

Back Checks

With Hydraulic Damping in the Opening Direction

The DICTATOR back checks with hydraulic damping slow down hinged doors opening too fast and limit the opening angle of the door. Thus they prevent damage to the door and the hinges.

The door can effortlessly be moved by hand. The cushioning of the back check prevents too high opening speed of the door (e.g. by a sudden gust of wind).

The DICTATOR back checks are often used on doors which could bump into a wall or something similar by gusts of wind, draught or just during opening being torn from the user's hand. Beside the damage this could cause to the door, the fittings and possibly the wall, doors opening at uncontrolled speed present a risk of accident not to be underestimated.

The back checks are produced in **two basic versions**: with or without adjustment of the damping force. Of both versions there are available several series for different sizes of doors. Our technical service would be happy to determine free of charge the back check for your application.



Technical Data

Cylinder diameter	TB: 23, 28 mm; TBR: 28, 35 mm
Piston rod diameter	TB: 10, 14 mm; TBR: 10, 14 mm
Cylinder	steel zinc-plated or coated in RAL colours, AISI 304, AISI 316
Piston rod	hard-chrome plated, AISI 304, AISI 316
Door size*	up to width 1.30 m, height 2.50 m (with 3 hinges)
Door weight*	up to ca. 200 kg; *for larger doors on demand
Maximum opening angle	120°
Mechanical stop (ca.)	TB: 1023: 250 N, 1428: 350 N, 1435: 500 N



Operation, Installation and Adjustment

DICTATOR back checks are the ideal solution for exterior doors being exposed to wind or interior doors in surroundings with heavy draught that might slam open. The cushioning by the back check reduces strain both on door (e.g. glass panes) and door hinges. One side of the back check is fixed to the upper door frame, the other side to the door leaf. When the door is opened normally, there is almost no cushioning effect of the back check perceptible. As soon as the door is opened very fast either by hand or e.g. a gust of wind, the back check hydraulically slows down this sudden movement.

Choosing the Correct Back Check

The tables with the different standard models show the weight of interior doors up to which the respective back check may be used. When installing a back check without adjustment on a frequently used door, you should always choose the series 1428 with 250 mm stroke (also with the sets)!

When you intend to install back checks on exterior doors or on doors with high pressure differences or heavy draught, please contact our advisory service. For this application we need the following data:

- Opening angle, weight, dimensions, thickness and material of the door
- Width and material of the door frame
- Mechanic stop required: yes/no
- Installation on the side of the hinges or on the side opposite to the hinges
- An overhead door closer is mounted on the door: yes/no
- If yes: On which side of the door?
- On the door leaf is mounted the guide rail/the overhead door closer.
- Drawings or pictures, if possible.

Accessories

The **back checks** are available **with** complete **installation kits** for the different types of doors, all packed in a unit box. This should **facilitate the choosing**. Information on the different sets is to be found beginning on page 02.065.00, the exact dimensions of the fixing accessories are shown on page 02.067.00 and 02.068.00.

Apart from the sets the fixing accessories are also separately available. For the 1435 series no sets are available as here the installation situations vary a lot. The necessary installation accessories have to be ordered additionally to the back check.

Mechanical Stop

The back checks can be furnished with an integrated mechanical stop for the door in the open position (stop at about 3° before the piston rod is completely extended).

Installation

When installing the back check, please make sure it is fixed securely to the door and the frame. If door or frame are made from thin steel sheet or something similar, we recommend to use mounting plates.

Furthermore, the piston rod should not be fully compressed when the door is closed. There should be left approx. 10 mm of stroke in order to ensure the door can be opened without problems.

Damping Adjustment

When using a non-adjustable back check TB model the cushioning range can be reduced on site by withdrawing some of the oil through the valve screw. If this necessary, please contact our technical customer service.

