



APPLICATION AND SWITCH ORDERING GUIDE

VER.3

CUSTOMER: _____ DATE: _____

CONTACT: _____ PHONE: _____ FAX: _____

1) APPLICATION

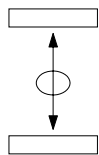
- INDOOR OUTDOOR MARINE ENVIRONMENT MOBILE EQUIPMENT OVERHEAD CRANE/HOISTING CRANE CHAIR
- PORTABLE EQUIPMENT FOOT PEDAL OTHER _____

2) CONTROLLER SIZE & DURABILITY

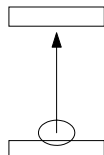
- MINIATURE: V10 H100 H7 V14 V20 S14 MEDIUM: V11 V8 D8
- SMALL: V5 VV5 S2 S21 S22 S23 S24 N6 LARGE: V3 V6 VV6 D64 DD64 K2

3) CONTROLLER FUNCTIONS

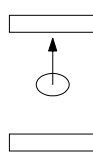
SINGLE AXIS (PICK 1 OF 3 ITEMS BELLOW)



STANDARD BI-DIRECTIONAL

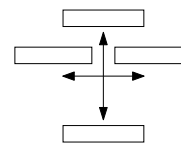


FULL TRAVEL UNI-DIRECTIONAL

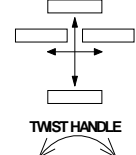


CENTER TO END UNI-DIRECTIONAL

DUAL AXIS



MULTI AXIS



4) SWITCH SPECIFICATIONS

LEFT HAND MOUNTING
 VOLTAGE _____ AC/DC CURRENT _____ AMPS.
 DIRECTION 1&2 DIRECTION 3&4
 NUMBER OF CONTACTS _____
 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 _____
 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 _____

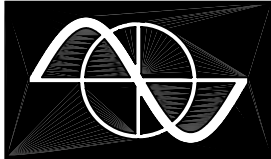
7) NAMEPLATE SPECIFICATIONS

- 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

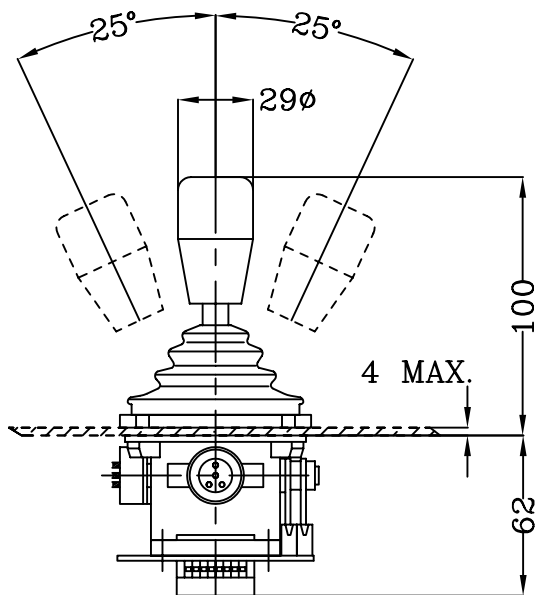
9) NOTES



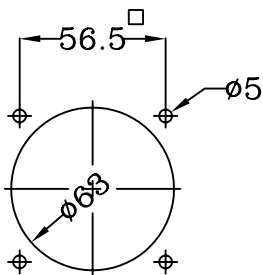
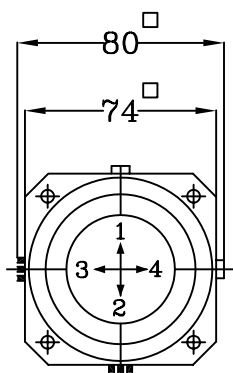
V10 MULTI AXIS MASTER SWITCH

