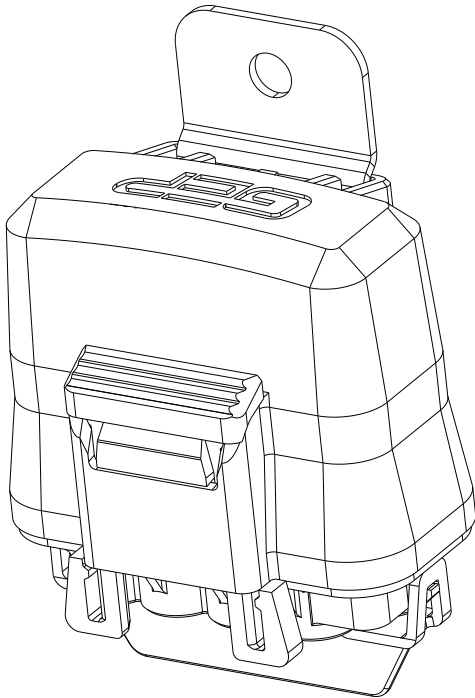


REV	REVISION DETAILS	ECO	DATE	BY	ABY
0	INITIAL RELEASE	NP-002993	10-27-2020	JWK	JJW
1	UPDATED TO LATEST DRAWING STANDARDS	NP-006107	04-24-2024	JWK	JML



ISO VIEW  
FOR REF ONLY

**CONFIDENTIAL**

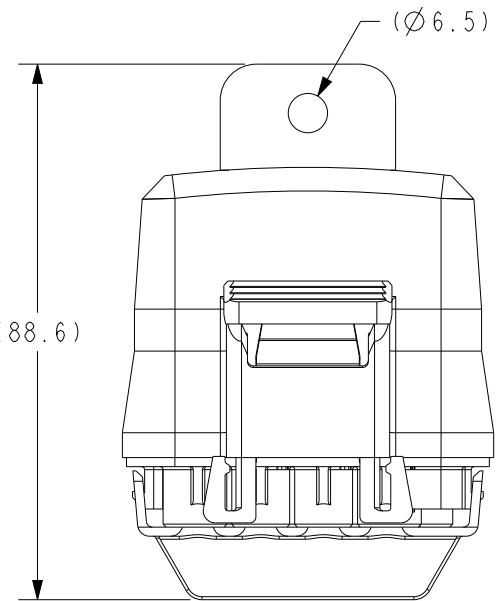
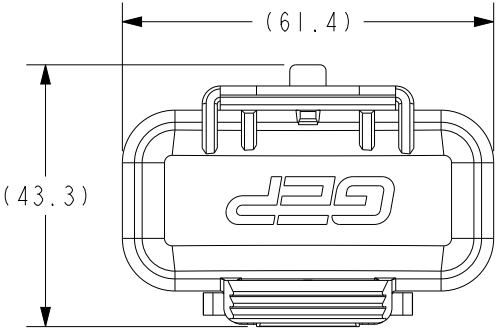
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CRITICAL DIMENSIONS ON FEATURES TO BE CHECKED DURING ANY SET-UP ADJUSTMENTS, TOOL CHANGES, OR ANNUAL MAINTENANCE ON TOOLING.	DIMENSIONS OR FEATURES TO BE CHECKED FROM RUN-TO-RUN
TOLERANCES UNLESS OTHERWISE SPECIFIED	
THIRD ANGLE PROJECTION 	
METRIC TOL	ENGLISH TOL
1 PL DEC. = ±.25 2 PL DEC. = ±.13	2 PL DEC. = ±.01 3 PL DEC. = ±.005
ANGULAR TOL = ±2° FRACTION TOL = ±1/64 IN	
DIMENSIONS INSIDE PARENTHESES OR CONTAINING "REF" ARE FOR REFERENCE ONLY.	

