

## 1. Type B (Magnetic Sensor)

### A. Transmission Rotor Gear Formula:

$$\text{F.S. Frequency (Hz)} = \frac{\text{tire revs per mile} \times \text{rear axle ratio} \times \# \text{ of gear teeth} \times 80 \text{ MPH}}{3600 \text{ seconds}}$$

**Example:**  $\frac{500 \times 4.10 \times 16 \times 80}{3600} = 729 \text{ Hertz}$  **Close:** S2, 3, 6, 7, 9

### B. Hub-Mounted Tone Wheel Formula:

$$\text{F.S. Frequency (Hz)} = \frac{\text{tire revs per mile} \times \# \text{ slots} \times 80 \text{ MPH}}{3600 \text{ seconds}}$$

**Example:**  $\frac{500 \times 60 \times 80}{3600} = 667 \text{ Hertz}$  **Close:** S2, 4, 5, 6, 8, 9, 10

## 2. Type F (Square Wave Input)

$$\text{Formula: F.S. Frequency (Hz)} = \frac{\text{PPM} \times 80 \text{ MPH}}{3600 \text{ seconds}}$$

(PPM = Pulses per mile from signal source input)

**Example:**  $\frac{29200 \times 80}{3600} = 649 \text{ Hertz}$  **Close:** S2, 4, 5, 7, 8, 10

Freq.	Switch Closures	Freq.	Switch Closures	Freq.	Switch Closures	Freq.	Switch Closures
450	S3,4,5,6,7,8,10	501	S2,6,7,10	560	S2,5,6,7,9,10	613	S2,4,6,7
451	S3,4,5,6,7,8,10	502	S2,6,7,9	561	S2,5,6,7,8	614	S2,4,6,7,10
452	S3,4,5,6,7,8,9	503	S2,6,7,9	562	S2,5,6,7,8	615	S2,4,6,7,10
453	S3,4,5,6,7,8,9	504	S2,6,7,9,10	563	S2,5,6,8,9,10	616	S2,4,6,7,9
454	S3,4,5,6,7,8,9,10	505	S2,6,7,8	564	S2,5,6,7,8,10	617	S2,4,6,7,9,10
455	S3,4,5,6,7,8,9,10	506	S2,6,7,8	565	S2,5,6,7,8,10	618	S2,4,6,7,9,10
456	S2	507	S2,6,7,8,10	566	S2,5,6,7,8,9	619	S2,4,6,7,8
457	S2,10	508	S2,6,7,8,10	567	S2,5,6,7,8,9	620	S2,4,6,7,8
458	S2,10	509	S2,6,7,8,9	568	S2,5,6,7,8,9,10	621	S2,4,6,7,8,10
459	S2,9	510	S2,6,7,8,9	569	S2,4	622	S2,4,6,7,8,10
460	S2,9	511	S2,6,7,8,9,10	570	S2,4	623	S2,4,6,7,8,9
461	S2,9,10	512	S2,5	571	S2,4,10	624	S2,4,6,7,8,9,10
462	S2,9,10	513	S2,5	572	S2,4,10	625	S2,4,6,7,8,9,10
463	S2,8	514	S2,5,10	573	S2,4,9	626	S2,4,5
464	S2,8,10	515	S2,5,10	576	S2,4,8	627	S2,4,5
465	S2,8,10	516	S2,5,9	577	S2,4,8	628	S2,4,5,10
466	S2,8,9	525	S2,5,8,9,10	578	S2,4,8,10	629	S2,4,5,10
467	S2,8,9	526	S2,5,8,9,10	579	S2,4,8,10	630	S2,4,5,9
468	S2,8,9,10	527	S2,5,7	580	S2,4,8,9	631	S2,4,5,9
469	S2,8,9,10	528	S2,5,7,10	581	S2,4,8,9	632	S2,4,5,9,10
470	S2,7	529	S2,5,7,10	582	S2,4,8,9,10	633	S2,4,5,8
471	S2,7	530	S2,5,7,9	583	S2,4,8,9,10	634	S2,4,5,8
472	S2,7,10	531	S2,5,7,9	584	S2,4,7	635	S2,4,5,8,10
473	S2,7,9	532	S2,5,7,9,10	585	S2,4,7,10	636	S2,4,5,8,10
474	S2,7,9	533	S2,5,7,9,10	586	S2,4,7,10	637	S2,4,5,8,9
475	S2,7,9,10	534	S2,5,7,8	587	S2,4,7,9	638	S2,4,5,8,9
476	S2,7,9,10	535	S2,5,7,8	588	S2,4,7,9	639	S2,4,5,8,9,10
477	S2,7,8	536	S2,5,7,8,10	589	S2,4,7,9,10	640	S2,4,5,7
478	S2,7,8	537	S2,5,7,8,9	590	S2,4,7,9,10	641	S2,4,5,7
479	S2,7,8,10	538	S2,5,7,8,9	591	S2,4,7,8	642	S2,4,5,7,10
480	S2,7,8,9	539	S2,5,7,8,9,10	592	S2,4,7,8,10	643	S2,4,5,7,10
481	S2,7,8,9	540	S2,5,7,8,9,10	593	S2,4,7,8,10	644	S2,4,5,7,9
482	S2,7,8,9,10	541	S2,5,6	594	S2,4,7,8,9	645	S2,4,5,7,9
483	S2,7,8,9,10	542	S2,5,6	595	S2,4,7,8,9	646	S2,4,5,7,9,10
484	S2,6	543	S2,5,6,10	596	S2,4,7,8,9,10	647	S2,4,5,7,9,10
485	S2,6	544	S2,5,6,9	597	S2,4,7,8,9,10	648	S2,4,5,7,8
486	S2,6,10	545	S2,5,6,9	598	S2,4,6	649	S2,4,5,7,8,10
487	S2,6,10	546	S2,5,6,9,10	599	S2,4,6	650	S2,4,5,7,8,10
488	S2,6,9,10	547	S2,5,6,9,10	600	S2,4,6,10	651	S2,4,5,7,8,9
489	S2,6,9,10	548	S2,5,6,8	601	S2,4,6,9	652	S2,4,5,7,8,9
490	S2,6,8	549	S2,5,6,8	602	S2,4,6,9	653	S2,4,5,7,8,9,10
491	S2,6,8	550	S2,5,6,8,10	603	S2,4,6,9,10	654	S2,4,5,7,8,9,10
492	S2,6,8,10	551	S2,5,6,8,10	604	S2,4,6,9,10	655	S2,4,5,6
493	S2,6,8,10	552	S2,5,6,8,9	605	S2,4,6,8	656	S2,4,5,6,10
494	S2,6,8,9	553	S2,5,6,8,9,10	606	S2,4,6,8	657	S2,4,5,6,10
495	S2,6,8,9,10	554	S2,5,6,7	607	S2,4,6,8,10	658	S2,4,5,6,9
496	S2,6,8,9,10	555	S2,5,6,7	608	S2,4,6,8,9	659	S2,4,5,6,9
497	S2,6,9	556	S2,5,6,7,10	609	S2,4,6,8,9	660	S2,4,5,6,9,10
498	S2,6,7	557	S2,5,6,7,10	610	S2,4,6,8,9,10	661	S2,4,5,6,9,10
499	S2,6,7	558	S2,5,6,7,9	611	S2,4,6,8,9,10	662	S2,4,5,6,8
500	S2,6,7,10	559	S2,5,6,7,9,10	612	S2,4,6,7	663	S2,4,5,6,8

