



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

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

REF DES	CONSTRUCTION	CONDUCTORS	INSULATION	JACKET
2	8 TWISTED PAIRS, WITH OVERALL SHIELD	30 AWG TINNED STRANDED COPPER (7/0.10MM, 0.30MM OD)	0.15MM THICK SRPVC, 0.60MM OD	01.00MM THICK PVC, 6.70MM OD
3	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

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.

METRIC CUSTOMER DRAWING

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS AND [INCHES]

DO NOT SCALE DRAWING THIRD ANGLE PROJECTION

NI NI.COM AUSTIN, TEXAS

TITLE: SH68M-5IXBF MIO

SIZE: D CODE: 7U296 IDENT NO.: MM/DD/YYYY 08/19/2021

SCALE: 1/1 SHEET 1 OF 3

WIRE LIST

LEAD	Cable Type Ref Des	PAIR	P6 (VHDCI)	SIGNAL - VHDCI 1	SIGNAL - VHDCI 2	SIGNAL - IX	COND.	COLOR	P1	P2	P3	P4	P5	
1	2	0	52	P0.0	P0.8	A	C0	RED	1					
			18	D GND	D GND	I (REF)	C1	WHITE	3					
		1	18	D GND	D GND	I (REF)	C2	WHITE	3					
			17	P0.1	P0.9	B	C3	BROWN	2					
		2	49	P0.2	P0.10	C	C4	ORANGE	4					
			18	D GND	D GND	I (REF)	C5	WHITE	3					
		3	18	D GND	D GND	I (REF)	C6	WHITE	3					
			47	P0.3	P0.11	D	C7	YELLOW	5					
		4	19	P0.4	P0.12	E	C8	GREEN	6					
			50	D GND	D GND	J (AUX)	C9	WHITE	8					
		5	50	D GND	D GND	J (AUX)	C10	WHITE	8					
			51	P0.5	P0.13	F	C11	BLUE	7					
		6	16	P0.6	P0.14	G	C12	VILOET	9					
			50	D GND	D GND	J (AUX)	C13	WHITE	8					
7	50	D GND	D GND	J (AUX)	C14	WHITE	8							
	48	P0.7	P0.15	H	C15	GREY	10							
N/A	SHELL	CHSGND	CHSGND	CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL							
2	2	0	11	PFI 0/P1.0	P0.16	A	C16	RED		1				
			9	D GND	D GND	I (REF)	C17	WHITE		3				
		1	9	D GND	D GND	I (REF)	C18	WHITE		3				
			10	PFI 1/P1.1	P0.17	B	C19	BROWN		2				
		2	43	PFI 2/P1.2	P0.18	C	C20	ORANGE		4				
			9	D GND	D GND	I (REF)	C21	WHITE		3				
		3	9	D GND	D GND	I (REF)	C22	WHITE		3				
			42	PFI 3/P1.3	P0.19	D	C23	YELLOW		5				
		4	41	PFI 4/P1.4	P0.20	E	C24	GREEN		6				
			7	D GND	D GND	J (AUX)	C25	WHITE		8				
		5	7	D GND	D GND	J (AUX)	C26	WHITE		8				
			6	PFI 5/P1.5	P0.21	F	C27	BLUE		7				
		6	5	PFI 6/P1.6	P0.22	G	C28	VILOET		9				
			7	D GND	D GND	J (AUX)	C29	WHITE		8				
7	7	D GND	D GND	J (AUX)	C30	WHITE		8						
	38	PFI 7/P1.7	P0.23	H	C31	GREY		10						
N/A	SHELL	CHSGND	CHSGND	CHSGND	OUTER SHIELD	SHIELD/DRAIN		SHELL						
3	2	0	37	PFI8/P2.0	P0.24	A	C32	RED			1			
			36	D GND	D GND	I (REF)	C33	WHITE			3			
		1	36	D GND	D GND	I (REF)	C34	WHITE			3			
			3	PFI9/P2.1	P0.25	B	C35	BROWN			2			
		2	45	PFI10/P2.2	P0.26	C	C36	ORANGE			4			
			36	D GND	D GND	I (REF)	C37	WHITE			3			
		3	36	D GND	D GND	I (REF)	C38	WHITE			3			
			46	PFI11/P2.3	P0.27	D	C39	YELLOW			5			
		4	2	PFI12/P2.4	P0.28	E	C40	GREEN			6			
			4	D GND	D GND	J (AUX)	C41	WHITE			8			
		5	4	D GND	D GND	J (AUX)	C42	WHITE			8			
			40	PFI13/P2.5	P0.29	F	C43	BLUE			7			
		6	1	PFI14/P2.6	P0.30	G	C44	VILOET			9			
			4	D GND	D GND	J (AUX)	C45	WHITE			8			
7	4	D GND	D GND	J (AUX)	C46	WHITE			8					
	39	PFI15/P2.7	P0.31	H	C47	GREY			10					
N/A	SHELL	CHSGND	CHSGND	CHSGND	OUTER SHIELD	SHIELD/DRAIN			SHELL					

... WIRE LIST, CONTINUED

LEAD	Cable Type Ref Des	PAIR	P6 (VHDCI)	SIGNAL - VHDCI 1	SIGNAL - VHDCI 2	SIGNAL - IX	COND.	COLOR	P1	P2	P3	P4	P5		
4	3	0	68	AI 0 (AI 0+)	AI 16 (AI 16+)	A	C48	RED				1			
			34	AI 8 (AI 0-)	AI 24 (AI 16-)	B	C49	WHITE				2			
			67	AI GND	AI GND	I (REF)	Shield1	SHIELD/DRAIN				3			
		1	3	1	67	AI GND	AI GND	I (REF)	Shield2	SHIELD/DRAIN				3	
					33	AI 1 (AI 1+)	AI 17 (AI 17+)	C	C50	BROWN				4	
					66	AI 9 (AI 1-)	AI 25 (AI 17-)	D	C51	WHITE				5	
		2	3	2	65	AI 2 (AI 2+)	AI 18 (AI 18+)	E	C52	ORANGE				6	
					31	AI 10 (AI 2-)	AI 26 (AI 18-)	F	C53	WHITE				7	
					64	AI GND	AI GND	J (AUX)	Shield3	SHIELD/DRAIN				8	
		3	3	3	64	AI GND	AI GND	J (AUX)	Shield4	SHIELD/DRAIN				8	
					30	AI 3 (AI 3+)	AI 19 (AI 19+)	G	C54	YELLOW				9	
					63	AI 11 (AI 3-)	AI 27 (AI 19-)	H	C55	WHITE				10	
		N/A		N/A	SHELL	CHSGND	CHSGND	CHSGND	OUTER SHIELD	SHIELD/DRAIN				SHELL	
5	3	0	28	AI 4 (AI 4+)	AI 20 (AI 20+)	A	C56	RED					1		
			61	AI 12 (AI 4-)	AI 28 (AI 20-)	B	C57	WHITE					2		
			27	AI GND	AI GND	I (REF)	Shield5	SHIELD/DRAIN					3		
		1	3	1	27	AI GND	AI GND	I (REF)	Shield6	SHIELD/DRAIN					3
					60	AI 5 (AI 5+)	AI 21 (AI 21+)	C	C58	BROWN					4
					26	AI 13 (AI 5-)	AI 29 (AI 21-)	D	C59	WHITE					5
		2	3	2	25	AI 6 (AI 6+)	AI 22 (AI 22+)	E	C60	ORANGE					6
					58	AI 14 (AI 6-)	AI 30 (AI 22-)	F	C61	WHITE					7
					24	AI GND	AI GND	J (AUX)	Shield7	SHIELD/DRAIN					8
		3	3	3	24	AI GND	AI GND	J (AUX)	Shield8	SHIELD/DRAIN					8
					57	AI 7 (AI 7+)	AI 23 (AI 23+)	G	C62	YELLOW					9
					23	AI 15 (AI 7-)	AI 31 (AI 23-)	H	C63	WHITE					10
		N/A		N/A	SHELL	CHSGND	CHSGND	CHSGND	OUTER SHIELD	SHIELD/DRAIN				SHELL	