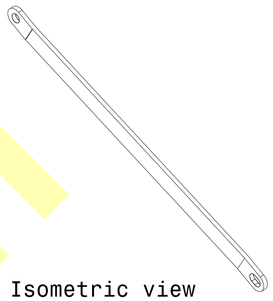
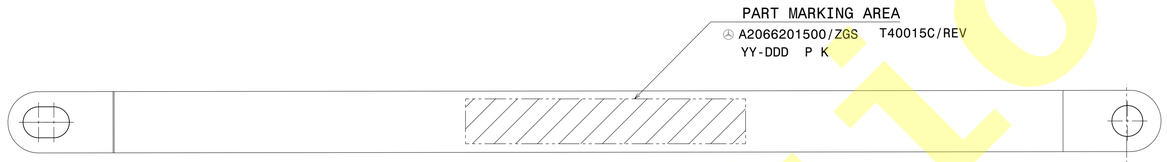
Allgemeintoleranzen nach General tolerances acc. to		MBN 10 231
Symbol	Toleranz Tolerance -Art -Wert -type-value	Bedeutung / Meaning
	0	Bezugsstellen nach Datum targets according MBN 11 011
	⌓ 2 | X | Y | Z	Flaechenformtoleranz fuer umgeformte Flaechen Surface tolerance for formed surfaces
	⏥ 0.6	Ebenheit im Anschlussbereich Flatness in the connecting area
	⌒ 2 | X | Y | Z	Linienformtoleranz fuer geschnittene Kanten Line tolerance for cut edges
		Materialseite Side of material
	⌖ 0.6 | X | Y | Z	Positionstoleranz fuer Loecher Position tolerance for holes
	⌖ 0.4 | X | Y | Z	Positionstoleranz Fixierloecher (Bezugselemente) fuer die nicht fixierte Raumrichtung Position tolerance for locating holes (reference elements) of the not defined direction of space
∅	+0.2 -0.1	Lochdurchm. allg. bzw. Formkontur Hole diameter general resp. shape
	+2	Biegeradien / Bending radii
	+2	Freischnitte / Free cuts

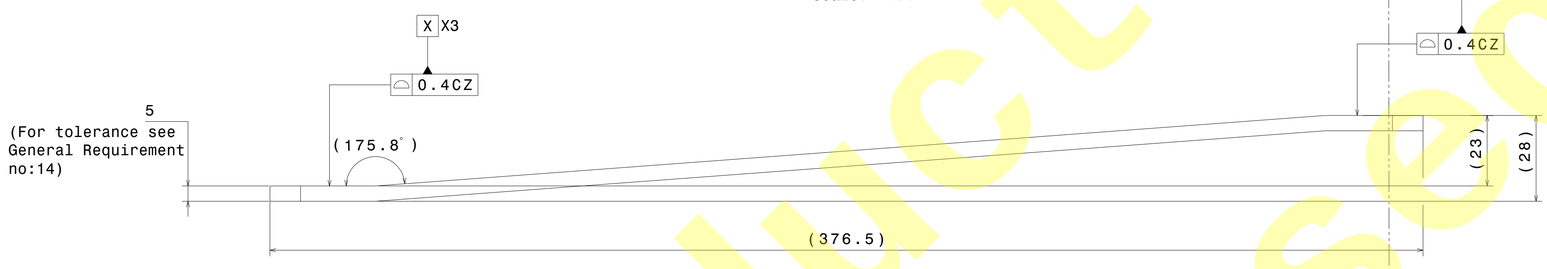
Reference points in vehicle axis system				
Datum	**X**	**Y**	**Z**	**Notes**
X1	-598.5	-395	361	"X" Ref on surface of part
X2	-598.5	-388	374	
X3	-621.5	-111.5	211.8	
Y4	-616.43	-145	241.9	"Y" Ref on surface of part
Y5	-600.94	-328	343.63	
Z6	-598.5	-405	375	"Z" Ref on center point of hole



