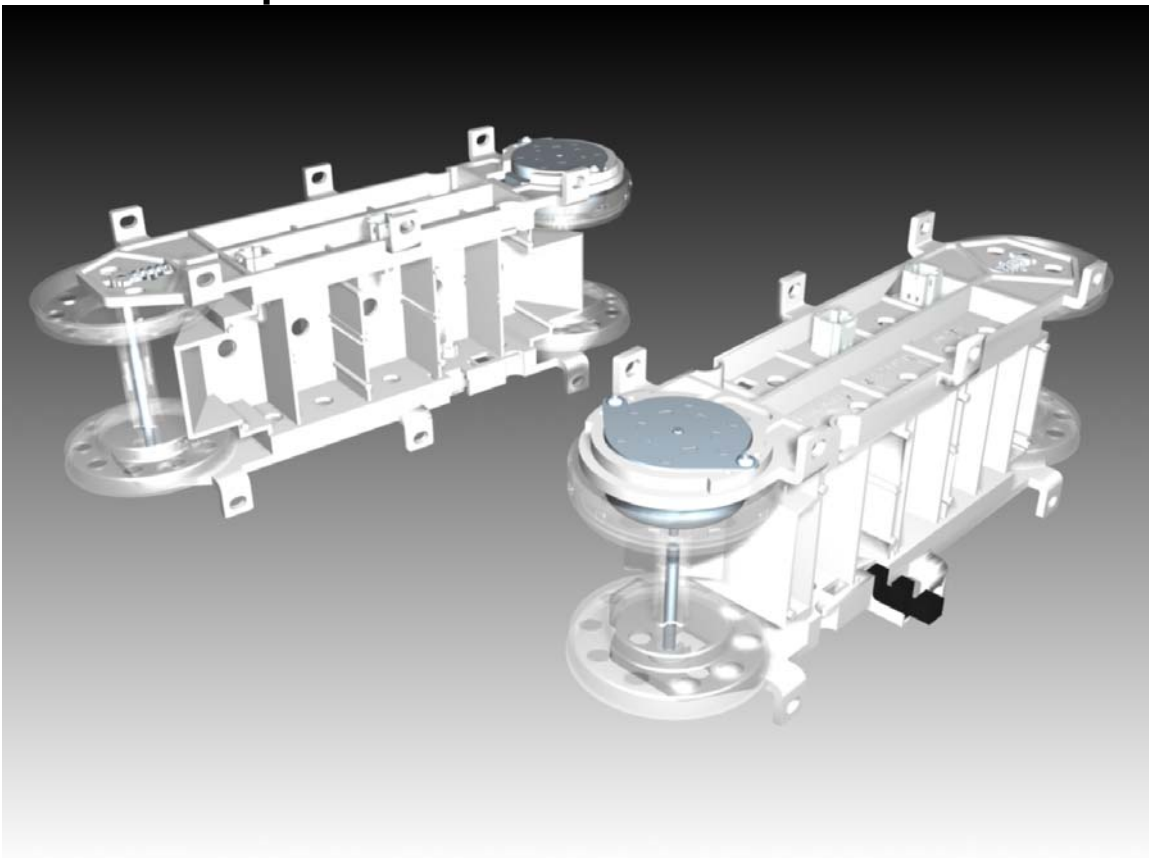




Gamesman

Flexi Mech Specification Document



Issue	4
Status	Released
Author	James Cove, R & D Manager
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1. OVERVIEW

This document is the final specification document for the FlexiMech.

The flexi device offers 12, 16 or 24 symbol continuous reel band solutions within one compact and quiet product. Up to 5 symbols are presented to the player and may be rear illuminated for increased player interest. The unit is easy to service and lamps can be changed without removing the reel band. The band can be removed easily by compressing a set of rollers and lifting off.

2. DESIGN FEATURES

- a) Running speed up to 100 rpm.
- b) Very low noise output when running.
- c) Single or Double row illumination.
- d) Split screen illumination.
- e) Single end view symbol for flexi-matrix.
- f) Illumination via 5mm standard AMP Lampholder.
- g) Total unit weight only 350grams.
- h) Can be shelf or glass mounted.
- i) Glass mounting requires NO brackets.
- j) Motor:- 12 Volt 48 step 34 ohms
- k) Tape:- 600mm long with 36 sprocket holes at 16.667mm pitch.
- l) Motor Drive roller:- 200mm circumference with 12 teeth.
- m) Ratio between Tape & Drive roller (motor) 3:1
- n) 144 motor steps per one tape revolution = 3 motor revs per tape rev.
- o) 9 motor steps per symbol for 16 symbol tape
- p) 12 motor steps per symbol for 12 symbol tape.
- q) 6 motor steps per symbol for 24 symbol tape.

