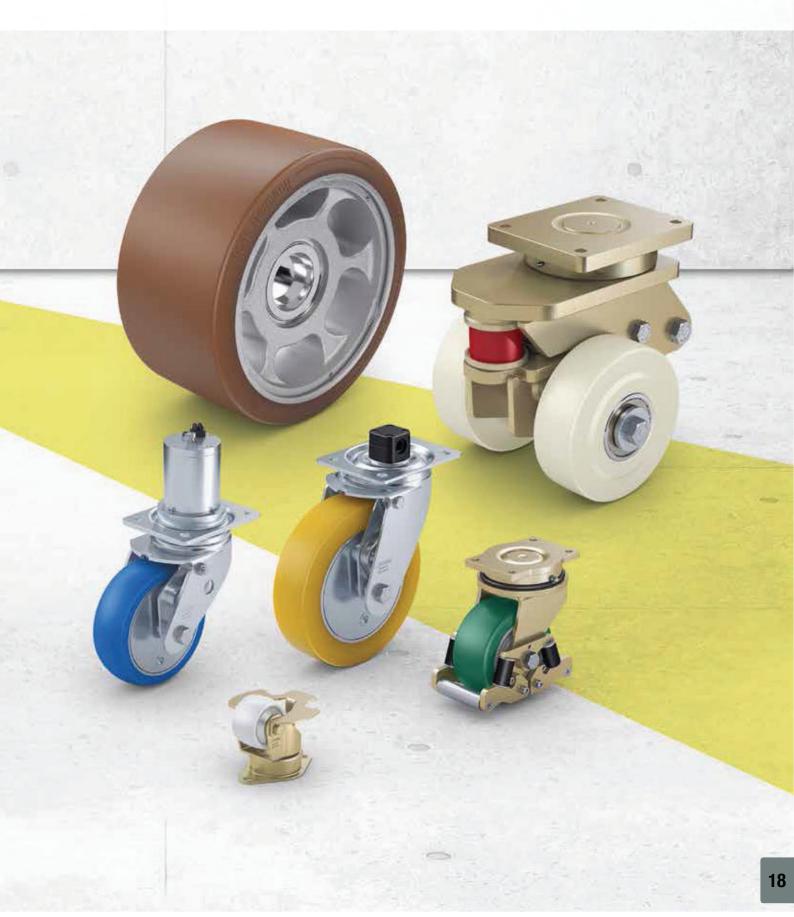
Contents

592–593	Customising
594–595	Castors with dead man's brake and drum brake
596–599	Brake and locking systems
600	Electric drive systems
601–604	Progressus wheels and castors
605	Wheels and castors with imperial measurements
606	Truck locks and jacks
607–608	Adapter plates and swivel heads
609–611	Wheels
612–613	Light-duty castors
614–615	Transport equipment castors
616–618	Heavy-duty castors
619	Stainless steel / synthetic / hygiene
620–621	Wheels and castors for forklift trucks, industrial trucks and AGV applications
622	Foot guard / wheel guard
623	Clamping and wheel sets







Listen. Consider. Realise.

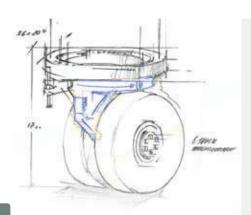
Our strength: Customise.

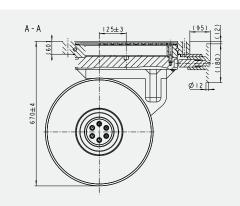


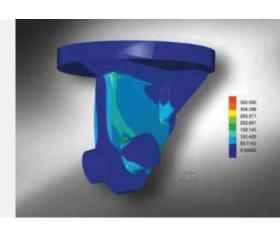
Your requirements. Our idea.

Design. Drawings.

Details. Calculation.









Listen. Consider. Realise.

Our strength: Customise.

In addition to our standard ranges, we also provide a wide range of tailored special solutions for customer-specific applications.

We aim to provide the perfect wheel or castor to meet any requirement. We will draw on our expertise and experience to develop your tailored special solution in partnership with you. You give us your requirements and we make them a reality. We handle every stage of the process: from the first design drawings through to calculations and the manufacturing itself.

