



H.Cegielski-Fabryka Pojazdów Szynowych Spółka z o.o.

Low floor tram car type 118N – Puma



Tram car type 118N - Puma is designed for municipal transport companies in Poland and another city transport authorities in Europe.

This is the state-of-the-art low floor tram, one-space construction with three sections connected by the articulations to ensure higher comfort and capacity.

Tram car 118N conforms all requirements according with present Polish transport legislation.

Modern design and conception of this tram guarantee :

- high level of comfort and safety of traveling
- smooth running
- friendly for handicapped persons
- highly technical parameters
- low material operating consumption
- friendly for environment
- routine maintenance easy in servicing
- low cost of operating and maintenance
- restrict of some reactions during running on the track curve and eliminate risk of leave the track

High level of safety for passengers is achieved by :

- applying of fire-proof material or if that possible and acceptable, non-flammable material with restriction of smoke emission and harmful compounds
- high performance of brake system
- bumpers with energy absorption system
- adjusted of the body car accordance with standard class PIV PN-EN 12663
- ability to manual opening of the doors
- applying of special glass-hardened in side windows for safe evacuation of passengers

The components of this tram are mainly sourced from Polish producers :

- transfer propulsion system
- power electronics transmission system
- ventilation and heating system
- air-conditioning unit
- asynchronous traction motor AC

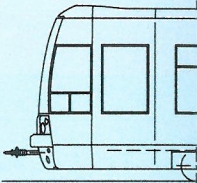
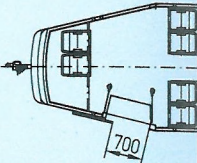
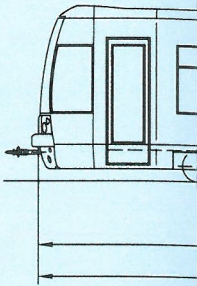
Inside of the tram has a large level of silence comfort and efficient acoustic and thermal insulation.

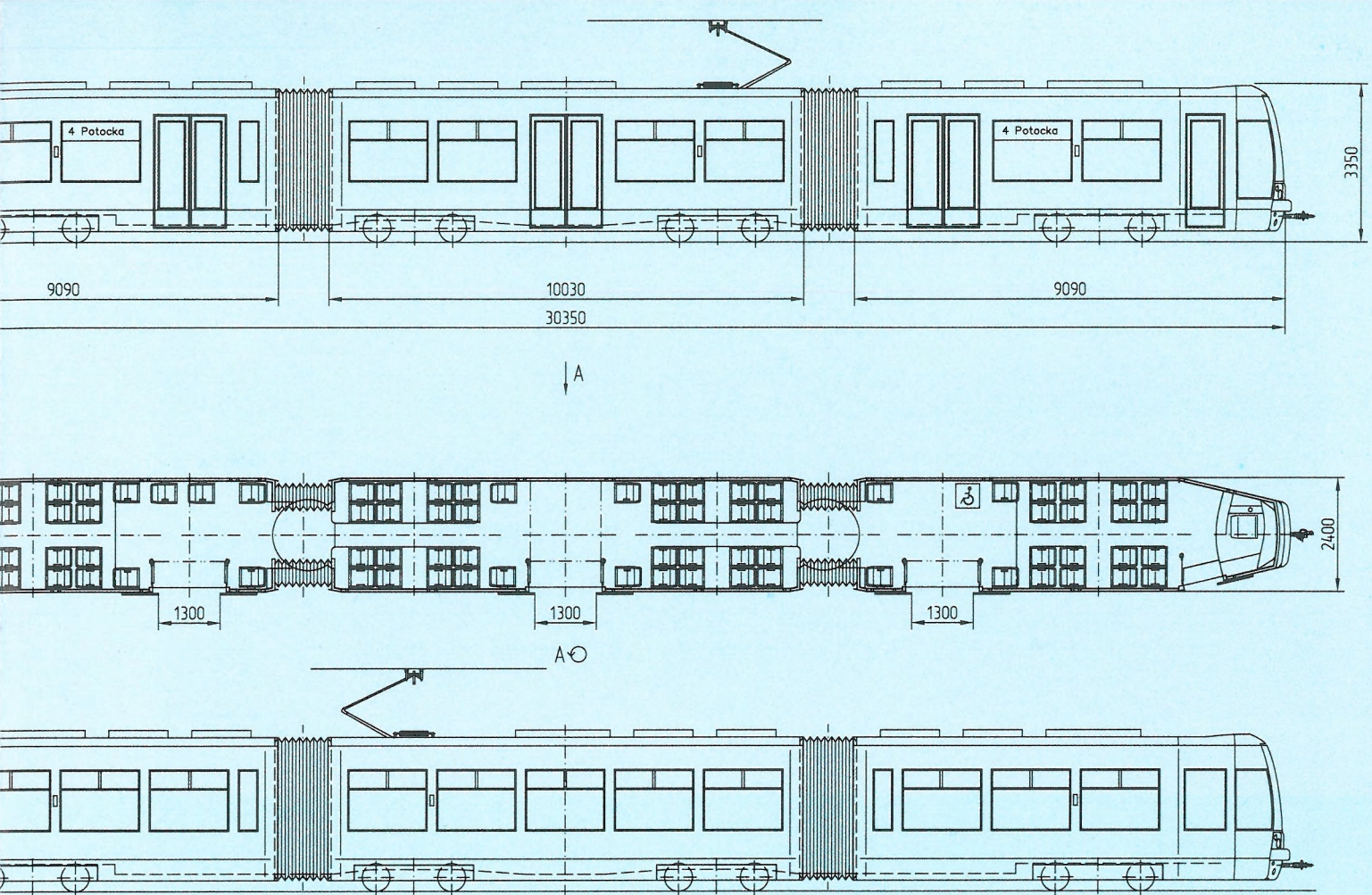
This tram car is equipped with modern information system consists of visual and acoustic facilities. Full comfort in a driver's cabin guarantee : ergonomic driver board, air-conditioning, microprocessor of steering, surveillance control and diagnostic system.