3. GUIDANCE RAMPS FOR FLEXI-GAME LINE

Darlington Drive: Diodes +12v Zener in fly-back circuit, 12v supply

Times are in millisecond between full step phase changes.

Motor 200RPM = Flexi Band 70RPM

Up: - 20-14-15-13-14-8-8-7-7

Run: - 6

Down: - 7-10-15

Motor 250RPM = Flexi Band 80RPM

Up: - 19-14-15-17-14-12-9-7-6

Run: - 5

Down: - 8-10-14

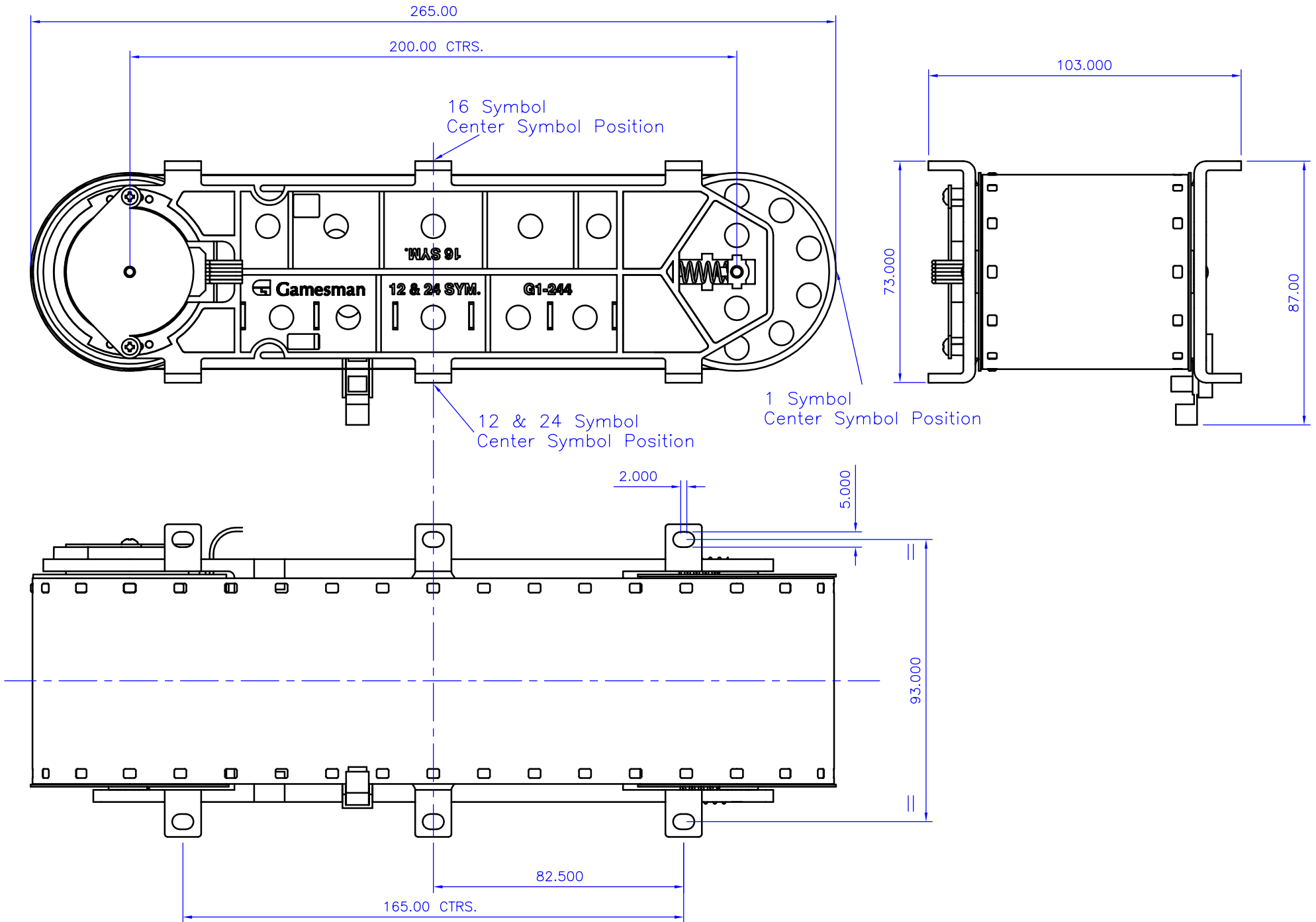
Motor 300RPM = Flexi Band 100RPM

Up: - 16-13-11-10-10-6-7-5-5

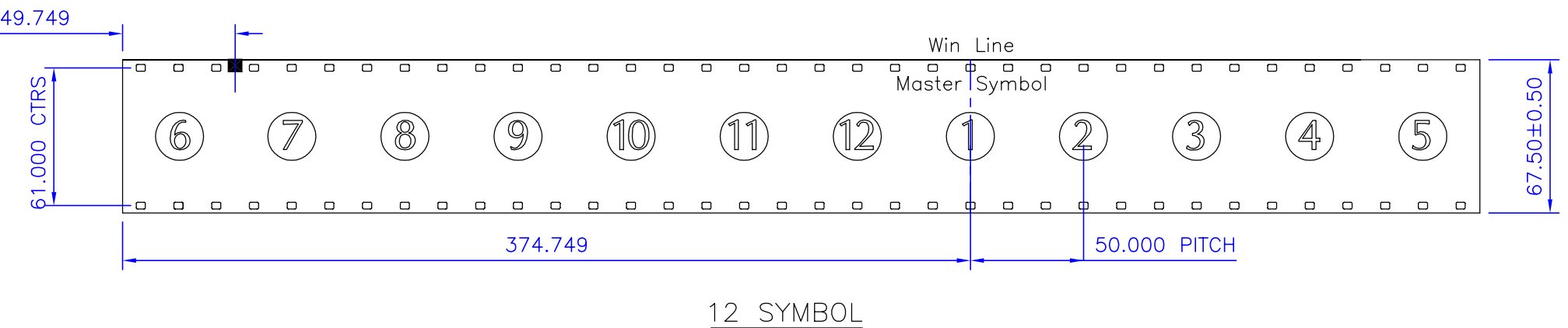
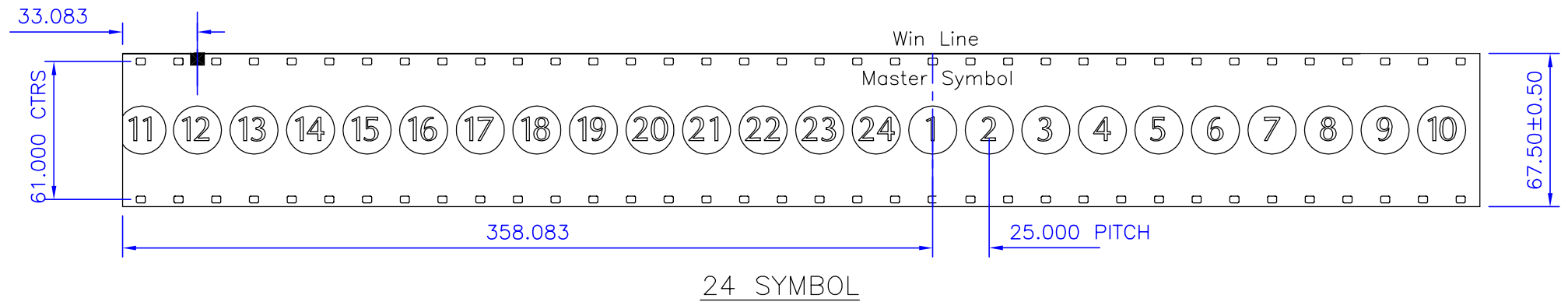
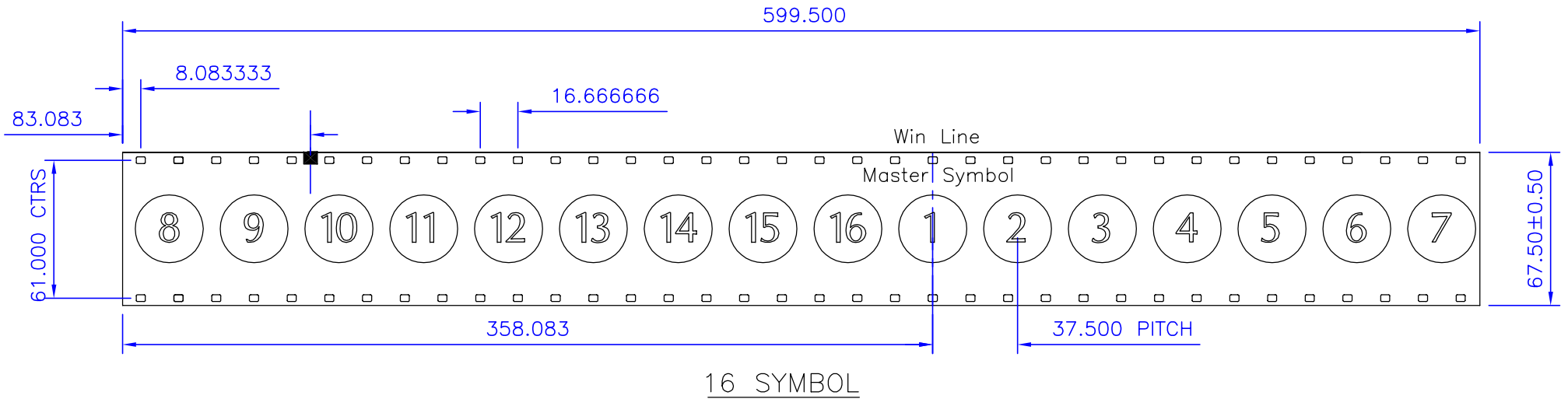
Run: - 4

