

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 about the different sets is to be found beginning on page 02.075.00, the exact dimensions of the fixing accessories are shown beginning on page 02.077.00.

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.



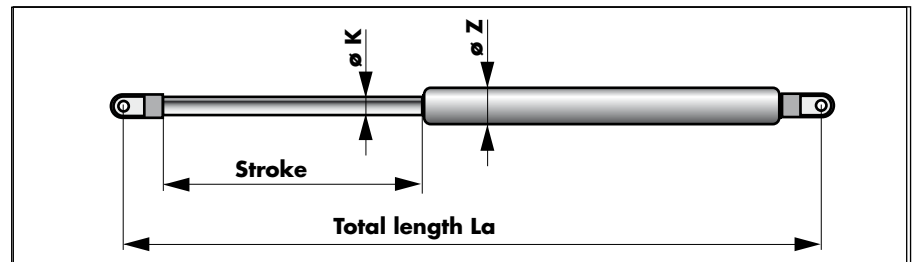
Non-Adjustable Back Checks TB

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 about the different sets you will find on page 02.071.00.

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

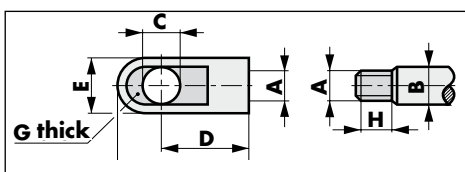
Ø K * [mm]	Ø Z * [mm]	Stroke * [mm]	Length La * [mm]	Door weight up to	Max. door open- ing	Me- chan- ic. stop	Measure C eyelet of 1435 series	Part no.		
								Steel zinc-plated	AISI 304	AISI 316
10	28	200	550	100 kg	95°	no		302200	302202	302203
10	28	250	600	100 kg	120°	no		302204	302205	302206
14	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



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 02.077.00.

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	

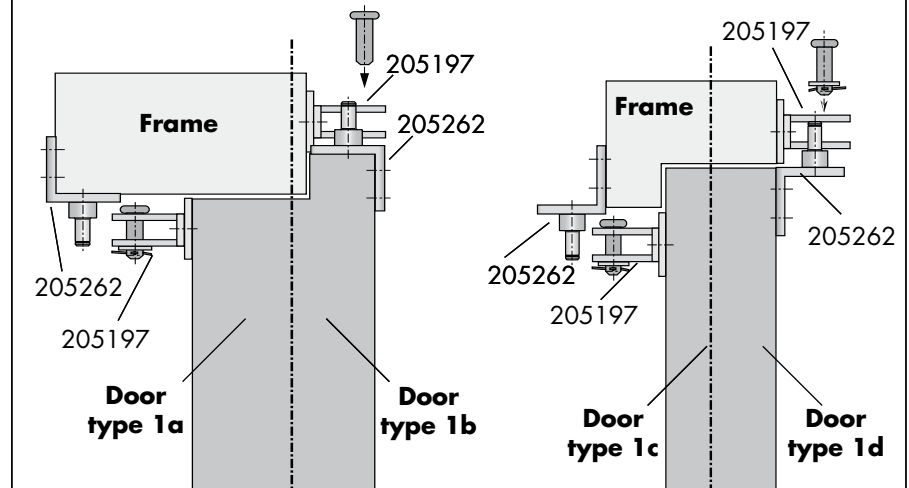
Back check sets adjustable TBR (AISI 304)					Part no.	
$\varnothing K$	$\varnothing Z$	Stroke	Length La	Accessories	without stop	with stop
10	28	250	600	Set 1	300999	
10	28	250	600	Set 2	300980	
10	28	250	600	Set 3	301903	



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).

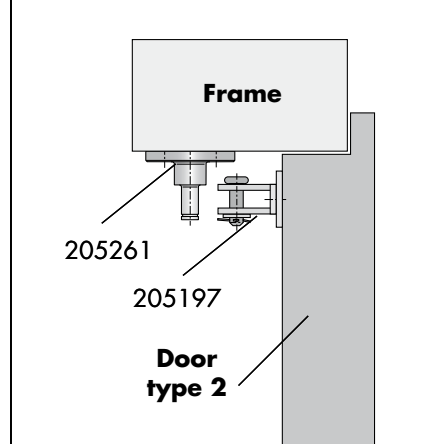


Installation Kit 1

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.

