

# Product data sheet Powerturn F/R-IS \*



Electromechanical swing door drive system for 2-leaf fire and smoke protection doors with closing sequence control and integrated smoke switch



#### **AREAS OF APPLICATION**

- $\rightarrow$  Fire and smoke protection doors
- $\rightarrow$  Hold-open systems with integrated hold-open function country-specific specifications must be observed
- ightarrow Right and left double leaf single-action doors
- ightarrow Single-action doors up to 3200 mm hinge clearance, 1600 mm leaf width and 600 kg weight
- $\rightarrow$  Minimum hinge clearance 1657 mm
- ightarrow Interior and exterior doors with high access frequency
- ightarrow Transom installation hinge and opposite hinge side

#### **PRODUCT FEATURES**

- ightarrow Smart swing function for easy manual door opening
- ightarrow Closing force of EN4-7 with variable adjustment
- ightarrow Integrated smoke switch control unit, whose signal closes the door automatically in the event of a fire
- ightarrow Opening and closing speed can be individually adjusted
- $\rightarrow$  Mechanical latching action when operated without current, and electrical latching action in regular operation, which accelerates the door shortly before the closed position
- ightarrow Mechanical and electrical closing sequence control holds the active leaf in the waiting position until the passive leaf is closed
- ightarrow Low-energy function opens and closes the door with reduced speed, fulfilling the highest safety demands
- ightarrow Obstacle detection detects an object through contact and stops the opening or closing process
- ightarrow Automatic reversing detects an obstacle and returns to the opening position
- ightarrow Push & Go function triggers the automatic drive following light manual pressure on the door leaf
- ightarrow Drive can be used with roller guide rail or link arm
- ightarrow Servo function for motorized support when manually opening the door
- ightarrow Optional radio reception board for wireless activation by radio transmitter
- ightarrow Freely configurable inputs and outputs for different functions
- ightarrow Can be networked, and integrated into the building automation via open standard (BACnet)

#### **TECHNICAL DATA**

Productname	Powerturn F/R-IS *	
Leaf weight (max.) 1-leaf	600 kg	
Distance centre door hinge-drive axis (minmax.) 2-leaf, link arm	1657 mm - 3200 mm	
Distance centre door hinge-drive axis (minmax.) 2-leaf, roller guide rail	1657 mm - 2800 mm	

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Minimum passive leaf width	800 mm
passive leaf width max.	1600 mm
active leaf width min.	856 mm
active leaf width max.	1600 mm
Reveal depth (max.)	300 mm
Opening angle (max.)	136 °
DIN left	Yes
DIN right	Yes
Transom installation opposite hinge side with link arm	Yes
Transom installation opposite hinge side with roller guide rail	Yes
Transom installation hinge side with roller guide rail	Yes
Mechanical latching action	Yes
Electrical latching action	Yes
Electrical closing sequence control	Yes
Mechanical closing sequence control	Yes
Disconnection from mains	Main switch in the drive
Power supply for external consumers (24 V DC)	1.2 A
Service temperature	-15 - 50 °C
Mode of operation	Automatic, Off, Permanently open, Shop closing, Night
Automatic function	Yes
Low-energy function	Yes
function smart swing	Yes
Servo function	Yes
Obstacle detection	Yes
Automatic reversing	Yes
Push & Go	adjustable
Operation	Programme switch DPS, Programme switch integrated in the drive, MPS programme switch
Standard conformity	DIN 18650, EN 16005
Suitability for fire protection doors	Yes
Smoke switch integrated	Yes

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#### PART

#### **POWERTURN F/R-IS**

Electromechanical swing door system for double leaf fire and smoke protection doors with closing sequence control and integrated smoke switch

