

20.10. Comparative Notations

	This Volume	[20. 58] NBS	[20. 59] Stratton-Morse, etc.	[20. 36] Meixner and Schäfer	[20. 30] McLachlan	[20. 15] Bateman Manuscript	Comments
Parameters in 20.1.1.....	a q a_r b_r	$b=a+2q$ $s=4q$ $b_r=a_r+2q$ $b_{r'}=b_r+2q$	b $c=2\sqrt{q}$ $b_r=a_r+2q$ $b_{r'}=b_r+2q$	λ h^2 a_r b_r	a q a_r b_r	h θ a_r b_r	
Periodic Solutions, of 20.1.1:							
Even.....	$ce_r(z, q)$	$A^r Se_r(s, x)$ *	$A^r Se_r^{(1)}(c, \cos x)$ *	$ce_r(z, h^2)$ *	$ce_r(z, q)$	$ce_r(z, \theta)$	See Note 1.
Odd.....	$se_r(z, q)$	$B^r So_r(s, x)$ *	$A^r So_r^{(1)}(c, \cos x)$ *	$se_r(z, h^2)$ *	$se_r(z, q)$	$se_r(z, \theta)$	
Coefficients in Periodic Solutions:							
Even.....	$A_m^r(q)$	$A^r De_m^r(s)$ *	$A^r D_m^r$ *	A_m^r	A_m^r	A_m^r	
Odd.....	$B_m^r(q)$	$B^r Do_m^r(s)$ *	$B^r F_m^r$ *	B_m^r	B_m^r	B_m^r	
$\frac{1}{\pi} \int_0^{2\pi} y^2 dx$, y is the Standard Solution of 20.1.1.	1	$(A^r)^{-2}$ or $(B^r)^{-2}$	$(A^r)^{-2}$ or $(B^r)^{-2}$	1	1	1	See Note 1.
Floquet's Solutions 20.3.8.....	$F_r(z)$			$me_r(z, h^2)$	$\phi(z)$		
Characteristic Exponent.....	ν	$\mu=i\nu$		ν	$\mu=i\nu$	$\mu=i\nu$	
Normalizations of Floquet's Solutions.	Unspecified			$\frac{1}{\pi} \int_0^{2\pi} (me_r(z, h^2) me_{-r}(z, h^2)) = 1$			
Solutions of Modified Equation 20.1.2.	$Ce_r(z, q)$ $Se_r(z, q)$ $Mc_r^{(1)}(z, q)$ $Ms_r^{(1)}(z, q)$ $Mc_r^{(2)}(z, q)$ $Ms_r^{(2)}(z, q)$	$Ag_{o..r}(s)Je_r(s, q)$ $Bg_{o..r}(s)Jo_r(s, q)$ $\sqrt{\frac{2}{\pi}} Je_r(s, z)$ $\sqrt{\frac{2}{\pi}} Jo_r(s, z)$ $\sqrt{\frac{2}{\pi}} Ne_r(s, z)$ $\sqrt{\frac{2}{\pi}} No_r(s, z)$	$Ag_{o..r}(s)Je_r(c, \cosh z)$ $Bg_{o..r}(s)Jo_r(c, \cosh z)$ $\sqrt{\frac{2}{\pi}} Je_r(c, \cosh z)$ $\sqrt{\frac{2}{\pi}} Jo_r(c, \cosh z)$ $\sqrt{\frac{2}{\pi}} Ne_r(c, \cosh z)$ $\sqrt{\frac{2}{\pi}} No_r(c, \cosh z)$	$Ce_r(z, q)$ $Se_r(z, q)$ $Mc_r^{(1)}(z, h)$ $Ms_r^{(1)}(z, h)$ $Mc_r^{(2)}(z, h)$ $Ms_r^{(2)}(z, h)$	$Ce_r(z, q)$ $Se_r(z, q)$ $\sqrt{\frac{2}{\pi}} Ce_r(z, q)/Ag_{o..r}(q)$ $\sqrt{\frac{2}{\pi}} Se_r(z, q)/Bg_{o..r}(q)$ $\sqrt{\frac{2}{\pi}} Fey_r(z, q)/Ag_{o..r}(q)$ $\sqrt{\frac{2}{\pi}} Gey_r(z, q)/Bg_{o..r}(q)$	$Ce_r(z, \theta)$ $Se_r(z, \theta)$ $\sqrt{\frac{2}{\pi}} Ce_r(z, \theta)/Ag_{o..r}(q)$ $\sqrt{\frac{2}{\pi}} Se_r(z, \theta)/Bg_{o..r}(q)$ $\sqrt{\frac{2}{\pi}} Fey_r(z, \theta)/Ag_{o..r}(q)$ $\sqrt{\frac{2}{\pi}} Gey_r(z, \theta)/Bg_{o..r}(q)$	
Joining Factors.....	$\sqrt{2/\pi}/Mc_r^{(1)}(0, q)$ $\sqrt{2/\pi}/\frac{d}{dz}[Ms_r^{(1)}(z, q)]_{z=0}$ $-Mc_r^{(2)}(0, q)/Mc_r^{(1)}(0, q)$ $\left[\frac{d}{dz} Ms_r^{(2)}(z, q) \right]_{z=0}$ $\left[\frac{d}{dz} Ms_r^{(1)}(z, q) \right]_{z=0}$	$g_{o..r}(s)$ $g_{o..r}(s)$ $f_{o..r}(s)$ $f_{o..r}(s)$	$\sqrt{2\pi} \lambda_r^{(e)}$ $\sqrt{2\pi} \lambda_r^{(o)}$ $\frac{2}{\pi} \frac{K_1'}{K_1}$ $\frac{2}{\pi} \frac{K_1'}{K_1}$	$\sqrt{2/\pi}/Mc_r^{(1)}(0, h)$ $\sqrt{2/\pi}/\frac{d}{dz}[Ms_r^{(1)}(z, h)]_{z=0}$ $-Mc_r^{(2)}(0, h)/Mc_r^{(1)}(0, h)$ Same as this volume	$(-1)^r p_r \sqrt{\frac{2}{\pi}}/A$ $(-1)^r s_r \sqrt{\frac{2}{\pi}}/B$ $\frac{-Fey_r(0, q)}{Ce_r(0, q)}$ $\left[\frac{d}{dz} Gey_r(z, q) \right]_{z=0}$ $\left[\frac{d}{dz} Se_r(z, q) \right]_{z=0}$	Same as [20.30] Same as [20.30] Same as [20.30]	See Note 2. See Note 3.

NOTE: 1. The conversion factors A^r and B^r are tabulated in [20.58] along with the coefficients.
 2. The multipliers p_r and s_r are defined in [20.30], Appendix 1, section 3, equations 3, 4, 5, 6.
 3. See [20.59], sections (5.3) and (5.5). In eq. (316) of (5.5), the first term should have a minus sign.

*See page II.