

4 Feedthroughs

TM OSEMs

A

OSEM

TM OSEM to BF Cable JGW-D1503901 Sheet 01

OSEM BF-TR Signal Cable JGW_E1503901 Sheet 17

TR to Flange Signal Cable JGW-D1503901 Sheet 19

Feedthrough

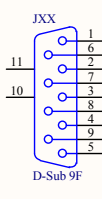
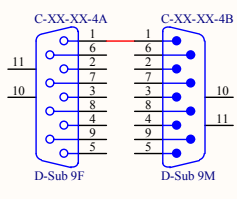
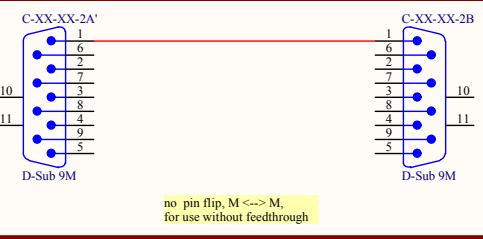
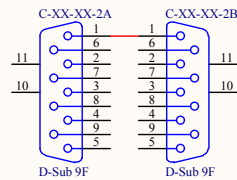
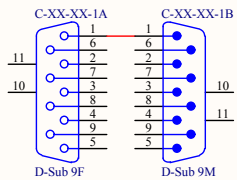
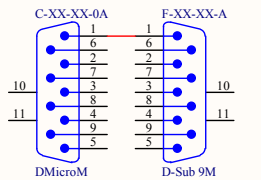
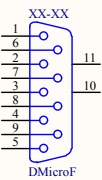
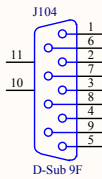
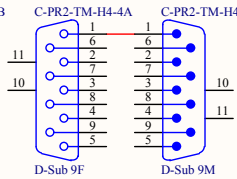
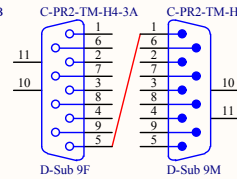
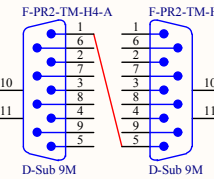
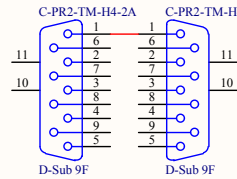
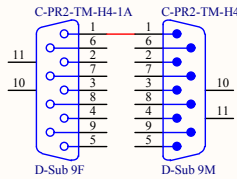
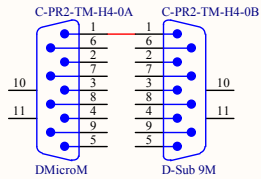
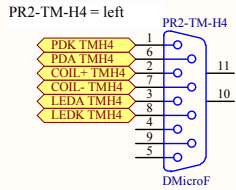
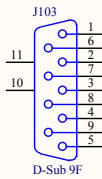
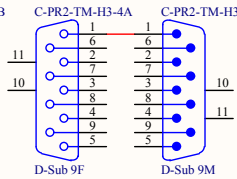
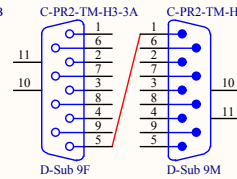
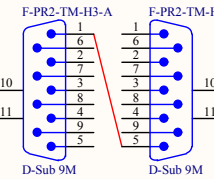
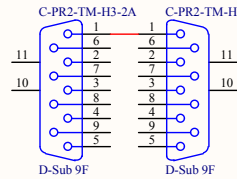
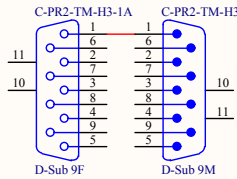
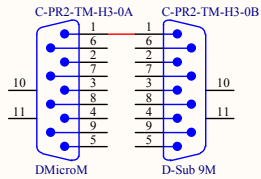
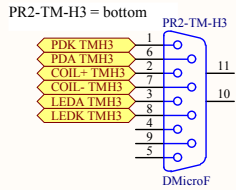
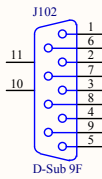
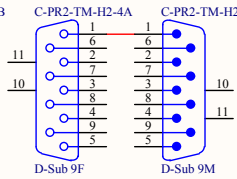
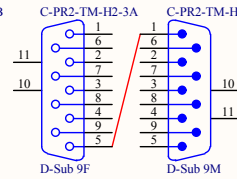
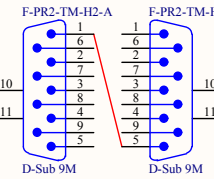
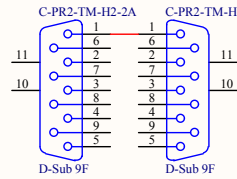
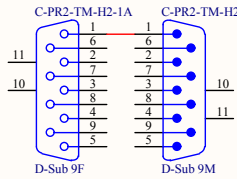
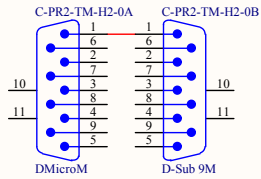
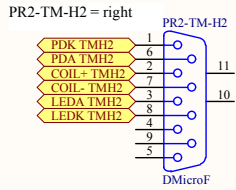
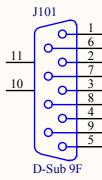
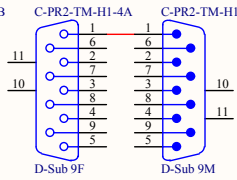
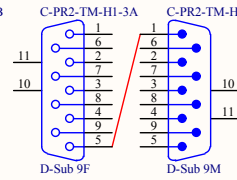
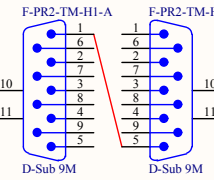
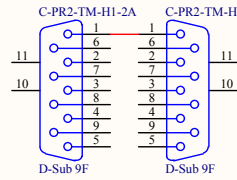
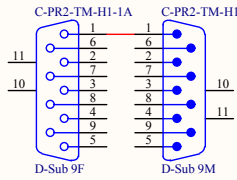
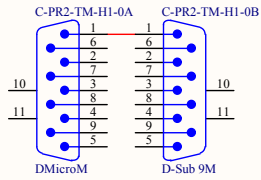
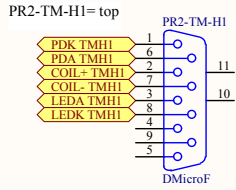
Anti-Feedthrough Adapter Cable

