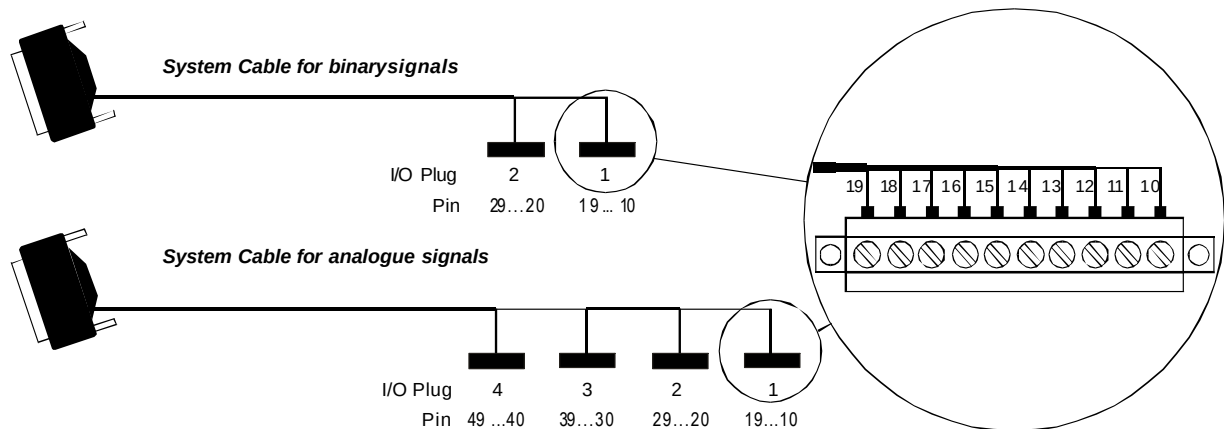
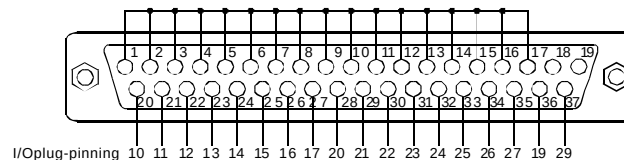


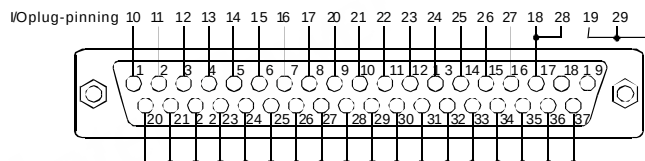
2.2 System Cables



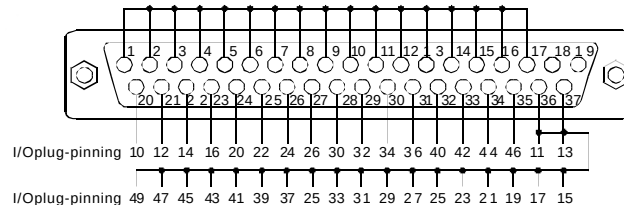
System Cable for binary signals
Part no.: 0336331
for Freelance I/O board : DDI 01



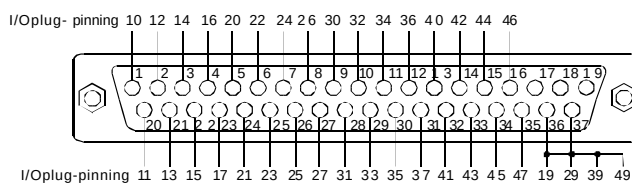
System Cable for binary signals
Part no.: 0336332
for Freelance I/O board : DDO 01



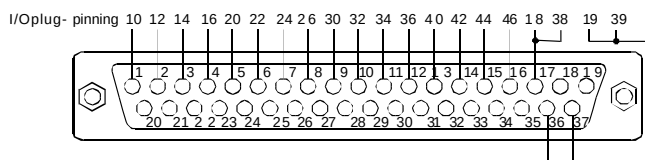
System Cable for analogue input signals (1)
Part no.: 0336333
for Freelance I/O board : DAI 01