Freq.	Switch Closures	Freq.	Switch Closures	Freq.	Switch Closures	Freq.	Switch Closures
664	S2,4,5,6,8,10	739	S2,3,6,7,8,9,10	814	S2,3,4,7,10	889	S2,3,4,5,6,8
665	S2,4,5,6,8,9	740	S2,3,5	815	S2,3,4,7,9	890	S2,3,4,5,6,8
666	S2,4,5,6,8,9	741	S2,3,5	816	S2,3,4,7,9,10	891	S2,3,4,5,6,8,10
667	S2,4,5,6,8,9,10	742	S2,3,5,10	817	S2,3,4,7,9,10	892	S2,3,4,5,6,8,10
668	S2,4,5,6,8,9,10	743	S2,3,5,10	818	S2,3,4,7,8	893	S2,3,4,5,6,8,9
669	S2,4,5,6,7	744	S2,3,5,9	819	S2,3,4,7,8	894	S2,3,4,5,6,8,9
670	S2,4,5,6,7	745	S2,3,5,9,10	820	S2,3,4,7,8,10	895	S2,3,4,5,6,8,9,10
671	S2,4,5,6,7,10	746	S2,3,5,9,10	821	S2,3,4,7,8,10	896	S2,3,4,5,6,7
672	S2,4,5,6,7,9	747	S2,3,5,8	822	S2,3,4,7,8,9	897	S2,3,4,5,6,7
673	S2,4,5,6,7,9	748	S2,3,5,8	823	S2,3,4,7,8,9	898	S2,3,4,5,6,7,10
674	S2,4,5,6,7,9,10	749	S2,3,5,8,10	824	S2,3,4,7,8,9,10	899	S2,3,4,5,6,7,10
675	S2,4,5,6,7,9,10	750	S2,3,5,8,10	825	S2,3,4,6	900	S2,3,4,5,6,7,9
676	S2,4,5,6,7,8	751	S2,3,5,8,9	826	S2,3,4,6	901	S2,3,4,5,6,7,9
677	S2,4,5,6,7,8	752	S2,3,5,8,9,10	827	S2,3,4,6,10	902	S2,3,4,5,6,7,9,10
678	S2,4,5,6,7,8,10	753	S2,3,5,8,9,10	828	S2,3,4,6,10	903	S2,3,4,5,6,7,9,10
679	S2,4,5,6,7,8,10	754	S2,3,5,7	829	S2,3,4,6,9	904	S2,3,4,5,6,7,8
680	S2,4,5,6,7,8,9	755	S2,3,5,7	830	S2,3,4,6,9	905	S2,3,4,5,6,7,10
681	S2,4,5,6,7,8,9,10	756	S2,3,5,7,10	831	S2,3,4,6,9,10	906	S2,3,4,5,6,7,8,10
682	S2,4,5,6,7,8,9,10	757	S2,3,5,7,10	832	S2,3,4,6,8	907	S2,3,4,5,6,7,8,9
683	S2,3	758	S2,3,5,7,9	833	S2,3,4,6,8	908	S2,3,4,5,6,7,9
684	S2,3	759	S2,3,5,7,9	834	S2,3,4,6,8,10	909	S2,3,4,5,6,7,8,9,10
685	S2,3,10	760	S2,3,5,7,9,10	835	S2,3,4,6,8,10	910	S2,3,4,5,6,7,8,9,10
686	S2,3,10	761	S2,3,5,7,8	836	S2,3,4,6,8,9	911	S1
687	S2,3,9	762	S2,3,5,7,8	837	S2,3,4,6,8,9	912	S1,10
688	S2,3,9,10	763	S2,3,5,7,8,10	838	S2,3,4,6,8,9,10	913	S1,10
689	S2,3,9,10	764	S2,3,5,7,8,10	839	S2,3,4,6,8,9,10	914	S1,9
690	S2,3,8	765	S2,3,5,7,8,9	840	S2,3,4,6,7	915	S1,9
691	S2,3,8	766	S2,3,5,7,8,9	841	S2,3,4,6,7,10	916	S1,9,10
692	S2,3,8,10	767	S2,3,5,7,8,9,10	842	S2,3,4,6,7,10	917	S1,9,10
693	S2,3,8,10	768	S2,3,5,6	843	S2,3,4,6,7,9	918	S1,8
694	S2,3,8,9	769	S2,3,5,6	844	S2,3,4,6,7,9	919	S1,8
695	S2,3,8,9	770	S2,3,5,6,10	845	S2,3,4,6,7,9,10	920	S1,8,10
696	S2,3,8,9,10	771	S2,3,5,6,10	846	S2,3,4,6,7,9,10	921	S1,8,9
697	S2,3,7	772	S2,3,5,6,9	847	S2,3,4,6,7,8	922	S1,8,9
698	S2,3,7	773	S2,3,5,6,9	848	S2,3,4,6,7,8,10	923	S1,8,9,10
699	S2,3,7,10	774	S2,3,5,6,9,10	849	S2,3,4,6,7,8,10	924	S1,8,9,10
700	S2,3,7,10	775	S2,3,5,6,9,10	850	S2,3,4,6,7,8,9	925	S1,7
701	S2,3,7,9	776	S2,3,5,6,8	851	S2,3,4,6,7,8,9	926	S1,
702	S2,3,7,9	777	S2,3,5,6,8,10	852	S2,3,4,6,7,8,9,10	927	S1,7,10
703	S2,3,7,9,10	778	S2,3,5,6,8,10	853	S2,3,4,6,7,8,9,10	928	S1,7,9
704	S2,3,7,8	779	S2,3,5,6,8,9	854	S2,3,4,5	929	S1,7,9
705	S2,3,7,8	780	S2,3,5,6,8,9	855	S2,3,4,5	930	S1,7,9,10
706	S2,3,7,8,10	781	S2,3,5,6,8,9,10	856	S2,3,4,5,10	931	S1,7,9,10
707	S2,3,7,8,10	782	S2,3,5,6,8,9,10	857	S2,3,4,5,9	932	S1,7,8
708	S2,3,7,8,9	783	S2,3,5,6,7	858	S2,3,4,5,9	933	S1,7,8
709	S2,3,7,8,9	784	S2,3,5,6,7,10	859	S2,3,4,5,9,10	934	S1,7,8,10
710	S2,3,7,8,9,10	785	S2,3,5,6,7,10	860	S2,3,4,5,9,10	935	S1,7,8,9,10
711	S2,3,7,8,9,10	786	S2,3,5,6,7,9	861	S2,3,4,5,8	936	S1,7,8,9
712	S2,3,6	787	S2,3,5,6,7,9	862	S2,3,4,5,8	937	S1,7,8,9,10
713	S2,3,6,10	788	S2,3,5,6,7,9,10	863	S2,3,4,5,8,10	938	S1,7,8,9,10
714	S2,3,6,10	789	S2,3,5,6,7,9,10	864	S2,3,4,5,8,9	939	S1,6
715	S2,3,6,9	790	S2,3,5,6,7,8	865	S2,3,4,5,8,9	940	S1,6
716	S2,3,6,9	791	S2,3,5,6,7,8	866	S2,3,4,5,8,9,10	941	S1,6,10
717	S2,3,6,9,10	792	S2,3,5,6,7,8,9,10	867	S2,3,4,5,8,9,10	942	S1,6,10
718	S2,3,6,9,10	793	S2,3,5,6,7,8,9	868	S2,3,4,5,7	943	S1,6,9
719	S2,3,6,8	794	S2,3,5,6,7,8,9	869	S2,3,4,5,7	944	S1,6,9,10
720	S2,3,6,8,10	795	S2,3,5,6,7,8,9,10	870	S2,3,4,5,7,10	945	S1,6,9,10
721	S2,3,6,8,10	796	S2,3,5,6,7,8,9,10	871	S2,3,4,5,7,10	946	S1,6,8
722	S2,3,6,8,9	797	S2,3,4	872	S2,3,4,5,7,9	947	S1,6,8
723	S2,3,6,8,9	798	S2,3,4	873	S2,3,4,5,7,9,10	948	S1,6,8,10
724	S2,3,6,8,9,10	799	S2,3,4,10	874	S2,3,4,5,7,9,10	949	S1,6,8,10
725	S2,3,6,8,9,10	800	S2,3,4,9	875	S2,3,4,5,7,8	950	S1,6,8,9
726	S2,3,6,7	801	S2,3,4,9	876	S2,3,4,5,7,8	951	S1,6,8,9
727	S2,3,6,7	802	S2,3,4,9,10	877	S2,3,4,5,7,8,10	952	S1,6,8,9,10
728	S2,3,6,7,10	803	S2,3,4,9,10	878	S2,3,4,5,7,8,10	953	S1,6,7
729	S2,3,6,7,9	804	S2,3,4,8	879	S2,3,4,5,7,8,9	954	S1,6,7
730	S2,3,6,7,9	805	S2,3,4,8	880	S2,3,4,5,7,8,9,10	955	S1,6,7,10
731	S2,3,6,7,9,10	806	S2,3,4,8,10	881	S2,3,4,5,7,8,9,10	956	S1,6,7,10
732	S2,3,6,7,9,10	807	S2,3,4,8,10	882	S2,3,4,5,6	957	S1,6,7,9
733	S2,3,6,7,8	808	S2,3,4,8,9	883	S2,3,4,5,6	958	S1,6,7,9
734	S2,3,6,7,8	809	S2,3,4,8,9,10	884	S2,3,4,5,6,10	959	S1,6,7,9,10
735	S2,3,6,7,8,10	810	S2,3,4,8,9,10	885	S2,3,4,5,6,10	960	S1,6,7,8
736	S2,3,6,7,8,9	811	S2,3,4,7	886	S2,3,4,5,6,9	961	S1,6,7,8
737	S2,3,6,7,8,9	812	S2,3,4,7	887	S2,3,4,5,6,9	962	S1,6,7,8,10
738	S2,3,6,7,8,9,10	813	S2,3,4,7,10	888	S2,3,4,5,6,9,10	963	S1,6,7,8,10

