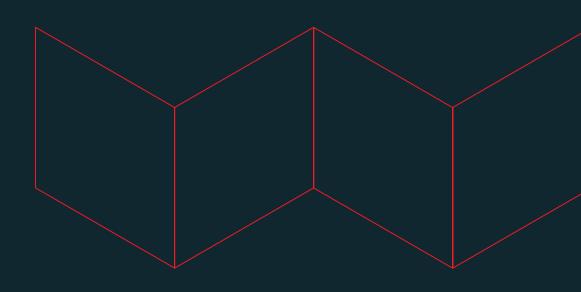


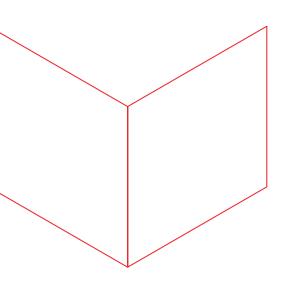
Safety fence system Easy FLEX II The flexible safety fence system

for dividing protection equipment

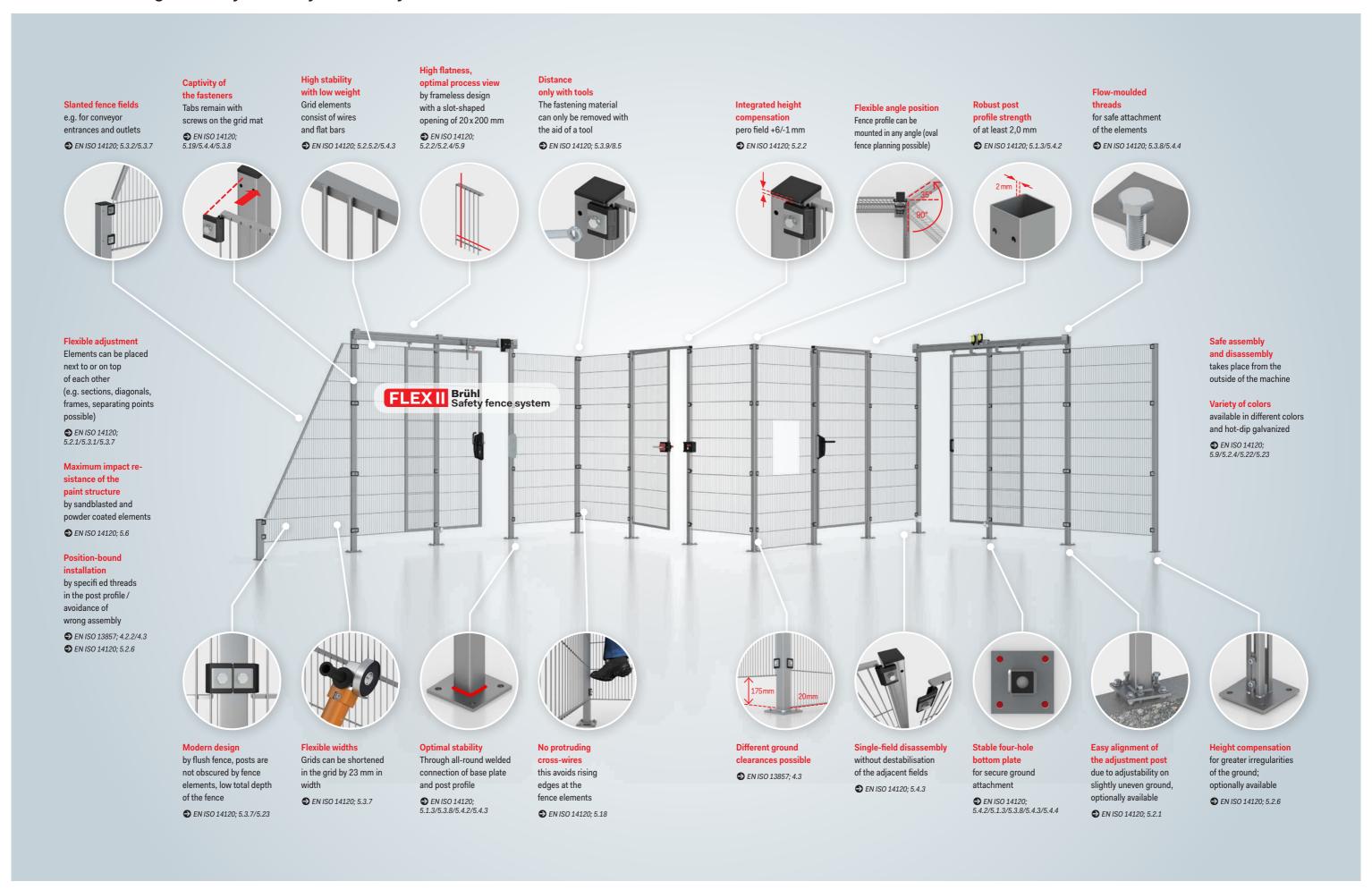






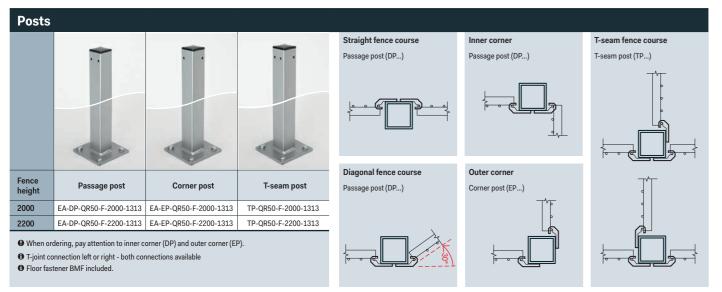


Product advantages safety fence system Easy FLEX II



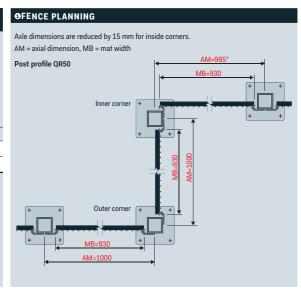
Safety fence system Easy FLEX II





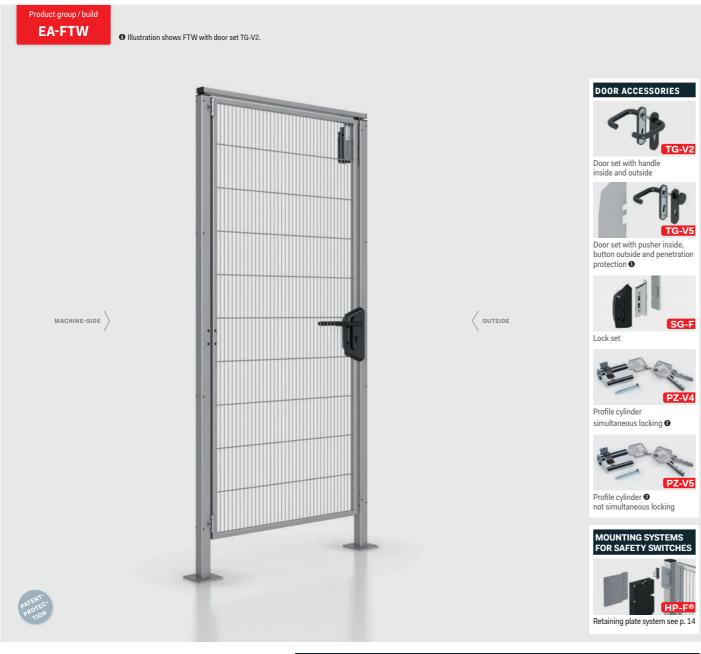
Sta	andaro	d grid ele	ement	s								
		Markhadas		Planne	d axle siz	e from po	st centre	to post ce	entre 🖸			
		Mat heigt	1000	1200	1400	1500	1600	1800	2000	2200		
						Real ax	e size 2				Number of post	
		0	993,5	1200,5	1407,5	1499,5	1614,5	1798,5	2005,5	2212,5	attachment	
=		arace		Mat	width b (a	xle size -	post prof	ile - 20 m	ım) 0		material	
Fence height		Ground clearace 175 mm	923,5	1130,5	1337,5	1429,5	1544,5	1728,5	1935,5	2142,5	per mat.	
ceh	Product	pung Jung			Nu	mber of v	ertical ro	ds				
Fer	Pre	Grc 175	41	50	59	63	68	76	85	94	FL2	
2000	EA-SF2	-1825	-924	-1131	-1338	-1430	-1545	-1729	-1936	-2143	8	
2200	EA-SF2	-2025	-924	-1131	-1338	-1430	-1545	-1729	-1936	-2143	8	
	•	m number code		ŭ		EA-SF	2-1825-14	130				

- Grid spacing 23 × 200 mm, vertical wires Ø 3.5 mm, horizontal flat steel 15 × 6 mm, horizontal wires Ø 5.5 mm
- At different fence heights the wires and the flat bars may deviate in the horizontal.
- With a fence with doors, it can lead to a slight height offset in the horizontal wires and flat bars.
- $\ensuremath{\mbox{\bf 0}}$ Flaps FL2-V1 and ground fastener BMF included.
- $\textcircled{\textbf{0}} \ \text{Maximum tolerances in the field height ± 2.5 mm, maximum tolerances in the field width ± 4.5 mm}$



Presentation shows FTW with a handle system.

