



LENGTH	TOLERANCE
<2M	+5CM/-0CM
2 TO 5M	+10CM/-0CM
>5M	+15CM/-0CM

REF DES	DESCRIPTION
P1,P2,P3,P4, P5,P6,P7,P8	HIROSE IX INDUSTRIAL CONNECTOR, FEMALE, TYPE B OR EQUIVALENT
P9	68-POSITION VHDCI CONNECTOR, MALE
1	M2.0X0.4 THUMBSCREWS, METAL, SLOTTED AND KURLED

REF DES	CONSTRUCTION	CONDUCTORS	INSULATION	JACKET
2	4 SHIELDED TWISTED PAIRS, WITH OVERALL SHIELD	30 AWG TINNED STRANDED COPPER (7/0.10MM, 0.30MM OD)	0.15MM THICK SRPVC, 0.60MM OD	0.76MM THICK PVC, 5.50MM OD

METRIC

CUSTOMER DRAWING

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS AND [INCHES]

NI.COM AUSTIN, TEXAS

TITLE: SH68M-8IXBF AI DIFF

SIZE: D 7U296

IDENT NO.: MM/DD/YYYY 08/19/2021

SCALE: 1/1 SHEET 1 OF 2

DO NOT SCALE DRAWING THIRD ANGLE PROJECTION

2 PRODUCT AND COMPANY NAMES MENTIONED ARE TRADEMARKS OR TRADE NAMES OF THEIR RESPECTIVE COMPANIES.

1. REFER TO PRODUCT MANUAL ON NI.COM FOR MORE DETAILS.

NOTES: UNLESS OTHERWISE SPECIFIED.

WIRE LIST

LEAD	PAIR	P9 (VHDCI)	SIGNAL - VHDCI	SIGNAL - IX	COND.	COLOR	P1	P2	P3	P4		
1	0	68	AI16+	A	C0	RED	1					
		34	AI16-	B	C1	WHITE	2					
		22	AIGND	I (REF)	SHIELD_0	SHIELD/DRAIN	3					
	1	1	22	AIGND	I (REF)	SHIELD_1	SHIELD/DRAIN	3				
			33	AI17+	C	C2	BROWN	4				
			67	AI17-	D	C3	WHITE	5				
	2	2	32	AI18+	E	C4	ORANGE	6				
			66	AI18-	F	C5	WHITE	7				
			22	AIGND	J (AUX)	SHIELD_2	SHIELD/DRAIN	8				
	3	3	22	AIGND	J (AUX)	SHIELD_3	SHIELD/DRAIN	8				
			65	AI19+	G	C6	YELLOW	9				
			31	AI19-	H	C7	WHITE	10				
	N/A	N/A	SHELL	CHSGND	CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL				
	2	0	30	AI20+	A	C8	RED		1			
64			AI20-	B	C9	WHITE		2				
22			AIGND	I (REF)	SHIELD_4	SHIELD/DRAIN	3					
1		1	22	AIGND	I (REF)	SHIELD_5	SHIELD/DRAIN	3				
			29	AI21+	C	C10	BROWN	4				
			63	AI21-	D	C11	WHITE	5				
2		2	62	AI22+	E	C12	ORANGE	6				
			28	AI22-	F	C13	WHITE	7				
			22	AIGND	J (AUX)	SHIELD_6	SHIELD/DRAIN	8				
3		3	22	AIGND	J (AUX)	SHIELD_7	SHIELD/DRAIN	8				
			27	AI23+	G	C14	YELLOW	9				
			61	AI23-	H	C15	WHITE	10				
N/A		N/A	SHELL	CHSGND	CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL				
3		0	26	AI32+	A	C16	RED			1		
	60		AI32-	B	C17	WHITE			2			
	22		AIGND	I (REF)	SHIELD_8	SHIELD/DRAIN	3					
	1	1	22	AIGND	I (REF)	SHIELD_9	SHIELD/DRAIN	3				
			59	AI33+	C	C18	BROWN	4				
			25	AI33-	D	C19	WHITE	5				
	2	2	24	AI34+	E	C20	ORANGE	6				
			58	AI34-	F	C21	WHITE	7				
			22	AIGND	J (AUX)	SHIELD_10	SHIELD/DRAIN	8				
	3	3	22	AIGND	J (AUX)	SHIELD_11	SHIELD/DRAIN	8				
			23	AI35+	G	C22	YELLOW	9				
			57	AI35-	H	C23	WHITE	10				
	N/A	N/A	SHELL	CHSGND	CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL				
	4	0	55	AI36+	A	C24	RED				1	
21			AI36-	B	C25	WHITE				2		
22			AIGND	I (REF)	SHIELD_12	SHIELD/DRAIN	3					
1		1	22	AIGND	I (REF)	SHIELD_13	SHIELD/DRAIN	3				
			20	AI37+	C	C26	BROWN	4				
			54	AI37-	D	C27	WHITE	5				
2		2	19	AI38+	E	C28	ORANGE	6				
			53	AI38-	F	C29	WHITE	7				
			22	AIGND	J (AUX)	SHIELD_14	SHIELD/DRAIN	8				
3		3	22	AIGND	J (AUX)	SHIELD_15	SHIELD/DRAIN	8				
			52	AI39+	G	C30	YELLOW	9				
			18	AI39-	H	C31	WHITE	10				
N/A		N/A	SHELL	CHSGND	CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL				

