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1x Male 22pin Housing
 [EL-MS0490]

21x Male Molex Pin
 [EL-MS0205]

Strip 4mm

Note: all cut lengths +/- 3mm

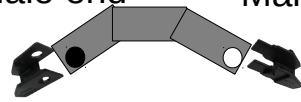
5x Male Molex Pin
 [EL-MS0205]



1x Male 6pin Housing
 [PC-CN0119]

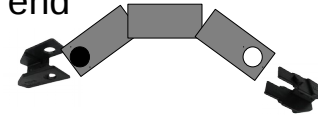
17 Links 30mm Cable Chain [EL-MS0380]
 30mm Inner Width Mounting Brackets (male and female) – [EL-MS0383]

Female end Male end
 * use shown orientation



24 Links 20mm Cable Chain [EL-MS0379]
 20mm Inner Width Mounting Brackets (male and female) – [EL-MS0382]

Female end Male end
 * use shown orientation



21x [EL-MS0479]
 Female 3.0 Molex Pin

Strip 3mm



Pin 22
 Pin 21
 Pin 20
 Pin 19
 Pin 18
 Pin 17
 Pin 16

Strip Insulator 20 mm

[EL-WR0152] chainflex® CF9
 control cable TPE

Length = 1210mm

Pin 15
 Pin 14
 Pin 13
 Pin 12
 Pin 11
 Pin 10
 Pin 9
 Pin 8
 Pin 7
 Pin 6
 Pin 5
 Pin 4
 Pin 3

Strip Insulator 20 mm

[EL-WR0152] chainflex® CF9
 control cable TPE

Length = 1210mm

Pin 15
 Pin 14
 Pin 13
 Pin 12
 Pin 11
 Pin 10
 Pin 9
 Pin 8
 Pin 7
 Pin 6
 Pin 5
 Pin 4
 Pin 3

Strip Insulator 20 mm

[EL-WR0152] chainflex® CF9
 control cable TPE

Length = 1210mm

Part number reference label

Igus 4-wire Shielded Chainflex Cable – [EL-WR0140]

Strip Insulator 30 mm

Length = 550mm

Pin 1
 Pin 2
 Pin 3
 Pin 4
 Pin 5

Strip Insulator 30 mm

EL-HR0141
 2x Heat Shrink Tubing
 40mm
 [HD-TB0075]

Cut 30mm
 (see page 2)

Strip 2.2mm
 Pin 4
 Pin 6
 Pin 3
 Pin 1

1x [EL-MS0355]
 Female 6pin Housing
 4x [EL-MS0351]
 Female JST Pin

1x [EL-MS0141]
 Term Ring Non Ins 26-22AWG

Strip 4mm

3x Heat Shrink Tubing
 20mm
 [HD-TB0075]

Strip 4mm

Strip 4mm

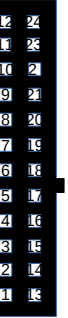
Strip 4mm

pin pos 24
 pin pos 12
 pin pos 23
 pin pos 11
 pin pos 10
 pin pos 8
 pin pos 9



pin pos 22
 pin pos 20
 pin pos 19 + 24v
 pin pos 7 - power
 pin pos 18 + 5v
 pin pos 6 - power

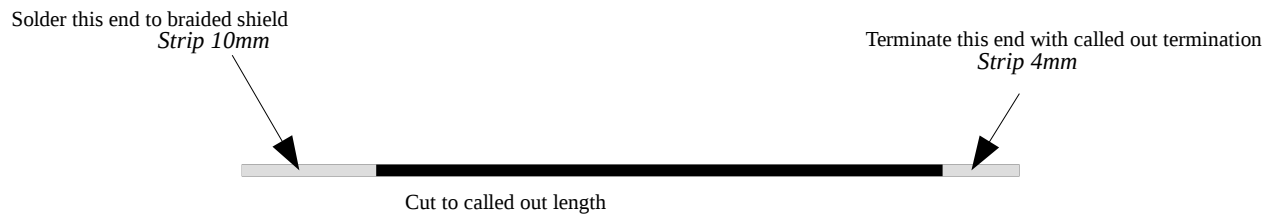
pin pos 17
 pin pos 15
 pin pos 3
 pin pos 14
 pin pos 2
 pin pos 13
 pin pos 1

pin pos 4
 ground



1x [EL-MS0509]
 Wire Housing RECEPTACLE
 24P DUAL ROW

DRAWN BY JW		DATE		 ALEPH OBJECTS® INCORPORATED			
CHECKED BY		DATE					
EL-HR0141				TITLE Extruder X Harness, Assembled			
FILE NAME EL-HR0141_extruder_x_harness.odg				SHEET 1		REV. J	



TITLE			
Extruder X Harness, Assembled			
SIZE	DWG NO.	REV.	
A	EL-HR0141	J	
SCALE	NA	DO NOT SCALE DRAWING	SHEET 2 of 2

Rev	Date	Changes	Change By
A	8/23/18	Swap green and brown wire on third 7 wire cable	JW
B	8/27/18	Extend 30mm chain to include x harness	JW
C	9/13/18	Change second 30mm chain to 20mm chain	JW
D	10/29/18	Change JST strip length 2.5 to 2.2	SAW
E	11/12/18	Specify P/n label add heat shrink position and length	JW
F	11/15/18	Fixed pin quantities, normalized call-outs	SAW
G	11/21/18	Corrected E0 x4 to E1 x2 and E2 x2	SAW
H	12/17/18	Add 20mm of length to the x harness, add heatshrink tubing to the 24 POS connector side	JW
I	12/16/18	Add ground lug to jst side of x motor	JW
J	1/22/19	Change heat shrink part number to HD-BT0075	JW

30mm cable chain	17links	EL-MS0380	06-30-028-0	igus
20mm cable chain	24 links	EL-MS0379	06-20-028-0	igus
30mm mounting bracket set	1	EL-MS0383	E2-100-30-12	igus
20mm mounting bracket set	1	EL-MS0382	E2-100-20-12	igus
male molex 22 POS housing	1	EL-MS0490	538-70107-0021	Mouser
male molex pin	26	EL-MS0205	16-02-0107	TTI
Chainflex CF9	3630mm	EL-WR0152	CF9-02-07	igus
Igus 4-wire shielded chainflex cable	550mm	EL-WR0140	CF11-02-02-02	igus
Female 3.0 molex pin	21	EL-MS0479	43030-0001	TTI
Wire housing receptacle 24p dual row	1	EL-MS0509	538-43025-2400	Mouser
Female 6 pin housing jst	1	EL-MS0355	PHR-6	Future electronics
female jst pin	4	EL-MS0351	SPH-002T-P0.5S	Future electronics
heat shrink tubing	140mm	HD-TB0075	7856k76	Digikey
Male 6 pin housing	1	PC-CN0119	WM2537-ND	Digikey
24awg Black Wire	75mm	EL-WR0105	HU1569247BK	Allcable
<i>Term Ring Non Ins 26-22AWG</i>	1	EL-MS0141	P22-4R-M	TTI