inclined section at locking bolt 45° cover-side
	L/R	Inclined section at locking bolt 45° 1 x left-hand side 1 x right-hand side
⑥		back-side M8 mounting holes
	GB215	frontal M8 mounting holes

Mounting position

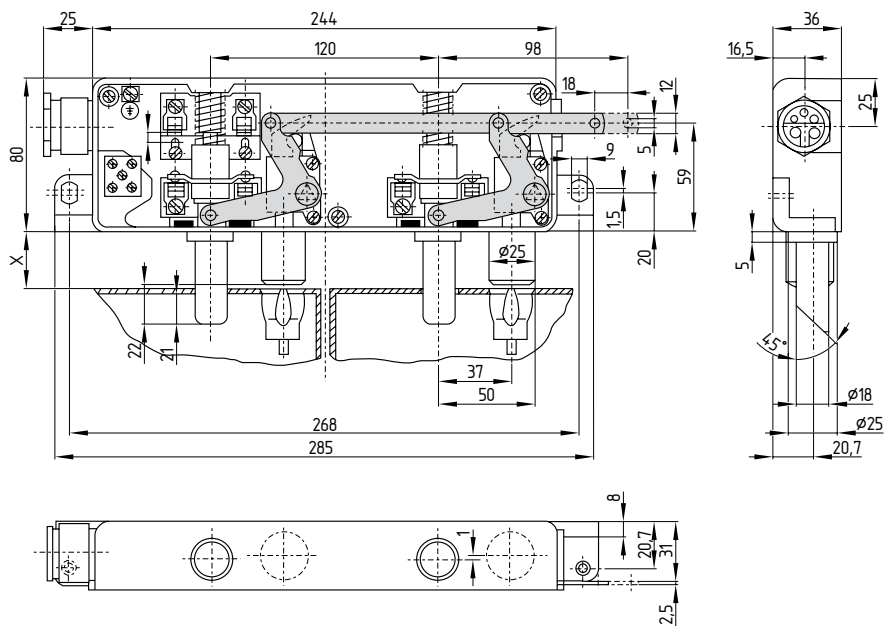


Door locking devices

Actuator with pull strap, version R

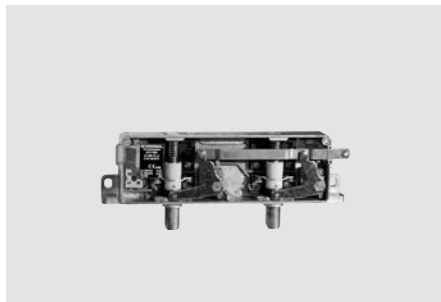
Shown:

- Right-hand version
- Auxiliary contact k
- Cable entry E1
- X-dimensions other than the above-listed standard dimensions are available at an additional cost.
- Special version with M8 thread, ordering suffix GB 215



Door locking devices

AV 28



- For 2-leaf doors
- Without certified locking device
- With metal enclosure
- For service lifts
- Emergency release with triangular key M5

Technical data

Standards: EN 81, Directive 95/16/EC
 Enclosure: Light-metal die-cast
 Protection class: IP 20
 Locking bolt: Brass D = 18 mm
 Contact material: Silber
 Switching element: changeover contact with double break, galvanically separated contact bridges

U_{imp} : 6 kV
 U_j : 400 VAC
 I_{th} : 10 A
 A

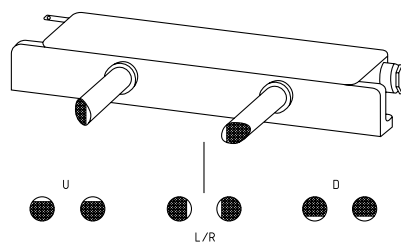
Utilisation category: AC-15, DC-13
 I_e/U_e : 2 A/230 VAC; 2A/200 VDC

Short-circuit protection: 6 A (slow blow)
 Emergency release: with triangular key M5 to DIN 22417

Ambient temperature: - 15 °C ... + 70 °C
 X-dimension: 11.5, 20, 30, 40, 45 mm

Actuating force at the linkage F_a : 17 N
 Actuating force at the linkage F_e : 30 N

