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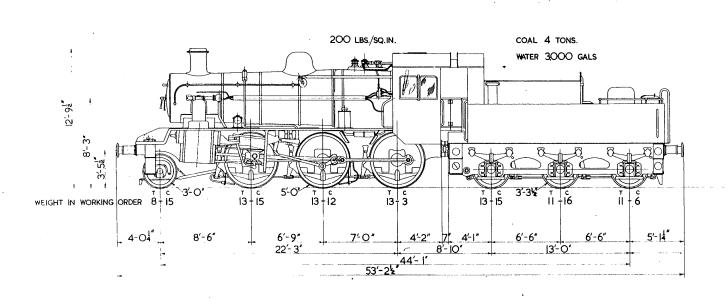
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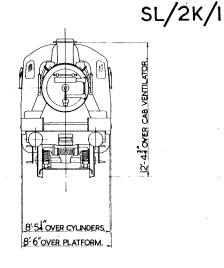
British Railways Board

NUMBER I	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LO CO . NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM NUMBER	LOCO. NUMBER	DIAGRAM	LOCO. NUMBER	DIAGRAN
70000 5	5L/7A / I	70045	SL/7A / 2	73012	SL/5B/1	73057	SL/5B/9	73102	SL/SB/5	73147	SL/5B/2	75016	SL/4B/I	75061	SL/4B/3	76022	SL/4K/I	76067	SL/4K/
70001	()	70046		73013	.,	73058		73103	,,,	73148	1,,	75017	00/40/1	75062	3L/4D/3	76023	3L/4K/1	76068	32/48/
70002	.,	70047	.,	73014	, ,	73059	, ,	73104	.,	73149	. , ,	75018		75063	,,	76023	,,,	76069	
70003		70048		73015		73060	, ,	73105	,,,	73150	, , , , , , , , , , , , , , , , , , , 	75019	 	75064	- : :	76025		76070	SL/4K/3
70004	, ,	70049	.,,	73016		73 0 61		73106	,,	73151	,,	75020	, , ,	75065	SL/4B/2	76025	 ''	76070	
70005	, ,	70050		73017	1,,	73062	, ,	73107	,,	73152	,,	75021		75066			, ,	76072	<u>' ' '</u>
70006	, ,	70051	,	73018	, ,	73063	, ,	73108	,,	73152	, ,	75021	- ; ; -	75067		76O27 76O28	,,	76072	::
70007	1.1	70051	.,	73019	1	73064	1	73109		73154	, ,	75023	, ,	7506B	,,	76029	 	¥	
70008	,.	70053	,,	73020	, ,	73065	SL/5B/6	73110	SL/5B / 7	73155	SL/5B/5	75024	, ,	75069	- ; ;	76030	 	76074 76075	1
70009		70054	,,	73020	,,	73066	32/36/0	73111	7 , ,	73156	, ,	75025	, ,	75070	,,	76031	 	76076	—
70010	1 1	70054	-	73021	1	73067		73112	,,	73157	,,	75026	, ,	75071	, , ,	76031		76077	
70011	1.1			73022	 	73068		73113	 	*	 ; ;	75027	, ,	75071	- ; ;	76032		76078	1
70012	, ,		<u> </u>	73023	<u>,,</u>		1	73114	 	73158 73159	,,	75027	- ; ; -	75072	- ; ;		1 ,,	76079	
70012	, ,			73024	 	73069	, ,		 		· · · · ·	1				76034			
70013	,,	 	- /- /-	 	+	73070		73115		73160	• • •	75029	٠.	75074 75075	, ,	76035	,,	76080	<u> </u>
70014		71000	SL/8A/2	73026	,,	73071	, ,	73116		73161	,,	75030			• •	76036	.,	76081	<u> ' ' ' </u>
	, ,		-	73027		73072	, .	73117	- ' '	73162	, ,	75031	, ,	75076	1.	76037	1,,	76082	1
70016	11		 	73028	, ,	73073	• •	73118	··-	73163	,,,	75032	, ,	75077	, ,	76038		76083	· · ·
70017 70018		 		73029	,,,	73074	• • •	73119	el len le	73164	· · · · · · · · · · · · · · · · · · ·	75033	. ,	75078	, ,	76039	,,	76084	<u>''</u>
	- '' ' '	70000	01 /4 4 /1	73030	<u> </u>	73075	. ,	73120	SL/58/5	73165	1.	75034	• •	75079	1 1	76040	,,	76085	 ''
70019	.,,	72000	SL/6A/I	73031	,,,	73076	٠,٠	73121	' '	73166	1:	75035	• '			76041	,,,	76086	· · ·
70020		72001	11	73032	, ,	73077	, ,	73122	,,	73167		75036	1.1			76042	,,	76087	
70021	- 1)	72002		73033	,,	73078	, ,	73123	٠,	73168	''	75037	1 1			76043		76088	<u> </u>
70022	11	72003	,,	73034	,,,	73079		73124	 ''	73169	,,	75038	1.1			76044	,,,	76089	<u> </u>
70023		72004	1.1	73035	,,	73080	SL/5B/5	73125	SL/5B/2	73170	.,	75039	, ,	76000	SL/4K/I	76045	SL/4K/3	76090	- : :
	SL/7A/3	72005	, ,	73036	,,	73081		73126	• • •	73171		75040	1 1	76001	• • •	76046	, ,	76091	
70025		72006	· · · · · · · · · · · · · · · · · · ·	73037	,,	73082	, ,	73 127	··-	.		75041	, ,	76002	, ,	76047	, ,	76092	· · ·
70026	, ,	72007	· · ·	73038	,,	73083	- ' '	73128	<u> </u>			75042	, ,	76003	, ,	76048	,,,	76093	
70027	,,	72008	1.1	73039	,,	73084	, ,	73129				75043	٠,,	76004	• •	76049	, ,	76094	• •
70028	,,	72009	, ,	73040	,,	73085	, ,	73130	٠,			75044	1 1	76005	, ,	76050	. ,	76095	
70029	,,			73041	٠,,	73086	, ,	73131	<u> </u>	75000	SL/4B/I	75045	1.1	76006	, ,	76051	, ,	76096	
70030	SL/7A/I		1	73042	1.1	73087	٠,	73132		75001	, ,	75046		76007	, ,	76052		76097	
70031	, ,			73043	. ,	73 0 88	, ,	73133		75002	• •	75047		76008	, ,	76053	SL/4K/2	76098	
70032	1.1			73044	• • •	73089	, ,	73134		75003	, ,	75048	. ,	76009	, ,	76054	,,	76099	• •
70033	,,	73000	SL/5B/I	73045		73090	SL/5B/6	73135	SL/5B/3	75004	, ,	75049	, ,	76010	, ,	76055	,,	76100	٠,
70034	,,	73001	, ,	73046	, ,	73091	, ,	73136	, ,	75005	, ,	75050	SL/4B/3	76OI I	, ,	76056		76101	, ,
70035	٠,	73002	1,	73047	.,	73092		73137		75006	, ,	75051	, ,	76012	, ,	76057	, ,	76102	• •
70036	,	73003	.,	73048		73093	٠.	73138		75007	, ,	75052	, ,	76013	, ,	76058	,,	76103	
70037	,,	73004	,,	73049	٠,,	73094		73139	٠,,	75008	, ,	75053	, ,	76014	11	76059		76104	, ,
70038	,,	73005	,,	73050	SL/5B / 8	73095	٠,,	73140		75009	, ,	75054	, ,	76015		76060	,,	76105	
70039	,,	73006	,,	73051	7.	73096	,,	73141	-,-	75010	, ,	75055		76016	, ,	76061	, ,	76106	
70040	• • • • • • • • • • • • • • • • • • • •	73007	.,	73052		73097		73142	·	75011	, ,	75056	7,	76017	٠,	76062	٠,	76107	. ,
70041		73008	1 ,,	73052	SL/5B/9	73098	.,	73143		75012	 	75057	1.1	76018	, ,	76063		76108	.,
70042	1	73009	 ,,	73054	,,	73099	,,	73144	· , ,	75013	1	7505 B	,,	76019	, ,	76064	٠,,	76109	
						73100		73145	SL/5B/2			75059	- , ,	76020	· · ·	76065		76110	.,
70043	,,	73010	1 11	73055		1/3100	SL/5B/5			75014	. ,								

