

Ribbon Cable Conductor	R30 Micro Pin	MR30/SR30 Micro Pin	DB25 Pin Number	MS-3102R-20-29P Pin No.	Multiconductor Cable Wire Colors**	Gray Code Output	Natural Binary Output	BCD Output
1	B ₇	B ₅	1	M	Green	2 ⁹	2 ⁹	1 ₁
3	B ₅	B ₄	2	L	Orange	2 ⁸	2 ⁸	1 ₂
5	B ₃	B ₃	3	K	Blue	2 ⁷	2 ⁷	1 ₄
7	B ₁	B ₂	4	J	White/Black	2 ⁶	2 ⁶	1 ₈
9	A ₀	B ₁	5	H	Red/Black	2 ⁵	2 ⁵	10 ₁
11	A ₂	B ₀	6	G	Green/Black	2 ⁴	2 ⁴	10 ₂
13	A ₄	A ₃	7	F	Orange/Black	2 ³	2 ³	10 ₄
15	A ₅	A ₂	8	E	Blue/Black	2 ²	2 ²	10 ₈
17	A ₆	A ₁	9	D	Black/White	2 ¹	2 ¹	-
19	A ₇	A ₀	10	C	Red/White	2 ⁰	2 ⁰	-
-	-	-	11	-	-	-	-	-
-	-	-	12	-	-	-	-	-
-	-	-	13	-	-	-	-	-
2	B ₆	B ₆	14	N/D*	Black/White	2 ¹⁰	2 ¹⁰	100 ₁
4	B ₄	B ₇	15	S/C*	Red/White	-	Serial\$	100 ₂
6	B ₂	C ₀	16	P	Green/White	-	Inverted Serial\$	100 ₄
8	B ₀	-	17	N*	Blue/White	-	-	100 ₈
10	A ₁	C ₂	18	S*	Black/Red	-	-	1000 ₁
12	A ₃	C ₃	19	R	White	DataReady	DataReady	DataReady
14	-	-	20	-	-	-	-	-
16	-	-	21	A	Black	Common	Common	Common
18	-	-	22	B	Red	Supply	Supply	Supply
20	-	-	23	-	-	-	-	-
-	-	-	24	-	-	-	-	-
-	-	-	25	-	-	-	-	-
				T	Drain wire	Case Gnd	Case Gnd	Case Gnd

* MS-3102R-20-29P C, D, N, S pinouts for BCD output ** The body color is listed first; the stripe color is second.

\$ MR30/SR30 models with M115 feature

Rev	Description	Date	Tolerances	MR30/R30/SR30 Connector Wiring		
a	Add note for MS connector, C & D pins	10/9/01	.XXXX ± .0005 .XXX ± .005 .XX ± .01 .X ± .015			
b	Added cable wire colors	7/2/02	Fractions ± 1/32 Angles ± 15 min. Runout ± .003 Unless otherwise specified	BY: TRD	MAT'L: n.a.	
c	Added MR30/SR30 micro & serial outputs	2/14/05		DATE: 8-20-98	FINISH: n.a.	SCALE: n.a.
d	Added 2**10 output; serial outputs	3/19/07		PHOTOCRAFT, Inc. Elburn, Illinois 44A022d		