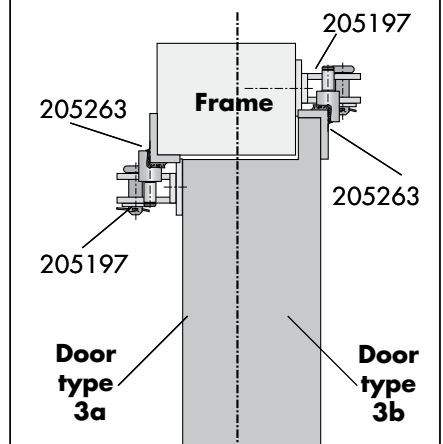


Installation Kit 2

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



Fixing Accessories: Kits 1 - 3

For mounting the back checks, different brackets are available.

All three standard installation kits (see previous page) include the mounting bracket shown below on the top left (no. 205197). To facilitate mounting if the door is made of thin walls, we offer a counter plate for this bracket. For a space saving mounting on glass doors with aluminium frames we provide the mounting plate TB.

The other component of the installation kits is chosen, depending on the mounting situation, from one of the mounting brackets shown at the bottom of this page.

Mounting bracket
part no. 205197 (zinc-plated),
205249 (AISI 304),
205455 (AISI 316)

All dimensions in mm

Counter plate for mounting bracket 205197
part no. 205468 (AISI 304)

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

Mounting plate TB with 2 threaded holes M5 for mounting bracket 205197
part no. 205479 (AISI 304)

When mounted on glass doors with an aluminium frame

3 x ø 5,4 x 120

Mounting flange TB
Ø 42 mm, pin 8 mm
part no. 205261 (zinc-plated),
205281 (AISI 304)

Mounting bracket TB
40x40x40 mm, pin 8 mm
part no. 205262 (zinc-plated),
205282 (AISI 304), 205456 (AISI 316)

Mounting bracket TB
50x40x20 mm, pin 8 mm
part no. 205263 (zinc-plated),
205258 (AISI 304)



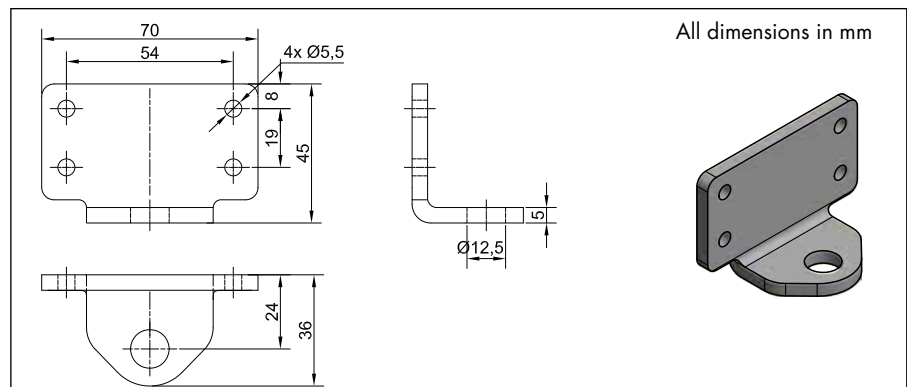
Fixing Accessories TB, for Universal Use

Beside the standard kits and the special mounting accessories for mounting in combination with overhead door closers (beginning on page 02.076.00), DICTATOR offers a great number of mounting brackets and mounting plates. Some feature a fixed mounting pin, others can be used either with a 8 or 10 mm mounting pin. These have to be ordered according to the application in addition to the fixing accessories.

Please let our technicians help you in choosing the optimum accessories.

Other accessories and special mounting brackets are available on demand.