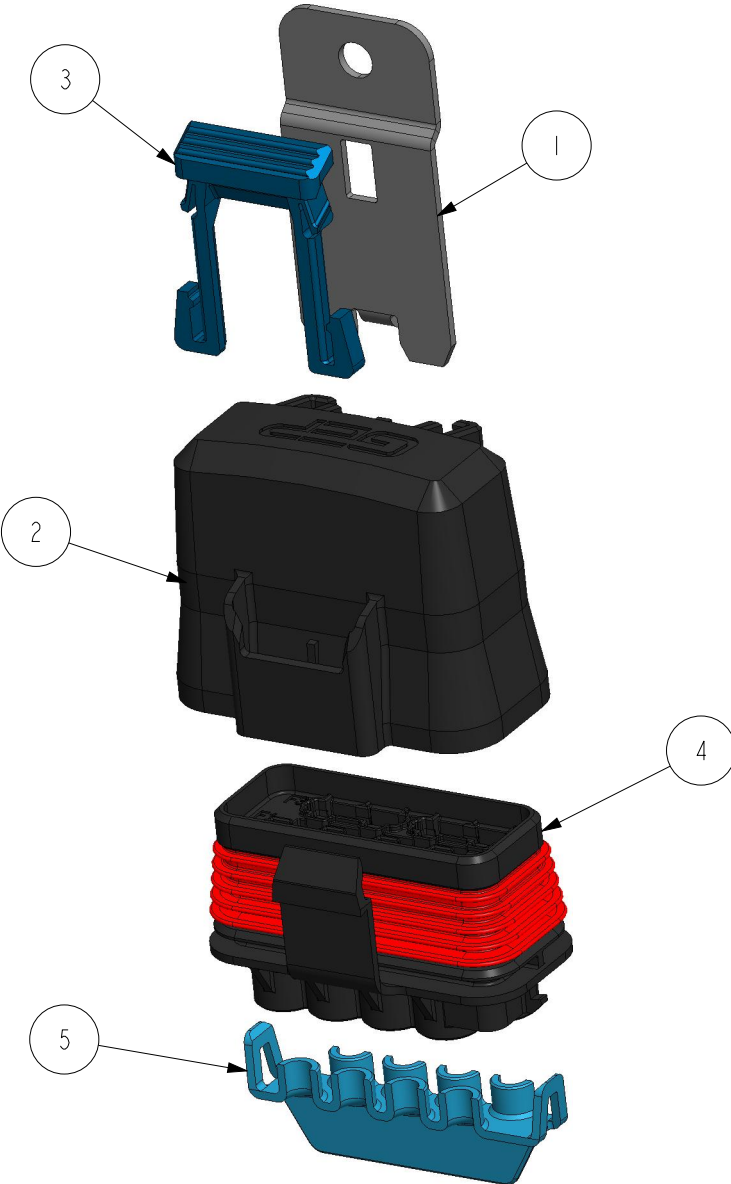
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		16830 Pheasant Drive Brookfield, WI 53005		
PART NO:		FRH - 4-WAY ATC SERIES (SALES)		
DESCRIPTION:		FRH - 4-WAY ATC SERIES		
CUSTOMER:		STANDARD		
METRIC (MM)	REV	SHEET	SCALE	SIZE
	1	1 OF 8	1:1	B

# EXAMPLE CONFIGURATION & NOTES



EXAMPLE CONFIGURATION DIMENSIONS WITH DIMENSIONAL INFO



EXAMPLE CONFIGURATION EXPLODE VIEW

- NOTES:
1. BASE, COVER, & CPA MATERIAL: UNFILLED PBT
  2. TPA MATERIAL: NYLON
  3. BRACKET MATERIAL: ZINC PLATED STEEL OR STAINLESS STEEL (SEE PART DESCRIPTION)
  4. DESIGNED TO USE DELPHI 630 METRI-PACK TERMINALS AND DELHI 480 METRI-PACK SEALS (SEE TABLE B)
  5. RoHS AND REACH COMPLIANT

EXAMPLE CONFIGURATION BOM			
ITEM	DESCRIPTION	PART NO.	QTY
1	BRACKET - PDM, FRH, FLAT WITH ANTI-ROTATION, ZINC STEEL	FRH-A12-MB-A1	1
2	COVER - PDM, FRH, 12 POS, GEP	FRH-A12-C	1
3	CPA - PDM, FRH	FRH-A-CPA	1
4	HOUSING AND SEAL - PDM, FRH, 4-WAY ATC	SC42-2013A-A001	1
5	TPA - PDM, FRH, 4-WAY ATC	SC38-2008A-B003	1

**GEP POWER PRODUCTS** 16830 Pheasant Drive Brookfield, WI 53005

PART NO: FRH - 4-WAY ATC SERIES (SALES)

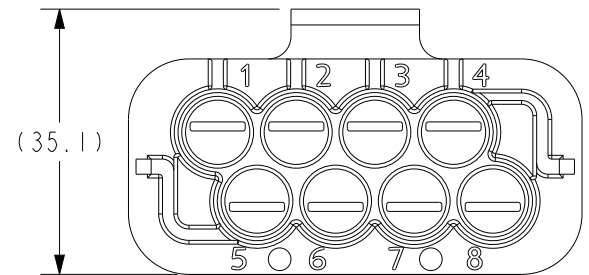
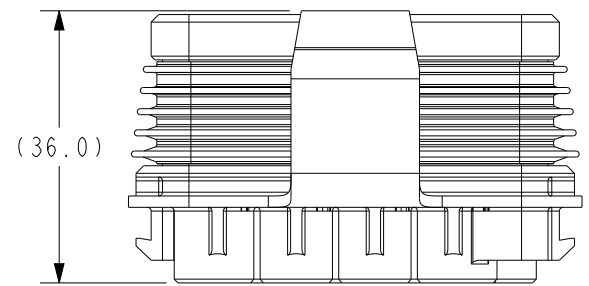
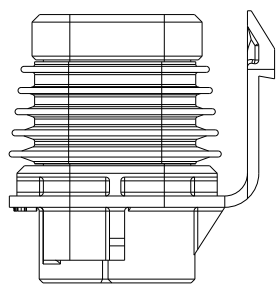
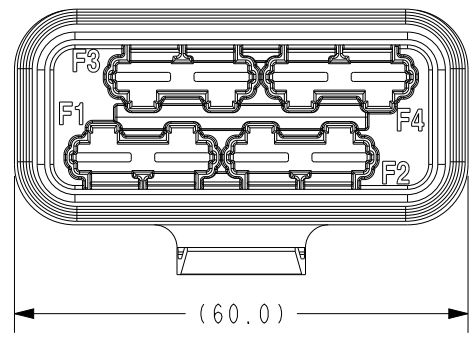
DESCRIPTION: FRH - 4-WAY ATC SERIES

CUSTOMER: STANDARD

METRIC (MM)	REV 1	SHEET 2 OF 8	SCALE 1:1.25	SIZE B
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# HOUSING W/SEAL OPTIONS

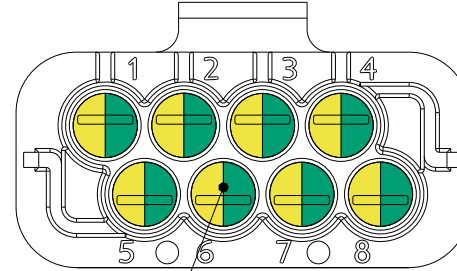
SC42-2013A-A001  
HOUSING AND SEAL - PDM, FRH, 4-WAY ATC



<b>GEP</b> POWER PRODUCTS		16830 Pheasant Drive Brookfield, WI 53005		
PART NO:		FRH - 4-WAY ATC SERIES (SALES)		
DESCRIPTION:		FRH - 4-WAY ATC SERIES		
CUSTOMER:		STANDARD		
METRIC (MM)	REV	SHEET	SCALE	SIZE
	1	3 OF 8	1:1	B

# HOUSING TERMINALS AND SEALS

SC42-2013A-A001  
HOUSING AND SEAL - PDM, FRH, 4-WAY ATC



630 CAVITIES  
SEE TABLE B FOR TERMINALS  
AND CABLE SEALS

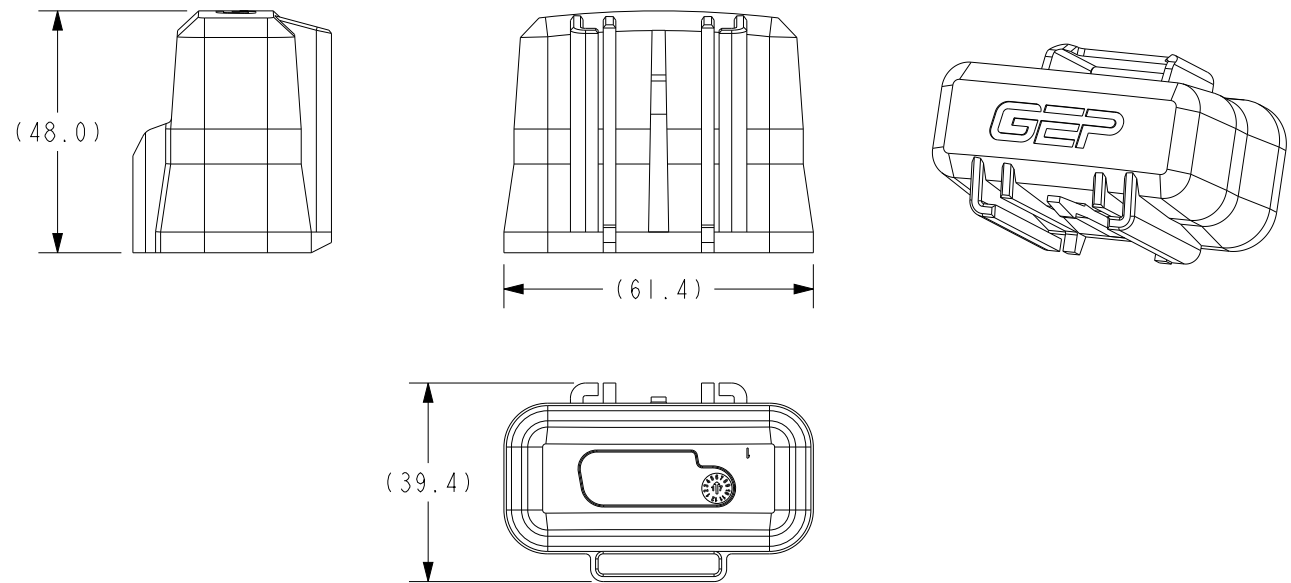
**Table B**

DELPHI 630 METRI-PACK TERMINALS				
PART #	RANGE (mm <sup>2</sup> )	MATERIAL	PLATING	
15317331	4.00-6.00	TIN BRASS	TIN	
12052456	3.00-5.00	TIN BRASS	TIN	
12052455	1.00-2.00	TIN BRASS	TIN	
12052457	0.50-0.80	TIN BRASS	TIN	
15317332	4.00-6.00	BERYLLIUM COPPER	SILVER/NICKEL	
15305232	3.00-5.00	BERYLLIUM COPPER	SILVER/NICKEL	
DELPHI 480 METRI-PACK CABLE SEALS (REF. ONLY)				
NOTE: 630 CAVITIES IN THIS HOUSING ARE DESIGNED TO BE USED WITH 480 SERIES CABLE SEALS				
PART # REEL	PART # LOOSE	CABLE DIA.	MATERIAL	COLOR
15344644	15363779	1.20-2.00	SILICONE	YELLOW
12052931	12052930	1.60-2.15	SILICONE	YELLOW
	15327998	2.00-2.70	SILICONE	BLUE
12048433	12048441	2.00-2.90	SILICONE	WHITE
15344645	15363604	2.00-2.90	SILICONE	WHITE
12052452	12048442	2.80-3.90	SILICONE	DK. RED
15337204	15327864	2.80-3.80	SILICONE	DK. RED
15344646	15363605	3.60-4.50	SILICONE	GREEN
10733034	10733145	4.40-5.10	SILICONE	GRAY
15344104	15344647	4.40-5.10	SILICONE	GRAY
	12066082	PLUG	SILICONE	LT. GREEN
DELPHI METRI-PACK TERMINAL REMOVAL TOOL (FOR REF. ONLY)				
PART # 12094430				

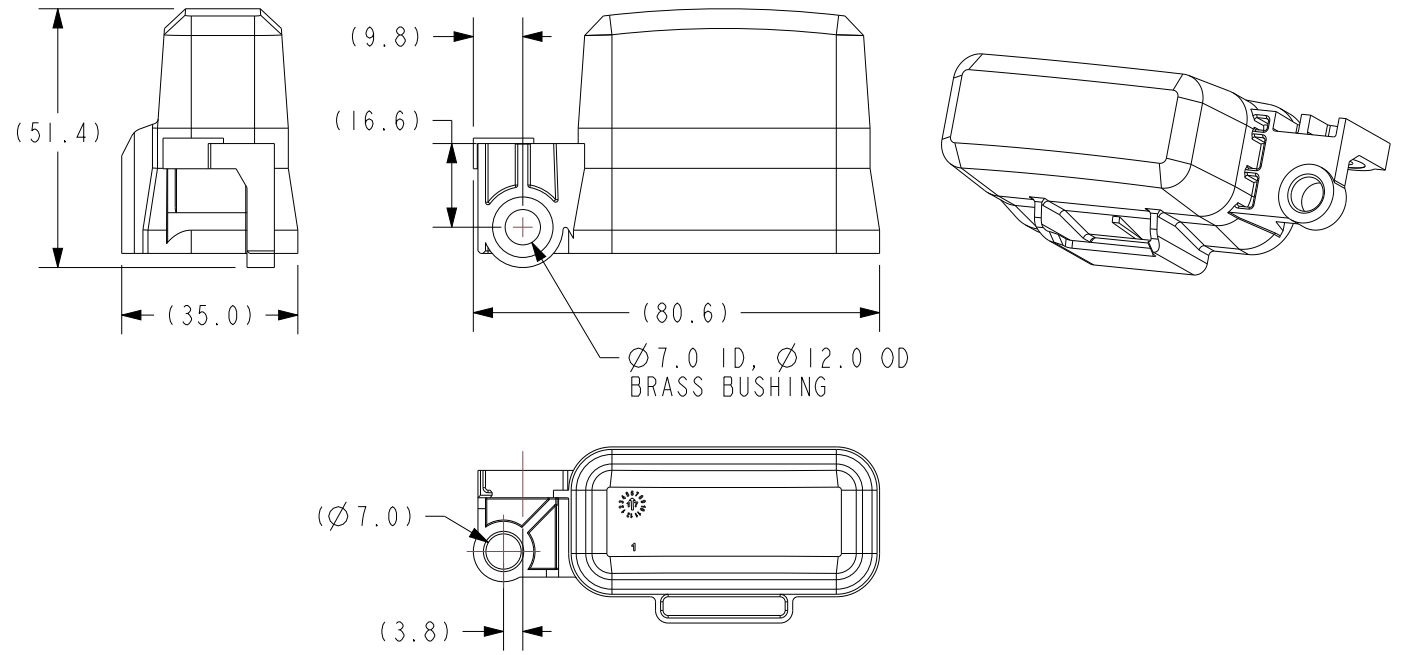
		16830 Pheasant Drive Brookfield, WI 53005		
PART NO:	FRH - 4-WAY ATC SERIES (SALES)			
DESCRIPTION:	FRH - 4-WAY ATC SERIES			
CUSTOMER:	STANDARD			
METRIC (MM)	REV 1	SHEET 4 OF 8	SCALE 1:1	SIZE B

# COVER OPTIONS

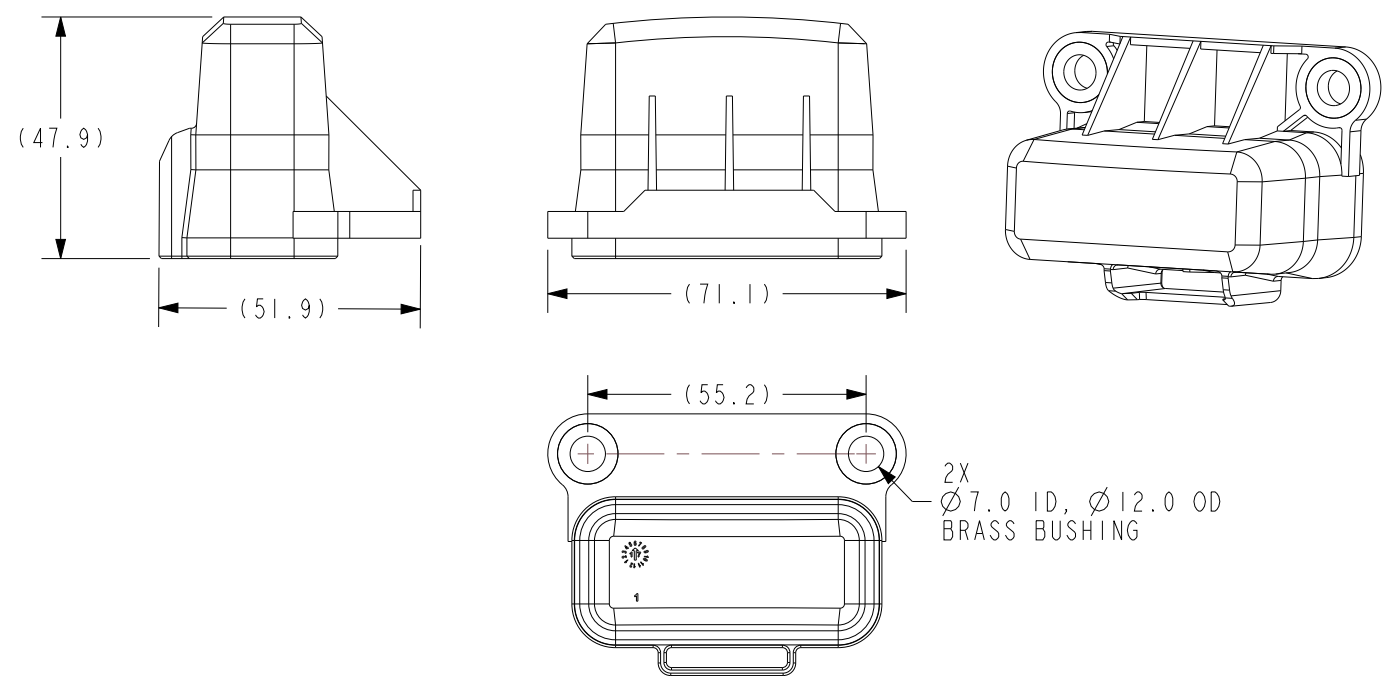
FRH-A12-C  
COVER - PDM, FRH, 12 POS, GEP