The damping force of the adjustable back checks TBR can be adjusted continuously and at any time. The piston rod of the models without mechanical stop has to be pulled out as far as possible and then - while still being pulled - be turned. With the types with mechanical stop it works the other way round: push the piston rod as far as possible into the cylinder and then turn it carefully.



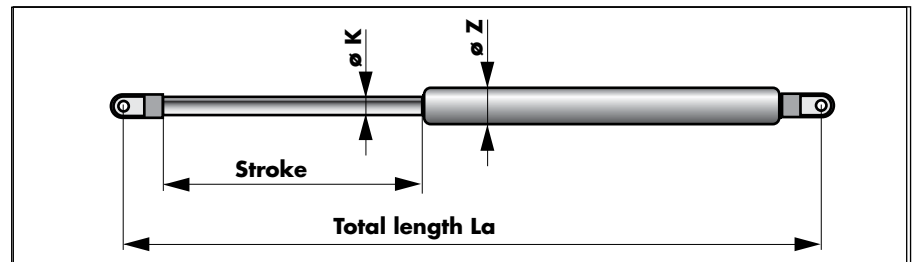
Non-Adjustable Back Checks TB

The economic and non-adjustable types **TB** are mainly intended for industrial applications (e.g. for hall doors opening to the outside).

There are produced two series of back checks TB with the diameters 1023 and 1428. The standard types are shown below. Of course, there are available differing lengths. In addition the back checks TB can also be provided with an integrated mechanical stop.

By default the steel version is zinc-plated. On demand coating in RAL colours is also possible. The dimensions of the fixing eyelet are to be found on the next page.

Dimensions



Technical Data and Order Information

The following list shows only a choice of the available models. We gladly will provide detailed advice on the appropriate model and of course will manufacture it, also single units and models which are not listed below.

Some of the back checks TB are also available as a set with the appropriate fixing accessories. Information on the different sets you will find on page 02.065.00.

Ø K [mm]	Ø Z [mm]	Stroke [mm]	Length La [mm]	Door weight up to	Max. door opening	Me- chanic. stop	Part no.		
							Steel zinc-plated	AISI 304	AISI 316
10	23	200	500	50 kg	95°	no	302000	302002	302004
10	23	200	500	50 kg	95°	yes	302001		-
10	23	200	510	50 kg	95°	yes	-	302003	302005
10	23	250	600	50 kg	120°	no	302006	302010	302012
10	23	250	600	50 kg	120°	yes	302007	-	-
10	23	250	610	50 kg	120°	yes	-	302011	302013
10	23	250	660	50 kg	120°	no	302008*	-	-
10	23	250	660	50 kg	120°	yes	302009*		
14	28	200	500	90 kg	95°	no	302014	-	-
14	28	200	510	90 kg	95°	no	-	302016	302018
14	28	200	510	90 kg	95°	yes	302015	302017	302019
14	28	250	600	200 kg	120°	no	302020	302022	302024
14	28	250	610	200 kg	120°	yes	302021	302023	302025
14	28	300	750	200 kg	120°	no	302026	302028	302030
14	28	300	750	200 kg	120°	yes	302027	302029	302031
14	28	400	1000	200 kg	120°	no	302033	302035	302037
14	28	400	1000	200 kg	120°	ja	302034	302036	302038

* The back checks with the part numbers 302008 and 302009 are longer than the standard models. They are specifically intended for the installation together with a guide rail door closer.



Adjustable Back Checks TBR

The adjustable back checks **TBR** are designed especially for the interior use, e.g. in residential building, hospitals, nursing homes etc. where higher requirements apply to the optimum movement of the door. They are also used on heavy doors as they can exactly be adjusted on site.

There are produced two series of adjustable back checks TB with the diameters 1028 and 1435. The standard types are shown below. Of course there are available differing lengths. In addition the diameter series 1435 is also available with an integrated mechanical stop (code "F"). For the fixing of the back checks there is provided an eyelet both on piston rod and cylinder (dimensions see below). Other end fittings are available on request.

