



## P series handle


- Ergonomic design
- High resistance thermoplastic resin
- Available with different proportional and ON/OFF functions
- Available with or without "dead man" trigger

### General features


Body, shell and plate material	Nylon® - MZN
IP weather protection (assembled)	depending on configuration
Ambient temperature	from -20°C to 60°C / from -4°F to 140°F
UV resistance	according to IEC68-2-5, S test C procedure

### Electric device features


#### ON/OFF push button

Version	spring return	
Contact type	normally open	
Current rating	2 A resistive load @ 12 VDC	
Mechanical life (nr. of operations)	10 <sup>6</sup>	
Electric life (nr. of operations)	200x10 <sup>3</sup>	
Weather protection	IP67 with handle mounting	


#### ON/OFF push button with detent

Version	with detent	
Contact type	NA	
Current rating	200 mA @ 12 VDC	
Mechanical life (nr. of operations)	10 <sup>6</sup>	
Electric life (nr. of operations)	5x10 <sup>5</sup>	
Weather protection	IP67 with handle mounting	


#### Rocker switch

Version	with detent	
Contact type	on/off/on	
Current rating	2 A resistive load @ 12 VDC	
Mechanical life (nr. of operations)	10 <sup>5</sup>	
Electric life (nr. of operations)	200x10 <sup>3</sup>	
Weather protection	IP68	


#### FNR rocker switch

Version	with detent	
Contact type	on/off/on	
Current rating	2 A resistive load @ 12 VDC	
Mechanical life (nr. of operations)	10 <sup>6</sup>	
Weather protection	IP67	


#### LED

Supply voltage (max.)	12V 10 mA	
-----------------------	-----------	---

#### "Dead man" trigger

Version	spring return	
Contact type	NA	
Current rating	2 A resistive load @ 12 V	
Mechanical life (nr. of operations)	10 <sup>6</sup>	
Electric life (nr. of operations)	200x10 <sup>3</sup>	
Weather protection	IP67	