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76112	SL/4K/3	78014	SL/2K/1	78059	SL/2K/I	80035	SL/4LT/I	80080	SL/4LT/I	80125	SL/4LT/I	82011	SL/3VT/ I	84007	SL/2VT/I	92018	SL/9R/4	92063	SL/9R/5
76113	, ,	78015	, ,	78060	, ,	80036	, ,	80081	. ,	80126	, ,	82012	1923.77	84008	JC/2V1/1	92019	SC/ SK/ 4	92064	JL/7R/ 3
76114	, ,	78016	, ,	78061	, ,	BO037	, ,	80082		80127	,,	82013	1	84009	1,,	92020	SL/9R/2	92065	1 ,,
		78017	.,	78062	1.7	80038	.,	80083	,,	80128	1,,	82014		84010	,,	92021		92066	1
		78018	,,	78063	,,	80039	1	80084	,,,	80129	,,	82015	1,,	84011	, ,,	92022	·	92067	SL/9R/3
		78019	, ,	78064	,,	80040	1	80085	.,	60130	,,	82016	1	84012	,,	92023	 	92068	1 , ,
		78020	, ,			80041	,,	80086	 	80131	,,	82017	1 , ,	84013	, ,	92024	, ,,	92069	— , ,
77000	SL/3K/I	78021	,,			80042	1 , ,	80087	·	80132	,,	82018	 ,,	84014	.,	92025	1,,	92070	,,,
77001	1.,	78022				80043	1 ,,	80088	1,,	80133	7,7	82019		B40I5	,,,	92026	٠,,	92071	
77002		78023				80044	1	80089	1	80134	,,	82020	 , , 	84016	, ,	92027	1	92072	—
77003	1	78024	.,	80000	SL/4LT/I	BOO45	1	80090	,,	80135	,,	82021	1 ,,	84017	1,,	92028	.,	92073	
77004	, ,	78025	.,	80001	, ,	80046	 	80091	1	80136	,,	82022	7,7	84018	1 , ,	92029	1 , ,	92074	 ,,
77005	1	78026	, ,	80002	1 .,	80047	·	80092	1	80137	,,	82023	1 77	84019	 , , 	92030	SL/9R/3	92075	 ,,
77006	—	78027	1	80003		80048	†	80093	 	80138	,,	82024		84020	,,	92031	1.,	92076	
77007	 	78028	.,	80004	1	80049		80094	1.,	80139	,,	82025	,,,	84021	— • • • • • • • • • • • • • • • • • • •	92032	1,,	92077	SL/9R/4
77008		78029	,,	80005	 ;;	80050	1,,	80095	,,	80140	,,	82026	 ,,	84022	, ,	92033	· · ·	92078	1
77009		78030	 	80006	,,,	80051		80096	,,	80141	1	82027	1	B4O23	, ,	92034		92079	+
77010	 	78031	,,	80007		80052	 	80097	 ; ;	80142		82028	 ,,	84024	,,	92035	,,	92080	
77011	 ':-	78032	 	80007	,,	80053	 ; ; 	80098	1 . ,	80143	- : :	82029		84025	, ,	92036	1	92081	
77012	- ; ;	78032	 	80009	1 ,,	80054	1	80099	1,,	80144		82030	1.1	84026	7.	92037		92082	.
77012		78034	1	80010	1 ,,	80055	1	80100	1 , ,	80145		82031	, ,	84027	, ,	92038	, ,	92083	
	 ;;	78034	 ; ;	80011	 	80056	 	80101	 	80145	• • • •	82032	 	84028	1 , ,	92039	1	92084	+ ; ;
77014	 		 	+	1.,	80057	 		,,		· · · · · ·		 	84029	,,,	92039	 	92085	+ ; ;
77015	 ;;	78036 78037	 	80012	 			80102 80103	 	80147	,,	82033 82034	1	54029	- '.'	92041	1		, ,
77016	 	1	 	+	 	80058	 	80104	 	80148 80149	1,,	82035				92041	1	92086	SL/9R/3
77017	+-;;	78038 78039	 	80014 80015	1,	80060	 ;;	80105	 	80150	 '; 	82036	8CBV11			92043	, , ,	92088	1.
77018	 ','			80016	, ,	80061	1 , ,	80106	 	80151	1,,	82037	01:	F		92044	- 	92089	1
77019	+	78040 78041	 ,,	80017		80062	 	80107	1	80152	-	82038	n· /	92000	SL/9R/I	92045	SL/9R/4	92090	—
				H	 	80063	' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' 	80108	 ;;	80153		82039	11.	92001	32/71/1	92046	1,,	92091	
	 	78042 78043	1	80018	1 , ,	80064	 	80109	1	BOI54	,,	82040	21	92002	· · · · ·	92047	11	92092	,,
		4	,,		111	80065	 	80110	,,	60134	-	82040	N	92003	1	92048	1,,	92093	1 , ,
78000	SL/2K/I	78044	+	80020 80021	1	80066	1 , ,	80111	· · · ·	 	 	82042	ימ	92003	 	92049	,,	92094	
		78045	11	 	+ ; ;	80067	 ;;		 		 	82043	2.	92005	,,,	92050	,,	92095	 ,,
78001		78046	11	80022	 ; ; 		 	80113	1,,			82044	12,1	92006	- 	92051	1,,	92096	1
78002		78047		80023	,,,	80068	 , ,	80113	1,,	82000	SL/3VT/I	82044	-~	92007		92052		92097	SL/9R/5
78003		78048	<u> </u>	80024	1				 	82000	30/3/1/1	 		92007		92053	,,	92098	100,711,5
78004	,,	78049	!!	80025	1	80070	''	80115	 			 		92009	- , ,	92054	, ,	92099	· , ,
78005		78050	<u> </u>	80026		80071	,,	80116	 	82002			 	92010	SL/9R/3	92055	, , ,	92100	SL/9R/4
78006	','	78051	ļ' <u>.</u>	80027		80072		80117	 	82003	• • •	04000	SL/2VT/ I	92011	7,1	92056	1 1	92101	,,,
78007	· · ·	78052	· · ·	80028	11	80073	• • •	80118	,,	82004	7.	84000	SL/2V1/1	92011	7,	92057	,,	92102	
78008	,,	78053	<u>''</u>	80029	٠,,	80074	<u> </u>	80119		82005				92012	, , , —	92057	 	92102	
78009	, ,	78054	• • •	80030	<u> </u>	80075	<u> </u>	80120	11	82006	* *	84002	• • •			92059		92104	
78010	.,	78055	- ' '	80031	• •	80076	!!	80121		82007	• •	84003		92014	SI JOD JA	92060	SL/9R/5	92105	,,
78011	,,	78056	,,	80032	• •	80077	٠,	80122		82008	''-	84004	• • •		SL/9R/4	92060	, ,	92106	 ','
78012		78057		80033		80078	· ' '	80123		82009		84005	' '	92016	 ::- -			92107	- , ; -
78013	.,	78058	1 , ,	80034		80079		80124	<u>''</u>	82010	''	84006		92017	<u> </u>	92062	<u> </u>	72107	

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92IO B	SL/9R/4			92198	SL/9R/3	92243	SL/9R/I								1	1101110	710111211	110111001	1.10.11.0
92109	''-	92154	, ,	92199	<u> </u>	92244	, ,			1			1	l					
92110	'''	92155	, ,	92200	, .	92245	, ,												
92111		92156	,,	92201	, ,	92246	, ,				I				1				
92112	, ,	92157	, ,	92202	. ,	92247						1							<u> </u>
92113	, ,	92158	, ,	92203	SL/9R/I	92248	, ,					1							
92114	, ,	92159	, ,	92204	1.7	92249						1	 				t		
92115	,,,	92160		92205	, ,	92250	, ,					<u> </u>		***********					
92116	, ,	92161	, ,	92206	, ,														
92117	٠,	92162	, ,	92207	, ,										· · · · · · · · · · · · · · · · · · ·				
92118	,,,	92163	, ,	92208	,,,														
92119	, ,	92164		92209	, ,														
92120	,,	92165	SL/9R/6	92210	, ,														
92121	, ,	92166	, ,	92211															
92122	, ,	92167	,,	92212	. ,														
92123	, ,	92168	SL/9R/3	92213	.,												t		
92124	, ,	92169	, 1	92214															
92125	, ,	92170	,,	92215	.,											·			
92126	, ,	92171	, ,	92216															
92127	, ,	92172	, ,	92217														-	
92128	, ,	92173	, ,	92218															
92129	, ,	92174	,,	92219	.,		1												
92130	,,	92175	,,	92220															
92131	, ,	92176	,,	92221	,,														
92132	,,	92177	,,	92222	,,				1										
92133	, ,	92178	,,	92223															
92134	, ,	92179	,,	92224	, ,														
92135	, ,	92180	,,	92225															
92136	1.1	92181	, ,	92226	. 1														
92137	.,	92182		92227	•••		1												
92138	,,	92183	.,	92228	,,														
92139	, ,	92184	.,	92229	• •														-
92140	SL/9R/3	92185	, ,	92230															
92141	,,	92186		92231															
92142	, ,	92187	,,	92232	,,														
92143	, ,	92188		92233	.,														
92144	, ,	92189	.,	92234	• •														
92145	,,	92190	. 1	92235	• •		[
92146	1,,	92191	,,	92236															
92147	1 ,,	92192	.,	92237	.,														
92148	1,,	92193		92238			1												
92149	· , ,	92194	—	92239															
92150	SL/9R /4	92195	,,	92240	,,														
92151	7,,	92196	 	92241															
92152	.,.	92197		92242	,,														





FIREBOX (OUTSIDE) **TUBES** SUPERHEATER ELEMENTS LENGTH BETWEEN TUBEPLATES HEATING SURFACES: TUBES FIREBOX

BOILER BARREL DIAMETER (OUTSIDE)

IOI SQ. FT. TOTAL EVAPORATIVE TO25 SQ. FT. SUPERHEATER 124 124 SQ. FT.

> 2.77 SQ. FT. 17:5 SQ. FT.

13/6 O.D.

10'-101/2"

924 SQ. FT.

4-3" INCREASING TO 4'-8"

12 LARGE 51/8" O.D. x 7 S.W.G

162 SMALL 156"O.D. x 12 SW.G

5-11" LONG x 4'-01/16" WIDE

WEIGHTS 161/2"DIA. x 24"STROKE CYLINDERS (TWO) TRACTIVE EFFORT 18513 LBS. **ENGINE** 4.9 ADHESION - FACTOR **TENDER** BRAKE % ENGINE & TENDER 60.23 TOTAL 4 CHAINS MINIMUM RADIUS CURVE (WITH SPECIFIED GAUGE WIDENING) BOILER TYPE BR. 8 SCALE

B.R. 3

STANDARD CLASS 2. 2-6-0 ENGINE

TENDER TYPE

Original © BRB Residuary Ltd

FREE FLUE AREA

GRATE AREA.

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(visit http://www.barrowmoremrg.co.uk)

FULL

T C

49-5

36-17

86-2

EMPTY

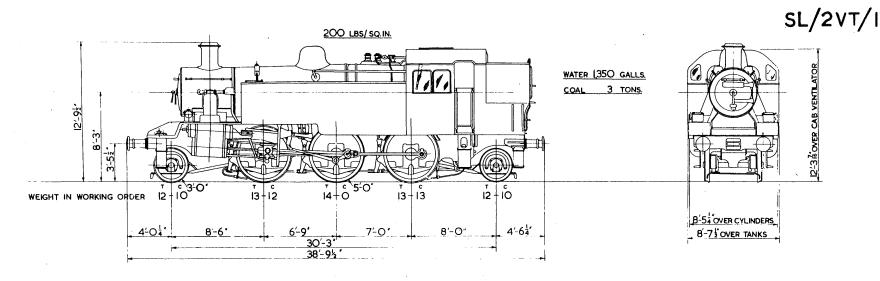
T C

45-8

19 - 9

64-17

8 IO FEET



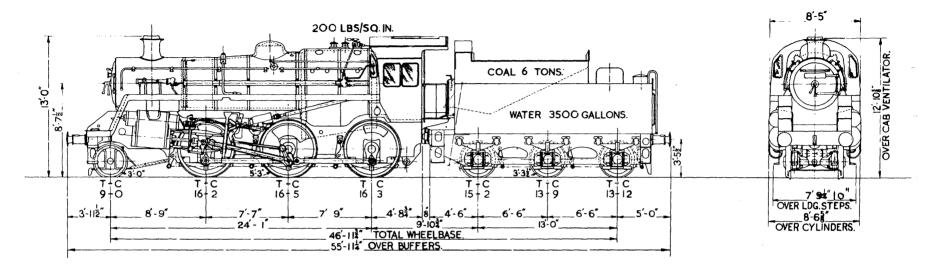
EMPTY WEIGHTS CYLINDERS (TWO) 16 DIA. x 24" STROKE T C BOILER BARREL DIAMETER (OUTSIDE) 4'-3' INCREASING TO 4'-8' 5'-11" LONG x 4'-0% WIDE TRACTIVE EFFORT 18.513 L.BS. **ENGINE** 66-5 53-12 FIREBOX (OUTSIDE) 12 LARGE 51 O.D. x 7 S.W.G. 5.0 ADHESION FACTOR **TUBES** 162 SMALL 1% O.D. x 12 S.W.G. BRAKE % 47 13/6 O.D. MINIMUM RADIUS CURVE 4 CHAINS SUPERHEATER ELEMENTS (WITH SPECIFIED GAUGE WIDENING) 10'-1012' LENGTH BETWEEN TUBEPLATES BOILER TYPE B.R.8 924 SQ. FT. HEATING SURFACES :- TUBES SCALE IOI SQ. FT. FIREBOX 8 IO FEET. 1,025 SQ. FT. TOTAL EVAPORATIVE SUPERHEATER 124, 134 SQ. FT. 2 · 77 SQ. FT. FREE FLUE AREA

STANDARD CLASS 2. 2-6-2 TANK ENGINE.

GRATE AREA

17 . 5 SQ. FT.

