



CUSTOMER: _____ **DATE:** _____

CONTACT: _____ **PHONE:** _____ **FAX:** _____

1) APPLICATION

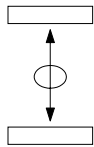
- INDOOR OUTDOOR MARINE ENVIRONMENT MOBILE EQUIPMENT OVERHEAD CRANE/HOISTING CRANE CHAIR
- PORTABLE EQUIPMENT FOOT PEDAL OTHER _____

2) CONTROLLER SIZE & DURABILITY

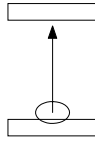
- MINIATURE: V10 H100 H7 V14 V20 S14 MEDIUM: V11 V8 D8
- SMALL: V5 VV5 S2 S21 S22 S23 S24 N6 LARGE: V3 V6 VV6 D64 DD64 K2

3) CONTROLLER FUNCTIONS

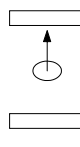
SINGLE AXIS (PICK 1 OF 3 ITEMS BELOW)



STANDARD BI-DIRECTIONAL

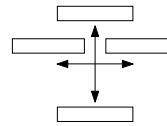


FULL TRAVEL UNI-DIRECTIONAL

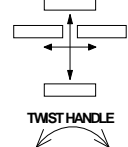


CENTER TO END UNI-DIRECTIONAL

DUAL AXIS



MULTI AXIS



4) SWITCH SPECIFICATIONS

LEFT HAND MOUNTING

- VOLTAGE _____ AC/DC CURRENT _____ AMPS.
 DIRECTION 1&2 DIRECTION 3&4
 NUMBER OF CONTACTS _____ NUMBER OF CONTACTS _____
 STEPLESS OR STEPS _____ STEPLESS OR STEPS _____
- SPRING RETURN SPRING RETURN
 - FRICTION BRAKE FRICTION BRAKE
 - POTENTIOMETER _____ POTENTIOMETER _____
 - ELECTRONICS ELECTRONICS

RIGHT HAND MOUNTING

- VOLTAGE _____ AC/DC CURRENT _____ AMPS.
 DIRECTION 5&6 DIRECTION 7&8
 NUMBER OF CONTACTS _____ NUMBER OF CONTACTS _____
 STEPLESS OR STEPS _____ STEPLESS OR STEPS _____
- SPRING RETURN SPRING RETURN
 - FRICTION BRAKE FRICTION BRAKE
 - POTENTIOMETER _____ POTENTIOMETER _____
 - ELECTRONICS ELECTRONICS

5) ELECTRONICS

A) VALVE SPECIFICATIONS

VALVE MANUFACTURE _____ MODEL NUMBER _____
 SUPPLY VOLTS: _____ VDC COIL RESISTANCE: _____ OHMS THRESHOLD: _____ mA MAX. OUTPUT _____ mA
 SINGLE COIL DUAL COIL FLOW CONTROL SWITCHES FOR DIRECTIONAL VALVES PWM FREQUENCY: _____ Hz

B) SIGNAL OUTPUTS

SUPPLY VOLTS: _____ VDC 4-20mA 0-20mA 0-10V -10V to +10V OTHER _____

C) OPTIONS FOR BOTH

SINGLE MAX. (A ADJ.) DUAL MAX. (A & B ADJ.) DUAL RANGE _____ mA RAMP TIME _____ SEC.

