

THE NETHERLANDS (N E D E R L A N D)





Concerning (1)

- approval granted
- approval extended
- approval refusal
- approval withdrawn
- production definitely discontinued

of a type of tyre for motor vehicles pursuant to Regulation number 30.

Approval number: E4-30R-0297218 Extension number: 04

Manufacturer's name and address
 ZODO TIRE Co., LIMITED

The South of Yalujiang Road, Wenzhuang Village Qinghe Agency of

Cao County Heze City Shandong Province 274400

China(PRC)

2. Tyre type designation (2)

 $2.1. \quad Brand-name(s)/trademark(s) \qquad \qquad : \ \, See \ annex \ 1 \ of \ communication \ form$

 $2.2. \quad Trade\ description(s)/Commercial\ name(s) \qquad : \ See\ annex\ 1\ of\ communication\ form$

3. If applicable, name and address of the

manufacturer's representative

: Not applicable

Summarised description

4.1. Tyre size designation : 185/60R15

4.2. Category of use : normal/snow/special use /temporary use (1)

4.3. Structure : diagonal / bias belted / radial / run flat tyre (1)

4.4. Speed category symbol : H

4.5. Load-capacity index : 88

P.O. Box 777 2700 AT Zoetermeer The Netherlands Tel. +31 (0)79 345 83 02 E-mail typeapproval@rdw.nl www.rdw.nl Type-approval Department



Approval number: E4-30R-0297218 Extension number: 04

4.6. Extended Mobility Tyre : Yes /No⁽¹⁾

applicable, test laboratory approved for

purposes of approval or of verification

of conformity

5. Technical service and, where : IDIADA Automotive Technology S.A.Institute for Applied

Automotive Research L' Albornar P.O. Box 20

E-43710 Santa Oliva (Tarragona)

Spain

6. Date of report issued by that service : 2016-09-23; 2020-02-24

7. Number of report issued by that service : extsion number 00; CN20020394

8. Reason(s) of extension (if applicable) : Update of tyre type designation(s)

Upgrade of regulation supplement number

Update of construction variant(s)

Addition of brand names; Addition of trade descriptions; Deletion of

trade description; Modification of manufacturer's name

Change of technical service

9. Any remarks : Not applicable

10. Place : Zoetermeer

11. Date : 27 March 2020

12. Signature :

The list of documents in the approval file which are deposited at the administrative service having delivered the approval

- Application form relating to ECE approval for a pneumatic tyre pursuant to Regulation number 30.
- The drawing of the tyre's sidewalls, tread and dimensioned cross-section.
- The test report as mentioned in item 7.

and which can be obtained upon request.

Tyres-passenger-vehicle R30-02 v7.00 Page 2 of 2

⁽¹⁾ Strike out what does not apply

⁽²⁾ A list of Brand name(s)/trademark(s) or Trade description(s)/Commercial name(s) may be annexed to this communication

Approval number: E4-30R-0297218 Extension number: 04

Annex 1

2. Tyre type designation

2.1. Brand-name(s)/trademark(s):

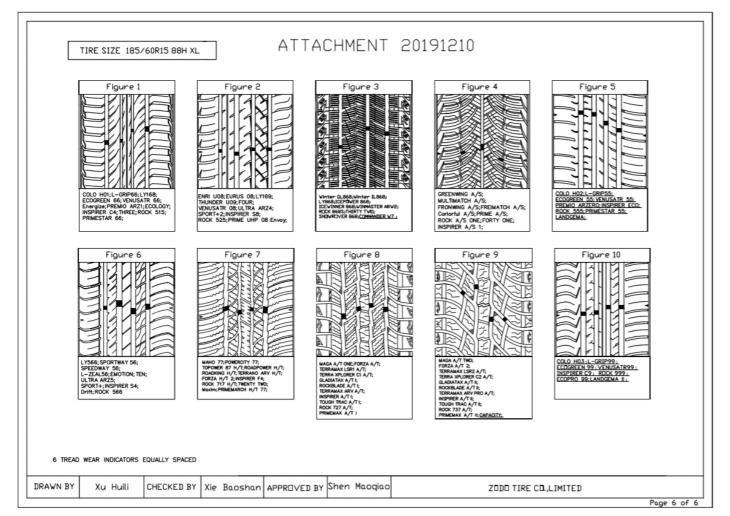
CONSTANCY; ILINK; LUXXAN; RHINO; ARIVO; GRENLANDER; T TYRE; CRYSTAL; ROCKBLADE; FRONWAY; SAILWIN; XBRI; ROADMARCH; KANGS; ZMAX