Wing door for handle, latch or deadlock slam lock, opposite sides



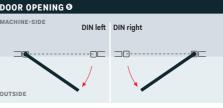
DOOR ACCESSORIES Latch without safety switch holder OUTSIDE MACHINE-SIDE ATTACHMENT SYSTEM FOR SAFETY SWITCHES

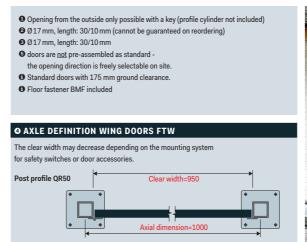
The posts of the bilateral wing door are made of a stable steel profi le with welded-on square bottom plate. By default, the two door posts are prepared for a corner and passage situation. The screw-on hinges permit exchange of the stop direction at any time. The FTW build is particularly fl exible and compatible with any attachment system for wing doors.

Wii	Wing door for handle, latch or deadlock slam lock, opposite sides									
	e_			system / filling				is 6 from center p the middle of the p		
ht	Product group/Style	Φ	<u>e</u>	ce systen	round clearance	ᄩ	800	1000	1200	
height	ct gr	rofil	orofi	fence	d cle	 	heig		Clear width	
Fence	Produ	Post profile	Wing profile	Safety FLEX II	Groun	Fence height	700	900	1100	
2000	EA-FTW	-QR50	-QR25	-F	-175	-2000	-800	-1000	-1200	
2200	EA-FTW	-QR50	-QR25	-F	-175	-2200	-800	-1000	-1200	

Example of Article Number Key Product Post Profile Wing Profile Guard Fence System Ground Clearance Fence Height Axis dimension EA-FTW-QR50-QR25-F-175-2000-1000

FLOOR MOUNTING		D
Required number	8 pieces	M
Attachment type	Fix ancor	
Size · Length	M10 · 120/130 mm	
Weight example FTW 2000×1000 mm	27,53 kg	OL

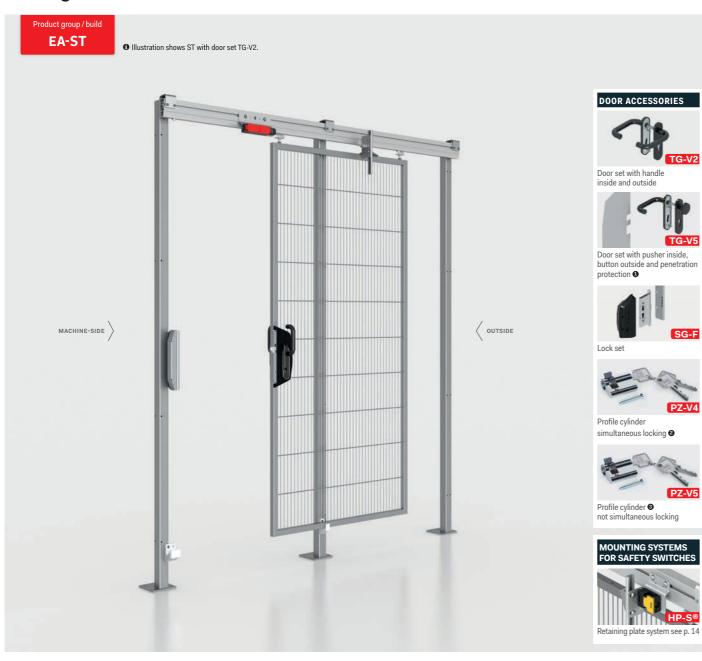






Frameless construction of protective fence system FLEX II - optimal process insight is guaranteed with high safety

Sliding door for handle or hook lock



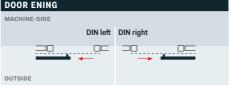
1 Illustration shows ST with a handle system. DOOR ACCESSORIES MACHINE-SIDE OUTSIDE TZ-GR-S Handle with ball catch

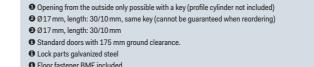
The special aluminium profile, long-lived rolls of steel and a guide of polyamid guarantee for a very smooth and precise opening and closing of the door wing. The posts of the sliding door are made of a stable steel profi le with welded-on square bottom plate. By default, the two door posts are prepared for a corner and passage situation.