The components for our extensive standard range are manufactured in large quantities using highly-automated processes. Special solutions are frequently based on these well-established standard components. This allows us to realise customer-specific solutions in a quick and cost-effective manner.







The perfect result: your individual solution.



Swivel castors with dead man's brake







Swivel castors with dead man's brake:

- Swivel castors with a dead man's brake are similar to drum-braked castors, but use an integrated spring for braking when the brake is not activated.
- The brake is activated by a hexagonal rod connected to the cam housing.
- The closed bracket design makes the brake shoes largely resistant to corrosion and dirt. This ensures that braking performance remains consistent regardless of moisture and dirt in the area.



Wheels: GEV series:

- tyres: high-quality elastic solid rubber in smooth rolling quality, hardness 65 Shore A, non-marking, grey
- wheel centre: made from robust grey cast iron, lacquered, colour silver
- brake mechanism: integrated into the wheel centre, zinc-plated, blue-passivated, Cr6-free



Swivel castors with a dead man's brake and swivel head brake:

- Swivel castors with a dead man's brake and swivel head brake are similar to drum-braked castors, but use an integrated spring for braking when the brake is not activated.
- Positive locking is used to stop the swivel head rotating.
- The brake is activated by a hexagonal rod connected to the cam housing.
- The closed bracket design makes the brake shoes largely resistant to corrosion and dirt. This ensures that braking performance remains consistent regardless of moisture and dirt in the area.



Wheels: GST series:

- tread: high-quality polyurethane-elastomer Blickle Softhane®, hardness 75 Shore A, colour green, non-marking, non-staining
- wheel centre: made from robust grey cast iron, lacquered, colour silver
- brake mechanism: integrated into the wheel centre, zinc-plated, blue-passivated, Cr6-free



Wheels: GTH series:

- tread: high-quality polyurethane-elastomer Blickle Extrathane®, hardness 92 Shore A, colour light brown, non-marking, non-staining
- wheel centre: made from robust grey cast iron, lacquered, colour silver
- brake mechanism: integrated into the wheel centre, zinc-plated, blue-passivated, Cr6-free

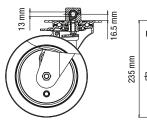
Swivel castors	Swivel castors with a	Wheel Ø	Wheel	Load	Bearing type	Total	Plate	Bolt hole	Bolt hole Ø	Width across	Offset
with dead man's	dead man's brake and		width	capacity		height	size	spacing		flats	
brake	swivel head brake	[mm]	[mm]	[kg]		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
L-GEV 200K-TM13-SG	L-GEV 200K-TTM13-SG	200	50	400	ball bearing	235	140 x 110	105 x 75–80	11	13	65
L-GST 200K-TM13	L-GST 200K-TTM13	200	50	400	ball bearing	235	140 x 110	105 x 75-80	11	13	65
L-GTH 200K-TM13	L-GTH 200K-TTM13	200	50	400	ball bearing	235	140 x 110	105 x 75–80	11	13	65

Braking can place swivel castors under a significant amount of additional stress, depending on the mass which needs to be braked. We recommend using an additional safety factor of 2.0-3.0 when designing the vehicle / chassis.



	directional lock (separate) 1 x 360°	other wheel designs	switching cam with width across flats 11 mm
Technical description page	115		
Product code suffix	RI-05.03	GB, GBS series	
Available for	all	upon request	upon request

- operating angle: max. 38°
- torque required to release the brake: < 10 Nm
- braking force: > 400 N





Fixed castors with drum brake and dead man's brake

召 450-900 kg





Fixed castors with drum brake:

- Fixed castors with a drum brake can be activated with a variety of features, e.g. a lever arm or a cable pull.
- The closed bracket design makes the brake shoes largely resistant to corrosion and dirt. This ensures that braking performance remains consistent regardless of moisture and dirt in the area.



Wheels: GEV series:

- tyres: high-quality elastic solid rubber in smooth rolling quality, hardness 65 Shore A, non-marking, grey or black
- wheel centre: made from robust grey cast iron, lacquered, colour silver
- brake mechanism: integrated into the wheel centre, zinc-plated, blue-passivated, Cr6-free



Fixed castors with dead man's brake:

- Fixed castors with a dead man's brake are similar to drum-braked castors, but use an integrated spring for braking when the brake is not activated. The brake can be released using a lever arm or cable pull.
- The closed bracket design makes the brake shoes largely resistant to corrosion and dirt. This ensures that braking performance remains consistent regardless of moisture and dirt in the area.