VER.3
1.4.1

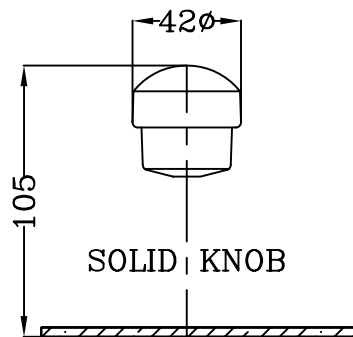
MINI KNOB



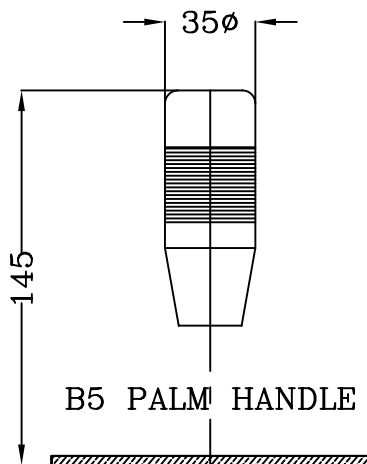
THE V10 MASTER SWITCH IS DESIGNED FOR RADIO AND PORTABLE CONTROLS. IT IS SMALL, LIGHTWEIGHT AND SOLID IN DESIGN. IT IS BUILT FOR 6 MILLION OPERATIONS. IT IS OIL, OZONE, UV AND SALT ATMOSPHERE (OCEAN CONDITION) RESISTANT. CONTACTS ARE RATED AT 5A 30VDC DEGREE OF PROTECTION FRONT: IP54



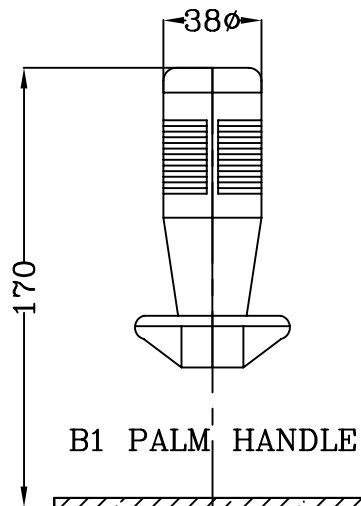
PANEL CUT OUT



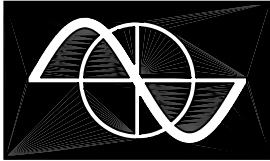
SOLID KNOB



B5 PALM HANDLE

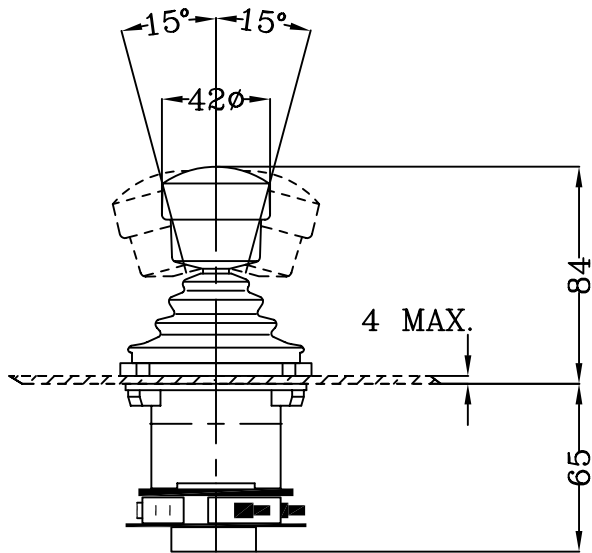


B1 PALM HANDLE



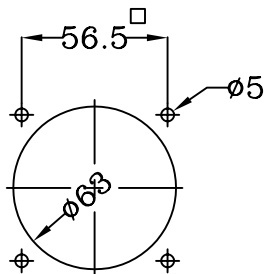
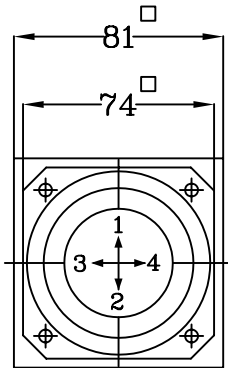
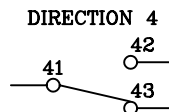
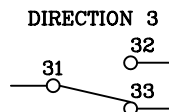
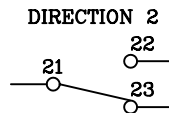
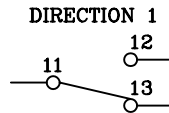
V10 BANG BANG MASTER SWITCH

