Tyres Tyres for off-road, cross-over vehicles

BORN UP NORTH

Every person likes to communicate with nature, but inescapably on his way faces obstacles which cannot be overcome without a certain skill. With no experience, one has to spend much time and forces, in order to drive a hundred or just ten metres. These can be snow or sand wreathes, shallow of a river or a deep pool, a slippery ascent or a slope, a washed out road or one with a deep rut. Skills come with time which can be reduced by knowledge of basic principles discovered by the drivers or suggested by life itself. Off-road tyres from the company NORTEC are among the best helpers in overcoming of road obstacles.



For off-road,



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Special modifications of tyres

The tyres supplied for the needs of the Ministry of Defense of the Russian Federation and other military authorities, according to GOST 13298, GOST 5513. GOST 4754, have the following indexes:

- -Guaranteed life:
- -Guaranteed storage life.

A number of models produced for the needs of the Ministry of Defense of the Russian Federation and other military authorities can also differ from other types of tyres produced in series by other technical characteristics.

For example:

- -Load indexes:
- -Speed indexes

Production of the indicated tyres requires readjustment of the equipment. The order for production can be accepted not less than 30 days before the date of the beginning of production.

Tyres produced in tropic and arctic version can also have technical characteristics different from those produced in series. Due to the readjustment of the equipment, the order for production can be accepted not less than 30 days before the date of the beginning of production.

> Hot line telephone number: BaRo GmbH - 040/21 90 12 90

NORTHES'

NorTec ET-500



Tyre size	35x11.5-16	33x10.5-16	32x9.5-16
Standard description	ΓS 38.304-203	TS 38.304-205	TS 38.304-204
Tyre pattern	Cross country		
Tyre weight, not more, kg	27,8	24.8	25.1
Load bearing capacity index	120	111	110
Recommended rim	8J; 8½J; 9½J; 10J	7½J; 8J; 9J; 9½J; 10J	6½J; 7J; 8J; 8½J; 9J
Exterior diameter, mm	901	856	844
Section width, mm, not more	309	276	257
Static radius, mm	408	396	389
Q _{max} , kgf	1400	1090	1060
P _o , at Q _{max} , kgf/sm ²	310 kPa	310 kPa	3.2
V _{max} , km/h	140	140	140
Design	TL	TL	TL
	For all wheel drive passenger		

For all wheel drive passenger cars of 4*4 axle configuration of Jeep type exploited in extreme off-road conditions.

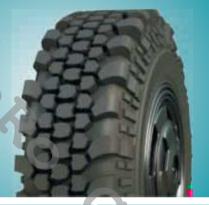
Use

MURTES

NorTec ET-600

Forward

Forward Safari 500



Tyre size	33x12.5-15	
Standard description	TS 38.304-125	
Tyre pattern	Cross country	
Tyre weight, not more, kg	27,6	
Load bearing capacity index	108	
Recommended rim	10J(81/2J;9J;11J)	
Exterior diameter, mm	850	
Section width, mm, not more	317	
Static radius, mm	388	
Q _{max} , kgf	1000	
P _o , at Q _{max} , kgf/sm ²	2.5	
V _{max} , km/h	120	
Design	TL	
Use	All wheel drive cross- country light trucks.	

Forward Forward Safari 500



Tyre size	31x10.5-15LT	
Standard description	TS 38.304-087	
Tyre pattern	Cross country	
Tyre weight, not more, kg	21,2	
Load bearing capacity index	100/109	
Recommended rim	8½J; (7J;7½/2J;8J;9J)	
Exterior diameter, mm	787±1.5%	
Section width, mm, not more	268	
Static radius, mm	368±1.5%	
Q _{max} , kgf	805/1020	
P _o , at Q _{max} , kgf/sm ²	0,24 (2,4); 0,31 (3,1)	
V _{max} , km/h	140	
Design	TT	
Use	Passenger and cargo-and- passenger cars of elevated cross- country capacity of 4*4 axle configuration, for off-road automobiles UAZ and analogues of foreign manufacture.	

With observation of load and speed characteristics 127 foreign manufacture.

Forward Forward Safari 530



Tyre size	235/75R15	
Standard description	TS 38.304-114	
Tyre pattern	Cross country	
Tyre weight, not more, kg	16,3	
Load bearing capacity index	105	
Recommended rim	6½J; (6J;6L;7J)	
Exterior diameter, mm	742±1.5%	
Section width, mm, not more	234	
Static radius, mm	333±1.5%	
Q _{max} , kgf	925	
P _o , at Q _{max} , kgf/sm ²	2.5	
V _{max} , km/h	150	
Design	TL	
Uso	All wheel drive passenger cars UAZ-31512, 31514, Patriot,	

Use

Hunter, their modifications and

foreign analogues*.

