



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]

DO NOT SCALE DRAWING THIRD ANGLE PROJECTION

TITLE: SH68M-8IXBF AO DIFF

SIZE: D 7U296

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

SCALE: 1/1 SHEET 1 OF 2

NI.COM AUSTIN, TEXAS

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	10	AO0	A	C0	RED	1				
		11	AO GND 0/1	B	C1	WHITE	2				
		SHELL	CHSGND	CHSGND	SHIELD_0	SHIELD/DRAIN	SHELL				
	1	44	AO1	C	C2	BROWN	4				
		11	AO GND 0/1	D	C3	WHITE	5				
		SHELL	CHSGND	CHSGND	SHIELD_1	SHIELD/DRAIN	SHELL				
	2	45	AO2	E	C4	ORANGE	6				
		46	AO GND 2/3	F	C5	WHITE	7				
		SHELL	CHSGND	CHSGND	SHIELD_2/DRAIN	SHIELD/DRAIN	SHELL				
	3	12	AO3	G	C6	YELLOW	9				
		46	AO GND 2/3	H	C7	WHITE	10				
		SHELL	CHSGND	CHSGND	SHIELD_3/DRAIN	SHIELD/DRAIN	SHELL				
N/A	SHELL	CHSGND	CHSGND	OUTER SHIELD/DRAIN	SHIELD/DRAIN	SHELL					
2	0	13	AO4	A	C8	RED		1			
		14	AO GND 4/5	B	C9	WHITE		2			
		SHELL	N/A	CHSGND	SHIELD_4/DRAIN	SHIELD/DRAIN	SHELL				
	1	47	AO5	C	C10	BROWN		4			
		14	AO GND 4/5	D	C11	WHITE		5			
		SHELL	N/A	CHSGND	SHIELD_5/DRAIN	SHIELD/DRAIN	SHELL				
	2	48	AO6	E	C12	ORANGE		6			
		49	AO GND 6/7	F	C13	WHITE		7			
		SHELL	N/A	CHSGND	SHIELD_6/DRAIN	SHIELD/DRAIN	SHELL				
	3	15	AO7	G	C14	YELLOW		9			
		49	AO GND 6/7	H	C15	WHITE		10			
		SHELL	N/A	CHSGND	SHIELD_7/DRAIN	SHIELD/DRAIN	SHELL				
N/A	SHELL	N/A	CHSGND	OUTER SHIELD/DRAIN	SHIELD/DRAIN	SHELL					
3	0	16	AO8	A	C16	RED			1		
		50	AO GND 8/9/10	B	C17	WHITE			2		
		SHELL	N/A	CHSGND	SHIELD_8/DRAIN	SHIELD/DRAIN	SHELL				
	1	17	AO9	C	C18	BROWN			4		
		50	AO GND 8/9/10	D	C19	WHITE			5		
		SHELL	N/A	CHSGND	SHIELD_9/DRAIN	SHIELD/DRAIN	SHELL				
	2	51	AO10	E	C20	ORANGE			6		
		50	AO GND 8/9/10	F	C21	WHITE			7		
		SHELL	N/A	CHSGND	SHIELD_10/DRAIN	SHIELD/DRAIN	SHELL				
	3	52	AO11	G	C22	YELLOW			9		
		18	AO GND 11	H	C23	WHITE			10		
		SHELL	N/A	CHSGND	SHIELD_11/DRAIN	SHIELD/DRAIN	SHELL				
N/A	SHELL	N/A	CHSGND	OUTER SHIELD/DRAIN	SHIELD/DRAIN	SHELL					
4	0	53	AO12	A	C24	RED				1	
		20	AO GND 12/13	B	C25	WHITE				2	
		SHELL	N/A	CHSGND	SHIELD_12/DRAIN	SHIELD/DRAIN	SHELL				
	1	54	AO13	C	C26	BROWN				4	
		20	AO GND 12/13	D	C27	WHITE				5	
		SHELL	N/A	CHSGND	SHIELD_13/DRAIN	SHIELD/DRAIN	SHELL				
	2	21	AO14	E	C28	ORANGE				6	
		55	AO GND 14/15	F	C29	WHITE				7	
		SHELL	N/A	CHSGND	SHIELD_14/DRAIN	SHIELD/DRAIN	SHELL				
	3	22	AO15	G	C30	YELLOW				9	
		55	AO GND 14/15	H	C31	WHITE				10	
		SHELL	N/A	CHSGND	SHIELD_15/DRAIN	SHIELD/DRAIN	SHELL				
N/A	SHELL	N/A	CHSGND	OUTER SHIELD/DRAIN	SHIELD/DRAIN	SHELL					

WIRE LIST (CONT.)

LEAD	PAIR	P9 (VHDCI)	SIGNAL - VHDCI	SIGNAL - IX	COND.	COLOR	P5	P6	P7	P8	
5	0	23	AO16	A	C32	RED	1				
		24	AO GND 16/17	B	C33	WHITE	2				
		SHELL	CHSGND	CHSGND	SHIELD_16	SHIELD/DRAIN	SHELL				
	1	57	AO17	C	C34	BROWN	4				
		24	AO GND 16/17	D	C35	WHITE	5				
		SHELL	CHSGND	CHSGND	SHIELD_17	SHIELD/DRAIN	SHELL				
	2	58	AO18	E	C36	ORANGE	6				
		59	AO GND 18/19	F	C37	WHITE	7				
		SHELL	CHSGND	CHSGND	SHIELD_18	SHIELD/DRAIN	SHELL				
	3	25	AO19	G	C38	YELLOW	9				
		59	AO GND 18/19	H	C39	WHITE	10				
		SHELL	CHSGND	CHSGND	SHIELD_19	SHIELD/DRAIN	SHELL				
N/A	SHELL	CHSGND	CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL					
6	0	26	AO20	A	C40	RED		1			
		27	AO GND 20/21	B	C41	WHITE		2			
		SHELL	CHSGND	CHSGND	SHIELD_20	SHIELD/DRAIN	SHELL				
	1	60	AO21	C	C42	BROWN		4			
		27	AO GND 20/21	D	C43	WHITE		5			
		SHELL	CHSGND	CHSGND	SHIELD_21	SHIELD/DRAIN	SHELL				
	2	61	AO22	E	C44	ORANGE		6			
		62	AO GND 22/23	F	C45	WHITE		7			
		SHELL	CHSGND	CHSGND	SHIELD_22	SHIELD/DRAIN	SHELL				
	3	28	AO23	G	C46	YELLOW		9			
		62	AO GND 22/23	H	C47	WHITE		10			
		SHELL	CHSGND	CHSGND	SHIELD_23	SHIELD/DRAIN	SHELL				
N/A	SHELL	CHSGND	CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL					
7	0	29	AO24	A	C48	RED			1		
		30	AO GND 24/25	B	C49	WHITE			2		
		SHELL	CHSGND	CHSGND	SHIELD_24	SHIELD/DRAIN	SHELL				
	1	63	AO25	C	C50	BROWN			4		
		30	AO GND 24/25	D	C51	WHITE			5		
		SHELL	CHSGND	CHSGND	SHIELD_25	SHIELD/DRAIN	SHELL				
	2	64	AO26	E	C52	ORANGE			6		
		65	AO GND 26/27	F	C53	WHITE			7		
		SHELL	CHSGND	CHSGND	SHIELD_26	SHIELD/DRAIN	SHELL				
	3	31	AO27	G	C54	YELLOW			9		
		65	AO GND 26/27	H	C55	WHITE			10		
		SHELL	CHSGND	CHSGND	SHIELD_27	SHIELD/DRAIN	SHELL				
N/A	SHELL	CHSGND	CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL					
8	0	32	AO28	A	C56	RED				1	
		33	AO GND 28/29	B	C57	WHITE				2	
		SHELL	CHSGND	CHSGND	SHIELD_28	SHIELD/DRAIN	SHELL				
	1	66	AO29	C	C58	BROWN				4	
		33	AO GND 28/29	D	C59	WHITE				5	
		SHELL	CHSGND	CHSGND	SHIELD_29	SHIELD/DRAIN	SHELL				
	2	67	AO30	E	C60	ORANGE				6	
		68	AO GND 30/31	F	C61	WHITE				7	
		SHELL	CHSGND	CHSGND	SHIELD_30	SHIELD/DRAIN	SHELL				
	3	34	AO31	G	C62	YELLOW				9	
		68	AO GND 30/31	H	C63	WHITE				10	
		SHELL	CHSGND	CHSGND	SHIELD_31	SHIELD/DRAIN	SHELL				
N/A	SHELL	CHSGND	CHSGND	OUTER SHIELD	SHIELD/DRAIN	SHELL					