MINISTERIO
DE ECONOMÍA, INDUSTRIA
Y COMPETITIVIDAD

DIRECCIÓN GENERAL DE INDUSTRIA Y
DE LA PEQUEÑA Y MEDIANA EMPRESA

SUBDIRECCIÓN GENERAL DE
CALIDAD Y SEGURIDAD INDUSTRIAL

E9

E9-05.6116

Comunicación sobre / *Concerning* (1):

- concesión de la homologación / *approval granted*
- ~~extensión de la homologación / *approval extended*~~
- ~~denegación de la homologación / *approval refused*~~
- ~~retirada de homologación / *approval withdrawn*~~
- ~~cese definitivo de la producción / *production definitely discontinued*~~

de un tipo de casco de protección con/~~sin~~ (1) uno/~~varios~~ (1) tipo~~(s)~~ de pantalla en aplicación del Reglamento Nº 22 / *of a type of protective helmet with/~~without~~ (1) one/~~more~~ (1) visor type~~(s)~~ pursuant to Regulation No. 22.*

Homologación Nº / *Approval No.*: E9-05.6116 Extensión Nº / *Extension No.* 00

1. Marca de fábrica o comercial / *Trade mark*: MHR, LS2, TAKAI

2. Tipo / *Type*: FF399

3. Tallas / *Sizes*: XS(53-54), S(55-56), M(57-58), L(59-60), XL(61-62), XXL(63-64), XXXL(65-66)

4. Nombre del fabricante / *Manufacturer's name*:
JIANGMEN PENGCHENG HELMETS LTD.

5. Dirección del fabricante / *Manufacturer's address*:
No.01-7 Dongsheng Road, Gonghe Town, Heshan, Jiangmen City,
Guangdong, 529728 P.R. China

6. Nombre del representante, en su caso / *If applicable, name of manufacturer's representative*: ----

7. Dirección del representante / *Representative address*: ----

8. Breve descripción del casco / *Brief description of helmet*:
Ver documentación del fabricante / *See manufacturer's documentation*

9. Casco con y sin protección de barbilla (P/J) / ~~sin protección de barbilla (J)~~ / ~~con protección de barbilla (P)~~ / ~~con protección de barbilla no protectora (NP)~~ (1) / *Helmet with and without lower face cover (P/J) / ~~without lower face cover (J) / with protective lower face cover (P) / with non-protective lower face cover (NP)~~* (1)

10. Tipo de pantalla o pantallas / *Type of visor or visors*: OF-MHR-89 (E9-05.6117)

11. Breve descripción de la pantalla o pantallas / *Brief description of visor or visors*:
Ver documentación del fabricante / *See manufacturer's documentation*

(1) Táchese lo que no proceda / *Strike out what does not apply*

E9

E9-05.6116

12. Presentado a la homologación el / *Submitted for approval on*: 14.12.2016

13. Servicio técnico encargado de los ensayos de homologación / *Technical service responsible for conducting approval tests*: IDIADA

14. Fecha del acta de los ensayos emitida por este servicio / *Date of report issued by that service*: 18.01.2017

15. Nº del acta de ensayos emitida por este servicio / *Number of report issued by that service*: MT16120079

16. Observaciones / *Comments*: ----

17. Homologación concedida / ~~extendida~~ / ~~denegada~~ / ~~retirada~~ (1) /
Approval granted / ~~*extended*~~ / ~~*refused*~~ / ~~*withdrawn*~~ *(1)*

18. Lugar / *Place*: Madrid

19. Fecha / *Date*: Ver firma electrónica / *See electronic signature*

20. Firma / *Signature*:
EL SUBDIRECTOR GENERAL DE CALIDAD Y SEGURIDAD INDUSTRIAL
Resolución P.D. del DIRECTOR GENERAL DE INDUSTRIA Y DE LA PYME de 25-10-2012

21. Los siguientes documentos, que llevan el número de homologación arriba indicado, pueden ser obtenidos a solicitud del interesado / *The following documents, bearing the approval number shown above, are available on request*:

    * Informe técnico / *Technical report*
    * Documentación técnica del fabricante / *Manufacturer's technical documentation*

(1) Táchese lo que no proceda / *Strike out what does not apply*

L'Albornar - Apartado de Correos 20
E - 43710 Santa Oliva (Tarragona)
España

Tel. +34 977 166000
Fax +34 977 166007
e-mail: idiada@idiada.com

INFORME Nº / *REPORT No.* MT16120079

CASCOS DE PROTECCIÓN Y SUS PANTALLAS PARA CONDUCTORES Y PASAJEROS DE MOTOCICLETAS Y CICLOMOTORES SEGÚN EL REGLAMENTO 22.05
PROTECTIVE HELMETS AND THEIR VISORS FOR DRIVERS AND PASSENGERS OF MOTORCYCLES AND MOPEDS ACCORDING TO REGULATION 22.05

Fabricante / *Manufacturer*	:	JIANGMEN PENGCHENG HELMETS LTD. No.01-7 Dongsheng Road, Gonghe Town, Heshan, Jiangmen City, Guangdong, 529728 P.R. China
Marca(s) / *Make(s)*	:	MHR, LS2, TAKAI
Tipo / *Type*	:	FF399
Denominaciones comerciales / *Commercial denominations*	:	AVENGER, VALIANT
Lugar y fecha de emisión del informe / *Place and date*	:	L'Albornar, Santa Oliva (Tarragona) 18.01.2017

CONCLUSIONES: El casco presentado CUMPLE con las especificaciones relativas a la homologación de cascos y pantallas de protección para conductores y pasajeros de motocicletas y ciclomotores, correspondientes al Reglamento 22.05, según se detalla en la hoja de ensayo anexa a este informe. /
CONCLUSIONS: The helmet submitted for test FULFILS the specifications relating to the homologation of helmets and their visors of protection for riders and passengers of motorcycles and mopeds, according to Regulation 22.05, as detailed in the test form attached to this report.

Realizado / *Performed by* :

Daniel García-Maroto Fernández
TÉCNICO DE HOMOLOGACIONES
HOMOLOGATION TECHNICIAN

Vº. Bº. / *Revised by* :

Víctor Costa Escarrà
JEFE DE DEPARTAMENTO
DEPARTMENT MANAGER

ANEXO AL INFORME / *ANNEX TO THE TEST REPORT*

IDENTIFICACIÓN DEL CASCO PRESENTADO AL ENSAYO /
IDENTIFICATION OF HELMET SUBMITTED FOR TEST

Fabricante / *Manufacturer*	:	JIANGMEN PENGCHENG HELMETS LTD. No.01-7 Dongsheng Road, Gonghe Town, Heshan, Jiangmen City, Guangdong, 529728 P.R. China
Marca(s) / *Make(s)*	:	LS2
Tipo / *Type*	:	FF399
Tallas / *Sizes*	:	XS(53-54), S(55-56), M(57-58), L(59-60), XL(61-62), XXL(63-64), XXXL(65-66)
Id. de la muestra / *Sample Id.*	:	CA1612/10

MARCADO DEL CASCO / *HELMET MARKINGS*

Posición de la marca del fabricante / *Position of manufacturer's make*	:	Parte externa de la carcasa / *Outer shell*
Posición de la talla / *Position of size*	:	Parte trasera externa de la carcasa / *Rear outer shell*
Posición de la marca de homologación / *Position of approval mark*	:	Marcada en una etiqueta cosida a la cinta del sistema de retención / *Marked on a label sewn on retention system chin strap*
Indicaciones para el usuario / *User instructions*	:	En un libreto enganchado a la cinta del sistema de retención / *In a brochure hang-tag on retention system chin strap*

DESCRIPCIÓN TÉCNICA Y DE MATERIALES / *TECHNICAL DESCRIPTION AND MATERIALS*

Carcasa / *Shell*	:	ABS
Relleno de protección / *Protective padding*	:	Poliestireno expandido (PEE) / *Expanded polystyrene (EPS)*
Sistema de retención / *Retention system*	:	Variant 1 : Doble anilla en D / *Double-D rings* Variant 2 : Cierre micrométrico "No.10" / *Micrometric mechanism "No.10"*
Pantalla / *Visor*	:	OF-MHR-89 (E9-05.6117)
Visera / *Peak*	:	----

ESPECIFICACIONES GENERALES / *GENERAL SPECIFICATIONS*

1. Constitución básica /
   Basic construction ..... *CORRECT*

2. Accesorios / *Accessories*:

   2.1. Pantalla / *Visor* ..... *YES*

   2.2. Visera / *Peak* ..... *NO*

   2.3. Otros dispositivos (Filtro solar) / *Other devices (Sunlight filter)* ..... *YES*

3. Protector de barbilla / *Lower face cover*:

   Mixto, con o sin protector de barbilla (Tipo "P/J") / *Mixed, with or without lower face cover ("P/J" type)*
   ~~Protectora (Tipo "P") / *Protective ("P" type)*~~
   ~~No protectora (Tipo "NP") / *Non protective ("NP" type)*~~
   ~~Sin protector de barbilla (Tipo "J") / *Without lower face cover ("J" type)*~~

4. Marcaje de aviso de no protección del mentón (solo para tipos "NP") /
   No chin protection warning marking (only for "NP" types) ..... *NOT APPLICABLE*

5. Protección / *Protection*:

   5.1. Área cubierta por la carcasa /
   Area covered by the shell ..... *CORRECT*

   5.2. Área cubierta por el relleno protector /
   Area covered by the protective padding ..... *CORRECT*

6. Proyecciones o irregularidades en la parte exterior de la carcasa /
   Projections or irregularities in the outer shell ..... *CORRECT*

