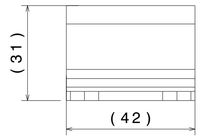
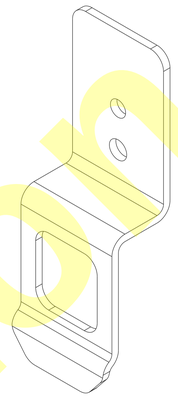
Allgemeintoleranzen nach General tolerances acc. to		MBN 11012-20
Symbol	Tolerance Tolerance -Art -Wert -type -value	Bedeutung / Meaning
	0	Bezugsstellen nach Datum Targets according to MBN 11012-1
	1 X Y Z	Flaechenformtoleranz fuer umgeformte Flaechen Surface tolerance for formed surfaces
	2 X Y Z	Linienformtoleranz fuer geschnittene Kanten Line tolerances for cut edges
	⌖ 1 X Y Z	Positionstoleranz fuer Loecher Position tolerance for holes
	⌖ 0.4 X Y Z	Positionstoleranz Bezugsloecher (Bezugselemente) fuer die nicht fixierte Raumrichtung Position tolerance for locating holes (reference elements) of the non-defined direction of space
∅	+0,2 -0,1	Lochdurchmesser allg. bzw. Formkontur General hole diameter or shape
∅	±0.1	Durchmessertoleranz Bezugsloecher und Bezugsbohrungen Tolerance of diameter for locating holes and datum holes
	+2	Biegeradien Bending radii
	+0,3	Zulaessiger Stanzgrat Permissible burr height

Reference points in vehicle axis system

Datum	X	Y	Z	Views	Sheet/Location	Notes
A1	-448.25	-414.00	338.90	Front View	SH1/M5	Ref on bottom surface of the part
A2	-448.25	-445.00	290.80	Front View	SH1/K4	
A3	-448.25	-413.00	290.80	Front View	SH1/M4	
B4	-448.25	-429.00	297.10	Front View	SH1/K5	Ref on center point of hole
B5	-448.25	-429.00	313.60	Front View	SH1/K5	
C6	-448.25	-429.00	297.10	Front View	SH1/M5	Ref on center point of hole



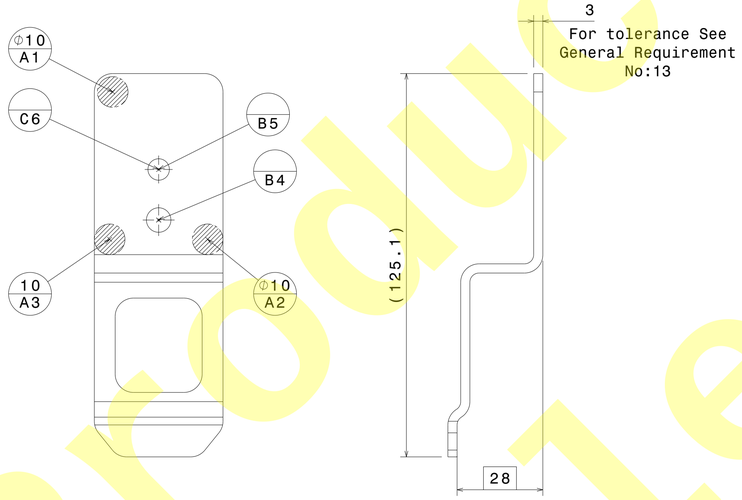
Bottom view
Scale: 1:1



Isometric view
Scale: 1:1

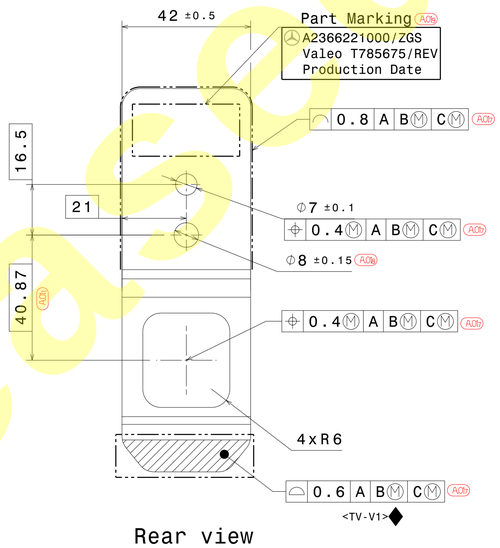
SPPC Sum Up

Internal	1	◆
Internal Followed	0	◇
Customer	0	◆
Customer Followed	0	◇
Safety and/or Regulation	1	S R
Other	0	