6) HANDLE TYPE

- STANDARD KNOB MECHANICAL INTERLOCK PUSHBUTTON DEADMAN PUSH DEADMAN PULL DEADMAN
- PALM HANDLE _____

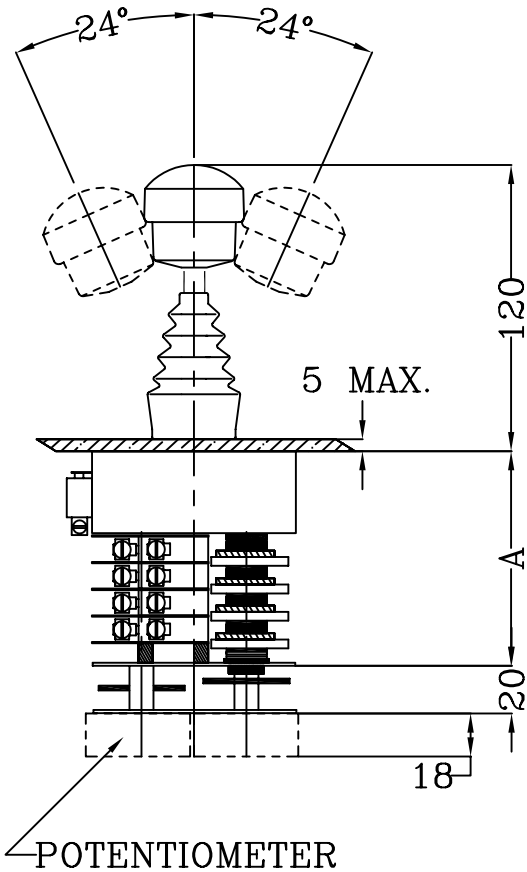
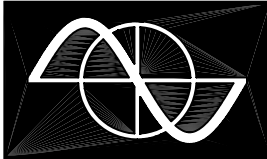
7) NAMEPLATE SPECIFICATIONS

- STANDARD NAMEPLATE _____ SPECIAL NAMEPLATE (ATTACH LAYOUT DRAWING OR SPECIFICATIONS)

8) ENCLOSURE

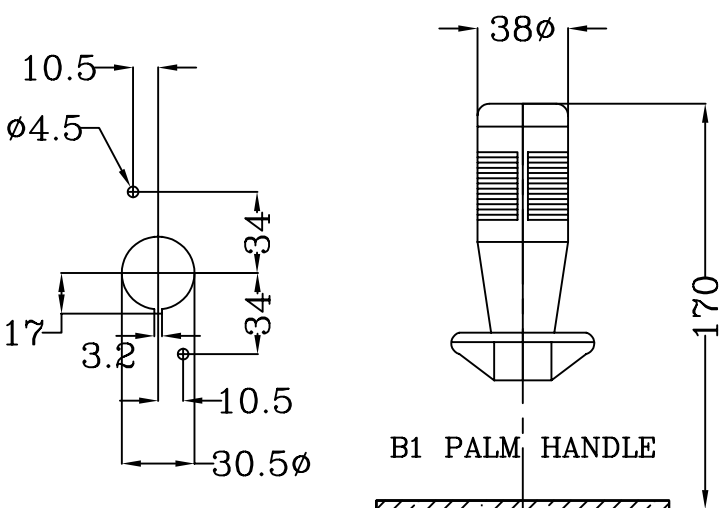
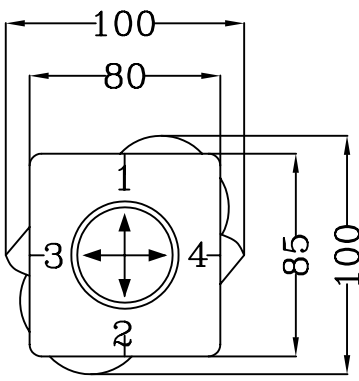
- GENERAL PURPOSE WEATHERPROOF CORROSIVE RESISTANT (PLASTIC) PORTABLE CONSOLES
- ENCLOSURE DIMENSIONS L= _____ W= _____ H= _____ TS1 TS2