Technical Data and Order Information

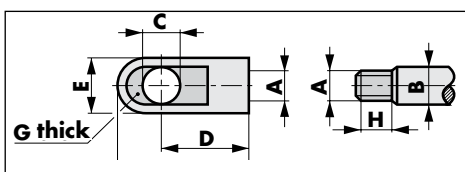
Ø K * [mm]	Ø Z * [mm]	Stroke * [mm]	Length La * [mm]	Door weight up to	Max. door open- ing	Me- chan- ic. stop	Measure C eyelet of 1435 series	Part no.		
								Steel zinc-plated	AISI 304	AISI 316
10	28	200	550	100 kg	95°	no		302200	302202	302203
10	28	250	600	100 kg	120°	no		302204	302205	302206
14	35	250	650	200 kg	120°	no	Ø 8	302210	302213	302215
14	35	250	650	200 kg	120°	no	Ø 10**	302211	302214	302216
14	35	250	650	200 kg	120°	yes	Ø 8	302212	302238	-
14	35	300	750	200 kg	120°	no	Ø 8	302217	302220	302222
14	35	300	750	200 kg	120°	no	Ø 10**	302218	302221	302223
14	35	300	750	200 kg	120°	yes	Ø 8	302219	302239	-
14	35	400	950	200 kg	120°	no	Ø 8	302224	302230	302232
14	35	400	950	200 kg	120°	no	Ø 10**	302225	302231	302233
14	35	400	950	200 kg	120°	yes	Ø 8	302226	-	-
14	35	400	950	200 kg	120°	yes	Ø 10**	302227	-	-
14	35	500	1150	200 kg	120°	no	Ø 10**	302234	-	-
14	35	500	1150	200 kg	120°	yes	Ø 10**	302235	-	-

* see drawing on the previous page

The above list shows only a choice of the available models. We gladly will provide detailed advice on the appropriate model and of course will manufacture it, also single units and models which are not listed below.

Some of the listed back checks TBR are also available as a set with the appropriate fixing accessories (see next page).

Dimensions End Fitting "Eyelet"



Ø Series	1023 / 1028	1428	1428V / 1435	1435-1**
A	M8	M10	M10	M10
B	Ø 10	Ø 14	Ø 14	Ø 14
C	Ø 8	Ø 8	Ø 8	Ø 10
D	22	30	27	27
E	14	18	18	18
F	32	40	36	36
G	10	10	10	10
H	10	10	10	10

** Fixing accessories on page 02.066.00



Back Check Sets

The most common TB and TBR back checks are also available as sets complete with the appropriate mounting accessories.

The required installation kit depends on the mounting situation, the type of door and frame. On the following page you will find the different kinds of installation and the corresponding accessories kit. Of course the fitting brackets are also available as single parts. Details and the dimensions of all components are shown on page 02.067.00.

Order Information Sets

Back check sets not adjustable TB (zinc-plated steel)					Part no.	
$\varnothing K$	$\varnothing Z$	Stroke	Length La	Accessories	without stop	with stop
10	23	250	600	Set 1	300981	300991
10	23	250	600	Set 2	300982	300992
10	23	250	600	Set 3	300983	300993
14	28	250	600	Set 1	300984	
14	28	250	610	Set 1		300994
14	28	250	600	Set 2	300985	
14	28	250	610	Set 2		300995
14	28	250	600	Set 3	300986	
14	28	250	610	Set 3		300996

Back check sets not adjustable TB (AISI 304)					Part no.	
$\varnothing K$	$\varnothing Z$	Stroke	Length La	Accessories	without stop	with stop
14	28	250	600	Set 1	300987	
14	28	250	610	Set 1		300998
14	28	250	600	Set 2	300990	
14	28	250	610	Set 2		300997
14	28	250	600	Set 3	301901	
14	28	250	610	Set 3		301902

