SERIES 60

80-250 mm

55 Shore D

120-750 daN
4 km/h

100-500 daN
6 km/h

120-450 daN

-15 / +80 °C

INOX

THERMOPLASTIC POLYURETHANE WHEELS WITH POLYAMIDE 6 CENTRE



Description

Tyre: red thermoplastic polyurethane, hardness 55 Shore D, excellent rolling resistance and elasticity features, good resistance to wear and tearing.

Centre: polyamide 6.

Hub with plain bore which directly houses the axle.
Hub with cylindrical roller bearing in plastic cage. Also available with stainless steel roller bearing.
Hub with double shielding ball bearing, co-printed in centre (diam. 80-125 mm). Hub with double shielding ball bearings (diam. 150-200 mm).The bearings are protected from dirt, machining residue and corrosive substances by a glass-fibre reinforced polyamide installation bushing with internal labyrinth seal. Diam. 250 mm: hub with shielded ball bearings with interference assembly in the seats obtained by centre moulding. Also available with stainless steel ball bearing.

Uses

Suitable for trolleys and machinery with medium-duty loads, also in case of continuous handling.
Suitable for indoor and outdoor use with frequent washing and sterilisation.
Examples of recommended applications: trolleys for industrial use, tubular trolleys, trolleys for food and chemical industry, mobile scaffoldings (fitted with suitable brackets, they meet Standard UNI EN 1004-1:2021).

Environments of use

Suitable for industrial environments, also in presence of water and saturated vapour, alcohol and glycol, mineral and organic acids.

WEAK ACIDS		WEAK BASES	
STRONG ACIDS		STRONG BASES	
WATER		HYDROCARBONS	
ALCOHOL		SOLVENTS	

For information on the compatibility of the component wheel materials with specific aggressive chemical substances, see table at page 40.

Floors

Suitable for tiles and cement-resin.
Not recommended unpaved floors or in presence of processing residues.
Not suitable in presence of obstacles, even if small.
They do not mark fragile floors.



Force required to push or tow a wheel

	100 kg	150 kg	200 kg	250 kg	300 kg	350 kg	400 kg	450 kg	750 kg
80 mm	4,5	----	----	----	----	----	----	----	----
100 mm	2,2	4,5	----	----	----	----	----	----	----
125 mm	1,2	2,2	4	----	----	----	----	----	----
150x35 mm	< 1	2	3,2	5	----	----	----	----	----
150x45 mm	< 1	1,8	2,6	3,5	5	5,3	----	----	----
160 mm	<1	1,6	2,2	3	3,9	5,1	6	---	---
200 mm	< 1	1,5	2	2,8	3,7	4,8	5,5	6,5	----
250 mm	< 1	< 1	<1	2	2,8	3,7	4,8	5	7

For each load and diameter, the table indicates the force (in daN) needed to push or tow a single wheel at the constant speed of 4 km/h on smooth flooring. For manual handling of a 4-wheeled trolley we recommend diameters that have values < 5 daN, for frequent handling we recommend diameters with values < 3 daN.

Fittings with brackets



Standard-duty brackets NL
Maximum carrying capacity 300 daN - available diameters 80-200 mm
Top plate, bolt hole, solid stem, Zama expander fittings. Available with front brake.



Stainless steel standard-duty brackets NLX
Maximum carrying capacity 300 daN - available diameters 80-200 mm
Top plate and bolt hole fittings. Available with front brake.



Medium-duty brackets M
Maximum carrying capacity 450 daN - available diameters 150-200 mm
Top plate fitting. Available with adjustable front brake.



Medium-heavy duty brackets P
Maximum carrying capacity 750 daN - available diameters 100-250 mm
Top plate fitting. Available with front brake and adjustable rear brake.



Medium-heavy duty brackets PX in stainless steel
Maximum carrying capacity 450 daN - available diameters 150-200 mm
Top plate fitting. Available with adjustable rear brake.



Mobile scaffolding brackets (See Scaffolding section on page 368)
Maximum carrying capacity 400 daN - maximum capacity according to UNI EN 1004-1:2021 750 daN
Available diameters 125-200 mm. Top plate, unthreaded stem, threaded stem with leveller fittings. Available with brake and double brake pedal.