FRH-A12-CB-1  
COVER - PDM, FRH 12 POS, SINGLE SIDE MOUNT, PLAIN



FRH-A12-CD-1  
COVER - PDM, FRH 12 POS, DOUBLE SIDE MOUNT, PLAIN

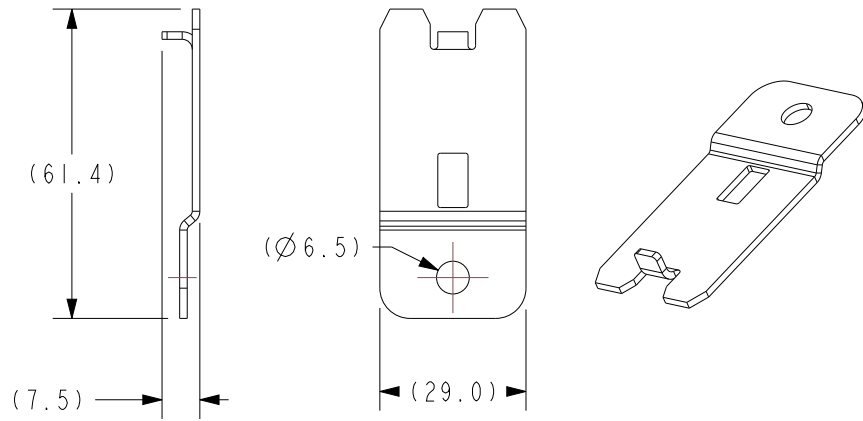


<b>GEP</b> POWER PRODUCTS		16830 Pheasant Drive Brookfield, WI 53005		
PART NO:	FRH - 4-WAY ATC SERIES (SALES)			
DESCRIPTION:	FRH - 4-WAY ATC SERIES			
CUSTOMER:	STANDARD			
METRIC (MM)	REV 1	SHEET 5 OF 8	SCALE 1:1.5	SIZE B

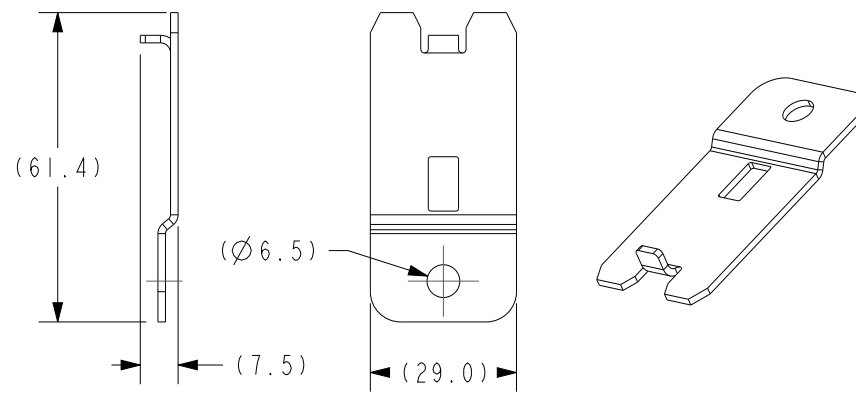
# FRH 4-WAY - ACCESSORY OPTIONS

FOR NON-STANDARD MOUNTING OPTIONS EMAIL  
GEPENGINEERING@GEPPOWERPRODUCTS.COM TO REVIEW

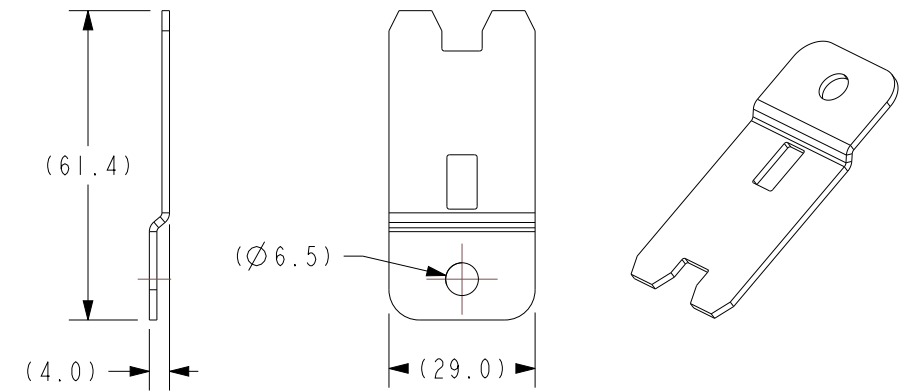
FRH-A12-MB-A1  
BRACKET - PDM,FRH,FLAT WITH ANTI-ROTATION, ZINC STEEL