Freq.	Switch Closures	Freq.	Switch Closures	Freq.	Switch Closures	Freq.	Switch Closures
964	S1,6,7,8,9	1039	S1,4,7	1114	S1,4,5,6,9	1189	S1,3,6,7,8,10
965	S1,6,7,8,9	1040	S1,4,7,10	1115	S1,4,5,6,9,10	1190	S1,3,6,7,8,10
966	S1,6,7,8,9,10	1041	S1,4,7,10	1116	S1,4,5,6,9,10	1191	S1,3,6,7,8,9
967	S1,6,7,8,9,10	1042	S1,4,7,9	1117	S1,4,5,6,8	1192	S1,3,6,7,8,9,10
968	S1,5	1043	S1,4,7,9	1118	S1,4,5,6,8	1193	S1,3,6,7,8,9,10
969	S1,5,10	1044	S1,4,7,9,10	1119	S1,4,5,6,8,10	1194	S1,3,6,7,9
970	S1,5,10	1045	S1,4,7,9,10	1120	S1,4,5,6,8,9	1195	S1,3,5
971	S1,5,9	1046	S1,4,7,8	1121	S1,4,5,6,8,9	1196	S1,3,5
972	S1,5,9	1047	S1,4,7,8	1122	S1,4,5,6,8,9,10	1197	S1,3,5,10
973	S1,5,9,10	1048	S1,4,7,8,10	1123	S1,4,5,6,8,9,10	1198	S1,3,5,10
974	S1,5,9,10	1049	S1,4,7,8,9	1124	S1,4,5,6,7	1199	S1,3,5,9
975	S1,5,8	1050	S1,4,7,8,9	1125	S1,4,5,6,7	1200	S1,3,5,9,10
976	S1,5,8,10	1051	S1,4,7,8,9,10	1126	S1,4,5,6,7,10	1201	S1,3,5,9,10
977	S1,5,8,10	1052	S1,4,7,8,9,10	1127	S1,4,5,6,7,10	1202	S1,3,5,8
978	S1,5,8,9	1053	S1,4,6	1128	S1,4,5,6,7,9	1203	S1,3,5,8
979	S1,5,8,9	1054	S1,4,6	1129	S1,4,5,6,7,9,10	1204	S1,3,5,8,10
980	S1,5,8,9,10	1055	S1,4,6,10	1130	S1,4,5,6,7,9,10	1205	S1,3,5,8,10
981	S1,5,8,9,10	1056	S1,4,6,9	1131	S1,4,5,6,7,8	1206	S1,3,5,8,9
982	S1,5,7	1057	S1,4,6,9	1132	S1,4,5,6,7,8	1207	S1,3,5,8,9
983	S1,5,7	1058	S1,4,6,9,10	1133	S1,4,5,6,7,8,10	1208	S1,3,5,8,9,10
984	S1,5,7,10	1059	S1,4,6,9,10	1134	S1,4,5,6,7,8,10	1209	S1,3,5,7
985	S1,5,7,9	1060	S1,4,6,8	1135	S1,4,5,6,7,8,9	1210	S1,3,5,7
986	S1,5,7,9	1061	S1,4,6,8	1136	S1,4,5,6,7,8,10	1211	S1,3,5,7,10
987	S1,5,7,9,10	1062	S1,4,6,8,10	1137	S1,4,5,6,7,8,9,10	1212	S1,3,5,7,10
988	S1,5,7,9,10	1063	S1,4,6,8,10	1138	S1,3	1213	S1,3,5,7,9
989	S1,5,7,8	1064	S1,4,6,8,9	1139	S1,3	1214	S1,3,5,7,9
990	S1,5,7,8	1065	S1,4,6,8,9,10	1140	S1,3,10	1215	S1,3,5,7,9,10
991	S1,5,7,8,10	1066	S1,4,6,8,9,10	1141	S1,3,10	1216	S1,3,4,6,7,10
992	S1,5,7,8,9	1067	S1,4,6,7	1142	S1,3,9	1217	S1,3,5,7,8
993	S1,5,7,8,9	1068	S1,4,6,7	1143	S1,3,9	1218	S1,3,5,7,8,10
994	S1,5,7,8,9,10	1069	S1,4,6,7,10	1144	S1,3,9,10	1219	S1,3,5,7,8,10
995	S1,5,7,8,9,10	1070	S1,4,6,7,10	1145	S1,3,8	1220	S1,3,5,7,8,9
996	S1,5,6	1071	S1,4,6,7,9	1146	S1,3,8	1221	S1,3,5,7,8,9
997	S1,5,6	1072	S1,4,6,7,9,10	1147	S1,3,8,10	1222	S1,3,5,7,8,9,10
998	S1,5,6,10	1073	S1,4,6,7,9,10	1148	S1,3,8,10	1223	S1,3,5,7,8,9,10
999	S1,5,6,10	1074	S1,4,6,7,8	1149	S1,3,8,9	1224	S1,3,5,6
1000	S1,5,6,9	1075	S1,4,6,7,8	1150	S1,3,8,9	1225	S1,3,5,6,10
1001	S1,5,6,9,10	1076	S1,4,6,7,8,10	1151	S1,3,8,9,10	1226	S1,3,5,6,10
