

Product data sheet

Powerchain



Chain drive for large and heavy window elements that need
large opening widths



AREAS OF APPLICATION

- Smoke and heat extraction system and natural ventilation (24 V) in the façade and roof area
- Can be used in the exhaust air and air intake
- Inward and outward opening windows with bottom-hung, top-hung, side-hung leaves
- Roof window
- Installation on wooden, plastic or metal windows
- Leaf and frame installation
- Synchronisation of up to four drives
- System solution in combination with the Power lock locking drive

PRODUCT FEATURES

- Fast opening speeds in the event of smoke and heat extraction, even for very heavy windows
- Continuously adjustable drive stroke and individual speeds for ventilation and smoke and heat extraction
- Available as special version – stroke, cable length and colour configurable
- Synchronisation of max. four drives without external control unit
- DIP switches for changing the mode of operation (Solo and Syncro, master, slave)
- Fast and easy installation with the Smart fix installation system
- IQ windowdrive – intelligent drive control
- SHEV tested according to EN 12101-2

TECHNICAL DATA

Productname	Powerchain
Space required on frame (min.)	Frame installation inward-opening: 50/61 mm (for swing leaf DIN L),, leaf installation inward-opening: 30/41 mm (for swing leaf DIN R),, frame installation outward-opening: 50 mm
Space requirement on leaf (min.)	Frame installation inward-opening: 40 mm, leaf installation inward-opening: 50 mm, Frame installation outward-opening 30/41 mm (for swing leaf DIN R)
Possible stroke heights	600 mm, 800 mm, 1200 mm
Opening speed RWA	15 mm/s
Opening speed ventilation	5 mm/s
Closing speed	5 mm/s
Tensile force (max.)	600 N
Force of pressure (max.)	600 N (depending on stroke), see force-path diagram



Holding force (max.)	3000 N
Leaf weight	200 kg*
Overlap range	0 - 23 mm (depending on application and brackets)
Voltage at operation	24 V, $\pm 25\%$
Operating voltage	24 V DC
Current consumption	1.5 A
Power consumption	Ventilation (24 V): 1.2 A; RWA (18 V): 1.5 A
Power consumption	36 W
Duty rating	30 %
Special length of power supply cable	5 m, 7.5 m
Cable dimensions	4 cores 0.75 mm ²
Temperature range	-5°C...+70°C
IP rating	IP40
protection rating	III
Syncro function	Yes
Adjustable opening speed (ventilation)	Yes
Additional locking available	Yes
Type of additional locking	Locking drive
Type of stroke shortening	Synchronising unit, Factory setting
End position cut-off extended	electronic, via internal path sensor
End position cut-off retracted	electronic via current consumption
Overload cut-off	Yes
Complete opening within 60 s	yes, up to 800 mm stroke, including locking drive
SHEV tested	Yes
SHEV additional information	yes, up to 800 mm stroke, including locking drive
Synchronisation (max.)	4 drives
Bottom-hung window INWARD-opening frame installation	Yes
Bottom-hung window INWARD-opening leaf installation	Yes
Bottom-hung window OUTWARD-opening frame installation	Yes
Side-hung window INWARD-opening frame installation	Yes
Side-hung window INWARD-opening door leaf installation	Yes
Side-hung window OUTWARD-opening frame installation	Yes
Top-hung window INWARD-opening frame installation	Yes
Top-hung window INWARD-opening leaf installation	Yes
Top-hung window OUTWARD-opening frame installation	Yes
OUTWARD-opening roof window	Yes

NETWORKING



SAFETY NOTICE

Falling window leaves can be a considerable risk to life and limb of persons in the vicinity. Therefore, the use of GEZE safety scissor stays is mandatory when using GEZE drives on bottom-hung windows.