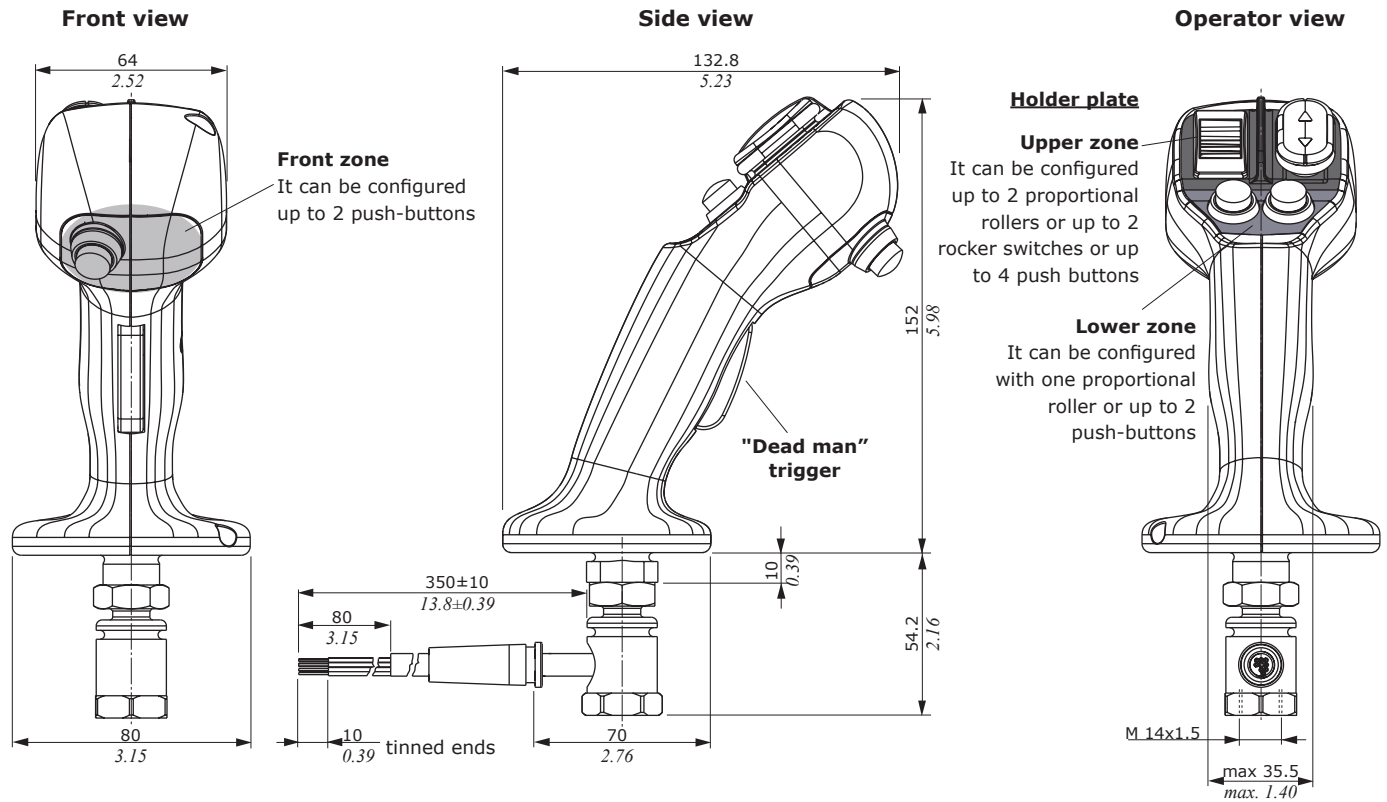
#### Proportional roller

Supply	9-32 VDC	
Max. current consumption	< 24 mA	
Max. output current	1 mA	
Output signal (range)	0.5 - 4.5 V	
Output signal (central position)	2.5V	
Signal tolerance (central position and stroke end)	±100 mV	
Minimum load	10 Ω	
Actuator deflection angle	± 35° (±1°)	
Mechanical life (nr. of operations)	10 <sup>6</sup>	
Operating force	2 N	
Mechanical vibration	IEC 68-2	
Mechanical shock	EN 60068-2-29 (pulse 400m/s <sup>2</sup> x 6 ms, 100 times)	
Weather protection	IP67-IP69K	
EMC compatibility	ISO 13766 ISO 14982	

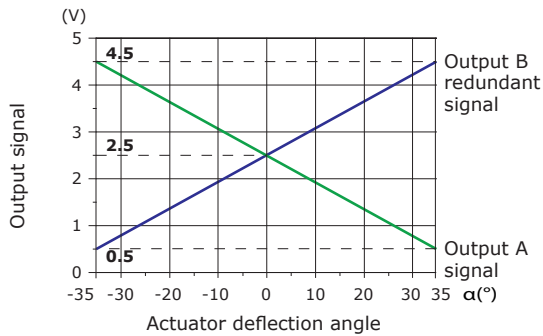
#### Cables

Conductor material	copper with tinned ends
Nr. of conductors	up to 12
Conductor section	from AWG16 to AWG20
Insulating material	PVC
Protective covering material	fireproof polyurethane