7. Interior del casco /
   Inside of helmet ..... *CORRECT*

8. Sistema de retención protegido contra la abrasión /
   Retention system protected against abrasion ..... *CORRECT*

9. Sistema de retención / *Retention system*:

   9.1. Anchura de la cinta /
   Chin strap width ..... *CORRECT*

   9.2. Cinta desprovista de mentonera /
   Chin strap does not include a chin-cup ..... *CORRECT*

   9.3. Dispositivo de ajuste y retención de la cinta /
   Chin strap adjustment and tensioning device ..... *CORRECT*

   9.4. Posición de los dispositivos de retención y ajuste de la cinta /
   Position of the chin strap fastening and tensioning devices ..... *CORRECT*

9.5. Dispositivo de apertura rápida con barra deslizante o doble anillo en D (Variante 1) /
Sliding bar or double-D ring fastening devices : *(Variant 1)*

9.5.1. Sistema de retención de apertura involuntaria /
Free end retaining system ..... *CORRECT*

9.5.2. Patilla de desenganche del mecanismo /
Releasing pulling flap ..... *CORRECT*

9.6. Mecanismo de apertura rápida (Variante 2)/
Quick release mechanism (Variant 2) ..... *CORRECT*

9.7. Comportamiento del sistema de retención /
Retention system behaviour ..... *CORRECT*

9.8. Protección contra manipulación incorrecta del cierre /
Buckle protected against incorrect manipulation ..... *CORRECT*

10. Estado del casco después del ensayo /
Helmet status after test ..... *CORRECT*

11. Visión periférica / *Peripheral vision*:

Horizontal / *Horizontal* (≥ 105°) ..... *CORRECT*

Hacia arriba / *Upwards* (≥ 7°) ..... *CORRECT*

Hacia abajo / *Downwards* (≥ 45°) ..... *CORRECT*

12. Pantalla / *Visor*:

12.1. Sistema de fijación al casco /
System of attachment to the helmet ..... *CORRECT*

12.2. Maniobrabilidad / *Maneuverability* ..... *CORRECT*

12.3. Ángulo máximo de apertura / *Maximum opening angle* (≥ 5°) ..... *CORRECT*

12.4. Visión periférica / *Peripheral vision* ..... *CORRECT*

12.5. Guarniciones y dispositivos de maniobrabilidad /
Fixings and devices to allow the maneuverability ..... *CORRECT*

12.6. Campo de visión / *Field of vision*:

Hacia arriba / *Upwards* (≥ 7°) ..... *CORRECT*

Horizontal / *Horizontal* (≥ 90°) ..... *CORRECT*

Parte inferior / *Lower edge* ..... *CORRECT*

13. Marcaje de advertencia /
Conspicuity marking ..... *NOT APPLICABLE*

ENSAYO DE ABSORCIÓN DE IMPACTO / *IMPACT ABSORPTION TEST*

CONFIGURACIÓN DEL CASCO OPCIÓN "P" / *"P" OPTION HELMET CONFIGURATION*

TALLA / *SIZE*: XXL (63-64) Cabeza de ensayo / *Test headform*: O (62)

Nº / *No.*	ACONDIC. / *CONDITIONING*	YUNQUE / *ANVIL*	VELOCIDAD / *SPEED* (m/s)	PUNTO IMPACTO / *IMPACT POINT*	RESULTADOS / *RESULTS*	
					$Ac_{(g)}$ máx ≤ 275 g	HIC ≤ 2400
1	AMBIENTE / *AMBIENT*	PLANO / *FLAT*	7.5	B	184	1532
				X	219	1869
				P	188	1820
				R	185	1606
2	AMBIENTE / *AMBIENT*	CUÑA / *KERBSTONE*	7.5	B	158	1123
				X	184	1446
				P	152	1151
				R	139	1082
3	-20 ºC	PLANO / *FLAT*	7.5	B	183	1401
				X	234	2041
				P	185	1599
				R	169	1385
			5.5	S	177	777
4	+50 ºC	CUÑA / *KERBSTONE*	7.5	B	163	1073
				X	187	1455
				P	134	1032
				R	139	1058
5	UV + H_2O	CUÑA / *KERBSTONE*	7.5	B	157	1132
				X	185	1489
				P	153	1149
				R	147	1144

TALLA / *SIZE*: L (59-60) Cabeza de ensayo / *Test headform*: M (60)

Nº / *No.*	ACONDIC. / *CONDITIONING*	YUNQUE / *ANVIL*	VELOCIDAD / *SPEED* (m/s)	PUNTO IMPACTO / *IMPACT POINT*	RESULTADOS / *RESULTS*	
					$Ac_{(g)}$ máx ≤ 275 g	HIC ≤ 2400
6	-20 ºC	PLANO / *FLAT*	7.5	B	169	1240
				X	237	2121
				P	179	1700
				R	163	1073
			5.5	S	185	626
7	+50 ºC	CUÑA / *KERBSTONE*	7.5	B	145	962
				X	183	1463
				P	160	1177
				R	137	880

TALLA / *SIZE*: M (57-58) Cabeza de ensayo / *Test headform*: J (57)

Nº / *No.*	ACONDIC. / *CONDITIONING*	YUNQUE / *ANVIL*	VELOCIDAD / *SPEED* (m/s)	PUNTO IMPACTO / *IMPACT POINT*	RESULTADOS / *RESULTS*	
					$Ac_{(g)}$ máx ≤ 275 g	HIC ≤ 2400
8	-20 ºC	PLANO / *FLAT*	7.5	B	206	1653
				X	238	2102
				P	190	1843
				R	188	1411
			5.5	S	164	568
9	+50 ºC	CUÑA / *KERBSTONE*	7.5	B	148	1137
				X	191	1381
				P	168	1237
				R	134	899

TALLA / *SIZE*: XS (53-54) Cabeza de ensayo / *Test headform*: E (54)

Nº / *No.*	ACONDIC. / *CONDITIONING*	YUNQUE / *ANVIL*	VELOCIDAD / *SPEED* (m/s)	PUNTO IMPACTO / *IMPACT POINT*	RESULTADOS / *RESULTS*	
					$Ac_{(g)}$ máx ≤ 275 g	HIC ≤ 2400
10	-20 ºC	PLANO / *FLAT*	7.5	B	183	1595
				X	198	1592
				P	217	2118
				R	168	1262
			5.5	S	119	309
11	+50 ºC	CUÑA / *KERBSTONE*	7.5	B	142	1109
				X	188	1343
				P	163	1241
				R	116	783

Resultado ensayo de absorción de impactos / *Impact absorption test result* .....*CORRECT*

CONFIGURACIÓN DEL CASCO OPCIÓN "J" / *"J" OPTION HELMET CONFIGURATION*

TALLA / *SIZE*: XXL (63-64) Cabeza de ensayo / *Test headform*: O (62)

Nº / *No.*	ACONDIC. / *CONDITIONING*	YUNQUE / *ANVIL*	VELOCIDAD / *SPEED* (m/s)	PUNTO IMPACTO / *IMPACT POINT*	RESULTADOS / *RESULTS*	
					$Ac_{(g)}$ máx ≤ 275 g	HIC ≤ 2400
25	AMBIENTE / *AMBIENT*	PLANO / *FLAT*	7.5	B	191	1363
				X	225	1936
				P	192	1778
				R	188	1631
26	AMBIENTE / *AMBIENT*	CUÑA / *KERBSTONE*	7.5	B	161	1075
				X	193	1613
				P	164	1245
				R	145	1035
27	-20 ºC	PLANO / *FLAT*	7.5	B	187	1482
				X	234	2194
				P	190	1953
				R	168	1125
			5.5	S	---	---
28	+50 ºC	CUÑA / *KERBSTONE*	7.5	B	187	1163
				X	185	1478
				P	147	1097
				R	149	1089
29	UV + H_2O	CUÑA / *KERBSTONE*	7.5	B	165	1085
				X	193	1565
				P	154	1204
				R	148	1058

TALLA / *SIZE*: L (59-60) Cabeza de ensayo / *Test headform*: M (60)

Nº / *No.*	ACONDIC. / *CONDITIONING*	YUNQUE / *ANVIL*	VELOCIDAD / *SPEED* (m/s)	PUNTO IMPACTO / *IMPACT POINT*	RESULTADOS / *RESULTS*	
					$Ac_{(g)}$ máx ≤ 275 g	HIC ≤ 2400
30	-20 ºC	PLANO / *FLAT*	7.5	B	192	1386
				X	247	2327
				P	175	1609
				R	133	777
			5.5	S	---	---
31	+50 ºC	CUÑA / *KERBSTONE*	7.5	B	140	920
				X	186	1522
				P	143	1066
				R	161	1149

TALLA / *SIZE*: M (57-58) Cabeza de ensayo / *Test headform*: J (57)

Nº / *No.*	ACONDIC. / *CONDITIONING*	YUNQUE / *ANVIL*	VELOCIDAD / *SPEED* (m/s)	PUNTO IMPACTO / *IMPACT POINT*	RESULTADOS / *RESULTS*	
					$Ac_{(g)}$ máx ≤ 275 g	HIC ≤ 2400
32	-20 ºC	PLANO / *FLAT*	7.5	B	205	1639
				X	243	2207
				P	202	1856
				R	184	1196
			5.5	S	---	---
33	+50 ºC	CUÑA / *KERBSTONE*	7.5	B	191	1096
				X	202	1710
				P	181	1350
				R	135	919

TALLA / *SIZE*: XS (53-54) Cabeza de ensayo / *Test headform*: E (54)

Nº / *No.*	ACONDIC. / *CONDITIONING*	YUNQUE / *ANVIL*	VELOCIDAD / *SPEED* (m/s)	PUNTO IMPACTO / *IMPACT POINT*	RESULTADOS / *RESULTS*	
					$Ac_{(g)}$ máx ≤ 275 g	HIC ≤ 2400
34	-20 ºC	PLANO / *FLAT*	7.5	B	204	1355
				X	214	1910
				P	219	2110
				R	174	1245
			5.5	S	---	---
35	+50 ºC	CUÑA / *KERBSTONE*	7.5	B	159	1058
				X	167	1290
				P	157	1220
				R	166	1190