2.2. Trade description(s)/Commercial name(s):

COLO H01; L-GRIP66; LY168; ECOGREEN 66; VENUSATR 66; Energize; PREMIO ARZ1; ECOLOGY; INSPIRER C4; THREE; ROCK 515; PRIMESTAR 66; ENRI U08; EURUS 08; LY169; THUNDER U09; FOUR; VENUSATR 08; ULTRA ARZ4; SPORT+2; INSPIRER S8; ROCK 525; PRIME UHP 08; Envoy; Winter GL868; Winter IL868; LY868; ICEPOWER 868; ICEWINNER 868; WINMASTER ARW2; ROCK 868S; THIRTY TWO; SNOWROVER 868; GREENWING A/S; MULTIMATCH A/S; FRONWING A/S; FREIMATCH A/S; Carlorful A/S; PRIME A/S; ROCK A/S ONE; FORTY ONE; INSPIRER A/S 1; LY566; SPORTWAY 56; SPEEDWAY 56; L-ZEAL56; EMOTION; TEN; ULTRA ARZ5; SPORT+; INSPIRER S4; Drift; ROCK 566; MAHO 77; POWERCITY 77; TOPOWER 87 H/T; ROADPOWER H/T; ROADKING H/T; TERRANO ARV H/T; FORZA H/T 2; INSPIRER F4; ROCK 717 H/T; TWENTY TWO; Maxim; PRIMEMARCH H/T 77; MAGA A/T ONE; FORZA A/T; TERRAMAX LSR1 A/T; TERRA XPLORER C1 A/T; GLADIATAX A/T I; ROCKBLADE A/T I; TERRAMAX ARV A/T; INSPIRER A/T I; TOUGH TRAC A/T I; ROCK 727 A/T; PRIMEMAX A/T I; MAGA A/T TWO; FORZA A/T 2; TERRAMAX LSR2 A/T; TERRA XPLORER C2 A/T; GLADIATAX A/T II; ROCKBLADE A/T II; COMMANDER W7; CAPACITY; ECOPRO 99; COLO H02; L-GRIP55; ECOGREEN 55; VENUSATR 55; PREMIO ARZERO; INSPIRER ECO; ROCK 555; PRIMESTAR 55; LANDGEMA; COLO H03; L-GRIP99; ECOGREEN 99; VENUSATR99; INSPIRER C9; ROCK 999; LANDGEMA II



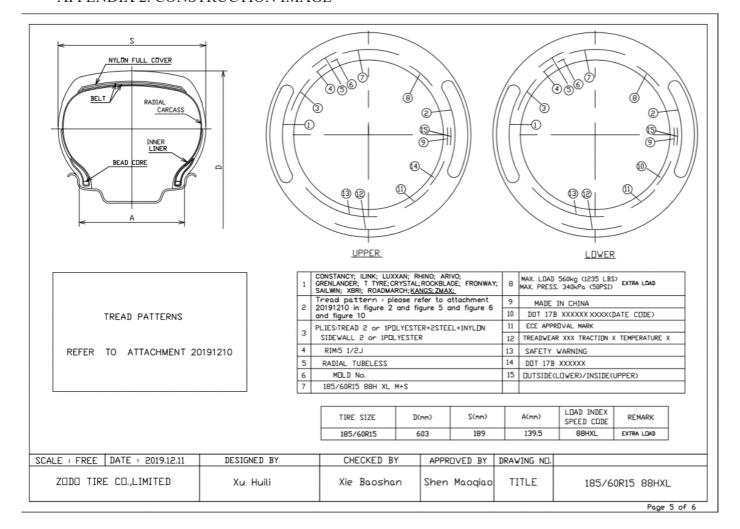
APPENDIX 1. CONSTRUCTION IMAGE (1)



 $^{^{(1)}}$ The tyre marking statements are considered leading in case of deviating drawing information.