Wheels: GST series:

- tread: high-quality polyurethane-elastomer Blickle Softhane®, hardness 75 Shore A, colour green, non-marking, non-staining
- wheel centre: made from robust grey cast iron, lacquered, colour silver
- brake mechanism: integrated into the wheel centre, zinc-plated, blue-passivated, Cr6-free



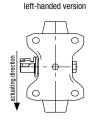
Wheels: GTH series:

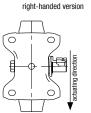
- tread: high-quality polyurethane-elastomer Blickle Extrathane®, hardness 92 Shore A, colour light brown, non-marking, non-staining
- wheel centre: made from robust grey cast iron, lacquered, colour silver
- brake mechanism: integrated into the wheel centre, zinc-plated, blue-passivated, Cr6-free

Fixed castors	Fixed castors	Wheel Ø	Wheel / tyre	Load	Bearing type	Total	Plate	Bolt hole	Bolt
with drum brake	with dead man's		width	capacity		height	size	spacing	hole Ø
	brake *	[mm]	[mm]	[kg]		[mm]	[mm]	[mm]	[mm]
B-GEV 160K-TB	B-GEV 160K-TM	160	50	450	ball bearing	195	140 x 110	105 x 75-80	11
B-GEV 160K-TB-SG	B-GEV 160K-TM-SG	160	50	450	ball bearing	195	140 x 110	105 x 75-80	11
B-GTH 160K-TB	B-GTH 160K-TM	160	50	600	ball bearing	195	140 x 110	105 x 75-80	11
BH-GTH 160K-TB	BH-GTH 160K-TM	160	50	800	ball bearing	202	140 x 110	105 x 75–80	11
B-GEV 200K-TB	B-GEV 200K-TM	200	50	600	ball bearing	235	140 x 110	105 x 75-80	11
B-GEV 200K-TB-SG	B-GEV 200K-TM-SG	200	50	600	ball bearing	235	140 x 110	105 x 75-80	11
B-GST 200K-TB	B-GST 200K-TM	200	50	600	ball bearing	235	140 x 110	105 x 75-80	11
B-GTH 200K-TB	B-GTH 200K-TM	200	50	600	ball bearing	235	140 x 110	105 x 75–80	11
BH-GST 200K-TB	BH-GST 200K-TM	200	50	800	ball bearing	245	140 x 110	105 x 75–80	11
BH-GTH 200K-TB	BH-GTH 200K-TM	200	50	900	ball bearing	245	140 x 110	105 x 75–80	11

^{*} L or R must be added to the product code for left-handed and right-handed versions.

- actuation path: approx. 10–12 mm
 approxing angle; approx. 12°, 15°
- operating angle: approx. 13°–15°
 actuation force: < 250 N
- actuation force: < 250 N
 braking force: > 500 N







Brake systems

Cable pull-operated drum brake



Fixed castor with drum brake

Cable pull-operated dead man's brake



Fixed castor with dead man's brake

Dead man's brake for hexagonal connection



Swivel castor with dead man's brake



Structure and function

- activated using a cable pull (as shown above) or lever arm
 when actuated, the brake shoes are pressed onto the cast wheel centre, which functions as a drum brake

- · consistently high braking force, even in wet conditions
- · short actuation path

More information

· A detailed description and overview of fixed castors with drum brakes is provided on page 595.



Structure and function

- activated using a cable pull (as shown above) or lever arm
 Before the brake is actuated, the spring presses the brake shoes onto the cast wheel centre, which functions as a drum brake.
- The brake releases when actuated.

Advantages

- consistently high braking force, even in wet conditions
- safety
- · short actuation path

More information

· A detailed description and overview of fixed castors with dead man's brakes is provided on page 595.



Structure and function

· can be activated by a hexagonal rod

Advantages

- · consistently high braking force, even in wet conditions
- · short actuation path

More information

A detailed description and overview of swivel castors with drum brakes is provided on page 594.