OSEM External Cable

Sat Amp #1 D1402809

Glenair GMR7590-9P-1BPN

Glenair MWDML-9SS



For testing the suspension outside the vacuum tank, there should be a supply of plain M-M gender changers to replace the combination of Feedthrough+Anti-Feedthrough adapter cable.

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D

Title			PR2 Suspension Cabling - Test Mass OSEMs		
Size	Number	JGW-D1503614		Revision	-v3
A3					
Date:	2015/08/08	Sheet	of	7	
File:	Z:\Work\TM OSEMs.SchDoc	Drawn By:			

6 Feedthroughs

IM OSEMs

OSEM

IM OSEM to BF Cable JGW-D150391 Sheet 02

OSEM BF-TR Signal Cable JGW-D150391 Sheet 17

TR to Flange Signal Cable JGW-D150391 Sheet 19

Feedthrough

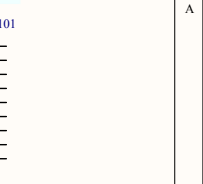
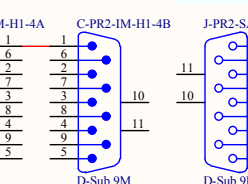
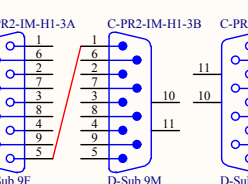
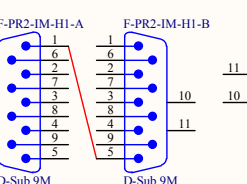
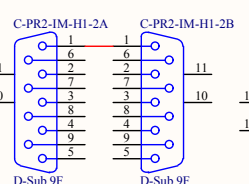
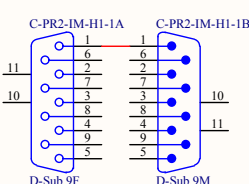
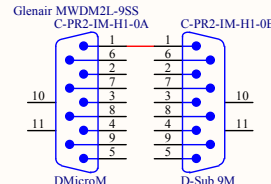
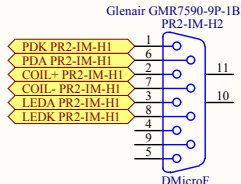
Anti-Feedthrough Adapter Cable