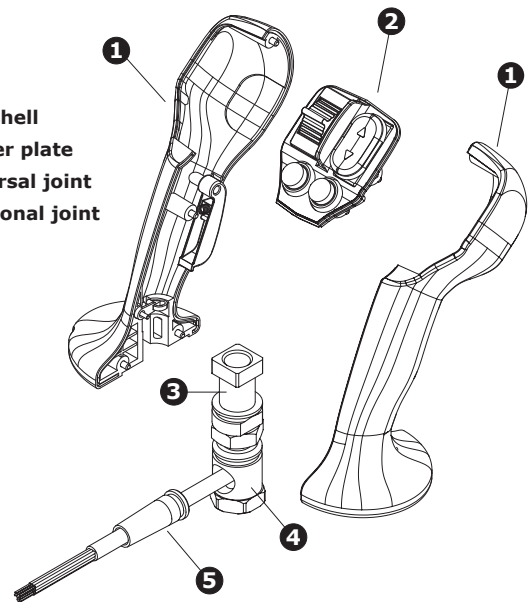
### Dimensions



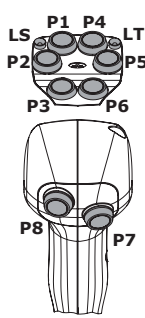
**Proportional roller output detail**



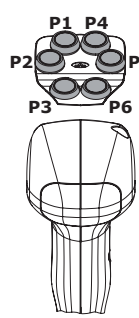
- 1) Half-shell
- 2) Holder plate
- 3) Universal joint
- 4) Additional joint
- 5) Cable



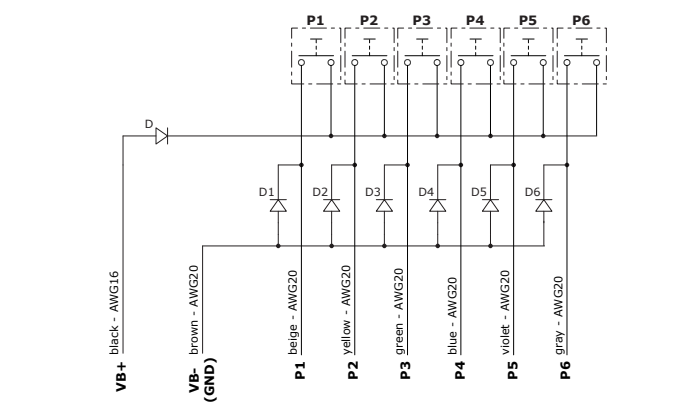
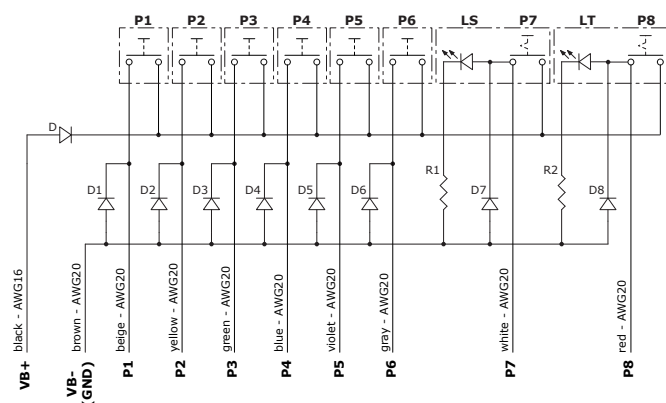
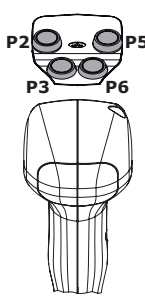
Without "dead man" trigger



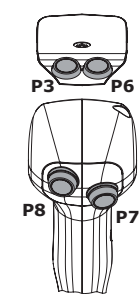
Code	<b>2IM8020007</b>
Description	PQC6002B9-1R1(T)D035-2R1(T)D035-3R1(T)D035-4R1(T)D035-5R1(T)D035-6R1(T)D035-7R3(A)D035-8R3(A)D035-SLR035-TLV035-12VDC
Holder plate	6 push-buttons with spring return (P1... P6), 2 LEDs (LS-LT)
Front zone	2 detent push-buttons (P7-P8)
Joint	Standard for SVM400-430 joystick