1002	S1,5,6,9,10	1077	S1,4,6,7,8,10	1152	S1,3,7	1227	S1,3,5,6,9
1003	S1,5,6,8	1078	S1,4,6,7,8,9	1153	S1,3,7	1228	S1,3,5,6,9
1004	S1,5,6,8	1079	S1,4,6,7,8,9	1154	S1,3,7,10	1229	S1,3,5,6,9,10
1005	S1,5,6,8,10	1080	S1,4,6,7,8,9,10	1155	S1,3,7,10	1230	S1,3,5,6,9,10
1006	S1,5,6,8,10	1081	S1,4,5	1156	S1,3,7,9	1231	S1,3,5,6,8
1007	S1,5,6,8,9	1082	S1,4,5	1157	S1,3,7,9	1232	S1,3,5,6,8,10
1008	S1,5,6,8,9,10	1083	S1,4,5,10	1158	S1,3,7,9,10	1233	S1,3,5,6,8,10
1009	S1,5,6,8,9,10	1084	S1,4,5,10	1159	S1,3,7,9,10	1234	S1,3,5,6,8,9
1010	S1,4,5,8,10	1085	S1,4,5,9	1160	S1,3,7,8	1235	S1,3,5,6,8,9
1011	S1,5,6,7	1086	S1,4,5,9	1161	S1,3,7,8,10	1236	S1,3,5,6,8,9,10
1012	S1,5,6,7,10	1087	S1,4,5,9,10	1162	S1,3,7,8,10	1237	S1,3,5,6,8,9,10
1013	S1,5,6,7,10	1088	S1,4,5,8	1163	S1,3,7,8,9	1238	S1,3,5,6,7
1014	S1,5,6,7,9	1089	S1,4,5,8	1164	S1,3,7,8,9	1239	S1,3,5,6,7
1015	S1,5,6,7,9	1090	S1,4,5,8,10	1165	S1,3,7,8,9,10	1240	S1,3,5,6,7,10
1016	S1,5,6,7,9,10	1091	S1,4,5,8,10	1166	S1,3,7,8,9,10	1241	S1,3,6,7,9
1017	S1,5,6,7,8	1092	S1,4,5,8,9	1167	S1,3,6	1242	S1,3,5,6,7,9
1018	S1,5,6,7,8	1093	S1,4,5,8,9	1168	S1,3,6,10	1243	S1,3,5,6,7,10
1019	S1,5,6,7,8,10	1094	S1,4,5,8,9,10	1169	S1,3,6,10	1244	S1,3,5,6,7,10
1020	S1,5,6,7,8,10	1095	S1,4,5,8,9,10	1170	S1,3,6,9	1245	S1,3,5,6,7,8
1021	S1,5,6,7,8,9	1096	S1,4,5,7	1171	S1,3,6,9	1246	S1,3,5,6,7,8
1022	S1,5,6,7,8,9	1097	S1,4,5,7,10	1172	S1,3,6,9,10	1247	S1,3,5,6,7,8,10
1023	S1,5,6,7,8,9,10	1098	S1,4,5,7,10	1173	S1,3,6,9,10	1248	S1,3,5,6,7,8,9
1024	S1,4	1099	S1,4,5,7,9	1174	S1,3,6,8	1249	S1,3,5,6,7,8,9
1025	S1,4	1100	S1,4,5,7,9	1175	S1,3,6,8	1250	S1,3,5,6,7,8,9,10
1026	S1,4,10	1101	S1,4,5,7,9,10	1176	S1,3,6,8,10	1251	S1,3,5,6,7,8,9,10
1027	S1,4,10	1102	S1,4,5,7,9,10	1177	S1,3,6,8,9	1252	S1,3,4
1028	S1,4,9	1103	S1,4,5,7,8	1178	S1,3,6,8,9	1253	S1,3,4,10
1029	S1,4,9	1104	S1,4,5,7,8,10	1179	S1,3,6,8,9,10	1254	S1,3,4,6,9
1030	S1,4,9,10	1105	S1,4,5,7,8,10	1180	S1,3,6,8,9,10	1255	S1,3,4,10
1031	S1,4,9,10	1106	S1,4,5,7,8,9	1181	S1,3,6,7	1256	S1,3,4,9
1032	S1,4,8	1107	S1,4,5,7,8,9	1182	S1,3,6,7	1257	S1,3,4,9,10
1033	S1,4,8,10	1108	S1,4,5,7,8,9,10	1183	S1,3,6,7,10	1258	S1,3,4,9,10
1034	S1,4,8,10	1109	S1,4,5,7,8,9,10	1184	S1,3,6,7,9	1259	S1,3,4,8
1035	S1,4,8,9	1110	S1,4,5,6	1185	S1,3,6,7,9,10	1260	S1,3,4,8
1036	S1,4,8,9	1111	S1,4,5,6	1186	S1,3,6,7,9,10	1261	S1,3,4,8,10
1037	S1,4,8,9,10	1112	S1,4,5,6,10	1187	S1,3,6,7,8	1262	S1,3,4,8,10
1038	S1,4,8,9,10	1113	S1,4,5,6,9	1188	S1,3,6,7,8	1263	S1,3,4