Forward. Forward Safari 540



Tyre size	235/75R15	
Standard description	TS 38.304-115	
Tyre pattern	Cross country	
Tyre weight, not more, kg	18	
Load bearing capacity index	105	
Recommended rim	6½J; (6J;6L;6½J;7J;6½J;8J)	
Exterior diameter, mm	746±1.5%	
Section width, mm, not more	235	
Static radius, mm	335±1.5%	
Q _{max} , kgf	925	
P _o , at Q _{max} , kgf/sm ²	2.5	
V _{max} , km/h	150	
Design	TL	
	All wheel drive passenger cars HAZ-	

Use

All wheel drive passenger cars UAZ-31512, 31514, Patriot, Hunter, their modifications and foreign analogues of Jeep type*.

NorTec MT-540



Tyre size	215/65R15	225/75R16
Standard description	TS 38.304-183	TS 38.304-137
Tyre pattern	Cross country	
Tyre weight, not more, kg	13,9	17,8
Load bearing capacity index	102	104
Recommended rim	6½J; 6,5J; 6J; 7J; 7,5J;)	6J; (6½j; 7J;7½J;)
Exterior diameter, mm	686	747
Section width, mm, not more	221	223
Static radius, mm	313	325
Q _{max} , kgf	8336(850)	8830(900)
P _o , at Q _{max} , kgf/sm ²	290 (2.9)	0,30 (3.0)
V _{max} , km/h	160	
Design	TL	
Use	All wheel drive cross-overs and off- roaders of class B+ and C+ UAZ-3169 Patriot, 3151 Hunter, their modifications and foreign analogues of	

Jeep type.

NorTec WT-590



Tyre size	215/65R15	
Standard description	TS 38.304-136	
Tyre pattern	Winter	
Tyre weight, not more, kg	12,6	
Load bearing capacity index	102	
Recommended rim	6½J; (6J;7J;7J½;8J)	
Exterior diameter, mm	786	
Section width, mm, not more	221	
Static radius, mm	314	
Q _{max} , kgf	8336 (850)	
P _o , at Q _{max} , kgf/sm ²	290 (2.9)	
V _{max} , km/h	160	
Design	TL	
Use	For exploitation on all wheel drive passenger cars of class B+ and C+, exploited on ice and snow-covered	

roads.

Forward. Forward Safari 510



Tyre size	215/90-15C	
Standard description	TS 38.304-105	
Tyre pattern	Cross country	
Tyre weight, not more, kg	17,6	
Load bearing capacity index	99	
Recommended rim	6L; (6J)	
Exterior diameter, mm	789±1.5%	
Section width, mm, not more	218	
Static radius, mm	370±1.5%	
Q _{max} , kgf	775	
P _o , at Q _{max} , kgf/sm ²	2.6	
V _{max} , km/h	110	
Design	TT	

Use

Passenger cars and light trucks of elevated cross country capacity of 4*4 axle configuration, UAZ-31512, 31514, 469, UAZ-3741, 3962, 3909 and analogous automobiles of foreign manufacture.*

NorTec AT-560



Tyre size	215/75R15	
Standard description	TS 38.304-158	
Tyre pattern	All-season	
Tyre weight, not more, kg	13,6	
Load bearing capacity index	100	
Recommended rim	6J (5½J; 6½J;7J)	
Exterior diameter, mm	704	
Section width, mm, not more	215	
Static radius, mm	316	
Q _{max} , kgf	800	
P _o , at Q _{max} , (kgf/sm ²) kPa	250 (2.6)	
V _{max} , km/h	160	
Design	TL	
Use	For exploitation on all wheel drive passenger cars Shevy-Niva and a number of analogous automobiles	

number of analogous automobiles of foreign manufacture.

Forward Forward Safari 540



Tyre size	205/75R15	
Standard description	TS 38.304-116	
Tyre pattern	Cross country	
Tyre weight, not more, kg	12.8	
Load bearing capacity index	97	
Recommended rim	5½J; (5J; 6J; 6½J;7J)	
Exterior diameter, mm	699±1.5%	
Section width, mm, not more	205	
Static radius, mm	314±1.5%	
Q _{max} , kgf	730	600 Q econom
P _o , at Q _{max} , (kgf/sm ²) kPa	2.5	2.1
V _{max} , km/h	160	
Design	TL	
Use	All wheel drive passenger cars VAZ-2123 and foreign analogues.*	

*With observation of load and speed characteristic

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NORTES' NorTec WT-580



Tyre size	205/70R16	
Standard description	TS 38.304-186	
Tyre pattern	Winter	
Tyre weight, not more, kg	11.9	
Load bearing capacity index	97Q	
Recommended rim	(5J; 5½J; 6J; 6½J;7J)	
Exterior diameter, mm	694	
Section width, mm, not more	209	
Static radius, mm	314	
Q _{max} , kgf	7169 (730)	
P _o , at Q _{max} , (kgf/sm ²) kPa	250 (2.5)	
V _{max} , km/h	160	
Design	TL	
Use	Designed for exploitation on all wheel drive automobiles (cross-over and off-road class B+ and C+) exploited on all types of roads including snow-covered roads of any category.	

Forward. Forward Dinamic 156



Tyre size	185/75R16	
Standard description	TS 38.304-122	
Tyre pattern	All-season	
Tyre weight, not more, kg	10.5	
Load bearing capacity index	92	
Recommended rim	5J; (5½J; 6J)	
Exterior diameter, mm	684±1.5%	
Section width, mm, not more	184	
Static radius, mm	316±1.5%	
Q_{max} kgf/ Q_{ec}	630 / 570	
P _o , at Q _{max} , kgf/sm ² / P at Q _{ec}	2.5 / 2.2	
V _{max} , km/h	160	
Design	TL	
Use	All wheel drive passenger cars VAZ- 2121, -2123, Niva, their modifications and a number of automobiles of foreign manufacture of analogous class.*	

*With observation of load and speed characteristics 136

Forward Dinamic 232



Tyre size		185/75R16		
Standard description		TS 38.304-123		
Tyre pattern		All-season		
Tyre weight, no	Tyre weight, not more, kg		10.5	
Load bearing capacity index		95T		
Recommended	Recommended rim		5J; (5½J / 6J)	
Exterior diameter, mm		684±1.5%		
Section width, mm, not more		184		
Static radius, mm		313±1.5%		
Q _{max} , kgf /	Q _{econ}	690	616	
P _o , at Q _{max} , kgf/sm ²	P _o , at Q _{econ} , kgf/sm ²	2.5	2.1	
V _{max} , km/h		190		
Design		TL		
Use		For exploitation on all wheel drive passenger cars of family VAZ-2123 Niva and its modifications and automobiles of foreign manufacture of class FAW 2.0, Fiat		

Tveco Daily.

Forward. Forward Arctic 511



Tyre size		175/80R16		
Standard description		TS 38.304-106		
Tyre pattern		Winter		
Tyre weight, no	t more, kg	12,7		
Load bearing capacity index		8	88	
Recommended rim		5J; (4½J;5½J)		
Exterior diameter, mm		686±1.5%		
Section width, mm, not more		178		
Static radius, mm		315±1.5%		
Q _{max} , kgf	Q _{econ} , kgf	560	505	
P _o , at Q _{max} , kgf/sm ²	P _o , at Q _{econ} , kgf/sm ²	2,3	2,0	
V _{max} , km/h		160		
Design		TT		
Use		All wheel drive passenger cars VAZ- 2121,-2131 Niva, VAZ-21214, (Lada 4*4), VAZ-21310 (Lada 4*4), VAZ- 21312 (Lada 4*4) and automobiles of foreign manufacture of analogous class *		

*With observation of load and speed characteristics 138

analogous class.*

ВЛИ-10



Tyre size		175/80R16	
Standard description		GOST 4754	
Tyre pattern		Winter	
Tyre weight, no	nt, not more, kg		,0
Load bearing capacity index		88	
Recommended rim		5J	
Exterior diameter, mm		686±1.5%	
Section width, mm, not more		178	
Static radius, mm		315±1.5%	
Q _{max} , kgf	Q _{econ} , kgf	560 505	
P _o , at Q _{max} , kgf/sm ²	P _o , at Q _{econ} , kgf/sm ²	2,3	2,0
V _{max} , km/h		160	
Design		TT	
Use		VAZ-2121, 21213 (Niva) in series and modernized.	

ВЛИ-5



Tyre size	175/80-16C	
Standard description	GOST 4754	
Tyre pattern	Universal	
Tyre weight, not more, kg	11,9	
Load bearing capacity index	85	
Recommended rim	5J	
Exterior diameter, mm	692±1.5%	
Section width, mm, not more	178	
Static radius, mm	326±1.5	
Q _{max} , kgf	515	
P _o , at Q _{max} , kgf/sm ²	2,1	
V _{max} , km/h	150	
Design	TT	
Use	VAZ-2121, 21213 (Niva) in series and modernized.	