#### LINK ARM POWERTURN / POWERTURN F

For transom and door leaf installation with reveal depths up to 560 mm

Designation	Description	ldent- No.	Colour
Link arm Powerturn / Powerturn F	Length 245 mm for reveal depth / 20 mm to 160 mm with sensor link arm, / -30 mm to 110 mm without sensor link arm	154707	EV1
Link arm Powerturn / Powerturn F	Length 645 mm for reveal depth / 420 mm to 560 mm with sensor link arm, / 370 mm to 510 mm without sensor link arm	154721	according to RAL
Link arm Powerturn / Powerturn F	Length 245 mm for reveal depth / 20 mm to 160 mm with sensor link arm, / -30 mm to 110 mm without sensor link arm	154709	according to RAL
Link arm Powerturn / Powerturn F	Length 445 mm for reveal depth / 220 mm to 360 mm with sensor link arm, / 170 mm to 310 mm without sensor link arm	154714	EV1
Link arm Powerturn / Powerturn F	Length 545 mm for reveal depth / 320 mm to 460 mm with sensor link arm / 270 mm to 410 mm without sensor link arm	154717	EV1
Link arm Powerturn / Powerturn F	Length 445 mm for reveal depth / 220 mm to 360 mm with sensor link arm, / 170 mm to 310 mm without sensor link arm	154715	according to RAL
Link arm Powerturn / Powerturn F	Length 545 mm for reveal depth / 320 mm to 460 mm with sensor link arm / 270 mm to 410 mm without sensor link arm	154718	according to RAL
Link arm Powerturn / Powerturn F	Length 645 mm for reveal depth / 420 mm to 560 mm with sensor link arm, / 370 mm to 510 mm without sensor link arm	154720	EV1
Link arm Powerturn / Powerturn F	Length 215 mm for reveal depth / -10 mm to 130 mm with sensor link arm, / -30 mm to 80 mm without sensor link arm	165818	EV1
Link arm Powerturn / Powerturn F	Length 215 mm for reveal depth / -10 mm to 130 mm with sensor link arm, / -30 mm to 80 mm without sensor link arm	159376	according to RAL
Link arm Powerturn / Powerturn F	Length 345 mm for reveal depth / 120 mm to 260 mm with sensor link arm, / 70 mm to 210 mm without sensor link arm	154712	according to RAL
Link arm Powerturn / Powerturn F	Length 345 mm for reveal depth / 120 mm to 260 mm with sensor link arm, / 70 mm to 210 mm without sensor link arm	154711	EV1









#### **COVER POWERTURN**

For the Powerturn swing door drive, including additional side panels and shaft covers painted with cover colour



Designation	Description	Ident-No.	Colour
Cover Powerturn	Cover including end caps and shaft covers painted in the cover colour	161927	EV1
Cover extension kit for GEZE Powerturn		157830	
Intermediate cover kit for GEZE Powerturn		157831	
Powerturn additional side panel / axis cover		162746	silver-coloured
Cover Powerturn	Cover including end caps and shaft covers painted in the cover colour	160326	according to RAL

#### **POWERTURN / POWERTURN F ROLLER GUIDE RAIL**

For transom installation on the hinge side or opposite hinge side with roller guide rail



Designation	Description	ldent- No.	Colour	Type of installation
Roller guide rail Powerturn (F)	For transom installation opposite hinge side, length 691 mm, lever length 450 mm	153813	according to RAL	Transom installation opposite hinge side
Roller guide rail Powerturn (F)	For transom installation opposite hinge side, length 691 mm, lever length 450 mm	153812	EV1	Transom installation opposite hinge side
Roller guide rail Powerturn (F)	For transom installation hinge side, length 691 mm, lever length 330 mm	153790	according to RAL	Transom installation hinge side
Roller guide rail Powerturn (F)	For transom installation hinge side, length 691 mm, lever length 330 mm	153787	EV1	Transom installation hinge side



#### **CONNECTOR PLUG POWERTURN / EMD 230 V**

230 V connection and GEZE logo for the Powerturn / EMD



Designation	Description	Ident-No.	Colour
Connection Powerturn / EMD 230 V	Connector plug Powerturn / EMD	156890	black

# INSTALLATION KIT FOR MECHANISM FOR INTEGRATED CLOSING SEQUENCE CONTROL

For double leaf doors with closing sequence control to ensure the correct door closing sequence



