

## Measuring the hole spacing/ measuring hole location using SBKL1 tool

- If necessary, check the specified hole spacing between the two fastening holes from hole center to hole center using a sliding calliper. It must be 145-mm
- Always check the distance –C– (see Table 1) between the center's of the holes and the rail head bottom using the rail hole check gauge type SBKL1.
- Screw SBKL1 into the rail web holes.
- Release the knurled screw, press the movable leg against the rail head underside firmly and then tighten the knurled screw again.
- Cautiously take the SBKL1 off the rail and read the measured value.
- Compare the read dimension with the dimension required according to Table 1. For rail types not shown in the Table 1 chart consult with Pintsch Tiefenbach to get the appropriate values.

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### Note: Too many fastening holes weaken the rail /tolerances



If the dimensions obtained with the BVR17 should deviate by more than  $\pm 0.5\text{mm}$  or, when using the LD-3PY, by more than  $\pm 0.5\text{mm}$  from the value stated in the table, then the holes must be drilled another time. If there are too many holes in a stretch of 6 feet, the strength of the rail could be weakened and is not allowed.

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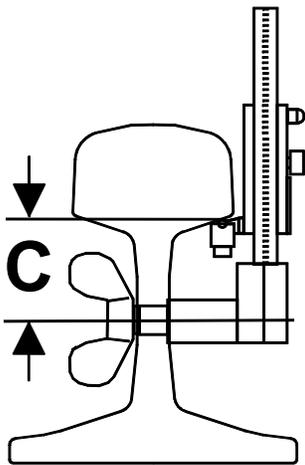
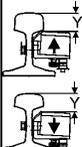
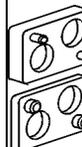
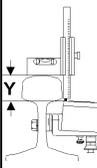


Fig. 1 Measure with rail hole check gauge SBKL 1

Table 1 also states from which distance –C– the DSS sensor must be installed with its top or bottom fastening hole possibilities.

Table 1: Overview of the mounting dimensions for the DSS sensor

1	2	3		4	5		6	7			8	
Identify	Read	Adapt		Measure	Remeasure		Determine	Add			Remeasure	
Rail profile 	Height 	BVR17 	LD-1P 	Height Actual dim. 	SBKL1 	SAHL1 	DSS mounting position 	Spacer plates, also see <b>Error!</b> <b>Reference source not found.</b> 			SAHL2 	
New rail	H [mm]	Stop triangles [mm]	Base plate + jaw profiles	X [mm]	C [mm]	B [mm]		MP A	MP B	[mm]	Y [mm]	
USA / CANADA	ASCE 60	107.95	41.46	> 99.95 ≤ 99.95	61.46	> 79 ≤ 79	bottom holes top holes				> 37 ≤ 37	
	ASCE 75	122.24	36.44	> 114.24 ≤ 114.24	56.44	> 79 ≤ 79	bottom holes top holes				> 37 ≤ 37	
	ASCE 80	127.00	34.51	> 119 ≤ 119	54.51	> 79 ≤ 79	bottom holes top holes			without not possible	> 37 ≤ 37	
	ARA A 90	142.88	35.85	> 134.88 ≤ 134.88	55.85	> 79 ≤ 79	bottom holes top holes			without not possible	> 37 ≤ 37	
	ARA B 100	143.27	29.39	> 135.27 ≤ 135.27	49.39	> 79 ≤ 79	bottom holes top holes				> 37 ≤ 37	
	ASCE 100	146.00	29.39	> 138 ≤ 138	49.39	> 79 ≤ 79	bottom holes top holes				> 37 ≤ 37	
	AREA 100 = 100RE	152.40	31.10	> 144.4 ≤ 144.4	51.10	> 79 ≤ 79	bottom holes top holes		blue	1.5	not possible	> 37 ≤ 37
USA / CANADA	AREA 112 = 112RE	168.28	30.40	> 160.3 ≤ 160.3	50.40	> 79 ≤ 79	bottom holes top holes				without without	> 37 ≤ 37
	AREA 115 = 115RE	168.28	30.50	> 160.3 ≤ 160.3	50.50	> 79 ≤ 79	bottom holes top holes				without without	> 37 ≤ 37
	AREA 119 = 119RE	173.00	25.73	> 165 ≤ 165	45.73	> 79 ≤ 79	bottom holes top holes		red	1.0	without	> 37 ≤ 37
	CB 122	172.21	27.57	> 164.21 ≤ 164.21	47.57	> 79 ≤ 79	bottom holes top holes				without	> 37 ≤ 37
	AREA 132 = 132RE	180.98	29.01	> 173 ≤ 173	49.01	> 79 ≤ 79	bottom holes top holes		green	3.6	0	> 37 ≤ 37
	AREA 133 = 133RE	179.39	26.70	> 171.4 ≤ 171.4	46.70	> 79 ≤ 79	bottom holes top holes		green	3.6		> 37 ≤ 37
	AREA 136 = 136RE	185.70	24.34	> 177.7 ≤ 177.7	44.34	> 79 ≤ 79	bottom holes top holes	grey	red blue	1.2+4.3=5.5 1.5		> 37 ≤ 37
	AREA 140 = 140RE	185.70	23.80	> 177.7 ≤ 177.7	43.80	> 79 ≤ 79	bottom holes top holes	red	red brown	1.0+4.3=5.3 2		> 37 ≤ 37
AREA 141 = 141RE	188.90	21.16	> 180.9 ≤ 180.9	41.16	> 79 ≤ 79	bottom holes top holes	red	red white	1.0+4.3=5.3 4.3		> 37 ≤ 37	

# SBKL 1

Part-No.: 040802

Refer to Wheel Sensor assembly instructions  
for specific rail type dimension distances