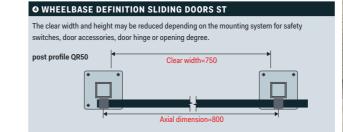
Sli	Sliding door for handle or hook lock									
			ening ction			filling				e of the post
	group/Style					Safety fence system / filling FLEX II	ance		1000	1200
ght	grou	ng	ning	e iie	ille	nce (lear	ight	Clear	width
Fence height	Product	left opening	right opening	Post profile	Wing profile	Safety fe FLEX II	Ground clearance	Fence height	830	1030
2000	EA-ST	-L	-R	-QR50	-QR35	-F	-175	-2000	-1000	-1200
2200	EA-ST	-L	-R	-QR50	-QR35	-F	-175	-2200	-1000	-1200

Example of Article Number Key Product Opening Direction Post Profile Wing Profile Guard Fence System Ground Clearance Fence Height Axle Dimension EA-ST-L-QR50-QR35-F-175-2000-1000

FLOOR MOUNTING						
Required number	12 pieces	M				
Attachment type	Fixanker					
Size · Length	M10 · 120/130 mm					
Weight example ST 2000×1000 mm	42,42 kg	0				



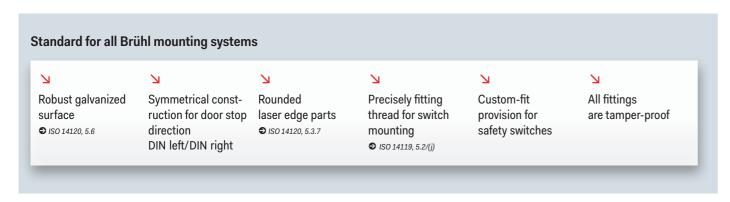




DUITIONALI	031
1000 1000	From an axle dimension of 1000 mm, an additional post (a) is included in the
0	delivery. Please take into account when planning the fence course: order separate grid element (b) at fence height.



Attachment systems for safety switches



Handle preparation BRÜHL-GV

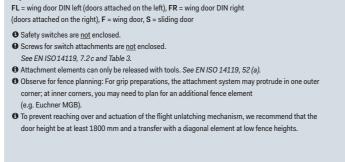
The grip system BRÜHL-GV is a precisely fitting preparation for attachment of compact and multifunctional safety holding-shut devices for different safety switchgear manufacturers. Depending on the switch build, the product properties include an additional

mechanical stop to avoid damage to the door and safety switch, robust zinc-plated surfaces and precisely fitting threads for quick installation.



Overvie	Overview handle preparation BRÜHL-GV for wing doors						
Manufacturer		Switch assembly	ItemNo.				
Euchner	EUCHNER	MGB	GV-F-V2-MGB-B004				
Fortress	∂ Fortress Interlocks	amGardpro EI-I6	GV-F-V4-EII6-B090				
Interlocks		amGardpro EN-T6	GV-F-V4-EN4T6SL-B085				
Jokab Safety		Knox	GV-F-V3-KNOX-B069				
		AZM200	GV-F-V2-AZM200-B003				
		AZM200-SZ200	GV-FR-V2-AZM200-SZ200-B035				
Schmersal	S SCHMERSAL	AZ200-SZ200	GV-FR-V2-AZ200-SZ200-B035				
		AZM200-SZ200	GV-FL-V2-AZM200-SZ200-B036				
		AZ200-SZ200	GV-FL-V2-AZ200-SZ200-B036				
	•						

Overview handle preparation BRÜHL-GV for sliding doors							
Manufacturer Switch assembly ItemNo.							
Euchner	EUCHNER	MGB	GV-S-V2-MGB-B059				
Schmersal	S SCHMERSAL	AZM200	GV-S-V2-AZM200-B060				





Handle system with bullet crossbow BRÜHL-GRK®

The attachment system BRÜHL-GRK® is the standard attachment system for the precisely fitting attachment of safety switches at Brühl wing doors. The safety switch is attached from the outside of the machine at the height of the stable plastic handle. The system is characterised by an optional bullet crossbow that is used according to

the Brühl product recommendation for safety switches with a latching force below 30 N. The attachment system can be used for doors attached on the right or on the left. The Brühl grip system can be combined with different manufacturer-comprehensive safety switches.