Designation	Description	Ident-No.
Mechanism for integrated closing sequence control Powerturn	complete installation kit for mechanical closing sequence control for active and passive leaf (tested in accordance with DIN EN 1158)	154838

#### GC GR FOR GC 338

Sensor roller guide rail Powerturn for GC 338 sensor strip



Designation	Description	ldent- No.	Colour	Type of installation
GC GR for GC 338 Powerturn	For Powerturn / Powerturn F, installation on the hinge side, lever length 330 mm	157451	according to RAL	Transom installation hinge side
GC GR for GC 338 Powerturn	For Powerturn / Powerturn F, installation on the opposite hinge side, lever length 450 mm	157476	EV1	Transom installation opposite hinge side
GC GR for GC 338 Powerturn	For Powerturn / Powerturn F, installation on the opposite hinge side, lever length 450 mm	157477	according to RAL	Transom installation opposite hinge side
GC GR for GC 338 Powerturn *	For Powerturn / Powerturn F, installation on the opposite hinge side, lever length 450 mm	157475	according to RAL	Transom installation opposite hinge side
GC GR for GC 338 Powerturn	For Powerturn / Powerturn F, installation on the hinge side, lever length 330 mm	157472	EV1	Transom installation hinge side
GC GR for GC 338 Powerturn	For Powerturn / Powerturn F, installation on the hinge side, lever length 330 mm	157450	EV1	Transom installation hinge side
GC GR for GC 338 Powerturn	For Powerturn / Powerturn F, installation on the opposite hinge side, lever length 450 mm	157474	EV1	Transom installation opposite hinge side
GC GR for GC 338 Powerturn	For Powerturn / Powerturn F, installation on the hinge side, lever length 330 mm	157473	according to RAL	Transom installation hinge side



#### ACCESSORIES

**POWERTURN 230 V T-DISTRIBUTOR \*** 

Optional 230 V connection for external peripheral device



Designation	Description	Ident-No.
Powerturn 230 V T-distributor	Optional 230 V connection for external peripheral device (max. 700 W, max. 7 A, AD 0.75 $\rm mm^2)$	166272

#### GC 338

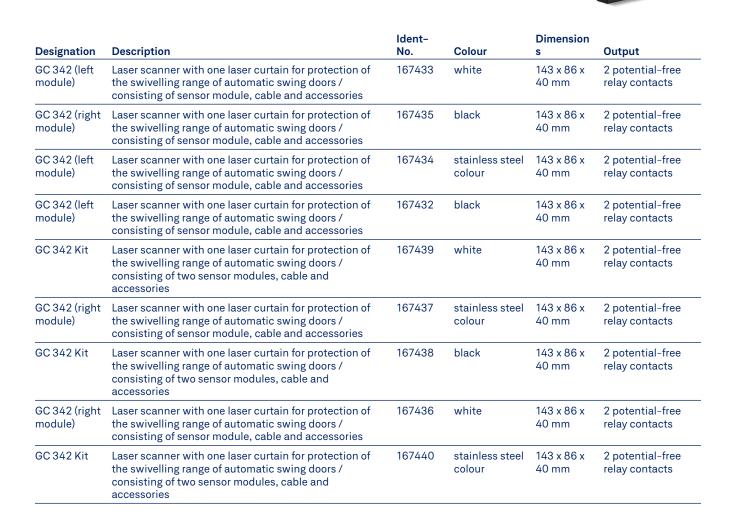
Sensor strip with standby mode for the protection of automatic swing and revolving doors