Options available to order

The series 60 wheels are also available with assembled thread guards. To order them add the "PF" suffix to the product code. To order loose thread guards see the Accessories section.

THERMOPLASTIC POLYURETHANE WHEELS WITH POLYAMIDE 6 CENTRE



mm	mm	kg	COD.	mm	mm.	daN	daN	daN
						Static		4 km/h
80	30	0,11	601101	12	39	**220**	**120**	**120**
100	30	0,15	601102	12	44	**300**	**170**	**170**
125	35	0,25	601103	15	44	**350**	**230**	**230**
150	35	0,35	601105	15	44	**500**	**250**	**250**
150	45	0,51	601104	20	59	**700**	**280**	**350**
200	50	0,87	601106	20	59	**750**	**320**	**450**



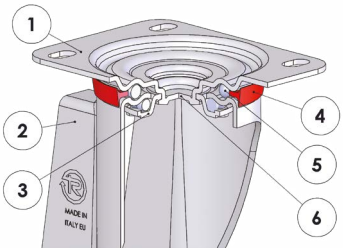
mm	mm	kg	COD.	kg	COD.	mm	mm	daN	daN	daN
								Static		4 km/h
80	30	0,13	603101	0,13	603201	12	39	**220**	**120**	**120**
100	30	0,17	603102	0,17	603202	12	44	**300**	**170**	**170**
125	35	0,25	603103	0,25	603203	15	44	**350**	**230**	**230**
150	35	0,37	603105	0,37	603205	15	44	**500**	**250**	**250**
150	45	0,54	603104	0,54	603204	20	59	**700**	**280**	**350**
200	50	0,92	603106	0,92	603206	20	59	**750**	**320**	**450**



mm	mm	kg	COD.	kg	COD.	mm	mm.	daN	daN	daN	daN
								Static		4 km/h	6 km/h
80	30	0,17	602201	0,17	602401	8	40	**220**	**130**	**130**	**100**
100	30	0,21	602202	0,21	602402	8	45	**300**	**200**	**200**	**160**
125	35	0,30	602203	0,30	602403	8	45	**350**	**250**	**250**	**200**
150	45	0,76	602204	0,76	602404	12	60	**700**	**300**	**350**	**280**
160	50	0,87	602210	0,87	602410	12	60	**720**	**320**	**400**	**320**
200	50	1,16	602206	1,16	602406	12	60	**750**	**360**	**450**	**360**
250	50	1,50	602208			20	58	**1000**	**450**	**750**	**500**

Standard-duty brackets NL - max carrying capacity 300 daN





1) Plate: electrolytically galvanised steel plate
2) Fork: electrolytically galvanised steel plate
3) Ball race ring: electrolytically galvanised steel plate
4) Dust seal: orange polyethylene
5) Swivel actions: double ball ring with grease lubrication
6) King pin: integrated with the plate and cold-riveted

Available with total front foot brake

															4 km/h
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN
80	30	0,57	604201	0,42	605701	0,73	606601	107	100x85	80x60	9	40	120	**120**
100	30	0,64	604202	0,50	605702	0,80	606602	128	100x85	80x60	9	35	120	**170**
125	35	0,85	604203	0,65	605703	1,01	606603	156	100x85	80x60	9	37	120	**220**
150	35	0,97	604204	0,78	605704	1,13	606604	182	100x85	80x60	9	34	120	**220**
150	45	1,84	604211	1,70	605711	2,12	606611	194	140x110	105x80	11	56	156	**300**
200	50	2,28	604206	2,23	605706	2,57	606606	240	140x110	105x80	11	56	156	**300**
80	30	0,59	604501	0,44	605901	0,74	606621	107	100x85	80x60	9	40	120	**120**
100	30	0,66	604502	0,52	605902	0,82	606622	128	100x85	80x60	9	35	120	**170**
125	35	0,87	604503	0,67	605903	1,03	606623	156	100x85	80x60	9	37	120	**220**
150	35	0,99	604504	0,80	605904	1,15	606624	182	100x85	80x60	9	34	120	**220**
150	45	1,87	604511	1,73	605911	2,17	606631	194	140x110	105x80	11	56	156	**300**
200	50	2,31	604506	2,27	605906	2,60	606626	240	140x110	105x80	11	56	156	**300**
80	30	0,62	604701	0,47	604801	0,77	604901	107	100x85	80x60	9	40	120	**130**
100	30	0,69	604702	0,54	604802	0,85	604902	128	100x85	80x60	9	35	120	**200**
125	35	0,87	604703	0,67	604803	1,03	604903	156	100x85	80x60	9	37	120	**220**
150	45	2,00	604731	1,85	604811	2,29	604911	194	140x110	105x80	11	56	156	**300**
160	50	2,11	604710	1,96	604810	2,40	604910	199	140x110	105x80	11	56	156	**300**
200	50	2,46	604736	2,41	604806	2,75	604906	240	140x110	105x80	11	56	156	**300**

