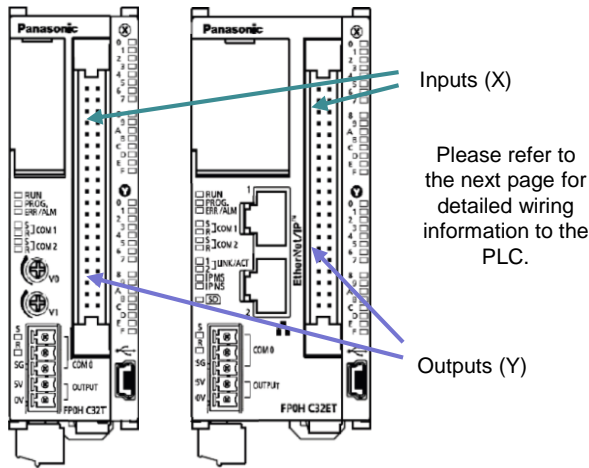


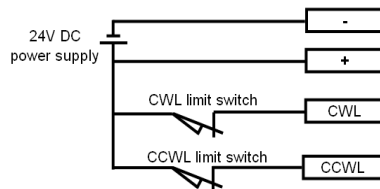
# Leaflet 1 – Wiring overview

## MINAS A5/A6 servo driver to FP series PLC (PNP output type) 1 axis, 50 pin connector, loose wires for I/Os, length x m

### Wiring to the PLC (e.g.):



### Wiring to the power supply and limit switches:



to PLC inputs (X)

from PLC outputs (Y)

PLC Output (+) +24 VDC

PLC Output (-) 0 VDC

PLC Input (COM) 0 VDC

+24 VDC red, (+) shrink wrap

0 VDC blue, (-) shrink wrap

CWL black, long shrink wrap

CWL black, short shrink wrap

CCWL black, short shrink wrap

CN X4 Pin	Signal (in bold essential)
10	BRKOFF- (External break release output)
34	<b>S-RDY-</b> (Servo-Ready output)
36	<b>ALM-</b> (Servo-Alarm output)
38	<b>INP-</b> (Positioning complete output)
1	<b>OPC1 [PULS1]</b> (Command pulse input A)
2	<b>OPC2 [SIGN1]</b> (Command pulse input A)
26	VS-SEL1 (Damping control switching input)
27	GAIN (Gain switching input)
28	DIV1 (Electronic gear switching input 1)
29	<b>SRV-ON</b> (Servo-ON input)
30	<b>CL</b> (Deviation counter clear input)
31	<b>A-CLR</b> (Alarm clear input)
32	C-Mode (Control mode switching input)
33	<b>INH</b> (Command pulse inhibition input)
35	<b>S-RDY+</b> (Servo-Ready output)
37	<b>ALM+</b> (Servo-Alarm output)
39	<b>INP+</b> (Positioning complete output)
11	BRKOFF+ (External break release output)
4	<b>PULS2</b> (Command pulse input A)
6	<b>SIGN2</b> (Command pulse input A)
7	<b>COM+</b> (Common for signals)
8	NOT (Positive direction over-travel inhibition input)
9	POT (Positive direction over-travel inhibition input)
	FG

Specification Sheet			
Product Number		Description	
DV0P0988WP-x		Leaflet 1 – Wiring overview	
Version	Date	designed by	approved
0.90	10.08.2018	Kunath	-
1.00	29.11.2018	Hotz	Kunath

### Remarks:

- This cable is designed for use with PNP output types of FP0H, FP0R or a comparable PLC.
- If you use limit switches, please refer to the corresponding manuals for further information.
- If you do not use limit switches, please insulate the connection wires to avoid trouble.
- If you do not use a signal which is supported by the cable please insulate the pin on the cable.
- The wiring example refers to MINAS A6. Connector number and signal names for MINAS A5 may differ.
- For further information, please refer to the corresponding manuals.

# Leaflet 2 – PLC wiring instruction

## PLC wiring instruction:

1. Select your PLC type and select the pulse output channel of your PLC which should be used to control the axis. Each I/O cable can control one axis with one channel.
2. Connect the wires OPC1 (grey), OPC2 (pink) and CL (brown-green) to the related PLC output, depending on the PLC type and pulse output channel (see table).
3. Connect the power supply wires (blue and red) to the (+), (-) and COM pin of the PLC (ensure the power supply of every used I/O module).
4. Connect the free wires of the I/O cable but regard the following points
  - Do not connect to an I/O of the PLC which should be used to control another axis
  - Do not connect to an input of the PLC which should be used to connect an external device. (e.g. Position control trigger input, Home input)
5. Insulate not used pins.

PLC I/O allocation table (for pulse output functions)

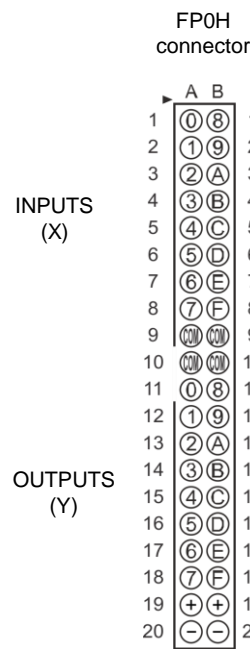
PLC Type	FP0R C32				FP0HC32			
Pulse output channel	CH0	CH1	CH2	CH3	CH0	CH1	CH2	CH3
Command pulse (CW or Pulse)	Y0	Y2	Y4	Y6	Y0	Y3	Y8	YB
Command pulse (CCW or Sign)	Y1	Y3	Y5	Y7	Y1	Y4	Y9	YC
Deviation counter clear output	Y8	Y9	YA	YB	Y2	Y5	YA	YD
Position control trigger input	X0	X1	X2	X3	X0	X1	X3	X4
Home input	X4	X5	X6	X7	X2	X5	X6	X7

← OPC1 (grey)

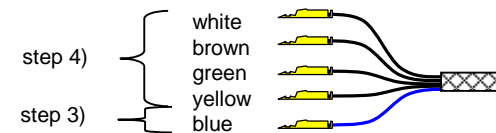
← OPC2 (pink)

← CL (brown-green)

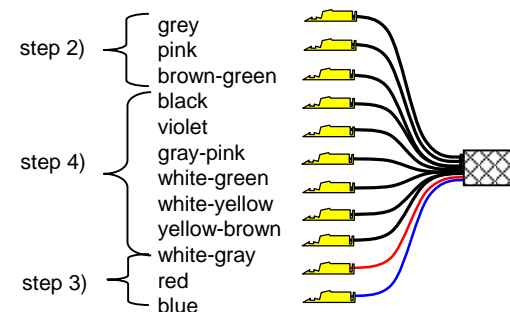
← e.g. connection of an external sensor



### Wiring to PLC input:

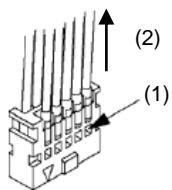


### Wiring to PLC output:



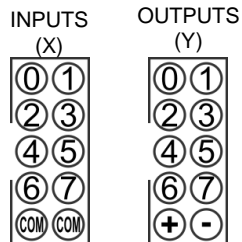
### If there is a wiring mistake:

To remove a contact from the MIL-connector use a small screw driver or the pressure connection tool (part. no. AXY52000FP).



Move the screw driver trough the hole and press the contact of the pin (1). Simultaneous remove the wire (2).

FP0R connectors



### Specification Sheet

Product Number		Description	
DV0P0988WP-x		Leaflet 2 – PLC wiring instruction	
Version	Date	designed by	approved
0.90	10.08.2018	Kunath	-
1.00	29.11.2018	Hotz	Kunath