

## Taxiway and runway guidance sign

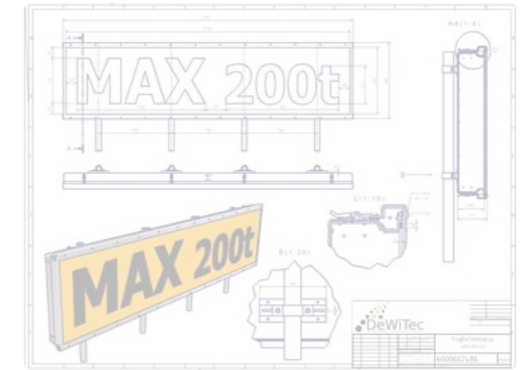
The constant light intensity and consistent colouring of the DWT-TXS LED make sure all necessary information is displayed accurately. Uniform lighting ensures excellent readability. High levels of operational efficiency and low maintenance needs lead to low running costs. Benefit from the advantages of LED technology combined with a robust passive electronic converter for your taxiway guidance systems.



### Versions available:

Length: 600 to 3000 mm

Height: 650 and 800 mm



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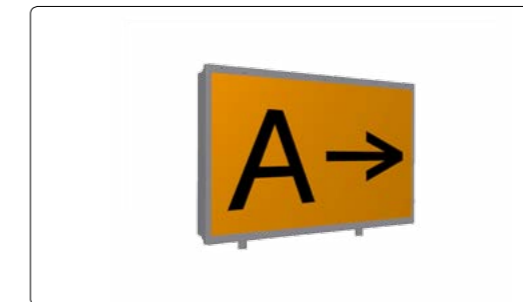
#### for your taxiways and runways

- Operational guidance signs yellow background / black lettering  
black background / yellow lettering
- Mandatory instructions signs red background / white lettering
- Special equipment specific taxiway traffic instruction signs with individual lettering

Compliant with:  
✓ ICAO Annex 14

### DWT-TXS LED erfüllt

- DIN 500017 (condensed water test)
- DIN 50021 (salt spray test)
- DIN 53151 (cross cut test)
- DIN 67530 (1) (gloss measurement)
- IEC 61823 (compatibility with transformers)
- IEC TS 61827
- VDE protection class II (230 VAC Version)
- Withstands wind strengths up to 60 m/s. Optional 90 m/s for higher wind strengths.



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### Failsafe reliability

The LEDs are fixed on holder modules which can easily be exchanged for servicing (by removing four screws and using tool-free connectors). The holder modules for the signs are all compatible with each other so any defect signs can easily be put back into operation. The converters are based on inductivity using passive electronic components.

The converter generates the electrical parameters needed to operate the LEDs from the current series circuit. If any faults arise the converter components can be accessed and exchanged individually. Unexpected performance caused by differing currents in series circuits and complex electronics is thus eliminated. The DWT-TXS can therefore be operated reliably with maximum safeguards against breakdowns.

### Easy maintenance

The front panel can be completely removed for maintenance without the need for tools. Edges are rounded for convenient handling. On the front the housing is canted inwards by 20 mm and is fitted with a rubber seal to stop any moisture entering.

The sign has 2 x 2 cable entry glands which are either fitted with cable glands – right or left – or ventilation plugs. These have a screw attachment on one side while the other side has ventilation plugs using Goretex to ensure the housing is well-ventilated. The support poles are provided with a black end cap made of hard plastic.

### Reliable components compliant with regulations

#### Component selection

All components comply with regulations and have been selected and adapted according to the individual requirements of airport technology. Particular attention is paid to reliability, convenience of operation, efficiency and environmental-friendliness.

#### Assembly

The signs are mounted on poles. Rails on the back panel enable the horizontal distance between the poles to be varied by approx 100 mm. The outer poles each have cable glands (long slot 30 mm width) 50 mm below half the height of the mounting pole. The assembly can include frangible connections and base plates.

#### Lettering

High performance foils are applied in a multi-layer process to ensure they are protected from UV light. The dimensions of the lettering are compliant with ICAO.

#### Material

The housing comprises an aluminium frame construction with a minimum thickness of 2 mm. This is given a powder coating of between 60 µm and 90 µm. Weather durability and colour fastness are guaranteed for at least 10 years. All fittings and fasteners are made of stainless steel.

#### Front panel

The front plate is made of robust Makrolon® (polycarbonat). This high-tech plastic has particularly high transparency and impact resistance levels. It also provides a perfectly even surface structure and is not susceptible to scratching.

#### Photometry

DWT-TXS LED fulfils and exceeds the values demanded for light intensity and distribution according to ICAO Annex 14. In particular, the light to dark ratio is better than 1:3 at all points.



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### MECHANICAL CHARACTERISTICS

<b>Material</b>	Aluminium
Housing	Makrolon® (Polycarbonat, t = 5 mm)
<b>Colour Housing</b>	<ul style="list-style-type: none"> <li>◦ White</li> <li>◦ Yellow</li> </ul>
<b>Colour Front Panel / Lettering</b>	<ul style="list-style-type: none"> <li>◦ Yellow / Black</li> <li>◦ Black / Yellow</li> <li>◦ Red / White</li> </ul>
<b>Length (Standardversions)</b>	<ul style="list-style-type: none"> <li>◦ 600 mm</li> <li>◦ 1300 mm</li> <li>◦ 1600 mm</li> <li>◦ 1800 mm</li> <li>◦ 2500 mm</li> <li>◦ 3000 mm</li> <li>Others on request</li> </ul>
<b>Height incl. Poles</b>	
650 mm Version	approx. 750 mm
800 mm Version	approx. 950 mm
<b>Protection Class (230 V Version<sup>1</sup>)</b>	II
<b>Operating Temperature</b>	-40°C (-67F) to + 85°C (194F)
<b>Mounting</b>	Poles 50 x 5 x 950 mm, Amount depending on length

### OPTICAL CHARACTERISTICS

<b>Light Source</b>	High-Power-LEDs (cold white)
<b>Lightintensity and -distribution</b>	According to ICAO
<b>Available Intensities</b>	With control: 10%, 30%, 100%
<b>Nominal Lifespan of LED</b>	> 50 000 hours

### ELECTRICAL CHARACTERISTICS

<b>Nominal Current</b>	<ul style="list-style-type: none"> <li>◦ 6.6 A (0 - 100%)</li> <li>◦ 2.2A</li> </ul>
<b>Operating Voltage</b>	
U <sub>f</sub> min (0,1 %)	21 V
U <sub>f</sub> max (100%)	25 V
<b>Power Consumption</b>	approx. 20 W / m
<b>Efficiency</b>	> 95 %
<b>Insulation Resistance</b>	> 50 MΩ
<b>Insulation Voltage</b>	1000 V <sub>eff</sub> (1 min, 50 Hz)
<b>Fuse</b>	Integrated (DIN 72581)
<b>Cable Gland</b>	2 x 2 Typ Skintop M20 x 1,5 x 16

<sup>1</sup> Operating Voltage 230 V on request.