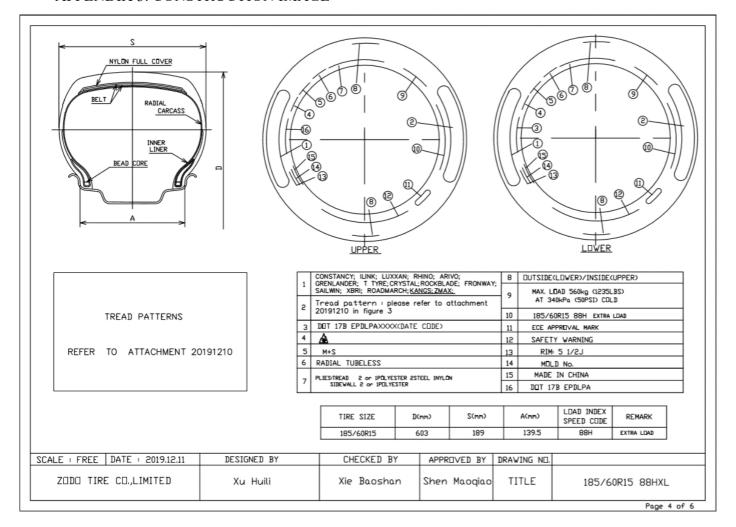
APPENDIX 2. CONSTRUCTION IMAGE (1)



 $^{^{(1)}}$ The tyre marking statements are considered leading in case of deviating drawing information.



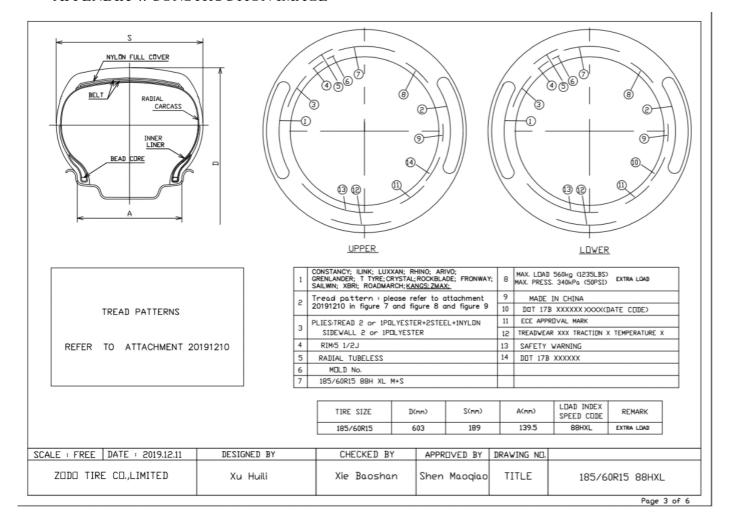
APPENDIX 3. CONSTRUCTION IMAGE (1)



⁽¹⁾ The tyre marking statements are considered leading in case of deviating drawing information.



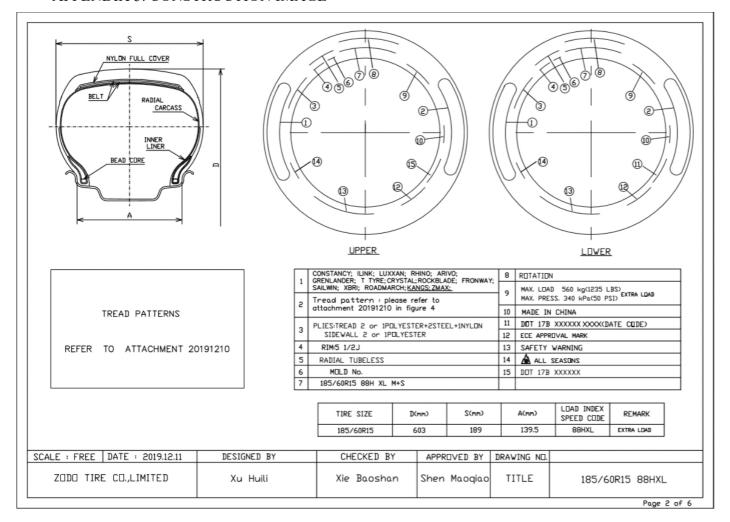
APPENDIX 4. CONSTRUCTION IMAGE (1)



 $^{^{(1)}}$ The tyre marking statements are considered leading in case of deviating drawing information.