Down: - 14-10-14

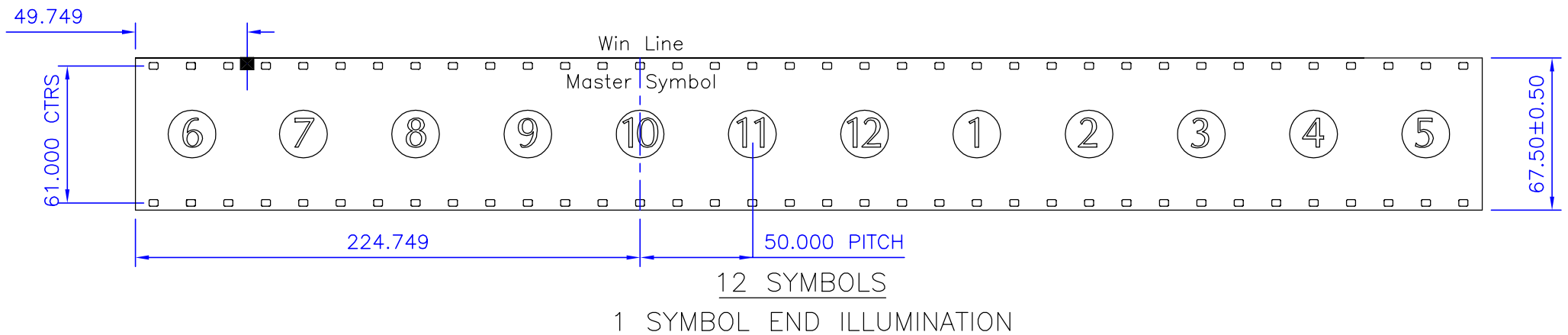
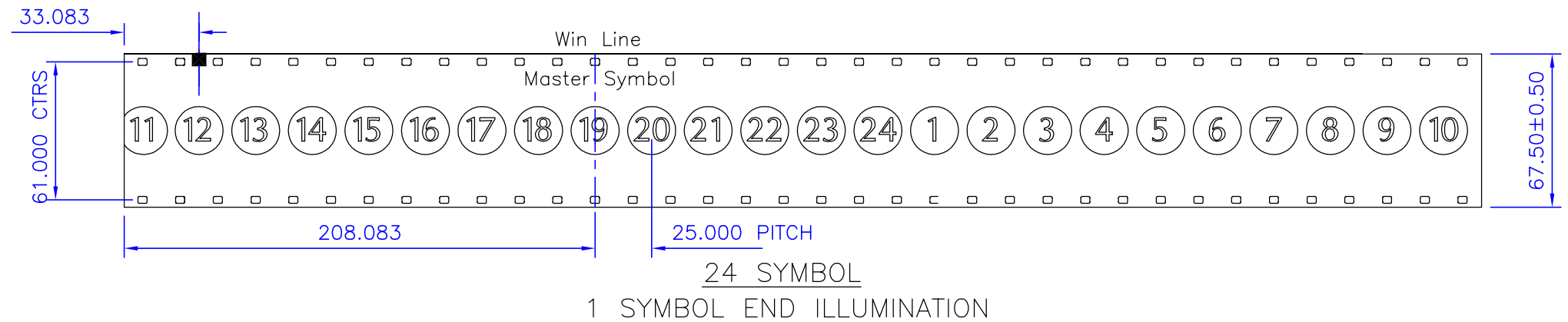
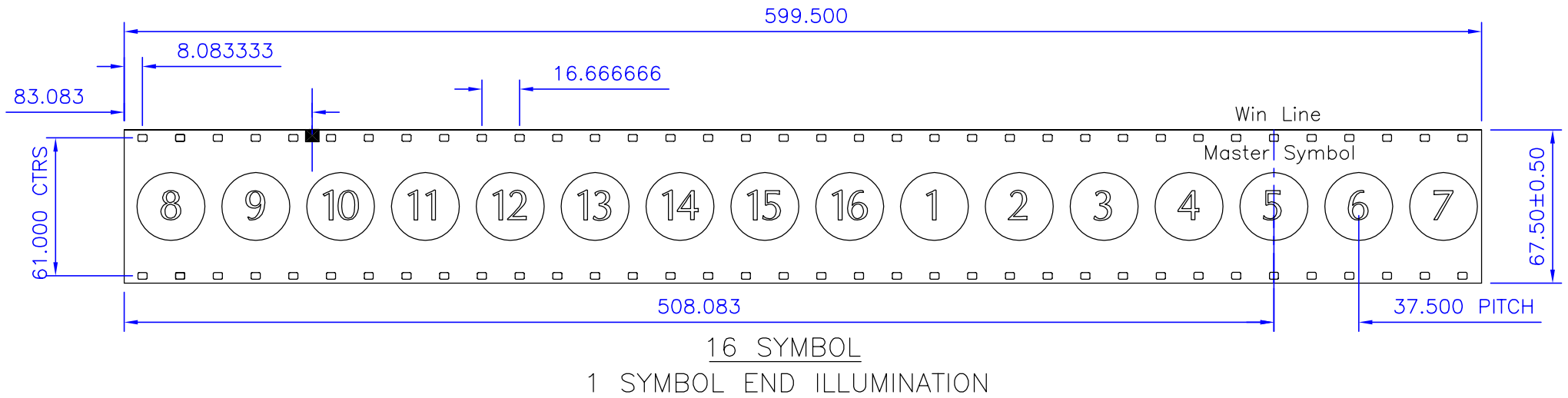
4. PRODUCT DIMENSIONS