Freq.	Switch Closures	Freq.	Switch Closures	Freq.	Switch Closures	Freq.	Switch Closures
1264	S1,3,4,8,9	1311	S1,3,4,5,10	1358	S1,3,4,5,6,7,8	1405	S1,2,6,8,9
1265	S1,3,4,8,9,10	1312	S1,3,4,5,9	1359	S1,3,4,5,6,7,8,10	1406	S1,2,6,8,9
1266	S1,3,4,8,9,10	1313	S1,3,4,5,9	1360	S1,3,4,5,6,7,8,10	1407	S1,2,6,8,9,10
1267	S1,3,4,7	1314	S1,3,4,5,9,10	1361	S1,3,4,5,6,7,8,9	1408	S1,2,6,7
1268	S1,3,4,7	1315	S1,3,4,5,9,10	1362	S1,3,4,5,6,7,8,9	1409	S1,2,6,7
1269	S1,3,4,7,10	1316	S1,3,4,5,8	1363	S1,3,4,5,6,7,8,9,10	1410	S1,2,6,7,10
1270	S1,3,4,7,9	1317	S1,3,4,5,8	1364	S1,3,4,5,6,7,8,9,10	1411	S1,2,6,7,10
1271	S1,3,4,7,9	1318	S1,3,4,5,8,10	1365	S1,2	1412	S1,2,6,7,9
1272	S1,3,4,7,9,10	1319	S1,3,4,5,8,10	1366	S1,2	1413	S1,2,6,7,9
1273	S1,3,4,7,8	1320	S1,3,4,5,8,9	1367	S1,3,4,5,6,7,9,10	1414	S1,2,6,7,9,10
1274	S1,3,4,7,8	1321	S1,3,4,5,8,9,10	1368	S1,2,10	1415	S1,2,6,7,9,10
1275	S1,3,4,7,8,10	1322	S1,3,4,5,8,9,10	1369	S1,2,9	1416	S1,2,6,7,8
1276	S1,3,4,7,8,10	1323	S1,3,4,5,7	1370	S1,2,9	1417	S1,2,6,7,8,10
1277	S1,3,4,7,8,9	1324	S1,3,4,5,7	1371	S1,2,9,10	1418	S1,2,6,7,8,10
1278	S1,3,4,7,8,9	1325	S1,3,4,5,7,10	1372	S1,2,9,10	1419	S1,2,6,7,8,9
1279	S1,3,4,7,8,9,10	1326	S1,3,4,5,7,10	1373	S1,2,8	1420	S1,2,6,7,8,9
1280	S1,3,4,6	1327	S1,3,4,5,7,9	1374	S1,2,8	1421	S1,2,6,7,8,9,10
1281	S1,3,4,6	1328	S1,3,4,5,7,9,10	1375	S1,2,8,10	1422	S1,2,6,7,8,9,10
1282	S1,3,4,9,6,10	1329	S1,3,4,5,7,9,10	1376	S1,2,8,9	1423	S1,2,5
1283	S1,3,4,6,10	1330	S1,3,4,5,7,8	1377	S1,2,8,9	1424	S1,2,5,10
1284	S1,3,4,6,9	1331	S1,3,4,5,7,8	1378	S1,2,8,9,10	1425	S1,2,5,10
1285	S1,3,4,6,9	1332	S1,3,4,5,7,8,10	1379	S1,2,8,9,10	1426	S1,2,5,9
1286	S1,3,4,6,9,10	1333	S1,3,4,5,7,8,10	1380	S1,2,7	1427	S1,2,5,9
1287	S1,3,4,6,9,10	1334	S1,3,4,5,7,8,9	1381	S1,2,7	1428	S1,2,5,9,10
1288	S1,3,4,6,8	1335	S1,3,4,5,7,8,9	1382	S1,2,7,10	1429	S1,2,5,9,10
1289	S1,3,4,6,8,10	1336	S1,3,4,5,7,8,9,10	1383	S1,2,7,10	1430	S1,2,5,8
1290	S1,3,4,6,8,10	1337	S1,3,4,5,6	1384	S1,2,7,9	1431	S1,2,5,8
1291	S1,3,4,6,8,9	1338	S1,3,4,5,6	1385	S1,2,7,9,10	1432	S1,2,5,8,10
1292	S1,3,4,6,8,9	1339	S1,3,4,5,6,10	1386	S1,2,7,9,10	1433	S1,2,5,8,9
1293	S1,3,4,6,8,9,10	1340	S1,3,4,5,6,10	1387	S1,2,7,8	1434	S1,2,5,8,9
1294	S1,3,4,6,8,9,10	1341	S1,3,4,5,6,9	1388	S1,2,7,8	1435	S1,2,5,8,9,10
1295	S1,3,4,6,7	1342	S1,3,4,5,6,9	1389	S1,2,7,8,10	1436	S1,2,5,8,9,10
1296	S1,3,4,6,7,10	1343	S1,3,4,5,6,9,10	1390	S1,2,7,8,10	1437	S1,2,5,7
1297	S1,3,4,6,7,10	1344	S1,3,4,5,6,8	1391	S1,2,7,8,9	1438	S1,2,5,7
1298	S1,3,4,6,7,9	1345	S1,3,4,5,6,8	1392	S1,2,7,8,9,10	1439	S1,2,5,7,10
1299	S1,3,4,6,7,9	1346	S1,3,4,5,6,8,10	1393	S1,2,7,8,9,10	1440	S1,2,5,7,9
1300	S1,3,4,6,7,9,10	1347	S1,3,4,5,6,8,10	1394	S1,2,6	1441	S1,2,5,7,9
1301	S1,3,4,6,7,9,10	1348	S1,3,4,5,6,8,9	1395	S1,2,6	1442	S1,2,5,7,9,10
1302	S1,3,4,6,7,8	1349	S1,3,4,5,6,8,9	1396	S1,2,6,10	1443	S1,2,5,7,9,10
1303	S1,3,4,6,7,8	1350	S1,3,4,5,6,8,9,10	1397	S1,2,6,10	1444	S1,2,5,7,8
1304	S1,3,4,6,7,8,10	1351	S1,3,4,5,6,8,9,10	1398	S1,2,6,9	1445	S1,2,5,7,8
1305	S1,3,4,6,7,8,9	1352	S1,3,4,5,6,7	1399	S1,2,6,9	1446	S1,2,5,7,8,10
1306	S1,3,4,6,7,8,9	1353	S1,3,4,5,6,7,10	1400	S1,2,6,9,10	1447	S1,2,5,7,8,10
1307	S1,3,4,6,7,8,9,10	1354	S1,3,4,5,6,7,10	1401	S1,2,6,8	1448	S1,2,5,7,8,9
1308	S1,3,4,6,7,8,9,10	1355	S1,3,4,5,6,7,9	1402	S1,2,6,8	1449	S1,2,5,7,8,9,10
1309	S1,3,4,5	1356	S1,3,4,5,6,7,9	1403	S1,2,6,8,10	1450	S1,2,5,7,8,9,10
1310	S1,3,4,5	1357	S1,3,4,5,6,7,9,10	1404	S1,2,6,8,10		