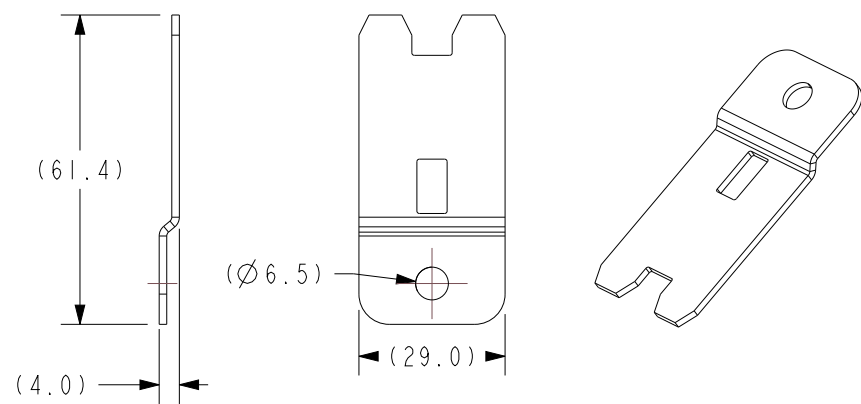
FRH-A12-MB-A2  
BRACKET - PDM, FRH, FLAT WITH ANTI-ROTATION, STAINLESS 304



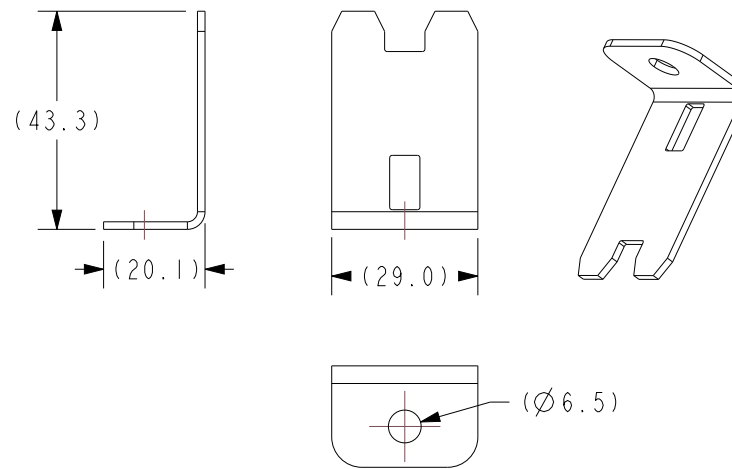
FRH-A12-MB-B1  
BRACKET - PDM, FRH, FLAT WITHOUT ANTI-ROTATION, ZINC STEEL



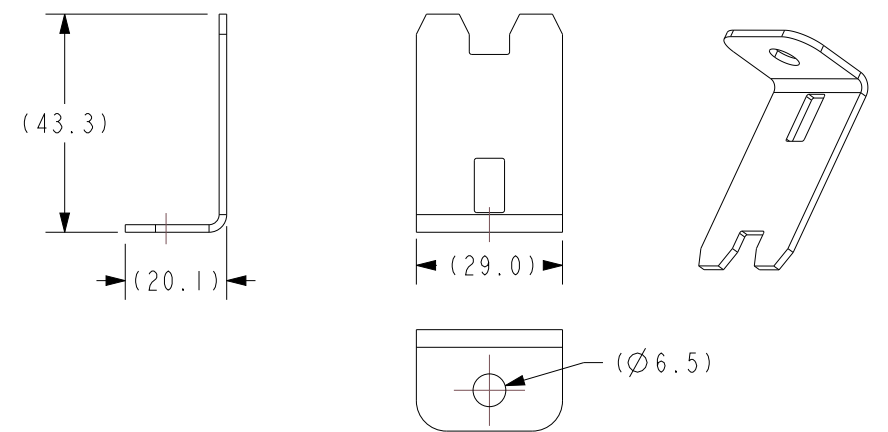
FRH-A12-MB-B2  
BRACKET - PDM, FRH, FLAT WITHOUT ANTI-ROTATION, STAINLESS 304



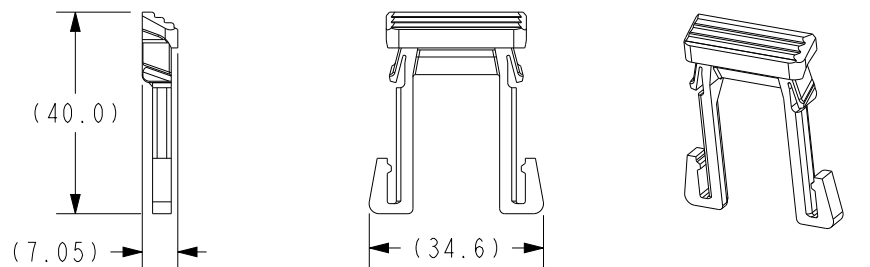
FRH-A12-MB-C1  
BRACKET - PDM, FRH, 90° BENT, ZINC STEEL