Overview grip system with bullet crossbow BRÜHL-GRK® for wing doors

Manufactur	er	Switch assembly	ItemNo.
Bernstein	BERNSTEIN	SK	GRK-F-V4-SK-B001
Bernstein	S DEKINS I EIIN	SKC	GRK-F-V4-SKC-B001
Honeywell	Honeywell	GKN	GRK-F-V4-GKN-B001
ABB		Magne	GRK-F-V2-MAGNE-B071
		PSENme2	GRK-F-V4-PSENME2-B001
Pilz	PILZ	PSENme3	GRK-F-V4-PSENME3-B001
		PSENslock	GRK-F-V2-PSENSL-B043
		AZ15	GRK-F-V4-AZ15-B001
		AZ16	GRK-F-V4-AZ16-B001
		AZ300	GRK-F-V2-AZ300-B078
		AZM161	GRK-F-V4-AZM161-B002
Schmersal	S SCHMERSAL	AZM170	GRK-F-V4-AZM170-B055
Schinersai		AZM300	GRK-F-V2-AZM300-B078
		EX-AZ16	GRK-F-V4-EX-AZ16-B001
		EX-AZM161	GRK-F-V4-EX-AZM161-B002
		MZM100	GRK-F-V2-MZM100-B006
		BNS-B20	GRK-F-V3-BNS-B20-B007
Sick	SICK	i16	GRK-F-V4-i16-B001
SICK	SICK	i17	GRK-F-V4-i17-B001
Siemens	SIEMENS	3SE2	GRK-F-V4-3SE2-B001
Siemens	SIEWIEWS	3SE5	GRK-F-V2-3SE5-B040
Rockwell Automation		440K-T	GRK-F-V4-440K-T-B001

Explanation of attachment situation abbreviation: F = wing door, FEO = wing door opening inwards

- Safety switches are not enclosed.
- Screws for switch attachments are not enclosed See EN ISO 14119, 7.2 c and Table 3.
- ents can only be released with tools. See EN ISO 14119, 52 (a).





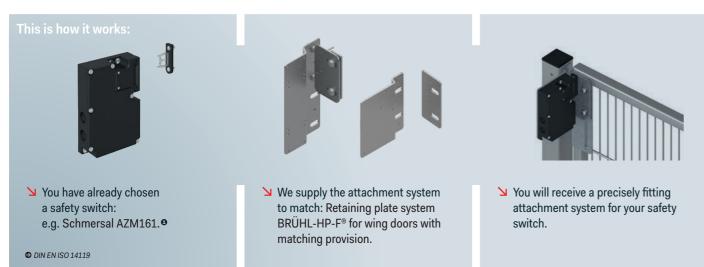
Product example: Handle with bullet crossbow and safety switch by Bernstein

Brühl www.bruehl-safety.com

Retaining plate system BRÜHL-HP-F® for wing doors

The retaining plate system BRÜHL-HP-F® is supplemented according to access comfort with a handle set, a handle or latch. The safety switch is attached with the Brühl retaining plate system in the upper area of the door wing on the machine side. The system can be used for doors attached on the left or right equally. Aluminium plugs serve

manipulation protection. The retaining plate system BRÜHL-HP-F® can be combined easily with safety switches of build 2 (with or without safety holding-shut device).



Bernstein			ItemNo.	Manufacture		Switch assembly	ItemNo.
Bernstein		SK	HP-F-V1-SK-B052			PSENme1	HP-F-V1-PSENME1-B012
	BERNSTEIN	SKC	HP-F-V1-SKC-B052	D'1	PILZ	PSENme2	HP-F-V1-PSENME2-B05
		SLK	HP-F-V1-SLK-B012	Pilz	FILE	PSENme3	HP-F-V1-PSENME3-B05
Comitronic-BTI		AMX	HP-F-V1-AMX-B067			PSENslock	HP-F-V2-PSENSL-B041
		CET	HP-F-V1-CET-B049	Rockwell		440V.T	UD F.V4 440K T D0F0
		GP	HP-F-V1-GP-B013	Automation		440K-T	HP-F-V1-440K-T-B052
		NZ	HP-F-V1-NZ-B011			AZ15	HP-F-V1-AZ15-B052
uchner	EUCHNER	SGP	HP-F-V1-SGP-B013			AZ16	HP-F-V1-AZ16-B052
ucnner	EUGHNER	STA	HP-F-V1-STA-B013			AZ17	HP-F-V1-AZ17-B058
		STP	HP-F-V1-STP-B013		S SCHMERSAL	AZ300	HP-F-V1-AZ300-B079
		TP	HP-F-V1-TP-B013	Schmersal		AZM161	HP-F-V1-AZM161-B038
		TZ	HP-F-V1-TZ-B030			AZM170	HP-F-V1-AZM170-B038
. "	Honeywell	GKN	HP-F-V1-GKN-B052			AZM300	HP-F-V1-AZM300-B079
loneywell	noneyweii	GKS	HP-F-V1-GKS-B013			BNS16	HP-F-V1-BNS16-B052
.euze	△ Leuze electronic	L200	HP-F-V1-L200-B013			BZ16	HP-F-V1-BZ16-B052
electronic	Leuze electronic	S20	HP-F-V1-S20-B058			EX-AZ16	HP-F-V1-EX-AZ16-B052
Omron	OMRON	D4NL	HP-F-V1-D4NL-B046			EX-AZM161	HP-F-V1-EX-AZM161-B0
Electronics	OHIROH	D4NS	HP-F-V1-D4NS-B058			XCS-A	HP-F-V1-XCS-A-B011
						XCS-B	HP-F-V1-XCS-B-B011
				Teleme-		XCS-C	HP-F-V1-XCS-C-B011
				canique	Telemecanique Sensors	XCS-E	HP-F-V1-XCS-E-B030
				Sensors	Sensors	XCS-PA	HP-F-V1-XCS-PA-B052
						XCS-TA	HP-F-V1-XCS-TA-B052
	• 1					XCS-TE	HP-F-V1-XCS-TE-B030
	541					i10	HP-F-V1-i10-B013
				Ci-l.	CICI	i12	HP-F-V1-i12-B058
	A CONTRACTOR OF THE PARTY OF TH			Sick	SICK	i16	HP-F-V1-i16-B052
		(0)				i17	HP-F-V1-i17-B052
1000		0				3SE2	HP-F-V1-3SE2-B052