Note



Inclined section at the locking bolt – Variants

Approvals



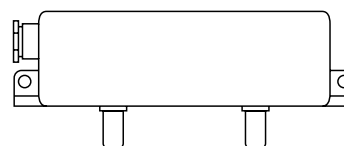
Ordering data

AV 28 ①②③④ ⑤45°N⑥

N°	Add	Description
①	L R	Left-hand version Right-hand version
②	K	without auxiliary contact with auxiliary contact
③	E4 E1	Cable gland M20 Cable entry (5 Holes)
④	X...	X-dimension = 11.5, 20, 30, 40, 45 mm

N°	Add	Description
⑤	U D L/R	Inclined section at locking bolt 45° bottom-side Inclined section at locking bolt 45° cover-side Inclined section at locking bolt 45° left-hand side / right-hand side
⑥	GB215	back-side M8 mounting holes frontal M8 mounting holes

Mounting position

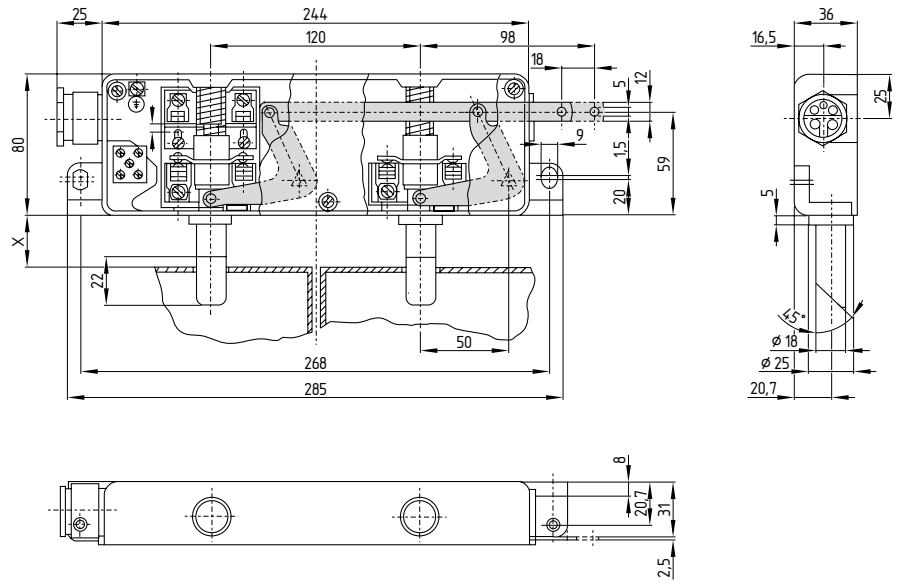


Door locking devices

Actuator with pull strap, version R

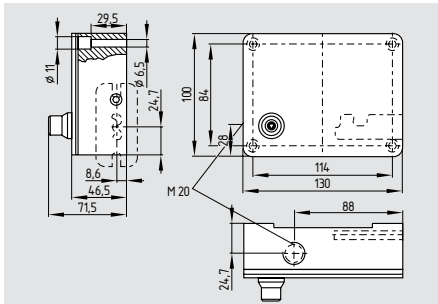
Shown:

- Right-hand version
- Auxiliary contact k
- Cable entry E1
- X-dimensions other than the above-listed standard dimensions are available at an additional cost.
- Special version with M8 thread, ordering suffix GB 215



Door locking devices

AV 415



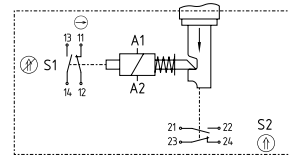
- 1-leaf
- With certified locking device
- For construction hoists
- Metal enclosure
- 4 contacts for monitoring the door and the locked position
- Holding force 3500 N
- Emergency release by triangular key on cover-side M5