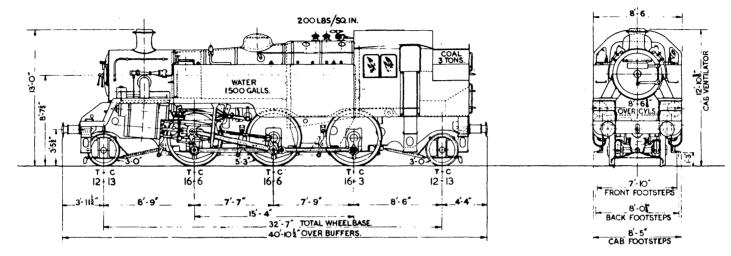
SL/3K/1.



	SIDE)4'-5"INCREASING TO 5'-OE".
FIREBOX (OUTSIDE)	7'-0"LONG X 4'-0" WIDE.
TUBES	18 LARGE 5 0.D. X 7 S.W.G.
	143 145 SMALL 1 0.D. X 12 SW.G.
SUPERHEATER ELEMENTS	I 🖁 O.D. IO S.W.G.
LENGTH BETWEEN TUBEPLATES	
HEATING SURFACES TUBES 9	<u> 23·54 932-90 </u> sq.fт.
FIREBOX	118 40 " "
TOTAL EVAPORATI	<u></u>
SUPERHEAT	TER
FREE FLUE AREA	3,054 ' 3 08 " "
GRATE AREA	20:35 * "

CYLINDERS (TWO)172"X 26"	WEIGHTS	FULL	EMPTY
TRACTIVE EFFORT21490 LBS.		T - C	T - C
ADHESION FACTOR 5.05	ENGINE	57 -10	53 - O
BRAKE % ENGINE & TENDER 60.7	TENDER	42 - 3	20 - 10
MINIMUM RADIUS CURVE 4* CHAINS # 2.3	TOTAL	99 13	73 IO
(WITH SPECIFIED GAUGE WIDENING)	T_{i}		
BOILER TYPEBR. 6.		SCALE	
TENDER TYPE BR. 2 A.	WW 1 2	2 3 4 5 6	7 8 9 10

STANDARD CLASS 3. 2-6-0 ENGINE.



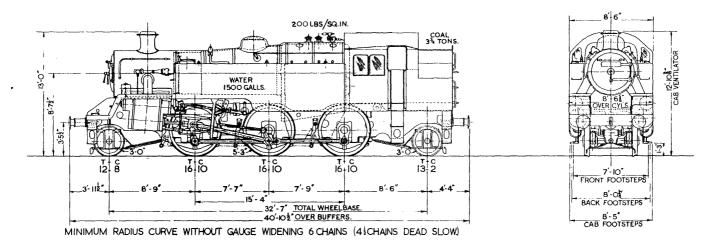
LEADING DIMENSIONS.

FIREBOX (OUT	SIDE)	4'-5" INCREASING TO 5'-02". 7'-0" LONG X 4'-0"WIDE. 18 LARGE 5\bar{b}"O.D. x 7 S.W.G.	,
	143	3 445-SMALL 18 O.D. x 12 S.W.G.	
SUPERHEATER	ELEMENTS		
LENGTH BETY	VEEN TUBEPLATES	_Ю´ Ю½″.	
HEATING SURFACES.	TUBES 913.54	932-90 SQ.FT	
	FIREBOX	€ 118 :45 " "	
TOTAL	EVAPORATIVE PALLA	1051-30- " "	
	SUPERHEATER	84190.00	
FREE FLUE AREA	3.08	<u>sú·3-08</u>	
GRATE AREA		20 · 35 ^	

CYLINDERS (TWO) 17½" x 26.". TRACTIVE EFFORT 21490 LBS.	WEIGHTS. FULL. EMPTY. T-C T-C 74-1. 60-18.
ADHESION FACTOR 5.08 BRAKE % ENGINE 51.5	74°1. 60°18.
MINIMUM RADIUS CURVE 42CHAINS. (WITH SPECIFIED GAUGE WIDENING)	
BOILER TYPEBR 6.	SCALE
	0 2 4 6 8 K FEET

BR.STANDARD CLASS 3. 2-6-2 TANK ENGINE.

SL/3VT/2



BOILER BARREL DIAMETER (OUTSIDE) 4'-5" INCREASING TO 5'-0½".

FIREBOX (OUTSIDE) 7'-0" LONG X 4'-0"WIDE.

TUBES 18 LARGE 5½"O.D. x 7 S.W.G.

143 SMALL 1½"O.D. x 12 S.W.G.

SUPERHEATER ELEMENTS 1½"O.D. 9 S.W.G.

LENGTH BETWEEN TUBEPLATES 10' 10½".

HEATING SURFACES. TUBES 923 :54 SQ.FT

FIREBOX 118 :42 " "

TOTAL EVAPORATIVE 1041 :96 " "

SUPERHEATER 184 :50 " "

FREE FLUE AREA 3 :054 " "

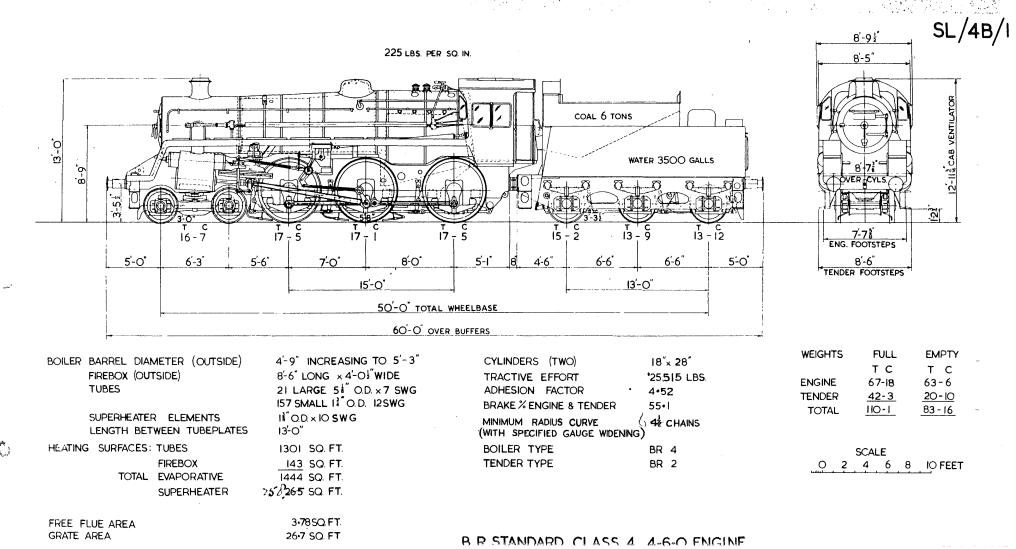
GRATE AREA 20 :35 " "

BOILER TYPE_____BR 6.

WEIGHTS. FULL. EMPTY, T-C T-C 75-O. 61-2

SCALE 0 2 4 6 8 Ø FEET

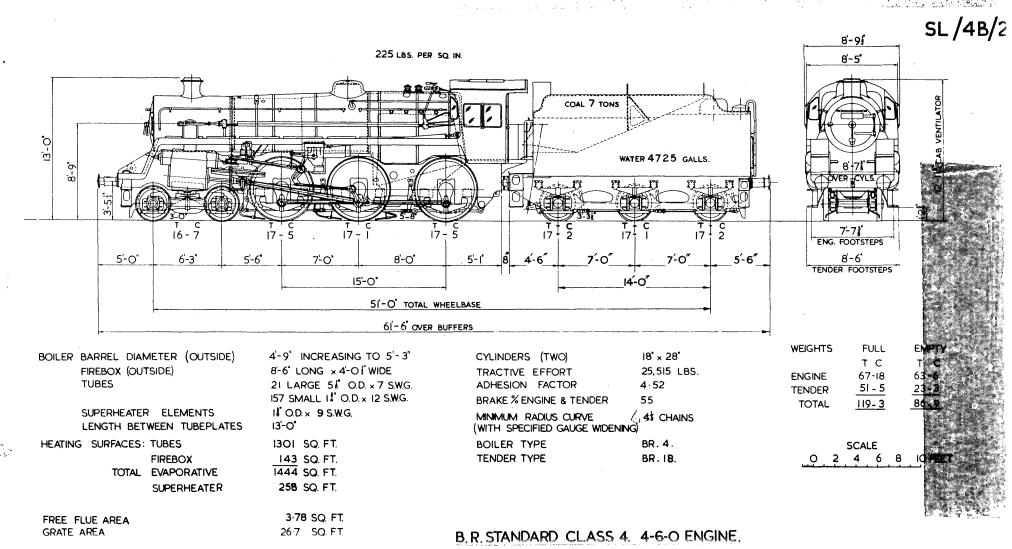
BR.STANDARD CLASS 3. 2-6-2 TANK ENGINE.



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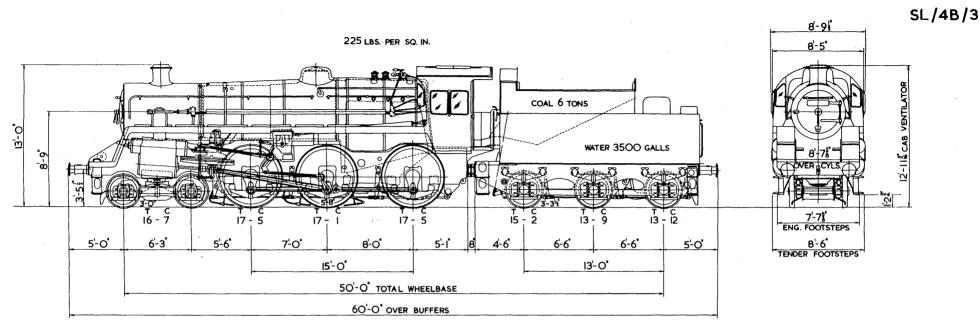
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BOILER BARREL DIAMETER (OUTSIDE) FIREBOX (OUTSIDE) TUBES

> SUPERHEATER ELEMENTS LENGTH BETWEEN TUBEPLATES

HEATING SURFACES: TUBES

FIREBOX

TOTAL EVAPORATIVE

SUPERHEATER

3.78 SQ FT. 26.7 SQ.FT.

1444 SQ. FT.

258 SQ. FT.

13'-0"

4-9" INCREASING TO 5-3" 8-6" LONG x 4'-O!" WIDE 21 LARGE 5 . O.D. x 7 S.W.G. 157 SMALL 13 O.D.x 12 S.W.G. 11 O.D. x 9 S.W.G. 1301 SQ. FT. 143 SQ. FT.

