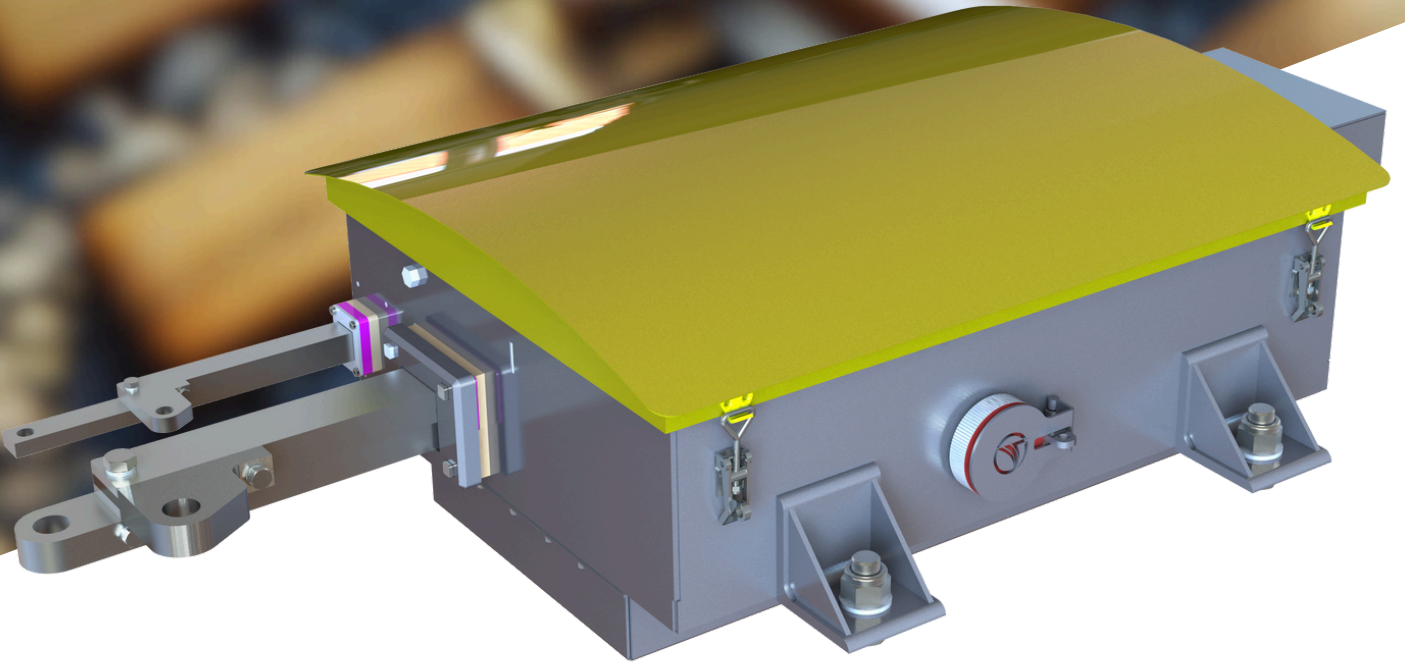




TURGA
TEKNOLOJİ

TURGA K-500

SWITCH MOTOR





About Us

Turga Technology was established with the vision of providing reliable, innovative, and national solutions in the railway sector. With over 25 years of experience of our founders, we are committed to an original and domestic production approach in the field of railway signaling equipment.

In line with our commitment to technology and R&D, we aim to become a leading company in the sector by developing our signaling solutions—primarily the Switch Machine—that ensure high efficiency and safety in railway systems. Our company has successfully completed the design and analysis processes of the “Switch Machine,” a field device of railway signaling systems, through fully original design efforts carried out by our engineering teams specialized in design and analysis, and has moved forward with its production.

As Turga Technology,

- ⑦ We offer innovative solutions in railway signaling and field equipment.
- ⑦ We provide added value to the industry through consultancy and project advisory services.
- ⑦ We deliver sustainable and safe solutions through our maintenance and repair services.
- ⑦ We design national and original products, strengthening the power of domestic production.

Founded in Ankara, our company continues its efforts with the aim of shaping the future of railway systems and producing domestic solutions that add value to the industry.