Back check sets adjustable TBR (zinc-plated steel)					Part no.	
$\varnothing K$	$\varnothing Z$	Stroke	Length La	Accessories	without stop	with stop
10	28	250	600	Set 1	300975	
10	28	250	600	Set 2	300976	
10	28	250	600	Set 3	300977	

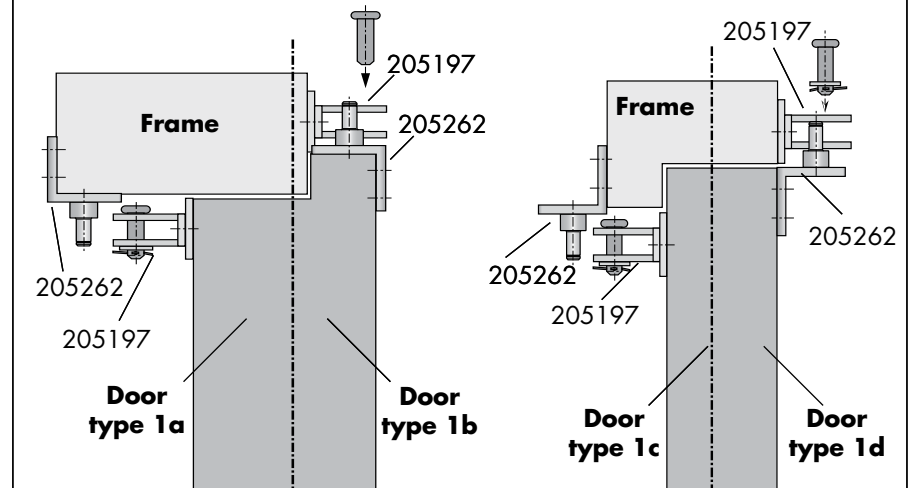
Back check sets adjustable TBR (AISI 304)					Part no.	
$\varnothing K$	$\varnothing Z$	Stroke	Length La	Accessories	without stop	with stop
10	28	250	600	Set 1	300999	
10	28	250	600	Set 2	300980	
10	28	250	600	Set 3	301903	



Installation Kits - Mounting Situations

Kit 1 can be used for the back (door type 1a with **mid-size frame**) or front side of an overlapping door (door type 1b).

Kit 1 also can be used on the back (door type 1c with **narrow frame**) or front of a flush door (door type 1d).

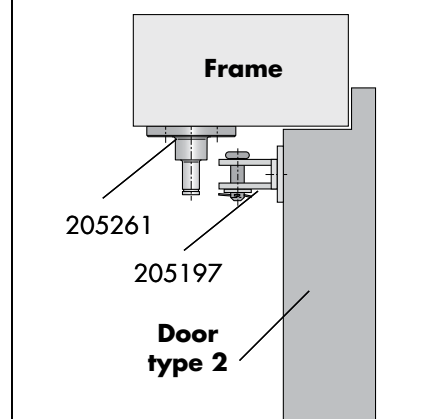


Installation Kit 1

for overlapping and flush doors:

Installation kit 1 (part no. 205197 and 205262) for back checks of the 1023, 1028 and 1428 series

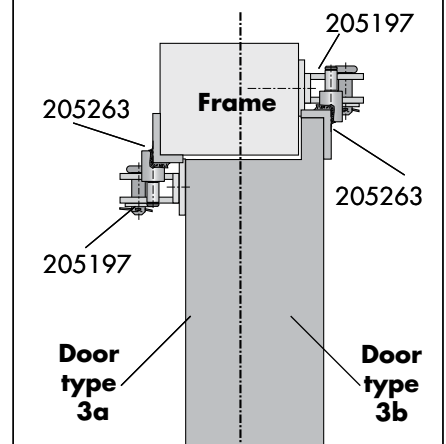
Kit 2 is used only on the **back side** of the door. There has to be enough space available on the frame for mounting flange no. 205261, to achieve a secure fixing.