OSEM External Cable

Sat Amp #2 D1402809

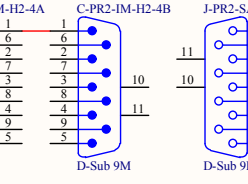
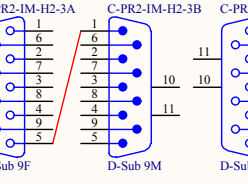
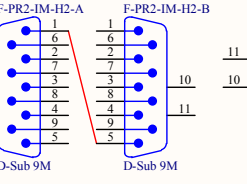
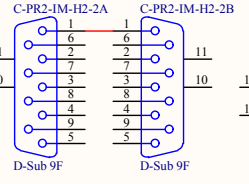
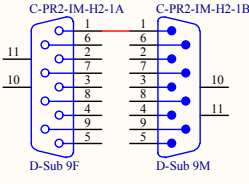
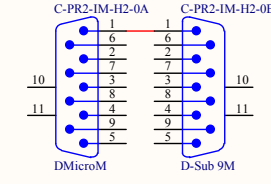
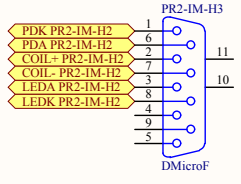
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A



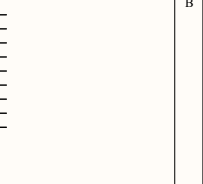
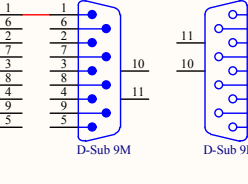
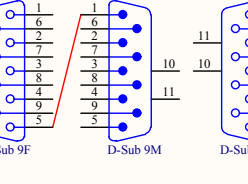
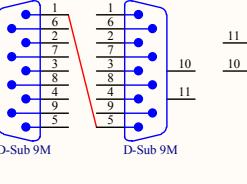
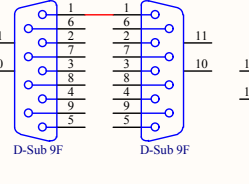
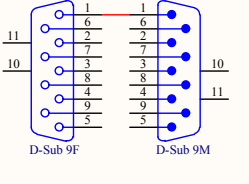
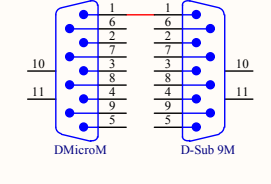
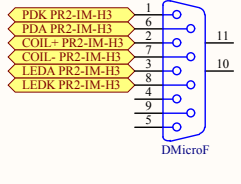
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B



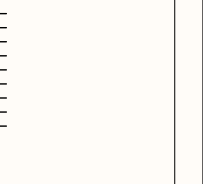
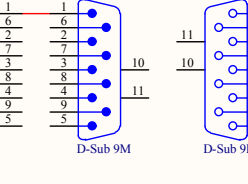
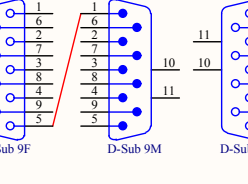
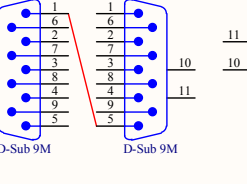
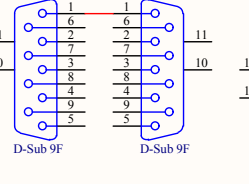
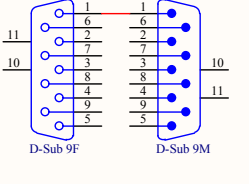
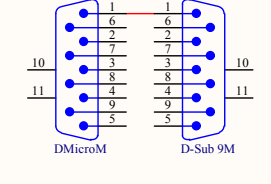
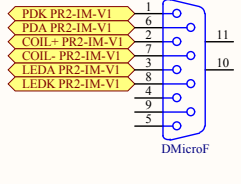
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C



