

#### **SPECIAL FEATURES PLS**

- For natural ventilation, smoke and heat exhausting and ferralux® NRWG (EN12101-2)
- Powerful heavy duty drives for loads up to 5000 N
- Robust corrosion-resistant design in aluminium housing (D = 50 mm), optionally in RAL colors
- Easy installation due to adjustable clamp ring (Rear suspension on request)
- Spindle is ball beared with end position dampening and gentle soft-start and soft-stop mode
- Stainless steel spindle tube
- Programmable parameters of Intelligent Control Electronics S12
  - Synchronised multi-operation and sequence control without add. devices
  - Electronic soft-start, soft-close and soft-stop at end of stroke control
  - Stroke, force, speed
  - Rebate control
- With GoreTex membrane
- Suitable for operation with M-COM for the automatic configuration of synchronised run of multi drive systems and sequence control

For this product series, a Type III Environmental Product Declaration (EPD) was issued according to ISO 14025 and EN 15804. The LCA results of the different product types are listed at the end of this product catalogue. The EPD documents can be viewed or downloaded from our homepage **www.aumueller-gmbh.de**.

### FACADE

Bottom-hung





Top-hung





Side-hung





### ROOF

Bottom-hung



Top-hung







Skylight





Glass pyramid





aumüller



- Application: natural ventilation, RWA, ferralux<sup>®</sup>-NRWG
- Internal Intelligent Control Electronics S12

Options

- Programmable synchronised run (max. 4 drives) and special functions
- M-COM for automatic synchronised run of multi drive systems and automatic sequence control with locking drives (S3 / S12)
- Spindle tube end with interior thread for clevis
- Eyebolt and clevis for rear suspention

Ø8 Ø10 7	10	Ø25
L = s + 465 mm		2/3 KLB
<u>,</u>	000	M12 Internal 50 thread

TECH	INICAL DATA	
U <sub>N</sub>	Rated voltage	24V DC (19V 28V)
I <sub>N</sub>	Rated current	3,0 A
I <sub>A</sub>	Cut-off current	4,0 A
P <sub>N</sub>	Rated power	72 W
DC	Duty cycle	5 cycles (ED 30 % - ON: 3 min./OFF: 7 min.)
	Protection rating	IP 54
1	Ambient temperature range	-5 °C +60 °C
Fz	Pulling force max.	1500 N
F <sub>A</sub>	Pushing force max.	F(N) Schub   Push 1500 1400 1300 1200
		0 800 900 1000 1100 1200 S (mm)
F <sub>H</sub>	Pullout force	0
F <sub>H</sub>	Pullout force Spindle tube	0 800 900 1000 1100 1200 S (mm)
F <sub>H</sub>		0 800 900 1000 1100 1200 S (mm) 25000 N (fastening depended)
F <sub>H</sub>	Spindle tube	0 800 900 1000 1100 1200 S (mm) 25000 N (fastening depended) stainless steel
	Spindle tube Connecting cable	0 800 900 1000 1100 1200 S (mm) 25000 N (fastening depended) stainless steel non-halogen, grey 3 x 1,0 mm <sup>2</sup> , ~ 3 m
v	Spindle tube Connecting cable Speed	0 800 900 1000 1100 1200 s (mm) 25000 N (fastening depended) stainless steel non-halogen, grey 3 x 1,0 mm², ~ 3 m X 16,0 mm/s → 16,0 mm/s



ORDER	ORDER DATA								
s [mm]	L [mm]	Version	Finish	PU/pcs.	PartNo.				
300	765	PLS15 300 S12	E6/C-0	1	576830				
400	865	PLS15 400 S12	E6/C-0	1	576840				
500	965	PLS15 500 S12	E6/C-0	1	576850				
600	1065	PLS15 600 S12	E6/C-0	1	576860				
750	1215	PLS15 750 S12	E6/C-0	1	576875				
1000	1465	PLS15 1000 S12	E6/C-0	1	576800				
1200	1665	PLS15 1200 S12	E6/C-0	1	576812				