ADHESION FACTOR BRAKE % ENGINE & TENDER MINIMUM RADIUS CURVE

WITHOUT GAUGE WIDENING

BOILER TYPE

CYLINDERS (TWO)

TRACTIVE EFFORT

TENDER TYPE

18" x 28" 25.515 LBS. 4.52

55.1

6 CHAINS

(OR 4! CHAINS DEAD SLOW)

BR 4

BR 2A

SCALE

WEIGHTS

ENGINE

TENDER

TOTAL

O 2 4 6 8 IOFEET

FULL

T C

67-18

42-3

110-1

EMPTY

T C

63 - 6

20-10

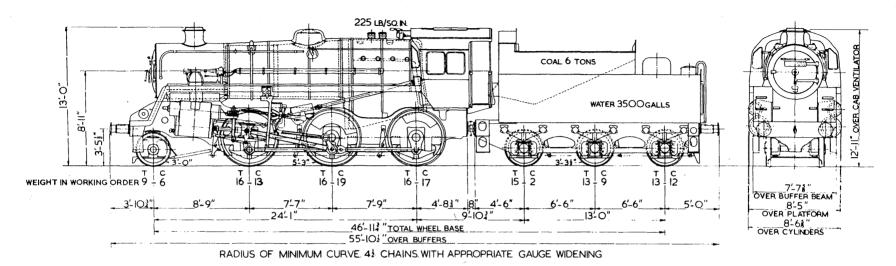
83-16

B.R. STANDARD CLASS 4. 4-6-O ENGINE.

FREE FLUE AREA

GRATE AREA

SL/4K/I



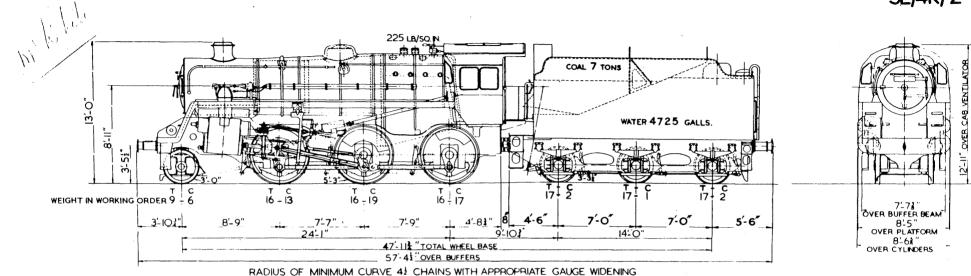
BOILER BARREL DIAMETER (OUTSIDE) FIREBOX (OUTSIDE) TUBES	4'-9½"INCREASING TO 5'-3" 7'-6"LONGX 4'-0½"WIDE 24 LARGE 5½"O DX7SWG IS6SMALL 1½"ODX12SWG.	CYLINDERS (TWO) TRACTIVE EFFORT ADHESION FACTOR BRAKE % ENGINE & TENDER	17½"x 26" 24J7OLB. 4•68 63•75	WEIGHTS FULL EMPTY T C T C O ENGINE 59-15-0 55-18-2 TENDER 42-3-0 20-10-2 TOTAL 101-18-0 76-9-0
SUPERHEATER ELEMENTS LENGTH BETWEEN TUBEPLATES	18"O.D.x 95.WG. 10'-10'8"		1 chan	18 (
HEATING SURFACES TUBES	1,0 75 SQ.FT	BOILER TYPE	BR.7	SCALE
FIREBOX TOTAL EVAPORATIVE	<u>131</u> SQ.FT 1. 206 SQ FT	TENDER TYPE	BR 2	O 2 3 4 5 6 7 8 9 IOFEET
SUPERHEATER	247 SQFT			
FREE FLUE AREA	3-8 SQ.FT.			

STANDARD CLASS 4 2-6-O ENGINE

GRATE AREA

23 SQFT

SL/4K/2



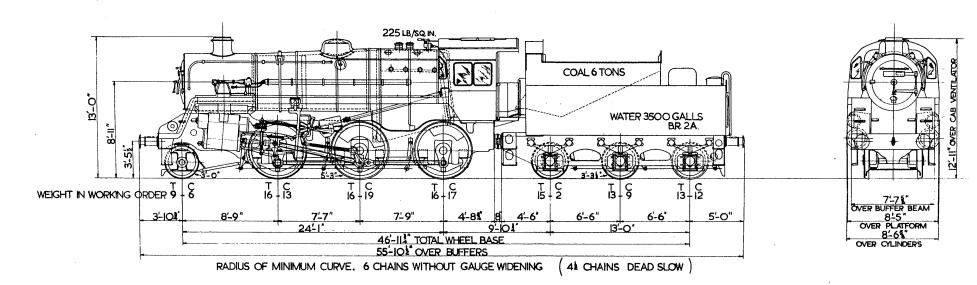
BOILER BARREL DIAMETER (OUTSIDE) FIREBOX (OUTSIDE) TUBES	4'-91"INCREASING TO 5'-3" 7'-6"LONGX 4'-01"WIDE 24 LARGE 51"ODX75WG 1565WALL 12"ODX125WG.	CYLINDERS (TWO) TRACTIVE EFFORT ADHESION FACTOR BRAKE % ENGINE & TENDER	171"x 26" 24170LB. 4•68 59:5	WEIGHTS FULL EMPTY T C O T C O ENGINE 59-15-0 55-18-2 TENDER 51-5-0 23-3-0 TOTAL III-0-0 79-1-2
SUPERHEATER ELEMENTS LENGTH BETWEEN TUBEPLATES	}"O.Dx 95WG Oʻ- O}"		6 Chama	
HEATING SURFACES TUBES	1075 SQ FT	BOILER TYPE	BR 7	SCALE
FIREBOX	<u> 131</u> SQFT	TENDER TYPE	BR LB	O 1 2 3 4 5 6 7 8 9 IOFEET
TOTAL EVAPORATIVE	1206 SQ FT			

FREE FLUE AREA GRATE AREA SUPERHEATER

3-8 SQFT. 23 SQFT

247 SQFT

STANDARD CLASS 4.2-6-O ENGINE



BOILER	BARREL DIAMETER (OUTSIDE) FIREBOX (OUTSIDE) TUBES
	SUPERHEATER ELEMENTS LENGTH BETWEEN TUBEPLATES

HEATING SURFACES TUBES

FIREBOX TOTAL EVAPORATIVE SUPERHEATER

FREE FLUE AREA GRATE AREA

3.8 SQ.FT. SQ.FT.

CYLINDERS (TWO)

TRACTIVE EFFORT

BOILER TYPE

TENDER TYPE

ADHESION FACTOR

BRAKE % ENGINE & TENDER

STANDARD CLASS 4. 2-6-O ENGINE

17£ x 26

24170 LB

4.68

63.75

BR. 7

BR 2A

4-91 INCREASING TO 5-3

24 LARGE 55 O.D. 7 S.W.G.

156 SMALL 18" OD x 12 SWG.

7-6 LONG ×4-0 WIDE

18 OD × 9 S.W.G. 10-101

1075 SQ.FT.

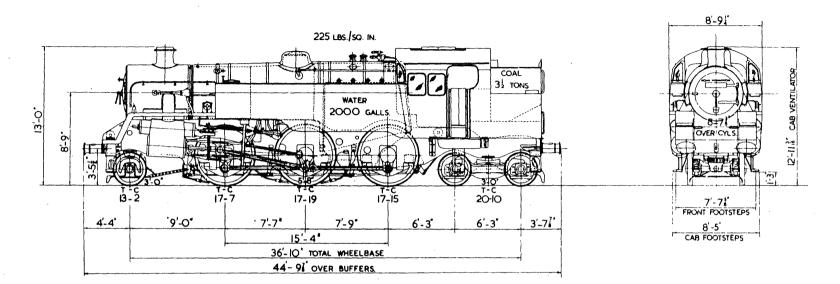
_131_SQ.FT.

1,206 SQ.FT. 247 SQ.FT. WEIGHTS FULL

T C Q T C Q ENGINE 59-I5-O 55-I8-2 TENDER 42-3-O 2O-IO-2 TOTAL IOI-I8-O 76-9-O

EMPTY

SL/4LT/I



BOILER BARREL DIAMETER (OUTSIDE) 4'-9' INCREASING TO 5'- 3' 8-6' LONG * 4-01" WIDE FIREBOX (OUTSIDE) TUBES 21 LARGE 51" QD. x 7 SWG 157 SMALL 11 0.0 x 12 SWG SUPERHEATER ELEMENTS 1 1 0.D x 10 SWG LENGTH BETWEEN TUBEPLATES 12'-3" HEATING SURFACES : TUBES 1223 SQ. FT. **FIREBOX** 143 SQ FT TOTAL EVAPORATIVE 1366 SQ. FT. 240, 246 SQ. FT. SUPERHEATER

CYLINDERS (TWO) 18' × 28'

TRACTIVE EFFORT 25,515 LBS.

ADHESION FACTOR 4.65

BRAKE % 44.2

MINIMUM RADIUS CURVE (WITH SPECIFIED GAUGE WIDENING)

BOILER TYPE BR 5

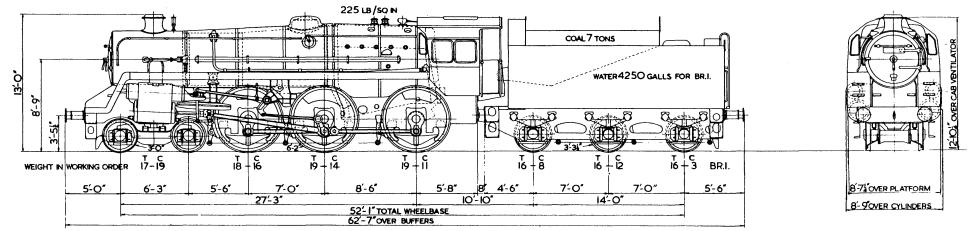
WEIGHTS FULL EMPTY
T - C T - C
86 - 13 69 - 8

SCALE
O 2 4 6 8 10 FEET

FREE FLUE AREA GRATE AREA. 3.78 SQ.FT. 26.7 SQ.FT.

B.R. STANDARD CLASS 4. 2-6-4 TANK ENGINE

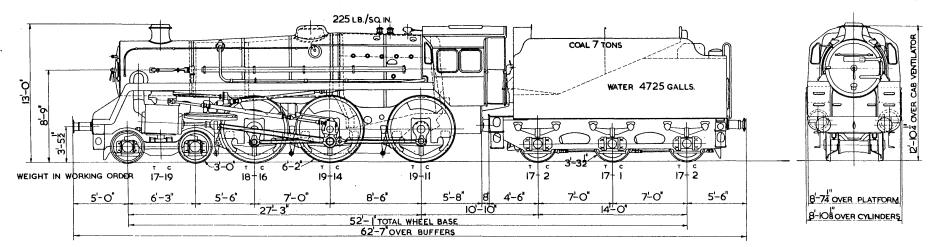
SL/5B/I



MINIMUM RADIUS CURVE WITHOUT GAUGE WIDENING 6 CHAINS (4) CHAINS DEAD SLOW).