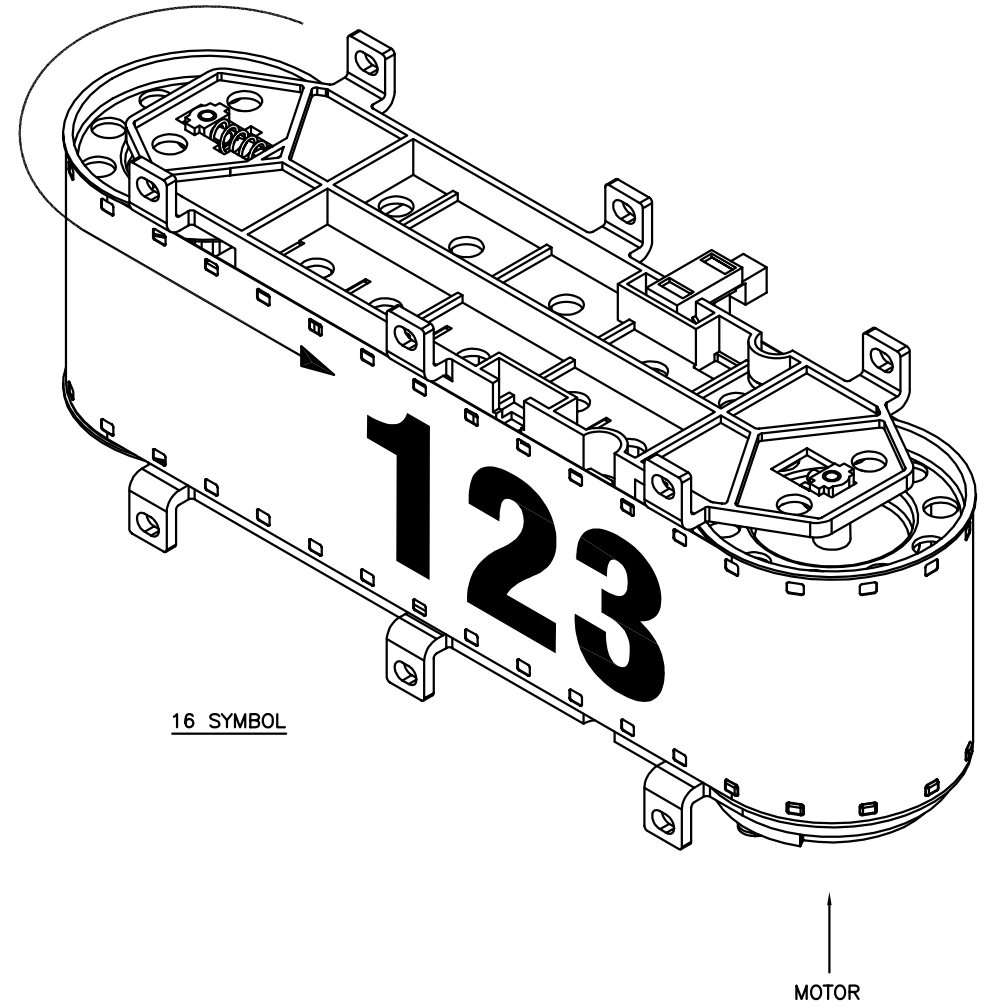