### 3. Type Q (Square Wave Input)

**Formula:** F.S. Frequency (Hz) =  $\frac{\text{PPM} \times 80 \text{ MPH}}{3600 \text{ seconds}}$

(PPM = Pulses per mile from signal source input)

**Example:**  $\frac{29200 \times 80}{3600} = 649 \text{ Hertz}$     **Close:** S2, 4, 5, 7, 8, 10

### 4. Type S (Sender Generator Input)

**Formula:** F.S. Frequency (Hz) =  $\frac{\text{*transmission revs per mile} \times \text{pulses per rev of sender} \times 80 \text{ MPH}}{3600 \text{ seconds}}$

↓

\*transmission revs per mile =  $\frac{\text{tire revs per mile} \times \text{rear axle ratio} \times \text{\# of drive gear teeth}}{\text{\# of driven gear teeth}}$

**Example:**  $\frac{500 \times 4.10 \times 16 \times 80}{3600} = 729 \text{ Hertz}$     **Close:** S2, 3, 6, 7, 9

Freq.	Switch Closures	Freq.	Switch Closures	Freq.	Switch Closures	Freq.	Switch Closures
20.0	1,2,3,4,5,6,7,8,9,10	30.4	1,2,3,4,7,9,10	46.1	1,2,4,5,6,7,8	70.1	1,2,8,10
20.2	1,2,3,4,5,6,7,8,9	30.7	1,2,3,4,7,9	46.6	1,2,4,5,6,7,9	70.8	1,2,10
20.4	1,2,3,4,5,6,7,8,10	31.0	1,2,3,4,7	47.1	1,2,4,5,6,7	71.5	1,3,4,5,6,7,8,9
20.6	1,2,3,4,5,6,7,8	31.3	1,2,3,4,8,9,10	47.5	1,2,4,5,6,8,10	72.2	1,3,4,5,6,7,9
20.8	1,2,3,4,5,6,7,9,10	31.6	1,2,3,4,8,10	48.0	1,2,4,5,6,9,10	72.9	1,3,4,5,6,8,9,10
21.0	1,2,3,4,5,6,7,9	31.9	1,2,3,4,9,10	48.5	1,2,4,5,6,10	73.6	1,3,4,5,6,9,10
21.2	1,2,3,4,5,6,7,10	32.2	1,2,3,4,9	49.0	1,2,4,5,7,8,9	74.4	1,3,4,5,7,8,9,10
21.4	1,2,3,4,5,6,7	32.6	1,2,3,4	49.5	1,2,4,7,8	75.1	1,3,4,5,7,9,10
21.7	1,2,3,4,5,6,8,9,10	32.9	1,2,3,5,6,7,8,9,10	50.0	1,2,4,5,7,10	75.9	1,3,4,5,7
21.9	1,2,3,4,5,6,8,9	33.2	1,2,3,5,6,7,8,10	50.5	1,2,4,5,8,9,10	76.6	1,3,4,5,8
22.1	1,2,3,4,5,6,8,10	33.5	1,2,3,5,6,7,9,10	51.0	1,2,4,5,8	77.4	1,3,4,5
22.3	1,2,3,4,5,6,9,10	33.9	1,2,3,5,6,7,9	51.5	1,2,4,5,9	78.2	1,3,4,6,7,8
22.5	1,2,3,4,5,6,9	34.2	1,2,3,5,6,7	52.0	1,2,4,6,7,8,9,10	78.9	1,3,4,6,7
22.8	1,2,3,4,5,6,10	34.6	1,2,3,5,6,8,9	52.5	1,2,4,6,7,8,10	79.7	1,3,4,6,8
23.0	1,2,3,4,5,6	34.9	1,2,3,5,6,8	53.0	1,2,4,6,7,9	80.5	1,3,4,6
23.2	1,2,3,4,5,7,8,9,10	35.3	1,2,3,5,6,9,10	53.5	1,2,4,6,8,9,10	81.3	1,3,4,7,8
23.5	1,2,3,4,5,7,8,9	35.6	1,2,3,5,6,10	54.1	1,2,4,6,8,10	82.1	1,3,4,7
23.7	1,2,3,4,5,7,8,10	36.0	1,2,3,5,7,8,9,10	54.6	1,2,4,6,9	83.0	1,3,4,8
23.9	1,2,3,4,5,7,9,10	36.3	1,2,3,5,7,8,10	55.2	1,2,4,7,8,9,10	83.8	1,3,4
24.2	1,2,3,4,5,7,9	36.7	1,2,3,5,7,8	55.7	1,2,4,7,8	84.6	1,3,5,6,7,8
24.4	1,2,3,4,5,7,10	37.1	1,2,3,5,7,9	56.3	1,2,4,7,9	85.5	1,3,5,6,7
24.6	1,2,3,4,5,7	37.4	1,2,3,5,7	56.8	1,2,4,8,9,10	86.3	1,3,5,6,9,10
24.9	1,2,3,4,5,8,9,10	37.8	1,2,3,5,8,9	57.4	1,2,4,8	87.2	1,3,5,7,8,9,10
25.1	1,2,3,4,5,8,10	38.2	1,2,3,5,8	58.0	1,2,4,10	88.1	1,3,5,7,9,10
25.4	1,2,3,4,5,8	38.6	1,2,3,5,9	58.6	1,2,5,6,7,8,9	88.9	1,3,5,8,9
25.6	1,2,3,4,5,9,10	39.0	1,2,3,5	59.2	1,2,5,6,7,9,10	89.8	1,3,5,9
25.9	1,2,3,4,5,9	39.3	1,2,3,6,7,8,9	59.7	1,2,5,6,7	90.7	1,3,6,7,8,10
26.2	1,2,3,4,5	39.7	1,2,3,6,7,8	60.3	1,2,5,6,8,10	91.6	1,3,6,7,10
26.4	1,2,3,4,6,7,8,9,10	40.1	1,2,3,6,7,9	60.9	1,2,5,6,9	92.6	1,3,6,8
26.7	1,2,3,4,6,7,8,9	40.5	1,2,3,6,7	61.6	1,2,5,7,8,9,10	93.5	1,3,6
27.0	1,2,3,4,6,7,8	40.9	1,2,3,6,8,9	62.2	1,2,5,7,8	94.4	1,3,7,9,10
27.2	1,2,3,4,6,7,9,10	41.4	1,2,3,6,8	62.8	1,2,5,7,10	95.4	1,3,8,9
27.5	1,2,3,4,6,7,9	41.8	1,2,3,6,9	63.4	1,2,5,8,9	96.3	1,3,10
27.8	1,2,3,4,6,7	42.2	1,2,3,6	64.1	1,2,5,9,10	97.3	1,4,5,6,7,8
28.0	1,2,3,4,6,8,9,10	42.6	1,2,3,7,8,9	64.7	1,2,5	98.2	1,4,5,6,7
28.3	1,2,3,4,6,8,10	43.0	1,2,3,7,8	65.3	1,2,6,7,8	99.2	1,4,5,6,9,10
28.6	1,2,3,4,6,8	43.5	1,2,3,7,9	66.0	1,2,6,7,10	100	1,4,5,7,8,9,10
28.9	1,2,3,4,6,9,10	43.9	1,2,3,7	66.7	1,2,6,8,9	101	1,4,5,7,8,9
29.2	1,2,3,4,6,10	44.3	1,2,3,8,10	67.3	1,2,6,9	102	1,4,5,7,8,10
29.5	1,2,3,4,6	44.8	1,2,3,9,10	68.0	1,2,7,8,9,10	103	1,4,5,7,8
29.8	1,2,3,4,7,8,9	45.2	1,2,3,10	68.7	1,2,7,8	104	1,4,5,7,9,10
30.1	1,2,3,4,7,8,10	45.7	1,2,4,5,6,7,8,9,10	69.4	1,2,7	105	1,4,5,7,9