9) NOTES

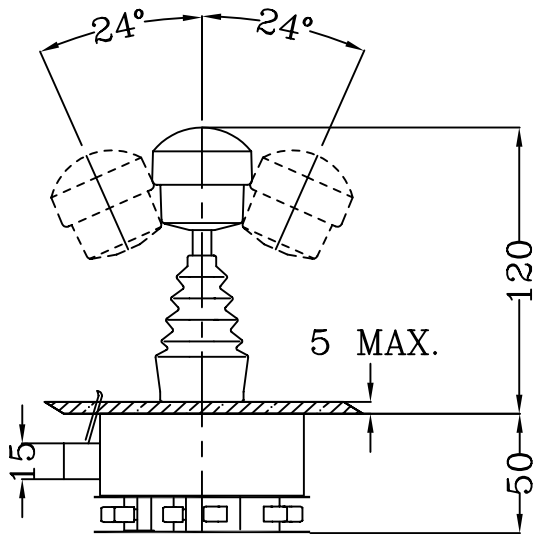
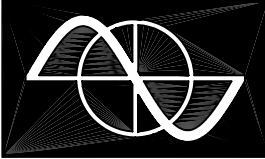


THE V5 MASTER SWITCH IS RUGGED, COMPACT AND IT'S MODULAR DESIGN IS SUITABLE FOR ALMOST ANY APPLICATION. IT IS BUILT FOR 6 MILLION OPERATIONS. IT IS OIL, OZONE, UV AND SALT ATMOSPHERE (OCEAN CONDITION) RESISTANT. CONTACTS ARE RATED AT 2A 250V AC15 RES. 3A 24V DC13. DEGREE OF PROTECTION FRONT: IP54

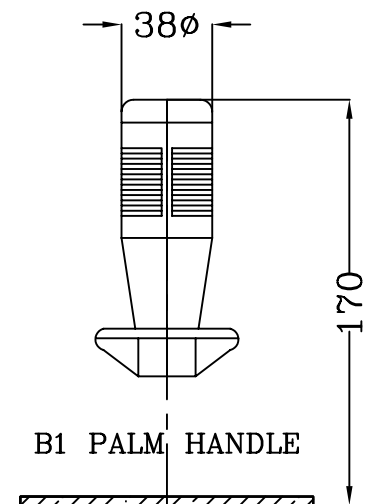
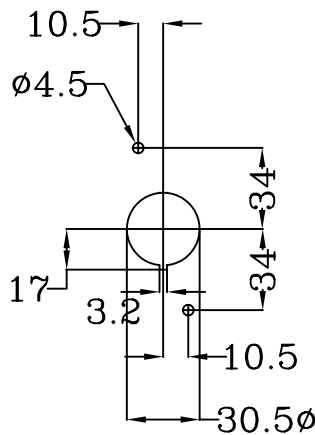
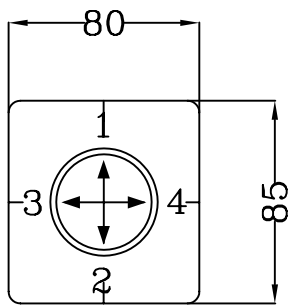
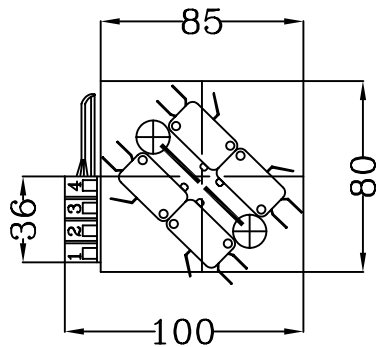
SIZE	# OF CONTACTS	A DIMENSION
1	1	58
2	2	69
3	3	79
4	4	90
5	5	100
6	6	111



PANEL CUT OUT

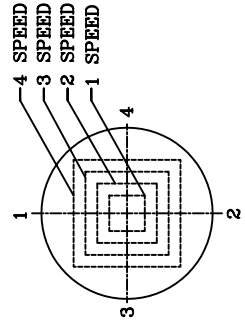


THE V5 BANG BANG MASTER SWITCH IS RUGGED, COMPACT AND IT'S MODULAR DESIGN IS SUITABLE FOR ALMOST ANY APPLICATION. IT IS BUILT FOR 6 MILLION OPERATIONS. IT IS OIL, OZONE, UV AND SALT ATMOSPHERE (OCEAN CONDITION) RESISTANT. CONTACTS ARE RATED AT 10A 250V AC15 RES. (STANDARD) 3A 24V DC13. (OPTIONAL) DEGREE OF PROTECTION FRONT: IP54