Explanation of attachment situation abbreviation: F = hinged door, FEO = wing door opening inwards

3SE5

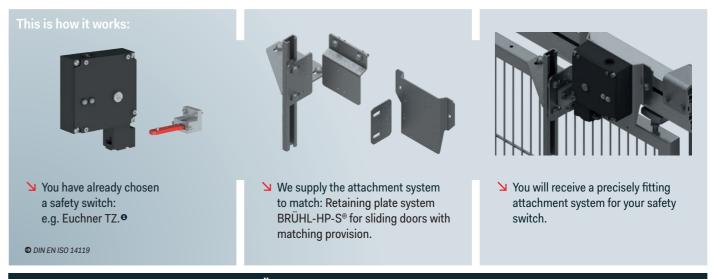
HP-F-V1-3SE5-B051

- Safety switches are not enclosed. Screws for switch attachments are not enclosed
- See EN ISO 14119, 7.2 c and Table 3.
- 10 Attachment elements can only be released with tools. See EN ISO 14119, 52 (a).

Mounting plate system BRÜHL-HP-S® for sliding doors

The BRÜHL-HP-S® mounting plate system is complemented by a handle set or a handle in accordance with accessibility and can be used for both left and right-hinged doors. A mechanical stop in the aluminum profile prevents damage to the safety switch and actuator. The position of the safety switch depends on the door type and the

wing mobility. The brackets BRÜHL-HP-S ® can be easily combined with safety switches of type 2 (with or without safety lock).



Manufacturer Switch assembly Ite		ItemNo.	Manufacture	r	Switch assembly	ItemNo.	
		SK	HP-S-V3-SK-B053			AZ15	HP-S-V3-AZ15-B053
Bernstein	BERNSTEIN	SKC	HP-S-V3-SKC-B053	_		AZ16	HP-S-V3-AZ16-B053
	S DEKINS I EIIN	SLK+ENK	HP-S-V3-SLK+ENK-B045	_		AZ17	HP-S-V3-AZ17-B058
		SLK	HP-S-V3-SLK-B012	Cohmonol	S SCHMERSAL	AZM161	HP-S-V3-AZM161-B039
Comitronic-		AMX	HP-S-V6-AMX-B070	Schmersal	9 SCHIIIERSHL	AZM170	HP-S-V3-AZM170-B039
BTI		AIVIA	TIF-3-VO-AIVIA-DO70	_		BNS16	HP-S-V3-BNS16-B053
		NZ	HP-S-V3-NZ-B037			BZ16	HP-S-V3-BZ16-B053
		STA	HP-S-V3-STA-B014			AZM400	HP-S-V3-AZM400-B086
		STP	HP-S-V3-STP-B014			XCS-A	HP-S-V3-XCS-A-B037
Euchner	EUCHNER	EUCHNER TP HP-S-V3-TP-B014			XCS-B	HP-S-V3-XCS-B-B037	
		TZ	HP-S-V3-TZ-B031	Teleme-		XCS-C	HP-S-V3-XCS-C-B037
		CET	HP-S-V5-CET-B050		(E) Telemecanique	XCS-E	HP-S-V3-XCS-E-B031
		CES	HP-S-V6-CES-B070	Sensors	Sensors	XCS-PA	HP-S-V6-XCS-PA-B053
	Honoreell	GKN	HP-S-V3-GKN-B053	-		XCS-PA	HP-S-V6-XCS-PA-B072
Honeywell	Honeywell	GKS	HP-S-V3-GKS-B014	_		XCS-TA	HP-S-V3-XCS-TA-B053
Jokab Safety		EDEN	HP-S-V6-EDEN-B070	_		XCS-TE	HP-S-V3-XCS-TE-B031
Leuze	△ Leuze electronic	L200	HP-S-V3-L200-B014			i10	HP-S-V3-i10-B014
electronic	Leuze electronic	S20	HP-S-V3-S20-B058	-		i12	HP-S-V3-i12-B058
Omron Electronics	OMRON	D4NS	HP-S-V3-D4NS-B058	Sick	SICK	i16	HP-S-V3-i16-B053
		PSENme1	HP-S-V3-PSENME1-B012	-		i17	HP-S-V3-i17-B053
		PSENme2	HP-S-V3-PSENME2-B053	-		T400-DNA	HP-S-V6-T4000-DNA-B070
		PSENme3	HP-S-V3-PSENME3-B053	-		3SE2	HP-S-V3-3SE2-B053
		PSENslook	HP-S-V4-PSENSL-B041	Siemens	SIEMENS	3SE5	HP-S-V3-3SE5-B010
Pilz	PILZ	PSENcs3	HP-S-V6-PSENCS-B070			3SE5	HP-S-V3-3SE5-B051
		PSENcs4	HP-S-V6-PSENCS-B070				