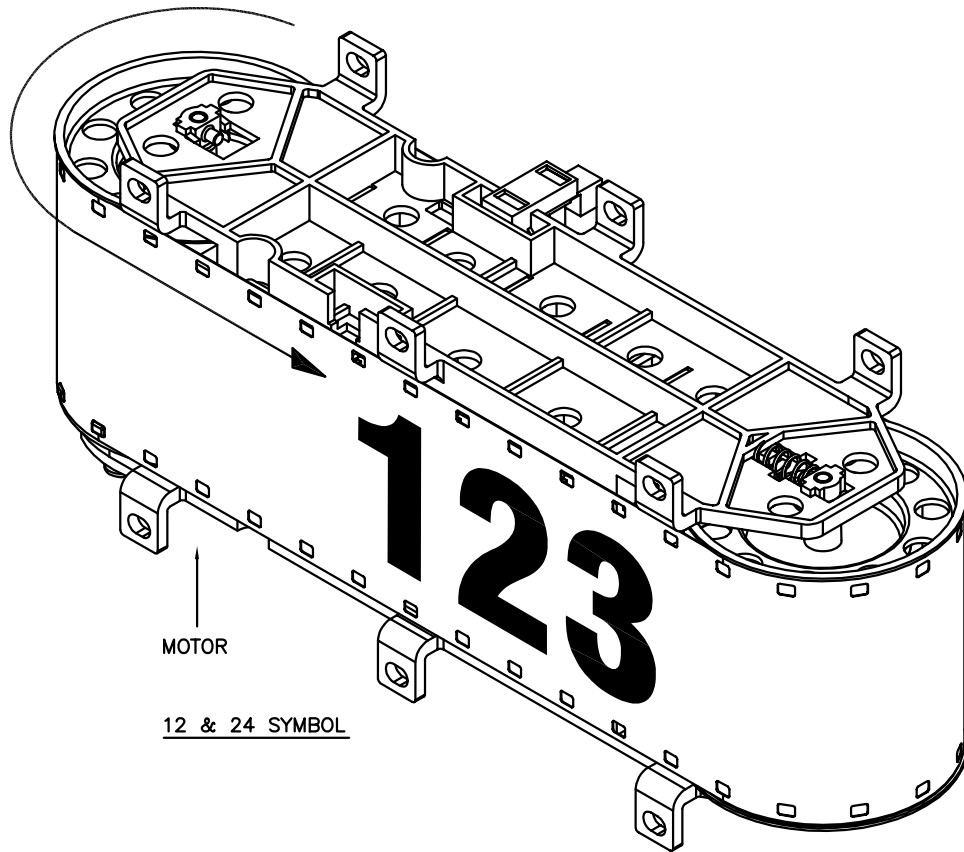
5. REEL TAPES 12, 16 AND 24 SYMBOLS