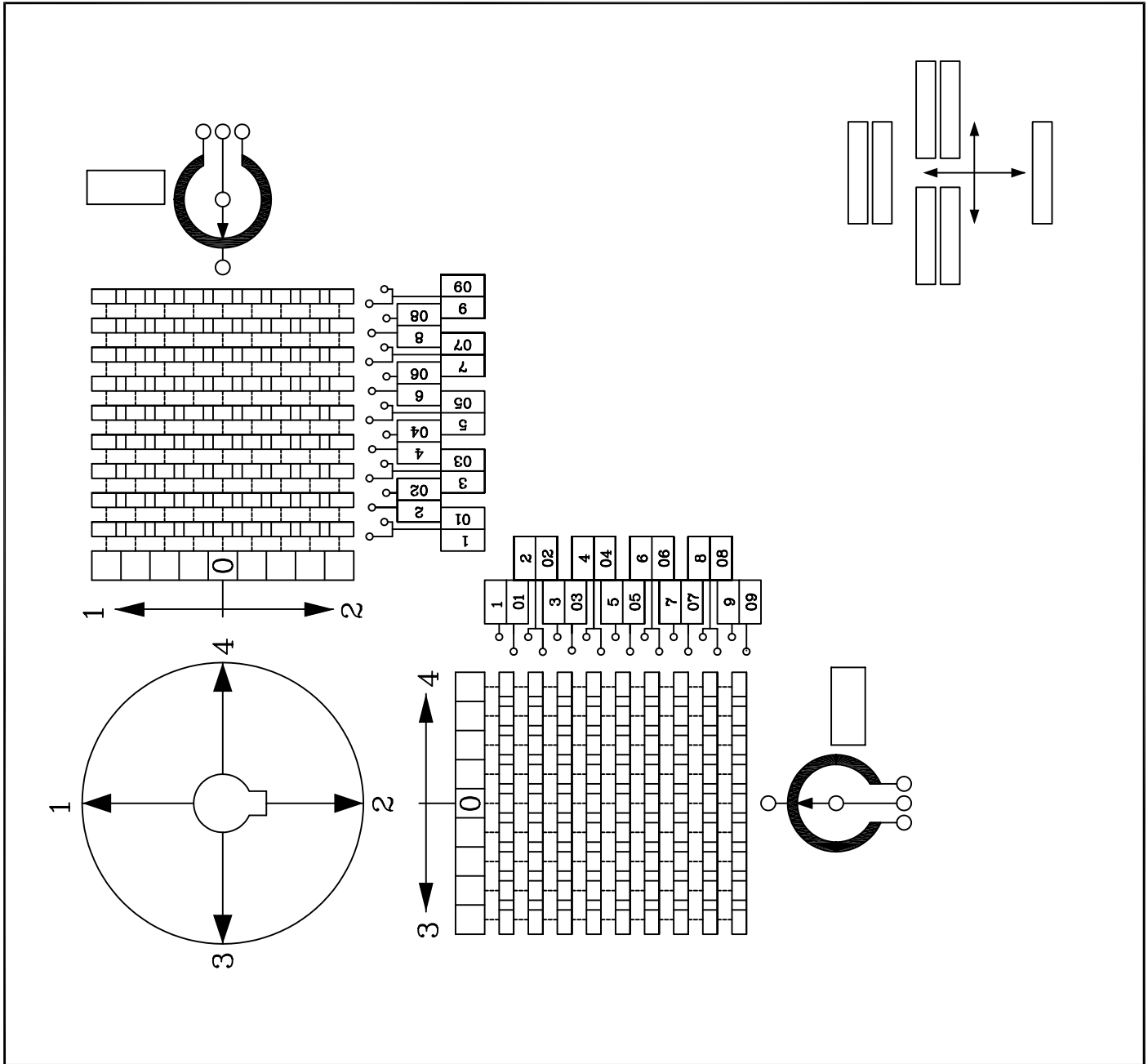


PANEL CUT OUT

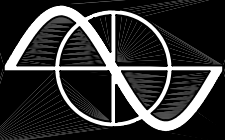
	V51-BASIC SINGLE AXIS SWITCH
	V5-BASIC DUEL AXIS SWITCH
	X-STANDARD HANDLE
	T-DEAD MAN TO PRESS
	P-DEAD MAN TO PULL
	B-PUSH BUTTON IN HANDLE
	M-MECH. INTERLOCK IN O POSS.
	BIT-PALM HANDLE P. B. DEADMAN
	1-SWITCHING GATE #1 1
	2-SWITCHING GATE #2 +
	3-SWITCHING GATE #3 □
	4-SPECIAL SWITCHING GATE
	CONTACT ARR. DIR. 1-2
	A-Z-FROM SHEET 20.2.1
	O-SPECIAL CONTACT ARRANGEMENT
	X-IF NOT REQUIRED
	z-SPRING RETURN
	r-BRAKE ADJUSTABLE
	X-IF NOT REQUIRED
	P-POTENTIOMETER SEE SECT. 6
	P-POTENTIOMETER MOUNTING
	X-IF NOT REQUIRED
	CONTACT ARR. DIR. 3-4
	A-Z-FROM SHEET 20.2.1
	O-SPECIAL CONTACT ARRANGEMENT
	X-IF NOT REQUIRED
	z-SPRING RETURN
	r-BRAKE ADJUSTABLE