HP-S-V6-PSENMA-B070

HP-S-V6-PSENMA-B070

HP-S-V6-440G-T-B072

HP-S-V3-440K-T-B053



Explanation of attachment situation abbreviation: S = sliding doo

Safety switches are <u>not</u> enclosed.

Rockwell

- Screws for switch attachments are not enclosed.
- See EN ISO 14119, 7.2 c and Table 3.
- Attachment elements can only be released with tools. See EN ISO 14119, 52 (a).

PSENma1 PSENma2

440G-T

440K

Latch preparation BRÜHL-RV for wing doors

This system is a preparation for safety switches that is made of a combination of safety switch, attachment plates/elements and latches of many different safety switchgear manufacturers. The BRÜHL-RV systemis used to install the safety switch precisely to ensure long-lived

latching function. A high assembly effort is avoided by using standard hole patterns at Brühl wing doors.



You have already chosen a safety switch: e.g. Fortress Interlocks AMS1STOP.

DIN EN ISO 14119



We supply the attachment system to match: Latch preparation BRÜHL-RV for wing doors with matching provision.



You will receive a precisely fitting attachment system for your safety

Overview latch preparation BRÜHL-RV for wing doors Manufacturer Switch assembly Item.-No. DOLD & Dold RV-F-V4-STS3-B063 CTP RV-F-V3-CTP-B020 GP RV-F-V3-GP-B020 NZ RV-F-V3-NZ-B020 RV-F-V3-SGP-B020 **EUCHNER** RV-F-V3-STA-B020 STA Euchne RV-F-V3-STP-B020 RV-F-V3-TP-B020 TX RV-F-V3-TX-B020 RV-F-V3-TZ-B020 AMA1STOP RV-F-V2-AMA1STOP-B019 AMS1STOF RV-F-V2-AMS1STOP-B019 Fortress Fortress RV-F-V4-DM1-B033 DM2 RV-F-V4-DM2-B033 PSENcs1 RV-F-V3-PSENCS-B032 RV-F-V3-PSENCS-B032 PSENcs2 PILZ PSENme1 RV-F-V3-PSENME1-B032 RV-F-V6-PSENSG-B064 XCS-A RV-F-V2-XCS-A-B066 RV-F-V2-XCS-B-B066 XCS-B canique Sensors RV-F-V2-XCS-C-B066 XCS-E RV-F-V2-XCS-E-B066

Explanation of attachment situation abbreviation: F = wing doo

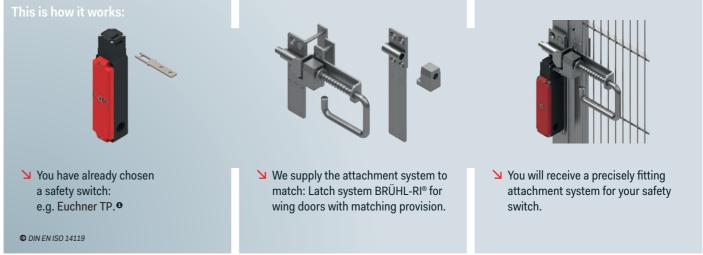
- Safety switches are <u>not</u> enclosed.
- Screws for switch attachments are <u>not</u> enclosed. See EN ISO 14119, 7.2 c and Table 3.
- Fasteners can only be released with tools. See EN ISO 14119, 52 (a)
- 1 To prevent reaching over and actuation of the flight unlatching mechanism, we recommend that the door height be at least 1800 mm and a transfer with a diagonal element at low fence heights.