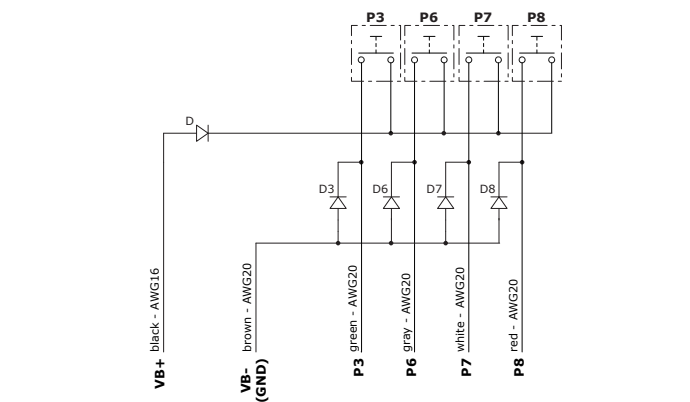
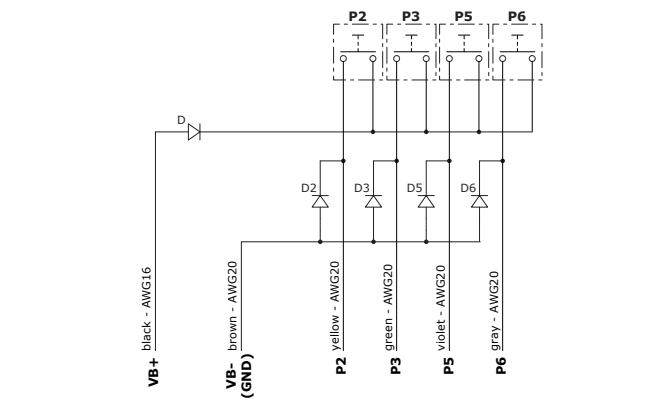
Code	<b>2IM8010032</b>
Description	PTB6000A9-1R1D035-2R1D035-3R1D035-4R1D035-5R1D035-6R1D035
Holder plate	6 push-buttons with spring return (P1... P6)
Front zone	-
Joint	Standard for SVM400-430 joystick

Code	<b>2IM8010033</b>
Description	PTB4000A9-2R1D035-3R1D035-5R1D035-6R1D035
Holder plate	4 push-buttons with spring return (P2-P3-P5-P6)
Front zone	-
Joint	Standard for SVM400-430 joystick



Code	<b>2IM8020008</b>
Description	PTC2000C9-3R1D035-6R1D035-7R1D035-8R1D035
Holder plate	2 push-buttons with spring return (P3-P6)
Front zone	2 push-buttons with spring return (P7-P8)
Joint	Standard for SVM400-430 joystick



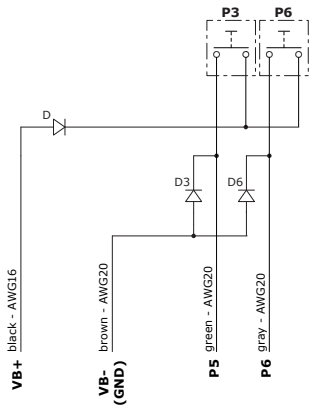
NOTE - For different joint see page 4.  
For different handle configurations, contact our Sales Dept.

### Configurations

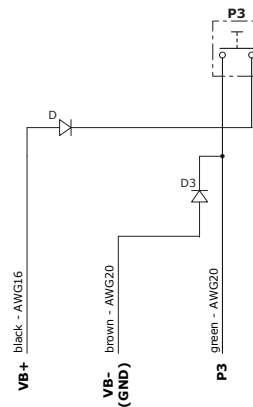
#### Without "dead man" trigger



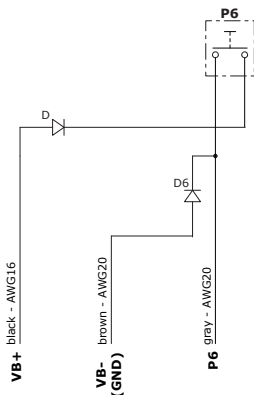
Code	<b>2IM8010034</b>
Description	PTB2000C9-3R1D035-6R1D035
Holder plate	2 push-buttons with spring return (P3-P6)
Front zone	-
Joint	Standard for SVM400-430 joystick