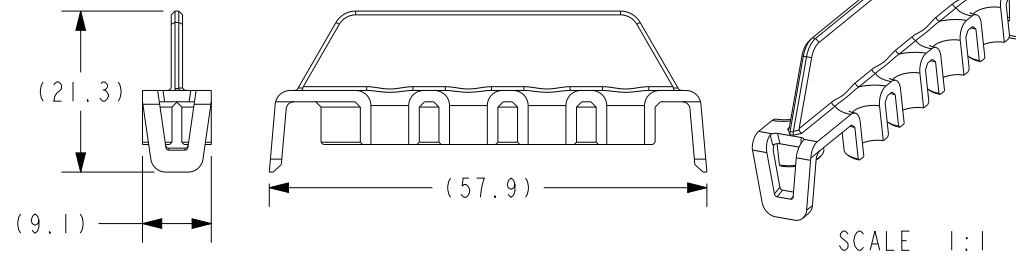
FRH-A12-MB-C2  
BRACKET - PDM, FRH, 90° BENT, STAINLESS 304



FRH-A-CPA  
CPA - PDM, FRH



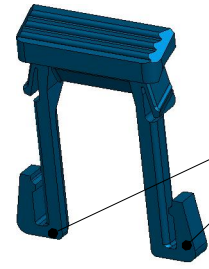
SC38-2008A-B003  
TPA - PDM, FRH, 4-WAY ATC



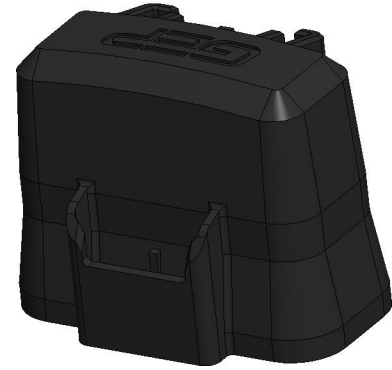
<b>GEP</b> POWER PRODUCTS		16830 Pheasant Drive Brookfield, WI 53005		
PART NO:	FRH - 4-WAY ATC SERIES (SALES)			
DESCRIPTION:	FRH - 4-WAY ATC SERIES			
CUSTOMER:	STANDARD			
METRIC (MM)	REV 1	SHEET 6 OF 8	SCALE 1:1.5	SIZE B

# ACCESSORY ASSEMBLY INSTRUCTIONS

## CPA INSTALLATION

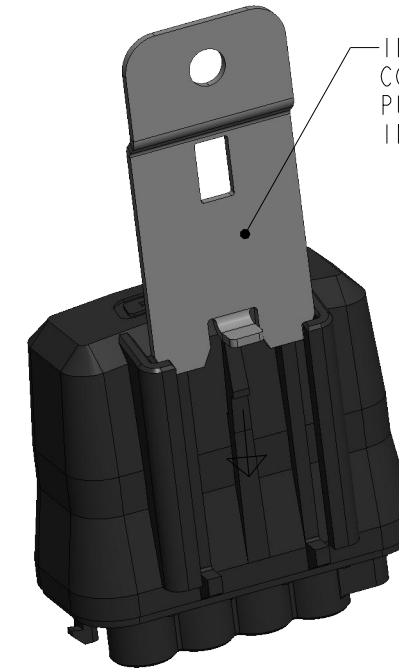


1. PINCH CPA LEGS TOGETHER AND INSERT INTO COVER



CPA INSTALLATION INTO COVER

## MOUNTING BRACKET INSTALLATION

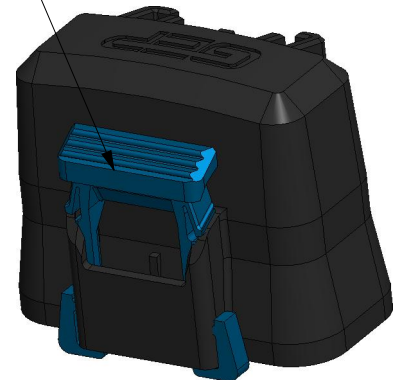


INSERT MOUNTING BRACKET INTO COVER AS SHOWN. PUSH DOWN UNTIL BRACKET SNAPS INTO PLACE.



