Arntjen Germany

An der Brücke 33-35 D-26180 Rastede

Tel: +49 (0) 4402 - 9240 - 0 E-mail: info@arntjen.com Fax: +49 (0) 4402 - 9240 - 92 Internet: www.arntjen.com

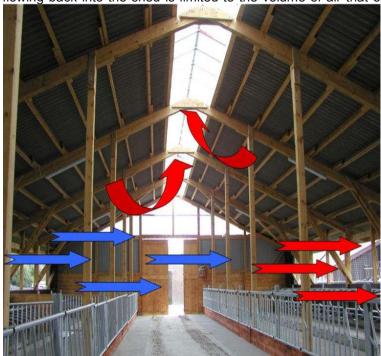


Arntjen ISO Lighting / Ventilation Ridges

Light and ventilation – a twofold gain!

Ventilation and exhaust systems for cubicle barns

The extraction of exhausted air is just as important as the supply of fresh air. This is because the volume of air flowing back into the shed is limited to the volume of air that exited the shed previously. An efficient venting



system ensures that water vapor and, thereby, germs, ammonium, CO² and other harmful gases are extracted continuously from the shed.

Only a shed that is virtually free of harmful gases will allow a cow to perform at its best. During the summer months, cross ventilation forces the bulk of the consumed air to escape from the open curtains on the shed side averted from the wind. The heated air collecting above the eave line, i. e. in the triangles of the roof pitches, is supposed to escape or be extracted through the ridge.

When the curtains are kept closed in the fall, winter and spring, the largest portion of the air is extracted through the ridge.

The right size of the opening is calculated as 0.15 sqm per cow. However, another decisive factor is the shape of the opening.





Arntjen ISO lighting/ventilation ridge on top of a milking parlor

Arntjen ISO lighting/ventilation ridge on top of a shed in the USA

Barn equipment

15.

Arntjen Germany

GMBH

An der Brücke 33-35 D-26180 Rastede

Tel: +49 (0) 4402 - 9240 - 0 E-mail: info@arntjen.com Fax: +49 (0) 4402 - 9240 - 92 Internet: www.arntjen.com

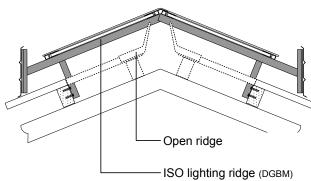


components

Arntjen ISO Lighting Ridge M4 type Germany/ Simplex



- · Outstanding air extraction
- No driving rain in the shed
- Ideal light source for the building
- Improved comfort for the animals
- Significant energy savings thanks to lower lighting costs
- Air exit up to 72 cm (type LA80)
- High wind deflectors
- Light inlet 100 350 cm
- · Light dispersion thanks to opal light panel
- High-quality aluminum profiles
- Stainless steel screw connections



How much does an open ridge cost? How much is a lighting/ventilation ridge?

Example: Open ridge €120 to €150 per meter length.

ISO lighting ridge from approx. €120 per meter length

As you can see, an ISO lighting/ventilation ridge does not cost anything extra!
Other benefits:

- Reliable exhaust air extraction
- more day light
- dry shed

In areas with heavy snow loads, large snow accumulations must be cleared off the ridge as they will otherwise represent an unresolvable variable in the calculation of the snow, snow-water or snow-ice loads pushing on the wind deflectors and result in damage. We offer a line of reinforcing accessories that supplement our ISO lighting ridge to provide for increased stability in these areas. If you are dealing with extensive snow loads, we will be happy to prepare a quote for you!

description

ord-No.

ISO Lighting Ridge M4 (DBGM)

type Germany / Simplex

stable aluminum substructures with a section distance of 105.7 cm and Double H-profile, single-part including aluminum "Z-Form" wind guide

including ISO light panel 10 mm with UV protection

Color: "Opal" (white/ transparent), Clear (transparent) on request, including special stainless steel bolts without brush strip

Smallest structural element 1.057 meters!