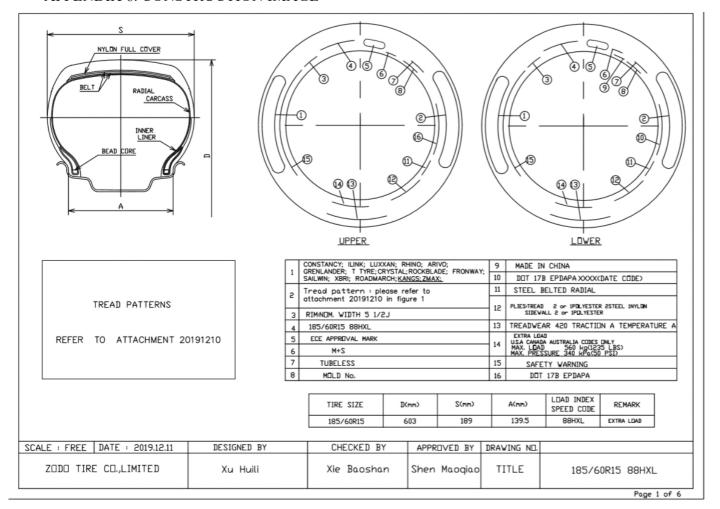
APPENDIX 5. CONSTRUCTION IMAGE (1)



⁽¹⁾ The tyre marking statements are considered leading in case of deviating drawing information.



APPENDIX 6. CONSTRUCTION IMAGE (1)



⁽¹⁾ The tyre marking statements are considered leading in case of deviating drawing information.



Test report data delivered by the designated technical service or its laboratory/branch office responsible for conducting the approval tests

Tested in accordance to ECE regulation no. 30, 02 series of amendments, supplement 21

Test reports :	Date of report	Date of test	Location of test	Reference
	2016-09-23	2016-09-19	Heze, China	extsion number 00
	2020-02-24	2020-01-02	Heze, China	CN20020394

Y

Appropriate test facility, calibrated measurement- and test equipment have been used in compliance with the applicable test requirements

Name and address of designated technical service

: IDIADA Automotive Technology S.A.Institute for Applied Automotive

Research

L' Albornar P.O. Box 20 E-43710 Santa Oliva (Tarragona)

Spain : N.A.

Name and address of branch office of designated technical service

Tyre size designation

Tyre size designation

Brand-name(s) / trademark(s)

Trade description(s) / commercial name(s)

: 185/60R15

N.A.

: CONSTANCY, ILINK, LUXXAN, RHINO, ARIVO, GRENLANDER, T TYRE, CRYSTAL, ROCKBLADE, FRONWAY, SAILWIN, XBRI, ROADMARCH, KANGS, ZMAY

ROADMARCH, KANGS, ZMAX

COLO H01, L-GRIP66, LY168, ECOGREEN 66, VENUSATR 66, Energize, PREMIO ARZ1, ECOLOGY, INSPIRER C4, THREE, ROCK 515, PRIMESTAR 66, ENRI U08, EURUS 08, LY169, THUNDER U09, FOUR, VENUSATR 08, ULTRA ARZ4, SPORT+2, INSPIRER S8, ROCK 525, PRIME UHP 08, Envoy, Winter GL868, Winter IL868, LY868, ICEPOWER 868, ICEWINNER 868, WINMASTER ARW2, ROCK 868S, THIRTY TWO, SNOWROVER 868, GREENWING A/S, MULTIMATCH A/S, FRONWING A/S, FREIMATCH A/S, Carlorful A/S, PRIME A/S, ROCK A/S ONE, FORTY ONE, INSPIRER A/S 1, LY566, SPORTWAY 56, SPEEDWAY 56, L-ZEAL56, EMOTION, TEN, ULTRA ARZ5, SPORT+, INSPIRER S4, Drift, ROCK 566, MAHO 77, POWERCITY 77, TOPOWER 87 H/T, ROADPOWER H/T, ROADKING H/T, TERRANO ARV H/T, FORZA H/T 2, INSPIRER F4, ROCK 717 H/T, TWENTY TWO, Maxim, PRIMEMARCH H/T 77, MAGA A/T ONE, FORZA A/T, TERRAMAX LSR1 A/T, TERRA XPLORER C1 A/T, GLADIATAX A/T I, ROCKBLADE A/T I, TERRAMAX ARV A/T, INSPIRER A/T I, TOUGH TRAC A/T I, ROCK 727 A/T, PRIMEMAX A/T I, MAGA A/T TWO, FORZA A/T 2, TERRAMAX LSR2 A/T, TERRA XPLORER C2 A/T, GLADIATAX A/T II, ROCKBLADE A/T II, TERRAMAX ARV PRO A/T, INSPIRER A/T II, TOUGH TRAC A/T II, ROCK 737 A/T, PRIMEMAX A/T II, COMMANDER W7, CAPACITY, ECOPRO 99, COLO H02, L-GRIP55, ECOGREEN 55, VENUSATR 55, PREMIO ARZERO, INSPIRER ECO, ROCK 555, PRIMESTAR 55, LANDGEMA, COLO H03, L-GRIP99, ECOGREEN 99, VENUSATR99, INSPIRER C9, ROCK 999, LANDGEMA II