Brake systems for central foot operation

Two swivel castors connected with a brake lever



Swivel castor with "ideal-stop" brake

Two or four swivel castors connected with a rod



Swivel castor with "central-stop" brake

Multiple fixed castors connected with



Fixed castor with "central-stop" brake



Structure and function

- · brake lever does not swivel with the castor
- "ideal-stop" brake lever comes with holes as standard for easy fitting of a brake lever to connect two brake levers together

Advantages

- saves time as two castors can be braked and released with a single motion
- comfort
- occupational safety

More information

- for a technical description of the ideal-stop brake, see page 112
- available for Blickle LK, LH and LEX bracket series



Structure and function

- multiple swivel castors connected with a rod
 rods are connected to the cam housing of the castor using a hexagonal rod

Advantages

- · saves time as two or four castors can be braked with a single motion
- comfort
- · occupational safety
- small operating angle
- can be actuated from both sides of the trolley

More information

- for a technical description of the "central-stop" brake, please refer
- available for Blickle LE, L, LK and LH bracket series



Structure and function

- · multiple fixed castors connected with a rod
- rod connected to the cam housing within the bracket using a

Advantages

- saves time as multiple castors can be braked with a single motion
- · small operating angle

More information

- for a technical description of the "central-stop" brake, please refer to page 113
- special solution available upon request



Brake systems for central directional lock

Directional lock, can be retrofitted, operated with a foot pedal, latching



Swivel castor with mounted directional lock

Directional lock, can be retrofitted, operated with a foot pedal, selflatching



Swivel castor with mounted directional lock

Directional lock for hexagonal connection



Swivel castor with central directional lock



Structure and function

- · Directional locks (separate) are fitted to the top plate of the swivel castor. Actuating the brake lever removes the directional lock, allowing the castor to swivel.
- Pushing the brake lever upwards allows the castors to latch back in when travelling straight (blocks the swivel motion of the castors)

Advantages

- multiple directional locks connected together using a rod possible
- can be retrofitted to standard castors
- stability + flexibility at the workstation

More information

- see page 115 for technical information
 available for many Blickle bracket series



Structure and function

 Actuating the brake lever unlocks the directional lock, allowing the castor to swivel. When the swivel castor is aligned in the direction of travel, the spring moves the brake lever back to its latched

Advantages

- · can be retrofitted to standard castors
- · stability + flexibility at the workstation

More information

· special solution, available upon request



Structure and function

- · multiple swivel castors connected with a hexagonal rod
- · swivel castor is fixed using a pre-tensioned spring in the swivel head (converts swivel castor to fixed castor)
- castor can swivel again when the hexagonal rod is actuated

Advantages

 $\bullet\,$ When 6 castors are used per carriage, the central castors can function as fixed castors when the carriage is towed or moved laterally during manual operation.

More information

· special solution, available upon request



Brake systems for central directional brake





Swivel castor with cable pull directional lock

Directional lock for pull cable connection, can be retrofitted



Swivel castor with mounted directional lock

Directional lock for side actuation, can be retrofitted



Swivel castor with mounted directional lock



Structure and function

- directional lock integrated into the bracket
 directional lock released using a cable pull

Advantages

· can be actuated by hand

More information

· special solution, available upon request



Structure and function

• threaded hole for connecting a cable pull

More information

• special solution, available upon request



Structure and function

- brake lever is actuated in a horizontal direction rather than in vertical direction
- · suitable for applications with limited space

More information

· special solution, available upon request



Electric drive systems

Minimum force required to move and control



The modular drive systems in the ErgoMove series consist of electrically-driven fixed castors, standardised controls and Blickle cockpit solutions. They are used for high-performance applications where ergonomics is an important factor. The physical strain on the operator is reduced significantly during internal material transport due to considerably less amount of effort required compared to manual operation.

The ErgoMove drive systems are designed for a variety of transport equipment, trailer systems and special applications with an overall weight of up to 4,000 kg. The high thrust of up to 2 x 55 daN ensures that the operator uses much less force. The integrated dead man's brake system guarantees safe operation in accordance with DIN EN 1175-1 (Safety of industrial trucks-Electrical requirements).



Electrically-driven fixed castor



Ergonomic cockpit







Progressus wheels and castors

Corrosion-resistant castors with enclosed swivel head for demanding requirements



The high-quality stainless steel products of Progressus compliments Blickle's comprehensive range of wheels and castors. Progressus' products are well-established in the medical, chemical and food industries.