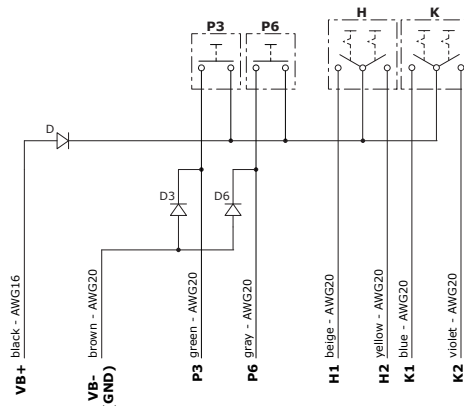
Code	<b>2IM8010035</b>
Description	PTB1000D9-3R1D035
Holder plate	1 push-button with spring return (P3)
Front zone	-
Joint	Standard for SVM400-430 joystick



Code	<b>2IM8010036</b>
Description	PTB1000A9-6R1D035
Holder plate	1 push-button with spring return (P6)
Front zone	-
Joint	Standard for SVM400-430 joystick



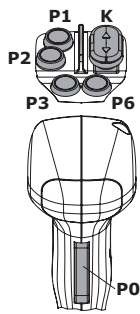
Code	<b>2IM8010037</b>
Description	PTB2020A9-3R1D035-6R1D035-HN6035-KN6035
Holder plate	2 push-buttons with spring return (P3-P6), 2 rocker switches with detent (H-K)
Front zone	-
Joint	Standard for SVM400-430 joystick



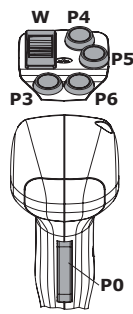
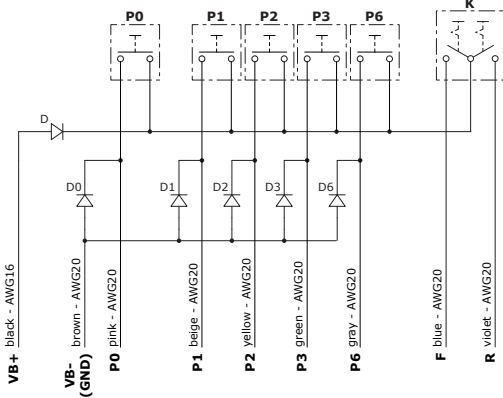
NOTE - For different joint see page 4.

For different handle configurations, contact our Sales Dept.

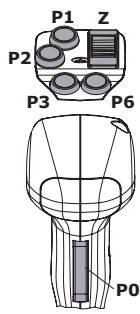
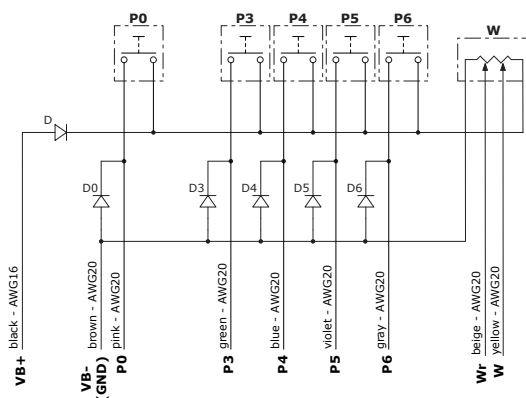
With "dead man" trigger