Technical data

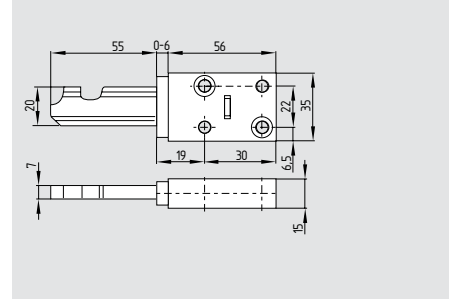
Standards:	IEC/EN 60947-5-1, DIN VDE 0660-200, EN 1088; BG-GS-ET-19, EN 81-1/2
Enclosure:	light-metal, enamel finish
Locking bolt:	galvanised metal/aluminium
Protection class:	IP 54 or IP 67
Contact material:	silver
Switching element:	changeover contact with double break Zb, galvanically separated contact bridges
Switching system:	⊖ IEC 60947-5-1; BG-GS-ET-19; slow action; positive break NC contact
Termination:	screw terminals
Cable section:	max. 2.5 mm ² (including conductor ferrules)
U _{imp} :	4 kV
U _i :	250 V
I _{the} :	6 A
Utilisation category:	AC-15 / DC-13
I _e /U _e :	2 A / 250 V AC; 1 A / 24 V DC
Positive break travel release:	5 mm
Positive break force release:	min. 15 N
Magnet:	100% ED
U _s :	12 V DC; 24 V AC/DC; 110 V AC; 230 V AC
Power consumption:	max. 10 W
Ambient temperature:	- 25 °C ... + 50 °C
Mechanical life:	> 1 million operations
Holding force F _{min} :	3500 N
Latching force:	-

Note

Spring-to-lock
2 NO contacts
2 NC contacts



Actuator



AZ/AZM 415-B1
AZ/AZM 415-B2
AZ/AZM 415-B3

Approvals



Ordering data

AV 415-22zpkFE

Note

Actuators must be ordered separately.

Note

- The AV 415 is a type-tested door locking device with integrated locking magnet. Because of its robust design, it is particularly fit for construction hoists and service lifts.

Door locking devices

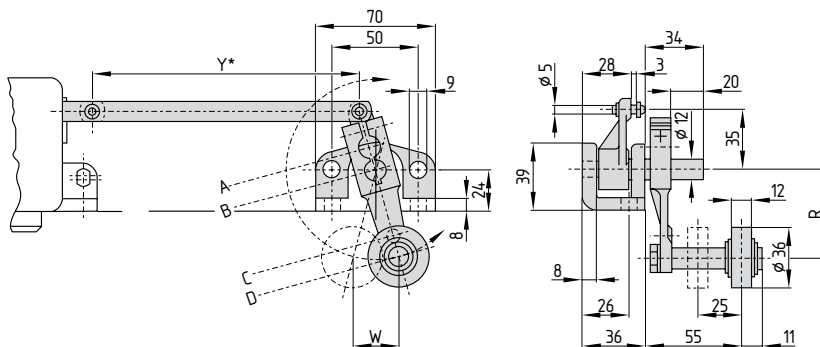
AY 03

Lever position	B-C	B-D	A-D
R [mm]	41	52	65
W [mm]	21	27	34

Actuating force at the roller

AV 15 [N]	9.5	7.5	6
AV 18 [N]	9.5	7.5	6
AV 20 [N]	43	33	25
AV 21 [N]	43	33	25
AV 25 [N]	22.5	18	14
AV 28 [N]	22.5	18	14

Bearing block with lever for door locking device with pull strap



Ordering data

Bearing block
Pull bar

AY 03
Y...

please indicate the
Y-dimension of the
pull bar, max. 1000 mm

Note

Right-hand and left-hand version are identical.