The unique enclosed and sealed swivel head meets the most demanding hygiene and cleanliness standards. In addition to medical facilities, these castors are particularly well-suited for wet environments like industrial kitchens, butcher shops and dairies.

Progressus also provides premium hospital bed castors for highly sensitive areas.



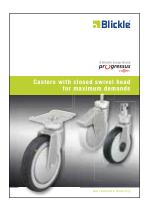
Corrosion-resistant castors with enclosed swivel head



Hospital bed castors with enclosed swivel head



Additional information is provided in our special brochure "Progressus castors - Castors with closed swivel head for maximum demands"





Wheels with elastic solid rubber tyres and thermoplastic polyurethane tread, with aluminium wheel centre



∏=

-25 °C to +134 °C

Tread:

PGV series:

- high-quality elastic solid rubber in smooth rolling quality, hardness 80 Shore A
- · outstanding operational comfort
- excellent floor preservation, low-noise operation
- low rolling resistance
- · colour grey, non-marking

ALEV series:

- high-quality elastic solid rubber in smooth rolling quality, hardness 80 Shore A
- outstanding operational comfort
- excellent floor preservation, low-noise operation
- · low rolling resistance
- · colour grey, non-marking
- · vulcanised onto the wheel centre

ALTPU series:

- high-quality thermoplastic polyurethane (TPU), hardness 92 Shore A
- · low rolling and swivel resistance
- · high abrasion resistance
- colour dark grey, non-marking, non-staining

Wheel centre:

- PGV series: die-cast aluminium, bolted
- ALEV/ALTPU series: die-cast aluminium

Other features:

- PGV/ALTPU series: temperature resistance from -25 °C to +134 °C
- PGV series: resistant to disinfectant, hydrogen peroxide and benzine
- PGV/ALTPU series: suitable for autoclaves
- · ALTPU series: electrically conductive

Additional details:

- wheel series: page 82
- bearing types: page 84-85
- chemical resistance: page 51





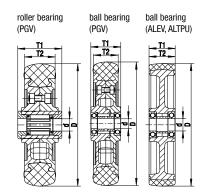
Wheels	Wheel Ø (D) [mm]	Tyre width (T2) [mm]	Load capacity [kg]	Bearing type	Axle bore Ø (d) [mm]	Hub length (T1) [mm]
PGV series						
PGV 84/10XR-SG	84	24	90	roller bearing	10	30
PGV 105/10XR-SG	105	24	120	roller bearing	10	30
PGV 120/12XR-SG	120	30	150	roller bearing	12	43
PGV 150/12XK-SG	150	30	200	ball bearing	12	36
PGV 186/25XK-SG	186	38	200	ball bearing	25	42*
ALEV series						
ALEV 151/15XK-SG	150	32	200	ball bearing	15	32
ALTPU series						
ALTPU 120/15XK-ELS	120	32	120	ball bearing	15	32
ALTPU 125/15XK-ELS	125	32	120	ball bearing	15	32
ALTPU 150/15XK-ELS	150	32	150	ball bearing	15	32

Versions / options

* Clamping length = 40 mm



electrically conductive version, black tyre	electrically conductive version, black tyre
50	50
-EL	-EL
PGV series all	ALEV series all
	version, black tyre 50 -EL PGV series





Corrosion-resistant castors with top plate, wheel with elastic solid rubber tyres



-25 °C to +134 °C

Bracket: LPX/BPX series:

- high-quality chromium-nickel steel (1.4301 / AISI304), corrosion-resistant, vibration-ground finished
- all parts including axle material are corrosion-resistant

Swivel bracket:

- four-point ball bearing for optimal absorption of vertical and horizontal forces
- hardened precision fork head made from corrosion-resistant steel (1.4034 / AISI420)
- excellent swivel characteristics, particularly resistant to impact and shocks
- · grease nipple



- tread: high-quality elastic solid rubber in smooth rolling quality, hardness 80 Shore A, colour grey, non-marking
- · wheel centre: die-cast aluminium, bolted

Other features:

· suitable for autoclaves

Additional details:

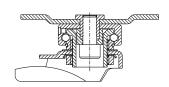
- bracket series: page 102
- brakes: page 112
- wheel series: page 602
- bearing types: page 84–85