Freq.	Switch Closures	Freq.	Switch Closures	Freq.	Switch Closures	Freq.	Switch Closures
106	1,4,5,7,10	183	1,6,7,8	259	2,3,4,6	337	2,3,9
107	1,4,5,7	184	1,6,7,9,10	260	2,3,4,7,8,9,10	338	2,3,10
108	1,4,5,8,9,10	185	1,6,7,9	261	2,3,4,7,8,9	339	2,3
109	1,4,5,8,9	186	1,6,7,10	262	2,3,4,7,8,10	340	2,4,5,6,7,8,9,10
110	1,4,5,8,10	187	1,6,7	263	2,3,4,7,8	341	2,4,5,6,7,8,9
111	1,4,5,8	188	1,6,8,9,10	264	2,3,4,7,9,10	342	2,4,5,6,7,8,10
112	1,4,5,9,10	189	1,6,8,9	265	2,3,4,7,9	343	2,4,5,6,7,8
113	1,4,5,9	190	1,6,8,10	266	2,3,4,7,10	344	2,4,5,6,7,9,10
114	1,4,5,10	191	1,6,8	267	2,3,4,7	345	2,4,5,6,7,9
115	1,4,5	192	1,6,9,10	268	2,3,4,8,9,10	346	2,4,5,6,7,10
116	1,4,6,7,8,9,10	193	1,6,9	269	2,3,4,8,9	347	2,4,5,6,7
117	1,4,6,7,8,9	194	1,6,10	270	2,3,4,8,10	348	2,4,5,6,8,9,10
118	1,4,6,7,8,10	195	1,6	271	2,3,4,8	349	2,4,5,6,8,9
119	1,4,6,7,8	196	1,7,8,9,10	272	2,3,4,9,10	350	2,4,5,6,8,10
120	1,4,6,7,9,10	197	1,7,8,9	273	2,3,4,9	351	2,4,5,6,8
121	1,4,6,7,9	198	1,7,8,10	274	2,3,4,10	352	2,4,5,6,9,10
122	1,4,6,7,10	199	1,7,8	275	2,3,4	353	2,4,5,6,9
123	1,4,6,7	200	1,7,9,10	276	2,3,5,6,7,8,9,10	354	2,4,5,6,10
124	1,4,6,8,9,10	201	1,7,9	277	2,3,5,6,7,8,9	355	2,4,5,6
125	1,4,6,8,9	202	1,7,10	278	2,3,5,6,7,8,10	356	2,4,5,7,8,9,10
126	1,4,6,8,9,10	203	1,7	279	2,3,5,6,7,8	357	2,4,5,7,8,9
127	1,4,6,8	204	1,8,9,10	280	2,3,5,6,7,9,10	358	2,4,5,7,8,10
128	1,4,6,9,10	205	1,8,9	281	2,3,5,6,7,9	359	2,4,5,7,8
129	1,4,6,9	206	1,8,10	282	2,3,5,6,7,10	360	2,4,5,7,9,10
130	1,4,6,10	207	1,8	283	2,3,5,6,7	361	2,4,5,7,9
131	1,4,6	208	1,9,10	284	2,3,5,6,8,9,10	362	2,4,5,7,10
132	1,4,7,8,9,10	209	1,9	286	2,3,5,6,8,10	363	2,4,5,7
133	1,4,7,8,9	210	1,10	287	2,3,5,6,8	364	2,4,5,8,9,10
134	1,4,7,8,10	211	1	288	2,3,5,6,9,10	365	2,4,5,8,9
135	1,4,7,8	212	2,3,4,5,6,7,8,9,10	289	2,3,5,6,9	366	2,4,5,8,10
136	1,4,7,9,10	213	2,3,4,5,6,7,8,9	290	2,3,5,6,10	367	2,4,5,8
137	1,4,7,9	214	2,3,4,5,6,7,8,10	291	2,3,5,6	368	2,4,5,9,10
138	1,4,7,10	215	2,3,4,5,6,7,8	292	2,3,5,7,8,9,10	369	2,4,5,9
139	1,4,7	216	2,3,4,5,6,7,9,10	293	2,3,5,7,8,9	370	2,4,5,10
140	1,4,8,9,10	217	2,3,4,5,6,7,9	294	ZS,5,7,8,10	371	2,4,5
141	1,4,8,9	218	2,3,4,5,6,7,10	295	2,3,5,7,8	372	2,4,6,7,8,9,10
142	1,4,8,10	219	2,3,4,5,6,7	296	2,3,5,7,9,10	373	2,4,6,7,8,9
143	1,4,8	220	2,3,4,5,6,8,9,10	297	2,3,5,7,9	374	2,4,6,7,8,10
144	1,4,9,10	221	2,3,4,5,6,8,9	298	2,3,5,7,10	375	2,4,6,7,8
145	1,4,9	222	2,3,4,5,6,8,10	299	2,3,5,7	376	2,4,6,7,9,10
146	1,4,10	223	2,3,4,5,6,8	300	2,3,5,8,9,10	377	2,4,6,7,9
147	1,4	224	2,3,4,5,6,9,10	301	2,3,5,8,9	378	2,4,6,7,10
148	1,5,6,7,8,9,10	225	2,3,4,5,6,9	302	2,3,5,8,10	379	2,4,6,7
149	1,5,6,7,8,9	226	2,3,4,5,6,10	303	2,3,5,8	380	2,4,6,8,9,10
150	1,5,6,7,8,10	227	2,3,4,5,6	304	2,3,5,9,10	381	2,4,6,8,9
151	1,5,6,7,8	228	2,3,4,5,7,8,9,10	305	2,3,5,9	382	2,4,6,8,10
152	1,5,6,7,9,10	229	2,3,4,5,7,8,9	306	2,3,5,10	383	2,4,6,8
153	1,5,6,7,9	230	2,3,4,5,7,8,10	307	2,3,5	384	2,4,6,9,10
154	1,5,6,7,10	231	2,3,4,5,7,8	308	2,3,6,7,8,9,10	385	2,4,6,9
155	1,5,6,7	232	2,3,4,5,7,9,10	309	2,3,6,7,8,9	386	2,4,6,10
156	1,5,6,8,9,10	233	2,3,4,5,7,9	310	2,3,6,7,8,10	387	2,4,6
157	1,5,6,8,9	234	2,3,4,5,7,10	311	2,3,6,7,8	388	2,4,7,8,9,10
158	1,5,6,8,10	235	2,3,4,5,7	312	2,3,6,7,9,10	389	2,4,7,8,9
159	1,5,6,8	236	2,3,4,5,8,9,10	313	2,3,6,7,9	390	2,4,7,8,10
160	1,5,6,9,10	237	2,3,4,5,8,9	314	2,3,6,7,10	391	2,4,7,8
161	1,5,6,9	238	2,3,4,5,8,10	315	2,3,6,7	392	2,4,7,9,10
162	1,5,6,10	239	2,3,4,5,8	316	2,3,6,8,9,10	393	2,4,7,9
163	1,5,6	240	2,3,4,5,9,10	317	2,3,6,8,9	394	2,4,7,10
164	1,5,7,8,9,10	241	2,3,4,5,9	318	2,3,6,8,10	395	2,4,7
165	1,5,7,8,9	242	2,3,4,5,10	319	2,3,6,8	396	2,4,8,9,10
166	1,5,7,8,10	243	2,3,4,5	320	2,3,6,9,10	397	2,4,8,9
167	1,5,7,8	244	2,3,4,6,7,8,9,10	321	2,3,6,9	398	2,4,8,10
168	1,5,7,9,10	245	2,3,4,6,7,8,9	322	2,3,6,10	399	2,4,8
169	1,5,7,9	246	2,3,4,6,7,8,10	323	2,3,6	400	2,4,9,10
170	1,5,7,10	247	2,3,4,6,7,8	324	2,3,7,8,9,10	401	2,4,9
171	1,5,7	248	2,3,4,6,7,9,10	325	2,3,7,8,9	402	2,4,10
172	1,5,8,9,10	249	2,3,4,6,7,9	326	2,3,7,8,10	403	2,4
173	1,5,8,9	250	2,3,4,6,7,10	327	2,3,7,8	404	2,5,6,7,8,9,10
174	1,5,8,10	251	2,3,4,6,7	328	2,3,7,9,10	405	2,5,6,7,8,9
175	1,5,8	252	2,3,4,6,8,9,10	329	2,3,7,9	406	2,5,6,7,8,10
176	1,5,9,10	253	2,3,4,6,8,9	330	2,3,7,10	407	2,5,6,7,8
177	1,5,9	254	2,3,4,6,8,10	331	2,3,7	408	2,5,6,7,9,10
178	1,5,10	255	2,3,4,6,8	332	2,3,8,9,10	409	2,5,6,7,9
179	1,5	255	2,3,5,6,8,9	333	2,3,8,9	410	2,5,6,7,10
180	1,6,7,8,9,10	256	2,3,4,6,9,10	334	2,3,8,10	411	2,5,6,7
181	1,6,7,8,9	257	2,3,4,6,9	335	2,3,8	412	2,5,6,8,9,10
182	Page 6 1,6,7,8,10	258	2,3,4,6,10	336	2,3,9,10	413	2,5,6,8,9