VER.3
1.4.1BB

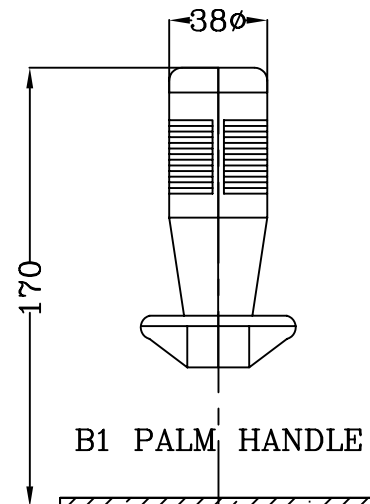
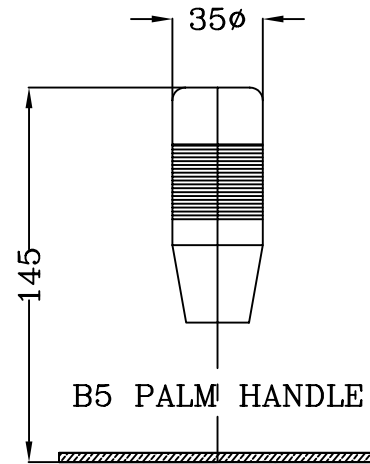


THE V10 BANG BANG MASTER SWITCH IS DESIGNED FOR RADIO AND PORTABLE CONTROLS. IT IS SMALL, LIGHTWEIGHT AND SOLID IN DESIGN. IT IS BUILT FOR 6 MILLION OPERATIONS. IT IS OIL, OZONE, UV AND SALT ATMOSPHERE (OCEAN CONDITION) RESISTANT. CONTACTS ARE RATED AT 16A 250VAC DEGREE OF PROTECTION FRONT: IP54

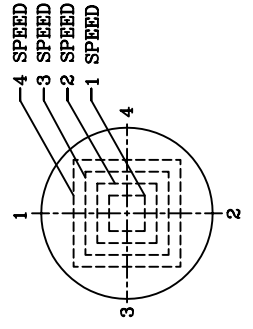
TERMINALS CAN BE SCREW TYPE OR 0.187" TABS