Resultado ensayo de absorción de impactos / *Impact absorption test result* .....*CORRECT*

ENSAYO PARA SALIENTES Y FRICCIÓN / *TEST FOR PROJECTIONS AND SURFACE FRICTION*

CONFIGURACIÓN DEL CASCO OPCIÓN "P" / *"P" OPTION HELMET CONFIGURATION*

CASCO / *HELMET*		RESULTADOS DEL ENSAYO / *TEST RESULTS*	
Nº / *No.*	TALLA / *SIZE*	SALIENTES / *PROJECTIONS*	FRICCIÓN / *FRICTION*
12	M (57-58)	*CORRECT*	*CORRECT*

CONFIGURACIÓN DEL CASCO OPCIÓN "J" / *"J" OPTION HELMET CONFIGURATION*

CASCO / *HELMET*		RESULTADOS DEL ENSAYO / *TEST RESULTS*	
Nº / *No.*	TALLA / *SIZE*	SALIENTES / *PROJECTIONS*	FRICCIÓN / *FRICTION*
36	M (57-58)	*CORRECT*	*CORRECT*

Observaciones / *Remarks*: Ensayo realizado según el método B / *Test carried out according to Method B*

ENSAYO DE RIGIDEZ / *RIGIDITY TEST*

CONFIGURACIÓN DEL CASCO OPCIÓN "P" / *"P" OPTION HELMET CONFIGURATION*

CASCO / *HELMET*		DIRECCIÓN / *DIRECTION*	RESULTADO / *RESULT*	
Nº / *No.*	TALLA / *SIZE*		Deformación máx. / *Max. deformation* (≤ 40 mm)	Deformación residual / *Residual deformation* (≤ 15 mm)
13	XXXL (65-66)	Transversal	12.9	1.5
14	XXXL (65-66)	Longitudinal	16.4	1.3
15	L (59-60)	Transversal	13.1	1.6
16	L (59-60)	Longitudinal	17.1	1.5

CONFIGURACIÓN DEL CASCO OPCIÓN "J" / *"J" OPTION HELMET CONFIGURATION*

CASCO / *HELMET*		DIRECCIÓN / *DIRECTION*	RESULTADO / *RESULT*	
Nº / *No.*	TALLA / *SIZE*		Deformación máx. / *Max. deformation* (≤ 40 mm)	Deformación residual / *Residual deformation* (≤ 15 mm)
37	XXXL (65-66)	Transversal	26.5	5.8
38	XXXL (65-66)	Longitudinal	19.3	2.4
39	L (59-60)	Transversal	25.4	5.8
40	L (59-60)	Longitudinal	18.5	2.2

ENSAYO DINÁMICO DEL SISTEMA DE RETENCIÓN / *RETENTION SYSTEM DYNAMIC TEST*

CONFIGURACIÓN DEL CASCO OPCIÓN "P" / *"P" OPTION HELMET CONFIGURATION*

Variant 1: Doble anilla en D / *Double-D rings*

CASCO / *HELMET*		DESPLAZAMIENTO / *DISPLACEMENT*	
Nº / *No.*	TALLA / *SIZE*	DINÁMICO / *DYNAMIC* (≤ 35 mm)	RESIDUAL / *RESIDUAL* (≤ 25 mm)
17	XL (61-62)	26.7	15.1
19	XS (53-54)	28.9	12.1

Variant 2: Cierre de apertura rápida "No.10" / *Quick release mechanism "No.10"*

CASCO / *HELMET*		DESPLAZAMIENTO / *DISPLACEMENT*	
Nº / *No.*	TALLA / *SIZE*	DINÁMICO / *DYNAMIC* (≤ 35 mm)	RESIDUAL / *RESIDUAL* (≤ 25 mm)
18	XL (61-62)	29.0	17.0
20	XS (53-54)	33.2	14.3

CONFIGURACIÓN DEL CASCO OPCIÓN "J" / *"J" OPTION HELMET CONFIGURATION*

Variant 1: Doble anilla en D / *Double-D rings*

CASCO / *HELMET*		DESPLAZAMIENTO / *DISPLACEMENT*	
Nº / *No.*	TALLA / *SIZE*	DINÁMICO / *DYNAMIC* (≤ 35 mm)	RESIDUAL / *RESIDUAL* (≤ 25 mm)
41	XL (61-62)	31.4	18.6
43	XS (53-54)	29.5	12.6

Variant 2: Cierre de apertura rápida "No.10" / *Quick release mechanism "No.10"*

CASCO / *HELMET*		DESPLAZAMIENTO / *DISPLACEMENT*	
Nº / *No.*	TALLA / *SIZE*	DINÁMICO / *DYNAMIC* (≤ 35 mm)	RESIDUAL / *RESIDUAL* (≤ 25 mm)
42	XL (61-62)	32.2	16.5
44	XS (53-54)	28.2	11.8

ENSAYO DE DESCALCE / *DETACHING TEST*

CONFIGURACIÓN DEL CASCO OPCIÓN "P" / *"P" OPTION HELMET CONFIGURATION*

Variant 1: Doble anilla en D / *Double-D rings*

CASCO / *HELMET*		ÁNGULO GIRADO / *TURNED ANGLE* (≤ 30°)
Nº / *No.*	TALLA / *SIZE*	
21	XL (61-62)	12.9º
23	XS (53-54)	16.6º

Variant 2: Cierre de apertura rápida "No.10" / *Quick release mechanism "No.10"*

CASCO / *HELMET*		ÁNGULO GIRADO / *TURNED ANGLE* (≤ 30°)
Nº / *No.*	TALLA / *SIZE*	
22	XL (61-62)	17.8º
24	XS (53-54)	22.5º

CONFIGURACIÓN DEL CASCO OPCIÓN "J" / *"J" OPTION HELMET CONFIGURATION*

Variant 1: Doble anilla en D / *Double-D rings*

CASCO / *HELMET*		ÁNGULO GIRADO / *TURNED ANGLE* (≤ 30°)
Nº / *No.*	TALLA / *SIZE*	
45	XL (61-62)	26.2º
47	XS (53-54)	21.4º

Variant 2: Cierre de apertura rápida "No.10" / *Quick release mechanism "No.10"*

CASCO / *HELMET*		ÁNGULO GIRADO / *TURNED ANGLE* (≤ 30°)
Nº / *No.*	TALLA / *SIZE*	
46	XL (61-62)	22.1º
48	XS (53-54)	21.6º

ENSAYO DEL SISTEMA DE RETENCIÓN / *RETENTION SYSTEM TEST*

ENSAYO DE DESLIZAMIENTO DE LA CINTA / *CHIN STRAP MICRO-SLIP TEST*

Frecuencia de ensayo / *Test frequency*: 1 Hz

- Deslizamiento de la cinta / *Slippage through the grip*: 3 mm ≤ 10 mm.....*CORRECT*

ENSAYO DE RESISTENCIA AL ROZAMIENTO DE LA CINTA / *CHIN STRAP RESISTANCE TO ABRASION TEST*

- Resultado de la aplicación de 3 kN de carga a tracción sobre el mecanismo después del proceso de desgaste / *Result of an application of a tensile strain of 3 kN over the chin strap after wearing process*.....*NOT APPLICABLE*

  Nota / *Note* : El deslizamiento de la cinta en el ensayo de deslizamiento es 3 ≤ 5 mm / *The slippage of the strap in the micro-slip test is 3 ≤5 mm*

ENSAYO DE SISTEMAS DE RETENCIÓN QUE COMPRENDEN MECANISMOS DE APERTURA RÁPIDA *(Variante 2) / RETENTION SYSTEM TEST RELYING ON QUICK-RELEASE MECHANISMS (Variant 2)*

- El sistema no se abre apoyando una esfera de 100 mm de diámetro con una fuerza de 100 N / *The system does not release under the pressure of a rigid sphere of 100 mm diameter, with a force of 100 N*.....*CORRECT*

- Fuerza de apertura menor a 30 N cuando el sistema está cargado con 150 N, después de la aplicación de una fuerza adicional de 350 N / *Opening force less than 30 N when the system is loaded with 150 N, after the application of an additional force of 350 N*.....*CORRECT*

- Resultado de la aplicación de 2 kN de carga a tracción sobre el mecanismo después del proceso de desgaste (ciclado después del acondicionamiento con solución salina) / *Result of the application of 2 kN of tensile strain over the mechanism after the wearing process (cycling after salt spray conditioning)*:

  – El mecanismo ni se rompe ni se abre / *The mechanism does neither fracture nor disengage*.....*CORRECT*

  – Tras la aplicación de la carga, el mecanismo funciona normalmente / *After the load application, the mechanism operates properly*.....*CORRECT*

Lugar del ensayo / *Test place* : L'Albornar, Santa Oliva (Tarragona)
Fecha del ensayo / *Test date* : 14.12.2016-13.01.2017

Daniel García-Maroto Fernández
TÉCNICO DE HOMOLOGACIONES
HOMOLOGATION TECHNICIAN

DOCUMENTACIÓN TÉCNICA /
TECHNICAL DOCUMENTATION

MT16120079

INDEX OF DOCUMENTATION

1. GENERAL INFORMATION

1.1 Make:

MHR, LS2, TAKAI

1.2. Type:

FF399

1.3. Variants / Versions: **-----**

1.4 Commercial denominations:

AVENGER, VALIANT

1.5. Name and address of manufacturer:

JIANGMEN PENGCHENG HELMETS LTD.
No.01-7 Dongsheng Road, Gonghe Town, Heshan, Jiangmen City, Guangdong, 529728 P.R. China

1.6. If any, name and address of manufacturer's authorized representative: **----**

1.7. Location and method of affixing of the international approval mark:

Marked in a label sewn on the retention system chin strap

1.8. Number of visors which can be fitted: **1**

2. DESCRIPTION OF THE HELMET

2.1. Type of helmet: **Full face & Open face**

2.2. Type of lower face cover: **"P" protective & "J" none / ~~"NP" non protective~~**

2.3. Sizes:

XS(53-54cm), S(55-56cm), M(57-58cm), L(59-60cm), XL(61-62cm), XXL(63-64cm), XXXL(65-66cm)

3. SHELL

3.1. Material used:

ABS

3.2. Composition of the border join on the shell:

PVC

3.3. Ventilations:

3.3.1. Number of ventilations: **3 pcs**

3.3.2. Positioning on the shell: **1pc top vent and 2pcs rear top vents.**

4. RETENTION SYSTEM

4.1. Chin strap:

4.1.1. Material:

NYLON

4.1.2. Width:

25mm when use Double-D ring
22mm when use No.10 buckles

4.2. Retention system: **Double D rings and quick release mechanism (buckle No.10)**

4.3. Comfort padding of the retention system:

4.3.1. Composition: **Leather and textile.**

4.3.2. Thickness: **3 mm**

4.4. Fixing system to the shell:

By means of a metallic piece fixed to the shell by rivets.

