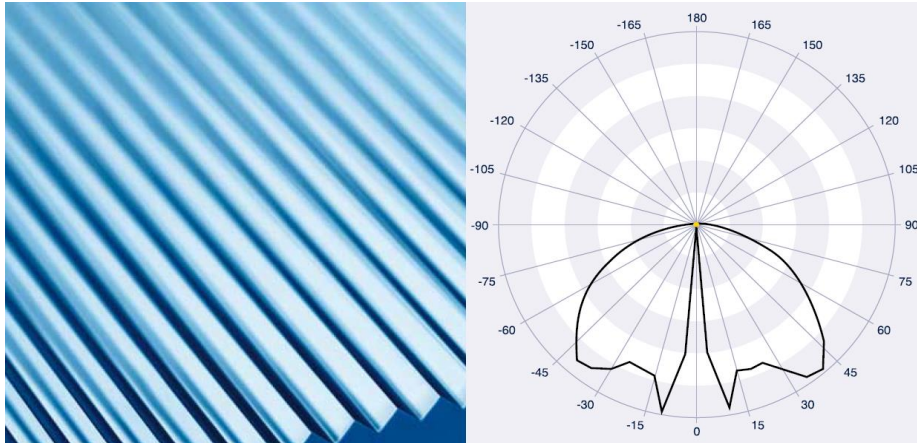


## Linear Prism 90°

Jungbecker LP 90



### Description:

LP90 features a special geometry of perpendicular prisms which effectively does ray splitting, ray deflection and total deflection of perpendicular light.

### Application:

The special feature of LP90 is that perpendicular light cannot transmit directly through the structure but is deflected. Aligning the prisms in the source direction results in a complete cut-off direct light, one axis beam splitter in luminaires.

### Service information:

For samples, pricing and delivery please contact us at:

+45 4618 6644

Email:

[sales@ingemanncomponents.com](mailto:sales@ingemanncomponents.com)

Looking for a solution with this product, click [here](#).

Product data	
<b>Standard Material</b>	PMMA clear acrylic: LSP (PC on request)
<b>Available size</b>	Rectangle up to 1500 mm x 300 mm (up to 1300 mm x 400mm upon request). Square up to 600 mm x 600 mm Customized, edge profile treatment (milling)
<b>Thickness</b>	Standard 3 mm +0.2 to +0.5mm (2.5mm - 5mm upon request)
<b>Prism size</b>	3mm (2.5 - 5 mm upon request)
<b>Refractive Index</b>	1.491
<b>Transmittance</b>	92% (acrylic clear)
<b>Temperature Range</b>	-40°C to +80°C

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\*Datasheet made on behalf of producer's information.

Ingemann Components A/S cannot guarantee the authenticity of the given data.

LP 90

High transparent microstructured right angled prisms that provides special kinds of deflection of light and ray splitting.

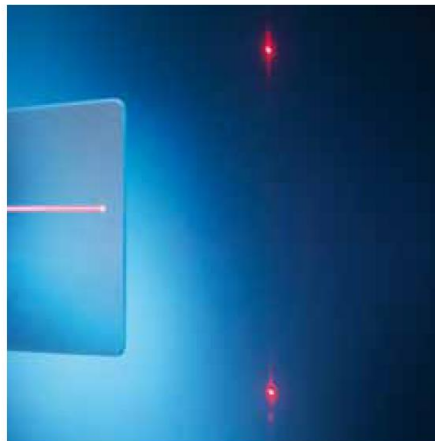
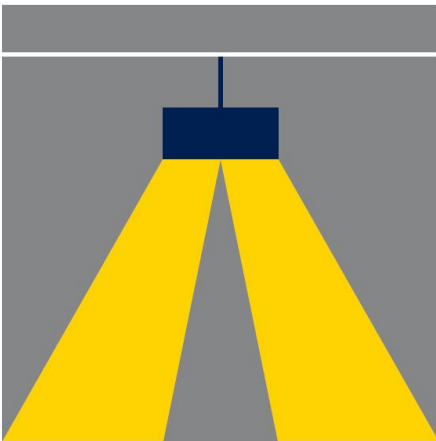
92% Transmission  
2.5-5mm thickness  
Max temp +80°C  
Custom sizes available

Ingemann Components  
Tingbjergvej 6  
4632 Bjæverskov  
Denmark  
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Components

Technical Specs – LP 90

Properties	3 mm	Notes
<b>Physical –</b>		
Density	1.18 g/cm <sup>3</sup>	
Rockwell Hardness	113	
<b>Optical –</b>		
Transmittance	92%	
Refractive index	1.491	
Reflection	N/A	
<b>Mechanical –</b>		
Tensile strength	69.9 MPa	
<b>Thermal –</b>		
Long term temp.	-40°C to +80°C	
Short term temp.	95°C	
Melting temp.	130°C	
<b>Surface</b>	Right angled structure on one side, glossy on other side	
<b>UV stable</b>	Yes	
<b>Dirt depreciation</b>	Anti-static treatment	
<b>Chemical Resistance</b>		See next page
<b>Thermal expansion</b>	7 K <sup>-1</sup> x10 <sup>-5</sup>	
<b>Glow wire test IEC 60695-2-12</b>	N/A	
<b>Fire Rating</b>	PMMA	Class B2 (DIN 4102)



Processing options at Ingemann Components

Processing	Yes/No	Notes
Milling	Yes	Recommended processing
CNC Knife	No	
Laser Cutting	No	
Saw	Yes	
Die Cut	No	
Thermo-forming	No	
Print	Yes	

## Chemical Resistances

Chemical resistance at 20°C	
Acetone -	Ethyl acetate -
Ammonia +	Glycerin +
Amyl Alcohol -	Fuel oil o
Benzene, free from aromatics -	Hexane +
Benzole -	Isopropanol o
Boric Acid +	Coffee +
Butanol -	Caustic potash solution +
Chlorinated hydro-carbon -	Ketone -
Chloroform -	Methylene chloride -
Chlorinated water/air o	Lactic acid 10% +
Dibutyl phthalate -	Mineral oil +
Diocetyl phthalate -	Caustic soda +
Glacial acetic acid -	Nitrocellulose lacquer -
Acetic essence -	Oxalic acid +
Aqueous acetic acid +	Wax +
Ethanol o	Hydrogen peroxide o
Acidity of wine +	Hydrochloric acid conc. 35% +
Xylene -	Sodium carbonate +
Paraffin +	Salad vinegar +
Petroleum ether +	Stearic Acid +
Phosphoric acid 10% +	Tea +
Sulphuric acid 10% +	Turpentine +
Nitric acid 10% +	Toluene -
Hydrochloric acid 10% +	Diluting agent -

- + Resistant
- o Limited resistance
- Not Resistant
- na Not available

At 20°C PMMA is resistant to hydrocarbons, aromatic free carburetor fuel, mineral oils, vegetable- and animal fats and oils, water, aqueous salt solutions, diluted acids and alkalis. Aromatic hydrocarbons and hydrogen chlorides, ester, ether and ketones attack and degrade PMMA.

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