Category of use Snow Structure Radial EMT (Extended Mobility Tyre) N Speed category symbol Н Load capacity index 88 Protective rib Ν Tubeless Standard / reinforced / T-type temporary use Reinforced Ply-rating number of diagonal (bias-ply) tyres N.A. 0.7

Maximum speed for speed symbol Y for load rating determination

Tread-wear indicators

Height of lowest tread-wear indicator : 1.95 mm
Height of tallest tread-wear indicator : 2.02 mm
Number of transverse rows of wear indicators : 6

Special use tread pattern features : N.A.



1 Test data

1.1 Construction variant 1 - 1

1.1.1 MEASURING DATA (ACCORDING TO ANNEX 6)

1.1.1.1 Measuring rim width : 5.5 inch

1.1.1.2 Conditioning

Mounting pressure: 3.0 barAdjusted pressure: 2.2 barConditioning time: 24 hrsTest room temperature: 25 °CReadjusted pressure: 2.2 bar

1.1.1.3 Measurements

Overall width measured : 187.5 mm Calculated outer diameter : 603.2 mm

1.1.1.4 Plies of tyre subject for type approval

Material	Side wall	Tread
Polyester	1	1
Steel	0	2
Nylon	0	1

1.1.2 LOAD SPEED PERFORMANCE TEST (ACCORDING TO ANNEX 7)

1.1.2.1 Reference is made to a worst case tyre out of the tyre range : N

1.1.2.2 Test setup

Test drum diameter : 1.70 mTest rim width : 5.5 inchTest axle load : 448 kg

1.1.2.3 Conditioning

 $\begin{array}{lll} \mbox{Test inflation pressure} & : & 3.2 \mbox{ bar} \\ \mbox{The test inflation pressure differs from those given under} & : & N \end{array}$

Annex 7 paragraph 1.2

1.1.2.5 Test procedure

Time from zero to initial test speed : 10 min

Test steps : Step

Step	Duration (min)	Speed (km/h)	
1.	10	170	
2.	10	180	
3.	10	190	
4.	20	200	

1.1.2.6 Test results

Traces of tread separation, ply separation, cord separation, : N

chunking or broken cords after the load/speed test

Superficial blistering after the load/speed test caused by : N

the specific test equipment and conditions

Conditioning time after test : 6 hrs
Calculated outer diameter of measured circumference after : 605.1 mm

test

Change in outer diameter after test : 0.15%



1.2 Construction variant 2 - 2

MEASURING DATA (ACCORDING TO ANNEX 6) 1.2.1

1.2.1.1 Measuring rim width : 5.5 inch

1.2.1.2 Conditioning

3.0 bar Mounting pressure Adjusted pressure 2.2 bar 24 hrs Conditioning time Test room temperature 25°C Readjusted pressure 2.2 bar

1.2.1.3 Measurements

Overall width measured 186.6 mm Calculated outer diameter 601.6 mm

1.2.1.4 Plies of tyre subject for type approval

Material	Side wall	Tread
Polyester	2	2
Steel	0	2
Nylon	0	1

LOAD SPEED PERFORMANCE TEST (ACCORDING TO ANNEX 7)

1.2.2.1 Reference is made to a worst case tyre out of the tyre range : N

1.2.2.2 Test setup

Test drum diameter : 1.70 m Test rim width : 5.5 inch Test axle load : 448 kg

1.2.2.3 Conditioning

Test inflation pressure : 3.2 bar The test inflation pressure differs from those given under : N

Annex 7 paragraph 1.2

Conditioning time : 3 hrs Test room temperature 25 °C Readjusted pressure 3.2 bar 1.2.2.4 Outer diameter before test 602.9 mm