5. PROTECTIVE PADDING

5.1. Composition: **Expanded polystyrene**

5.2. Density:

Size	Main Part Kg/m^3	Top Part Kg/m^3	Side Part Kg/m^3	Chin Part
XS	40	30	35	80
S				
M	50	30	70	
L				
XL	55		75	
XXL				
XXXL				

5.3. Weight:

Size	Main Part	Top Part	Side Part	Chin part
XS	96g±5g	24g±2g	33.4g±2g	19.5g±2g
S				
M	107g±5g	25.5g±2g	53.9g±2g	
L				
XL	121g±5g		59g±2g	
XXL				
XXXL				

6. COMFORT PADDING

6.1. Composition of:

Comfort padding: **Sponge**
Comfort tissue: **NYLON**
Protection of the back of the neck: **Sponge, textile and leather.**

7. VISOR

7.1. Approval number: **E9-05.6117**

7.2. Make: **MHR, LS2**

7.3. Type: **OF-MHR-89**

7.4. Name and address of manufacturer:

JIANGMEN PENGCHENG HELMETS LTD.
No.01-7 Dongsheng Road, Gonghe Town, Heshan, Jiangmen City, Guangdong, 529728 P.R. China

7.5. Material: **PC**

7.6. Drawing of the visor: **See page 12.**

7.7. Surface treatment: **Anti-scracth (outside)**

7.8. Colour: **Clear**

7.9. Manufacturing method: **Mould injection.**

8. ACCESSORIES

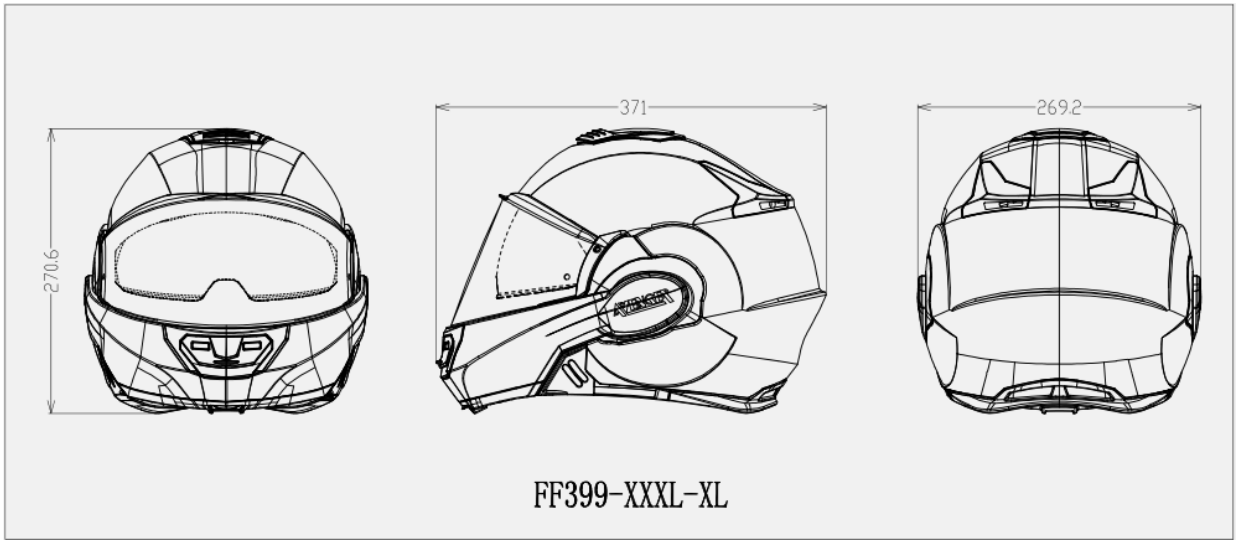
8.1. Sunlight filter: **Included as an optional device, see page 13.**

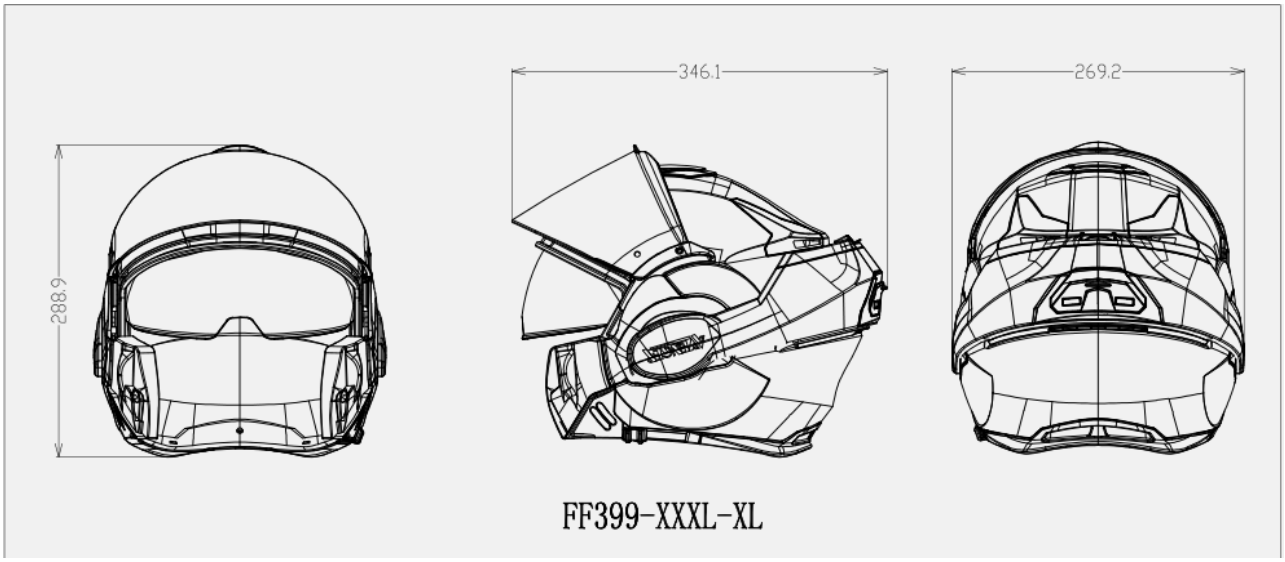
8.2. User instructions:

8.2.1. Text: **See page 14,15 and 16.**

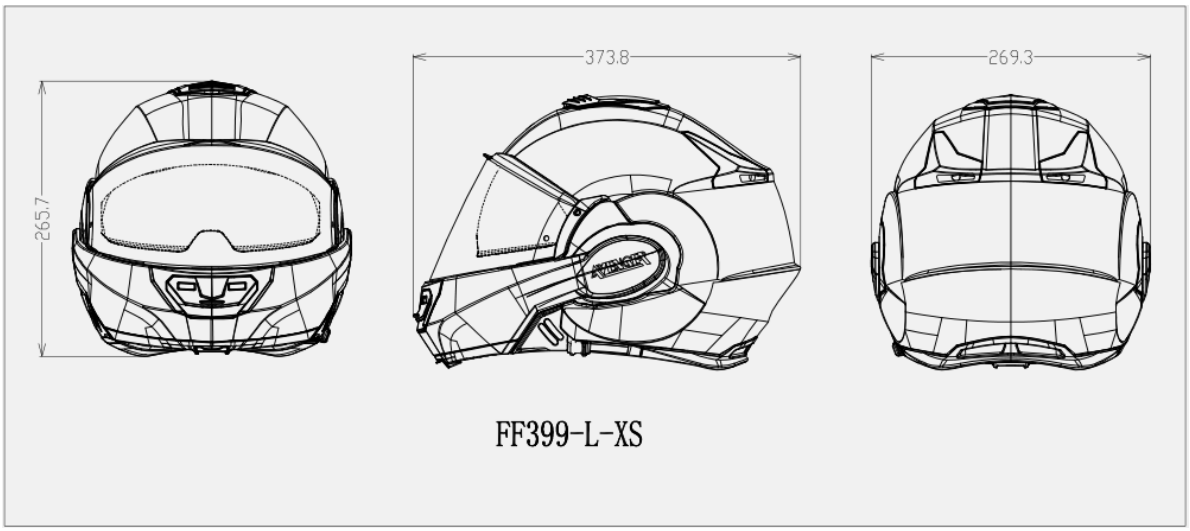
8.2.2. Location: **Hanged on chin strap.**