Swivel castors	Fixed castors	Swivel castor with	Wheel Ø	Tyre	Load	Bearing type	Total	Plate	Bolt hole	Bolt	Offset of the
		"stop-fix" brake		width	capacity		height	size	spacing	hole Ø	swivel castor
		•	[mm]	[mm]	[kg]		[mm]	[mm]	[mm]	[mm]	[mm]
LPX-PGV 84XR-PG1-SG-FA	BPX-PGV 84XR-PG1-SG-FA		84	24	90	roller bearing	124	100 x 60	82 x 42	8.5	33
LPX-PGV 105XR-PG1-SG-FA	BPX-PGV 105XR-PG1-SG-FA		105	24	120	roller bearing	146	100 x 60	82 x 42	8.5	30
LPX-PGV 120XR-PG2-SG-FA	BPX-PGV 120XR-PG2-SG-FA	LPX-PGV 120XR-PG2-FI-SG-FA	120	30	150	roller bearing	164	120 x 80	100 x 60	11	45
LPX-PGV 150XK-PG2-SG-FA	BPX-PGV 150XK-PG2-SG-FA	LPX-PGV 150XK-PG2-FI-SG-FA	150	30	200	ball bearing	195	120 x 80	100 x 60	11	45
LPX-PGV 186XK-PG3-SG-FA	BPX-PGV 186XK-PG3-SG-FA	LPX-PGV 186XK-PG3-FI-SG-FA	186	38	200	ball bearing	236	140 x 80	110 x 50	11	55

Versions / options



	electrically conductive version, black tyre	with side wheel brake	with directional lock	other plate dimensions
Technical description page	50		115	
Product code suffix	-EL	-SRA	-RI	
Available for	all	all	wheel Ø 120–186 mm upon request	upon request



Hospital bed castors with fitting and integrated switching cam, with central brake system



-25 °C to +134 °C

Bracket: LPZ series:

- high-quality chromium-nickel steel (1.4301 / AISI304), corrosion-resistant, vibration-ground finished
- four-point ball bearing for optimal absorption of vertical and horizontal forces
- hardened precision fork head made from chromed heat-treatable steel
- excellent swivel characteristics, particularly resistant to impact and shocks
- stem fitting with hexagonal switching cams
- · grease nipple

Wheels: ALEV/ALTPU series

· tread:

ALEV series: high-quality elastic solid rubber in smooth rolling quality, hardness 80 Shore A, colour grey, non-marking

ALTPU series: high-quality thermoplastic polyurethane (TPU), hardness 92 Shore A, colour dark grey, non-marking, non-staining

wheel centre: die-cast aluminium

Other features:

- ALTPU series: temperature resistant between -25 °C and +134 °C
- ALEV series: temperature resistant between -25 °C and +80 °C; up to +100 °C for short
 Alexander of the series of the se
- ALTPU series: suitable for autoclaves, electrically conductive

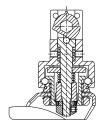
Additional details:

- bracket series: page 102
- brakes: page 113
- wheel series: page 602
- bearing types: page 84–85









Swivel castors	Wheel Ø [mm]	Tyre width [mm]	Load capacity [kg]	Bearing type	Total height [mm]	Stem Ø [mm]	Stem length [mm]	Operating angle	Width across flats [mm]	Offset [mm]
ALEV series										
LPZ-ALEV 151XK-CS11-SG-FA	150	32	200	ball bearing	194	32	50	2 x 30°	11	43
ALTPU series										
LPZ-ALTPU 150XK-CS11-ELS-FA	150	32	150	ball bearing	194	32	50	2 x 30°	11	43

Versions / options switching cam with electrically conductive with central and load-dependent different special colours version, black tyre directional lock directional latch with operating angle flat design (electrostatic powder ball pressure screw (D profile) coating) 50 Technical description page -EL -CS11RI2 -RIR22 Product code suffix Available for ALEV series upon request upon request upon request upon request



Wheels and castors with imperial measurements



In addition to castors designed to metric standards, Blickle also provides wheels and castors with special inch dimensions in accordance with US standards (ANSI ICWM:2012, ASME B56.11.1).

Top plate fittings, mounting heights and wheel dimensions were designed specifically to meet the requirements of the US market.