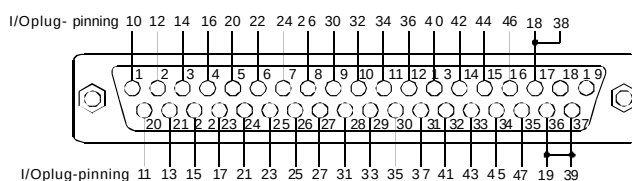
System Cable for analogue input signals (2)
Part no.: 0336334
for Freelance I/O board : DAI 01



System Cable for analogue output signals (1)
Part no.: 0336335
for Freelance I/O board : DAO 01



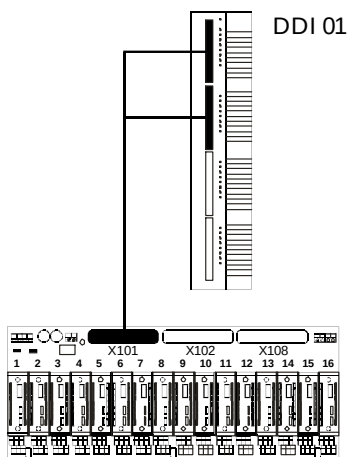
System Cable for analogue output signals (2)
Part no.: 9700140
for Freelance I/O board : DAO 01



Chapter 3 - Digital Input

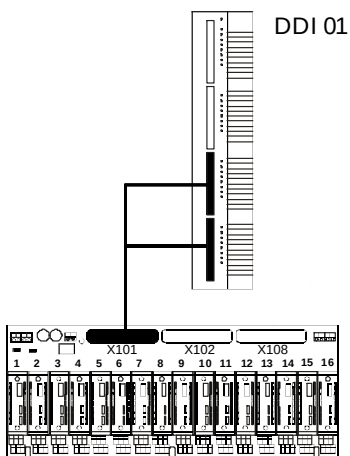
3.1 Digital Input, 16 Channels

3.1.1 Interconnection andChannelAssignmentfor Channel 0 ... 15



Contrans I Backplane	Freelance DDI01
Slot1-----	Channel 0
Slot2-----	Channel 1
Slot3-----	Channel 2
Slot4-----	Channel 3
Slot5-----	Channel 4
Slot6-----	Channel 5
Slot7-----	Channel 6
Slot8-----	Channel 7
Slot9-----	Channel 8
Slot10-----	Channel 9
Slot11-----	Channel 10
Slot12-----	Channel 11
Slot13-----	Channel 12
Slot14-----	Channel 13
Slot15-----	Channel 14
Slot16-----	Channel 15

3.1.2 Interconnection andChannelAssignmentfor Channel 16...31



Contrans I Backplane	Freelance DDI01
Slot1-----	Channel 16
Slot2-----	Channel 17
Slot3-----	Channel 18
Slot4-----	Channel 19
Slot5-----	Channel 20
Slot6-----	Channel 21
Slot7-----	Channel 22
Slot8-----	Channel 23
Slot9-----	Channel 24
Slot10-----	Channel 25
Slot11-----	Channel 26
Slot12-----	Channel 27
Slot13-----	Channel 28
Slot14-----	Channel 29
Slot15-----	Channel 30
Slot16-----	Channel 31

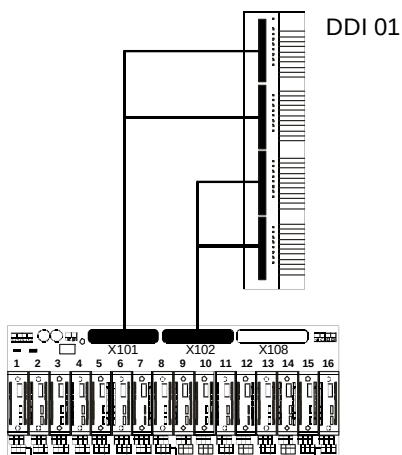
3.1.3 ContransIModules, Backplanes andSystem Cables

Contrans I Modules	System Powered	Field Powered	Redundancy	Channel / Module	Channel / Backplane	Field Contact Powering	Electrical Isolation Input / Output	Electrical Isolation Channel to Channel	Intrinsically Safe	Failure monitoring (short circuit/wire break)	Failure signaling (short circuit/wire break)	Backplane V17111-321	Backplane V17111-322	Backplane V17111-351	Backplane V17111-320	System Cable 0336331	System Cable 0336332	System Cable 0336333	System Cable 0336334	System Cable 0336335	System Cable 9700140
V 17191-12	x			1 of 2	16	x						x	x			x					
V 17131-13	x			1 of 2	16	x	x	x		x		x	x			x					
V 17131-16	x			1 of 2	16	x	x	x		x		x	x			x					
V 17131-51	x			1	16	x	x	x	x	x		x	x	x		x					
V 17131-54	x			1	16	x	x	x	x	x		x	x	x		x					
V 17133-11		x		1 of 2	16		x	x				x	x			x					