BOILER BARREL DIAMETER (OUTSIDE) FIREBOX (OUTSIDE) TUBES SUPERHEATER ELEMENTS	4'-111"."INCREASING TO 5'-81" 9'-21"."LONG x 3'-111".WIDE 28 LARGE 51"."QD x 7 SWG 151 SMALL 13"."QD x 11 SWG 18"O.D x 9 SWG	CYLINDERS (TWO) TRACTIVE EFFORT ADHESION FACTOR BRAKE % ENGINE & TENDER	19'x 28' 26120 LB 4.97 607 BR.I. TENDER	WEIGHTS FULL EMPTY T—C T—C ENGINE 76-0 69-5 TENDER 49-3 23-3 TOTAL 125-3 92-8
LENGTH BETWEEN TUBEPLATES	13'-2 ኔ "			
HEATING SURFACES TUBES	1479 SQ, FT,	BOILER TYPE	BR. 3.	SCALE
FIREBOX	171 SQ.FT.	TENDER TYPE	BR.I.	O 2 4 6 8 IO FEET
TOTAL EVAPORATIVE	1650 SQ, FT.			
SUPERHEATER	358 SQ.FT.			
FREE FLUE AREA	4.5 SQ.FT.			
GRATE AREA	28.7 SQ.FT.	STANDARD CLASS 5,4-6	5-O ENGINE	

WITH BRI. TENDER



MINIMUM RADIUS CURVE WITHOUT GAUGE WIDENING 6 CHAINS (42 CHAINS DEAD SLOW).

4.5 SQ. FT.

28.7 SQ. FT.

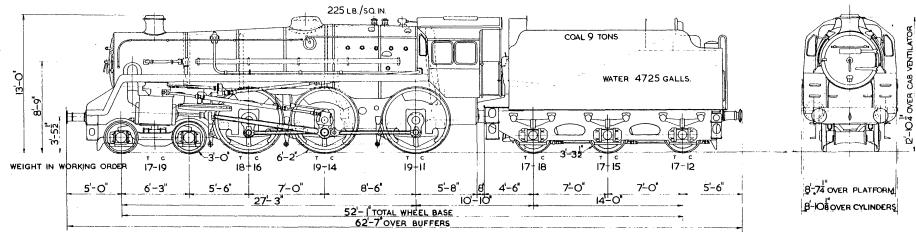
BOILER B	ARREL DIAMETER (OUTSIDE)	4-III INCREASING TO 5'-82"	CYLINDERS (TWO)	19"x 28"	WEIGHTS	FULL	EMPTY
F	REBOX (OUTSIDE)	9'-218"LONG x 3-118"WIDE	TRACTIVE EFFORT	26 120 LBS.		T. C.	T. C.
т	UBES	28 LARGE 5 0.D x 7 S.W.G.	ADHESION FACTOR	4.97	ENGINE	76-O	69-5
	ODE3	ISI SMALL IS O.D. x II S.W.G.	BRAKE % ENGINE & TENDER	62:3	TENDER	51-5	23 - 3
-	UPERHEATER ELEMENTS	IBOD X 9 S.W.G.			TOTAL	127-5	92-8
L	ENGTH BETWEEN TUBEPLATES	13'- 2 6					**
HEATING	SURFACES: TUBES	1479 SQ. FT.	BOILER TYPE	B.R. 3,			
	FIREBOX	171 SQ. FT.	TENDER TYPE	B.R. 1B.			
	TOTAL EVAPORATIVE	1650 SQ. FT.				SCALE	
	SUPERHEATER	358 SQ. FT.			. 0	2 4 6	8 IO FEET.

B.R. STANDARD CLASS 5. 4-6-O ENGINE.

医二氏反射 网络克里斯克姆斯克 医二氏反射的 医糖管

BRITISH-CAPROTTI VALVE GEAR.

FREE FLUE AREA GRATE AREA



MINIMUM RADIUS CURVE WITHOUT GAUGE WIDENING 6 CHAINS (42 CHAINS DEAD SLOW)

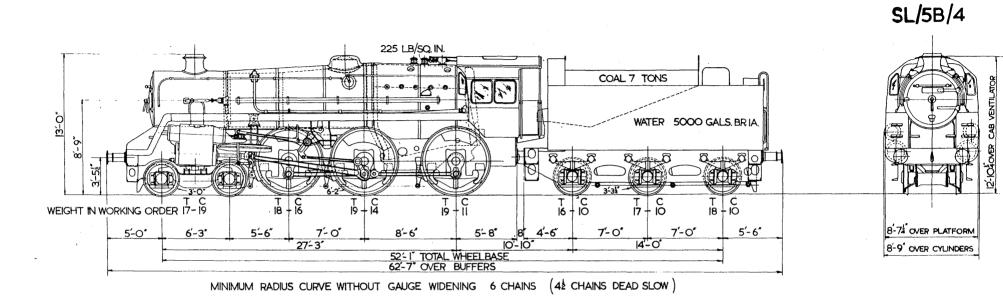
28.7 SQ. FT.

BOILER	BARREL DIAMETER (OUTSIDE)	4-III INCREASING TO 5'-82"	CYLINDERS (TWO)	19"x 28"	WEIGHTS	FULL	EMPTY
	FIREBOX (OUTSIDE)	9'-2 ^{13"} LONG x 3 ['] -118" WIDE	TRACTIVE EFFORT	26 120 LBS.		T. C.	T. C.
	TUBES	28 LARGE 5 0.D x 7 S.W.G.	ADHESION FACTOR	4.97	ENGINE	76-O	69-5
	SUPERHEATER ELEMENTS LENGTH BETWEEN TUBEPLATES	ISI SMALL IÉ O.D. X II SWG. IB O.D. X 9 S.W.G. I3-28	BRAKE % ENGINE & TENDER	61.5	TENDER TOTAL	53-5 1 <u>29-5</u>	23-3 92-8
HEATING	S SURFACES: TUBES	1479 SQ. FT.	BOILER TYPE	B.R.3.			*
	FIREBOX	171 SQ. FT.	TENDER TYPE	B.R. I C.			
	TOTAL EVAPORATIVE	1650 SQ. FT.				SCALE	
	SUPERHEATER	358 SQ. FT.			0	2 4 6	8 IO FEET.
FREE F	FLUE AREA	4.5 SQ. FT.					

B.R. STANDARD CLASS 5. 4-6-O ENGINE.

BRITISH-CAPROTTI VALVE GEAR.

GRATE AREA



BOILER	FIREBOX	DIAMETER (OUTSIDE) (OUTSIDE)
	TUBES	

SUPERHEATER ELEMENTS LENGTH BETWEEN TUBEPLATES HEATING SURFACES TUBES

FIREBOX TOTAL EVAPORATIVE SUPERHEATER

FREE FLUE AREA GRATE AREA

9-21 LONG 3-11 WIDE. 28 LARGE 5 0.D. x7 S.W.G. 151 SMALL 18 O.D.x 11 SWG. 18 O.D. × 9 S.W.G. 13'-21" 1479 SQ. FT. 171 SQ. FT. (650 SQ.FT. 358 SQ.FT.

4.5

SQ.FT, 28.7 SQ FT.

4'-11" INCREASING TO 5'-BE

CYLINDERS (TWO) TRACTIVE EFFORT ADHESION FACTOR BRAKE % ENGINE & TENDER

BOILER TYPE TENDER TYPE

B.R. 3 B.R. IA.

19'x 28'

4.97

59.5

26,120 LB

8 IO FEET

52-10

128-10

WEIGHTS

ENGINE

TENDER

TOTAL

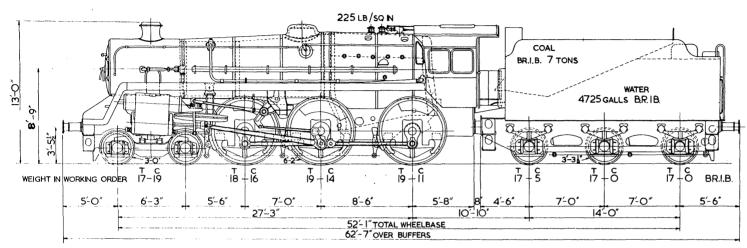
EMPTY

23 - 3

92 - 8

STANDARD CLASS 5. 4-6-0 ENGINE

SL/5B/5



RADIUS OF MINIMUM CURVE WITHOUT GAUGE WIDENING 6 CHAINS. (42 CHAINS DEAD SLOW)

4'-11% INCREASING TO 5'-81"	CYLINDERS (TWO)	19'x 28'
9'-2' LONG x 3'-11 WIDE	TRACTIVE EFFORT	26120 LB
28 LARGE 51'O.D.x7 SWG	ADHESION FACTOR	4.97
151 SMALL IL"ODXII SWG	BRAKE % ENGINE & TENDER	5843
ILODX 9 SWG		
13'-2 '		
1479 SQ FT	BOILER TYPE	BR. 3.
171 SQ FT	TENDER TYPE	BR.I.B.
1650 SQ FT		
358 SQ FT		
	9'-2' LONG x 3'-1 IL WIDE 28 LARGE 5 L'QD x 7 SWG 151 SMALL IL QD x 11 SWG 18' QD x 9 SWG 13'-2 L' 1479 SQ FT 1650 SQ FT	9'-2' LONG X3'-11' WIDE 28 LARGE 51' QD X7 SWG 151 SMALL 11' QD X11 SWG 13'-21' 1479 SQ FT 1650 SQ FT TRACTIVE EFFORT ADHESION FACTOR BRAKE % ENGINE & TENDER BRAKE % ENGINE & TENDER TENDER TYPE TENDER TYPE

4.5 SQ FT

28.7 SQ FT

8-9'OVER CYLINDERS

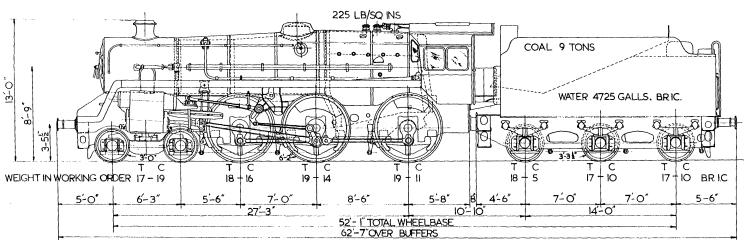
WITH BRIB TENDER.
WEIGHTS FULL EMPTY
T C T C
ENGINE 76-0 69-5
TENDER 51-5 23-3
TOTAL 127-5 92-8

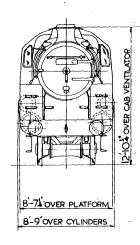
SCALE O 2 4 6 8 IO FEET

STANDARD CLASS 5. 4-6-0 ENGINE.