OPTIONS			
Special model	PU/pcs.	PartNo.	
Front Fixing			
Spindle tube end with interior thread M10	1	515062	
Spindle tube end with interior thread M12	1	515063	
Drive housing painted/powder coated in other RAL colours			
Lump sum for coating		516030	
	1 - 20	516004	
Specify at order stage:	21 - 50	516004	
specify at order stage.	51 – 100	516004	
	from 101	516004	
Extra length connecting cable:			
5 m – non-halogen, grey – 3 x 1,0 mm²		501037	
10 m – non-halogen, grey – 3 x 1,0 mm²		501039	
Accessories for front / rear suspension			
B29VA Eyebolt M12x40mm, Ø8 mm, stainless steel	1	105430	
B28ST Clevis M10x20 mm, galvanized, thread M10x50 mm	1	105520	
Microprocessor programming S12			
Electronic stroke reduction 24V S12	1	524190	
Programming drives 24V / 230V S12	1	524180	
Other lengths available on request			
Optional accessories	PU/pcs.	PartNo.	
M-COM Configuration module for synchronised multi-drive systems	1	524177	



- Application: natural ventilation, RWA, ferralux®-NRWG
- Internal Intelligent Control Electronics S12

Options

- Programmable synchronised run (max. 4 drives) and special functions
- M-COM for automatic synchronised run of multi drive systems and automatic sequence control with locking drives (S3 / S12)
- Spindle tube end with interior thread for clevis
- Eyebolt and clevis for rear suspention

Ø8 10 Ø10	TECHN	IICAL DATA	
Ø25	U <sub>N</sub>	Rated voltage	24V DC (19V 28V)
s s s s s s s s s s s s s s s s s s s	I <sub>N</sub>	Rated current	3,8 A
	I <sub>A</sub>	Cut-off current	5,0 A
T T T	P <sub>N</sub>	Rated power	91 W
0 0 0	DC	Duty cycle	5 cycles (ED 30 % - ON: 3 min./OFF: 7 min.)
0 0 0		Protection rating	IP 54
	X	Ambient temperature range	-5 °C +60 °C
e III	Fz	Pulling force max.	3000 N
L = s + 465 mm	F <sub>A</sub>	Pushing force max.	F (N) Schub   Push 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 2000 1800 1/3 KLB 1/3 KLB 000 000 000 000 000 000 000 0
	F <sub>H</sub>	Pullout force	25000 N (fastening depended)
(TB		Spindle tube	stainless steel
1/3 KLB		Connecting cable	non-halogen, grey 3 x 1,0 mm², ~ 3 m
	v	Speed	X₁ 7,8 mm/s 🏊 7,8 mm/s
M12 Internal	S	Stroke	300 – 1200 mm
g50 thread	L	Length	s + 465 mm see order data
		Sound pressure level	≤ 70 dB (A)



2/36

ORDER	ORDER DATA								
s [mm]	L [mm]	Version	Finish	PU/pcs.	PartNo.				
300	765	PLS30 300 S12	E6/C-0	1	577530				
400	865	PLS30 400 S12	E6/C-0	1	577540				
500	965	PLS30 500 S12	E6/C-0	1	577550				
600	1065	PLS30 600 S12	E6/C-0	1	577560				
750	1215	PLS30 750 S12	E6/C-0	1	577575				
1000	1465	PLS30 1000 S12	E6/C-0	1	577500				
1200	1665	PLS30 1200 S12	E6/C-0	1	577512				