Steering and diagnostic system based on dispersion intelligence network with digital transmission CAN Open to facilitate monitoring and diagnostic of equipment.

Construction of the tram allow easy access to instruments during maintenance and servicing.

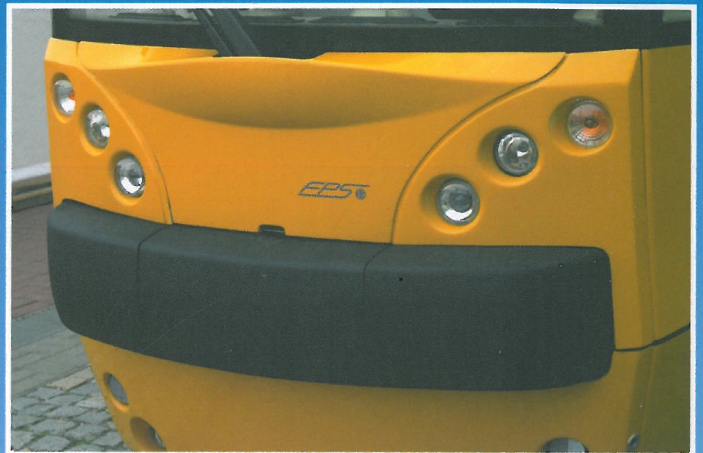
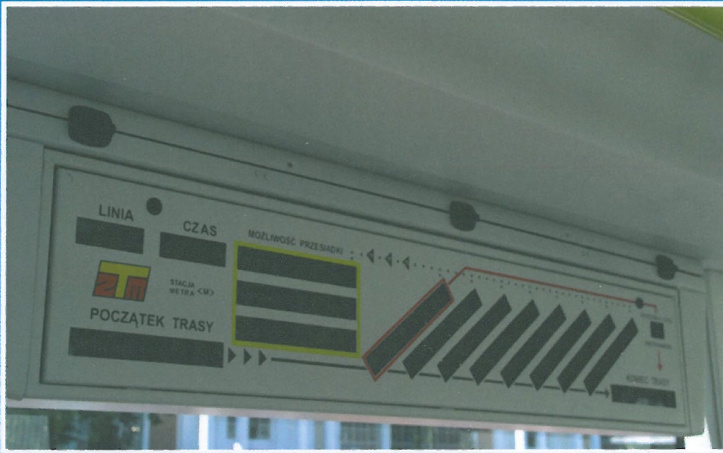
All used materials in this tram are adapted for recycling process or may be store without any problems on landfill site.





Technical parameters of low floor, articulated tram car

Gauge track	1.435 mm
Kinematic vehicle gauge	conform to PN-K-92008
Total length of the tram with bumpers	30.600 mm
Width of the body	2.400 mm
Height of the tram frame over the top of the rail	240 mm
Height of the floor over the top of the rail:	
- on entrances	300 mm
- on vestibules	360 mm
- over the running bogies	440 mm
- over the powered bogies	580 mm
- over the couplers	800 mm
Share of low floor	67%
Width of door clearance :	
- double door leaf 3 pcs.	1.300 mm
- single door leaf 2 pcs.	700 mm
Type of passenger doors	sliding doors
Windows	put by glueing
Number of seating seats	80
Number of standing places (1 person/0,2 m ²)	132
Weight of the tram	40.000 kg
Weight of the tram with full acceptable capacity inside	51.260 kg
Service speed	70 km/h
Powered bogies	2 pcs.
Rolling bogies	2 pcs.
Wheels diameter (new/used), width of the rim	590/530/95 mm
Brake system	Knorr-Bremse
Traction motor	asynchronous
Voltage of the network	600V ^{+250 V} _{-200 V}
Power rating	95 kW
Accumulator battery	Ni/Cd
Converter	static



**H. Cegielski-Fabryka Pojazdów Szynowych
Spółka z o.o.**

ul. 28 Czerwca 1956 nr 223/229, 60-965 Poznań

Marketing: +48 (0)61-831-25-46, 831-10-41 fax +48 (0)61-831-20-07

e-mail: fpstx@hcp.com.pl

<http://www.hcp.com.pl/fps/>