1.2.2.5 Test procedure

Time from zero to initial test speed 10 min

Test steps

Step	Duration (min)	Speed (km/h)	
1.	10	170	
2.	10	180	
3.	10	190	
4.	20	200	

1.2.2.6 Test results

Traces of tread separation, ply separation, cord separation,

chunking or broken cords after the load/speed test

Superficial blistering after the load/speed test caused by

the specific test equipment and conditions Conditioning time after test

Calculated outer diameter of measured circumference after

Change in outer diameter after test : 0.36 %

: N

6 hrs

605.1 mm



2 TYRE MARKINGS

STATEMENT (1)

2.1 Brand name or trade mark
 2.2 Trade description / commercial name
 2.3 Date of manufacture
 2.4 mm
 3 Marked
 4 mrked
 5 Marked
 6 Marked
 7 Y

2.4 Upper side wall markings

"TEMPORARY USE ONLY" : N.A.
"INFLATE TO 420kPa (60 psi)" : N.A.

2.5 Lower side wall markings

Approval mark in accordance to article 3.2, 3.4, 5.4 and : Y

Annex 2

Tyre structure letter code : R
Tyre to rim fitment code : N.A.

Service description

- marked within brackets : N.A. - immediately after tyre size designation Y - character height >= 6mm Y "RADIAL" Marked - character height >= 4 mm Y "B" and "BIAS BELTED" N.A. "TUBELESS" Marked - character height >= 4 mm Y N.A. Run flat symbol EMT (Extended mobility tyre) symbol N.A. "REINFORCED" or "EXTRA LOAD" Marked - character height \geq = 4 mm Y Marked "M+S"/"M.S"/"M&S" - character height >= 4 mm Y "ET" N.A. "POR" : N.A. Location of the applicable mandatory markings : In lower area

 $Symmetrical tyres marked on both sidewalls & : & Y \\ Asymmetrical tyres marked at least on the outer tyre side & : & Y \\$

wall

Nominal envelop dimensions of the inflated tyre mounted on the measuring rim (1)



⁽¹⁾ The tyre marking statements are considered leading in case of deviating drawing information.

APPLICATION FOR APPROVAL OF A TYPE OF PNEUMATIC TYRE FOR TYRES FOR MOTOR VEHICLES AND THEIR TRAILERS ACCORDING TO ECE REGULATION No. 30, 02 SERIES OF AMENDMENTS, SUPPLEMENT 21

4.1 Name and address of manufacturer (applicant) : ZODO TIRE Co., LIMITED

The South of Yalujiang Road, Wenzhuang Village Qinghe Agency of Cao

County Heze City

Shandong Province 274400

China(PRC)

185/60R15

N.A.

Name and address of branch office of designated technical service (manufacturers duly accredited representative)

Tyre size designation CONSTANCY, ILINK, LUXXAN, RHINO, ARIVO, GRENLANDER, T 4.1.2.1 Brand-name(s) / trademark(s)