OPTIONS			
Special model	PU/pcs.	PartNo.	
Front Fixing			
Spindle tube end with interior thread M10	1	515062	
Spindle tube end with interior thread M12	1	515063	
Drive housing painted/powder coated in other RAL colours			
Lump sum for coating		516030	
	1 - 20	516004	
Specify at order stage:	21 - 50	516004	
specify at order stage.	51 – 100	516004	
	from 101	516004	
Extra length connecting cable:			
5 m – non-halogen, grey – 3 x 1,0 mm²		501037	
10 m – non-halogen, grey – 3 x 1,0 mm²		501039	
Accessories for front / rear suspension			
B29VA Eyebolt M12x40mm, Ø8 mm, stainless steel	1	105430	
B28ST Clevis M10x20 mm, galvanized, thread M10x50 mm	1	105520	
Microprocessor programming S12			
Electronic stroke reduction 24V S12	1	524190	
Programming drives 24V / 230V S12	1	524180	
Other lengths available on request			
Optional accessories	PU/pcs.	PartNo.	
M-COM Configuration module for synchronised multi-drive systems	1	524177	





- Application: natural ventilation, RWA
- Internal Intelligent Control Electronics S12
- Options

TECH

 $\mathbf{U}_{N}$ 

 $I_{N}$ 

I<sub>A</sub> P<sub>N</sub> DC

ľ

F<sub>z</sub>

F<sub>H</sub>

v

s

L

- Programmable synchronised run (max. 4 drives) and special functions
- M-COM for automatic synchronised run of multi drive systems and automatic sequence control with locking drives (S3 / S12)
- Spindle tube end with interior thread for clevis
- Eyebolt and clevis for rear suspention



INICAL DATA	
Rated voltage	24V DC (19V 28V)
Rated current	3,0 A
Cut-off current	4,2 A
Rated power	72 W
Duty cycle	5 cycles (ED 30 % - ON: 3 min./OFF: 7 min.)
Protection rating	IP 54
Ambient temperature range	-5 °C +60 °C
Pulling force max.	5000 N
Pushing force max.	$ \begin{array}{c} F(N) \\ 5000 \\ 4000 \\ 3000 \\ 2000 \\ 1000 \\ 0 \\ 500 \\ 550 \\ 600 \\ 650 \\ 700 \\ 750 \\ 8 \ (mm) \end{array} $
Pullout force	25000 N (fastening depended)
Spindle tube	stainless steel
Connecting cable	non-halogen, grey 3 x 1,0 mm², ~ 3 m
Speed	X = 4,0 mm/s ⊾ 4,0 mm/s

Stroke Length Sound pressure level

s + 600 mm see order data

200 – 750 mm

 $\leq$  70 dB (A)



2/38

ORDER DATA							
s [mm]	L [mm]	Version	Finish	PU/pcs.	PartNo.		
200	800	PLS50 200 S12	E6/C-0	1	577620		
300	900	PLS50 300 S12	E6/C-0	1	577630		
400	1000	PLS50 400 S12	E6/C-0	1	577640		
500	1100	PLS50 500 S12	E6/C-0	1	577650		
600	1200	PLS50 600 S12	E6/C-0	1	577660		
750	1350	PLS50 750 S12	E6/C-0	1	577675		

OPTIONS			
Special model	PU/pcs.	PartNo.	
Front Fixing			
Spindle tube end with interior thread M10	1	515062	
Spindle tube end with interior thread M12	1	515063	
Drive housing painted/powder coated in other RAL colours			
Lump sum for coating		516030	
	1 - 20	516004	
Specify at order stage:	21 - 50	516004	
specify at order stage.	51 – 100	516004	
	from 101	516004	
Extra length connecting cable:			
5 m – non-halogen, grey – 3 x 1,0 mm²		501037	
10 m – non-halogen, grey – 3 x 1,0 mm²		501039	
Accessories for front / rear suspension			
B29VA Eyebolt M12x40mm, Ø8 mm, stainless steel	1	105430	
B28ST Clevis M10x20 mm, galvanized, thread M10x50 mm	1	105520	
Microprocessor programming S12			
Electronic stroke reduction 24V S12	1	524190	
Programming drives 24V / 230V S12	1	524180	
Other lengths available on request			
Optional accessories	PU/pcs.	PartNo.	
M-COM Configuration module for synchronised multi-drive systems	1	524177	