VARIANTS / ORDER INFO

Name	Description	Ident-No.	Colour	Stroke
Powerchain		147090	EV1	800 mm
Powerchain		147101	white RAL 9016	1200 mm
Powerchain		147081	white RAL 9016	600 mm
Powerchain		147091	white RAL 9016	800 mm
Powerchain		147080	EV1	600 mm
Powerchain		147100	EV1	1200 mm
Powerchain – special version	Can be configured: Stroke, cable length, colour	147120		

ACCESSORY

CONSOLE SET ET POWERCHAIN

For top hung windows, inward-opening



Name	Description	Ident-No.	Colour	Syncro function
Console set ET Powerchain	For top-hung window frame installation Inward	161140	black	0
Console set ET Powerchain	For top-hung window frame installation Inward	161139	white RAL 9016	0

CONSOLE SET A POWERCHAIN

For bottom-hung, side-hung and top-hung windows



Name	Description	Ident-No.	Colour	Syncro function
Console set A Powerchain	For bottom-hung, side-hung and top-hung windows, frame installation INWARD	147111	white RAL 9016	0
Console set A Powerchain	For bottom-hung, side-hung and top-hung windows, frame installation INWARD	147110	black	0

CONSOLE SET B POWERCHAIN

For bottom-hung, side-hung and top-hung windows and for different roof profile systems



Name	Description	Ident-No.	Colour	Syncro function
Console set B Powerchain	For bottom-hung, side-hung and top-hung windows, leaf installation INWARD OPENING and frame installation OUTWARD OPENING. Roof profile system: Aluprof MB-SR 50, Reynaers CW 50, Raico Wing 105 DI	147112	black	0
Console set B Powerchain	For bottom-hung, side-hung and top-hung windows, leaf installation INWARD OPENING and frame installation OUTWARD OPENING. Roof profile system: Aluprof MB-SR 50, Reynaers CW 50, Raico Wing 105 DI	147113	white RAL 9016	0

BRACKET SET ROOF D1

For roof windows



Name	Description	Ident-No.	Colour	Syncro function
Console set roof D1 Powerchain	For roof window frame installation OUTWARD. For roof profile systems: Heroal C50, Hueck 85E, Wicona Wictec 50-60	154869	silver-coloured	0

BRACKET SET ROOF D2

For roof windows



Name	Description	Ident-No.	Colour	Syncro function
Bracket set roof D2	For roof window frame installation OUTWARD. For roof profile systems: Akotherm AT 500F, Alcoa AA100, Heroal 180, Hueck VF50, MGlass	154870	silver-coloured	0

BRACKET SET ROOF D3

For roof windows



Name	Description	Ident-No.	Colour	Syncro function
Bracket set roof D3	For skylight frame installation OUTWARD-OPENING. For roof profile systems: Schüco AWS 57RO	158053	silver-coloured	0

CHOICE OF CONSOLES FOR POWERCHAIN

Special version can be configured in terms of opening type, opening direction, installation type and colour



Name	Description	Ident-No.	Colour	Syncro function
Bracket set Powerchain special version	Can be configured: Type of opening, opening direction, installation type, colour	147121	acc. to RAL	0
Bracket set Powerchain roof special version	Can be configured: Profile system, colour	159901	acc. to RAL	0

SAFETY SCISSOR STAY NO. 35

For protection of bottom-hung leaves



Name	Description	Ident-No.	Colour
Safety scissor stay no. 35	Fix pack available from stock (10 pcs), minimum leaf height 300mm	014499	galvanised

SAFETY SCISSOR NO. 60

For protection of bottom-hung leaves



Name	Description	Ident-No.	Colour
Safety scissor stay no. 60	Fix pack available from stock (10 pcs), minimum leaf height 700mm	133814	galvanised

BRACKET SET POWERCHAIN ROOF SPECIAL VERSION

For roof windows

**SERVICE CASE IQ WINDOWDRIVE**

For commissioning and parameter setting of the window drives from the IQ windowdrive range



Name	Description	Ident-No.	Colour	Supply voltage
Service case GEZE IQ windowdrive	for service case of 24 V window drives and for parameter setting of the IQ window drives in combination with the ST 220	142586	silver-coloured	100 - 240 V AC

POWER SUPPLY HS

24 V power supply for top hat rail mounting



IQ GEAR

Interface for activation of the Slimchain, Powerchain and E 250 NT window drives in ventilation mode



Name	Description	Ident-No.
IQ gear	Interface for activation of the Slimchain, Powerchain and E 250 NT window drives in ventilation mode	151959