Chapter 3 - Digital Input

3.2 Digital Input, 16 Channels with failuresignaling

3.2.1 Interconnection andChannelAssignmentfor Channel 0 ... 31



Contrans I Backplane

Signals :

Slot1-----	Channel 0
Slot2-----	Channel 1
Slot3-----	Channel 2
Slot4-----	Channel 3
Slot5-----	Channel 4
Slot6-----	Channel 5
Slot7-----	Channel 6
Slot8-----	Channel 7
Slot9-----	Channel 8
Slot10-----	Channel 9
Slot11-----	Channel 10
Slot12-----	Channel 11
Slot13-----	Channel 12
Slot14-----	Channel 13
Slot15-----	Channel 14
Slot16-----	Channel 15

Freelance DDI01

Contrans I Backplane

FailureSignals :

Slot1-----	Channel 16
Slot2-----	Channel 17
Slot3-----	Channel 18
Slot4-----	Channel 19
Slot5-----	Channel 20
Slot6-----	Channel 21
Slot7-----	Channel 22
Slot8-----	Channel 23
Slot9-----	Channel 24
Slot10-----	Channel 25
Slot11-----	Channel 26
Slot12-----	Channel 27
Slot13-----	Channel 28
Slot14-----	Channel 29
Slot15-----	Channel 30
Slot16-----	Channel 31

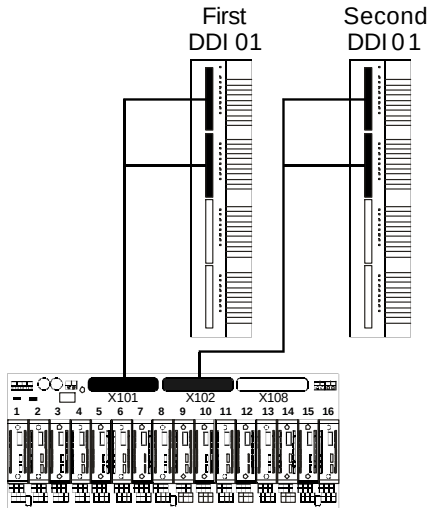
3.2.2 ContransIModules, Backplanes andSystem Cables

Contrans I Modules	System Powered	Field Powered	Redundancy	Channel / Module	Channel / Backplane	Field Contact Powering	Electrical Isolation Input / Output	Electrical Isolation Channel to Channel	Intrinsically Safe	Failure monitoring (short circuit/wire break)	Failure signaling (short circuit/wire break)	Backplane V17111-321	Backplane V17111-322	Backplane V17111-351	Backplane V17111-320	System Cable 0336331	System Cable 0336332	System Cable 0336333	System Cable 0336334	System Cable 0336335	System Cable 9700140
V17131-52	x			1	16	x	x	x	x	x	x	x	x	x		2x					
V17131-55	x			1	16	x	x	x	x	x	x	x	x	x		2x					

Chapter 3 - Digital Input

3.3 Digital Input, 16 Channels and Redundancy

3.3.1 Interconnection andChannelAssignmentfor Channel 0 ... 15andtheredundancyof Channel 0 ... 15



Contrans I Backplane

Signals :

Slot1-----	Channel 0
Slot2-----	Channel 1
Slot3-----	Channel 2
Slot4-----	Channel 3
Slot5-----	Channel 4
Slot6-----	Channel 5
Slot7-----	Channel 6
Slot8-----	Channel 7
Slot9-----	Channel 8
Slot10-----	Channel 9
Slot11-----	Channel 10
Slot12-----	Channel 11
Slot13-----	Channel 12
Slot14-----	Channel 13
Slot15-----	Channel 14
Slot16-----	Channel 15

Freelance FirstDDI 01

Contrans I Backplane

RedundantSignals :