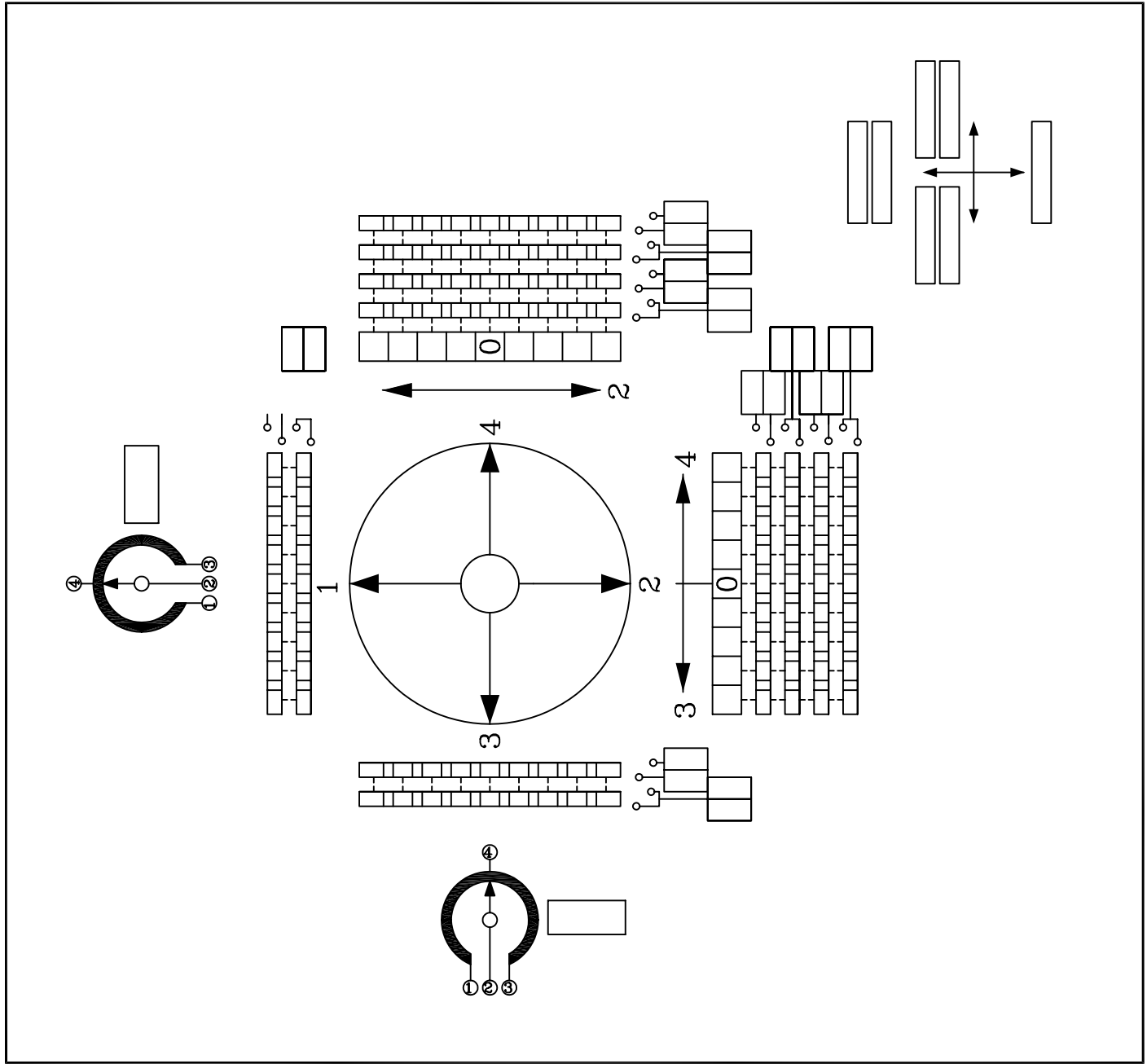
PANEL CUT OUT



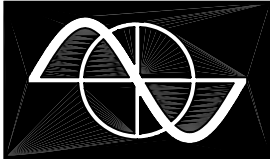
	V10-BASIC MASTER SWITCH
	X-STANDARD HANDLE
	T-DEAD MAN TO PRESS
	M-MECH. INTERLOCK IN 0 POSS. SPECIAL HANDLE SEE SECT. 5
	1-SWITCHING GATE #1 I
	2-SWITCHING GATE #2 +
	3-SWITCHING GATE #3 □
	4-SPECIAL SWITCHING GATE
	CONTACT ARR. DIR. 1-2
	A-Z-FROM SHEET 20.2.1
	O-SPECIAL CONTACT ARR.
	X-IF NOT REQUIRED
	Z-SPRING RETURN
	r-FRICTION BRAKE
	P-POTENTIOMETER SEE SECT. 6
	X-IF NOT REQUIRED
	CONTACT ARR. DIR. 3-4
	A-Z-FROM SHEET 20.2.1
	O-SPECIAL CONTACT ARR.
	X-IF NOT REQUIRED
	Z-SPRING RETURN
	r-FRICTION BRAKE
	P-POTENTIOMETER SEE SECT. 6
	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



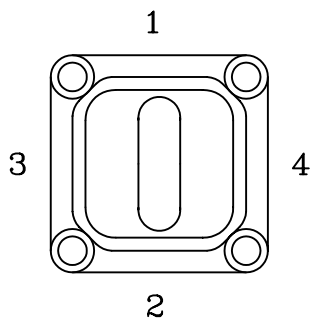
GESSMANN V10 MASTER SWITCH		JOB #
DATE:		
NAME:		