Options available to order



Bracket
with directional
lock
d. 80-125 mm

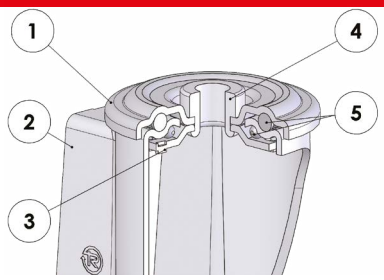


Directional lock
for brackets
d. 150-200 mm

THERMOPLASTIC POLYURETHANE WHEELS WITH POLYAMIDE 6 CENTRE

Standard-duty brackets NL - max carrying capacity 300 daN





1) Plate: electrolytically galvanised steel plate
2) Fork: electrolytically galvanised steel plate
3) Ball race ring: electrolytically galvanised steel plate
4) King pin: bushing in electrolytically galvanised steel
5) Swivel actions: double ball ring with grease lubrication

Available with total front foot brake

											4 km/h
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	daN
80	30	0,51	607701	0,67	606401	107	73	12	40	120	**120**
100	30	0,58	607702	0,73	606402	128	73	12	35	120	**170**
125	35	0,78	607703	0,95	606403	156	73	12	37	120	**220**
150	35	0,91	607704	1,07	606404	182	73	12	34	120	**220**
150	45	1,73	607711	2,05	606411	188	102	20	56	156	**300**
200	50	2,19	607706	2,50	606406	236	102	20	56	156	**300**
80	30	0,52	607801	0,68	606421	107	73	12	40	120	**120**
100	30	0,60	607802	0,75	606422	128	73	12	35	120	**170**
125	35	0,80	607803	0,97	606423	156	73	12	37	120	**220**
150	35	0,93	607804	1,09	606424	182	73	12	34	120	**220**
150	45	1,75	607811	2,05	606431	188	102	20	56	156	**300**
200	50	2,22	607806	2,53	606426	236	102	20	56	156	**300**
80	30	0,55	604301	0,71	605501	107	73	12	40	120	**130**
100	30	0,62	604302	0,78	605502	128	73	12	35	120	**200**
125	35	0,80	604303	0,97	605503	156	73	12	37	120	**220**
150	45	1,34	604331	1,50	605511	188	102	20	56	156	**300**
160	50	2,02	604310	2,32	605510	193	102	20	56	156	**300**
200	50	2,37	604336	2,68	605506	236	102	20	56	156	**300**

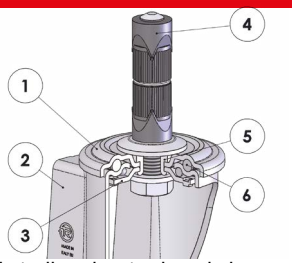
Options available to order



Fastening
with threaded stem

Standard-duty brackets NL - max carrying capacity 300 daN



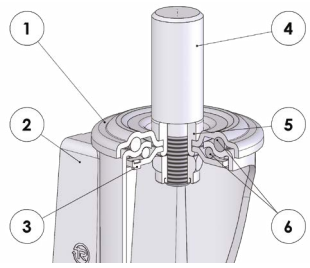


1) Plate: electrolytically galvanised steel plate
2) Fork: electrolytically galvanised steel plate
3) Ball race ring: electrolytically galvanised steel plate
4) Stem: zamak expander
5) King pin: bushing in electrolytically galvanised steel
6) Swivel actions: double ball ring with grease lubrication

Available with total front foot brake

mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	mm	4 km/h daN
80	30	0,63	609201	0,79	609301	109	73	20	65	20-24	40	120	**120**
100	30	0,70	609202	0,85	609302	130	73	20	65	20-24	35	120	**130**
125	35	0,90	609203	1,07	609303	158	73	20	65	20-24	37	120	**130**