OVERVIE\	N OF BRA	CKETS									
Typical applicat	tions				1	2	3	4	5	6	7
Frame bracket					K70	K82-1	K82-1	K121	K127-1	K121-1	K121-1
Mounting aid											
Bracket access								ng B6 (50 mi			
Casement brac					F10.8S, F10.		F28-1	F28	F10.11	F36	F30
Special applica	tion				Wictec 50, Wing 105 D	AWS 57RO, Wing 105D	Heroal 085D	Heroal 085D	roof window	Schüco AWS 57RO	Wicona Wictec 50
Space requiren	nent		min.	[mm]	120	50	50	35	35	50	50
Window mater	rial		Alu Wood PVC		•	•	•	•	•	•	•
Type of	Bottom	inward	HSK	FM							ĺ
window and	hung			RM							
mounting			NSK	FM							
				RM							
		outward	HSK	RM		•					
				PR							
			NSK	RM							
				PR							
	Тор	Top inward hung outward	HSK	FM							
	nung			RM							
			NSK	FM							
				RM							-
			HSK	RM		•					
				PR							
			NSK	RM PR							
	Side	inword	HSK	_							
	hung	inward	ЛСП	FM RM							
			NSK	FM							
			NJK	RM							
	Roof	outward	HSK	RM	•	•	•				
		Carryand		PR	-						
			NSK	RM				•	٠	•	•
				PR							
	Sky-light	outward	HSK	RM	•	•					
			NSK	RM							
FAB(*1			Solo	[mm]			4	50 – 1300			
			Sync2	[mm]			12	200 – 2500			
FAH(*1			Solo	[mm]			4	50 – 1500			
			Sync2	[mm]			4	50 – 2500			

#### LEGEND

(\*1

suitable
 not recommended

Sample value of the casement dimensions. The actuell casement dimensions depend on the stroke and the position of the drives to the hinges. The values of FAB/FAH are to be used analogue for side hung windows.



04/2021

#### **CASEMENT BRACKETS**

**Spindle drives** 

F10.85	208 200 200 200 200 200 200 200 200 200	Application Surface mounting on the main closing edge of casement profiles of outward opening windows, for drives with front or rear suspen- sion with bore Ø8 mm	PartNo. 151105 Material/Finish aluminium Feature/Equipment 1x nut M8, 1x screw M8x35 Load max. 3000 N		
F10.10	28 010 06,5 x3 x3 x3 x4 x4 x4 x4 x4 x4 x4 x4 x4 x4	Application Surface mounting on the main closing edge of the casement profiles of outward opening windows, for drives with front or rear suspension with bore Ø10 mm	PartNo. 151201 Material/Finish aluminium, stainless steel Feature/Equipment 1x bolt Ø10 mm, washer, split pin Load max. 5000 N		
F10.11		Application Surface mounting on the side closing edge of casement/ window frame profiles of in-/outward opening windows or on skylights, for drives with front or rear suspension with bore Ø10 mm, mounting holes aligned with central axis of drive	PartNo. 151202 Material/Finish aluminium, stainless steel Feature/Equipment 1x bolt Ø10 mm, washer, cotter pin Load max. 5000 N		
F40	60 20 011/06,5 X3 K R R R R R R R R R R R R R R R R R R	Application Surface mounting on the main closing edge of the casement profiles of outward opening roof windows, for drives with front or rear suspension with bore Ø8 mm	PartNo. 155172 Material/Finish aluminium Feature/Equipment 1x screw M8x35, nut M8 Load max. 3000 N		
	26 Ø8	Optional accessories		 	
	· •	B2 Base plate F39 / F40	PartNo. 155173		