AW 01

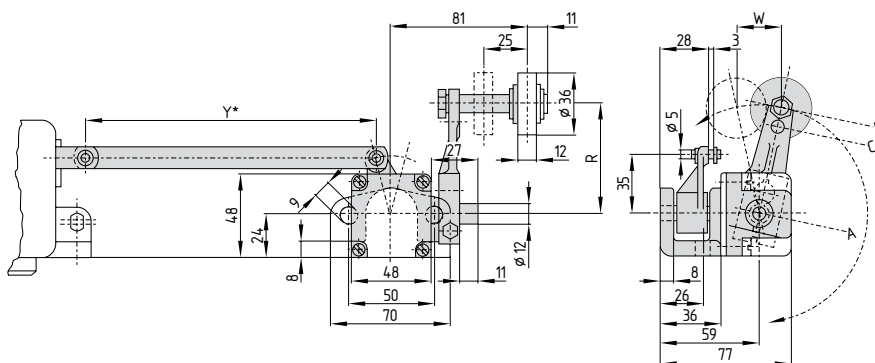
Lever position	A-C	A-D
R [mm]	54	65
W [mm]	28	34

Actuating force at the roller

AV 15 [N]	7	6
AV 18 [N]	7	6
AV 20 [N]	31	25
AV 21 [N]	31	25
AV 25 [N]	17	14
AV 28 [N]	17	14

Cam travel [mm]	35	40
-----------------	----	----

Angled transmission (i = 1:1) with lever



Ordering data

Angled transmission
Right-hand version
Left-hand version
Pull bar

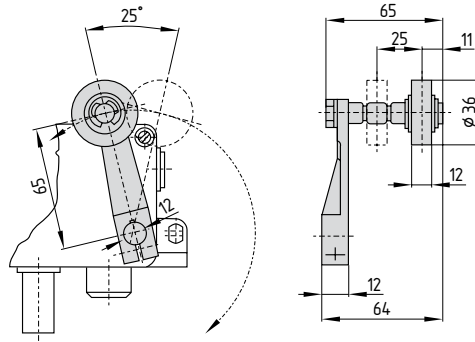
AW 01...
R
L
Y...

please indicate the
Y-dimension of the
pull bar, max. 1000 mm

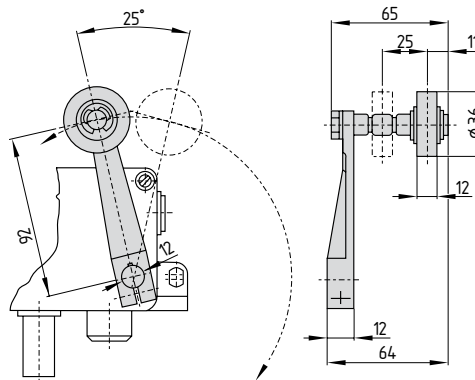
The figure shows the right-hand version;
the left-hand version is mirror-image.

