



## Br38 / K.P.E.V. P8

In 1906, the ministry of railways ordered ten superheated 4-6-0 locomotives to be known as the P8 Class. They were ordered so that their performance could be compared to the older P7 compound locomotives which were housed at the depots of Coeln and Elberfeld. The P7's were four-cylinder compounds that used saturated steam.

Robert Garbe, head engineer of the railway depot at Berlin and, from 1907 and on, chief engineer of the newly-created central rail railway administration, planned to demonstrate the superiority of superheated steam over saturated steam in the design of the P8. Other advantages of the P8 were the ability to be turned on a 52 foot turntable and ease of maintenance. The P8 locomotives were also designed for ease of inspection and low cost.

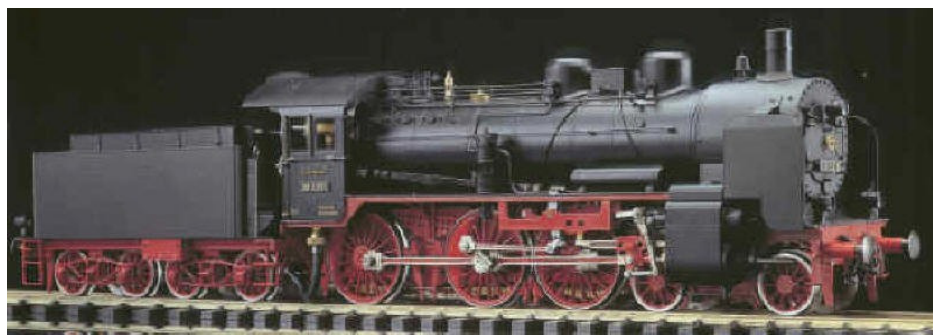
Because of increasing train weights, the then current passenger locomotives were unable to meet the required schedules, and double-heading or using an additional pushing locomotive was not a

viable option. The P7 were obsolete, expensive to maintain and only eighteen were available. Clearly a new design was needed.

Success for Robert Garbe came with the P8. The boiler was well-designed although the weight of the locomotive was above the desired specifications so that the maximum speed was 62 mph instead of 68 mph. In the original design the cab-front was pointed in an effort to provide an element of streamlining, but later models had conventional cabs.

The good reputation of the P8 soon became well-known throughout Germany and led to many orders from both German and foreign railways. Up to 1928 about 3800 P8s were built - the Prussian railway alone ordered 3370 units. More than 3000 P8s were assigned to the Reichsbahn (DRG). After WWII the Bundesbahn (DB) modified their P8s by replacing the original smoke deflectors with those of the Witte design. Many of the locomotives received tub tenders. As late as 1968, about three hundred P8s were still in service, most of them on the DR in East Germany.

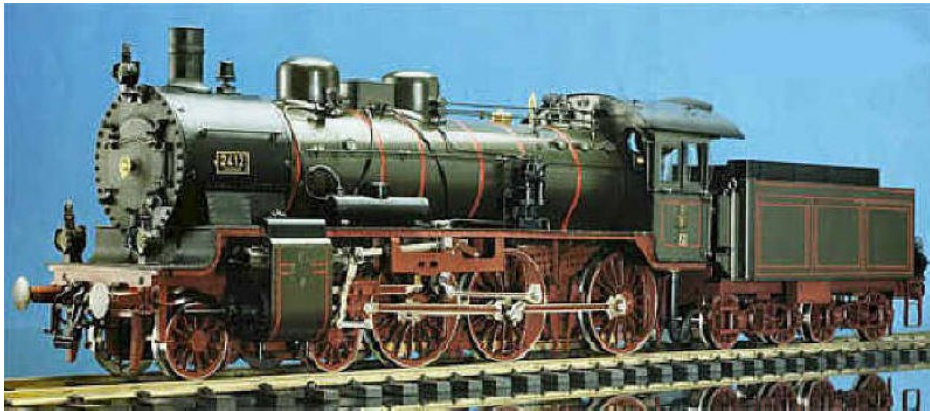
Aster has modeled the Br38 in three versions: Deutsche Reichsbahn (early); Deutsche Bundesbahn (late); and the K.P.E.V. P8.