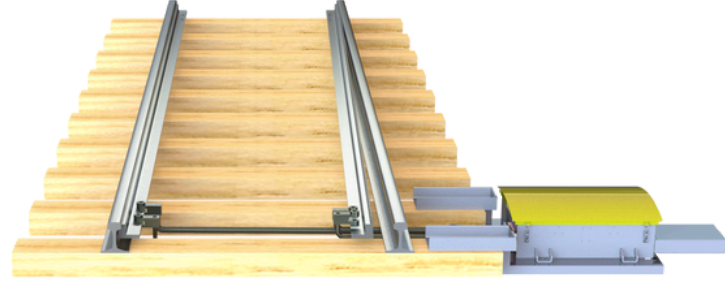
TURGA K-500

SWITCH MOTOR



Features

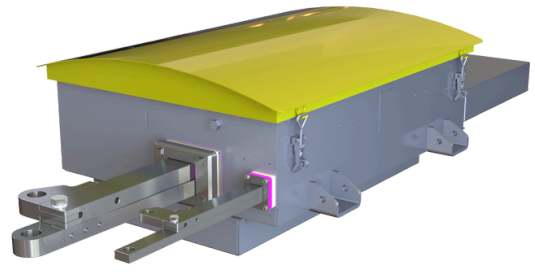
- It can be used as both right and left switch motor.
- When used without reverse throw, both switch blades can be locked with a force of 30 kN.
- It features an adjustable stroke distance to accommodate different switch blade openings.
- It allows on-site monitoring of the switch motor's position.



Innovative Solutions

- It is the first domestically produced and nationally developed switch motor.
- When used with reverse throw, the feature of locking the open switch blade with 9 kN and the closed switch blade with 30 kN is introduced for the first time in the Turga K-500 model.
- In all cases, the feature of not sending a signal unless the switch blade is in full contact with the stock rail is introduced for the first time in the Turga K-500 model.
- The separation of the electrical and mechanical compartments—allowing maintenance and repair activities to be carried out under all adverse environmental conditions and enhancing worker safety from an occupational health and safety perspective—is introduced for the first time in the Turga K-500 model.
- The capability of connecting a switch indication panel is introduced for the first time in the Turga K-500 model.

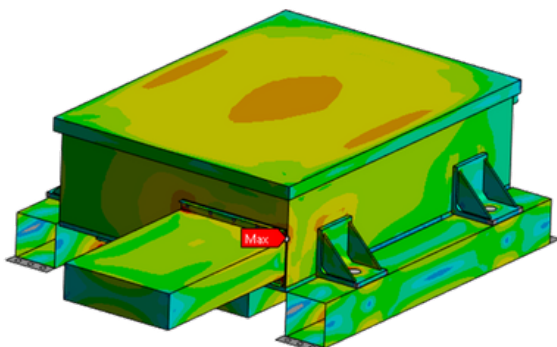
OPERATING CONDITIONS



Description	Provided Value
Pushing and Pulling Force	Adjustable between 2–9 kN
Holding Force	30 kN
Reverse Throw Force	Closed blade: 30 kN, open blade: 9 kN
Temperature Resistance	-40°C / +70°C
Protection Class	Electrical compartment: IP65, Entire switch motor: IP55
Service Life	2,000,000 cycles

Technical Specifications

Technical Specifications	TURGA K-500
Place of Manufacture	Domestic
Accessibility	15–45 days
Drive System	Hydraulic
Reverse Throw Switch Holding Forces	30 kN / 9 kN
Non-Reverse Throw Switch Holding Forces	30 kN
Pushing and Pulling Force	2 kN - 9 kN



TURGA K-500

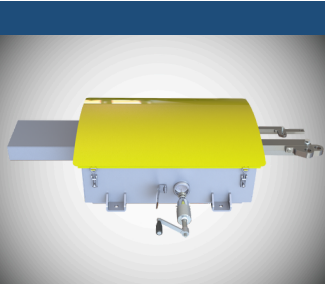
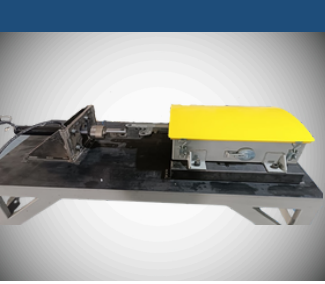
Technical Specifications



Technical Specifications	TURGA K-500
Sealing Class	Entire Switch Motor: IP55, Electrical Compartment: IP65
Right/Left Switch Compatibility	Available
Adjustable Travel Distance	Available (adjustable between 50 mm – 160 mm)
Detection of Closed Blade Position	Available
Separation of Electrical and Mechanical Compartments	Available
Switch Indication Panel Output	Available
Visual Monitoring of Switch Position	Available
Weight	230 kg



TURGA K-500 Patent



**TURK
PATENT**
TÜRK PATENT VE MARKA KURUMU

PATENT BELGESİ

No: TR 2022 006585 B

Buluş Başlığı

**KİLİTLEME MEKANİZMASINA SAHİP SİMETRİK FORMDA MAKAS
TANZİM EKİPMANI**

Patent Sahibi

**HASAN HÜSEYİN GÜNEY
SAMİ MACUNCU**

Bu belge, 6769 sayılı Sınai Mülkiyet Kanunu kapsamında 22.04.2022 tarihinden itibaren 20 yıl süre ile korunmak üzere 21/03/2024 tarihinde verilmiştir.