#### FRAME BRACKETS

K70	90 12 12 12 10 14,5 14,5 10 14,5 10 14,5 10 14,5 10 14,5 10 14,5 10 14,5 12 10 14,5 12 10 14,5 12 10 14,5 10 10 10 10 10 10 10 10 10 10	Application Surface mounting on the main closing egde of window frame profiles or on the mullion/ transom of outward opening (roof-)windows, for swivelling suspension of drives PLS with B6	PartNo. 155002 Material/Finish steel galvanized Feature/Equipment drilled holes Ø14,5 mm	
	90	Accessories		
		<b>B6</b> clamp ring PLS (Ø50mm, G1/8)	PartNo. 576001	
K82-1		Application	PartNo. 151321	
	13.5 18.5 0 14.5 0 14.5 0 00 0 00 0 06.5 x6	Surface mounting on the main closing egde of window frame profiles or on the mullion/ transom of outward opening (roof-)windows, for swivelling suspension of drives PLS with B6	Material/Finish stainless steel Feature/Equipment drilled holes Ø14,5 mm	
	49 <sup>30</sup> 60 90	Accessories		
		<b>B6</b> clamp ring PLS (Ø50mm, G1/8)	PartNo. 576001	

#### **OPTIONAL ACCESSORIES**



### SPECIFIC APPLICATIONS

SCHÜCO A	WS 57RO, WICONA WICTEC 50	), RAICO WING 105D – HSK			
F10.85	20 20 20 20 20 20 20 20 20 20	Application Surface mounting on the main closing edge of casement profiles of outward opening windows, for drives with front or rear suspen- sion with bore Ø8 mm	PartNo. 151105 Material/Finish aluminium Feature/Equipment 1x nut M8, 1x screw M8x35 Load max. 3000 N		
K82-1	R 00	Application Surface mounting on the main closing egde of win- dow frame profiles or on the mullion/transom of outward opening (roof-)windows, for swivelling suspension of drives PLS with B6	PartNo. 151321 Material/Finish stainless steel Feature/Equipment drilled holes Ø14,5 mm		
	- 00 - 00 - 00 - 00 - 00 - 00 - 00 - 00	Accessories B6 Clamp ring PLS	PartNo. 576001		
SCHÜCO A	WS 57RO – NSK	(Ø50 mm, G1/8)			
F36		Application	PartNo. 155170		
	20° 12 06,5 011/7 x4	Surface mounting on the side closing edge of outward ope- ning casement profiles of roof windows Schüco AWS 57RO, for drives with front suspension with bore Ø8 mm	Material/Finish aluminium (natural anodized), stainless steel Feature/Equipment 1x bolt Ø8 mm, screw M4, washer A4,3		
K121-1	* ^	Application	PartNo. 155117		
Ę	200 180 + 60 + 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	Surface mounting on the side closing edge of window frame profiles of outward opening roof windows Schüco AWS 57RO, Wicona Wictec 50, Metra for swivelling suspension of drives PLS with B6	Material/Finish stainless steel Feature/Equipment without clamp ring B6		
		Accessories		 	
	97 736	<b>B6</b> Clamp ring PLS (Ø50 mm, G1/8)	PartNo. 576001		