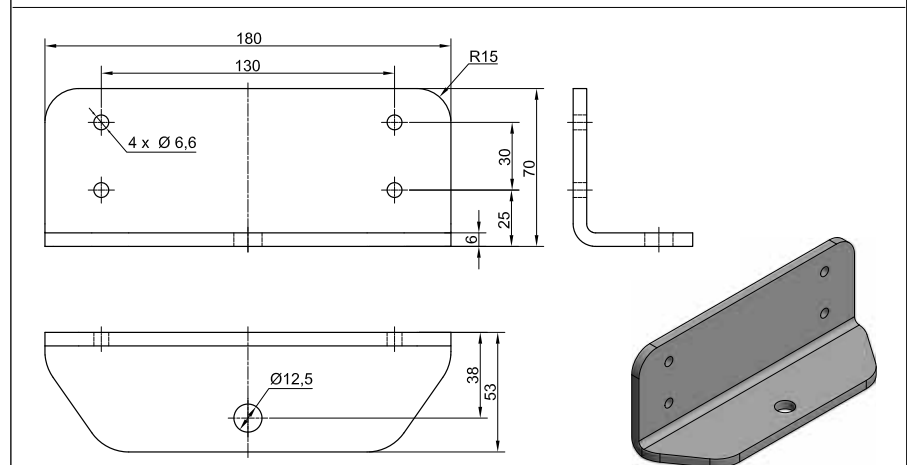
Fixing Accessories for Mounting Pin with Ø 8 or Ø 10 mm



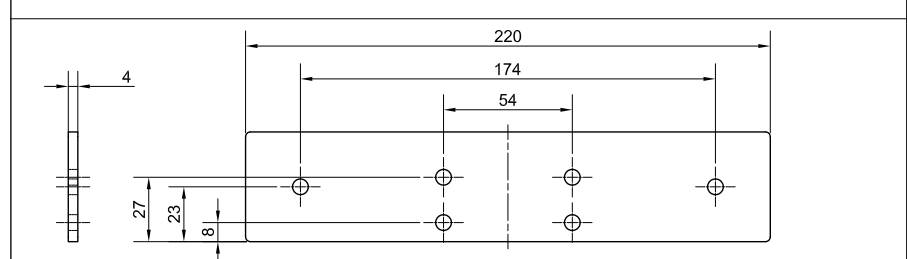
All dimensions in mm

Mounting bracket TB 70x45x36 mm (without mounting pin)

part no. 205489 (zinc-plated), 205490 (AISI 304), 205491 (AISI 316)



Mounting bracket TB 180x70x53 mm, zinc-plated (without mounting pin), part no. 205462-W



Mounting plate TB 220x46 mm

(suitable for mounting bracket TB 70x45x36, 205489 - if high forces apply)
part no. 205503 (zinc-plated), 205504 (AISI 304), 205505 (AISI 316)



Fixing Accessories TB, for Universal Use - cont.

The mounting pins for the fixing accessories are supplied together with washers, nut and lock washer.

They feature a different diameter of the pin and a different length of the distance piece, which is available with a length of 25 mm or 45 mm.

Mounting Pins for Fixing Accessories

Mounting pin TB Ø 8 mm		Mounting pin TB Ø 10 mm	
Distance (D)	25 mm 45 mm	Distance (D)	25 mm 45 mm
zinc-plated	part no. 205511 205514	zinc-plated	part no. 205517 205520
AISI 304	part no. 205512 205515	AISI 304	part no. 205518 205521
AISI 316	part no. 205513 205516	AISI 316	part no. 205519 205522

Fixing Accessories with Mounting Pin Ø 10 mm

Mounting plate
part no. 205460

Counter plate with threaded inserts for mounting plate
part no. 205461

Mounting flange for narrow door frames
part no. 205469

All dimensions in mm

2 x Ø 6 mm with countersink for countersunk head screw ISO 7721



Mounting Situations when Combined with Overhead Door Closers

The back check can also easily be used together with an overhead door closer. This applies to door closers with scissor arm as well as with slide channel.