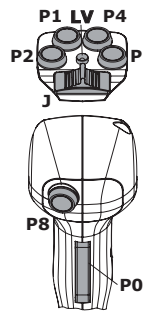
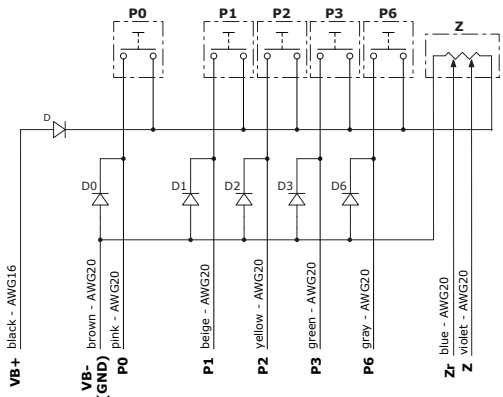
Code	<b>2IM8100002</b>
Description	PTA4010F9-0RD035-1R1D035-2R1D035-3R1D035-6R1D035-KRS035
Holder plate	4 push-buttons with spring return (P1-P2-3-P6), 1 FNR rocker switch with detent
Front zone	"Dead man" trigger (P0)
Joint	Standard for SVM400-430 joystick



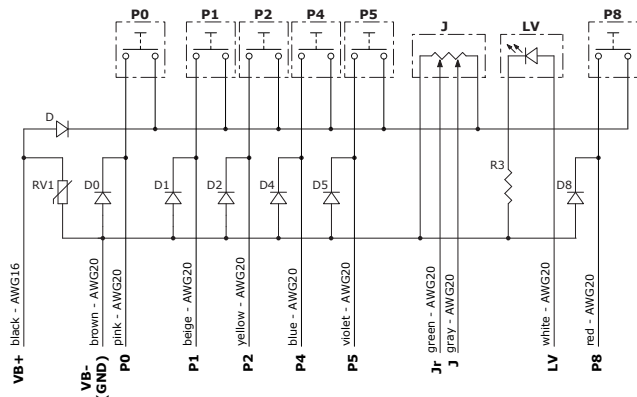
Code	<b>2IM8600007</b>
Description	PZTA4100D9-0RD035-3R1D035-4R1D035-5R1D035-6R1D035-WN130035
Holder plate	4 push-buttons with spring return (P3-P4-P5-P6), 1 proportional roller (W) with redundancy
Front zone	"Dead man" trigger (P0)
Joint	Standard for SVM400-430 joystick



Code	<b>2IM8600008</b>
Description	PZTA4100E9-0RD035-1R1D035-2R1D035-3R1D035-6R1D035-ZN130035
Holder plate	4 push-buttons with spring return (P1-P2-P3-P6), 1 proportional roller (Z) with redundancy
Front zone	"Dead man" trigger (P0)
Joint	Standard for SVM400-430 joystick



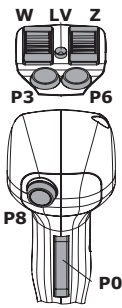
Code	<b>2IM86M0000</b>
Description	PZTM4101A9-0RD035-1R1D035-2R1D035-4R1D035-5R1D035-8R1D035-JN130035-VVL035-(12VDC)-(RV)
Holder plate	4 push-buttons with spring return (P1-P2-P4-P5), 1 proportional roller (J), 1 LED (LV)
Front zone	1 push-button with spring return (P8), "dead man" trigger (P0)
Joint	Standard for SVM400-430 joystick



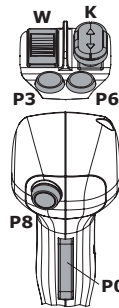
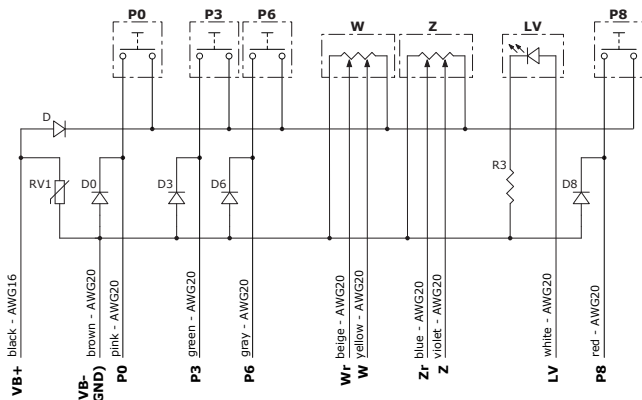
NOTE - For different joint see page 4.  
For different handle configurations, contact our Sales Dept.