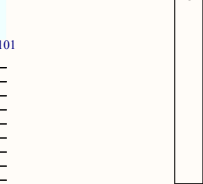
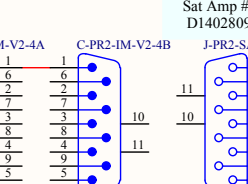
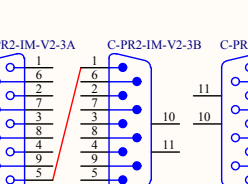
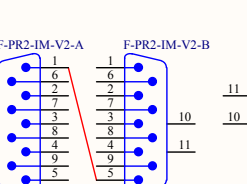
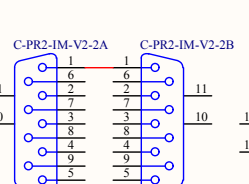
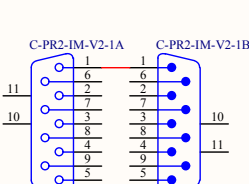
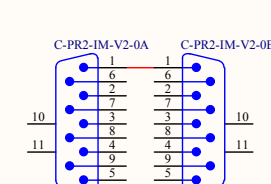
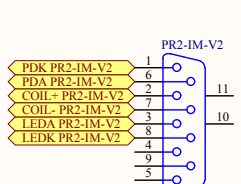
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D



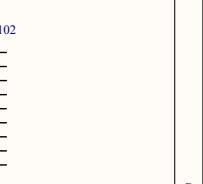
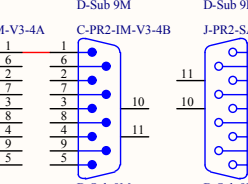
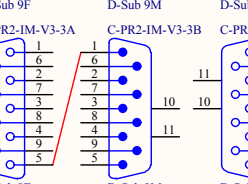
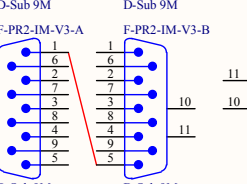
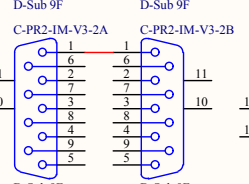
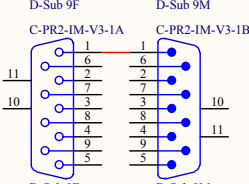
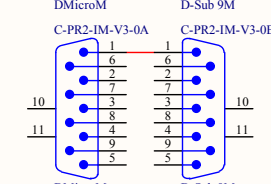
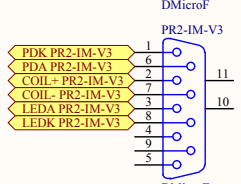
C

C



D

D

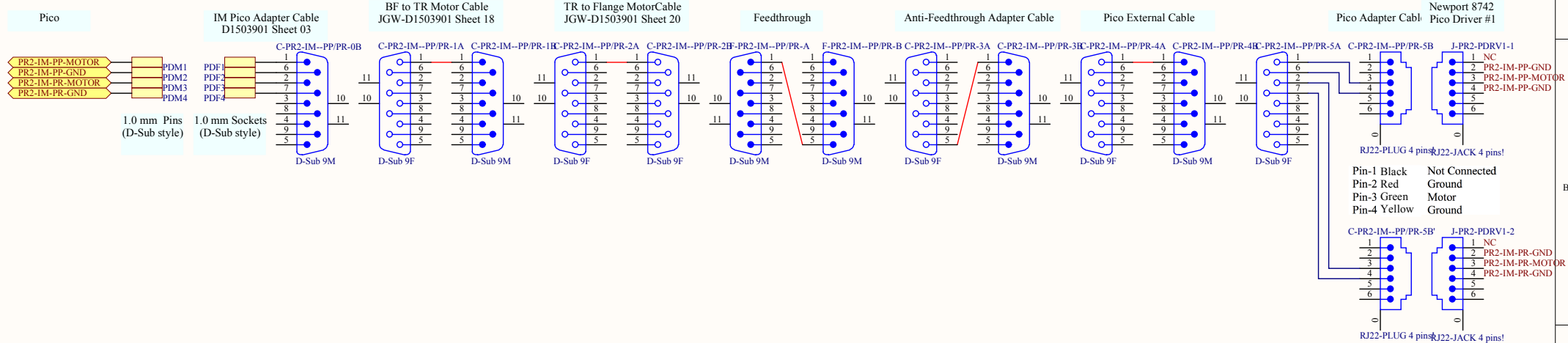


J-PR2-SA3-103 and J-PR2-SA3-104 not used

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Size A3	Number JGW-D1503614	Revision -v3
Date 2015/08/08	Sheet 2of 7	
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1 Feedthrough