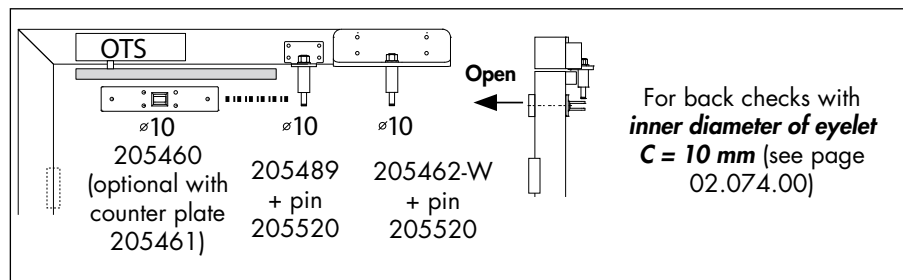
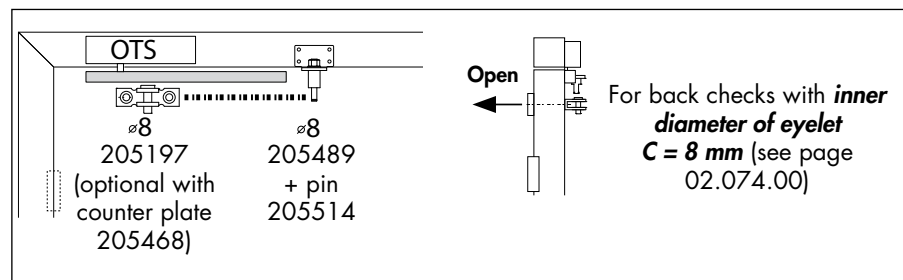
This, however, often requires special mounting brackets.

On this page you will find an overview of the most common mounting situations and the recommended accessories. But also for other applications, it usually is no problem to find a solution.

The dimensions of the accessories for mounting a back check in combination with an overhead door closer are to be found on the next page.

Mounting Situations Back Check - Overhead Door Closer OTS

Overhead door closer (OTS), mounted on the door frame



Note:

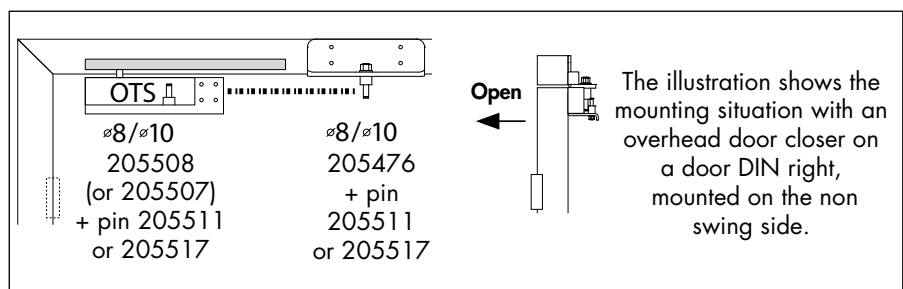
In addition to the zinc-plated models (for part no. see the drawings) some of the mounting accessories are also available in AISI 304 or in AISI 316.

zinc-plated	AISI 304	AISI 316
205197	205249	205455
205489	205490	205491

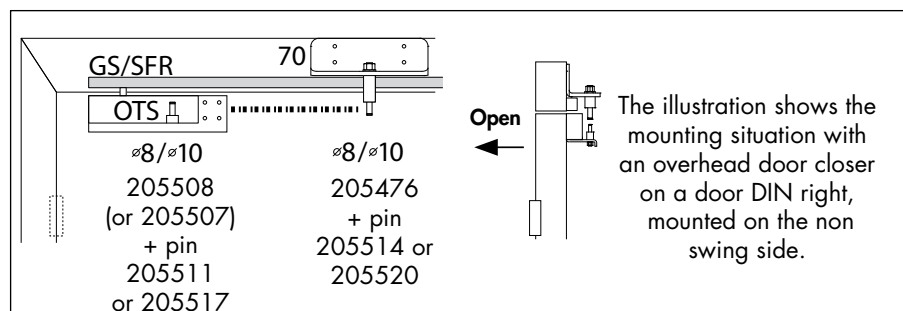
Mounting pin

205511	205512	205513
205514	205515	205516
205517	205518	205519
205520	205521	205522

Overhead door closer (OTS), mounted on the door leaf



Overhead door closer with slide channel (OTS-GS/SFR) with door sequence selection, mounted on the door leaf





Fixing Accessories when Combined with Overhead Door Closers (TB-OTS)

The mounting brackets 205476 and 205482 or 205485 can be used with a mounting pin of \varnothing 8 mm or 10 mm (see page 02.079.00 for the dimensions of the mounting pins). When choosing the mounting bracket no. 205482/205485, please keep in mind that the given DIN direction applies when being mounted on the non swing side. In the event of mounting it on the hinge side, you have to choose the other model.