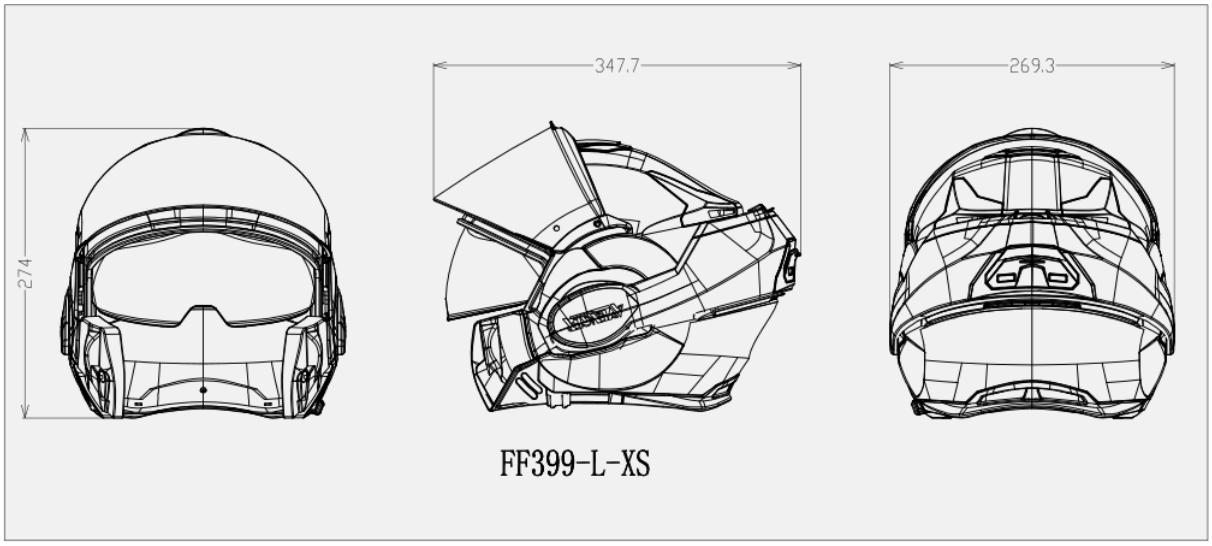
DRAWING OF THE HELMET WITH DIMENSIONS (Sizes XXXL-XL)



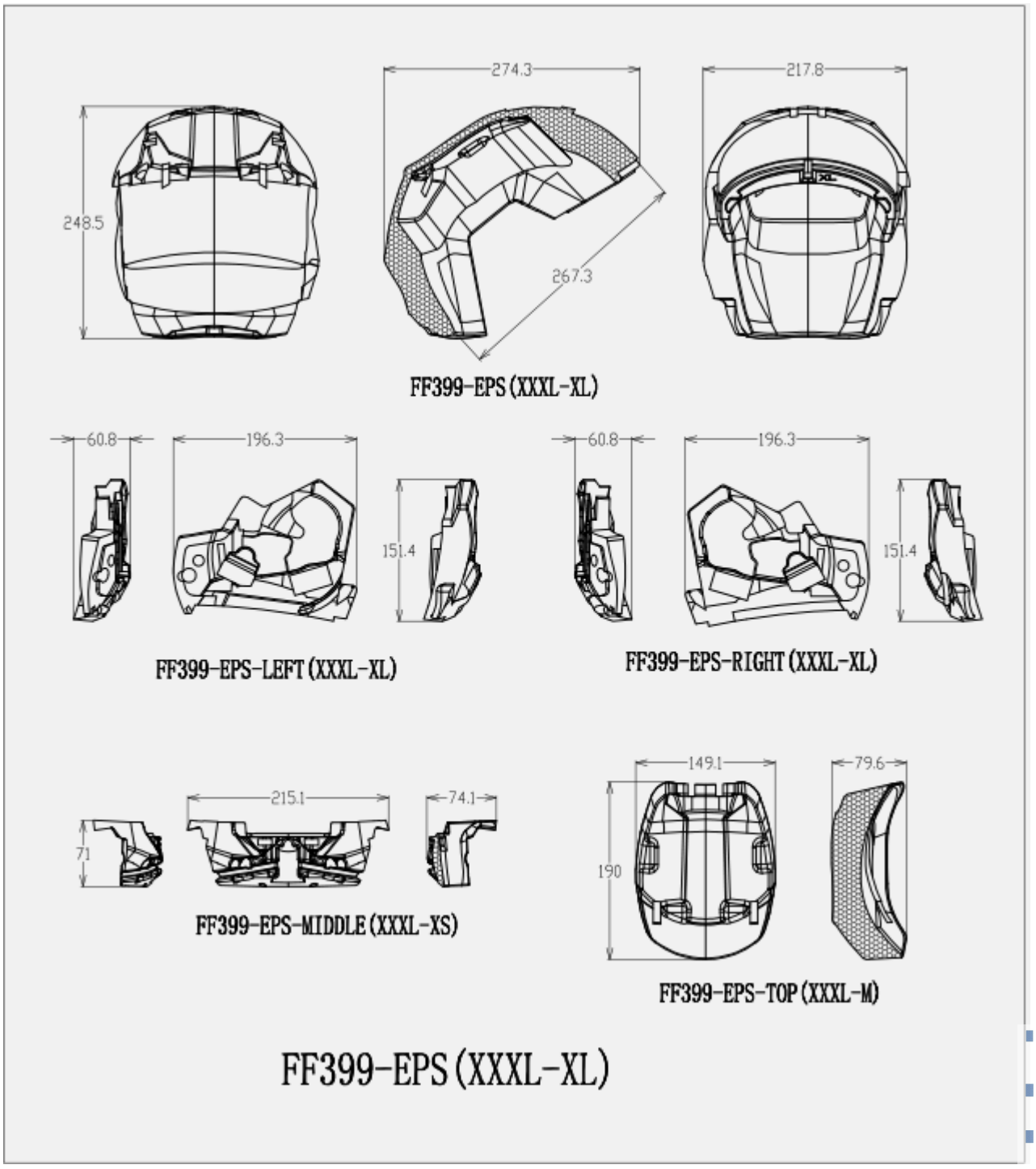


DRAWING OF THE HELMET WITH DIMENSIONS (Sizes L-XS)