V10 SWITCHING GATES

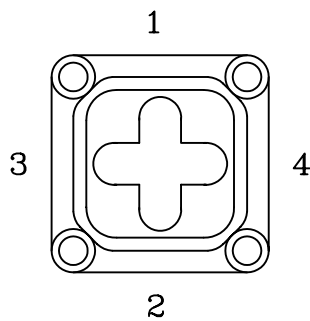
VER.3
1.4.3

#1



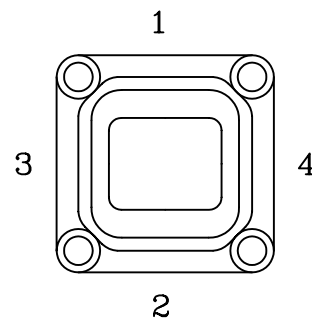
STANDARD		
1-2	BLANK	KBKT 17d
1-2	7.0-0-7.0	KBKT 56a
1-2	12.5-0-12.5	KBKT 82
1-2	13-0-13	KBKT 82
1-2	17-0-17	
1-2	18-0-18	KBKT 57
1-2	19-0-19	KBKT 60
1-2	25-0-25	KBKT 30a

#2

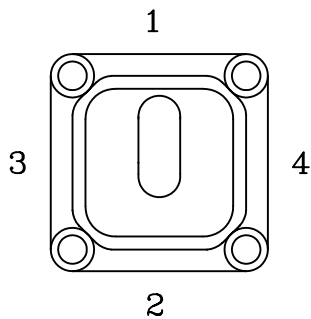


STANDARD		
1-2	9-0-9	KBKT 73
3-4	9-0-9	
1-2	9-0-9	KBKT 71
3-4	25-0-25	
1-2	13-0-13	KBKT 63
3-4	25-0-25	
1-2	25-0-25	KBKT 32a
3-4	25-0-25	

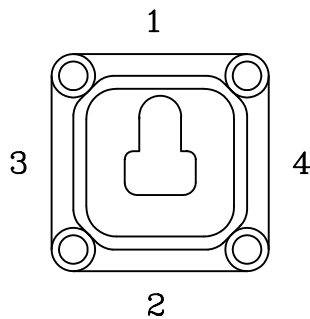
#3



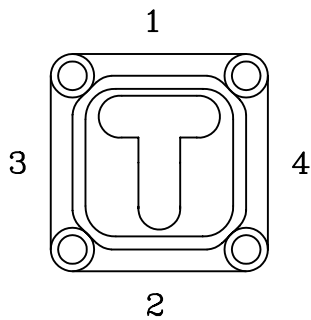
STANDARD		
1-2	7.0-0-7.0	KBKT 61
3-4	19-0-19	
1-2	7.0-0-7.0	KBKT 80
3-4	25-0-25	
1-2	9-0-9	KBKT 55a
3-4	25-0-25	
1-2	12.5-0-12.5	KBKT 38b
3-4	12.5-0-12.5	
1-2	13-0-13	KBKT 83
3-4	13-0-13	
1-2	13-0-13	KBKT 79
3-4	19-0-19	
1-2	25-0-25	KBKT 37b
3-4	17-0-17	
1-2	18-0-18	KBKT 28b
3-4	18-0-18	
1-2	19-0-19	KBKT 62
3-4	25-0-25	
1-2	20-0-20	KBKT 76
3-4	20-0-20	
1-2	25-0-25	KBKT 18b
3-4	25-0-25	



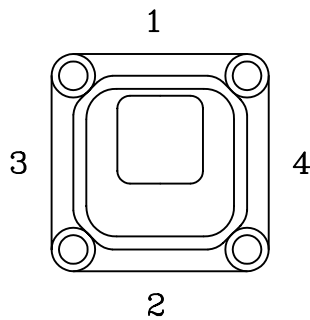
SPECIAL		
1-2	25-0	KBKT 39
1-2	25-0-12.5	KBKT 33b