1) Plate: electrolytically galvanised steel plate
2) Fork: electrolytically galvanised steel plate
3) Ball race ring: electrolytically galvanised steel plate
4) Solid stem: galvanised steel
5) King pin: bushing in electrolytically galvanised steel
6) Swivel actions: double ball ring with grease lubrication

Available with total front foot brake

mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	4 km/h daN
100	30	0,75	606102	0,90	606202	128	73	22	47	35	120	**170**
125	35	0,95	606103	1,12	606203	156	73	22	47	37	120	**220**
150	35	1,08	606104	1,24	606204	182	73	22	47	34	120	**220**
150	45	2,10	606111	2,40	606211	188	102	26	56	56	156	**300**
200	50	2,53	606106	2,84	606206	236	102	26	56	56	156	**300**

Options available to order



Bracket with Zama stem fitted with wheels with roller bearings and single ball bearing
d. 80-125 mm



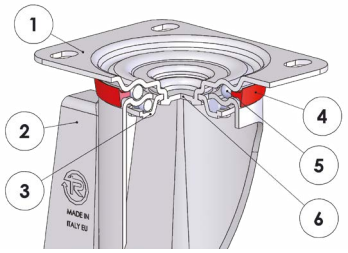
Connection with solid stem with dimensions that can be customised

RUOTE IN POLIURETANO TERMOPLASTICO CON NUCLEO IN POLIAMMIDE 6

Stainless steel standard-duty brackets NLX - max carrying capacity 300 daN

INOX





1) Plate: AISI 304 stainless steel
2) Fork: AISI 304 stainless steel
3) Ball race ring: AISI 304 stainless steel
4) Dust seal: orange polyethylene
5) Swivel actions: double ball ring with grease lubrication
6) King pin: integrated with the plate and cold-riveted

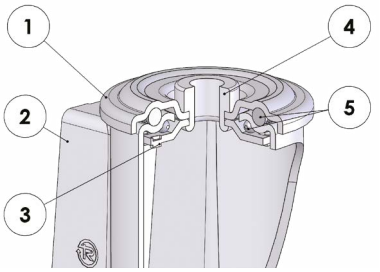
Available with total front foot brake

														4 km/h
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN
80	30	0,57	604401	0,42	605101	0,73	606701	107	100x85	80x60	9	40	120	**120**
100	30	0,64	604402	0,50	605102	0,80	606702	128	100x85	80x60	9	35	120	**170**
125	35	0,78	604403	0,66	605103	0,94	606703	156	100x85	80x60	9	37	120	**220**
150	35	1,06	604404	0,94	605104	1,22	606704	182	100x85	80x60	9	34	120	**220**
150	45	1,87	604411	1,73	605111	2,14	606711	194	140x110	105x80	11	56	156	**300**
200	50	2,28	604406	2,23	605106	2,57	606706	240	140x110	105x80	11	56	156	**300**
80	30	0,59	604601	0,44	605601	0,74	606721	107	100x85	80x60	9	40	120	**120**
100	30	0,66	604602	0,52	605602	0,82	606722	128	100x85	80x60	9	35	120	**170**
125	35	0,80	604603	0,68	605603	0,96	606723	156	100x85	80x60	9	37	120	**220**
150	35	0,92	604604	0,80	605604	1,08	606724	182	100x85	80x60	9	34	120	**220**
150	45	1,87	604611	1,73	605611	2,17	606731	194	140x110	105x80	11	56	156	**300**
200	50	2,31	604606	2,27	605606	2,60	606726	240	140x110	105x80	11	56	156	**300**
80	30	0,62	605401	0,47	605001	0,77	606901	107	100x85	80x60	9	40	120	**130**
100	30	0,69	605402	0,54	605002	0,85	606902	128	100x85	80x60	9	35	120	**200**
125	35	0,80	605403	0,68	605003	0,96	606903	156	100x85	80x60	9	37	120	**220**
150	45	2,00	605411	1,85	605011	2,29	606911	194	140x110	105x80	11	56	156	**300**
160	50	2,11	605410	1,96	605010	2,40	606910	199	140x110	105x80	11	56	156	**300**
200	50	2,46	605406	2,41	605006	2,75	606906	240	140x110	105x80	11	56	156	**300**

