

Number	Krauss Pacific Metric	Krauss Pacific Imperial	No 12 proposal	Northern Rock	River Esk	River Irt	Wroxham Broad	Hercules / Samson
Manufacturer	Krauss-Maffei	Krauss-Maffei						
Design	2'C1 'h2	4-6-2	2-6-2	2-8-2	2-8-2	0-8-2	2-6-4T	4-8-2
Length	7,430 mm	24' 5"	24'	24'	23' 3"	23' 6"	17' 6"	25'
Height	1,400 mm (chimney)	55"	64"	66"	58"	64½"	68½"	
Width	1,000 mm	39½"	46"	47"	38"	47"		
Fixed Wheelbase	1,350 mm	53½"	58½"	58½"	60"	72"		
Loco Wheelbase	3,515 mm	11' 6½"		11' 9"	11'	8' 8"		
Loco and tender wheelbase				20' 11"	20' 11"	18' 9"		
Smallest radius curve	20 m	66ft	80ft	80ft?	80ft?	80ft?		
In service weight with tender	8.1 t	8.1 t	TBD	?	8.1 tons	8.3 tons		
Maximum speed	30 km / h	19mph	20mph	20mph	20mph	20mph		
Coupled wheel	530 mm	20 3/4"	20"	18"	17½"	18½"	19"	19.5"
Wheel diameter	300 mm	11 3/4"	12"	12"	12"	-		
Cylinder diameter	150 mm	5.91"	6"	6"	6"	6"	5 1/8"	5¼"
Piston stroke	200 mm	7.87"	8½"	8½"	8½"	8"	8"	8½"
Boiler pressure	13 bar	189psi	170psi	170psi	170psi	170psi	180psi	180psi
Grate area	0.44 m <sup>2</sup>	4.7 ft <sup>2</sup>	5.5 ft <sup>2</sup>	5.5 ft <sup>2</sup>	4.8 ft <sup>2</sup>	5.5 ft <sup>2</sup>		
Evaporative area	11 m <sup>2</sup>	118 ft <sup>2</sup>	93 ft <sup>2</sup>	93 ft <sup>2</sup>	93 ft <sup>2</sup>	93 ft <sup>2</sup>		
Tender water capacity	0.9 m <sup>3</sup>	198 gal	177gal	180gal	167gal	?		
Fuel storage	0.2 tons of coke	~10 ft <sup>3</sup> ?	16 ft <sup>3</sup>	14.3 ft <sup>3</sup>	13.2 ft <sup>3</sup>	?		
Tractive effort lbf		2100	2210	2500	2500	2250	1692	1838

**Comparison of 15" gauge loco performance dimensions and tractive effort calculations**