Purlin spacing	Туре	
	LA 40	s0406
125 cm	LA 40	s0407
150 cm	LA 40	s0408
175 cm	LA 40	s0409
200 cm	LA 40	s0410
225 cm	LA 40	s0411
	LA 40	s0412
275 cm	LA 40	s0910
	LA 40	s0911
	LA 40	s0912
	LA 40	s0913
100 cm	LA 60	s0413
125 cm	LA 60	s0414
	LA 60	s0415
175 cm	LA 60	s0416
200 cm	LA 60	s0417
	LA 60	s0418
	LA 60	s0419
	LA 60	s0916
	LA 60	s0917
	LA 60	s0918
	LA 60	s0919
	LA 80	s0922
	LA 80	s0923
	LA 80	s0924
	LA 80	s0925
	LA 80	s0926
	LA 80	s0927
	LA 80	s0928
	LA 80	s0929
	LA 80	s0930
	LA 80	s0931
	LA 80	s0932
Brush strip 80 mm		s0357
Adjusts to the roof n	nembrane and keeps off wind	

and snow.

Including aluminum rail and drilling screws
Gable cladding see sheet 4, ventilation flap see sheet 8
Important for this ridge:

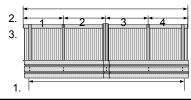
- prices are valid for roof slopes between 20-24°
- roof material "W5" installation direct on purlins
- prices for other roof slopes, higher roof structures, different roof constructions, and higher or different roof materials (tiled roofs, insulated roof panels), etc.: see ISO Lighting Ridge M4 type Germany/Vari-Tec

 Places request a quote

Please request a quote.

Length of ridge: The length of the ridge to order is calculated by the opening length plus the desired overlapping at the ends. This length must be rounded up to a length that is divisible by the structural elements.

- 1. Opening length
- 2. Ridge length
- 3. Elements



Arntjen Germany

An der Brücke 33-35 D-26180 Rastede

Tel: +49 (0) 4402 - 9240 - 0 E-mail: info@arntjen.com Fax: +49 (0) 4402 - 9240 - 92 Internet: www.arntjen.com



components

Arntjen ISO-Lighting ridge M4 Type Germany/Vari-Tec



Ridge profile, 2-part



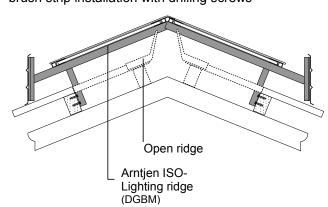
brush strip



- air exit up to 80 cm
- ridge top with optional 8 cm opening

For easier installation:

- ridge top profile, 2-part
- wind deflector across 2 panels
- brush strip installation with drilling screws



What does an open ridge cost? What does a lighting ridge

Example: Open ridge €120 to €150 per meter length. ISO lighting ridge from approx. €120 per meter length

You see an ISO lighting ridge is not more expensive!! More benefits:

- Reliable exhaust air extraction
- more day light
- dry shed

In "snowy regions" the ridge has to disburdened from big snow masses, otherwise a not calculable snow-, snow-water- or snowice burden presses on the wind-deflector and could result in damages. To get a higher rigidity in these regions you will find tightening material in our ISO-lighting ridge accessories

description

ord-No.

ISO-Lighting Ridge M4 (DBGM) Type Germany/Vari-Tec stable aluminum substructures with a section

distance of 105.7 cm and Ridge top profile, 2-part including aluminum "Z-Form" wind guide plate

including ISO light panel 10 mm with UV protection

. Color: "Opal" (white/ transparent) including special stainless steel bolts with optional ridge top opening without brush strip

Smallest structural element 1.057 meters! Please clarify statics before ordering.

Please clarify statics be		
Purlin distance Typ	е	
100 cm L	A 40	s0367
125 cm L	A 40	s0368
150 cm L	A 40	s0291
175 cm L		s0292
200 cm L		s0293
225 cm L		s0294
250 cm L		s0295
275 cm L		s0296
300 cm L		s0297
325 cm L		s0298
350 cm L	A 40	s0299
100 cm L	A 60	s0369
125 cm L		s0370
150 cm L		s0302
175 cm L		s0303
200 cm L		s0304
225 cm L		s0305
250 cm L		s0306
275 cm L		s0307
300 cm L		s0308
325 cm L		s0309
350 cm L 100 cm L	A 60	s0310
		s0371
125 cm L		s0372
150 cm L		s0313
175 cm L		s0314
200 cm L		s0315
225 cm L		s0316
250 cm L		s0317
275 cm L		s0318
300 cm L		s0319
325 cm L		s0320
350 cm L	A 80	s0321
Brush strip 80 mm p	er meter ridge	s0357
Adjusts to the roof memb	rane and keeps off	
wind and snow.		
Including aluminum rail a	nd drilling screws	

Gable cladding see sheet 4, ventilation flap see sheet 8

The prices apply to a purlin spacing of 100 - 250 cm for roof pitches of 15-29° 275 - 350 cm for roof pitches of 20-24°

- roof material "W5" installation direct on purlins
- prices for other roof slopes, higher roof structures, different roof constructions, and higher or different roof materials (tiled roofs, insulated roof panels) as well as ridges with ventilation flaps, etc. available on request.

Length of ridge: The length of the ridge to order is calculated by the opening length plus the desired overlapping at the ends. This length must be rounded up to a length that is divisible by the structural elements.

Arntjen Germany

An der Brücke 33-35 D-26180 Rastede

Tel: +49 (0) 4402 - 9240 - 0 E-mail: info@arntjen.com Fax: +49 (0) 4402 - 9240 - 92 Internet: www.arntjen.com

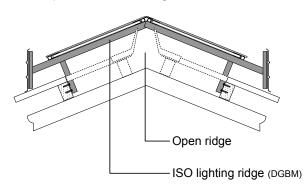


components

Arntjen ISO Lighting Ridge M4 Type Germany/Vari-Tec



- air exit up to 80 cm For easier installation:
- wind deflector across 2 panels
- brush strip installation with drilling screws



How much does an open ridge cost? How much is a lighting/ventilation ridge?

Example: Open ridge €120 to €150 per meter length.

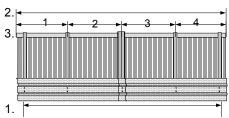
ISO lighting ridge from approx. €120 per meter length

As you can see, an ISO lighting/ventilation ridge does not cost anything extra! Other benefits:

- Reliable exhaust air extraction
- more day light
- dry shed

In areas with heavy snow loads, large snow accumulations must be cleared off the ridge as they will otherwise represent an unresolvable variable in the calculation of the snow, snow-water or snow-ice loads pushing on the wind deflectors and result in damage. We offer a line of reinforcing accessories that supplement our ISO lighting ridge to provide for increased stability in these areas.

- 1. Opening length
- 2. Ridge length
- 3. Elements



description

ord-No.

ISO Lighting Ridge M4

type Germany/Vari-Tec with 16 mm light panel

stable aluminum substructures with a section distance of 105.7 cm and Ridge top profile, 2-part

including aluminum "Z-Form" wind guide plate

including ISO light panel <u>16 mm</u> with UV protection

Color: Clear (transparent)

including special stainless steel bolts

without brush strip

Smallest structural element 1.057 meters!

Please clarify statics before ordering.

Purlin spacing	Type	
100 cm	LA 40	s0456
125 cm	LA 40	s0457
150 cm	LA 40	s0458
175 cm	LA 40	s0459
200 cm	LA 40	s0460
	LA 40	s0461
	LA 40	s0462
	LA 40	s0463
	LA 40	s0464
	LA 40	s0465
350 cm	LA 40	s0466
100 cm	LA 60	s0469
125 cm	LA 60	s0470
150 cm	LA 60	s0471
175 cm	LA 60	s0472
200 cm	LA 60	s0473
225 cm	LA 60	s0474
	LA 60	s0475
	LA 60	s0476
	LA 60	s0477
	LA 60	s0478
350 cm	LA 60	s0479
100 cm	LA 80	s0482
	LA 80	s0483
	LA 80	s0484
	LA 80	s0485
	LA 80	s0486
	LA 80	s0487
	LA 80	s0488
	LA 80	s0489
	LA 80	s0490
	LA 80	s0491
	LA 80	s0492
Brush strip 80 mm		s0357
Adjusts to the roof m	nembrane and keeps off	

Adjusts to the roof membrane and keeps off wind and snow.

Including aluminum rail and drilling screws Gable cladding see sheet 4, ventilation flaps see sheet 8

The prices apply to a purlin spacing of 100 - 250 cm for roof pitches of 15-29° 275 - 350 cm for roof pitches of 20-24°

- roof material "W5" installation direct on purlins
- prices for other roof slopes, higher roof structures, different roof constructions, and higher or different roof materials (tiled roofs, insulated roof panels) as well as ridges with ventilation flaps, etc. available on request.

Length of ridge: The length of the ridge to order is calculated by the opening length plus the desired overlap at the ends. This length must be rounded up to a length that is divisible by the structural elements.