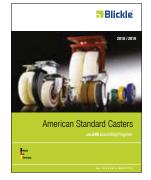
The Blickle "American Standard Casters" range is complemented by the special Blickle LEH bracket series. Using a hardened bearing seat makes it possible for even light-duty brackets to reach load capacities of up to 570 kg (1,250 lbs). The LEH bracket series is available in combination with the plate size 4" x 4 $\frac{1}{2}$ ".



Pressed steel castors in inches with top plate fitting 2 ½" x 3 %" and 4" x 4 ½"



Welded heavy-duty castors in inches with top plate fitting 4 $\frac{1}{2}$ " x 6 $\frac{1}{4}$ "



Additional information is provided in our special brochure "American Standard Casters"



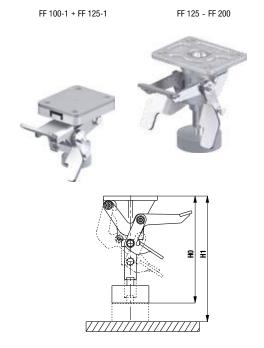
Truck locks and jacks

Truck locks

Truck locks keep transport equipment in a resting position. They are attached directly to the transport equipment. Operating the pedal takes some of the load off the transport equipment without raising it up.

When operated, the truck lock deflects by approximately 10 mm. The maximum surface contact pressure in combination with suitable swivel and fixed castors amounts to approx. 60 kg. The following truck lock with a plate size of 100×85 mm can be combined with the LE, L and LK castor series. The truck locks with a plate size of 140×110 mm can be combined with the LK (wheel Ø 125×50 -200 mm) LH, LO and LS castor series. Other versions are available upon request. Zinc-plated, blue-passivated,

Product code	Total height	Total height	Plate size	Bolt hole	Bolt hole
	unactuated	actuated,		spacing	diameter
		extended			
	(H0) [mm]	(H1) [mm]	[mm]	[mm]	[mm]
FF 100-1	108	138	100 x 85	80 x 60	9
FF 125-1	133	163	100 x 85	80 x 60	9
FF 125	142	180	140 x 110	105 x 75-80	12.3
FF 150	170	208	140 x 110	105 x 75-80	12.3
FF 160	175	213	140 x 110	105 x 75-80	12.3
FF 200	217	255	140 x 110	105 x 75-80	12.3



Jacks

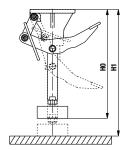
Jacks are used to raise transport equipment up in their resting position. They are attached directly to the transport equipment. Actuating the pedal raises the transport equipment up.

Jacks can be combined with a wide range of castor series. Jacks perform at their best when the total height of the actuated jack (H1) exceeds the total height of the fixed and swivel castors by 5 mm.

Depending on the weight of the operator, they can provide a lifting force of between 150 kg and 250 kg. The vertical load on the jack must not exceed 500 kg when raised. Zinc-plated, blue-passivated, Cr6-free.

Product code	Total height	Total height	Plate size	Bolt hole	Bolt
	unactuated	actuated		spacing	hole Ø
	(H0) [mm]	(H1) [mm]	[mm]	[mm]	[mm]
WH 160	166	209	140 x 110	105 x 75-80	12.3
WH 200	207	250	140 x 110	105 x 75-80	12.3
WH 250	257	300	140 x 110	105 x 75-80	12.3







Adapter plates

Adapter plates can be used to compensate for differences between the mounting height of different castors. Adapter plates can also be used to modify the mounting height of the transport eqipment. Adapter plates are available in steel (zinc-plated, blue-passivated, Cr6-free) and synthetic (nylon, black) designs. Untreated steel adapter plates are also available for welding upon request.

Steel adapter plates, zinc-plated

Product code	Plate	Bolt hole	Bolt hole	Height
	size	spacing	diameter	
	[mm]	[mm]	[mm]	[mm]
APS1-02,5	100 x 85	80 x 60	9	2.5
APS1-08	100 x 85	80 x 60	9	8
APS3-04	140 x 110	105 x 75–80	11	4
APS3-08	140 x 110	105 x 75–80	11	8
APS3-10	140 x 110	105 x 75–80	11	10



Synthetic adapter plates

Product code	Plate size [mm]	Bolt hole spacing [mm]	Bolt hole diameter [mm]	Height [mm]
AP1-10	100 x 85	80 x 60	9	10
AP3-17	140 x 110	105 x 75–80	11	17



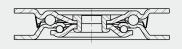


Swivel heads

Swivel heads can be used for a wide variety of applications: rotating plates, rotating platforms, flatbed turntables or axle-pivot steering systems. When combined with standard fixed castors, they can provide castor systems without an offset, which are easy to steer.