Slot1-----	Channel 0
Slot2-----	Channel 1
Slot3-----	Channel 2
Slot4-----	Channel 3
Slot5-----	Channel 4
Slot6-----	Channel 5
Slot7-----	Channel 6
Slot8-----	Channel 7
Slot9-----	Channel 8
Slot10-----	Channel 9
Slot11-----	Channel 10
Slot12-----	Channel 11
Slot13-----	Channel 12
Slot14-----	Channel 13
Slot15-----	Channel 14
Slot16-----	Channel 15

Freelance Second DDI01

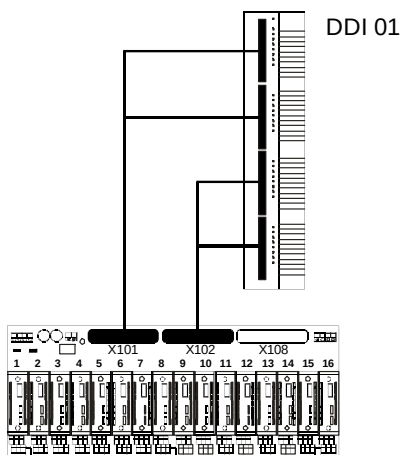
3.3.2 ContransIModules, Backplanes andSystem Cables

Contrans I Modules	System Powered	Field Powered	Redundancy	Channel / Module	Channel / Backplane	Field Contact Powering	Electrical Isolation Input / Output	Electrical Isolation Channel to Channel	Intrinsically Safe	Failure monitoring (short circuit/wire break)	Failure signaling (short circuit/wire break)	Backplane V 17111-321	Backplane V 17111-322	Backplane V 17111-351	Backplane V 17111-320	System Cable 0336331	System Cable 0336332	System Cable 0336333	System Cable 0336334	System Cable 0336335	System Cable 9700140
V17131-52	x		x	1	16	x	x	x	x	x		x	x	x		2x					
V17131-55	x		x	1	16	x	x	x	x	x		x	x	x		2x					

Chapter 3 - Digital Input

3.4 Digital Input, 32 Channels

3.4.1 Interconnection and Channel Assignment for Channel 0 ... 31



Contrans I Backplane	Freelance DDI01
Slot1, Channel 1	Channel 0
Channel 2	Channel 16
Slot2, Channel 1	Channel 1
Channel 2	Channel 17
Slot3, Channel 1	Channel 2
Channel 2	Channel 18
Slot4, Channel 1	Channel 3
Channel 2	Channel 19
Slot5, Channel 1	Channel 4
Channel 2	Channel 20
Slot6, Channel 1	Channel 5
Channel 2	Channel 21
Slot7, Channel 1	Channel 6
Channel 2	Channel 22
Slot8, Channel 1	Channel 7
Channel 2	Channel 23
Slot9, Channel 1	Channel 8
Channel 2	Channel 24
Slot10, Channel 1	Channel 9
Channel 2	Channel 25
Slot11, Channel 1	Channel 10
Channel 2	Channel 26
Slot12, Channel 1	Channel 11
Channel 2	Channel 27
Slot13, Channel 1	Channel 12
Channel 2	Channel 28
Slot14, Channel 1	Channel 13
Channel 2	Channel 29
Slot15, Channel 1	Channel 14
Channel 2	Channel 30
Slot16, Channel 1	Channel 15
Channel 2	Channel 31

3.4.2 Contrans I Modules, Backplanes and System Cables

Contrans I Modules	System Powered	Field Powered	Redundancy	Channel / Module	Channel / Backplane	Field Contact Powering	Electrical Isolation Input / Output	Electrical Isolation Channel to Channel	Intrinsically Safe	Failure monitoring (short circuit/wire break)	Failure signaling (short circuit/wire break)	Backplane V 7111-321	Backplane V 7111-322	Backplane V 7111-351	Backplane V 7111-320	System Cable 0336331	System Cable 0336332	System Cable 0336333	System Cable 0336334	System Cable 0336335	System Cable 9700140
V 17191-12	x			2	32	x						x	x			2x					
V 17131-13	x			2	32	x	x	x		x		x	x			2x					
V 17131-16	x			2	32	x	x	x		x		x	x			2x					
V 17131-53	x			2	32	x	x	x	x	x		x	x	x		2x					
V 17131-56	x			2	32	x	x	x	x	x		x	x	x		2x					
V 17133-11		x		2	32		x	x				x	x			2x					