Latch preparation BRÜHL-RI® for wing doors

By the locking bolt, the actuator is mechanically guided when retracting into the safety switch. The latch system BRÜHL-RI® has a built-in random safety device, by a compression spring, the bolt tongue is held without an operation in the position "bolt closed". Aluminum plugs serve as manipulation protection. This system is very robust,

needs low maintenance and is easy to clean and has proven itself in the industrial environment for more than 30 years. The BRÜHL-RI® mounting system can be easily combined with safety switches of type 2 (with or without safety lock).



lanufacture	er	Switch assembly	ItemNo.
		SLK	RI-F-V1-SLK-B016
ernstein	BERNSTEIN	SK	RI-F-V5-SK-B021
		SKC	RI-F-V5-SKC-B021
		СТР	RI-F-V1-CTP-B017
		NZ	RI-F-V1-NZ-B054
ıchner	EUCHNER	STA	RI-F-V1-STA-B017
icnner	EUCHNER	STP	RI-F-V1-STP-B017
		TP	RI-F-V1-TP-B017
		TZ	RI-F-V1-TZ-B018
neywell	Honomoli	GKS	RI-F-V1-GKS-B017
neywell	Honeywell	GKN	RI-F-V5-GKN-B021
ıze ctronic	△ Leuze electronic	L200	RI-F-V1-L200-B017
		PSENme1	RI-F-V1-PSENME1-B016
z	PILZ	PSENme2	RI-F-V5-PSENME2-B021
		PSENme3	RI-F-V5-PSENME3-B021
		440K-C	RI-F-V1-440K-C-B054
ckwell tomation		440K-C	RI-F-V5-440K-C-B021
		440K-T	RI-F-V5-440K-T-B021
		AZ15	RI-F-V5-AZ15-B021
		AZ16	RI-F-V5-AZ16-B021
hmersal	@ ccumence:	AZM161	RI-F-V5-AZM161-B022
imersai	S SCHMERSAL	AZM190	RI-F-V5-AZM190-B057
		BNS16	RI-F-V5-BNS16-B021
		TZK	RI-F-V5-TZK-B057
eme- iique nsors	Telemecanique Sensors	XCS-E	RI-F-V1-XCS-E-B018
		i10	RI-F-V1-i10-B017
:k	SICK	i16	RI-F-V5-i16-B021
		i17	RI-F-V5-i17-B021
emens	SIEMENS	3SE5	RI-F-V1-3SE5-B015
	SIEWIEWS	3SE2	RI-F-V5-3SE2-B021

Explanation of attachment situation abbreviation: F = wing door

- Safety switches are not enclosed.
- 9 Screws for switch attachments are not enclosed.
- See EN ISO 14119, 7.2 c and Table 3.
- 1 Fasteners can only be released with tools. See EN ISO 14119, 52 (a)





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Accessories



FLEX II-tab with captive Torx screw Plastic brackets with angle profile and fasteners.



FLEX II-tab with captive hexagon screw and spacer plate Plastic brackets with angle profile and fasteners.





FLEX I-tab with captive hexagon screw Bracket with fasteners • Angle position can be adjusted by bending inwards: up to 90 degrees; to the outside: up to 45 degrees

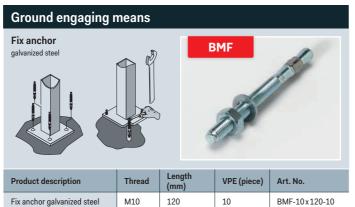




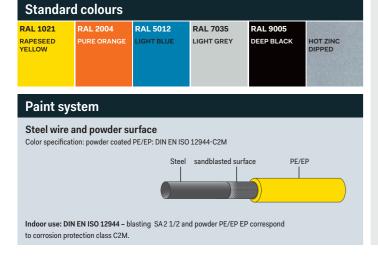
 Angle position can be adjusted by bending outwards: up to 45 degrees



Product description	VPE (piece)	ItemNo.
FLEX II tab with captive hexagon screw	6	FL2-V1-6
	8	FL2-V1-8
	10	FL2-V1-10
	50	FL2-V1-50
FLEX II tab with captive Torx screw	10	FL2-V2-10
FLEX II-tab with captive hexagon screw and spacer plate	5	FL2DP-V1-5
Flex angle with attachment	5	FL1W-V1-5
FLEX I-tab with captive hexagon screw	8	FL1-V2-8
FLEX I-tab with captive hexagon screw and canting for corner connection	5	FL1-V3-5



Colours and surfaces





Impressum

Brühl Safety GmbH Managing directors: Heinrich Brühl Kai Wienecke

Waldstraße 63b 57250 Netphen, Germany

Phone: +49 (0) 2737 59 34 0 Telefax: +49 (0) 2737 59 19 46 info@bruehl-safety.com www.bruehl-safety.com

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