	X-IF NOT REQUIRED
	P-POTENTIOMETER SEE SECT. 6
	P-POTENTIOMETER MOUNTING
	X-IF NOT REQUIRED
	1-M-STANDARD NAMEPLATE. SECT. 20.1
	X-IF NOT REQUIRED
	O-SPECIAL NAMEPLATE MARK IN CHART
	G-GENERAL PURPOSE ENCL.
	W-WEATHERPROOF ENCL.
	O-OPEN TYPE SWITCH



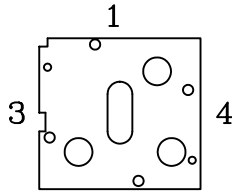
MARK IN SPECIAL SWITCHING GATE ONLY



GESSMANN V5 MASTER SWITCH		JOB #
DATE:	FROM:	
NAME:		

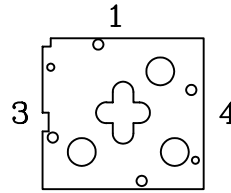


#1



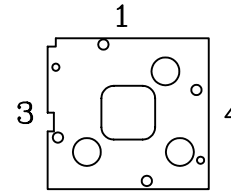
STANDARD		
3-4	- - -	KBKJ 0011
1-2	1-0-1	
3-4	- - -	KBKJ 0033
1-2	2-0-2	
3-4	- - -	KBKJ 0033
1-2	3-0-3	
3-4	- - -	KBKJ 0033
1-2	4-0-4	

#2



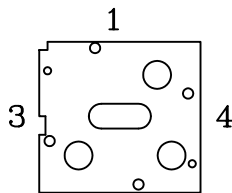
STANDARD		
1-0-1		KBKK 1111
1-0-1		
2-0-2		KBKK 3333
2-0-2		
3-0-3		KBKK 3333
3-0-3		
4-0-4		KBKK 3333
4-0-4		