6. REEL TAPES SINGLE SYMBOL



7. TAPE ORIENTATION & DIRECTION



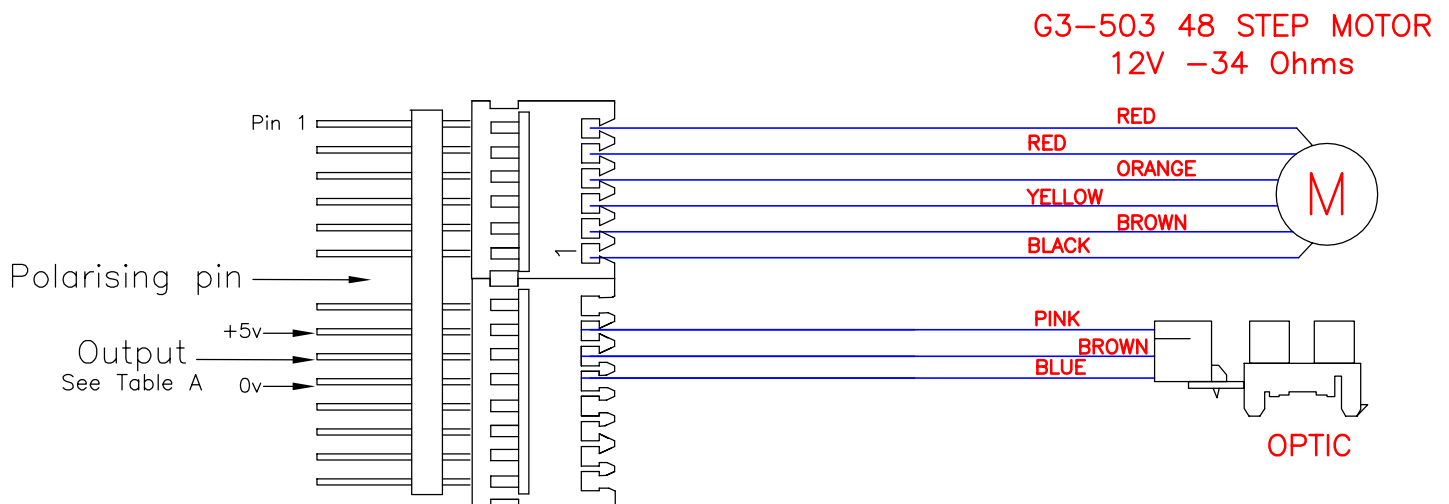
NOTE: THESE ILLUSTRATIONS SHOW THE PREFERRED ORIENTATION OF INSTALLATION WITH THE MOTOR AT THE BASE OF THE UNIT.

8. CIRCUIT DIAGRAM

When optic Tab is in the optic
see output below

Table A


Optic Type	Output
Active Low	
Active High	



PIN No.	1 Bk	4 Oe	2 Bn	3 Yw	5 Rd 6 Rd COM
1	—	ON	ON	—	+
2	—	—	ON	ON	
3	ON	—	—	ON	
4	ON	ON	—	—	

CW ↓ ↑ CCW

SWITCHING SEQUENCE

 Gamesman	DRAWN 11-6-02	1
	MODIFICATION:	ISSUE:
TITLE:	FlexiMech CIRCUIT DIAGRAM	DRAWN: JC .
		DRAWING NO: G4-755

Gamesman Ltd
 Crompton Fields, Crompton Way,
 Crawley, West Sussex, RH10 2QR
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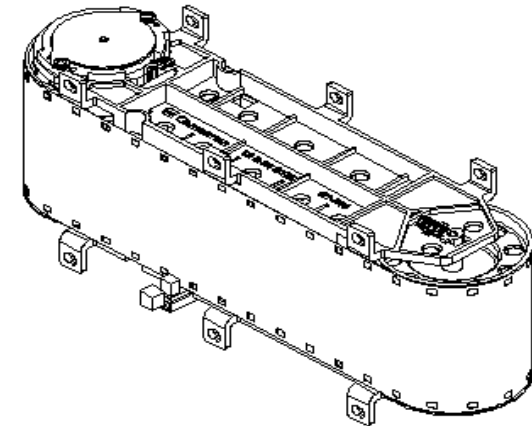
Flexi-Mech Spec Sheet
Project No:

MOTOR	A) 12 Volt 48 Step		→	<input type="checkbox"/>

OPTIC ASSEMBLY	A) Low Output at Tab	B) High Output at Tab	→	<input type="checkbox"/>

LAMP OPTIONS	Symbols	A) 1	B) 12	C) 16	→	<input type="checkbox"/>
		D) 24				
	Central Divider	A) 16 Symbol		C) Not supplied	→	<input type="checkbox"/>
	Loom	A) Sinking	B) Sourcing	Z) Not supplied	→	<input type="checkbox"/>
	Lampholder	A) Diode	B) Link	Z) Not supplied	→	<input type="checkbox"/>
	Lamp Type	A) See Page two for code		Z) Not supplied	→	<input type="checkbox"/>
	Lamp No's	A) See Page two for code		Z) Not supplied	→	<input type="checkbox"/>