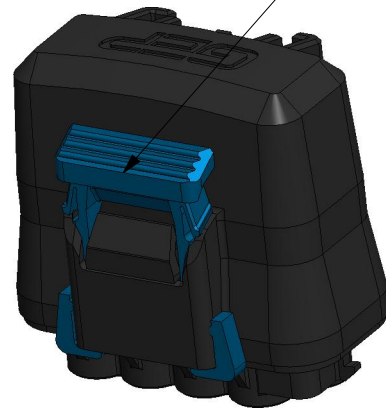
INSTALLED MOUNTING BRACKET

LIFT CPA TO UNLOCKED POSITION PRIOR TO ASSEMBLING TO OR REMOVING FROM HOUSING



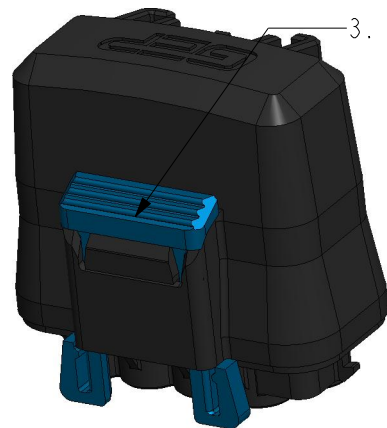
CPA UNLOCKED

2. ASSEMBLE COVER WITH CPA ONTO HOUSING IN UNLOCKED POSITION.



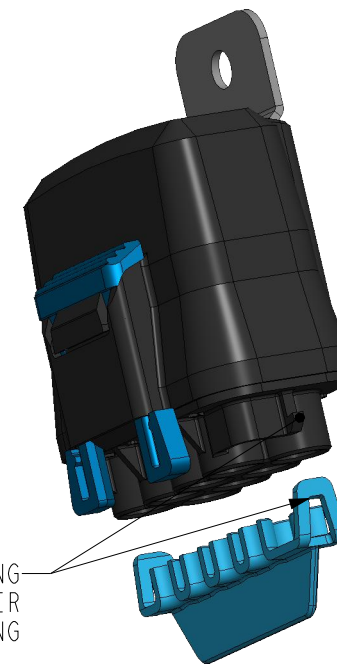
ASSEMBLY TO HOUSING WITH CPA UNLOCKED

3. PUSH CPA DOWN TO LOCK

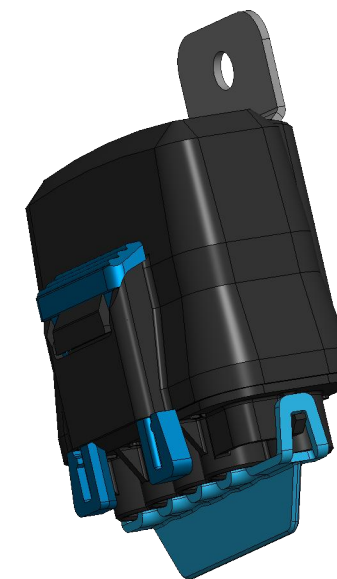


CPA LOCKED

## TPA INSTALLATION



INSERT TPA ONTO HOUSING UNTIL TPA EARS SNAP OVER RETAINING FEATURES ON HOUSING

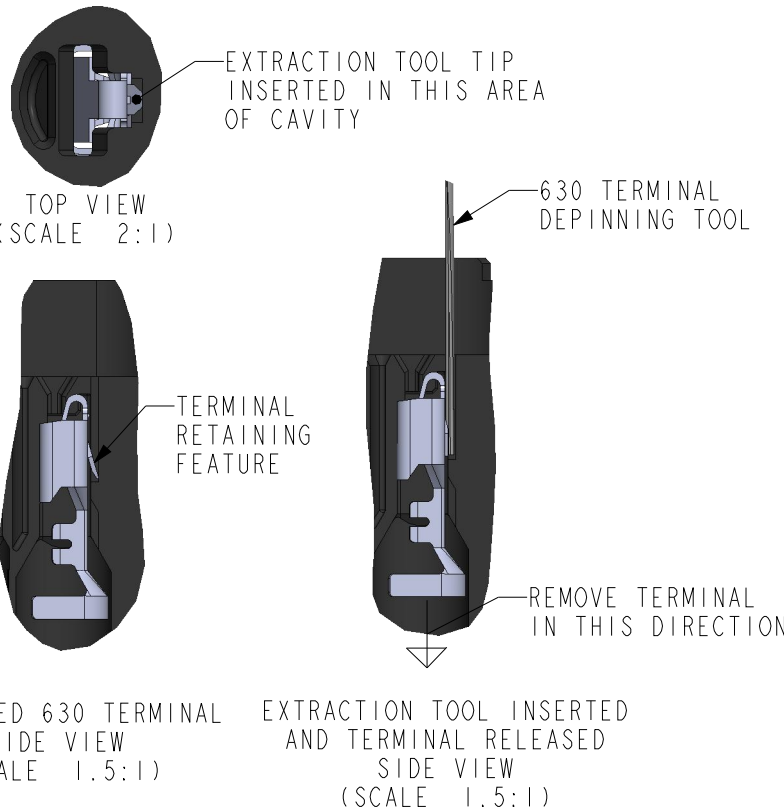


INSTALLED TPAS

<b>GEP</b> POWER PRODUCTS		16830 Pheasant Drive Brookfield, WI 53005		
PART NO:	FRH - 4-WAY ATC SERIES (SALES)			
DESCRIPTION:	FRH - 4-WAY ATC SERIES			
CUSTOMER:	STANDARD			
METRIC (MM)	REV 1	SHEET 7 OF 8	SCALE 1:1.25	SIZE B

# DEPINNING INSTRUCTIONS

## 630 TERMINAL DEPINNING



<b>GEP</b> POWER PRODUCTS		16830 Pheasant Drive Brookfield, WI 53005		
PART NO:	FRH - 4-WAY ATC SERIES (SALES)			
DESCRIPTION:	FRH - 4-WAY ATC SERIES			
CUSTOMER:	STANDARD			
METRIC (MM)	REV 1	SHEET 8 OF 8	SCALE 1:1	SIZE B