Stainless steel standard-duty brackets NLX - max carrying capacity 300 daN

INOX





1) Plate: AISI 304 stainless steel
2) Fork: AISI 304 stainless steel
3) Ball race ring: AISI 304 stainless steel
4) King pin: bushing in stainless steel
5) Swivel actions: double ball ring with grease lubrication

Available with total front foot brake

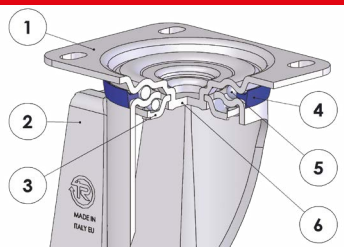
											4 km/h
mm	mm	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	daN
80	30	0,51	607901	0,67	608801	107	73	12	40	120	**120**
100	30	0,58	607902	0,73	608802	128	73	12	35	120	**170**
125	35	0,72	607903	0,88	608803	156	73	12	37	120	**220**
150	35	0,78	607904	0,94	608804	182	73	12	34	120	**220**
150	45	1,75	607911	2,05	608811	188	102	20	56	156	**300**
200	50	2,19	607906	2,50	608806	236	102	20	56	156	**300**
80	30	0,52	608001	0,68	608821	107	73	12	40	120	**120**
100	30	0,60	608002	0,75	608822	128	73	12	35	120	**170**
125	35	0,74	608003	0,90	608823	156	73	12	37	120	**220**
150	35	0,84	608004	1,00	608824	182	73	12	34	120	**220**
150	45	1,78	608011	2,08	608831	188	102	20	56	156	**300**
200	50	2,22	608006	2,53	608826	236	102	20	56	156	**300**
80	30	0,55	606301	0,71	606501	107	73	12	40	120	**130**
100	30	0,62	606302	0,78	606502	128	73	12	35	120	**200**
125	35	0,74	606303	0,90	606503	156	73	12	37	120	**220**
150	45	1,34	606311	1,50	606511	188	102	20	56	156	**300**
160	50	2,02	606310	2,32	606510	193	102	20	56	156	**300**
200	50	2,37	606306	2,68	606506	236	102	20	56	156	**300**

SERIES **60**

THERMOPLASTIC POLYURETHANE WHEELS WITH POLYAMIDE 6 CENTRE

Medium-duty brackets M - max carrying capacity 450 daN





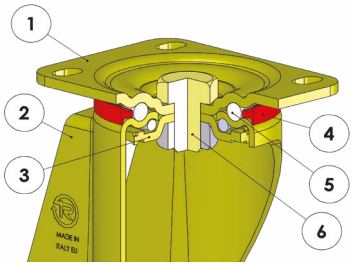
1) Plate: electrolytically galvanised steel plate
2) Fork: electrolytically galvanised steel plate
3) Ball race ring: electroplated galvanised steel
4) Dust seal: blue polyethylene
5) Swivel actions: double ball ring with grease lubrication
6) King pin: integrated with the plate and cold-riveted

Available with adjustable total front foot brake

		kg		kg		kg									4 km/h
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	
150	45	2,16	604311	1,70	605711	2,64	606811	194	140x110	105x80	11	58	178	**350**	
200	50	2,64	604306	2,23	605706	3,04	606806	240	140x110	105x80	11	50	178	**450**	
150	45	2,19	604711	1,73	605911	2,68	606831	194	140x110	105x80	11	58	178	**350**	
200	50	2,67	604706	2,27	605906	3,11	606826	240	140x110	105x80	11	50	178	**450**	
150	45	2,32	608411	1,85	604811	2,74	608911	194	140x110	105x80	11	58	178	**350**	
160	50	2,43	608410	2,96	604810	2,85	608910	199	140x110	105x80	11	58	178	**400**	
200	50	2,82	608406	2,41	604806	3,27	608906	240	140x110	105x80	11	50	178	**450**	