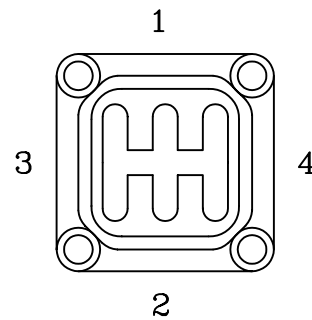
SPECIAL		
1-2	25-0-6	KBKT 72
3-4	9-0-9	



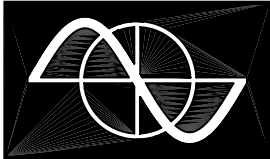
SPECIAL		
1-2	25-0-25	KBKT 49b
3-4	18-0-18	



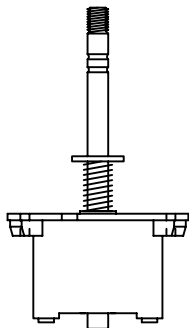
SPECIAL		
1-2	25-0	KBKT 44a
3-4	17-0-17	



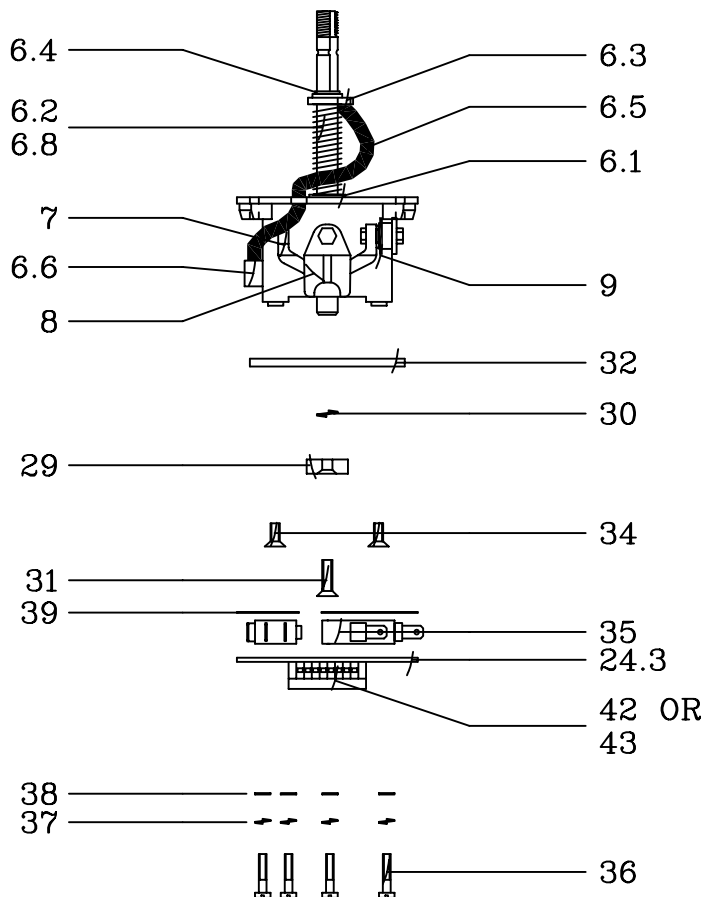
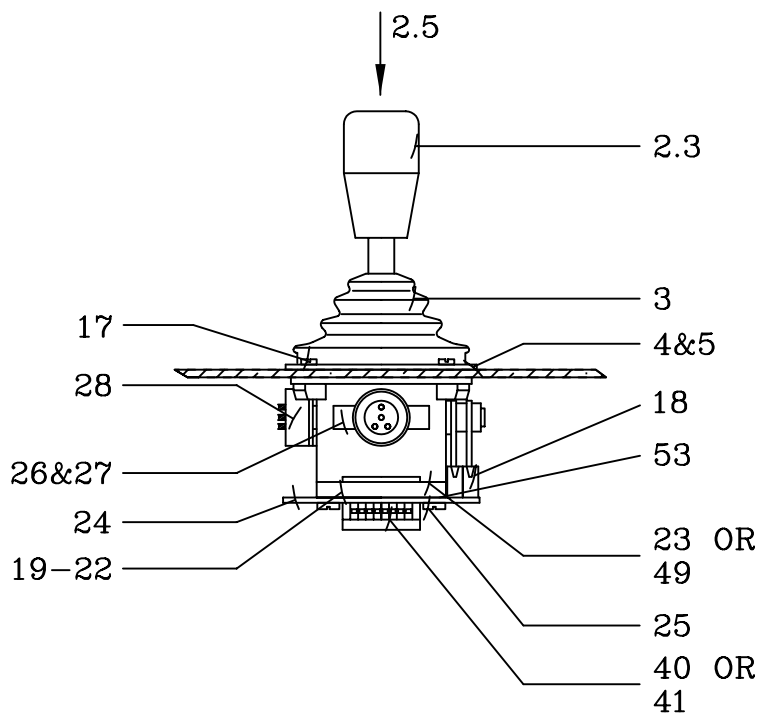
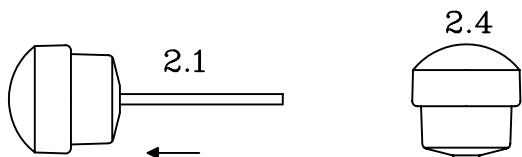
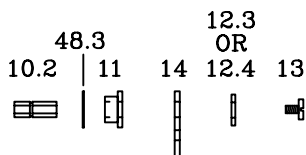
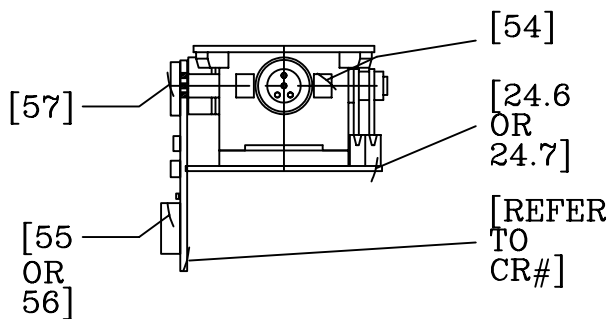
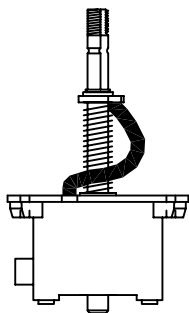
SPECIAL		
1-2	25-0-25	KBKT 58
3-4	25-0-25	