Prof. Dr. M. Zeki DURAK
Başkan

TURGA K-500 Certificate

TUVNORD

ASSESSMENT CERTIFICATE

Certificate No.: CR-AOC-TUVNORD-25/0035-R00

Name and address of bearer / manufacturer: **TURGA Teknoloji San. Ve Tic. A.Ş.**
İnönü Mh. Fatih Mehmet Blv. No:412/7
Yenimahalle, Ankara

We hereby certify that according to the results of the inspection, the product mentioned below fulfills the contractual requirements governing mission entrusted to TÜV NORD Turkey. This Assessment Certificate is issued on voluntary basis according to customer specification. It conforms that the listed equipment complies with the principal safety requirements of the specification (up to SIL4). It refers only to the particular sample and its technical documentation submitted for inspection.

Assessment acc. to: EN 50129:2018 SIL4 Capability Assessment

Description of product: Turga K-500 Railway Point Machine

Assessment scope: **SIL4 Capability Assessment**

Assessment report: RP-AOC-TUVNORD-25/0034-R00

Place of manufacture: Tahtalı Mh. 6.(460) Sk. No:26 Nilüfer, Bursa

Inspected by: A.L. ARSLAN

Istanbul, 25.03.2025
This certificate is valid between 25.03.2025 to 25.03.2028

Certifier for Product of TÜV NORD Turkey
Teknik Kontrol ve Belgelendirme A.Ş.
Mr. Mehmet Selçuk

TÜV NORD Turkey Teknik Kontrol ve Belgelendirme A.Ş.
Şehit Mehmet Fatih Ongül Sokak, No:5 Kat:4
Ödaz Plaza, Kozyatağı, 34742 İstanbul-
TÜRKİYE
Tel. +90-(0) 216 361 2995
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e-mail tuv-nord@tuv-turkey.com

F-1722 R00 (Rev.21/03/25) ENG

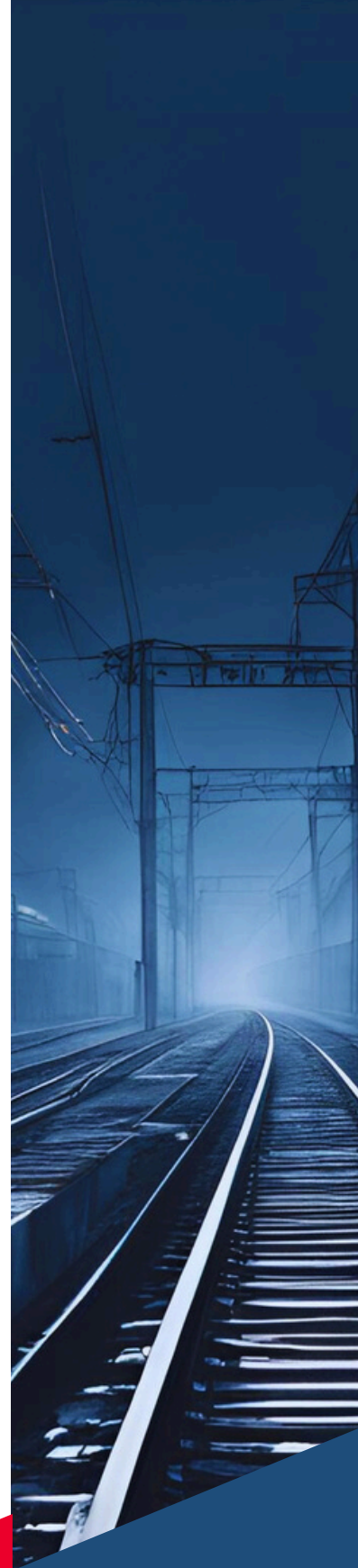
The TURGA K-500 Switch Motor has successfully completed the safety certification processes conducted by TUV NORD and has been officially certified with a safety certificate.





TURGA
TEKNOLOJİ

Reliability Technology Domestic Production



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