IM Picomotors

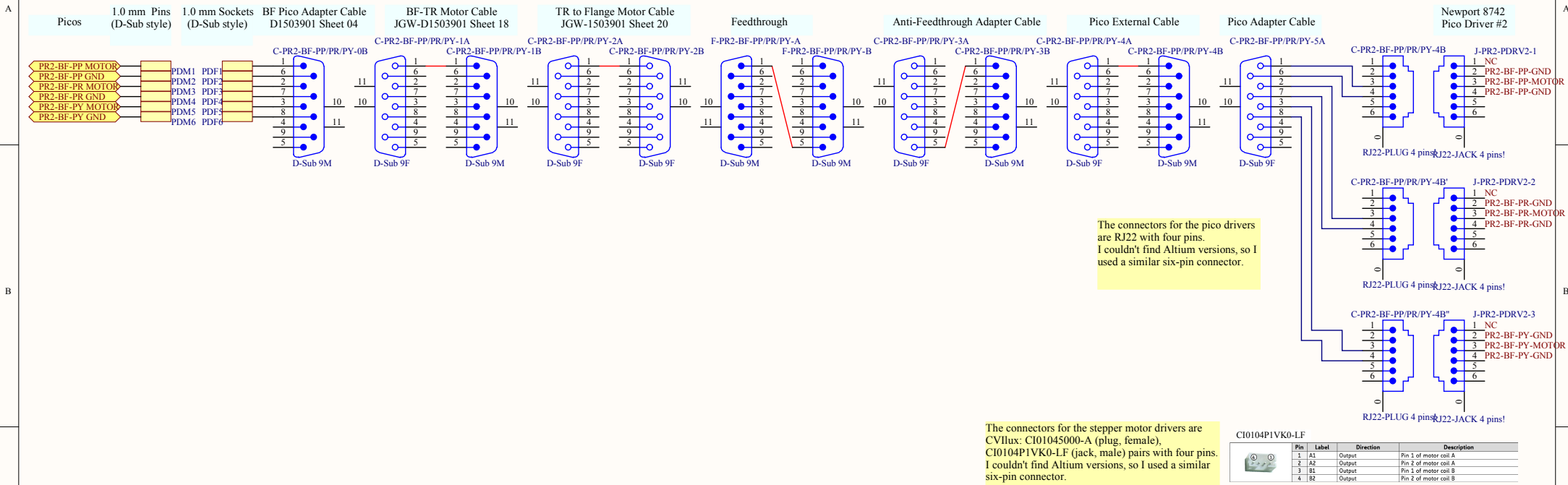


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Size A3	Number JGW-D1503614	Revision -v3	
Date: 2015/08/08	Sheet 3 of 7	Drawn By:	
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BF and SF Picomotors and Steppers