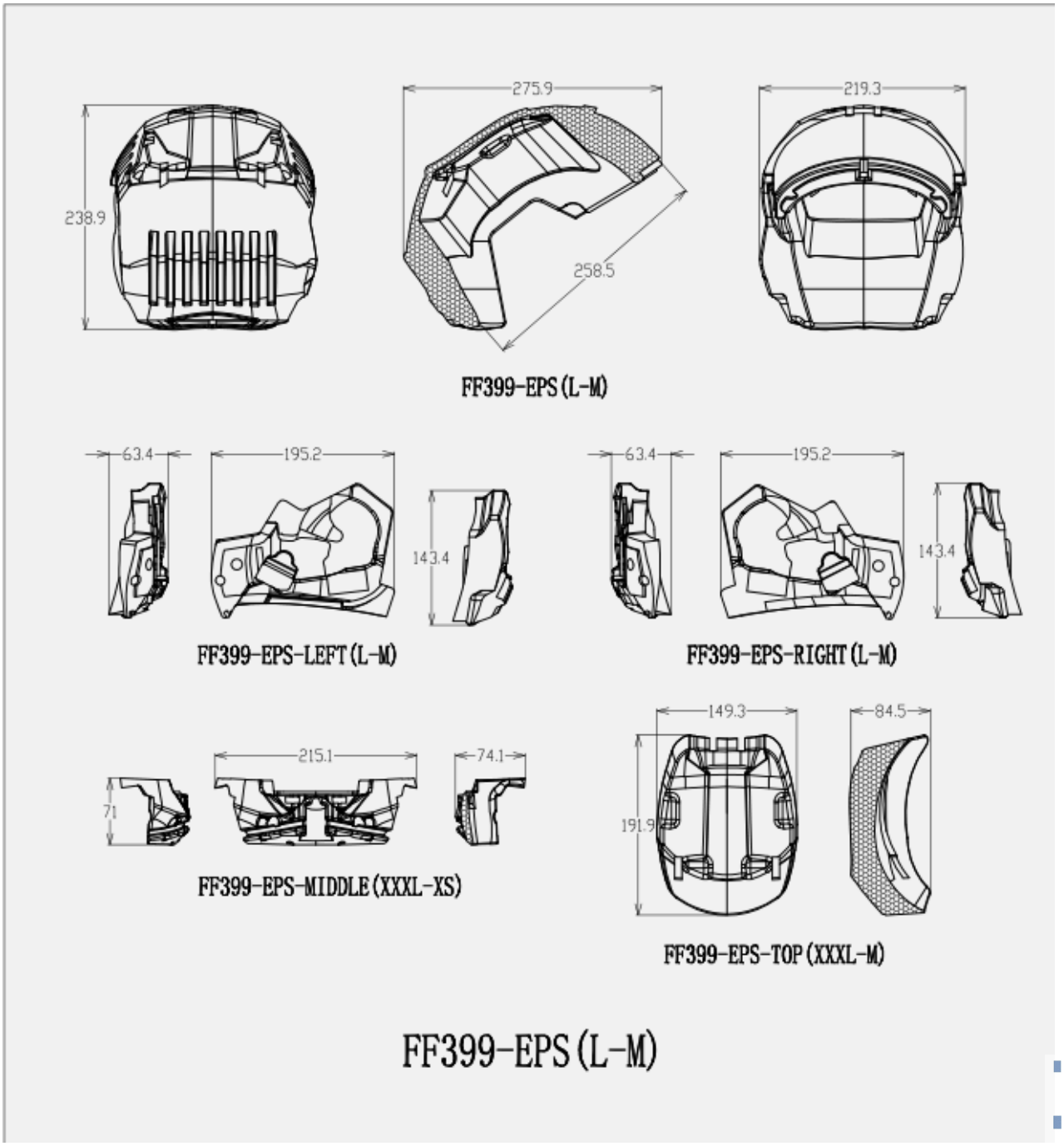




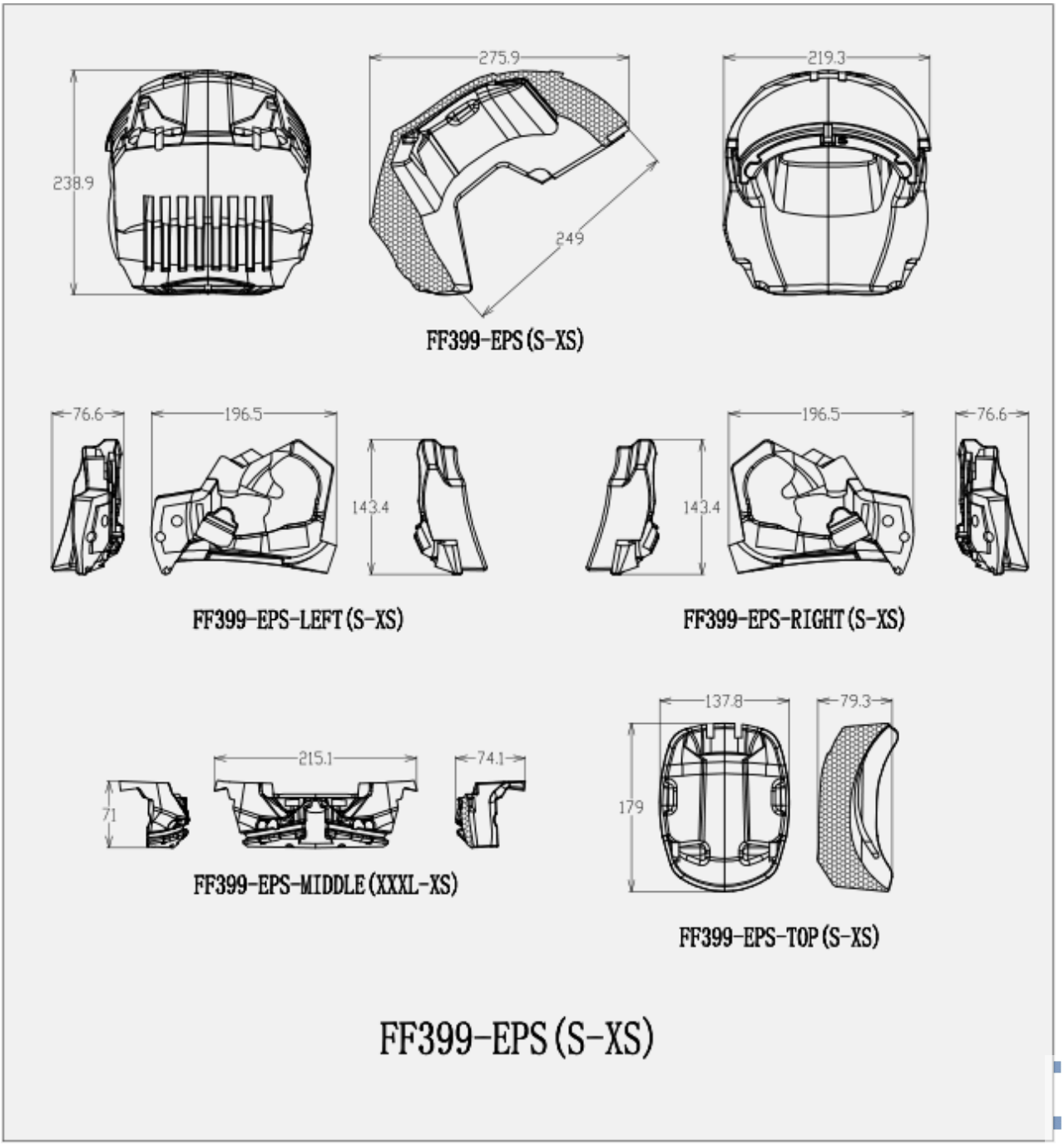
DRAWING OF THE PROTECTIVE PADDING (Sizes XXXL-XL)



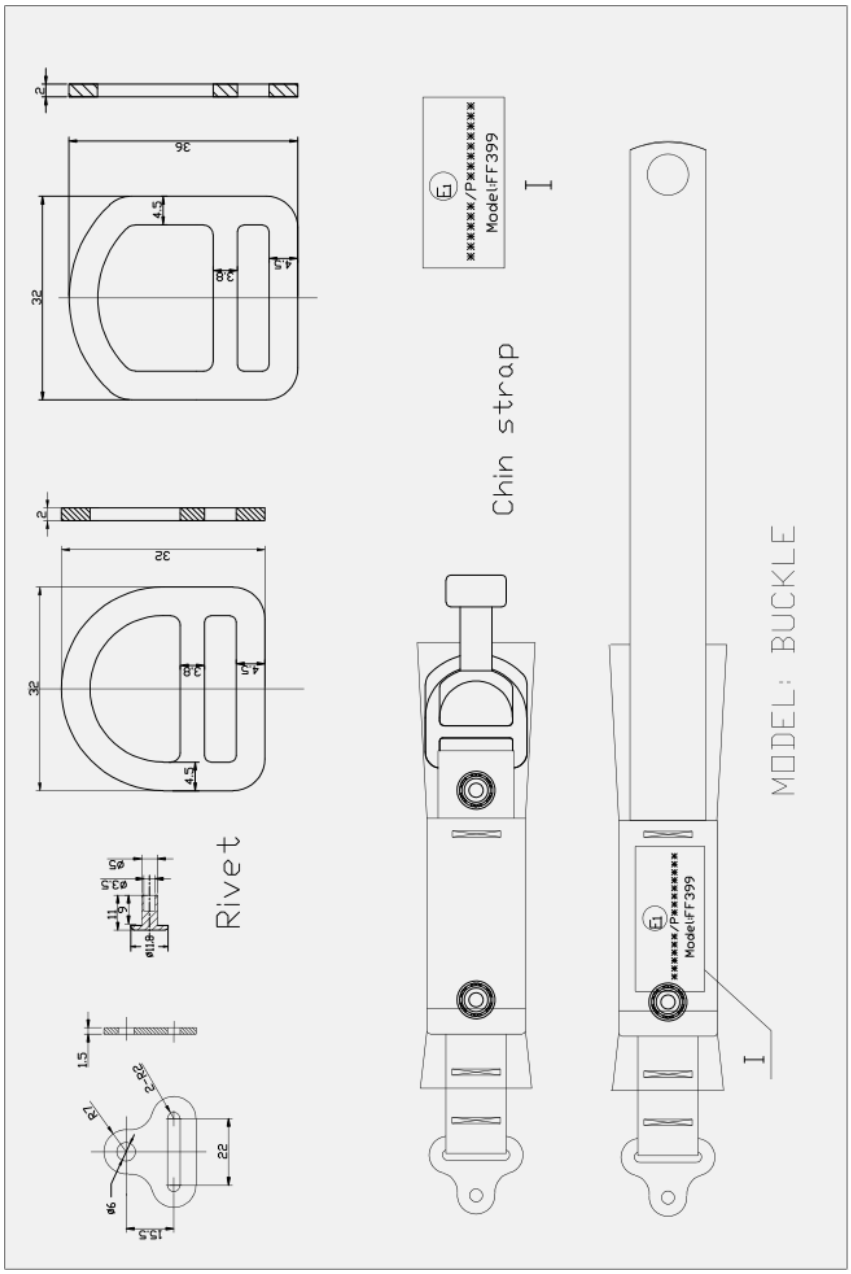
DRAWING OF THE PROTECTIVE PADDING (Sizes L-M)



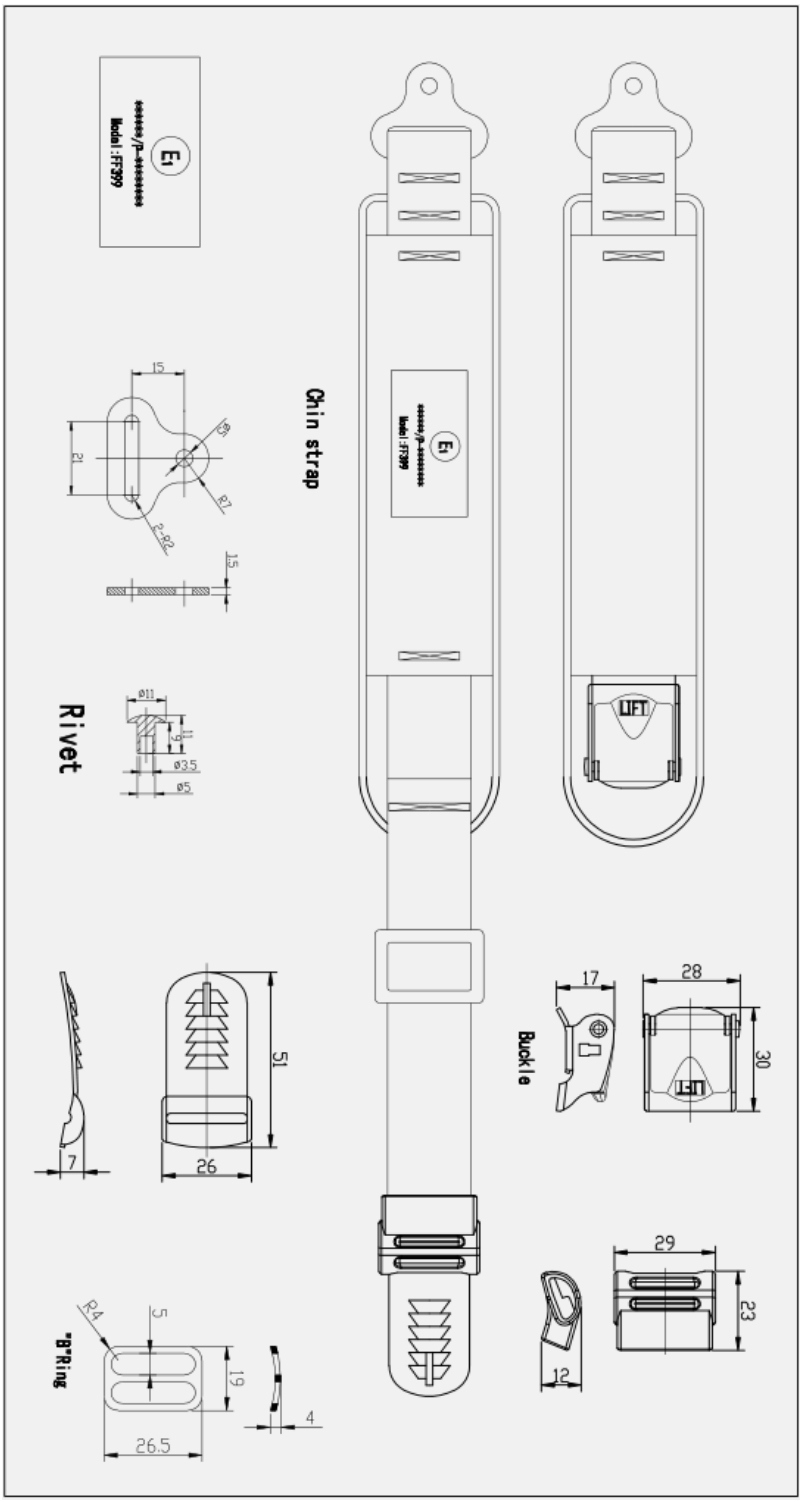
DRAWING OF THE PROTECTIVE PADDING (Sizes S-XS)