5. Beddings

Arntjen Germany



Tel: +49 (0) 4402 - 9240 - 0 E-mail: info@arntjen.com

An der Brücke 33-35 D-26180 Rastede

Fax: +49 (0) 4402 - 9240 - 92 Internet: www.arntjen.com	nternet: www.arntjen.com		agro-c
components	descript	tion	ord- No.
	ISO-lighting rid accessories:	ge	
	additional price fo		
	guide plates in dif		
	colours (grey, bro		
	for LA 40	per m ridge	
	for LA 60	per m ridge	
	for LA 80	per m ridge	06149
	supports "Z-Form		
	for extended roof	price per piece	00423
	gable cover, Alu		
	(4 plates with screws for		
	width 100-200 air exit		s0397
	width 225-300 air exit		
	width 325-400 air exit		s0399
gable cover	width 100-200 air exit		s0400
	width 225-300 air exit	LA60 per set	s0401
	width 325-400 air exit	LA60 per set	s0402
	width 100-200 air exit	LA80 per set	s0403
	width 225-300 air exit	LA80 per set	s0404
	width 325-400 air exit	LA80 per set	s0405
	gable cover, color	ed	
	anthracite / brown		
	(4 plates with screws for		
	width 100-200 air exit		s0495
	width 225-300 air exit		s0496
	width 325-400 air exit		s0497
	width 100-200 air exit		s0498
	width 225-300 air exit		s0499
	width 325-400 air exit		s4002
	width 100-200 air exit		s4003
	width 225-300 air exit	LA80 per set	
	width 325-400 air exit		s4005
		1 2 2 2 2 2	
	installation tools for rid	dges without	03382
	installation tools for rid	dges with flaps	03383

air flaps on page 8

Arntjen Germany

MBH

An der Brücke 33-35 D-26180 Rastede

Tel: +49 (0) 4402 - 9240 - 0 E-mail: info@arntjen.com Fax: +49 (0) 4402 - 9240 - 92 Internet: www.arntjen.com

components



ord-

No.

wind guide plate
fixing point

"Semi" ISO – Lighting ridge M4 type Germany/Vari-Tec

description

<u>Semi</u> ISO Lighting Ridge M4 (DBGM)

Type Germany/Vari-Tec

stable aluminum substructures with a section distance of 105.7cm including "Z-Form" wind guide aluminum plate

including ISO light panel 10 mm with UV protection

Color: "Opal" (white/ transparent), clear (transparent) on request including special stainless steel bolts without brush strip

Smallest structural element 1.057 meters!

width	LA 18	
100 cm		
125 cm		
150 cm		
175 cm		
200 cm		

Brush strip 80 mm per meter ridge
Adjusts to the roof membrane and keeps off wind and snow.

Including aluminum rail and drilling screws

Type Germany/Vari-Tec with 16 mm light panel

stable aluminum substructures with a section distance of 105.7 cm including aluminum "Z-Form" wind guide plate

including ISO light panel 16 mm with UV protection, color: clear (transparent) including special stainless steel bolts without brush strip)

Smallest structural element 1.057 meters!

width	LA 18	
100 cm		
125 cm		
150 cm		
175 cm		
200 cm		
Brush strip 80 mm	per meter ridge	

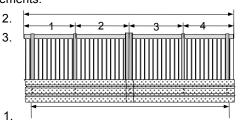
important for our complete ridge programme:

- prices are valid for roof slopes between 15-29°
- roof material "W5" installation direct on purlins
- prices for other roof slopes, different roof constructions and roof materials on request

Length of ridge:

The length of the ridge to order is calculated by the opening length plus the overlapping at the ends. This length is to adjust upward to whole elements.

- 1. Opening length
- Ridge length
- 3. Elements



In "snowy regions" the ridge has to disburdened from big snow masses, otherwise a not calculable snow-, snow-water- or snow-ice burden presses on the wind-deflector and could result in damages. To get a higher rigidity in these regions you will find tightening material in our ISO-lighting ridge accessories

Arntjen Germany

An der Brücke 33-35 D-26180 Rastede

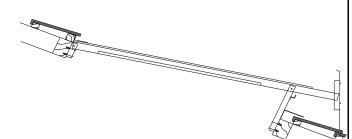
Tel: +49 (0) 4402 - 9240 - 0 E-mail: info@arntjen.com Fax: +49 (0) 4402 - 9240 - 92 Internet: www.arntjen.com



ord-

No.

description components Single-sided ISO Lighting



"Single-side" ISO – Lighting ridge M4 type Germany/Vari-Tec

Ridge M4 (DBGM) type Germany/Vari-Tec

stable aluminum substructures with a section distance of 105.7cm including "Z-Form" wind guide aluminum plate including ISO light panel 10 mm with UV protection

Color: "Opal" (white/ transparent), clear (transparent) on request including special stainless steel bolts without brush strip

Smallest structural element 1.057 meters!

width	LA	18	
100 cm			
125 cm			
150 cm			
175 cm			
200 cm			
Drugh strin	00 mm	nor motor ridge	

Brush strip 80 mm per meter ridge Adjusts to the roof membrane and keeps off wind and snow.