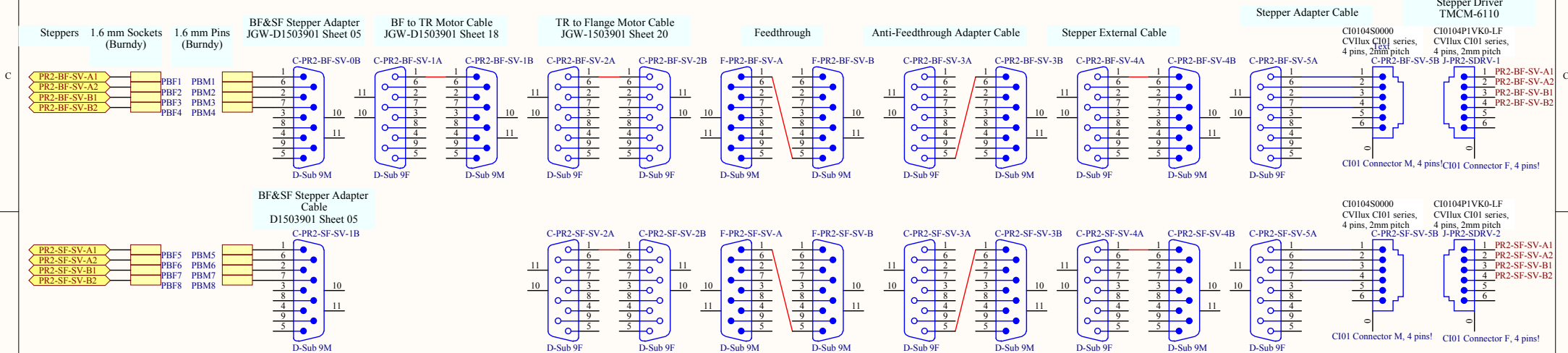
3 Feedthroughs

Pin-1 Black Not Connected
Pin-2 Red Ground
Pin-3 Green Motor
Pin-4 Yellow Ground



The connectors for the stepper motor drivers are CVIlux: C101045000-A (plug, female), C10104P1VK0-LF (jack, male) pairs with four pins. I couldn't find Altium versions, so I used a similar six-pin connector.

Pin	Label	Direction	Description
1	A1	Output	Pin 1 of motor coil A
2	A2	Output	Pin 2 of motor coil A
3	B1	Output	Pin 1 of motor coil B
4	B2	Output	Pin 2 of motor coil B



Pin	Label	Direction	Description
1	A1	Output	Pin 1 of motor coil A
2	A2	Output	Pin 2 of motor coil A
3	B1	Output	Pin 1 of motor coil B
4	B2	Output	Pin 2 of motor coil B

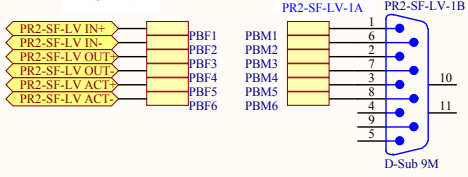
BF and SF LVDT/ACTs

2 Feedthroughs

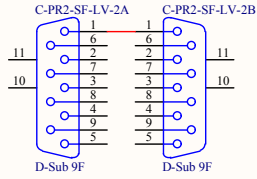
LVDT/Act

BF&SF LVDT Adapter Cable
JGW-D1503901 Sheet 06

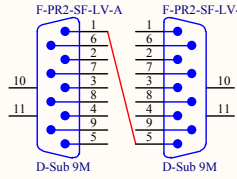
PR2-SF-LV



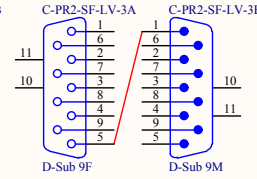
TR to Flange Signal Cable
JGW-D1503901 Sheet 19



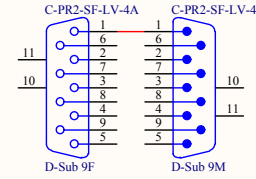
Feedthrough



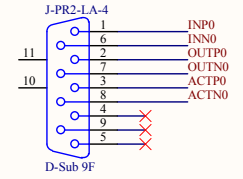
Feedthrough Adapter Cable



External Cable



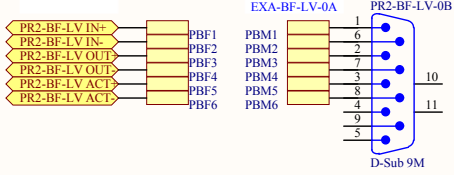
LVDT/ACT Distributor
JGW-D1402124



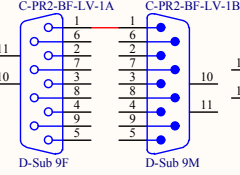
LVDT/Act

BF&SF LVDT Adapter Cable
JGW-D1503901 Sheet 06

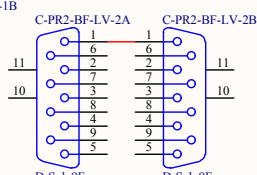
PR2-BF-LV



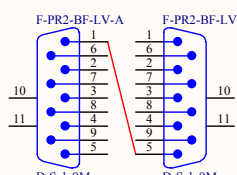
OSEM BF-TR Signal Cable
JGW-D1503901 Sheet 17



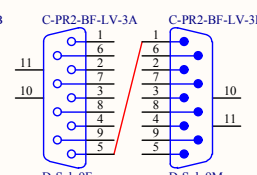
TR to Flange Signal Cable
JGW-D1503901 Sheet 19