TYRE, CRYSTAL, ROCKBLADE, FRONWAY, SAILWIN, XBRI,

ROADMARCH, KANGS, ZMAX

4.1.2.2 Trade description(s) / commercial name(s)

4.1.1

COLO H01, L-GRIP66, LY168, ECOGREEN 66, VENUSATR 66, Energize, PREMIO ARZ1, ECOLOGY, INSPIRER C4, THREE, ROCK 515, PRIMESTAR 66, ENRI U08, EURUS 08, LY169, THUNDER U09, FOUR, VENUSATR 08, ULTRA ARZ4, SPORT+2, INSPIRER S8, ROCK 525, PRIME UHP 08, Envoy, Winter GL868, Winter IL868, LY868, ICEPOWER 868, ICEWINNER 868, WINMASTER ARW2, ROCK 868S, THIRTY TWO, SNOWROVER 868, GREENWING A/S, MULTIMATCH A/S, FRONWING A/S, FREIMATCH A/S, Carlorful A/S, PRIME A/S, ROCK A/S ONE, FORTY ONE, INSPIRER A/S 1, LY566, SPORTWAY 56, SPEEDWAY 56, L-ZEAL56, EMOTION, TEN, ULTRA ARZ5, SPORT+, INSPIRER S4, Drift, ROCK 566, MAHO 77, POWERCITY 77, TOPOWER 87 H/T, ROADPOWER H/T, ROADKING H/T, TERRANO ARV H/T, FORZA H/T 2, INSPIRER F4, ROCK 717 H/T, TWENTY TWO, Maxim, PRIMEMARCH H/T 77, MAGA A/T ONE, FORZA A/T, TERRAMAX LSR1 A/T, TERRA XPLORER C1 A/T, GLADIATAX A/T I, ROCKBLADE A/T I, TERRAMAX ARV A/T, INSPIRER A/T I, TOUGH TRAC A/T I, ROCK 727 A/T, PRIMEMAX A/T I, MAGA A/T TWO, FORZA A/T 2, TERRAMAX LSR2 A/T, TERRA XPLORER C2 A/T, GLADIATAX A/T II, ROCKBLADE A/T II, TERRAMAX ARV PRO A/T, INSPIRER A/T II, TOUGH TRAC A/T II, ROCK 737 A/T, PRIMEMAX A/T II, COMMANDER W7, CAPACITY, ECOPRO 99, COLO H02, L-GRIP55, ECOGREEN 55, VENUSATR 55, PREMIO ARZERO, INSPIRER ECO, ROCK 555, PRIMESTAR 55, LANDGEMA, COLO H03, L-GRIP99, ECOGREEN 99, VENUSATR99, INSPIRER C9, ROCK 999, LANDGEMA II

4.1.3 Category of use

4.1.3.1 For the tyres belonging to the category of use "special use tyre" those which may bear the inscription M+S or M.S or M&S

4.1.4 Structure

4.1.5 Speed category symbol 4.1.6 Load capacity index

4.1.7 Tubeless

Standard / reinforced / T-type temporary use 4.1.8

4.1.9 EMT (Extended mobility tyre)

Ply-rating number of diagonal (bias-ply) tyres; except for T-4.1.10 type temporary use spare tyres

The overall dimensions: overall section width and outer 4.1.11 diameter

4.1.12 The rims on which the tyre can be mounted

The measuring rim and test rim 4.1.13

4.1.14 The test pressure where the manufacture requests the application of Annex 7 paragraph 1.3 to this Regulation

4.1.15 The factor 'x'

4.1.16 For tyres suitable for speeds in excess of 300 km/h, the maximum speed permitted by the tyre manufacturer and the Snow

N.A.

Radial Η

88 Y

Reinforced

Ν N.A.

Values per construction variant

Overall section width (mm) Outer diameter (mm) 187.5 603.2 186.6 601.6 2

5.5 inch

Values per construction variant

#	Measuring rim (inch)	Test rim (inch)	
1	5.5	5.5	
2	5.5	5.5	

Values per construction variant

	#	Test	inflation	pressure	(bar)
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load carrying capacity allowed for that maximum speed
4.1.17 The identification of the bead retention rim contours specific for the "flat tyre running mode" of "run flat tyres"

4.2 The application for approval is accompanied by drawings or images of

1. The tyre tread pattern

2. Envelope of the inflated tyre mounted on the measuring rim, showing the relevant dimensions (see paragraphs 6.1.1 and 6.1.2)

3. The side wall showing the relevant markings

4.4 Reference to Worst-case tyre has been made for the load-speed test. The worst case tyre selection criteria can be obtained from the approval authority.

: N.A.

: Y : Y

: Y

Values per construction variant

Worst case
1 N
2 N



Reason(s) of extension

Update of tyre type designation(s);

Upgrade of regulation supplement number;

Update of construction variant(s);

Change of technical service;

Addition of brand names; Addition of trade descriptions; Deletion of trade

description; Modification of manufacturer's name

The applicant, as defined in article in 4.1, declares that:

• This application is in compliance with the scope as defined in chapter 1 of the regulation.

- All data for this application are unambiguously and thruthfully given.
- The type approval application for the subject component is submitted only at RDW as Contracting party pursuant to this UN regulation.
- · Appropriate test facility, calibrated measurement en test equipment have been used in compliance with the applicable test requirements.

Company

: IDIADA Automotive Technology S.A.Institute for Applied Automotive

Research

Lluís Sans Gomis

lsans@idiada.com

DEPARTMENT MANAGER

Name of person responsible for the submitted application data

Function of above mentioned authorised person

E-mail address of department or above mentioned authorised

person

Place of submission : L'Albornar, Santa Oliva (Tarragona)

Submitted for approval on (date) 19/03/2020 22:36:44

Reference id of the application given by the applicant