Supernumerary automobile tubes

Designation of tube	Designation of tyres, including tubeless related to tube type	Double thickness of tube wall, mm, not less
	Truck	
1200*400-533	1200*400-533	7.0(tread)
	425/85R21	8.0 (band)
1200*500-508	500/70-508	7.0(tread)
		8.5(band)
14.00-20	14.00-20	6.0(tread)
		7.0(band)
12.00-20	12.00R20	6.0
	12.00-20	
11.00-20	11.00R20	6.0
10.00-20	10.00R20	6.0
9.00-20	9.00R20	4.5
8.25-20	8.25R20	4.0
16.00-24	16.00-24 mod. F1 140	5.0

Agricultural and for special technique			
28.1-26	28.1-26 mod. ФД-12Д	4.5	
21.3-24	21.3-24 mod. ИЯВ-79 18.4-24	4.5	
13.6-38	13.6-38 mod. Я-166	4.5	
	15.5-38 mod.Ф-2АД		
9.5-32	9.5-32 mod. B-110	4.5	
11.2-20	11.2-20 mod.Φ-35	3.5	
8.3-20	8.3-20 mod. B-105A	3.8	
7.50-20	7.50-20 mod. B-103	3.8	
	9.00-20 Altaishina 45		
16.5-18	16.5-18 mod. КФ-97	5.0	
12-16	12-16 mod. Л-163 12.4L- 16 mm	4.0	
	Nortec TS-07;		
	13.0/75- 16 mm Nortec IM-06		
9.00-16	260/95-16 (9.00-16)	4.5	
	mod. Я-324А, F AC-8		
6.50-16	6.50-16 mod. Я-275A	3.0	
5.00-10	5.00-10 mod. B -19A	2.5	
6-12	6L-12 Altaishina 421	3.2	
9.5-42	9.5-42 Altaishina 183	4.5	
15.5-18/	16.5/70-18 КФ-97	5.0	
16.5-18	15.5/16.5-18 КФ-105А		

Supernumerary automobile tubes

Designation of tube	Designation of tyres, including tubeless related to tube type		Double thickness of tube wall, mm, not less
	Passenger,	light truck	
6.95-16	195R16C	175/80R16C	3.0
	185/75R16C	225/75R16	
	175/80R16		
	175/80-16C		
	175R16C		
6.50-16	225/75R16C		3.0
	225/75R16		
	195R16C		
	175R16C		
8.40-15	225/75R16C		3.0
	225/75R16		
	235/75R15		
	225/85R15C		
	31*10.5-15LT		
	215/90-15C		
7.35-14	205/70R15	205/65R15	3.0
	195/65R15		
	205/70R14		
УК-13М	175-13/6.95-13		2.0
	175/70R13		
	165-13/6.45-13		
	155-13/6.15-13		
	6.40-13C		

Rim strips

Designation of rim strip	Designation of tyre	Designation of legal requirements	Dimensions of rim strip
300-508	14.00-20	GOST 13298 TS 38.304-108	
7.7-20	12.00-20, 10.00R20, 11.00R20, 12.00R20	TS 38.304-092 TS 38.304-091 GOST 5513 TS 38.304-097 TS 38.304-068	Dimensions
6.7-20	8.25R20, 9.00R20	GOST 5513	get determined
9.00-16	260/95-16 (9.00-16)	GOST 7463, TS 38.10497 with changes 1-9	by a press form
12-16	12-16	TS 104144-89	
16.5-18	16.5/70-18	TS 38.304-089	
16.5-18	15.5/65-18	TS 38.304-110	
205-457	12.00-18	GOST 13298	

Marking of automobile tyres



8 - indication of construction

11 - sign of official statement

12 - designation of tyre model

13 - date of manufacture

10 - indication of legal requirements

14 – indicator of wear-out (twi or Δ)

9 - ply rating

- 1 Trademark, logotype
- 2 commercial name
- 3 country of manufacture
- 4 tube type
- 5 load bearing capacity index
- 6 speed index
- 7 designation of tyre dimension

Figures in marking of diagonal tyre (for example, 6.15-13/155-13) mean:

6.15 – nominal section width in inches:

13 –diameter at rim seat in inches:

155 – nominal section width in mm;

Figures and letters in marking of radial tyre (for example, Forward Traction 310.10.00R20 146/143K Radial Tube type) mean:

10.00 - section width (in inches):

Forward Traction 310 - model;

20 - nominal diameter at rim seat (in inches);

Tube type - tube design of tyre;

146/143 – load bearing capacity index for single and dual wheels;

K - index of speed category of tyre (max admissible speed of automobile run in km/h).

Radial - radial tyre;

All seasons - all-season tyre;

Maximum load - maximum load;

Maximum pressure – maximum pressure corresponding to maximum load. Load is indicated in pounds (LBS), and pressure – in pounds upon square inch (PSI) for tyre in "cold" state (1 LBS=0.4536 kg, 1PSI= 0.0069 MPa).

TUBE TYPE or TT – (in German MIT SCHLAUCH) - designation for tube type tyres;

TUBELESS or TL- designation for tubeless tyres;

PR (PLY RATING) — endurance (load bearing capacity) of carcass is estimated conventionally by so called ply rating. For passenger cars, they use tyres with ply rating 4PR, and sometimes 6PR, in this case the latter have an inscription "Reinforced", i.e. "reinforced" tyre of elevated load bearing capacity.