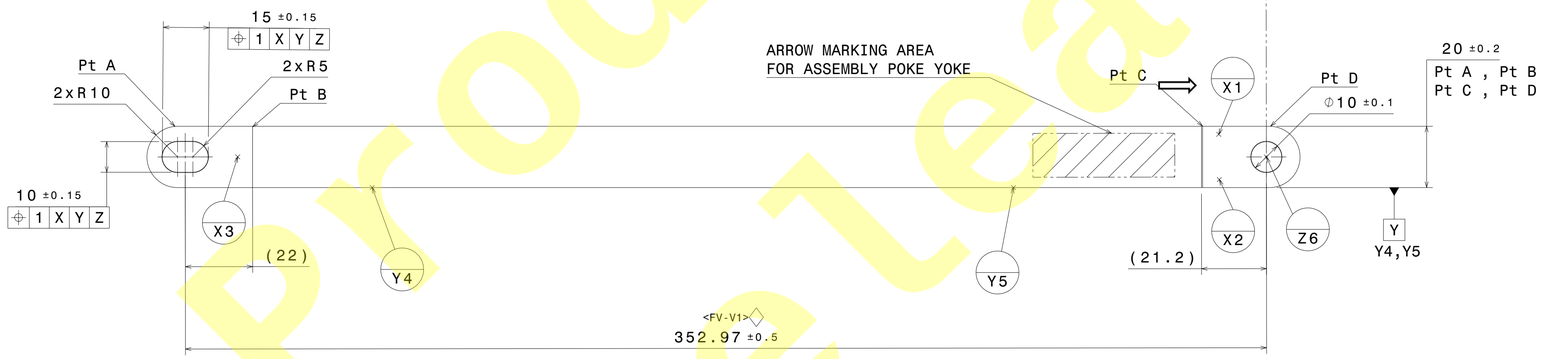
Isometric view
Scale: 1:3



Rear view
Scale: 1:1



Bottom view
Scale: 1:1



Front view
Scale: 1:1

General Requirements

1)Max. burr height (+0.3mm), Max. notches depth (-0.3mm) allowed.
2)Compliance with environmental, health and occupational safety requirements for regulated substance or process material restriction according to DBL 8585
3)Part marking position - See drawing reference :
According to customer MBN 10435 (logo, customer part number, ZGS + index)
According to Valeo requirement (logo, part number + index, daily production date, material, country of origin)
4)Form / shape : refer to CAD model provided in the defined revision level - CAD revision level is always master
5)Corrosion requirements: see coating definition in sVRF to respect Daimler FUVO A0030061699
6)Gaging: supplier must demonstrate capability for SPPC relevant characteristics using statistical analysis
7)Formability: forming/stamping simulation to be presented by supplier and to be approved by Valeo
8)Appearance requirements: see "book of defects"
9)GD&T symbology: Daimler MBN 11011i
10)Weight tolerance: +- 5%
11)No change in manufacturing process or product design without Valeo approval
12)All tests of functional and material DBL by Daimler to be performed and documented by supplier
13)Forming limitations
Max.allowable thinning: 11%
Max.allowable thickening: 10%
14)Thickness tolerance according to MBN_10231
15)Surface Black painted acc.to DBL 7381.00, No cass test is required acc.DBL 7381.00
16) No Scratch / Failure impacting the surface treatment or mechanical properties.
17)No material cracks allowed.

SPPC Sum Up

Internal	0
Internal Followed	1
Customer	0
Customer Followed	0
Safety and/or Regulation	1
Other	0

B.03₂

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

B.03₁

R Marking	Regulation Theme	Standard number (Including Revision) for Global Product	Regulation number (Including Revision)
R <N-R1>	-Material Restrictions	-Valeo BRDS(Latest Revision) -TDOC_100363499 Rev A (Regulation Standard)	1907/2006/EC 2000/53/EC GBT 30512:2014

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

B.03	TCO_100678094_01	Y.BABU/V.HORCH	2021/08/05	1.Regulation table added. (H-1) 2.SPPC sum up table updated. (G-2)
B.02	TCO_100630521_01	G.VEERASAMY / W.HIRNING	2021/03/17	Coating information updated. (K-1)
B.01	TCO_100598639_01	G.VEERASAMY / W.HIRNING	2021/02/19	1.Drawing updated based on R02V08. 2.Case test Note added under Note 18. (M-1) 3.SPPC sum up table updated. (O-4) 4.Regulation table removed. 5.Envelope note added. (F-1)
B	TCO_100423021_01	WH / VL / KD	2020/03/20	1.Drawing updated for SPPC <FV-V1> updated in Front View. 2.Material Updated. 3.Added Material Regulation Table.
A.01	TCO_100531228_01	WH / RV / VL	2020/09/14	Drawing updated for blank release.
A	TCO_100345783_01	VV / VL / KD	2019/07/17	1.Drawing Updated for Tool Go. 3D Revision R02V07. 2.Tolerances , Datum points updated and 20+/-0.2 dimension location revised. 3.SPPC's Updated. 4.Surface requirement updated. 5.DBL 7381.00 updated,it was DBL 7381.22.
02	TCO_100253765_01	SB / VL	2019-02-18	1.Drawing updated as per Jean comments. 2.Treatment coating details added in Title block . 3. Drawing updated based on R02V04.
01	TECO_100195028	SB / VL / MA	2018-08-13	Initial release for prototype.
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: 2020/09/14

Reason: -	Checked		-	Customer: DAIMLER	REV
				Part A2066201500	ZGS 005
Interchangeability -	Tech. Checked		-	Drawing	-

Former Part N°	Rev	Prototype Drw	Rough Part N°	Dev Code	Project Code
-	-	-	-	-	BR206

MATERIAL MBN 11253-1-AL5-IIC-NP-U+DBL4952.00

TREATMENT COATING (Black) E-COATING + DBL 7381.00

TITLE & DESCRIPTION
Front End Module
Front End Module - NVH BAR

APPROVED BY: V.HORCH
APPROVED DATE: 2021/11/02
ESTIMATED MASS: 97.7g
CREATED BY: Vengatesh L
CREATION DATE: 2018/08/13

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

DRAWING NUMBER	DRAWING REV.
DRW_T40015C_001	B.03
PART NUMBER	T40015C

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