FREE FLUE AREA

GRATE AREA





76 - 0 69 - 5

53 - 5 23 - 3 129 - 5 92 - 8

SCALE | 10 FEET

ENGINE

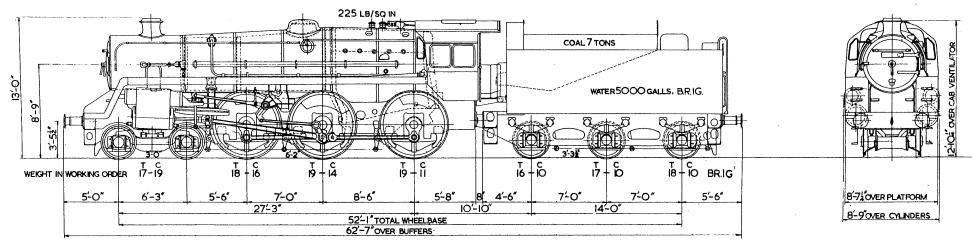
TOTAL

RADIUS OF MINIMUM CURVE WITHOUT GAUGE WIDENING 6 CHAINS (41 CHAINS DEAD SLOW)

BOILER BARREL DIAMETER (OUTSIDE)	4-11 INCREASING TO 5-82	CYLINDERS (TWO)	19"× 28"
FIREBOX (OUTSIDE)	9-22 LONG × 3-11 WIDE	TRACTIVE EFFORT	26,120 LB
TUBES	28 LARGE 5 QD ×7 SWG	ADHESION FACTOR	4.97
	151 SMALL 18 O.D × 11 SWG.	BRAKE % ENGINE & TENDER	57.63
SUPERHEATER ELEMENTS	1 € O.D. × 9 S,WG.		
LENGTH BETWEEN TUBEPLATES	13'-21		
HEATING SURFACES TUBES	1479 SQ. FT.	BOILER TYPE	BR.3,
FIREBOX	171 SQ. FT.	TENDER TYPE	BR. IC.
TOTAL EVAPORATIVE	1,650 SO.FT.		
SUPERHEATER	358 SQ.FT.		
			•
FREE FLUE AREA	4-5 SQ.FT.		
GRATE AREA	28:7 SQ.FT.	STANDARD CLASS 5	4-6-0 ENGINE

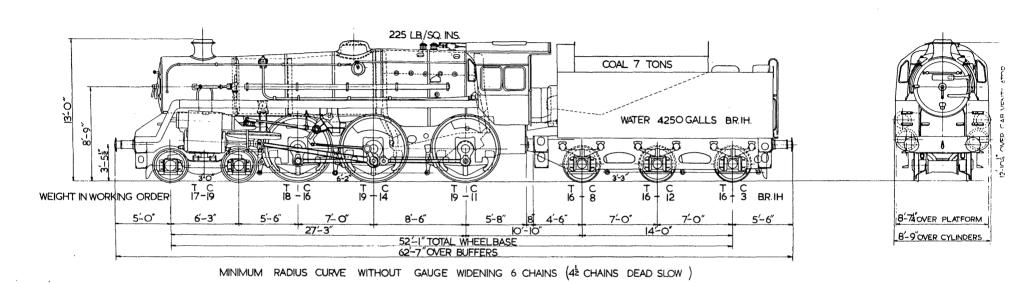
SL/5B/8

- 1 - 1 - 21 - 4 **はんか**かけ



MINIMUM RADIUS CURVE WITHOUT GAUGE WIDENING 6 CHAINS (41 CHAINS DEAD SLOW)

BOILER BARREL DIAMETER (OUTSIDE)	4'-IIM'INCREASING TO 5'-81"	CYLINDERS (TWO)	19"x 28"	WEIGHTS FULL EMPTY
FIREBOX (OUTSIDE)	9'-2指"LONG × 3'-1 13"WIDE	TRACTIVE EFFORT	2612O LB	тстс
TUBES	28 LARGE 54"O.D.x7\$WG	ADHESION FACTOR	4.97	ENGINE 76-0 69-5
	151 SMALL 13"O.D.X11 SWG	BRAKE % ENGINE & TENDER	59.5	TENDER <u>52-10</u> <u>23-3</u>
SUPERHEATER ELEMENTS	ILOD× 9 SWG	·		TOTAL 128-10 92-8
LENGTH BETWEEN TUBEPLATES	13'-21"			
HEATING SURFACES TUBES	1479 SQ FT	BOILER TYPE	BR. 3	
FIREBOX	<u> 171</u> SQ FT	TENDER TYPE	BR. IG.	
TOTAL EVAPORATIVE	1650 SQ FT			
SUPERHEATER	358 SQ FT			SCALE
FREE FLUE AREA	4.5 SQ. FT			O 2 4 6 8 Ю FEET
GRATE AREA	28.7 SQ.FT	CTANDADO CLASS E A CO ENCINE		



BOILER BARREL DIAMETER (OUTSIDE) FIREBOX (OUTSIDE)	4'-11" INCREASING TO 5-82" 9'-212" LONG x 3'-113" WIDE	CYLINDERS (TWO) TRACTIVE EFFORT	19"x 28" 26,120 LBS	WEIGHTS FULL EMPTY T C T C
TUBES	28 LARGE 55 O.D.×7 S.W.G.	ADHESION FACTOR	4.97	ENGINE 76-0 69-5
SUPERHEATER ELEMENTS	ISI SMALL IŠ O.D.×II SWG IŠ OD.× 9 SWG	BRAKE % ENGINE & TENDER	60•7	TENDER <u>49-3</u> <u>23-3</u> TOTAL 125-3 92-8
LENGTH BETWEEN TUBEPLATES	13'-2 1 '			
HEATING SURFACES TUBES	1479 SQ. FT.	BOILER TYPE	BR 3	
FIREBOX TOTAL EVAPORATIVE	<u>171</u> SQ. FT. 1650 SQ. FT.	TENDER TYPE	BR IH	
SUPERHEATER	358 SO.FT.			SCALE

STANDARD CLASS 5 4-6-0 ENGINE

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FREE FLUE AREA GRATE AREA

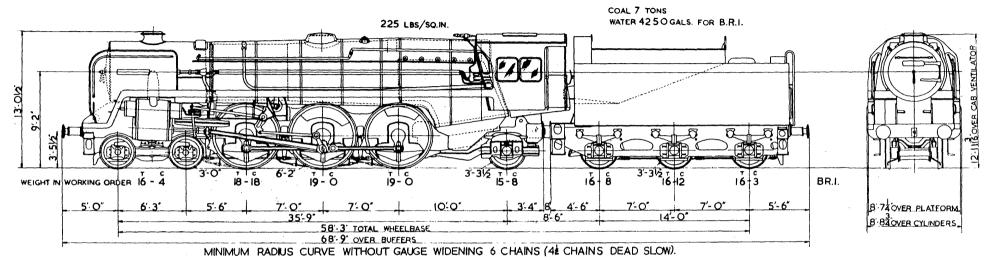
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4.5 SQ FT.

28.7 SQ. FT.

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BOILER BARREL DIAMETER (OUTSIDE) FIREBOX (OUTSIDE) TUBES SUPERHEATER ELEMENTS	5'-4" INCREASING TO 6'-1" 6'-9" LONG x 7'-0" TO 6'-8" WIDE. 35 LARGE 5'2" OD x 7 SWG. 108 SMALL 2'8" OD x 11 SWG. 136" OD x 9 SWG.
LENGTH BETWEEN TUBEPLATES	17'-O'
HEATING SURFACES : TUBES	1,878 SQ.FT.
FIREBOX TOTAL EVAPORATIVE	195 SQ.FT. 2073 SQ.FT. 592. 664 SQ.FT.
SUPERHEATER 5	5-73 SQ.FT.

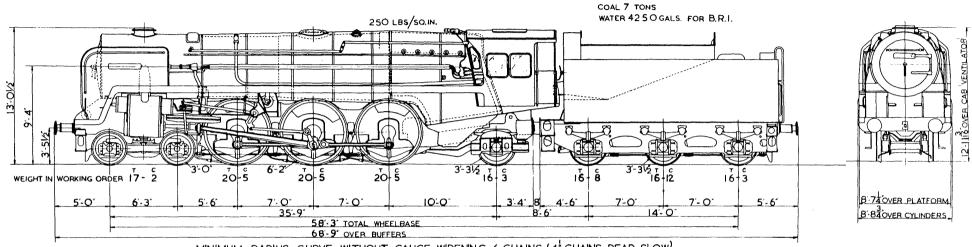
WITH BR I.TENDER. 192 x 28" CYLINDERS (TWO) WEIGHTS. FULL **EMPTY** TRACTIVE EFFORT T-C T-C 27.520 LBS ADHESION FACTOR 4.63 ENGINE 88-IO 80-18 49-9 BR.I. TENDER. 49-0 BRJA. TENDER. BRAKE % ENGINE & TENDER TENDER 49-3 23-3 TOTAL 137-13 104-1 BR.2. BOILER TYPE **SCALE** O 2 4 6 8 IO FEET TENDER TYPE BR.I.

STANDARD CLASS 6. 4-6-2 ENGINE.

GRATE AREA

36 SQ.FT.

SL/7A/I



MINIMUM RADIUS CURVE WITHOUT GAUGE WIDENING 6 CHAINS (42 CHAINS DEAD SLOW).

					WITH B.R.I. LENDER.
BOILER BARREL DIAMETER (OUTSIDE)	5'-9" INCREASING TO 6'- 51/2"	CYLINDERS (TWO)	20*× 28*	WEIGHTS	FULL EMPTY
FIREBOX (OUTSIDE)	7'-0" LONG x 7'-9" TO 7'-4" WIDE	TRACTIVE EFFORT	32,I5O LBS		T-C T-C
TUBES	40 LARGE 51/2 O.D. x 7 SWG	ADHESION FACTOR	4 · 23 53 · 4 BRJ. TENDER.	ENGINE	94-0 85-3
SUPERHEATER ELEMENTS	136 SMALL 21/60.D.x 11 SWG 18 QD.x 9 SWG	BRAKE % ENGINE & TENDER		TENDER	49-3 23-3
LENGTH BETWEEN TUBEPLATES	17'-O"			TOTAL	143-3 108-6
HEATING SURFACES: TUBES	2264 SQ. FT.	BOILER TYPE	BR. I.		SCALE
FIREBOX	210 SQ. FT.	TENDER TYPE	BR. I		0 2 4 6 8 IOFEET
TOTAL EVAPORATIVE	2474 SQ. FT.				•

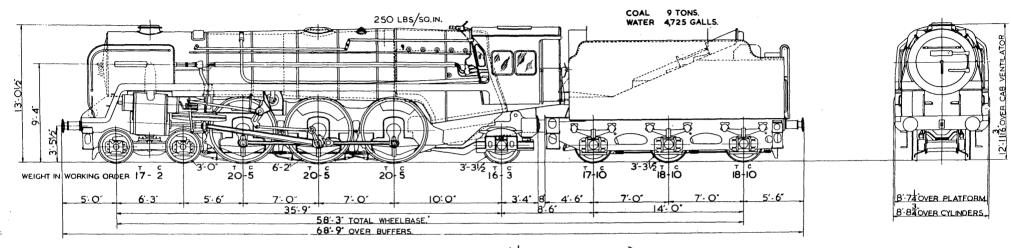
FREE FLUE AREA GRATE AREA

SUPERHEATER

6.8 SQ.FT. 42 SQ.FT.

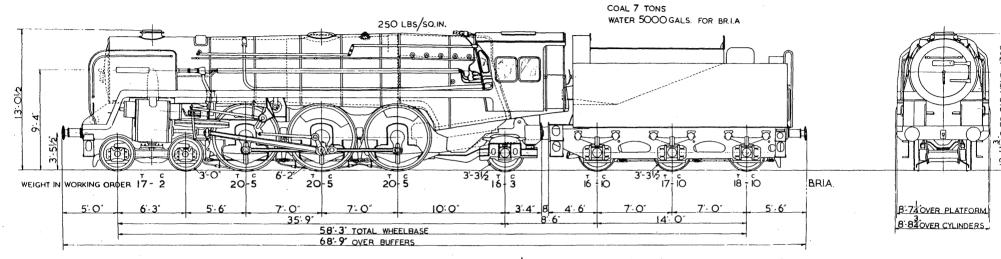
STANDARD CLASS 7. 4-6-2 ENGINE.