Designation	Description	ldent- No.	Colour	Output	Operating voltage
GC 338 Pair of sensor strips 1200 mm	consisting of two complete sensor strips for protection of the swivelling range of automatic swing and revolving doors in accordance with DIN 18650 / EN 16005	142825	according to RAL	Electrical relay	24 V DC +/- 20%
GC 338 Pair of sensor strips 1500 mm	consisting of two complete sensor strips for protection of the swivelling range of automatic swing and revolving doors in accordance with DIN 18650 / EN 16005	142827	according to RAL	Potential-free relay contact	24 V DC +/- 20%
GC 338 Pair of sensor strips 1500 mm	consisting of two complete sensor strips for protection of the swivelling range of automatic swing and revolving doors in accordance with DIN 18650 / EN 16005	142757	EV1	Electrical relay	24 V DC +/- 20%
GC 338 Pair of sensor strips 1200 mm	consisting of two complete sensor strips for protection of the swivelling range of automatic swing and revolving doors in accordance with DIN 18650 / EN 16005	142219	EV1	Electrical relay	24 V DC +/- 20%



#### GC 342

Laser scanner for the protection of automatic doors and windows with integrated object and wall blanking  $% \left( {{\left[ {{{\rm{A}}} \right]}_{{\rm{A}}}} \right)_{\rm{A}}} \right)$ 





#### SPINDLE EXTENSION POWERTURN

Available lengths 30 mm and 50 mm



Designation	Description	Ident-No.	Colour
Spindle extension Powerturn	V = 50 mm	153827	according to RAL
Spindle extension Powerturn	V = 30 mm	153824	according to RAL
Spindle extension Powerturn	V = 50 mm	153826	EV1
Spindle extension Powerturn	V = 30 mm	153822	EV1

#### ADAPTER FOR SENSOR LINK ARM

For mounting the link arm at the same height as the sensor strip



Designation	Description	Ident-No.	Colour
Adapter for sensor link arm	For Powerturn, EMD / EMD-F and TSA 160 NT	144352	silver-coloured
Adapter for sensor link arm	For Powerturn, EMD / EMD-F and TSA 160 NT	153126	according to RAL

#### GC 302

Radar movement detector for the activation of automatic doors



Designation	Description	ldent- No.	Colour	Dimensions	Output
GC 302 R radar movement detector	Radar movement detector for the activation of automatic doors	124087	black	176 x 62 x 52 mm	Potential-free relay contact
GC 302 R radar movement detector	Radar movement detector for the activation of automatic doors	124088	according to RAL	176 x 62 x 52 mm	Potential-free relay contact

#### GC 307+ \*

Non-contact proximity switch for activating automatic doors

Ident-Designation Description Colour Dimensions Type of installation No. GC 307+ Proximity switch for the activation of automatic doors 195727 alpine 80 x 80 x 21 Surface-mounted (hand icon) \* installation white mm GC 307+ (WC Proximity switch for the activation of automatic doors / 195751 alpine 80 x 80 x 21 Surface-mounted icon) \* Suitable for Powerturn, EMD, and standard sliding white installation mm doors GC 307+ Proximity switch for the activation of automatic doors 193226 80 x 80 x 8 Flush-mounted alpine (hand icon) \* installation white mm GC 307+ (WC Proximity switch for the activation of automatic doors / 195750 alpine 80 x 80 x 8 Flush-mounted icon) \* Suitable for Powerturn, EMD, and standard sliding white mm installation doors

#### GC 342+ \*

Laser scanner for the protection of automatic swing doors with integrated object and wall blanking

Designation	Description	ldent- No.	Colour	Dimension s	Output
GC 342+ (left module) *	Laser scanner with four laser curtains for optimal protection of the hazardous areas – including the secondary closing edge – of automatic swing doors; additional output for non-contact activation / consisting of sensor module, cable and accessories	198693	stainless steel colour	145 x 88 x 68 mm	3 potential-free relay contacts
GC 342+ (left module) *	Laser scanner with four laser curtains for optimal protection of the hazardous areas – including the secondary closing edge – of automatic swing doors; additional output for non-contact activation / consisting of sensor module, cable and accessories	198669	black	145 x 88 x 68 mm	3 potential-free relay contacts
GC 342+ (left module) *	Laser scanner with four laser curtains for optimal protection of the hazardous areas - including the secondary closing edge - of automatic swing doors; additional output for non-contact activation / consisting of sensor module, cable and accessories	198671	white	145 x 88 x 68 mm	3 potential-free relay contacts
GC 342+ (right module) *	Laser scanner with four laser curtains for optimal protection of the hazardous areas – including the secondary closing edge – of automatic swing doors; additional output for non-contact activation / consisting of sensor module, cable and accessories	198694	stainless steel colour	145 x 88 x 68 mm	3 potential-free relay contacts