1.1-1.3



1.4-1.8



NOTE: [] = H100 PART ONLY



V10 PARTS LIST

VER.3
1.4.5

PART#	DESCRIPTION	PART#	DESCRIPTION
1.1	STD.SHAFT ASSY. & RETURN SPRING c/w CASTING	23	METAL PLATE FOR MECHANICAL INTERLOCK
1.2	STD.SHAFT ASSY. & RETURN SPRING FOR MECH.c/w CASTING	23.1	BLANK METAL PLATE
1.3	STD.SHAFT ASSY. & RETURN SPRING FOR PUSH DM. c/w CASTING 'T'	24.1	PRINTED CIRCUIT BOARD FOR 4 MICRO SWITCHES (BLACK)
1.4	STD.SHAFT ASSY. & RETURN SPRING FOR B1T c/w CASTING	24.2	PRINTED CIRCUIT BOARD FOR 4 MICRO SWITCHES (WHITE)
1.5	STD.SHAFT ASSY. & RETURN SPRING FOR B_c/w CASTING	24.3	PRINTED CIRCUIT BOARD FOR RELAY FOR BANG BANG
1.6	STD.SHAFT ASSY. & RETURN SPRING FOR B c/w CASTING BANG	24.4	PRINTED CIRCUIT BOARD FOR 8 MICRO SWITCHES (BLACK)
1.7	STD.SHAFT ASSY. & RETURN SPRING FOR B_c/w CASTING H100	24.5	PRINTED CIRCUIT BOARD FOR BANG BANG
1.8	STD.SHAFT ASSY. & RETURN SPRING FOR MECH. c/w CASTING H100	24.6	MICRO SWITCH BOARD FOR ELECTRONICS (BLACK)
2.1	KNOB AND ROD FOR MECHANICAL INTERLOCK 'M'	24.7	MICRO SWITCH BOARD FOR ELECTRONICS (WHITE)
2.3	MINI KNOB	24.8	PRINTED CIRCUIT BOARD FOR 8 MICRO SWITCHES (BLACK/WHITE)
2.4	SOLID KNOB	25.1	SHOULDER SCREW M4x6
2.5	KNOB AND ROD FOR PUSH DEAD MAN 'T'	25.2	SHOULDER SCREW M4x10
3	RUBBER BOOT	26	POTENTIOMETER MOUNTING BRACKET
4	PLASTIC PLANGE PLATE	27	POTENTIOMETER BRACKET MOUNTING SCREWS M3.5x8
5	RUBBER GASKET	28	POTENTIOMETER SEE SECTION 6
6.1	PLASTIC BUSHING FOR RETURN SPRING	29	BANG BANG CONTACT ACTUATOR
6.2	RETURN SPRING	30	SPLIT LOCK WASHER M4
6.3	METAL HOLDER FOR RETURN SPRING	31	FLAT HEAD SCREW FOR CONTACT ACTUATOR M4x12
6.4	RETURN SPRING CLIP	32.1	#1 CONTACT PLATE/SWITCH GATE FOR BANG BANG
6.5	SPRING FOR WIRES	32.2	#2 CONTACT PLATE/SWITCH GATE FOR BANG BANG
6.6	CLAMP FOR SPRING FOR WIRES	32.3	#3 CONTACT PLATE/SWITCH GATE FOR BANG BANG
6.8	RETURN SPRING FOR MECHANICAL INTERLOCK 'M'	34	FLAT HEAD SCREW FOR CONTACT PLATE M4x8
7	1 st MOTION BRACKET	35	MICROSWITCH (0.187 TABS)
8	2 nd MOTION BRACKET	35.1	MICROSWITCH (SCREW TERMINALS)
9	FLAT WASHER M8	35.2	MICROSWITCH FOR PCB MOUNTING
10.2	CAM SHAFT c/w RING 0 1 2 CONTACTS	36	CHEESE HEAD SCREW M3x16
11	PLASTIC BUSHING	37	SPLIT LOCK WASHER M3
12.3	SPACER 1.5 mm	38	FLAT WASHER M3
12.4	SPACER 3.0 mm	39	INSULATING PLATE
13	CAM SHAFT SCREW M3x5	40	2 POLE TERMINAL STRIP (GREEN)
14	BLANK METAL CAM	41	8 POLE TERMINAL STRIP (GREEN)
17.1	HEX SOCKET CAP SCREW M4x16	42	2 POLE TERMINAL STRIP (WHITE)
17.2	HEX SOCKET CAP SCREW M4x20	43	3 POLE TERMINAL STRIP (WHITE)
17.3	HEX CAP SCREW M4x20	44	3 POLE TERMINAL STRIP (GREEN)
17.4	M4 FLAT WASHER NYLON	49	4 mm SPACER
18	MICROSWITCH c/w LEVER (173) (WHITE)	49.1	4 mm SPACER FOR MECHANICAL INTERLOCK
18.1	MICROSWITCH c/w ROLLER WATERTIGHT (BLACK)	53	ROUND SHIM 6x12x0.3
19	SWITCHING GATES #1 SEE PAGE 1.4.3	54	HEX STANDOFF M4x15
20	SWITCHING GATES #2 SEE PAGE 1.4.3	55	2 POLE TERMINAL STRIP (WHITE)
21	SWITCHING GATES #3 SEE PAGE 1.4.3	56	3 POLE TERMINAL STRIP (WHITE)
22	SWITCHING GATES #4 SEE PAGE 1.4.3	57	CHEESE HEAD SCREW M4x10