A MARKET



MINIMUM RADIUS CURVE WITHOUT GAUGE WIDENING 6 CHAINS (42 CHAINS DEAD SLOW.)

BOILER BARREL DIAMETER (OUTSIDE)	5'-9' INCREASING TO 6'- 51/2"	CYLINDERS ~ TWO	20″× 28°	WEIGHTS	FULL T. C.	EMPTY T. C.
FIREBOX (OUTSIDE) TUBES	7-0" LONG x 7:9" TO 7-4" WIDE 40 LARGE 51/2" O.D. x 7 S.W.G. 136 SMALL 21/8"O.D.x II S.W.G.	TRACTIVE EFFORT ADHESION FACTOR BRAKE % ENGINE & TENDER	32,I5O LBS 4·23 5I·7	ENGINE TENDER	94-0 54-10	85-3 24-8
SUPERHEATER ELEMENTS LENGTH BETWEEN TUBEPLATES	18 QD. × 9 SWG.	DRAKE / ENGINE & LINDER	31 /	TOTAL	148-10	109-11
HEATING SURFACES: TUBES FIREBOX TOTAL EVAPORATIVE SUPERHEATER	2264 SQ. FT. 210 SQ. FT. 2474 SQ. FT. 677 SQ. FT.	BOILER TYPE (TENDER TYPE) unl, field to the l 1 10/0000 10 70045	BRID BRID	0 2 4	ALE - 6 8	_IO FEET
FREE FLUE AREA GRATE AREA.	6-8 SQ.FT. 42 SQ.FT.	STANDARD CLASS	, ,			•



MINIMUM RADIUS CURVE WITHOUT GAUGE WIDENING 6 CHAINS (42 CHAINS DEAD SLOW.)

'				*******	D.M.A. ILINDI	LA
BOILER BARREL DIAMETER (OUTSIDE) FIREBOX (OUTSIDE) TUBES SUPERHEATER ELEMENTS	5'-9" INCREASING TO 6'- 51/2" 7'-0" LONG x 7'9" TO 7'-4" WIDE 40 LARGE 51/2" OD x 7 SWG 136 SMALL 21/6 O.D.x II SWG 18 OD x 9 SWG	CYLINDERS - TWO TRACTIVE EFFORT ADHESION FACTOR BRAKE % ENGINE & TENDER	20"× 28" 32,150 LBS 4 · 23 53 · 4 BRIATENDER	WEIGHTS ENGINE TENDER TOTAL	FULL 94 - O <u>52 - IO</u> 146 - IO	EMPTY 85 - 3 23 - 3 IO8 - 6
LENGTH BETWEEN TUBEPLATES HEATING SURFACES: TUBES	18 QU.× 9 SWG. 17 ¹ -O" 2264 SQ. FT.	BOILER TYPE	BR I	SCALI	F	
		BOILER THE		JUAL	L.	

TENDER TYPE

FREE FLUE, AREA GRATE AREA **FIREBOX**

SUPERHEATER

TOTAL EVAPORATIVE

6-8 SQ.FT. 42 SQ.FT.

210 SQ. FT.

677 SQ. FT.

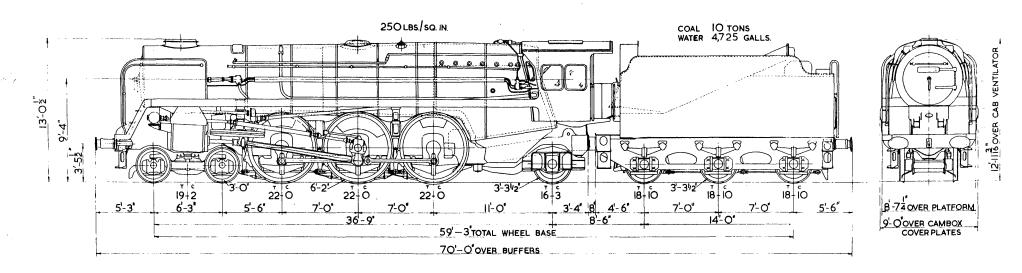
2474 SQ. FT.

STANDARD CLASS 7. 4-6-2 ENGINE.

BR IA

WITH BRIA TENDED

O 2 4 6 8 IO FEET



BOILER BARREL DIAMETER (OUTSIDE) (OUTSIDE) FIREBOX

TUBES

SUPERHEATER ELEMENTS LENGTH BETWEEN TUBEPLATES HEATING SURFACES: TUBES

> FIREBOX TOTAL EVAPORATIVE

SUPERHEATER

FREE FLUE AREA GRATE AREA

5'-9" INCREASING TO 6'-52 8'-08"LONG x 7-9" TO 7-4" WIDE 40 LARGE 52 O.D. x 7 S.W.G. 136 SMALL 280.D. x 115W.G. 18 O.D. x 9 S.W.G. 17-0 2264 SQ. FT.

226 SQ. FT. 2490 SQ. FT. 691 SQ. FT.

> 6.8 SQ. FT. 48-6 SQ. FT.

(THREE) 18"x 28" **EMPTY** CYLINDERS WEIGHTS FULL 39.080 LBS. T. C. T. C. TRACTIVE EFFORT 92 -C ADHESION FACTOR 3.78 **ENGINE** 101-5 BRAKE % ENGINE & TENDER 51.17 55~10 24-8 **TENDER** MINIMUM RADIUS CURVE 42 CHAINS 156-15 TOTAL 116-8 (WITH SPECIFIED GAUGE WIDENING) B.R. 13

B.R. I.E.

STANDARD CLASS 8. 4-6-2 ENGINE.

BOILER TYPE

TENDER TYPE

BRITISH-CAPROTTI VALVE GEAR.

Original © BRB Residuary Ltd

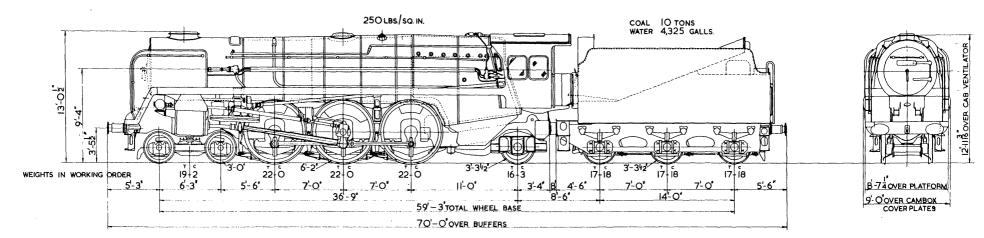
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(visit http://www.barrowmoremrg.co.uk)

SCALE

0 2 4 6 8 10

SL/8A/2



MINIMUM RADIUS CURVE WITHOUT GAUGE WIDENING 6 CHAINS (42 CHAINS DEAD SLOW)

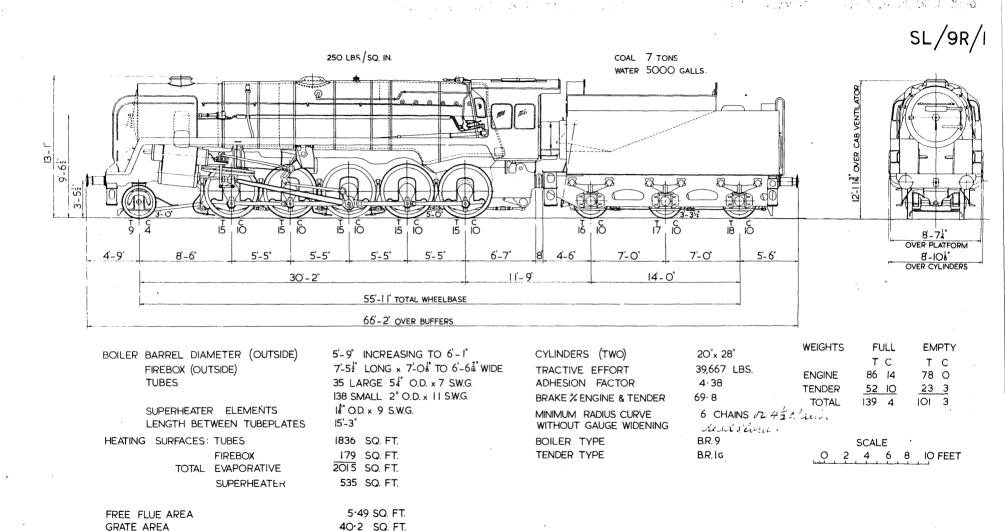
BOILER BARREL DIAMETER (OUTSIDE)	5'-9" INCREASING TO 6'-52"	CYLINDERS (THREE)	18 " x 28"	WEIGHTS	FULL	EMPTY	
FIREBOX (OUTSIDE)	8'-01"LONG x 7'-9" TO 7'-4" WIDE	TRACTIVE EFFORT	39,080 LBS.		T, C.	T. C.	
TUBES	40 LARGE 52 0.D. x 7 S.W.G.	ADHESION FACTOR	3.78	ENGINE	101-5	92-0	
10023	136 SMALL 28 O.D. x 115W.G.	BRAKE % ENGINE & TENDER	51-17	TENDER	53-14	24-8	
SUPERHEATER ELEMENTS	IN O.D. x 9 S.W.G.			TOTAL	154-19	116 -8	
LENGTH BETWEEN TUBEPLATES	17- 0"						
HEATING SURFACES: TUBES	2264 SQ. FT.	BOILER TYPE	B.R. 13				
FIREBOX	226 SQ. FT.	TENDER TYPE	B.R . I.J.				
TOTAL EVAPORATIVE	2490 SQ. FT.				SCALE		
SUPERHEATER	677 SQ. FT.			ي .	2 4 6	вю	

FREE FLUE AREA 6-8 SQ. FT.

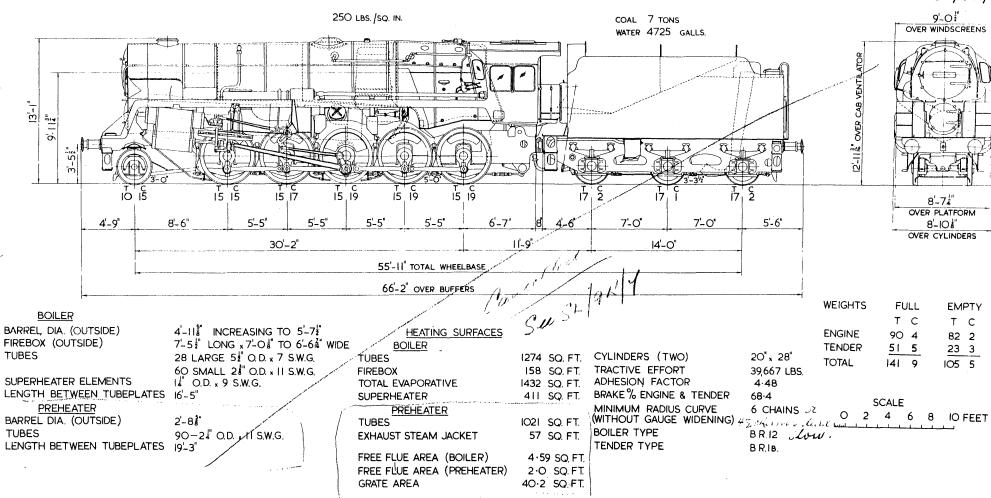
GRATE AREA 48-6 SQ. FT.