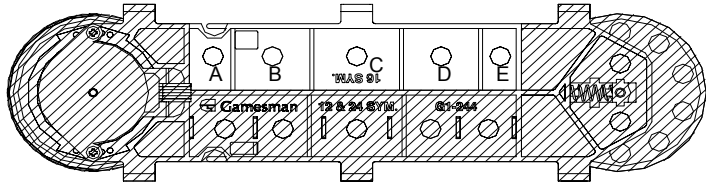
BAND	A) Band Fitted	Z) Band Not Fitted	→	<input type="checkbox"/>
	Customer Part No:			



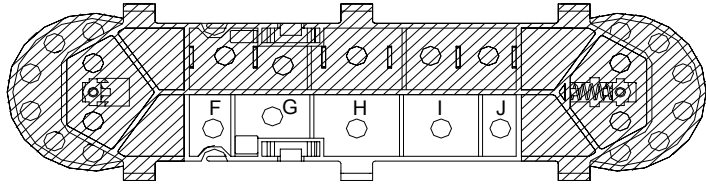
Issue: 4	Lamp Positioning 02-05-03
Issue: 3	Signature box added 12-12-02
Issue: 2	Lamp No box added 2-12-02
Issue: 1	Drawn 5-11-02
Gamesman Signature	
Comments:	

Customer:	Signature:	
Customer Part No.		

16 SYMBOL

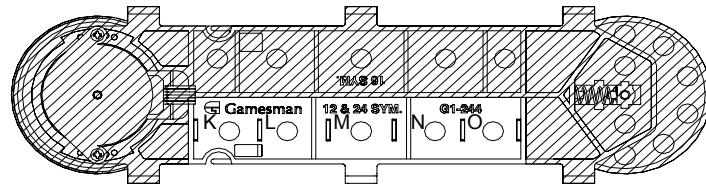


16 SYMBOL MOTOR SIDE

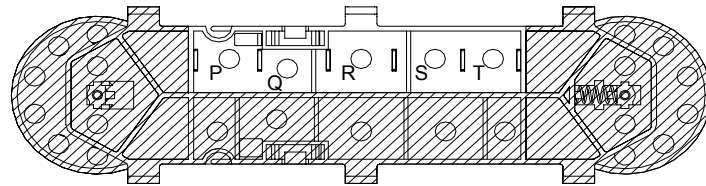


16 SYMBOL TOP SIDE

12 & 24 SYMBOL

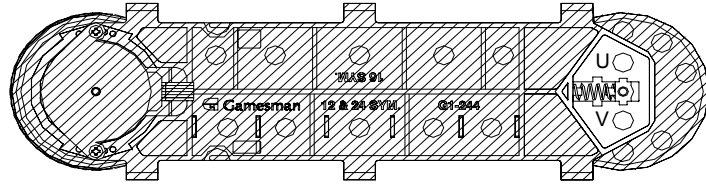


12 & 24 SYMBOL MOTOR SIDE

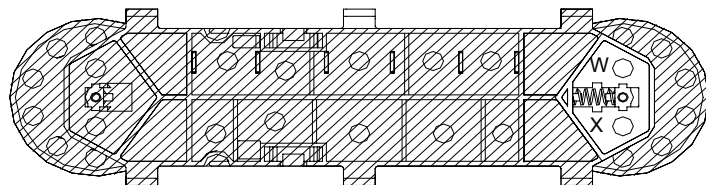


12 & 24 SYMBOL TOP SIDE

1 SYMBOL



1 SYMBOL MOTOR SIDE



1 SYMBOL TOP SIDE



Sheet 2
Project No

Enter Code for Lamp / LED Positioning

Position	A	B	C	D	E
Lamp Code					
Wire Colour					
Position	F	G	H	I	J
Lamp Code					
Wire Colour					
Position	K	L	M	N	O
Lamp Code					
Wire Colour					
Position	P	Q	R	S	T
Lamp Code					
Wire Colour					
Position	U	V	W	X	
Lamp Code					
Wire Colour					

Lamps

01	12v 0.1A - Red
02	12v 0.1A - Blue
03	12v 0.1A - Yellow
04	12v 0.1A - Green
05	12v 0.1A - Clear

LED's

06	12v - Red
07	12v - Blue
08	
09	
10	

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