Designation	Description	ldent- No.	Colour	Dimension s	Output
GC 342+ (right module) *	Laser scanner with four laser curtains for optimal protection of the hazardous areas – including the secondary closing edge – of automatic swing doors; additional output for non-contact activation / consisting of sensor module, cable and accessories	198670	black	145 x 88 x 68 mm	3 potential-free relay contacts
GC 342+ (right module) *	Laser scanner with four laser curtains for optimal protection of the hazardous areas – including the secondary closing edge – of automatic swing doors; additional output for non-contact activation / consisting of sensor module, cable and accessories	198692	white	145 x 88 x 68 mm	3 potential-free relay contacts

#### LED SENSOR FOOT SWITCH \*

#### Switch for activating automatic doors



		Ident-			
Designation	Description	No.	Colour	Dimensions	Output
LED sensor foot switch *	Capacitive push button for activating automatic door systems. Protection rating IP69K	182936	Stainless steel	100 x 100 x 3 x 14 mm	PNP transistor output

#### AS 500 \*

AS emergency stop switch with glass pane and five interchangeable labels ("Nottaster öffnen", "Notschalter", "Emergency switch", "Tür schließen" and without text)



Designation	Description	ldent- No.	Colour	Dimension s	Type of installation
AS 500 emergency stop switch	Rocker control switch with glow lamp, glass pane and five exchangeable labels ("open emergency push button", "emergency stop switch", "emergency switch", "close door" and no label)	120881	alpine white/red	80 x 80 x 21 mm	Flush-mounted installation

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#### AIR 20

Active infrared light switch for monitoring the door handle of automatic swing doors

Designatio n	Description	Ident-No.	Colour	Dimensions	Operating voltage
AIR 20-Var	Light switch for monitoring the door handle of automatic swing doors	082689	black	72 x 66 x 49 mm	24 V

Ident-

151524

155810

Colour

alpine

white

alpine

white

No.

#### DPS

Designation

switch

Display programme

switch DPS with OFF

DPS with OFF switch

and SCT key switch

Display programme switch for setting the mode of operation for automatic doors

Description

cylinder

E	FT.	EL.	BO	W	SW	ІТСН	*

Stainless steel elbow switch with IP65 IP rating for activating automatic doors

Configuring the mode of operation as well as

commissioning and parameter setting for automatic

doors / with 5x control keys, 2x7 segment display, alphanumerical fault display, IP rating IP40

in combined double frame without Euro profile half

Designation	Description	Ident-No.	Colour	Dimensions	Type of installation
EFT elbow switch	Very flat design / IP rating IP65	119898	Stainless steel	75 x 250 x 17 mm	Surface-mounted installation



Dimension

80 x 80 x

80 x 151 x

50 mm

53 mm

S





Operating

voltage

24 V DC

24 V DC

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#### **KFT ELBOW SWITCH**

Plastic elbow switch, IP rating IP20, for activation of automatic doors

Designation	Description	Ident-No.	Colour	Dimensions	Type of installation
KFT elbow switch	Very flat design, IP rating IP20	114077	stainless steel colour	90 x 179 x 23 mm	Surface-mounted installation
KFT elbow switch	Very flat design, IP rating IP20	114078	white	90 x 179 x 23 mm	Surface-mounted installation

#### LS 990 ELBOW SWITCH

Elbow switch for activating automatic doors

Designation	Description	Ident-No.	Colour	Dimensions	Type of installation
LS 990 elbow switch	IP rating IP30 H=223mm	128583	Stainless steel	81 x 223 x 18 mm	Flush-mounted installation
LS 990 elbow switch	IP rating IP30 H=223mm	128582	Stainless steel	81 x 223 x 51 mm	Surface-mounted installation
LS 990 elbow switch	IP rating IP30 H=223mm	141041	alpine white	81 x 223 x 51 mm	Surface-mounted installation
LS 990 elbow switch	IP rating IP30 H=223mm	141042	alpine white	81 x 223 x 18 mm	Flush-mounted installation