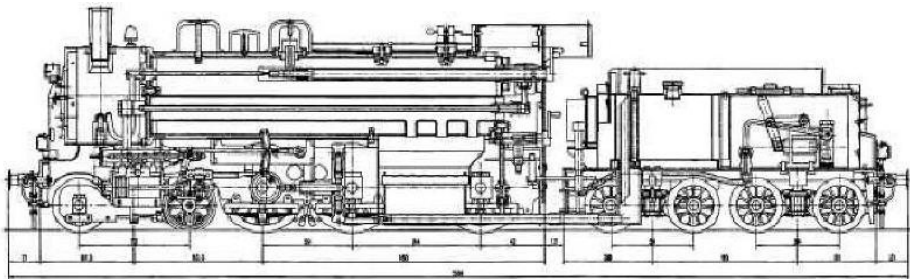
**Deutsche Reichsbahn Br 38 - Early Version**



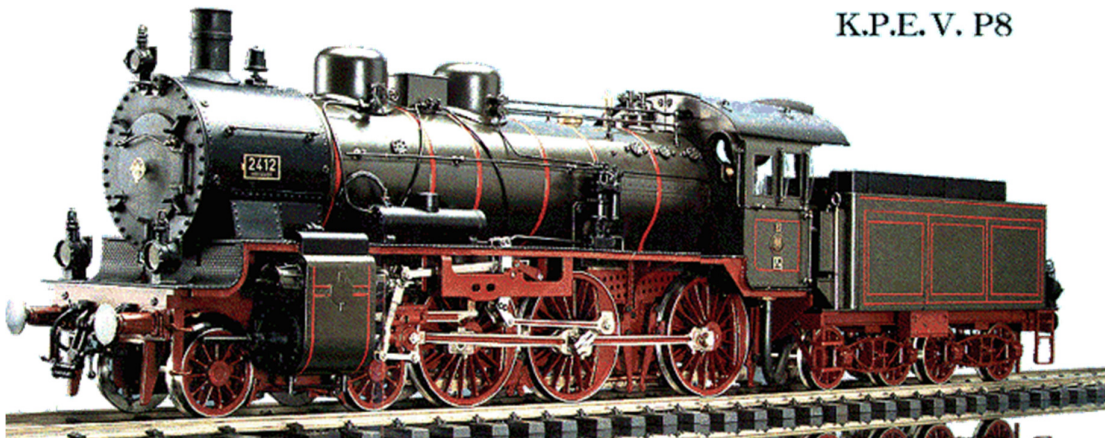
**Deutsche Bundesbahn Br 38 - Late Version**



**K.P.E.V P8**



**K.P.E.V. P8**



# Specifications

**Scale/Gauge:** 1/32, 45 mm (No. 1) Gauge

**Weight:** 5.6 kg. (12 lbs, 5 oz.)

**Dimensions:**

**Length:** 588 mm (23 inches)

**Width:** 98 mm. (3.8 inches)

**Height:** 142 mm (6 inches)

**Wheel Arrangement:** 4-6-0 Ten Wheeler

**Driving Wheel:** Dia. 54 mm. Eccentric Cam for axle pump mounted.

**Pilot Truck Wheel:** Dia 32.2 mm

**Tender Wheel:** 31.2 mm.

**Axle Driven Pump:** Pump Ram 5 mm x Stroke 5 mm. Mounted on Driver's axle.

**Engine:** Two cylinders with slide valve.

**Valve Gear:** Walshart's. Valve Travel 6 mm, Cut-off 75%

**Boiler Type:** Smoke Tube Boiler

**Water Capacity:** 240 cc at 70% full pressure.

**Boiler Fittings:** Regulator valve, blower valve, check valve, gauge glass, pressure gauge.

**Alcohol Tank:** 170 cc.

**Water Tank:** Hand Pump Mounted.

**Burner/Fuel:** Alcohol burner

**Minimum Radius:** 2.0 m (6 1/2 feet)