Front view
Scale: 1:1

Left view
Scale: 1:1



Rear view
Scale: 1:1

A.01	TCO_100747001_01	K.GANESH / P.KUNZELMANN	2022/02/17	1)Basic Dim. corrected 40.87 was 40.97. (SH1/H4) 2)General note 1 updated MaxO.3mm was MaxO.2mm (SH1/L3) 3)General note 4 updated Corrosion requirements: see coating definition in sVRF was see coating definition in sVRF to respect Daimler FUVO A0030061899. (SH1/M2) 4)General note 15 updated RPA-yearly was RPA-all 6 months. (SH1/M1) 5)General note 16 updated MBN_11012-20 was MBN36012. (SH1/M1) 6)Regulation table updated. (SH1/P1) 7)MMC modifier added in Feature control frame. (SH1/E5,E4,E3) 8)Feature control frame removed. (SH1/F4) 9)Part marking area added. (SH1/E5) 10)General note 14 updated Testing of the thickness ZiNi-coating each check on each batch (no additional test) was Testing of the thickness ZiNi-coating every batch. (SH1/K1) 11)General note 7 & 13 removed. (SH1/O2) 12)Optical and Aesthetic requirements are removed. 13)Views orientation changed as per FEM orientation.
A	TCO_100620310_01	R.VIJAYAN / C.D.NGUYEN	2021/04/26	Initial drawing for W-Release.(3D:R02V12)
REV	*ECO NUMBER*	*RESPONSIBLE*	*DATE*	*DESCRIPTION OF CHANGE*

All units shown are in millimeters (mm), unless otherwise indicated.
All surface finish is in micrometers (µm), unless otherwise indicated.
Template update: 2021/06/16

Reason: -	Checked		-	Customer: MERCEDES-BENZ	REV
				Part A2366221000	ZGS 002
Interchangeability -	Tech. Checked		-	Drawing -	-

Former Part N°	Rev	Prototype Drw	Rough Part N°	Dev Code	Project Code
-	-	-	-	-	BR236

MATERIAL Steel HC420LA 1.0556 acc. UNI EN 10268

TREATMENT COATING ZiNi acc. DBL 8451.66

TITLE & DESCRIPTION
Front End Module
ABSORBER X-BRACKET

APPROVED BY: P.KUNZELMANN
APPROVED DATE: 2022/08/08
ESTIMATED MASS: 120.8g
CREATED BY: Rubykumar V
CREATION DATE: 2021/04/26

Drawing assumes ISO-14405 E (envelope Principle) , unless otherwise specified.

Valeo
Thermal Front End
Germany
Valeostrasse 1, 74321 Bietigheim-Bissingen

DRAWING NUMBER	DRAWING REV.
DRW_T785675_001	A.01
PART NUMBER	T785675

SCALE 1 : 1 | First Angle Std | SIZE A1 | SHEET 1 / 1

General Requirements:

1)Max. burr height and/or max. sharp edges 10% of wall thickness, MaxO.3mm. ADg
2)Part marking position - See drawing reference :
  According to customer MBN 10435 (logo, customer part number, ZGS)
  According to Valeo requirement (logo, part number, daily production date, material, country of origin)
3)Form / shape : refer to CAD model provided in the defined revision level - CAD revision level is always master
4)Corrosion requirements: see coating definition in sVRF ADb
5)Gaging: supplier must demonstrate capability for SPPC relevant characteristics using statistical analysis
6)Formability: forming/stamping simulation to be presented by supplier and to be approved by Valeo
7)<Note removed> AD11
8)GD&T symbology: Daimler MBN 11011i
9)Weight tolerance: +- 5%
10)No change in manufacturing process or product design without Valeo approval
11)All tests of functional and material DBL by Daimler to be performed and documented by supplier
12)Forming limitations
  Max.allowable thinning: 17%
  Max.allowable thickening: 10%
13)<Note removed> AD11
14)Testing of the thickness ZiNi-coating each check on each batch (no additional test). AD10 <N-F1>
15)RPA-yearly corrosion testing mandatory.<N-F2> ADa
16)General tolerances acc. to MBN_11012-20 ADb
17)Regulation Note:

R Marking	Regulation Theme	Standard number (Including Revision) for Global Product	Regulation number (Including Revision)
<N-R3> S R	-Material Restrictions	- Valeo BRDS (Latest Revision) - TDOC_100363499 Rev A (Regulation standard) - Customer document DBL8585	1907/2006/EC 2000/53/EC GBT 30512:2014

◆	SIGNIFICANT CHARACTERISTICS Cpk ≥ 1.66	1
◇	FUNCTIONAL CHARACTERISTICS Cpk ≥ 1.33	0
<F>	FUNCTIONAL CHARACTERISTICS WITHOUT CAPABILITY REQUIREMENT	2