#### **LED SENSOR SWITCH \***

Switch for activating automatic doors

Designation	Description	ldent- No.	Colour	Dimensions	Output
LED sensor switch *	Capacitive push button with blue LED lighting and haptic Braille lettering for activating automatic door systems. Protection rating IP69K	137529	black	100 x 100 x 10 mm	PNP transistor output
LED sensor switch glass *	Capacitive push button with blue LED lighting for activating automatic door systems. Protection rating IP69K	143412	white	100 x 100 x 8 mm	PNP transistor output











#### MINI LED SENSOR SWITCH \*

Activation of all GEZE automatic doors



Designation	Description	ldent- No.	Colour	Dimensions	Output
LED sensor switch 20 mm *	Capacitive push button for activating automatic door systems. Protection rating IP69K	143273	Aluminium, matt	28.5 x 28.5 x 21 mm	PNP transistor output

#### MPS

Mechanical programme switch for setting the mode of operation for automatic doors



Designation	Description	ldent- No.	Colour	Dimension s	Operating voltage
MPS mechanical programme switch	Setting of the mode of operation of automatic doors with rotary knob, LED fault display, IP rating IP40 / suitable for switch programmes with 55x55mm switch insert	113226	alpine white	80 x 80 x 24 mm	24 V DC
MPS ST mechanical programme switch	Setting of the mode of operation of automatic doors with key, LED fault display, IP rating IP40, keyed alike cylinder, incl. 2× keys / suitable for switch programmes with 55x55mm switch insert	113227	alpine white	80 x 80 x 24 mm	24 V DC

#### **AS 500 ROCKER PUSH BUTTON**

Activation of all GEZE automatic doors



Designation	Ident-No.	Colour	Dimensions	Type of installation
AS 500 rocker push button	120888	alpine white	80 x 80 x 9 mm	Flush-mounted installation



#### PULL SWITCH \*

For triggering calls in barrier-free bathrooms or WCs



Designation	Description	Ident-No.	Colour	Dimensions	Type of installation
Pull switch	Incl. pull chain 500 mm long	008607	red	36 x 94 x 34 mm	Surface-mounted installation

#### GC 308 \*

Radar movement detector with individual adjustment option for activating automatic doors



Designation	Description	Ident-No.	Colour	Dimensions	Output
GC 308 R radar movement detector *	Activation of automatic drives	203605	stainless steel colour	120 x 50 x 50 mm	Potential-free relay contact
GC 308 R radar movement detector *	Activation of automatic drives	203603	black	120 x 50 x 50 mm	Potential-free relay contact
GC 308 R radar movement detector *	Activation of automatic drives	203604	white	120 x 50 x 50 mm	Potential-free relay contact

#### **DIGITAL PROGRAMMABLE TIMER \***

For time-controlled changes of modes of operation on automatic doors



For non-contact monitoring of the door leaf position





Designation	Description	ldent-No.	Colour
Reed switch *	For non-contact monitoring of the door leaf position	092777	white



#### **E2 ROCKER PUSH BUTTON**

Activation of all GEZE automatic doors



Designation	Ident-No.	Colour	Dimensions	Type of installation
E2 rocker push button	094013	pure white matt	80.8 x 80.8 x 9.3 mm	Flush-mounted installation

#### LS 990 ROCKER PUSH BUTTON

Activation of all GEZE automatic doors



Designation	Ident-No.	Colour	Dimensions	Type of installation
LS 990 rocker push button	098396	Stainless steel	81 x 81 x 11 mm	Flush-mounted installation

\* The products designated above may vary in form, type, characteristics, function, or availability depending on the country. Please get in touch with your GEZE contact person if you have any questions.