#### SPECIFIC APPLICATIONS

WICONA	WICTEC 50 – NSK			
F30	80 60 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Application Surface mounting on the side closing edge of the outward opening casement profiles of roof windows Wicona Wictec 50, for drives with front suspension with bore Ø8 mm	PartNo. 155160 Material/Finish aluminium (natural anodized), stainless steel Feature/Equipment 1x bolt Ø8 mm, screw M4, washer A4,3	
K121-1	× 4 2	Application	PartNo. 155117	
	200 00 00 00 00 00 00 00 00 00 00 00 00	Surface mounting on the side closing edge of window frame profiles of outward opening roof windows Schüco AWS 57RO, Wicona Wictec 50, Metra for swivelling suspension of drives PLS with B6	Material/Finish stainless steel Feature/Equipment without clamp ring B6	
	8	Accessories		
	736	<b>B6</b> Clamp ring PLS (Ø50 mm, G1/8)	PartNo. 576001	
Roof wi	ndow – NSK			
F10.11	Ø10 Ø13	Application	PartNo. 151202	
	Ø6,6		Material/Finish	
		Surface mounting on the side closing edge of casement/ window frame profiles of in-/outward opening windows or on skylights, for drives with front or rear suspension with bore Ø10 mm, mounting holes aligned with central axis of drive	aluminium, stainless steel Feature/Equipment 1x bolt Ø10 mm, washer, cotter pin Load max. 5000 N	
K127-1		side closing edge of casement/ window frame profiles of in-/outward opening windows or on skylights, for drives with front or rear suspension with bore Ø10 mm, mounting holes	aluminium, stainless steel Feature/Equipment 1x bolt Ø10 mm, washer, cotter pin Load	
K127-1		<b>side closing edge</b> of casement/ window frame profiles of in-/outward opening windows or on skylights, for drives with <b>front or rear suspension</b> with bore Ø10 mm, mounting holes aligned with central axis of drive	aluminium, stainless steel Feature/Equipment 1x bolt Ø10 mm, washer, cotter pin Load max. 5000 N	
K127-1		side closing edge of casement/ window frame profiles of in-/outward opening windows or on skylights, for drives with front or rear suspension with bore Ø10 mm, mounting holes aligned with central axis of drive Application Surface mounting on the side closing edge of window frame profiles of outward opening roof windows for swivelling suspen- sion of drives	aluminium, stainless steel Feature/Equipment 1x bolt Ø10 mm, washer, cotter pin Load max. 5000 N PartNo. 155118 Material/Finish stainless steel Feature/Equipment	
K127-1		side closing edge of casement/ window frame profiles of in-/outward opening windows or on skylights, for drives with front or rear suspension with bore Ø10 mm, mounting holes aligned with central axis of drive Application Surface mounting on the side closing edge of window frame profiles of outward opening roof windows for swivelling suspen- sion of drives PLS with B6	aluminium, stainless steel Feature/Equipment 1x bolt Ø10 mm, washer, cotter pin Load max. 5000 N PartNo. 155118 Material/Finish stainless steel Feature/Equipment	

**Spindle drives** 

#### SPECIFIC APPLICATIONS

HEROAL	085 / 180 – HSK			
F28-1	00 10 10 10 10 10 10 10 10 10	Application Surface mounting on the main closing edge of outward opening casement profiles of roof win- dows Heroal 085D, for drives with front suspension with bore Ø10 mm	PartNo. 155154 Material/Finish aluminium (natural anodized), stainless steel Feature/Equipment 1x bolt Ø10 mm, screw M5, washer A5,3 split pin 2x20	
K82-1	014.5 014.5 00 06,5 06,5 00 00 00 00 00 00 00 00 00 0	Application Surface mounting on the main closing egde of window frame profiles or on the mullion/ transom of outward opening (roof-)windows, for swivelling suspension of drives PLS with B6 Accessories	PartNo. 151321 Material/Finish stainless steel Feature/Equipment drilled holes Ø14,5 mm	
HEROAL		<b>B6</b> Clamp ring PLS (Ø50 mm, G1/8)	PartNo. 576001	
F28	06.5 0111/7 00 00 00 00 00 00 00 00 00 00 00 00 00	Application Surface mounting on the side closing edge of outward opening casement profiles of roof windows Heroal 085D, for drives with front suspension with bore Ø10 mm	PartNo. 155155 Material/Finish aluminium (natural anodized), stainless steel Feature/Equipment 1x bolt Ø10 mm, screw M5, washer A5,3	
K121	200 100 100 100 100 100 100 100 100 100	Application Surface mounting on the side closing edge of window frame profiles of outward opening roof windows Schüco RS 106D, Heroal 085D for swivelling suspension of drives PLS with B6	PartNo. 155110 Material/Finish stainless steel Feature/Equipment without clamping ring B6	
		Accessories		
		<b>B6</b> Clamp ring PLS (Ø50 mm, G1/8)	PartNo. 576001	

#### **OPTIONAL ACCESSORIES**