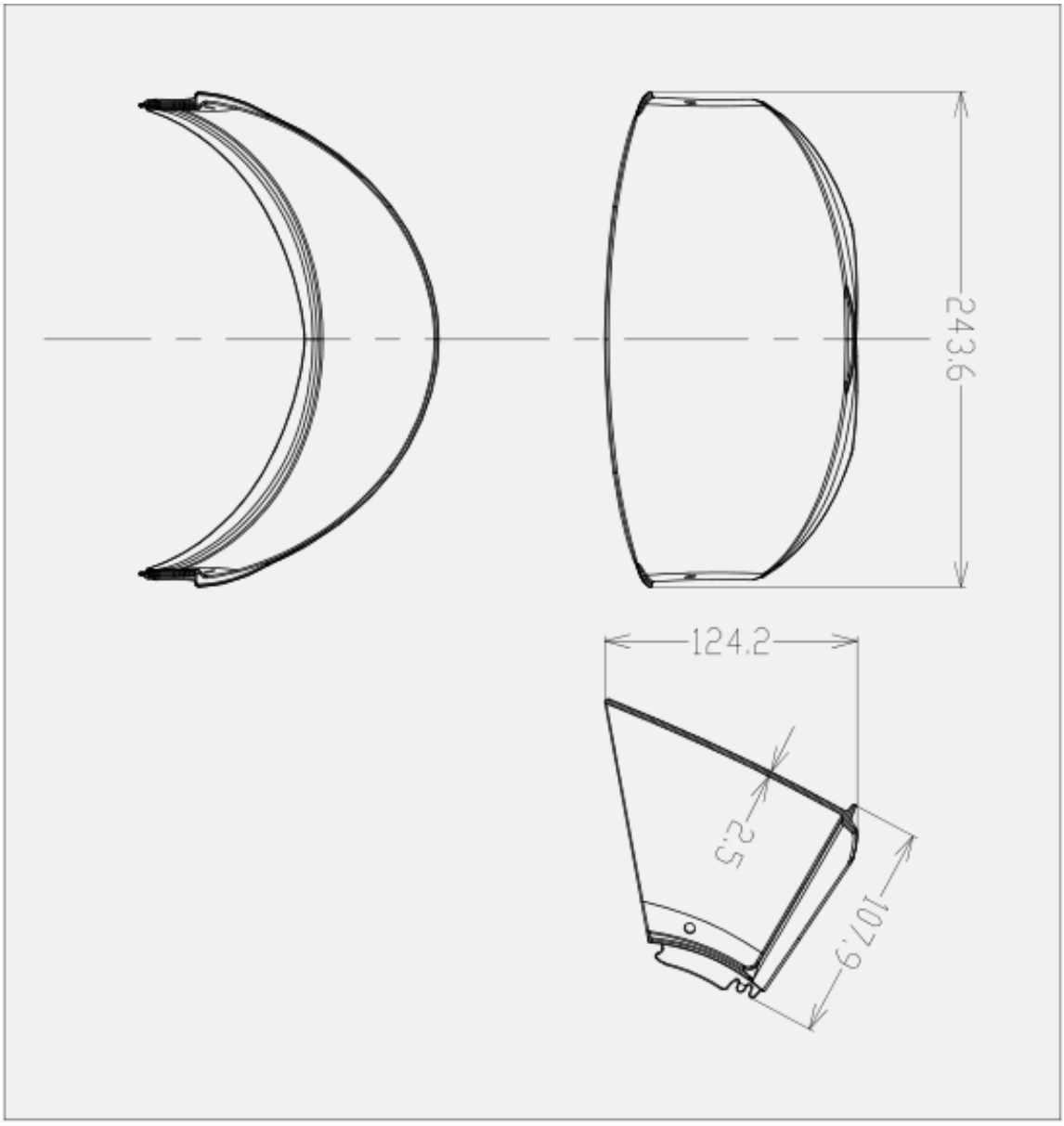
DRAWING OF THE RETENTION SYSTEM (Double-D rings)



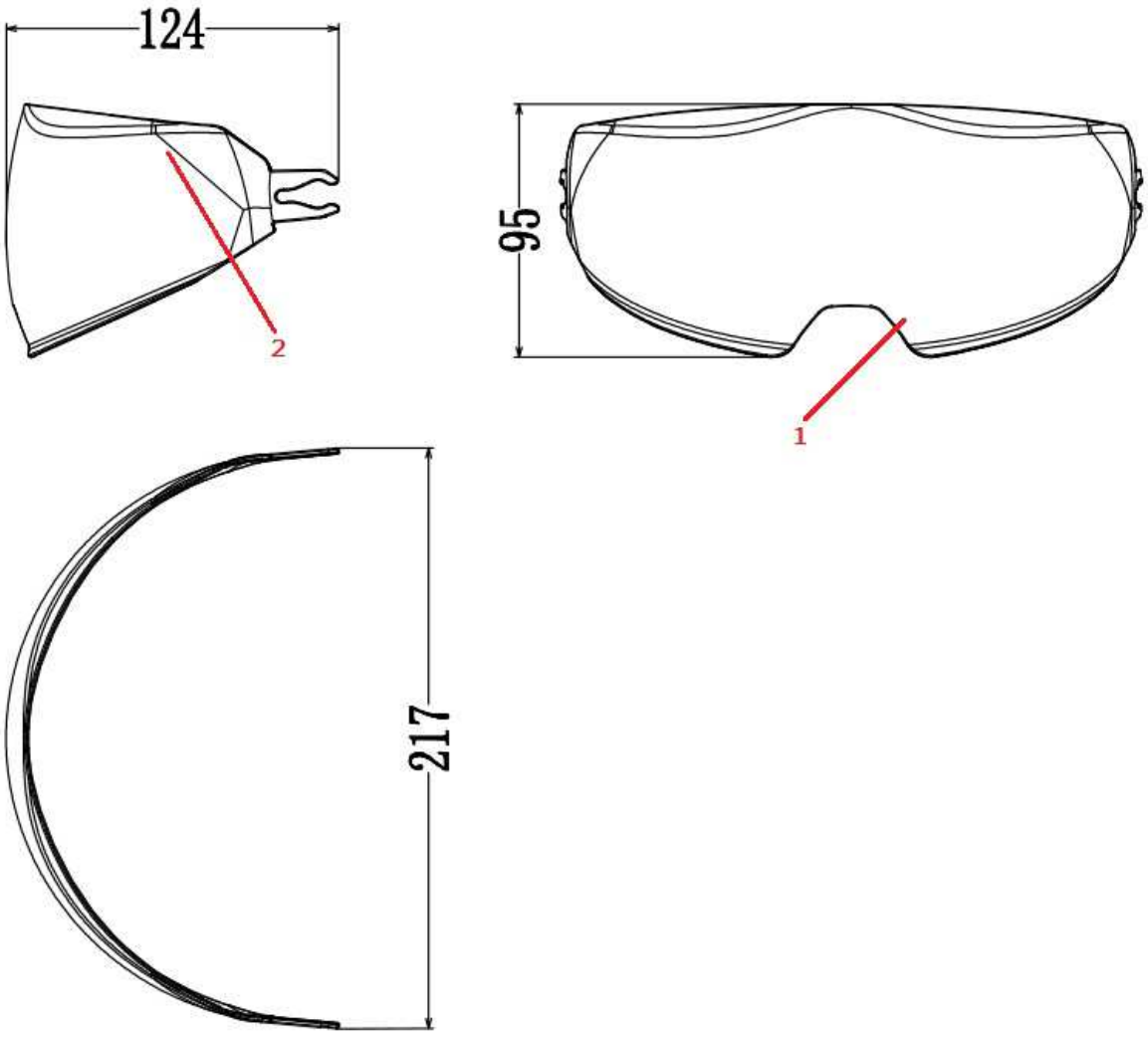
DRAWING OF THE RETENTION SYSTEM (No.10 buckle)



DRAWING OF THE VISOR



DRAWING OF THE SUNLIGHT FILTER



USER INSTRUCTIONS (I)

Congratulations on purchasing your new LS2 helmet. Please read these instructions carefully before use.They contain valuable informations to help you obtain the most protection from your helmet and to ensure a longer life for your helmet. All our products come from the most advanced research in terms of active security and design. The very high level for aerodynamism and comfort will get you the best performances all along the road. Whatever can be your choice leisure, tourism, racing, one of the helmets from the LS2 range is the best solution for your active protection.