Door locking devices

H 65 Standard lever for door locking device

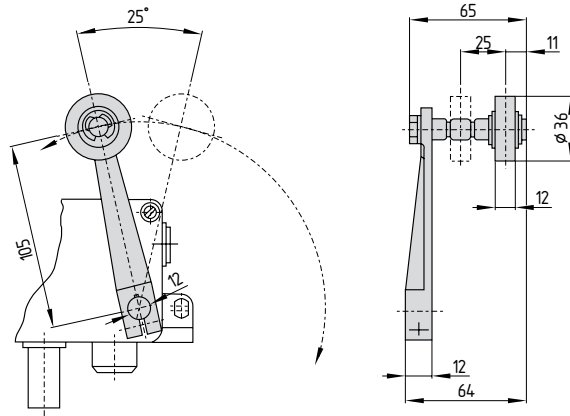


H 92 Lever for door locking device



Door locking devices

H 105 Lever for door locking device



Door locking devices

	AV 25	AV 28	AV 15
Number of door leafs	2	2	1
Certified locking device	●	–	●
Standards	EN 81, Directive 95/16/EC	EN 81, Directive 95/16/EC	EN 81, Directive 95/16/EC
Enclosure material	Light-metal die-cast	Light-metal die-cast	Light-metal die-cast
Protection class	IP 20	IP 20	IP 20, IP 41
Locking bolt	Light-metal die-cast	Light-metal die-cast	Light-metal die-cast
Contact material	Silver	Silver	Silver
Switching element	Changeover contact with double break, galvanically separated contact bridges	Changeover contact with double break, galvanically separated contact bridges	Changeover contact with double break, galvanically separated contact bridges
U_{imp}	6 kV	6 kV	6 kV
U_i	400 VAC	400 VAC	400 VAC
I_{th}	10 A	10 A	10 A
Utilisation category	AC-15, DC-13	AC-15, DC-13	AC-15, DC-13
I_e/U_e	2 A/230 VAC 2 A/200 VDC	2 A/230 VAC 2 A/200 VDC	2 A/230 VAC 2 A/200 VDC
Short-circuit protection	6 A (slow blow)	6 A (slow blow)	6 A (slow blow)
Emergency release	With triangular key M5	With triangular key M5	With triangular key M5
Permanent magnet for certified locking device	Ceramic-oxide magnet with high coercive field intensity	–	Ceramic-oxide magnet with high coercive field intensity
Ambient temperature	– 15 °C ... + 70 °C	– 15 °C ... + 70 °C	– 15 °C ... + 70 °C
Standard X-dimension:	11,5, 20, 30, 40, 45 mm	11,5, 20, 30, 40, 45 mm	11,5, 20, 30, 40, 45 mm
Suitable for	Passenger and service lifts	Service lifts	Passenger and service lifts

Door locking devices

AV 20	AV18	AV 21	
1	1	1	Number of door leaves
●	—	—	Certified locking device
EN 81, Directive 95/16/EC	EN 81, Directive 95/16/EC	EN 81, Directive 95/16/EC	Standards
Glass-fibre reinforces thermoplastic, self-extinguishing	Light-metal die-cast	Glass-fibre reinforces thermoplastic, self-extinguishing	Enclosure material
IP 54	IP 20, IP41	IP 54	Protection class
Brass D = 18 mm	Brass D = 18 mm	Brass D = 18 mm	Locking bolt
Silver	Silver	Silver	Contact material
Changeover contact with double break, galvanically separated contact bridges	Changeover contact with double break, galvanically separated contact bridges	Changeover contact with double break, galvanically separated contact bridges	Switching element
6 kV	6 kV	6 kV	U_{imp}
500 VAC	400 VAC	500 VAC	U_i
10 A	10 A	10 A	I_{th}
AC-15, DC-13	AC-15, DC-13	AC-15, DC-13	Utilisation category
2 A/230 VAC 2 A/200 VDC	2 A/230 VAC 2 A/200 VDC	2 A/230 VAC 2 A/200 VDC	I_e/U_e
6 A (slow blow)	6 A (slow blow)	6 A (slow blow)	Short-circuit protection
With triangular key M5	With triangular key M5	With triangular key M5	Emergency release
Ceramic-oxide magnet with high coercive field intensity	—	—	Permanent magnet for certified locking device
– 15 °C ... + 70 °C	– 15 °C ... + 70 °C	– 15 °C ... + 70 °C	Ambient temperature
11,5, 20, 30, 40, 45 mm	11,5, 20, 30, 40, 45 mm	11,5, 20, 30, 40, 45 mm	Standard X-dimension:
Passenger and service lifts	Service lifts	Service lifts	Suitable for

Door locking devices

	AV 415
Number of door leaves	1
Certified locking device	●
Standards	IEC/EN 60947-5-1; Directive 95/16/EC; EN 1088 BG-GS-ET-19, EN 81-1/2
Enclosure material	Light-metal, enamel finish
Protection class	IP 67
Locking bolt	Galvanised metal/aluminium
Contact material	Silver
Switching element	Changeover contact with double break, galvanically separated contact bridges
Switching system	⊖ IEC 60947-5-1 BG-GS-ET-19 Slow action, positive break NC contact
Termination	Screw terminals
Cable section	max. 2,5 mm ² (including conductor ferrules)
U_{imp}	4 kV
U_i	250 V
I_{th}	6 A
Utilisation category	AC-15
I_e/U_e	2 A / 250 VAC 1 A / 24 VDC
Positive break travel release	5 mm upon release
Positive break force release	min. 15 N upon release
Magnet	100% ED
U_s	12 VDC 24 VAC/DC; 110 VAC 230 VAC
Power consumption	max. 10 W
Ambient temperature	-25 °C ... +50 °C
Mechanical life	> 1 million operations
Holding force F_{min}	3500 N
Latching force	-
Suitable for	Construction hoists