Installation Kit 2 for backside installation under a large frame:

Installation kit 2 (part no. 205197 and 205261) for back checks of the 1023, 1028 and 1428 series

Kit 3 with the special bracket no. 205263 allows an installation on the **back side** of a narrow frame (3a) or on the **front** of doors with thin overlapping (3b).



Installation Kit 3 for installation under a narrow frame or on the front side of doors overlapping only slightly:

Installation kit 3 (part no. 205197 and 205263) for back checks of the 1023, 1028 and 1428 series

Note:

In addition to the zinc-plated models (for part no. see the drawings) the mounting accessories are also available of AISI 304, some also of AISI 316.

zinc-plated	AISI 304	AISI 316
205197	205249	205455
205261	205281	
205262	205282	205456
205263	205258	



Accessories for the Series 1023, 1028, 1428 and 1435

For installing the back checks there are different brackets available. The type of bracket to mount on the frame depends mainly on the width of the frame. The bracket to be chosen for the door depends on the kind of door (overlapping or flush).

If the back check is fitted to a door already being equipped with an overhead door closer, special brackets are necessary. For fixing it to the frame you need a longer bracket (part no. 205275) and for the door the special bracket (part no. 205276). They allow to fix the back check below the guide rail of the door closer.

Under certain circumstances these accessories can be used for the series 1435 (not for 1435-1!).

Mounting bracket
part no. 205197 / 205249 / 205455

Counter plate for mounting bracket
part no. 205468

For mounting on thin-walled doors: mounting bracket with counter plate

Mounting bracket
part no. 205262 / 205282 / 205456

Mounting bracket narrow
part no. 205263 / 205258

Mounting flange
part no. 205261 / 205281

Mounting bracket, zinc-plated
(in combination with overhead door closer)
part no. 205275

Mounting bracket zinc-plated
(in combination with overhead door closer)
part no. 205276



Accessories for the Series 1435-1

For the installation of the back check series 1435-1 we provide special accessories, as the applications where these back checks are used are subject to high forces. For this reason the diameter of the eyelet hole is 10 mm (instead of 8 mm as with the other eyelets). For the fixing to the door we recommend the mounting plate. To improve the stability of the fixing on e.g. very thin walled doors you should additionally use the counter plate with threaded inserts. The fastening angle is intended for the mounting to the frame. Depending on the mounting situation the bolt can be positioned on the inner or outer side.

The accessories are zinc-plated. Special accessories are available on demand.

<p>Counter plate to mounting plate with threaded inserts part no. 205461</p> <p>Mounting plate part no. 205460</p>	<p>Mounting flange for narrow door frames part no. 205469</p>
<p>Mounting angle with bolt that can be positioned on the inner or outer side part no. 205462</p>	

Order Information Mounting Accessories

Bracket, zinc-plated	for door and frame	part no. 205197
Bracket, AISI 304	for door and frame	part no. 205249
Bracket, AISI 316	for door and frame	part no. 205455
Counter plate with threaded inserts for bracket, AISI 304		part no. 205468
Mounting flange, zinc-plated	only for frame	part no. 205261
Mounting flange, AISI 304	only for frame	part no. 205281
Mounting bracket, zinc-plated	for door and frame	part no. 205262
Mounting bracket, AISI 304	for door and frame	part no. 205282
Mounting bracket, AISI 316	for door and frame	part no. 205456
M. bracket narrow, zinc-plated	for door and frame	part no. 205263
M. bracket narrow, AISI 304	for door and frame	part no. 205258
Mounting bracket (overhead door closer), zinc-plated	for frame	part no. 205275
Mounting bracket (overhead door closer), zinc-plated	for door	part no. 205276
Mounting plate for 1435-1 series, zinc-plated		part no. 205460
Counter plate with threaded inserts for 205460, zinc-plated		part no. 205461
Mounting angle for 1435-1 series, zinc-plated		part no. 205462
Mounting flange for 1435-1 series, zinc-plated		part no. 205469