1. Read these instructions thoroughly before using your helmet for the first time and store them safety for future reference.
2. A helmet like all products may wear out over time depending upon its use and the amount of care that is given. Please check your helmet every time before use for damage and do not use a damaged helmet. The most known standards of homologation recommend a helmet life of five years. LS2 agrees with their recommendation even though your helmet does not show any signs of malfunction, visible damage or defect. We strongly recommend you replace your helmet five years after the original date of purchase. See also "ONE IMPACT RULE" of item 3 in this manual, which says clearly "helmet is designed to help absorb one impact".
3. If you have any questions or comments concerning this helmet, please contact your nearest LS2 dealer or agent. Note that these specifications are subject to change without notice, as we continually strive to improve our products.

HOW TO CHOOSE A HELMET AND WEAR IT CORRECTLY

No helmet can protect the wearer against all foreseable high speed and low speed impact. however, for maximum head protection the helmet must be of proper fit and the retention system must be securely fastened under the chin. Failure to have proper fit and to securely fasten the helmet is dangerous as the helmet could come off in an accident resulting in severe head injury or death.

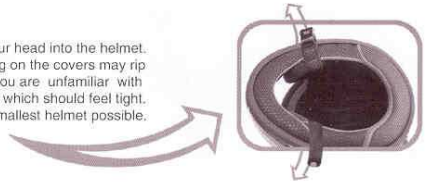
1 **To determinate proper fit.**

1.1. Measure your head size. Wrap a tape measure horizontally around your head at the height of about 2,5 cm above your eyebrows. This will establish the longest measurement around your head.

1.2. Select the helmet that is the closest match to your head size. If your head size should fat between two helmet sizes, try on the smaller one first.

2 **Try the helmet on**

2.1. Expand the helmet opening by the straps, and slide your head into the helmet. Pull the chin straps only, not the chin straps cover, puling on the covers may rip them. If the helmet is not tight, it is too big for you. If you are unfamiliar with helmets you may be reluctant to pull down the helmet which should feel tight. Even if you feel it is difficult to put it on, please use the smallest helmet possible.



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3 **Check for a proper fit. With the helmet , go through the following checklist to determine whether the helmet is the correct size.**

3.1. Make sure the inner lining fits snugly all around your head.

3.2. Make sure the top pad presses closely to the top of your head.

3.3. Check whether the cheek pads are in contact with your cheeks.

3.4. Make sure there is no space between inner lining and brow where you could insert your finger.

3.5. Now, take hold of the helmet with a hand on each side. Without moving your head, try to move the helmet up and down, and side to side. You should feel the skin of your head and face being pulled as you try to move the helmet. If you can move the helmet around easily, it is too big. Try a smaller size.

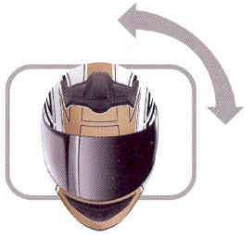
4 **Check the retention system and go through the following steps.**

4.1. Fasten the chinstrap as tight as possible without cousing you pain (see diagram 2). There must be no slack in the strap and it must be tight up against your chin.

4.2. With the chinstrap secured, put your hands flat on the back of the helmet and try to push the helmet off by rotating forward.

4.3. Next, put your hands on the front of the helmet above your forehead (or on the chinguard) and try to push the helmet off by rotating it toward the rear.

4.4. If the helmet starts to come off in either direction, do not use the helmet. either the helmet is too large for you or the chin strap is not fightened enough.



Tightening the chinstrap correctly is extremely important. Try to pull down on the chinstrap with the tips of your fingers if the strap is not against your chin or loosens, you have not properly put the strap through the D rings. Start again (see diagram 2) If your chinstrap is loose, the shock of an impact may knock your helmet off, leaving your head completely unprotected. Do not use a helmet that can be rolled off the head with the chinstrap fastened, since it may come off in an accident, resulting in death or serious personal injuries.

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USER INSTRUCTIONS (II)

D RING: To securely fasten the D ring retention system, thread the end of the chinstrap through the D rings only as shown in diagra m 2 and put it tight against your throat. Clip the chin strap end hook on the D ring as shown in diagram 2 to secure the loose end of the chin strap after it's securely fastening the chin strap. The only function of the chinstrap end hook fitted on the end of the chinstrap is to avoid flutering of the end part of the chinstrap.

Quick-release retention system: To fasten the strap, push the metal tongue firmly into the buckle until it locks with a click. Pull the strap tight and pass the end of the strap through the strap ring or ladder to secure it. To release the strap, press the two catches inward (or slide the catche down).

SAFETY RECOMMENDATIONS

1

No helmet can protect wearer against all foreseeable high speed and low speed impacts.
However, for maximum head protection, the helmet must be of proper fit and retention system must be securely fastened under the chin. The helmet should allow peripheral vision when secure on your head. If your helmet is too large, it may sleep or moove on your head while riding which may make it possible for your helmet to come off in an accident or to obstruct your vision while riding. In the first case, your helmet will not protect your head in an accident, which can result in serious personal injury or death and in the second case, if you cannot see you may have an accident.

2

Use only a helmet that fits snugly all around your head, and fasten the chinstrap securely under your chin.
Expand the helmet opening with your hands, and slide your head into the helmet. Please check whether the helmet fits properly according to the checklist (paragraph 3, page 3). Pull the chinstraps only, not the chinstraps covers. Pulling on the covers may rip them. if the helmet is not tight, it is too big for you. to securely fasten the D ring retention system, thread the end of the chinstrap through the D rings only as shown, and pull it tight up against your throat. In the case of quick-release retention system, refer to upper paragraph. If your chinstrap is loose, the shock of an impact may knock your helmet off leaving your head completely unprotected resulting in serious personal injury or death.

3

Helmets are designed to help absorb ONE impact. Afetr your helmet has protected you from an impact, you must get a new one.
Your helmet is designed to distribute the force incurred during an impact over a wide area. Even if your helmet looks undamaged externally its useful life is finished after one impact during riding, for example, a capsize or accident where you and your helmet hit the ground or some object. In an impact, the helmet's impact absorbing liner becomes compacted. Once this has happened, the helmet no longer has the ability to absorb further impacts. Your helmet may look the same, but it will not provide protection in an accident. if you have any doubts, for example, if you drop your helmet or if it is hit by something and you are not sure if this one impact rule applies, consult your LS2 dealer before you use the helmet again.

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4

Clean your helmet carefully.
Never use hot or salt water, benzene, gazoline, glass cleaner or other solvents. Your helmet could be seriously damaged by these substances. whithout whowing any apparent visible damage. A helmet damaged or weakened by a cleaning agent may not provide head protection in an accident resulting in serious personal injury or death. The correct way to clean a helmet is to mix 5 or 6 drops of mild soap in a quart of warm water. Dampen a soft cloth with this solution and wipe the helmet clean. Rinse with a wet cloth.

5

Never modify your helmet.
It is very dangerous to drill holes or cut the shell and / or the shock absorber liner. Modifications can seriously weaken the helmet. Modifying the retention system weakens it, and it may snap in an impact. removing parts such as the mouth guard or rubber face trim can expose edges, which may injure you in an accident. Always used approved LS2 parts when replacing shields, screws, or any other parts. A weakened helmet will not provide protection.

6

Don't mistread your helmet.
Never ride with the helmet hanging from the helmet holder, and don't hang the helmet from angled supports like a mirror. Don't sit on your helmet or throw it around. You should not expose the liner of your helmet to strong sunlight and excessive heat such as near heaters or where temperatures exceed 50° C (122 F). Avoid the spray of insect repellent chemicals (such as "naphtalene") near the helmet. Mistreating your helmet will damage the shell and impact absorbing liner and reduce the helmet's ability to protect you in an accident.

7

Always check your helmet before riding off.

1. **Check the shield and visor screws, and retighten them if necessary.**
2. **Check for cracks in the helmet. Strong acid (for exampl, battery acid) can damage the shield base. If you find cracks or damage, stop using the helmet immediately.**
3. **Plastic componets may start to wear out about 5 years after manufacture. If you find deterioration in any part of a component, either replace that component or get a new helmet. If these parts come loose and / or fall off while you are riding, your vision may be blocked which could cause an accident resulting in serious personal injury or death.**
4. **Check the security of the retention system**
5. **Make sure that the center pad (or comfort liner) and the cheek pads are attached before you use the helmet.**

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USER INSTRUCTIONS (III)

8

Maintain your helmet shield in good condition.
If your shield becomes too scratched or undeanable, replace it with a new one. Impaired visibility causes accidents. Clean your shield with mild soapy water, rinse well with clean water, and dry with a soft cloth. Never use benzene gasoline, glass cleaner or any other solvents. Do not attach stickers or adhesive tape to the shield, as this will weaken the hard coating. This can damage the shield.Do not drive with a dim or blurred face shield. Impaired vision can cause an accident resulting in serious personal injury or death.

9

Do not repaint the helmet.
We do not recommend you repaint the helmet, because paint and thinner can damage the materials used in the helmet construction. A helmet damaged weakened by a paint agent may not provide head protection in an accident resulting in serious personal injury or death. If you must paint your helmet, please consult your LS2 dealer.

10

Remember: helmets block important sounds and reduce awareness of environmental changes.
When you wear a helmet, especially a full-face type, you are somewhat isolated from the environment around you. Weather changes can catch you unprepared: sudden showers or temperature variations as you enter ore leave tunnels or climb mountain roads can cause unexpected misting of your shield and loss of visibility. Do not drive with a fogged face shield. Wearing a helmet also reduces your ability to hear traffic sounds, especially of high speed. With a full face helmet, opening and closing the shield makes a major difference in how much you can hear. For safe riding be aware of how your helmet type, your speed, affects your perception of road conditions and whether your shield is open.