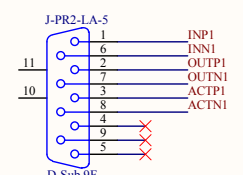
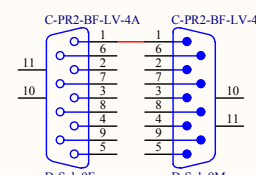
Feedthrough



Feedthrough Adapter Cable



External Cable

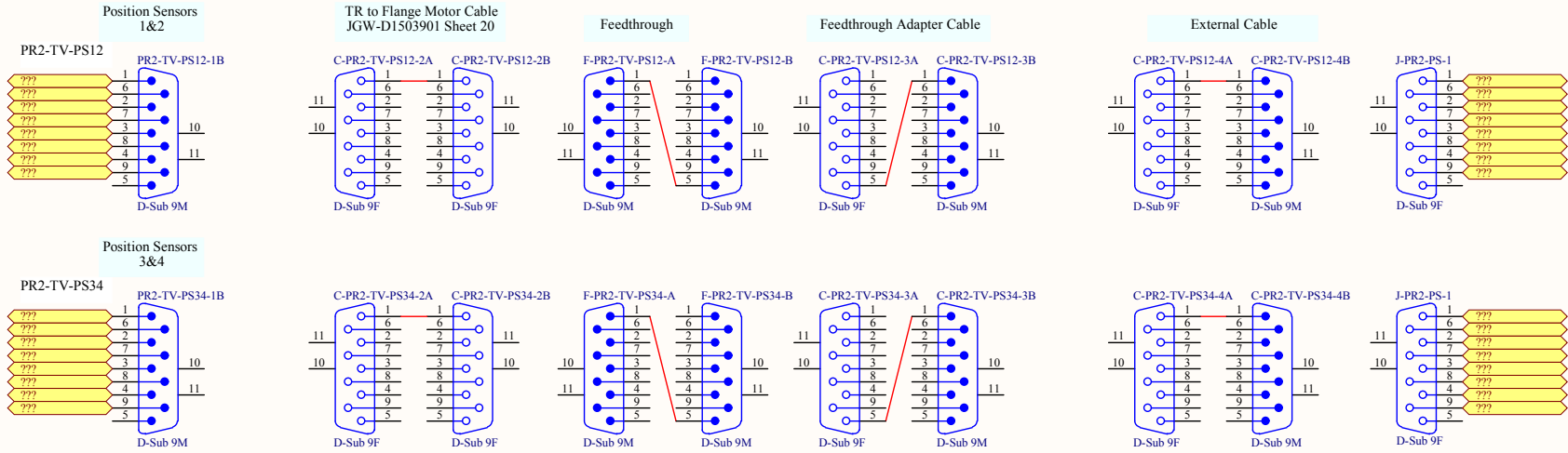


J-PR2-LA-6 and J-PR2-LA-7 not used

Title			
PR2 Suspension Cabling - Bottom and Standard Filter LVDTs			
Size	Number	Revision	
A3	JGW-D1503614	-v3	
Date:	2015/08/08	Sheet 5 of 7	
File:	Z:\Work\BF&SF LVDTs.SchDoc	Drawn By:	

Very rough approximation!

Assume sensor signals are robust, so we can use motor-type cable



Title		
PR2 Suspension Cabling - Traverser Steppers and Position Sensors		
Size	Number	Revision
A3	JGW-D1503614	-v3
Date:	2015/08/08	Sheet 6 of 7
File:	Z:\Work\TR Position Sensors.SchDoc	Drawn By:

4 Feedthroughs

Traverser Steppers

Limit Switch

Stepper

D-Sub 9 Female

TR to Flange Motor Cable
JGW-D1503901 Sheet 20

Feedthrough

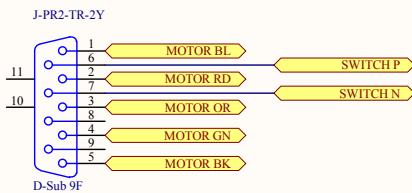
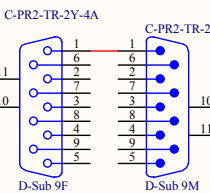
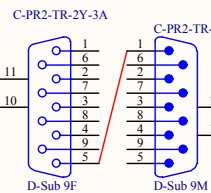
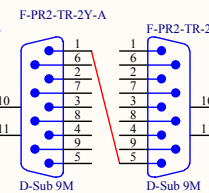
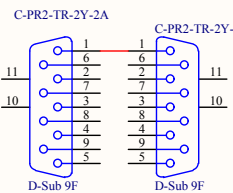
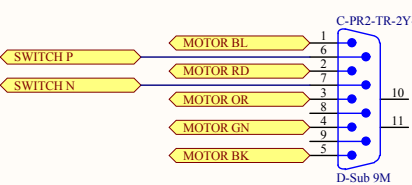
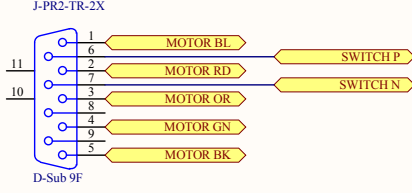
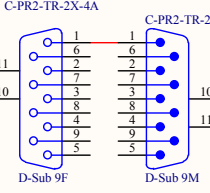
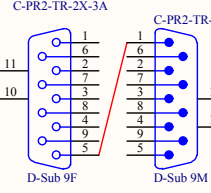
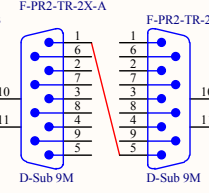
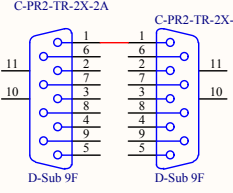
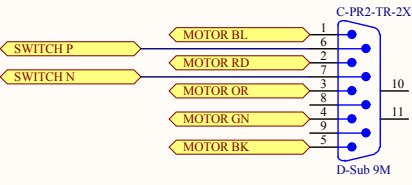
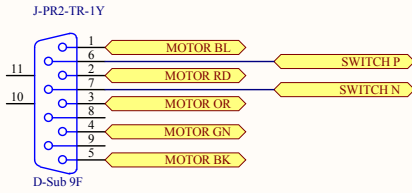
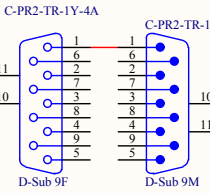
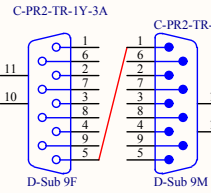
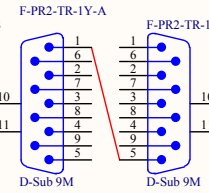
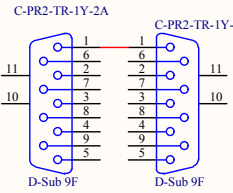
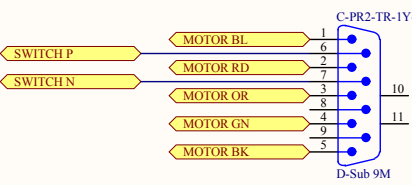
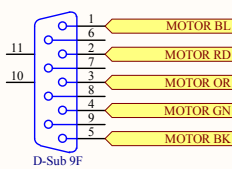
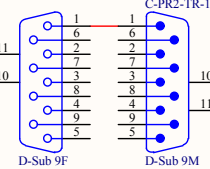
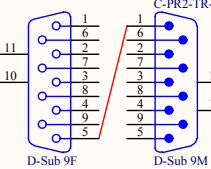
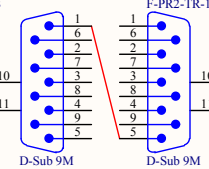
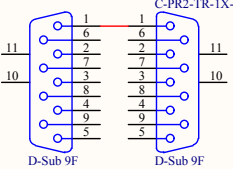
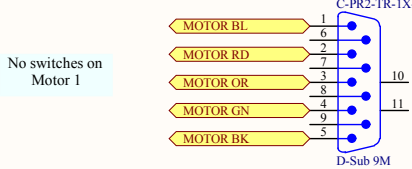
Anti-Feedthrough Adapter Cable

Stepper External Cable

Stepper Driver
CVD507-K

No switches on Motor 1

No switches on Motor 1



Title PR2 Suspension Cabling - Traverser Steppers		
Size A3	Number JGW-D1503614	Revision -v3
Date: 2015/08/08	Sheet 7 of 7	Drawn By:
File: Z:\Work\TR Steppers.SchDoc		