### Configurations

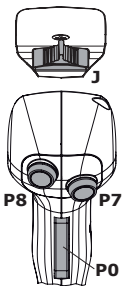
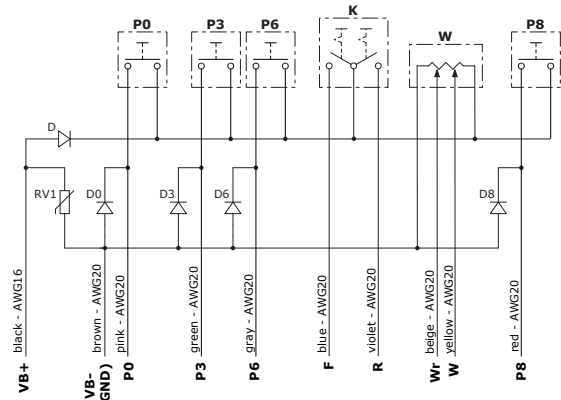
#### With "dead man" trigger



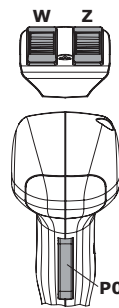
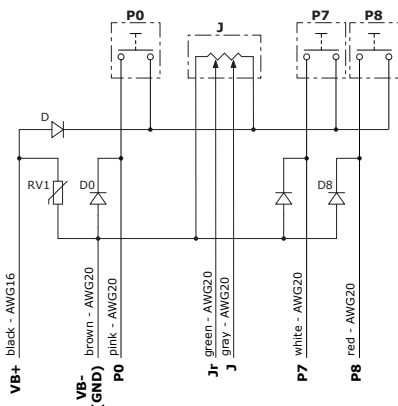
Code	<b>2IM86M0001</b>
Description	PZTM2200A9-ORD035-3R1D035-6R1D035-8R1D035-WN130035-ZN130035-VVL035-(12VDC)-(RV)
Hold plate	2 push-buttons with spring return (P3-P6), 2 proportional rollers (W-Z) with redundancy, 1 LED (LV)
Frontal zone	1 push-button with spring return (P8), "dead man" trigger (P0)
Joint	Standard for SVM400-430 joystick



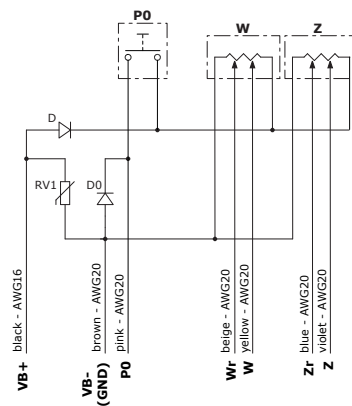
Code	<b>2IM86M0002</b>
Description	PZTM2110C9-ORD035-3R1D035-6R1D035-8R1D035-WN130035-KRS035
Hold plate	2 push-buttons with spring return (P3-P6), 1 proportional roller (W) with redundancy, 1 FNR rocker switch (K)
Frontal zone	1 push-button with spring return (P8), "dead man" trigger (P0)
Joint	Standard for SVM400-430 joystick



Code	<b>2IM8550004</b>
Description	PZTK0100F9-ORD035-7R1D035-8R1D035-JN130035-(RV)
Hold plate	1 proportional roller (J) with redundancy
Frontal zone	2 push-buttons with spring return (P7-P8), "dead man" trigger (P0)
Joint	Standard for SVM400-430 joystick



Code	<b>2IM8500007</b>
Description	PZA0200B9-ORD035-WN130035-ZN130035-(RV)
Hold plate	2 proportional rollers (W-Z) with redundancy
Frontal zone	"dead man" trigger (P0)
Joint	Standard for SVM400-430 joystick



NOTE - For different joint see page 4.  
For different handle configurations, contact our Sales Dept.