Note: The mounting bracket 205276 can also be replaced by the mounting bracket 205197 together with the mounting plate TB 205479.

Fixing Accessories TB-OTS with Mounting Pin \varnothing 8 mm

Mounting bracket TB 70x45x36 mm
part no. 205489 **with pin** \varnothing 8 mm
205514 - see pages 07.078/079.00

All dimensions in mm

Mounting bracket TB-OTS, 50x20x30 mm, pin 8 mm, zinc-plated, part no. 205276

Fixing Accessories TB-OTS for Mounting Pin \varnothing 8 or \varnothing 10 mm

Mounting bracket TB-OTS 180x70x90 mm
for pin 8 or 10 mm, zinc-plated
part no. 205476

Mounting bracket TB-OTS 250x106x90x84 mm
for pin 8 or 10 mm, zinc-plated
part no. 205507 (DIN left)(dimensioned drawing), part no. 205508 (DIN right)

DIN left

DIN right



Fixing Accessories - Order Information

The following table summarizes the order information of all the fixing accessories shown on the previous pages.

Basically you have to distinguish between the accessories with the 8 mm mounting pin and those with the 10 mm pin. Some accessories can be equipped either with a 8 mm or a 10 mm mounting pin.

Some fixing accessories are also by default available in AISI 304 and AISI 316. If you need accessories in stainless steel which are listed in this table only as zinc-plated version, please ask us.

Order Information Mounting Accessories TB

Model	Part no.		
	zinc-plated	AISI 304	AISI 316
Mounting bracket	205197	205249	205455
Counter plate with threaded inserts for mounting bracket 205197	-	205468	-
Mounting plate TB with 2 threaded holes M5 for mounting bracket 205197	-	205479	-
Mounting flange TB Ø 42, pin Ø 8 mm	205261	205281	-
Mounting bracket TB 40x40x40 mm, pin Ø 8 mm	205262	205282	205456
Mounting bracket TB 50x40x20 mm, pin Ø 8 mm	205263	205258	-
Mounting bracket TB 70x45x36 mm, for mounting pin Ø 8 or 10 mm	205489	205490	205491
Mounting bracket TB 180x70x53 mm, for mounting pin Ø 8 or 10 mm	205462-W	-	-
Mounting plate TB 220x46 mm	205503	205504	205505
Mounting pin TB 25-14 mm, Ø 8 mm	205511	205512	205513
Mounting pin TB 45-14 mm, Ø 8 mm	205514	205515	205516
Mounting pin TB 25-16 mm, Ø 10 mm	205517	205518	205519
Mounting pin TB 45-16 mm, Ø 10 mm	205520	205521	205522
Mounting plate TB 45x220 mm, seat with mounting pin Ø 10 mm	205460	-	-
Counter plate for mounting plate TB 45x220 mm, with threaded inserts	205461	-	-
Mounting flange TB 65x25 mm, mounting pin Ø 10 mm	205469	-	-
Mounting bracket TB-OTS 50x20x30 mm, mounting pin Ø 8 mm	205276	-	-
Mounting bracket TB-OTS 180x70x90 mm for mounting pin Ø 8 or 10 mm	205476	-	-
Mounting bracket TB-OTS 250x106x90x84 mm, for mounting pin Ø 8 or 10 mm, DIN left, mounted on non swing side	205507	-	-
Mounting bracket TB-OTS 250x106x90x84 mm, for mounting pin Ø 8 or 10 mm, DIN right, mounted on non swing side	205508	-	-