WIRE LIST (CONT.)

LEAD	PAIR	P9 (VHDCI)	SIGNAL - VHDCI	SIGNAL - IX	COND.	COLOR	P5	P6	P7	P8		
5	0	17	AI48+	A	C32	RED	1					
		51	AI48-	B	C33	WHITE	2					
		9	AIGND	I (REF)	Shield16	SHIELD/DRAIN	3					
	1	1	9	AIGND	I (REF)	Shield17	SHIELD/DRAIN	3				
			16	AI49+	C	C34	BROWN	4				
			50	AI49-	D	C35	WHITE	5				
	2	2	49	AI50+	E	C36	ORANGE	6				
			15	AI50-	F	C37	WHITE	7				
			9	AIGND	J (AUX)	Shield18	SHIELD/DRAIN	8				
	3	3	9	AIGND	J (AUX)	Shield19	SHIELD/DRAIN	8				
			14	AI51+	G	C38	YELLOW	9				
			48	AI51-	H	C39	WHITE	10				
	N/A	N/A	SHELL	CHSGND	CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL				
	6	0	13	AI52+	A	C40	RED		1			
47			AI52-	B	C41	WHITE		2				
9			AIGND	I (REF)	Shield20	SHIELD/DRAIN	3					
1		1	9	AIGND	I (REF)	Shield21	SHIELD/DRAIN	3				
			46	AI53+	C	C42	BROWN	4				
			12	AI53-	D	C43	WHITE	5				
2		2	11	AI54+	E	C44	ORANGE	6				
			45	AI54-	F	C45	WHITE	7				
			9	AIGND	J (AUX)	Shield22	SHIELD/DRAIN	8				
3		3	9	AIGND	J (AUX)	Shield23	SHIELD/DRAIN	8				
			10	AI55+	G	C46	YELLOW	9				
			44	AI55-	H	C47	WHITE	10				
N/A		N/A	SHELL	CHSGND	CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL				
7		0	42	AI64+	A	C48	RED			1		
	8		AI64-	B	C49	WHITE			2			
	43		AIGND	I (REF)	Shield24	SHIELD/DRAIN	3					
	1	1	43	AIGND	I (REF)	Shield25	SHIELD/DRAIN	3				
			7	AI65+	C	C50	BROWN	4				
			41	AI65-	D	C51	WHITE	5				
	2	2	6	AI66+	E	C52	ORANGE	6				
			40	AI66-	F	C53	WHITE	7				
			43	AIGND	J (AUX)	Shield26	SHIELD/DRAIN	8				
	3	3	43	AIGND	J (AUX)	Shield27	SHIELD/DRAIN	8				
			39	AI67+	G	C54	YELLOW	9				
			5	AI67-	H	C55	WHITE	10				
	N/A	N/A	SHELL	CHSGND	CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL				
	8	0	4	AI68+	A	C56	RED				1	
38			AI68-	B	C57	WHITE				2		
43			AIGND	I (REF)	Shield28	SHIELD/DRAIN	3					
1		1	43	AIGND	I (REF)	Shield29	SHIELD/DRAIN	3				
			3	AI69+	C	C58	BROWN	4				
			37	AI69-	D	C59	WHITE	5				
2		2	36	AI70+	E	C60	ORANGE	6				
			2	AI70-	F	C61	WHITE	7				
			43	AIGND	J (AUX)	Shield30	SHIELD/DRAIN	8				
3		3	43	AIGND	J (AUX)	Shield31	SHIELD/DRAIN	8				
			1	AI71+	G	C62	YELLOW	9				
			35	AI71-	H	C63	WHITE	10				
N/A		N/A	SHELL	CHSGND	CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL				