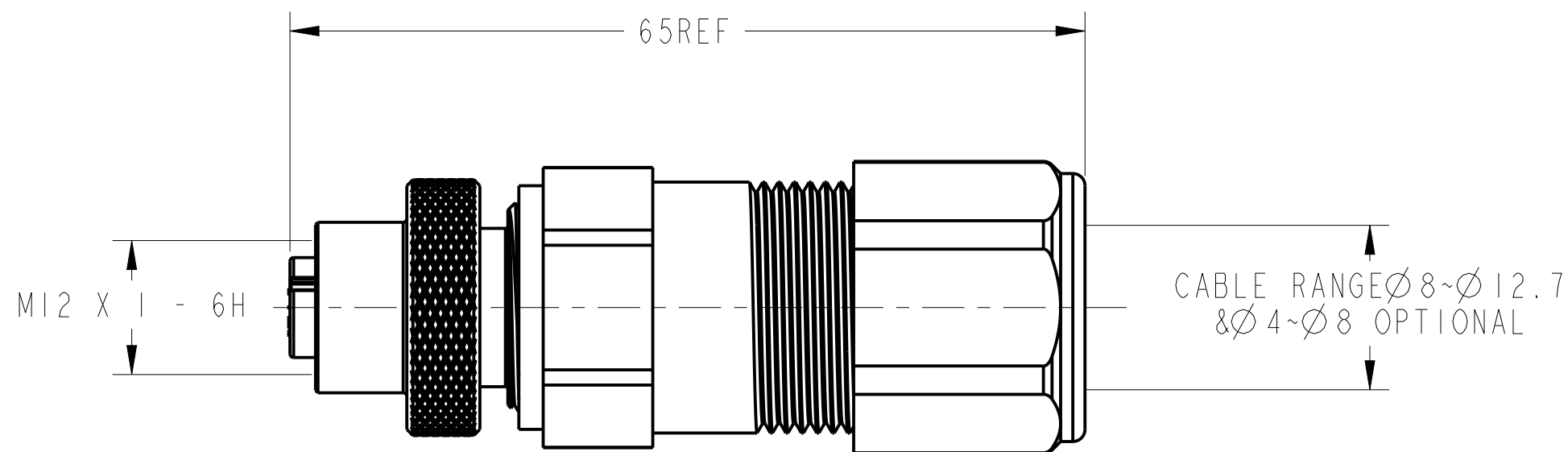
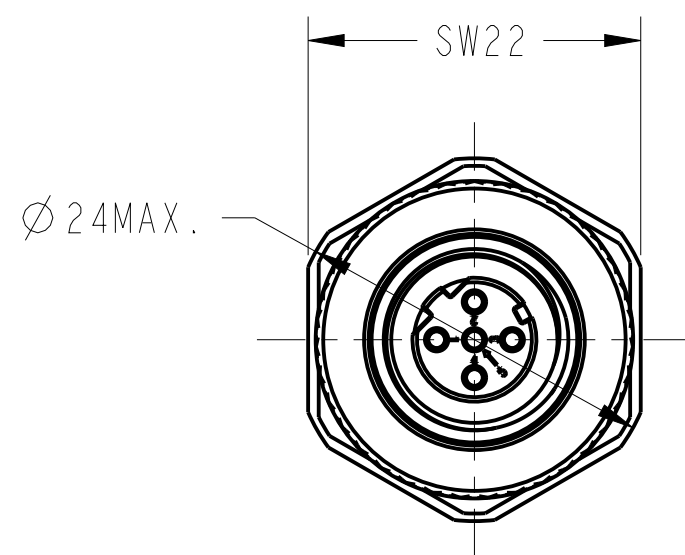


GENERAL TOLERANCE

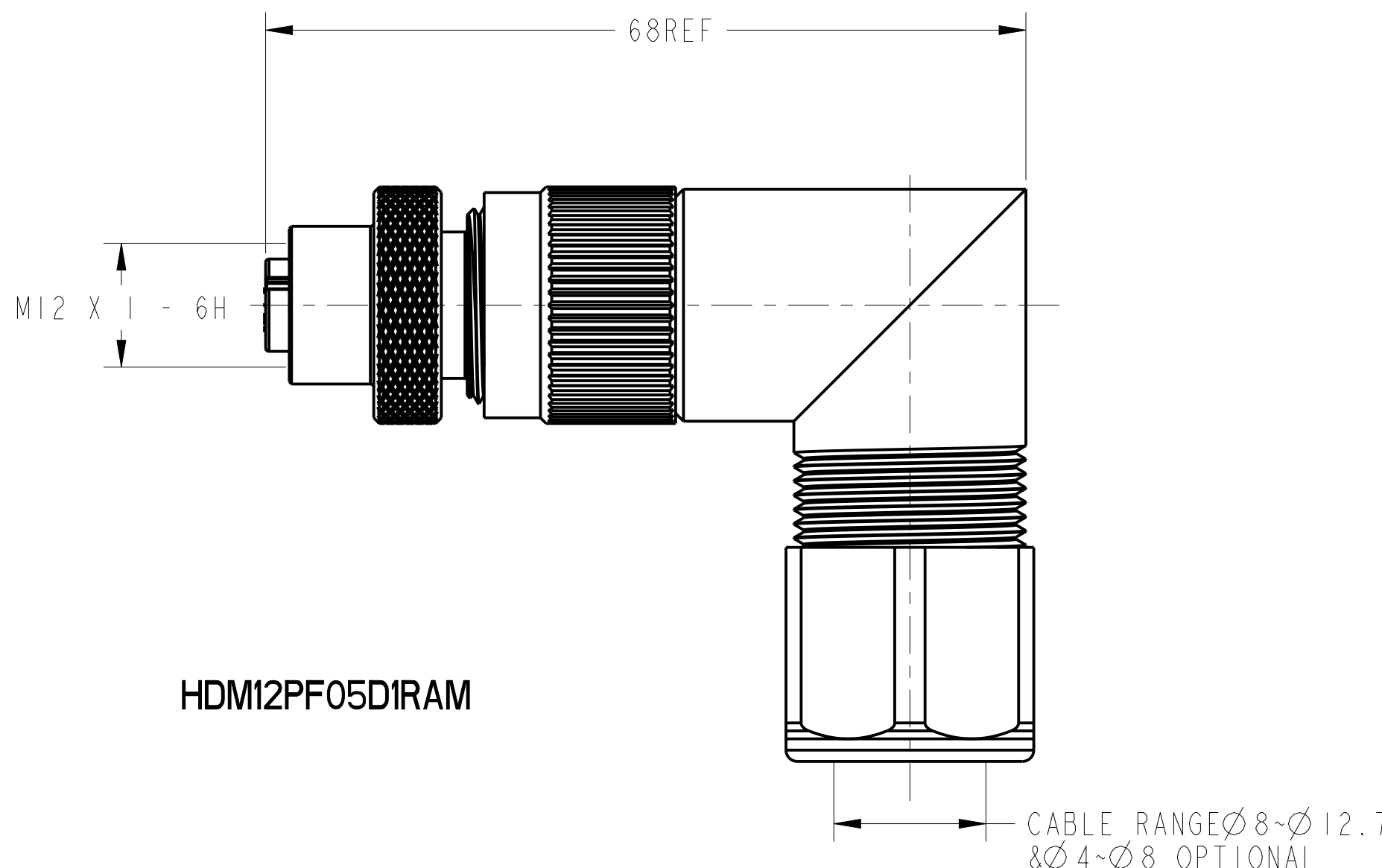
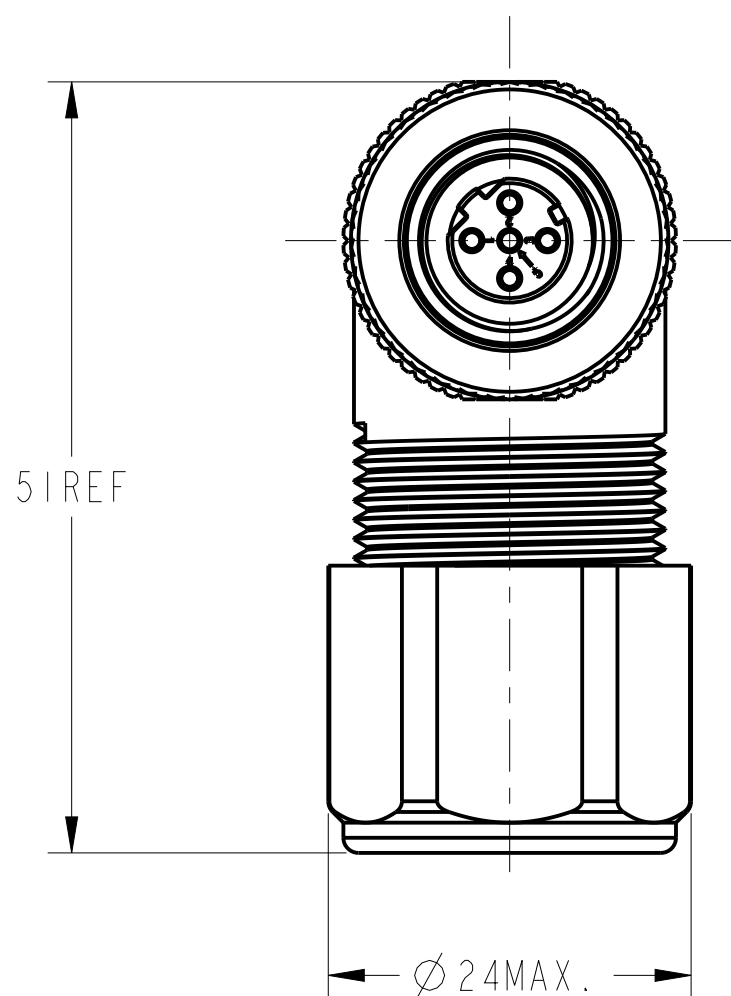
DIM. RANGE	0.5 ~ 3	> 3 ~ 6	> 6 ~ 30	> 30 ~ 120	> 120 ~ 400
TOLERANCE	±0.1	±0.1	±0.2	±0.3	±0.5

CUSTOMER DRAWING

REVISIONS		
LTR	DESCRIPTION	DATE
PA6	UPDATE DRAWING	2014-1-22



HDM12PF05D1STM



HDM12PF05D1RAM

NOTES:

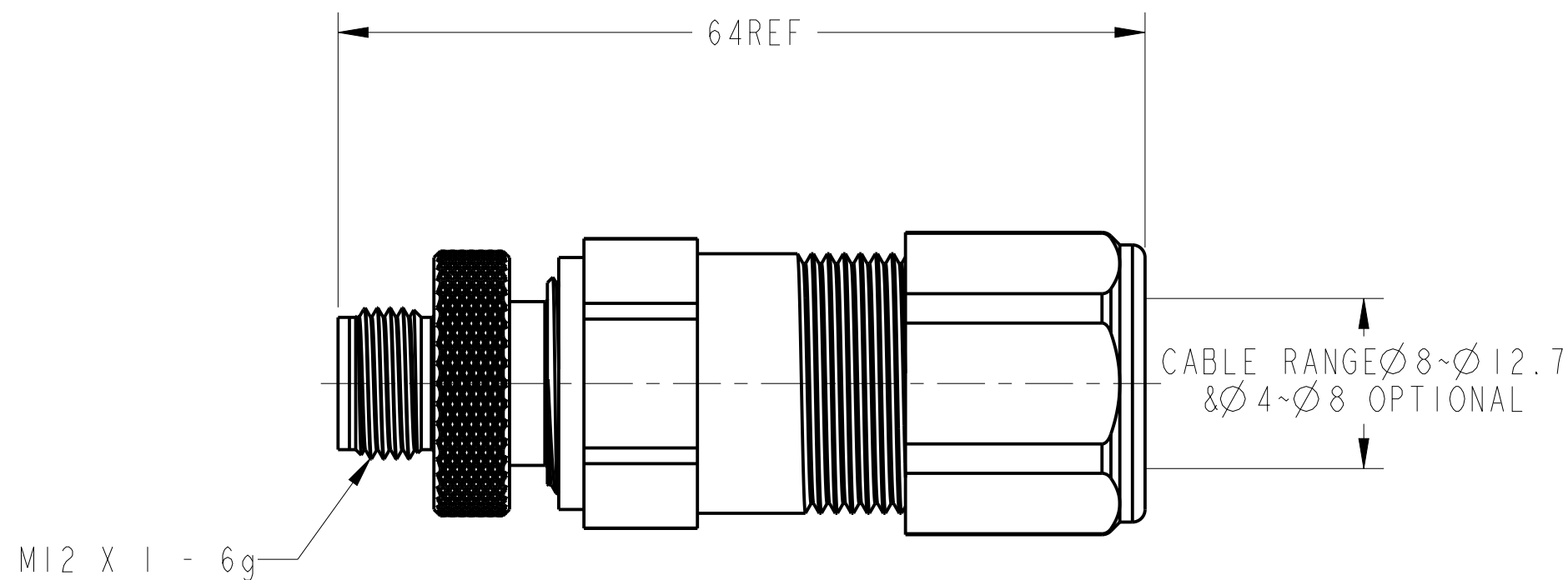
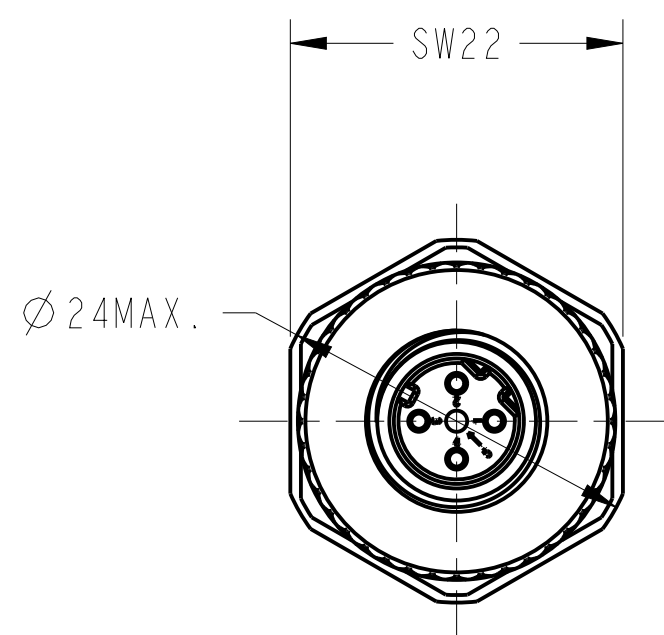
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N/A	N/A
NEXT ASSEMBLY	PRO/ENGINEER INFORMATION
<b>METRIC DOCUMENT</b>	Pro/e Model Used: HDM12RFD1RAM.ASSEM Drawing Name: HDM12_METAL_BACKSHELL

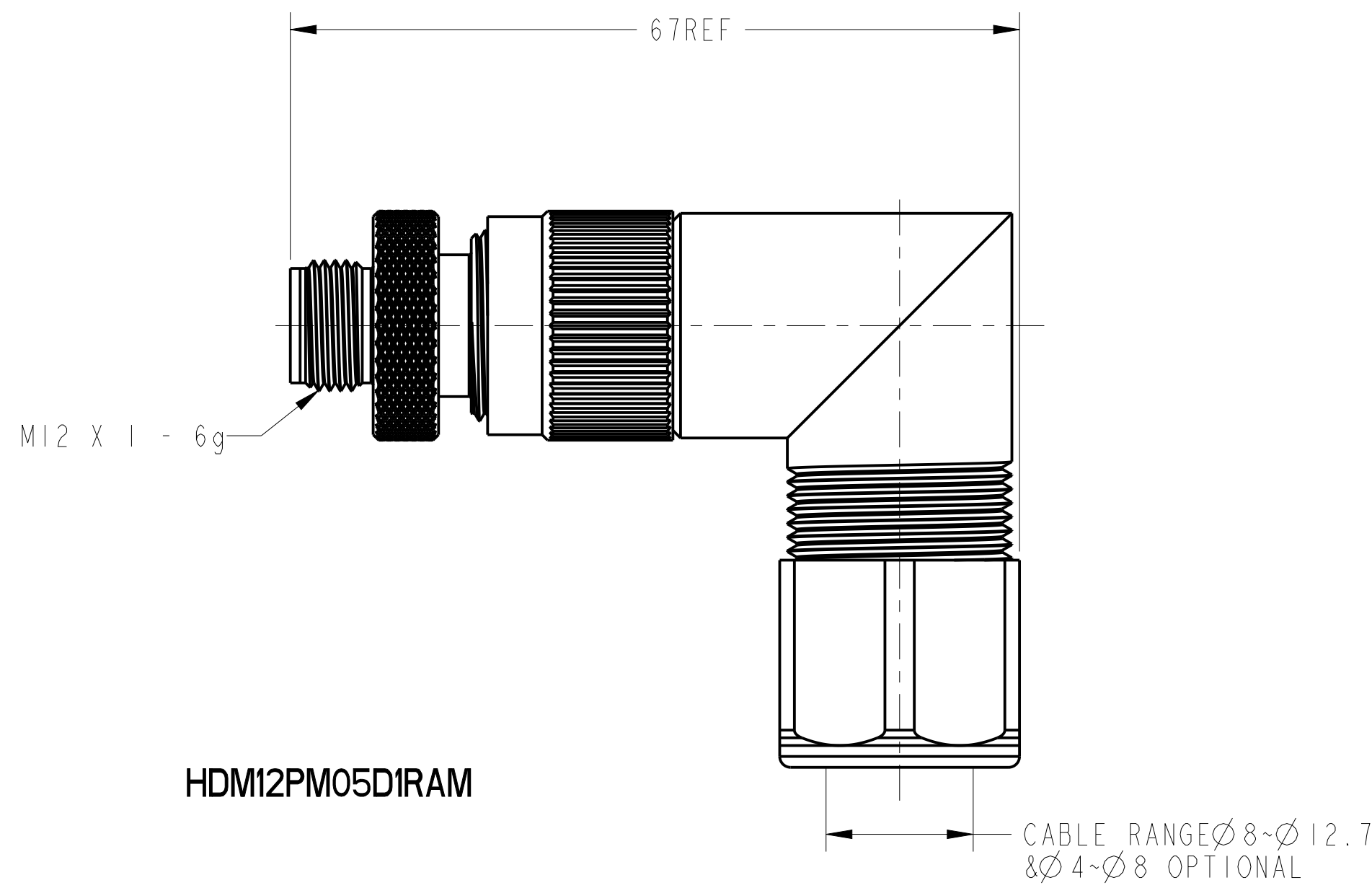
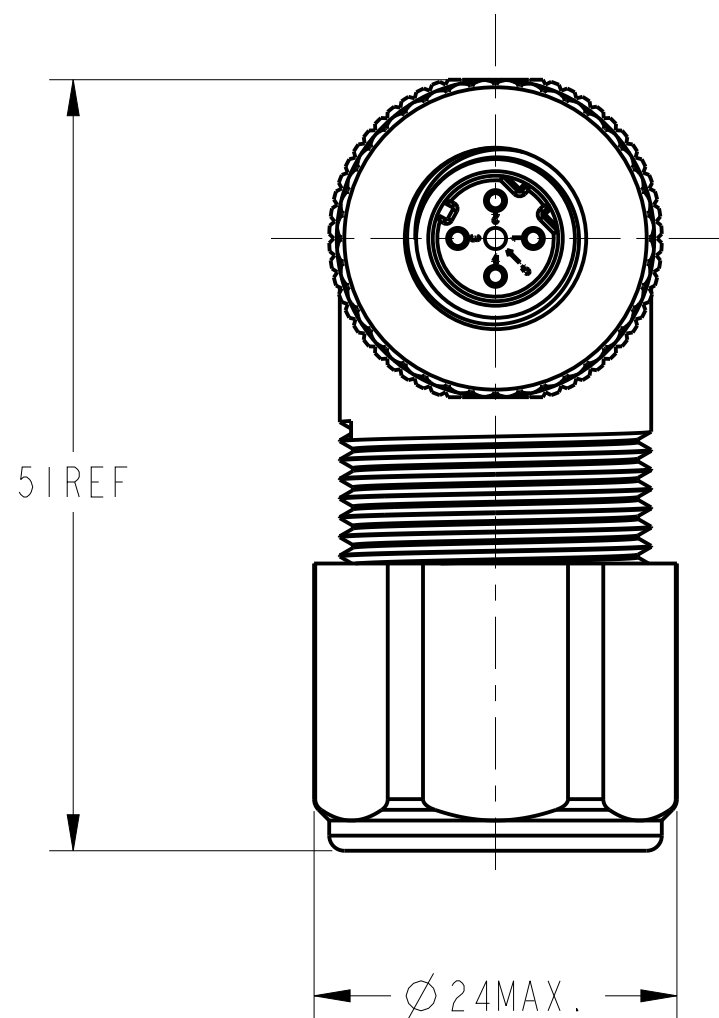
UNLESS OTHERWISE SPECIFIED	SPECIFICATIONS	POS	QTY	PART NUMBER	DESCRIPTION	NOTE
LINEAR DIMENSIONS ARE IN: <b>MILLIMETERS</b> TOLERANCES: ANGLES= ±2° DEFAULT LINEAR TOLERANCES SEE TABLE DIM. & TOL. PER ASME Y14.5M-1994; DRW PER MIL-DTL-31000; OTHER AMPHENOL STANDARDS: 9-9318 LEGENDS: △=FLAG NOTE CALL OUT REFERENCE ONLY	MATERIAL SPEC.	APPROVALS		DATE	PARTS LIST	
	N/A	PREPARED BY	Show Chen	22-Jan-14	<b>AMPHENOL INDUSTRIAL OPERATIONS</b> Amphenol Technology(Zhuhai)Co.,Ltd No.63, Xingnan Road, Sanzao Town, Jinwan, Zhuhai, PRC	
PROCESS SPEC.	N/A	ENGINEER IN CHARGE	Sam Xu		<b>MAX M12 WITH METAL BACKSHELL</b> <b>NICKEL PLATING</b>	
		DESIGN MANAGER	Ran Xiao		SIZE <b>C</b> CAGE CODE <b>77820</b> DOCUMENT NO. <b>HDM12_M</b> REV. <b>PA6</b>	
		DESIGN ACTIVITY GROUP	C 3		SCALE: 1.0 REF. SHEET 1 OF 7	
		THIRD ANGLE PROJECTION				

DOCUMENT NO. HDM12\_M  
 SHEET 1 OF 7  
 REV. PA6  
 C  
 B  
 A

REV. PA6  
 SHEET 1 OF 7  
 HDM12\_M



HDM12PM05D1STM



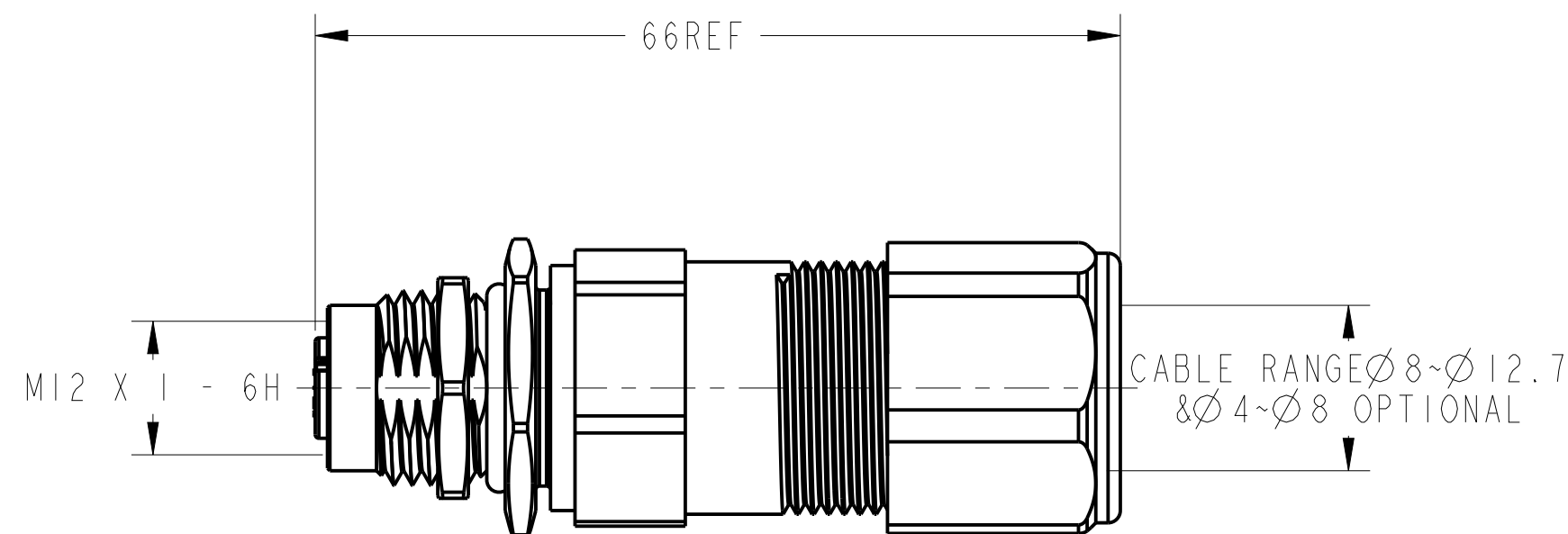
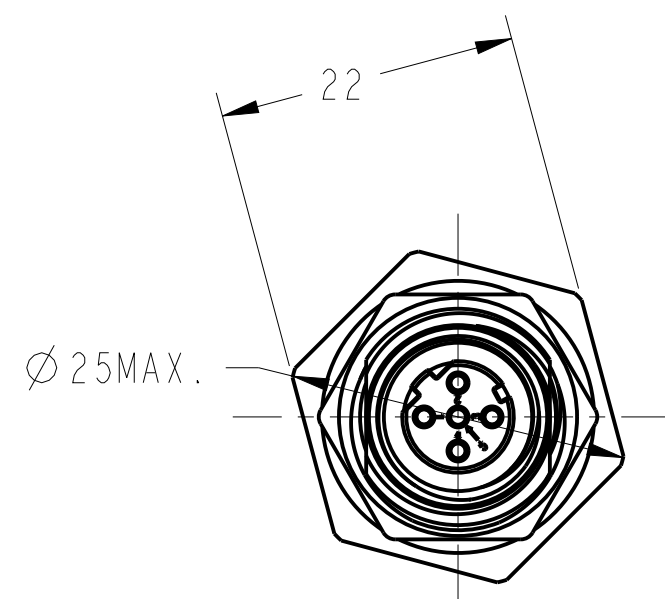
HDM12PM05D1RAM

NOTES:

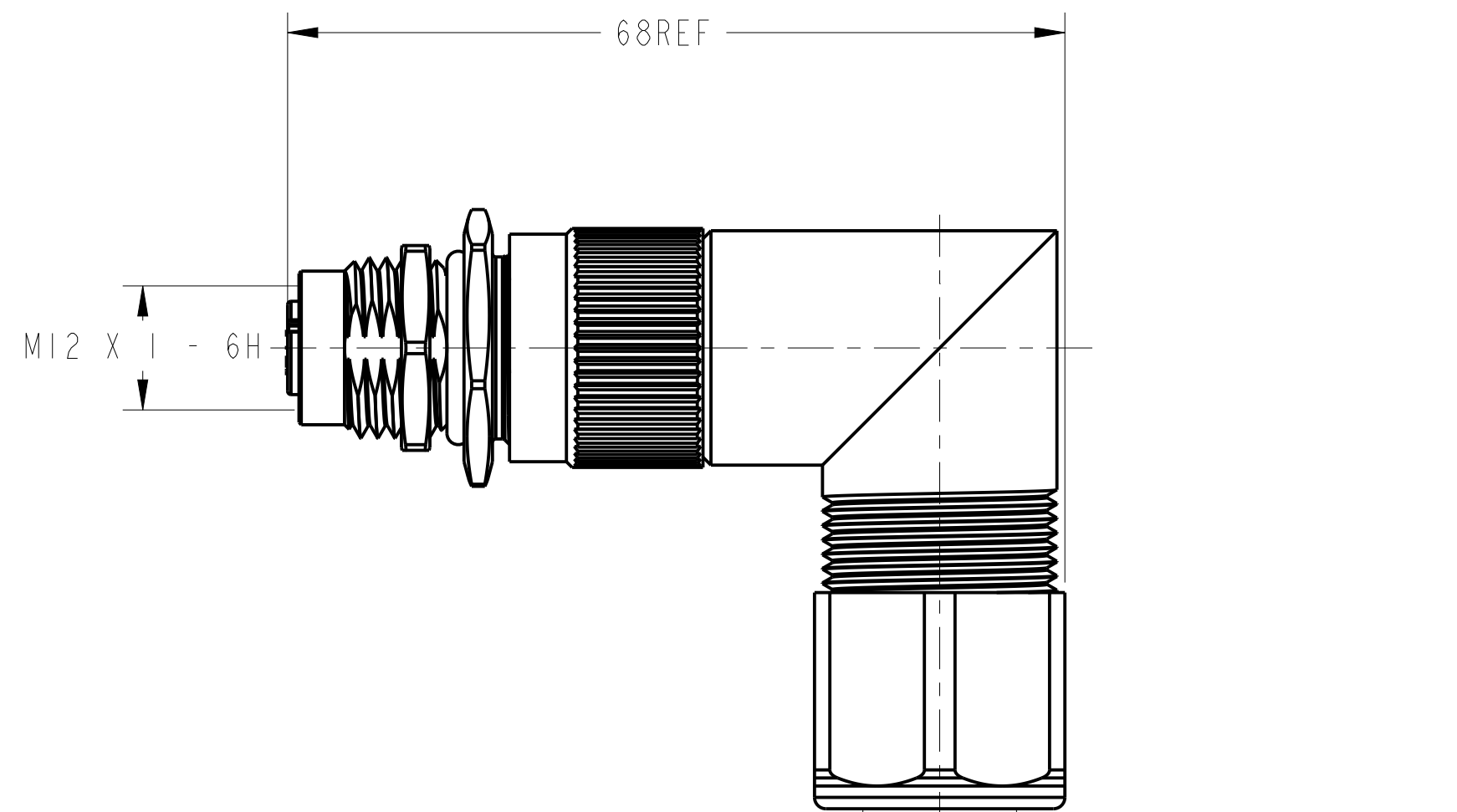
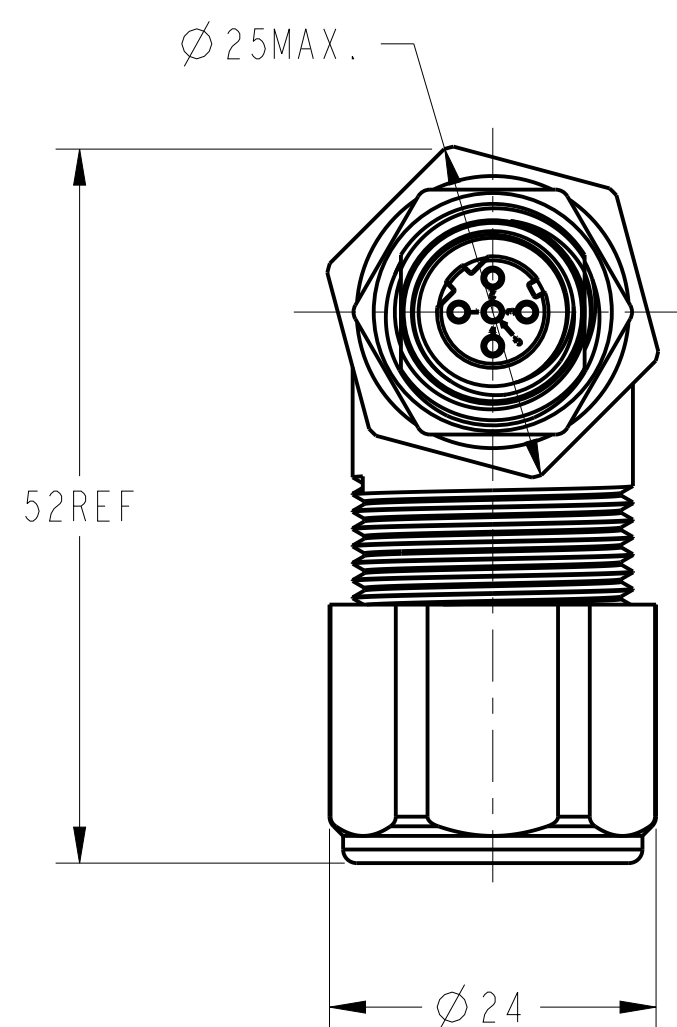
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FORMAT: C-L-E-Rev-B

SIZE <b>C</b>	CAGE CODE <b>77820</b>	DOCUMENT NO. <b>HDM12 M</b>	REV. <b>PA6</b>
SCALE: 2.0		REF:	SHEET 2 OF 7



HDM12RF05D1STM



HDM12RF05D1RAM

NOTES:

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SIZE	CAGE CODE	DOCUMENT NO.	REV.
C	77820	HDM12 M	PA6
SCALE: 2.0		REF:	SHEET 3 OF 7

DOCUMENT NO.  
HDM12 M

SHEET 4 OF 7

REV.  
PA6

C

B

A

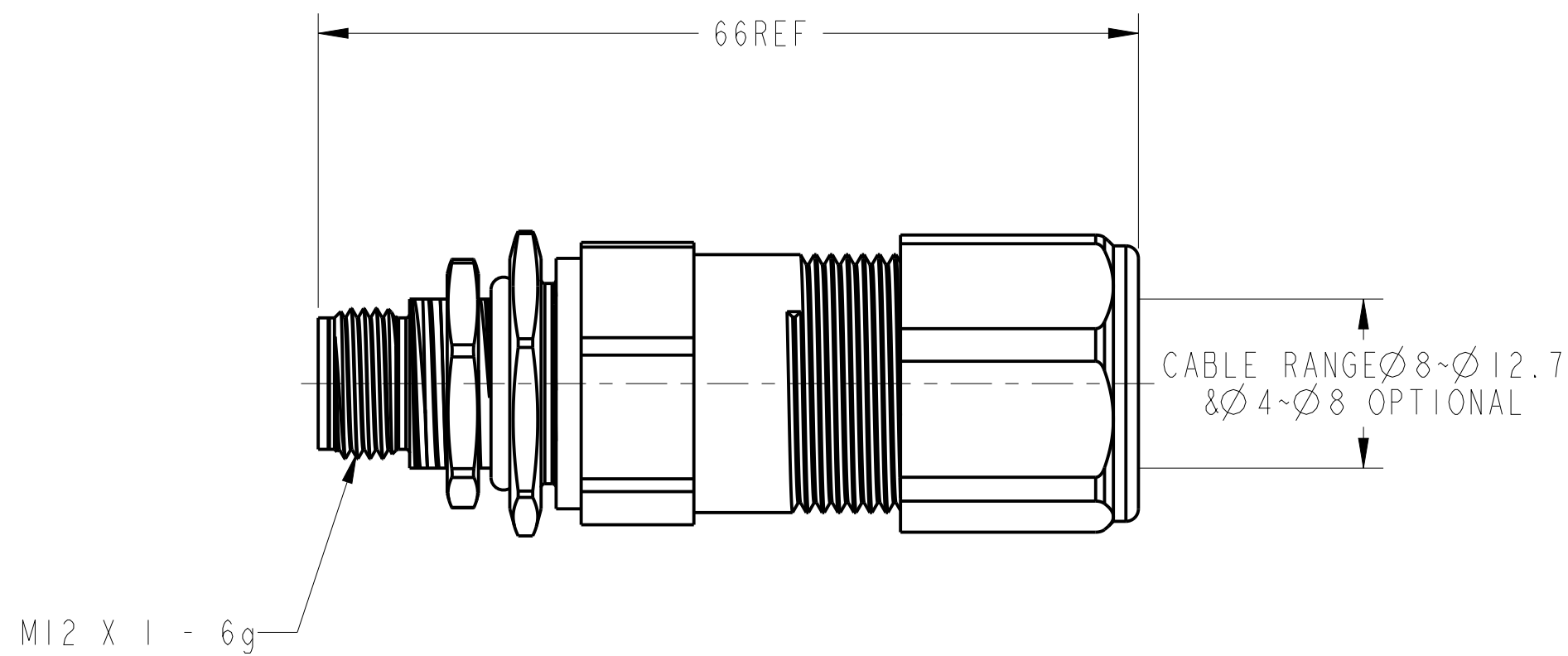
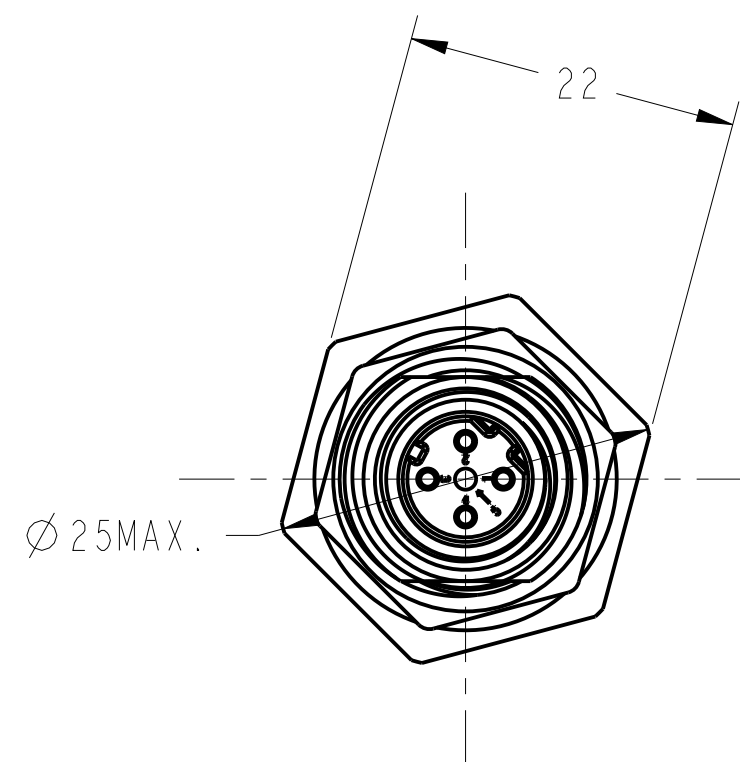
D

C

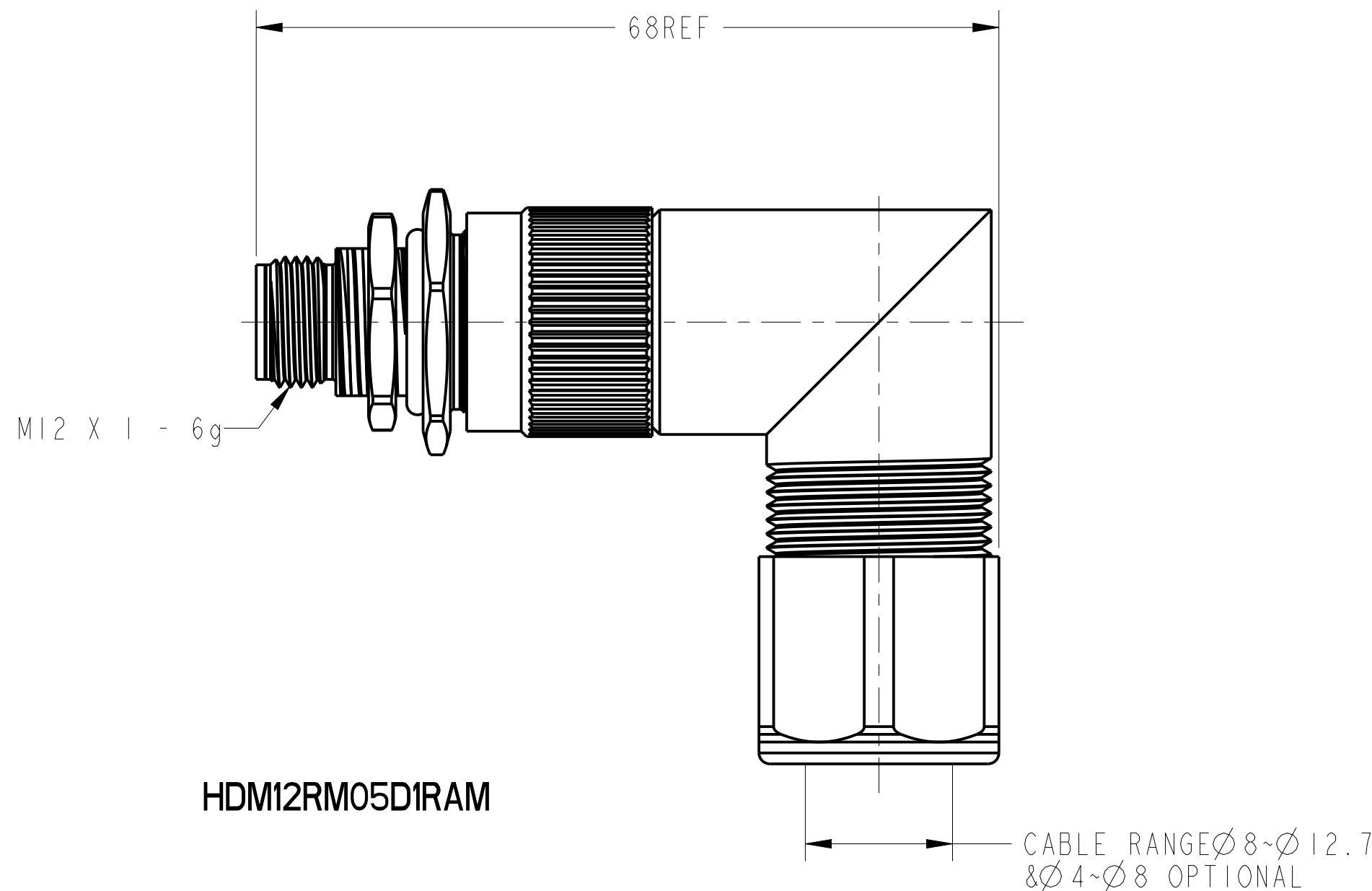
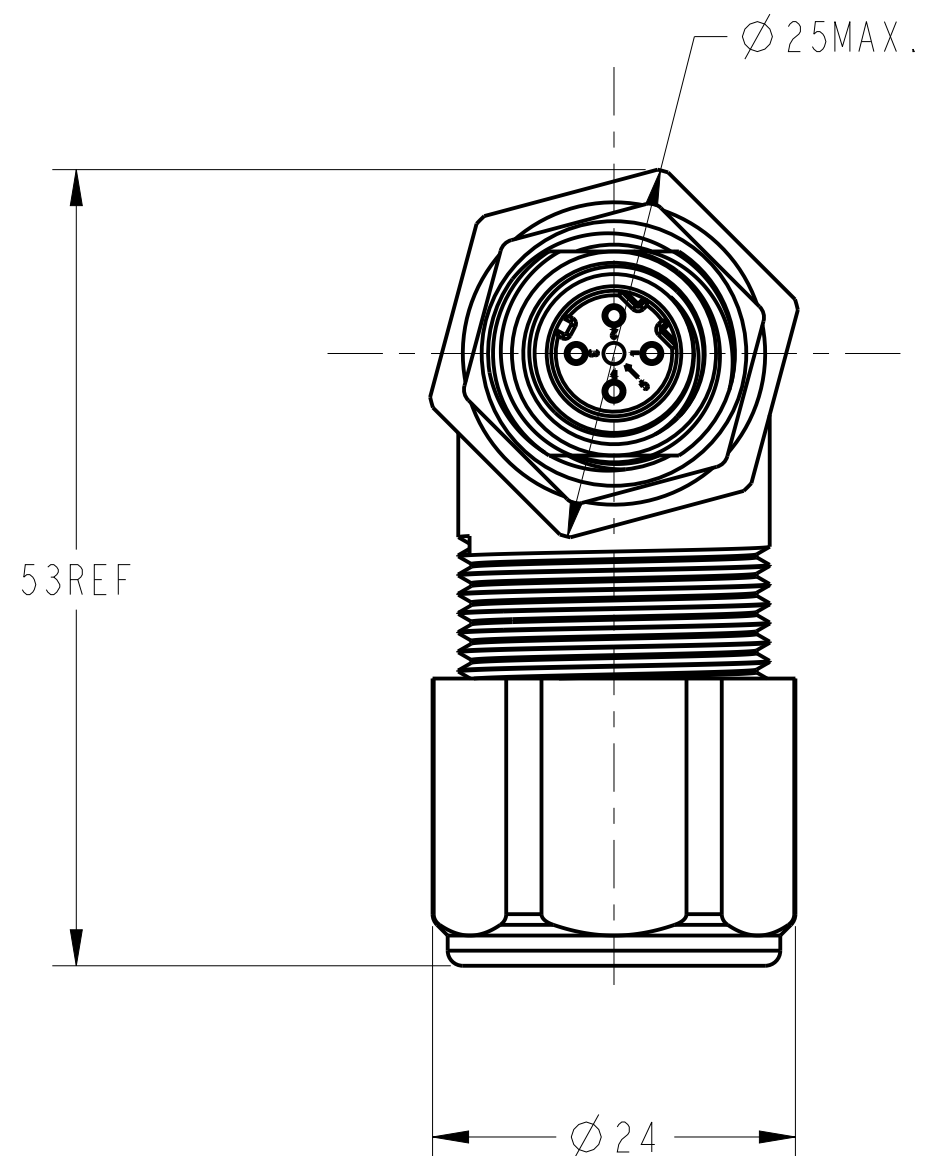
REV.  
SHEET 4 OF 7  
PA6

DOCUMENT NO.  
HDM12 M

A



HDM12RM05D1STM



HDM12RM05D1RAM

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SIZE <b>C</b>	CAGE CODE <b>77820</b>	DOCUMENT NO. <b>HDM12 M</b>	REV. <b>PA6</b>
SCALE: 2.0		REF:	SHEET 4 OF 7

# INSERT ARRANGEMENT AND CODING

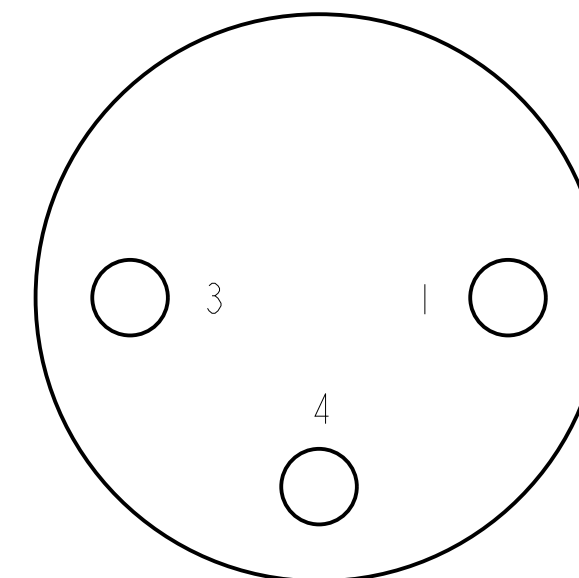
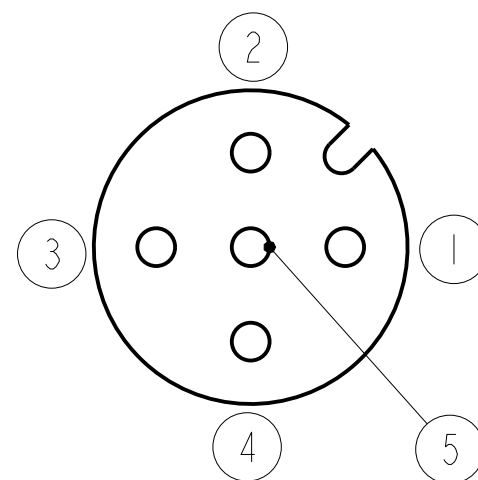
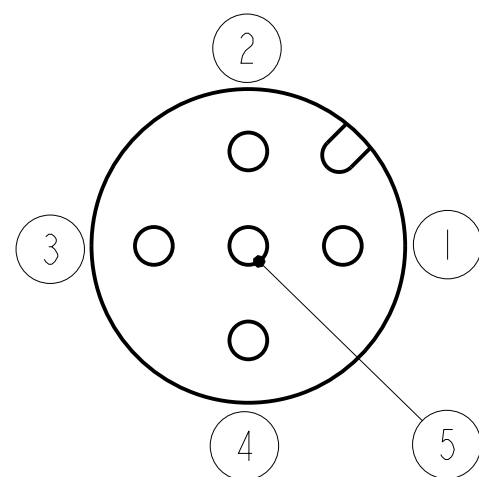
## CODING

### Male

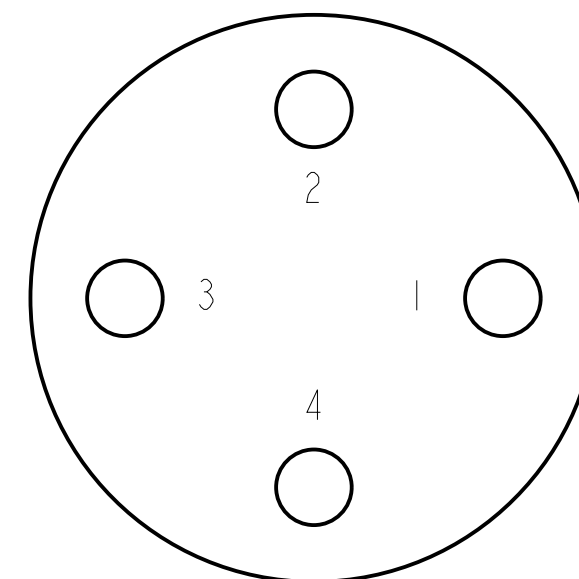
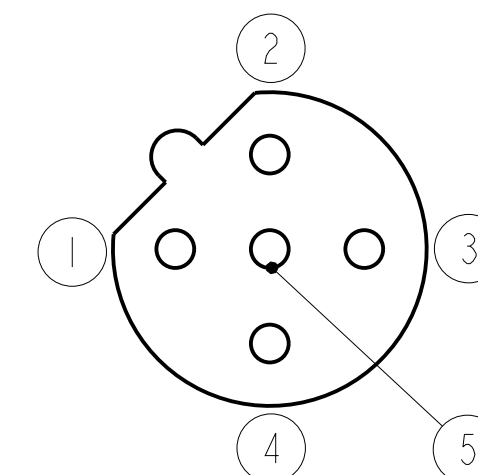
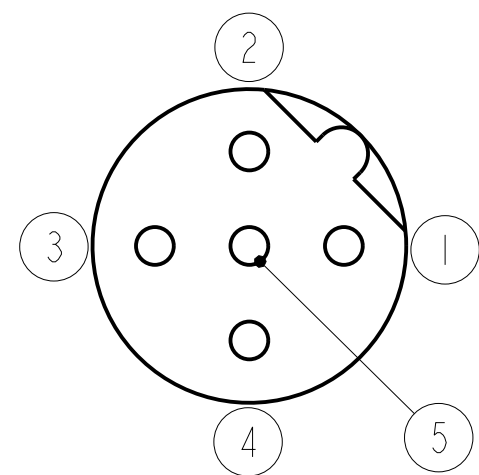
### Female

## INSERT ARRANGEMENT

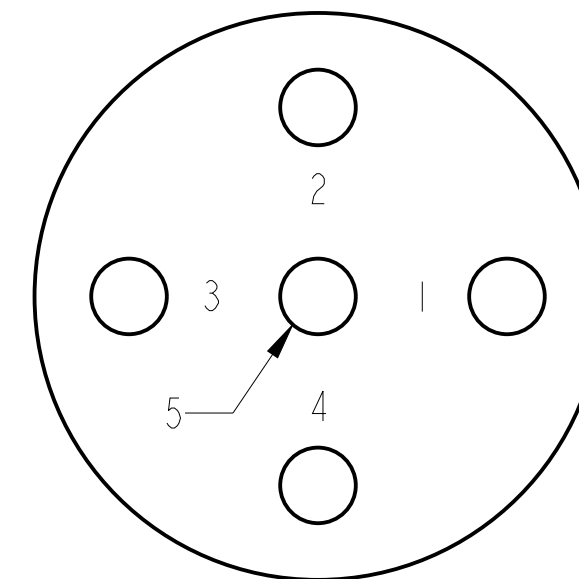
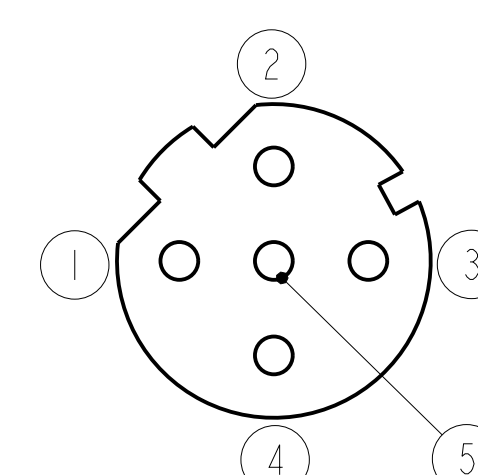
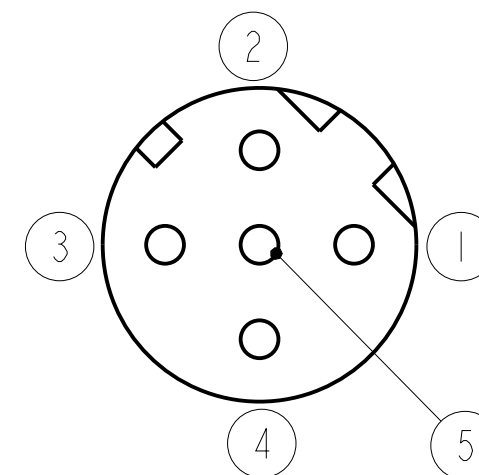
**A - CODING  
(5 POLE)**



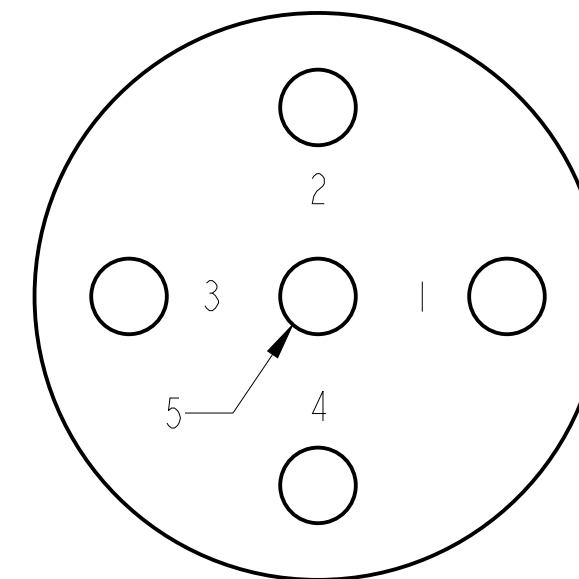
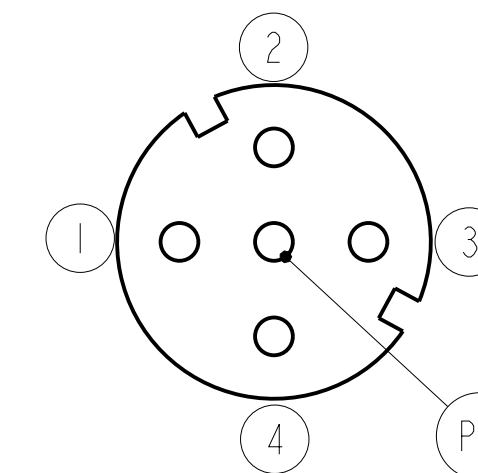
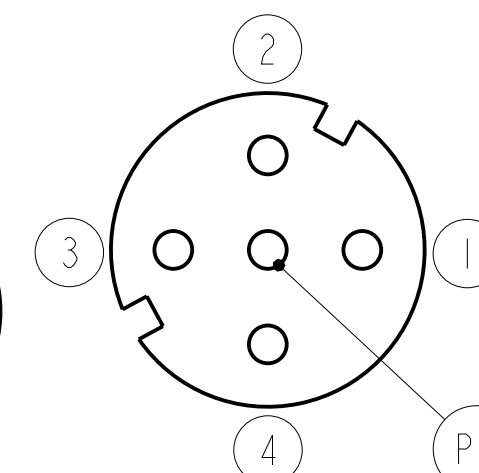
**B - coding  
(5 POLE)**



**D - coding  
(5 POLE)**



**P - coding  
(4 + PE POLE)**



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FORMAT: C-L-E-Rev-B

SIZE <b>C</b>	CAGE CODE <b>77820</b>	DOCUMENT NO. <b>HDM12_M</b>	REV. <b>PA6</b>
SCALE: 1.0		REF:	SHEET 5 OF 7

DOCUMENT NO. HDM12\_M

SHEET 5 OF 7

REV. PA6

C

B

A

D

C

REV. PA6

SHEET 5 OF 7

DOCUMENT NO. HDM12\_M

A

### SPECIFICATION

OPERATING VOLTAGE	5 PIN -60V AC/DC 3&4 PIN-250V AC/DC	IEC 60664
CURRENT RATING	4A MAX.	IEC 60512 TEST 5B
TEMPERATURE RATING	-55°C - +125°C -55°C - +150°C(WITH VITON SEALS)	SAE J2839,4.2.3.13
DIELECTRIC WITHSTANDING VOLTAGE	1000V	IEC 60512, TEST 4A
INSULATION RESISTANCE	>20 Megohms	SAE J2839, 4.2.3.3
RATED IMPULSE VOLTAGE	1500V	IEC 60664-1
CONTACT RESISTANCE	<10 mΩ	IEC 60512 TEST 2A
CONTACT RESISTANCE	EMI PROTECTION	
VIBRATION, SINE	10 - 2000 Hz, 20g, <1 us	SAE J2839, 4.2.3.15
SHOCK, HALF SINE	10 CYCLES, 50g, 11ms, <1 us	SAE J2839, 4.2.3.16
TEMPERATURE LIFE	1000H AT 125°C ± 3°C	SAE J2839, 4.2.3.7
DURABILITY	100 CYCLES MIN.	SAE J2839, 4.2.3.11
SALT FOG	240H	SAE J2839, 4.2.3.12
PROTECTION CLASS	IP67 OR ABOVE	IEC 60529
WIRE GAUGE	0.5 mm <sup>2</sup> (20AWG) OR 0.8 mm <sup>2</sup> (18AWG) / 0.75 mm <sup>2</sup>	SAE J1128 / ISO 6722
CABLE OD.	Ø12.7 MAX.	
RECOMMENDED TORQUE	M12 THREAD, 0.8 - 1.0 Nm	
CONNECTOR RETENTION	444N MIN	SAE J2839,4.2.3.20
CONTACT RETENTION	110 N MIN	SAE J2839,4.2.3.18
PANEL THICKNESS	1-6 mm FOR HDM12RF	
	1-6 mm FOR HDM12RF	
SHELL PLATING	NICKEL PLATED	

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SIZE <b>C</b>	CAGE CODE <b>77820</b>	DOCUMENT NO. <b>HDM12 M</b>	REV. <b>PA6</b>
SCALE: 1.0		REF:	SHEET 6 OF 7

DOCUMENT NO. HDM12 M

SHEET 6 OF 7 REV. PA6

C

B

A

D

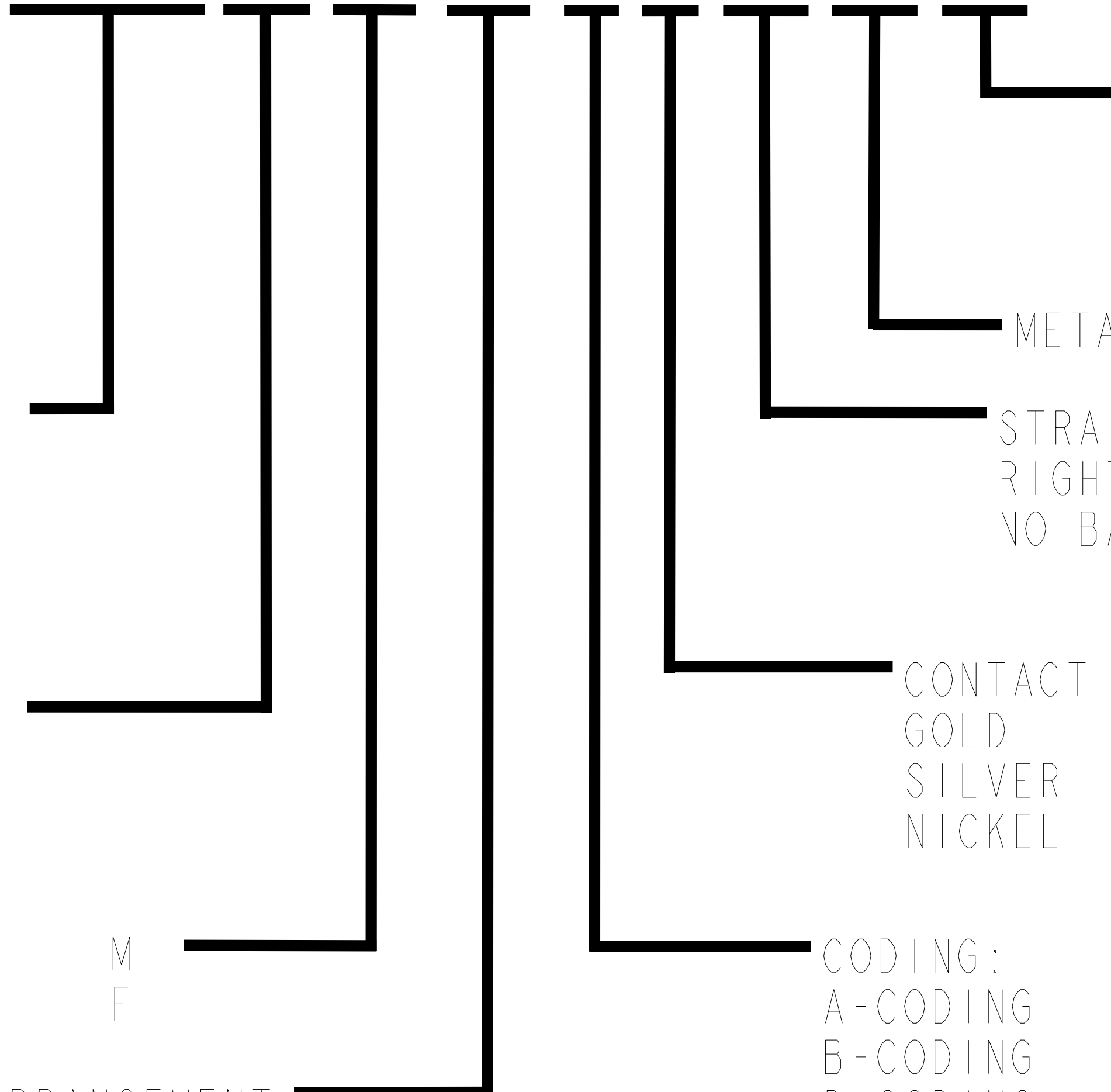
C

REV. SHEET 6 OF 7 PA6

DOCUMENT NO. HDM12 M

A

HDM12 P M 05 D 1 ST M (V)



VITON RUBBER SEALS  
OMIT FOR STANDARD  
RUBBER SEALS

METAL BACK SHELL M

LETTER DENOTING THE  
TYPE OF CONNECTOR

STRAIGHT	ST
RIGHT ANGLE	RA
NO BACKSHELL	XX

PLUG  
RECEPTACLE

P  
R

CONTACT FINISH:

GOLD	1
SILVER	2
NICKEL	4

MALE  
FEMALE

M  
F

CODING:

A-CODING	A
B-CODING	B
D-CODING	D
P-CODING	P

INSERT ARRANGEMENT

03: 3 POLE  
04: 4 POLE  
05: 5 POLE

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