#3



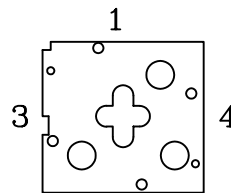
STANDARD		
3-4	1-0-1	KBKJ 1111
1-2	1-0-1	
3-4	1-0-1	KBKJ 1133
1-2	2-0-2	
3-4	1-0-1	KBKJ 1133
1-2	3-0-3	
3-4	1-0-1	KBKJ 1133
1-2	4-0-4	
2-0-2		KBPA 244
2-0-2		
3-0-3		KBPA 244
3-0-3		
2-0-2		KBPA 244
4-0-4		
3-0-3		KBPA 244
3-0-3		
3-0-3		KBPA 244
4-0-4		

#1



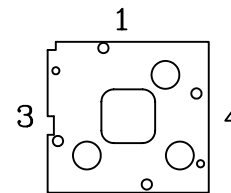
STANDARD		
1-2	- - -	KBKJ 1100
3-4	1-0-1	
1-2	- - -	KBKJ 3300
3-4	2-0-2	
1-2	- - -	KBKJ 3300
3-4	3-0-3	
1-2	- - -	KBKJ 3300
3-4	4-0-4	

#2

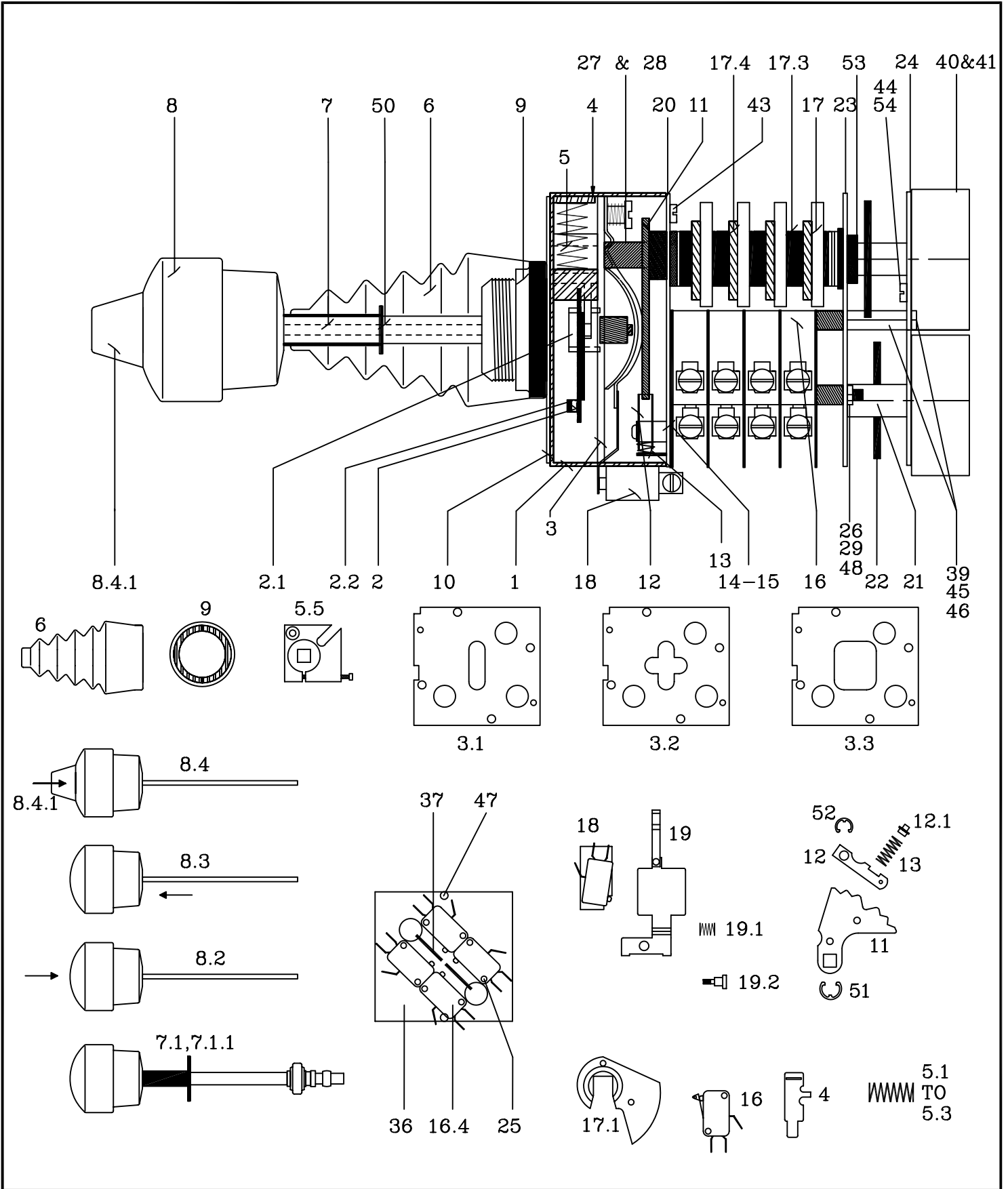


STANDARD		
1-0-1		KBKK 1111
1-0-1		
2-0-2		KBKK 3333
2-0-2		
3-0-3		KBKK 3333
3-0-3		
4-0-4		KBKK 3333
4-0-4		

#3



STANDARD		
1-2	1-0-1	KBKJ 1111
3-4	1-0-1	
1-2	1-0-1	KBKJ 3311
3-4	2-0-2	
1-2	1-0-1	KBKJ 3311
3-4	3-0-3	
1-2	1-0-1	KBKJ 3311
3-4	4-0-4	
2-0-2		KBPA 244
2-0-2		
3-0-3		KBPA 244
3-0-3		
2-0-2		KBPA 244
4-0-4		
3-0-3		KBPA 244
3-0-3		
3-0-3		KBPA 244
4-0-4		





PART#	DESCRIPTION	PART#	DESCRIPTION
1	V51 SINGLE AXIS DRIVE c/a RETURN SPRINGS	16.5	INSULATING PLATES FOR MICROSWITCHES
1.1	V5 MULTI DRIVE c/a RETURN SPRINGS	16.6	INSULATING PLATES FOR MICROSWITCHES
2	CAM SHAFT OPERATOR	16.7	MICROSWITCHES c/a ROLLER (0.250 TABS)
2.1	PLASTIC CAM SHAFT ACTUATOR	16.8	MICROSWITCHES (0.187 TABS)
2.2	PLASTIC ROLLER	17.1	BLANK PLASTIC CAM
3	SWITCHING GATES SEE PAGE 1.2.3	17.3	CAM HOLDER
4	RETURN SPRING ARM	17.4	CAM RETAINER WASHER
5.1	RETURN SPRING NORMAL	18	DEAD MAN MICROSWITCH ASSEMBLY
5.2	RETURN SPRING STRONG	19	DEAD MAN ACTUATOR
5.3	RETURN SPRING WEAK	19.1	DEAD MAN SPRING
5.5	FRICITION BRAKE	19.2	SHOULDER SCREW M4x6
6	RUBBER BOOT	19.3	BLANK DEAD MAN PLATE
7.0	SHAFT ONLY	20	TOP MOUNTING PLATE
7.0.1	SOLID KNOB	21	SMALL GEAR WITH 6mm HOLE
7.1	STANDARD SHAFT ASSEMBLY	21.1	SMALL GEAR WITH 1/2" HOLE
7.1.1	V51 STANDARD SHAFT ASSEMBLY	22	LARGE GEAR
7.2	STANDARD SHAFT ASSEMBLY FOR B	23	BOTTOM MOUNTING PLATE
7.2.1	V51 STANDARD SHAFT ASSEMBLY FOR B	24	POTENTIOMETER ADAPTER PLATE METAL
7.3	STANDARD SHAFT ASSEMBLY FOR PUSH DEAD MAN 'T'	24.1	POTENTIOMETER ADAPTER PLATE PRINTED CIRCUIT BOARD
7.3.1	V51 STANDARD SHAFT ASSEMBLY FOR PUSH DEAD MAN 'B'	24.2	POTENTIOMETER ADAPTER PLATE FOR 3 POTS.METAL
7.4	STANDARD SHAFT ASSEMBLY FOR PULL DEAD MAN 'P'	24.3	PRINTED CIRCUIT BOARD FOR CP.17 POTENTIOMETER
7.4.1	V51 STANDARD SHAFT ASSEMBLY FOR PULL DEAD MAN 'P'	25	CHEESE HEAD SCREW M3
7.5	STANDARD SHAFT ASSEMBLY FOR MECHANICAL INTERLOCK 'M'	26	SPLIT LOCK WASHER M3
7.5.1	KNOB AND ROD FOR MECHANICAL INTERLOCK 'M'	27	CAM SHAFT 01-07
7.5.2	BRACKET FOR MECHANICAL INTERLOCK	28	CAM SHAFT 01p-07p & 01r-07r
7.6	BOTTOM SLEEVE FOR MECHANICAL INTERLOCK	29	FLAT WASHER M3
7.7	STANDARD SHAFT ASSEMBLY FOR PUSH BUTTON DEAD MAN 'B'	30.1	SMALL PLASTIC SPACER FOR BANG BANG POT.SHAFT
7.7.1	V51 STANDARD SHAFT ASSEMBLY FOR PUSH BUTTON DEAD MAN 'B'	30.2	LARGE PLASTIC SPACER FOR BANG BANG POT.SHAFT
8.2	KNOB AND ROD FOR PUSH DEAD MAN 'T'	30.3	SPACER FOR CAM SHAFT
8.3	KNOB AND ROD FOR PULL DEAD MAN 'P'	36	BANG BANG PLATE
8.4	KNOB AND ROD FOR PUSH BUTTON DEAD MAN 'B'	37	BANG BANG CONTACT ACTUATOR
8.4.1	RUBBER CAP FOR PUSH BUTTON DEAD MAN	39.1	HEX STANDOFF'S M4x20
8.6	B1T PALM HANDLE WITH ROD	39.2	HEX STANDOFF'S M4x25
9	MOUNTING RING NUT	39.3	HEX STANDOFF'S M4x10
10	RUBBER GASKET	40	POTENTIOMETER SEE SECTION 6
11.1	2 STEP RATCHET	41	POTENTIOMETER CP-17
11.2	3 STEP RATCHET	43	CHEESE HEAD SCREW M4x8.
11.3	4 STEP RATCHET	44	SPLIT LOCK WASHER M4.
11.4	0 STEP RATCHET (SMOOTH)	45	FLAT WASHER M4
12	RATCHET ARM	46	HEX NUT M3
12.1	RATCHET SPRING HOLDER	47	FLAT HEAD SCREW M3x5
13.1	RATCHET SPRING NORMAL	48	HEX NUT M4
13.2	RATCHET SPRING STRONG	49	HEX SOCKET SET SCREW M3x5
14	SWITCH CONTACT ASSEMBLY FOR SINGLE AXIS	50	RETAINING RING EXTERNAL 8mm
15	SWITCH CONTACT ASSEMBLY FOR MULTI AXIS	51	RETAINING CLIP
16.1	MICROSWITCHES (166)AC c/w ROLLER (SCREW TERMINALS)	52	RETAINING CLIP
16.2	MICROSWITCHES (166)AC c/w ROLLER (SCREW TERMINALS) GOLD	53	SQUARE PLASTIC BUSHING
16.3	MICROSWITCHES c/w ROLLER (0.187 TABS)	54	PAN HEAD SCREW M4x6
16.4	MICROSWITCHES (0.187 TABS)		