Including aluminum rail and drilling screws

Type Germany/Vari-Tec with 16 mm light panel

stable aluminum substructures with a section distance of 105.7 cm including aluminum "Z-Form" wind guide

including ISO light panel 16 mm with UV protection, color: clear (transparent) including special stainless steel bolts without brush strip)

Smallest structural element 1.057 meters!

width L	_A 18	
100 cm		
125 cm		
150 cm		
175 cm		
200 cm		
Brush strip 80 mm	per meter ridge	

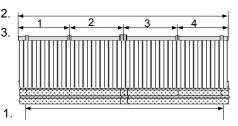
important for our complete ridge programme:

- prices are valid for roof slopes between 15-29°
- roof material "W5" installation direct on purlins
- prices for other roof slopes, different roof constructions and roof materials on request

Length of ridge:

The length of the ridge to order is calculated by the opening length plus the overlapping at the ends. This length is to adjust upward to whole elements.

- 1. Opening length
- 2. Ridge length
- 3. Elements



In "snowy regions" the ridge has to disburdened from big snow masses, otherwise a not calculable snow-, snow-water- or snowice burden presses on the wind-deflector and could result in damages. To get a higher rigidity in these regions you will find tightening material in our ISO-lighting ridge accessories

10. Slurry mixers

Arntjen Germany

An der Brücke 33-35

components

Tel: +49 (0) 4402 - 9240 - 0 E-mail: info@arntjen.com Fax: +49 (0) 4402 - 9240 - 92 Internet: www.arntjen.com

D-26180 Rastede



ord-

gable cover

description	NO.
ISO-Lighting ridge	
accessories for type:	
Half and One side:	
additional price for wind	
guide plates in different	
colours (grey, brown, red):	
LA 40 for LA 18 per m ridge	
gable cover, Alu	
(2 plates with screws for 2 gables)	
width 100-200 air exit	
LA 40 for LA 18 per set	
installation tools for ridges without flaps	03382
installation tools for ridges with flaps	03383

description

air flaps on page 8

Arntjen Germany

An der Brücke 33-35 D-26180 Rastede

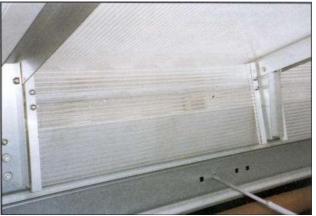
Tel: +49 (0) 4402 - 9240 - 0 E-mail: info@arntjen.com Fax: +49 (0) 4402 - 9240 - 92 Internet: www.arntjen.com



components



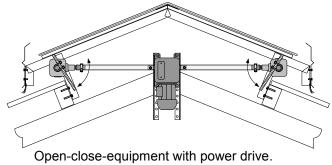
Air flaps type L2 open



Air flaps type L2 closed



open-closeequipment with ropes



	ord-
description	No.

ISO-lighting ridge		
accessories:		
air flaps type L	2	
for 2 sides		
LA 40	per m ridge	s0360
LA 60	per m ridge	s0361
LA 80	per m ridge	s0362
for 1 side		
LA 18	per m ridge	
Open-close-equip		
fan ana aida		-0004

Open-close-equipment		
for one side	er set	s0084
recommended installation locations:		
end of flap tube – up to 20 m		
middle of flap tube – up to 40 m		

Open-close-equipment with	
power drive for 2 sides:	
(without electrical work)	
Power-drive 230 V 50 Hz with 2	s0262
deflection gear units, connection parts	
and fastener material	
Main switch in ISO housing	s5381
lockable repair switch	
4-pin, 16 amperes	
1 unit per system or building	
Open/close switch 230V single phase	S5832

Open-close-equipment with			
s0263			
s5381			
S5832			
Bird protection grid for			
s4006			
s4007			

per meter ridge s4008

Different possibilities of climatecontrol on request.

Installation tools for ridge with flaps

LA80