Freq.	Switch Closures	Freq.	Switch Closures	Freq.	Switch Closures	Freq.	Switch Closures
414	2,5,6,8,10	491	3,4,5,7	568	3,6,7,9,10	645	4,7,8,9
415	2,5,6,8	492	3,4,5,8,9,10	569	3,6,7,9	646	4,7,8,10
416	2,5,6,9,10	493	3,4,5,8,9	570	3,6,7,10	647	4,7,8
417	2,5,6,9	494	3,4,5,8,10	571	3,6,7	648	4,7,9,10
418	2,5,6,10	495	3,4,5,8	572	3,6,8,9,10	649	4,7,9
419	2,5,6	496	3,4,5,9,10	573	3,6,8,9	650	4,7,10
420	2,5,7,8,9,10	497	3,4,5,9	574	3,6,8,10	651	4,7
421	2,5,7,8,9	498	3,4,5,10	575	3,6,8	652	4,8,9,10
422	2,5,7,8,10	499	3,4,5	576	3,6,9,10	653	4,8,9
423	2,5,7,8	500	3,4,6,7,8,9,10	577	3,6,9	654	4,8,10
424	2,5,7,9,10	501	3,4,6,7,8,9	578	3,6,10	655	4,8
425	2,5,7,9	502	3,4,6,7,8,10	579	3,6	656	4,9,10
426	2,5,7,10	503	3,4,6,7,8	580	3,7,8,9,10	657	4,9
427	2,5,7	504	3,4,6,7,9,10	581	3,7,8,9	658	4,10
428	2,5,8,9,10	505	3,4,6,7,9	582	3,7,8,10	659	4
429	2,5,8,9	506	3,4,6,7,10	583	3,7,8	660	5,6,7,8,9,10
430	2,5,8,10	507	3,4,6,7	584	3,7,9,10	661	5,6,7,8,9
431	2,5,18	508	3,4,6,8,9,10	585	3,7,9	662	5,6,7,8,10
432	2,5,9,10	509	3,4,6,8,9	586	3,7,10	663	5,6,7,8
433	2,5,9	510	3,4,6,8,10	587	3,7	664	5,6,7,9,10
434	2,5,10	511	3,4,6,8	588	3,8,9,10	665	5,6,7,9
435	2,5	512	3,4,6,9,10	589	3,8,9	666	5,6,7,10
436	2,6,7,8,9,10	513	3,4,6,9	590	3,8,10	667	5,6,7
437	2,6,7,8,9	514	3,4,6,10	591	3,8	668	5,6,8,9,10
438	2,6,7,8,10	515	3,4,6	592	3,9,10	669	5,6,8,9
439	2,6,7,8	516	3,4,7,8,9,10	593	3,9	670	5,6,8,10
440	2,6,7,9,10	517	3,4,7,8,9	594	3,10	671	5,6,8
441	2,6,7,9	518	3,4,7,8,10	595	3	672	5,6,9,10
442	2,6,7,10	519	3,4,7,8	596	4,5,6,7,8,9,10	673	5,6,9
443	2,6,7	520	3,4,7,9,10	597	4,5,6,7,8,9	674	5,6,10
444	2,6,8,9,10	521	3,4,7,9	598	4,5,6,7,8,10	675	5,6
445	2,6,8,9	522	3,4,7,10	599	4,5,6,7,8	676	5,7,8,9,10
446	2,6,8,10	523	3,4,7	600	4,5,6,7,9,10	677	5,7,8,9
447	2,6,8	524	3,4,8,9,10	601	4,5,6,7,9	678	5,7,8,10
448	2,6,9,10	525	3,4,8,9	602	4,5,6,7,10	679	5,7,8
449	2,6,9	526	3,4,8,10	603	4,5,6,7	680	5,7,9,10
450	2,6,10	527	3,4,8	604	4,5,6,8,9,10	681	5,7,9
451	2,6	528	3,4,9,10	605	4,5,6,8,9	682	5,7,10
452	2,7,8,9,10	529	3,4,9	606	4,5,6,8,10	683	5,7
453	2,7,8,9	530	3,4,10	607	4,5,6,8	684	5,8,9,10
454	2,7,8,10	531	3,4	608	4,5,6,9,10	685	5,8,9
455	2,7,8	532	3,5,6,7,8,9,10	609	4,5,6,9	686	5,8,10
456	2,7,9,10	533	3,5,6,7,8,9	610	4,5,6,10	687	5,8
457	2,7,9	534	3,5,6,7,8,10	611	4,5,6	688	5,9,10
458	2,7,10	535	3,5,6,7,8	612	4,5,7,8,9,10	689	5,9
459	2,7	536	3,5,6,7,9,10	613	4,5,7,8,9	690	5,10
460	2,8,9,10	537	3,5,6,7,9	614	4,5,7,8,10	691	5
461	2,8,9	538	3,5,6,7,10	615	4,5,7,8	692	6,7,8,9,10
462	2,8,10	539	3,5,6,7	616	4,5,7,9,10	693	6,7,8,9
463	2,8	540	3,5,6,8,9,10	617	4,5,7,9	694	6,7,8,10
464	2,9,10	541	3,5,6,8,9	618	4,5,7,10	695	6,7,8
465	2,9	542	3,5,6,8,10	619	4,5,7	696	6,7,9,10
466	2,10	543	3,5,6,8	620	4,5,8,9,10	697	6,7,9
467	2	544	3,5,6,9,10	621	4,5,8,9	698	6,7,110
468	3,4,5,6,7,8,9,10	545	3,5,6,9	622	4,5,8,10	699	6,7
469	3,4,5,6,7,8,9	546	3,5,6,10	623	4,5,8	700	6,8,9,10
470	3,4,5,6,7,8,10	547	3,5,6	624	4,5,9,10	701	6,8,9
471	3,4,5,6,7,8	548	3,5,7,8,9,10	625	4,5,9	702	6,8,10
472	3,4,5,6,7,9,10	549	3,5,7,8,9	626	4,5,10	703	6,8
473	3,4,5,6,7,9	550	3,5,7,8,10	627	4,5	704	6,9,10
474	3,4,5,6,7,10	551	3,5,7,8	628	4,6,7,8,9,10	705	6,9
475	3,4,5,6,7	552	3,5,7,9,10	629	4,6,7,8,9	706	6,10
476	3,4,5,6,8,9,10	553	3,5,7,9	630	4,6,7,8,10	707	6
477	3,4,5,6,8,9	554	3,5,7,10	631	4,6,7,8	708	7,8,9,10
478	3,4,5,6,8,10	555	3,5,7	632	4,6,7,9,10	709	7,8,9
479	3,4,5,6,8	556	3,5,8,9,10	633	4,6,7,9	710	7,8,10
480	3,4,5,6,9,10	557	3,5,8,9	634	4,6,7,10	711	7,8
481	3,4,5,6,9	558	3,5,8,10	635	4,6,7	712	7,9,10
482	3,4,5,6,10	559	3,5,8	636	4,6,8,9,10	713	7,9
483	3,4,5,6	560	3,5,9,10	637	4,6,8,9	714	7,10
484	3,4,5,7,8,9,10	561	3,5,9	638	4,6,8,10	715	7
485	3,4,5,7,8,9	562	3,5,10	639	4,6,8	716	8,9,10
486	3,4,5,7,8,10	563	3,5	640	4,6,9,10	717	8,9
487	3,4,5,7,8	564	3,6,7,8,9,10	641	4,6,9	718	8,10
488	3,4,5,7,9,10	565	3,6,7,8,9	642	4,6,10	719	8
489	3,4,5,7,9	566	3,6,7,8,10	643	4,6	720	9,10
490	3,4,5,7,10	567	3,6,7,8	644	4,7,8,9,10		

780B and 780F types are adjustable from 450 to 1450 Hertz.  
 780S and 780Q types are adjustable from 200 to 720 Hertz.

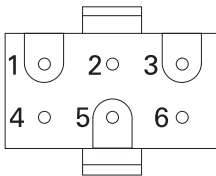
For 130 KMH models, find the full-scale frequency in the same manner as MPH units and refer to the tables for the correct switch closures.

Choose the appropriate formula for the specified input type and calculate the full-scale frequency. After the full-scale frequency is calculated, locate that frequency in the tables to find the speedometer DIP-switch settings.

This pamphlet contains calibration information for four types of speedometers. Please be sure to refer to the correct table for the type of speedometer that you have.

## Speedometer Calibration Switch Settings

**Speedometer Connections**  
 (looking into harness connector)



Pin	Color	Signal
1	Black	Signal Ground
2	Orange	Lamp
3	Black	Power Ground
4	Red	+ 12 Volts
5	Green	Signal
6	Blue	2-Speed Rear Axle

**AMETEK<sup>®</sup>**  
**DIXSON**

## 700 Series Speedometer Calibration Switch Settings

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 Product Support: (970) 244-1243