STANDARD CLASS 8, 4-6-2 ENGINE.

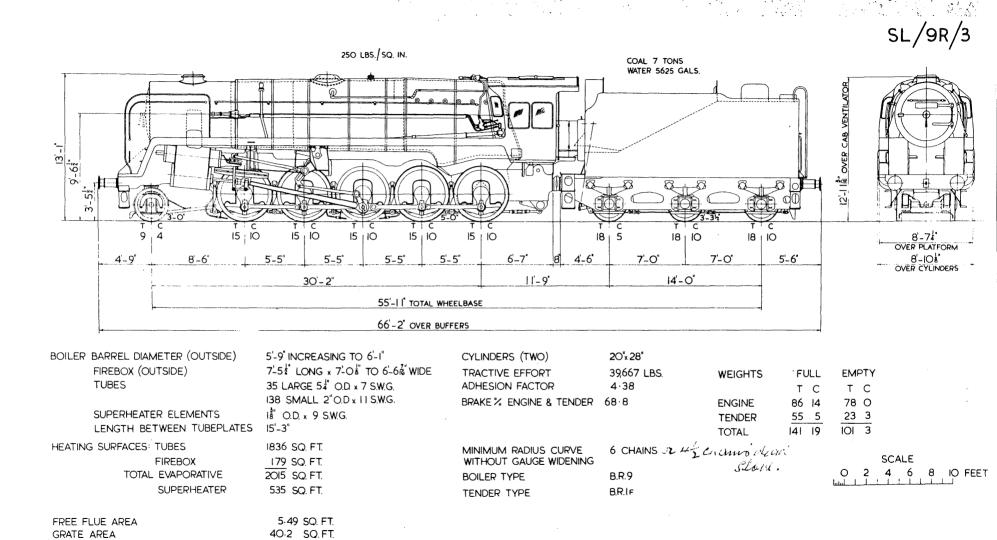
BRITISH-CAPROTTI VALVE GEAR



B.R.STANDARD CLASS 9. 2-10-0 ENGINE



PD CLACE O A IO O COOCTL ENGINE



B.R.STANDARD CLASS 9, 2-10-0 ENGINE

EMPTY

T C

78 O

23 3

250 LBS./SQ. IN. 12". I IR OVER CAB VENTILATOR COAL 9 TONS. WATER 4725 GALLONS. 8-71 OVER PLATFORM 6'-7" 7-0 7-0" 5-6 4'-9" 8'-6" 5'-5" 5'-5' 5'~5" 5'-5" 8-10% OVER CYLINDERS 11-9 14-0 30'-2" 55'-11" TOTAL WHEELBASE

BOILER BARREL DIAMETER (OUTSIDE) FIREBOX (OUTSIDE) TUBES

SUPERHEATER ELEMENTS

LENGTH BETWEEN TUBEPLATES

HEATING SURFACES: TUBES FIREBOX

FREE FLUE AREA

GRATE AREA

TOTAL EVAPORATIVE

SUPERHEATER

535 SQ. FT. 1 5.49 SQ. FT. 40-2 SQ. FT.

16 O.D. x 9 S.W.G.

1836 SQ. FT.

179 SQ. FT.

2015 SQ. FT.

15'-3"

66-2 OVER BUFFERS

5'-9" INCREASING TO 6'-1" CYLINDERS (TWO) 7-51 LONG x 7-01 TO 6-62 WIDE TRACTIVE EFFORT 35 LARGE 54 O.D. x 7 SW.G. ADHESION FACTOR 138 SMALL, -2" O.D. x 11 S.W.G. BRAKE % ENGINE & TENDER MINIMUM RADIUS CURVE WITHOUT GAUGE WIDENING BOILER TYPE TENDER TYPE

ENGINE 4.38 **TENDER** 53 5 69.5 TOTAL 139 19 6 CHAINS or 42 channe

20"x 28"

B.R. 9

39,667 LBS.

WEIGHTS

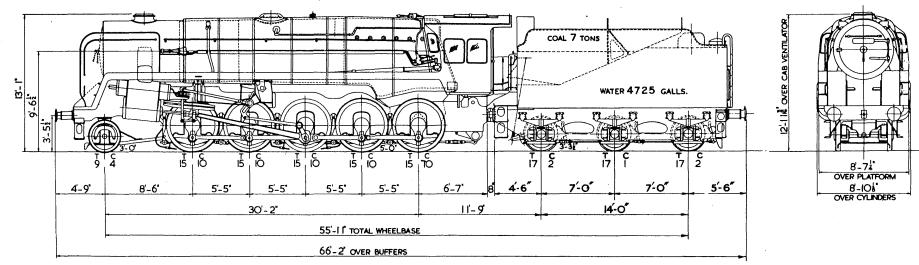
dead slow. SCALE B.R. IC. O 2 4 6 8 IO FEET

B.R.STANDARD CLASS 9. 2-10-0 ENGINE

FULL

TC





BOILER BARREL DIAMETER (OUTSIDE) FIREBOX (OUTSIDE) TUBES

SUPERHEATER ELEMENTS

LENGTH BETWEEN TUBEPLATES
HEATING SURFACES: TUBES

FIREBOX TOTAL EVAPORATIVE

SUPERHEATER

5'-9" INCREASING TO 6'-1"
7'-5\(\) LONG \(\times \) 7'-0\(\) TO 6'-6\(\) WIDE
35 LARGE 5\(\) O.D. \(\times \) 7 SW.G.
138 SMALL 2" O.D. \(\times \) 11 SW.G.
1\(\) 16" O.D. \(\times \) 9 S.W.G.
15'-3"
1836 SQ. FT.

CYLINDERS (TWO)
TRACTIVE EFFORT
ADHESION FACTOR
BRAKE & ENGINE & TENDER
MINIMUM RADIUS CURVE
WITHOUT GAUGE WIDENING
BOILER TYPE
TENDER TYPE

EMPTY WEIGHTS FULL 20'x 28' TC T C 39,667 LBS. 86 14 78 O **ENGINE** 4.38 23 3 IOI 3 **TENDER** 70.25 137 19 TOTAL 6 CHAINS 4元 D、路山

B.R. 9

B.R. IB.

SCALE O 2 4 6 8 IO FEET

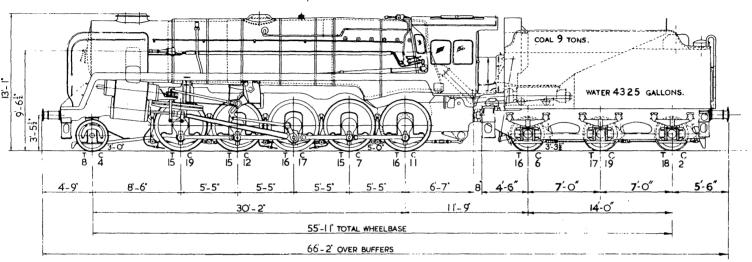
FREE FLUE AREA GRATE AREA 5·49 SQ. FT. 40·2 SQ. FT.

179 SQ. FT.

2015 SQ. FT. 535 SQ. FT.

B.R.STANDARD CLASS 9. 2-10-0 ENGINE





8'-74" OVER PLATFORM 8-108 OVER CYLINDERS

BOILER BARREL DIAMETER (OUTSIDE) FIREBOX (OUTSIDE) **TUBES**

> SUPERHEATER ELEMENTS LENGTH BETWEEN TUBEPLATES

HEATING SURFACES: TUBES

FIREBOX TOTAL EVAPORATIVE SUPERHEATER

FREE FLUE AREA GRATE AREA

5'-9" INCREASING TO 6'-1" 7-51 LONG x 7-01 TO 6-62 WIDE 35 LARGE 54 O.D. x 7 S.W.G. 138 SMALL 2" O.D. x 11 S.W.G. 18 O.D. x 9 S.W.G. 15'-3" 1836 SQ. FT. 179 SQ. FT. 2015 SQ. FT.

535 SQ. FT.

5.49 SQ. FT.

40-2 SQ. FT.

20"x 28" CYLINDERS (TWO) 39,667 LBS TRACTIVE EFFORT ADHESION FACTOR 4.56 BRAKE % ENGINE & TENDER 69.5 MINIMUM RADIUS CURVE 6 CHAINS (OR4 CHAINS DEAD SLOW) WITHOUT GAUGE WIDENING B.R. 9 BOILER TYPE TENDER TYPE

B.R. IK.

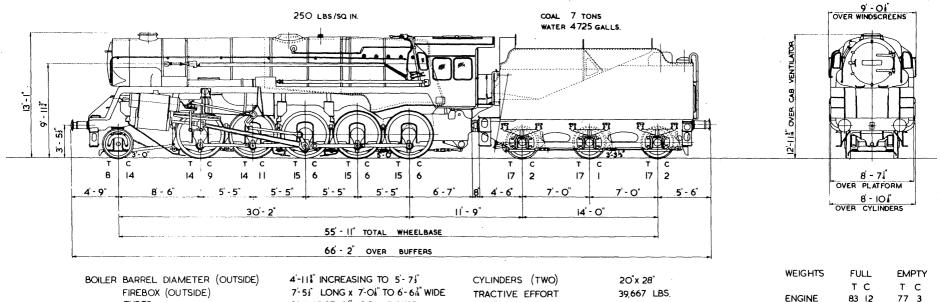
WEIGHTS **FULL EMPTY** T C T C 88 IO **ENGINE** 79 i6 24 13 104 9 **TENDER** 52 7 140 17 TOTAL

SCALE O 2 4 6 8 IO FEET

B.R.STANDARD CLASS 9. 2-10-0 ENGINE

FITTED WITH MECHANICAL STOKER

SL/9R/7.



FIREBOX (OUTSIDE)

TUBES

SUPERHEATER ELEMENTS LENGTH BETWEEN TUBEPLATES

HEATING SURFACES: TUBES

FIREBOX TOTAL EVAPORATIVE

SUPERHEATER

FREE FLUE AREA GRATE AREA

7-51 LONG x 7-01 TO 6-67 WIDE 28 LARGE 51 O.D. x 7 S.W.G.

60 SMALL 21 O.D.x II S.W.G.

14" O.D. x 9 S.W.G.

16-5"

1274 SQ. FT. 158 SQ. FT. 1432 SQ. FT.

411 SQ. FT.

4:59 SQ. FT.

40-2 SQ.FT.

TRACTIVE EFFORT ADHESION FACTOR

BRAKE % ENGINE & TENDER

MINIMUM RADIUS CURVE WITHOUT GAUGE WIDENING

BOILER TYPE TENDER TYPE 72.00% 6 CHAINS (OR 41 CHAINS DEAD SLOW)

B.R.12 B.R. 1B.

4.23

ENGINE 83 12 TENDER 51 5 TOTAL

23 3 100 6 134 17

SCALE

O 2 4 6 8 IO FEET

B.R. CLASS 9. 2-10-0 CROSTI (CONVERSION) ENGINE,

10/1/2