Medium-heavy duty brackets P - max carrying capacity 450 daN





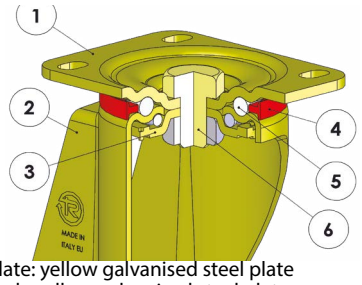
1) Plate: yellow galvanised steel plate
2) Fork: yellow galvanised steel plate
3) Ball race ring: yellow galvanised steel plate
4) Dust seal: orange polyamide
5) Swivel actions: double ball ring with grease lubrication
6) King pin: steel bolt in grade 8.8 steel and steel nut

Available with total front foot brake

		kg		kg		kg									4 km/h	6 km/h
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN	daN	
100	30	1,04	607102	0,63	608102	1,18	609002	138	100x85	80x60	9	46	123	**170**		
125	35	1,19	607103	0,74	608103	1,34	609003	161	100x85	80x60	9	44	123	**230**		
100	30	1,06	607302	0,65	608302	1,20	609102	138	100x85	80x60	9	46	123	**170**		
125	35	1,21	607303	0,76	608303	1,36	609103	161	100x85	80x60	9	44	123	**230**		
100	30	1,08	608202	0,67	608222	1,23	608242	138	100x85	80x60	9	46	123	**200**	**160**	
125	35	1,21	608203	0,76	608223	1,36	608243	161	100x85	80x60	9	44	123	**250**	**200**	

Medium-heavy duty brackets P - max carrying capacity 750 daN





1) Plate: yellow galvanised steel plate
2) Fork: yellow galvanised steel plate
3) Ball race ring: yellow galvanised steel plate
4) Dust seal: orange polyamide
5) Swivel actions: double ball ring with grease lubrication
6) King pin: steel bolt in grade 8.8 steel and steel nut

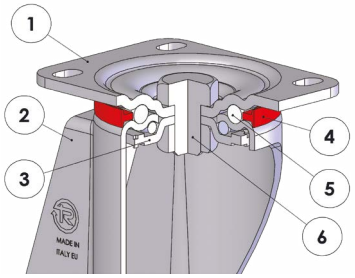
Available with adjustable total rear foot brake

															4 km/h	6 km/h
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN		
150	45	2,77	607604	1,85	608604	3,34	609004	200	140x110	105x80	11	70	126	**350**		
200	50	3,26	607606	2,40	608606	3,83	609006	250	140x110	105x80	11	70	126	**450**		
150	45	2,80	607504	1,88	608504	3,37	609104	200	140x110	105x80	11	70	126	**350**		
200	50	3,29	607506	2,44	608506	3,87	609106	250	140x110	105x80	11	70	126	**450**		
150	45	2,93	608211	2,01	608231	3,37	608251	200	140x110	105x80	11	70	126	**350**		
160	50	3,04	608210	2,12	608230	3,60	608250	205	140x110	105x80	11	70	126	**400**		
200	50	3,44	608206	2,58	608226	4,01	608246	250	140x110	105x80	11	70	126	**450**		
250	50	3,99	608208	3,13	608228	4,73	608248	298	140x110	105x80	11	66	126	**750**		

Stainless steel medium-heavy duty brackets PX - max carrying capacity 450 daN

INOX





1) Plate: AISI 304 stainless steel
2) Fork: AISI 304 stainless steel
3) Ball race ring: AISI 304 stainless steel
4) Dust seal: orange polyamide
5) Swivel actions: double ball ring with grease lubrication
6) King pin: screw and nut in stainless steel

Available with adjustable total rear foot brake

															4 km/h	6 km/h
mm	mm	kg	COD.	kg	COD.	kg	COD.	mm	mm	mm	mm	mm	mm	daN		
150	45	2,77	607004	1,85	607114	3,34	607214	200	140x110	105x80	11	70	126	**350**		
200	50	3,26	607006	2,40	607116	3,83	607216	250	140x110	105x80	11	70	126	**450**		
150	45	2,80	607314	1,88	607414	3,37	607514	200	140x110	105x80	11	70	126	**350**		
200	50	3,29	607316	2,44	607416	3,87	607516	250	140x110	105x80	11	70	126	**450**		
150	45	2,93	609411	2,01	609811	3,37	609911	200	140x110	105x80	11	70	126	**350**		
160	50	3,04	609410	2,12	609810	3,60	609910	205	140x110	105x80	11	70	126	**400**		
200	50	3,44	609406	2,58	609806	4,01	609906	250	140x110	105x80	11	70	126	**450**		