DK-L series



- · pressed steel
- · double ball bearing
- · strong central kingpin

Blickle riveting process

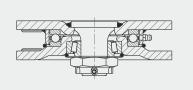
- · swivel head seal • minimum swivel head play and smooth rolling characteristic and increased service life thanks to the special dynamic
- zinc-plated, blue-passivated, Cr6-free

DK-LUH series



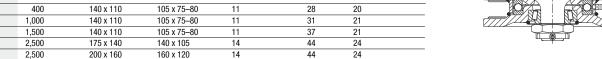
- · strong pressed steel
- four-point ball bearing for extremely heavy loads
- · enclosed and sealed swivel head
- particularly resistant to impact and shocks due to specially-sha-
- ped hardened bearing seats
 zinc-plated, blue-passivated, Cr6-free

DK-LS series



- · particularly robust welded steel construction
- axial grooved ball bearing ISO 104 and tapered roller bearing
- welded central kingpin, extremely stable, bolted and secured
- · dust and splash-proof
- · grease nipple
- zinc-plated, yellow-passivated, Cr6-free

Swivel	Load capacity*	Plate	Bolt hole	Bolt	Flange plate	Flange plate internal
heads		size	spacing	hole Ø	height (A)	clearance (B)
	[kg]	[mm]	[mm]	[mm]	[mm]	[mm]
DK-L-3	400	140 x 110	105 x 75–80	11	28	20
DK-LUH-3	1,000	140 x 110	105 x 75–80	11	31	21
DK-LS-3	1,500	140 x 110	105 x 75-80	11	37	21
DK-LS-35	2,500	175 x 140	140 x 105	14	44	24
DK-LS-36	2,500	200 x 160	160 x 120	14	44	24
DK-LS-38	5,500	255 x 200	210 x 160	18	60	25





Guide rollers





- impact-resistant special synthetics
- \bullet temperature resistance: up to 300 $^{\circ}\text{C}$

Guide roller as end wheel version for external applications



- synthetic wheel centres with polyurethane tread
- wheel centre sealed on one side to protect against corrosion

Guide roller for intralogistics robots



- drive wheel with polyurethane tread
- · electrostatically conductive
- individual laser marking

4 Guide roller for sorting systems



- polyurethane tread with optimised rolling resistance
- · electrostatically conductive
- optimised for constant use (24/7)

5 Transport roller for rubber belt drives



• polyurethane tread with groove for rubber belt drives

6 Precision guide roller



- vibration-absorbing polyurethane tread
- · high precision

7 Guide roller for wet areas



- UV-resistant tread made from TPE
- integrated holes for fixing a magnetic holder

Double pulley with additional locking mechanism



- wheel centre made of special synthetic material for two wire
- if the cable under load breaks, the other cable performs an emergency stop function

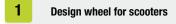
9 Compact pulley for warehouse logistics



- nylon wheel centre
- special ball bearing, stabilised to prevent tipping, with special inner ring



Running wheels





- tread made from thermoplastic polyurethane
- · spoked wheel with central ball bearing
- individual special colour

Design wheel for golf carts



- foam tyres for a high level of operational comfort, even on unpaved surfaces
- · weight-optimised wheel with wide tread

3 **Rollers for Mecanum wheels**



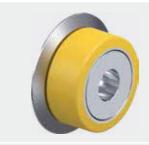
• FEM-optimised tread and wheel centre geometries for high load capacities

4 Flame-resistant heavy-duty wheel (DIN EN 45545)



- · wheel made from flame-retardant nylon
- · special seal with sea water-resistant grease

5 Flanged wheel with pressed-on polyurethane band



- · vibration-absorbing polyurethane tread provides ideal
- movement on rail profile
- · also used as a drive wheel due to high traction

Heavy-duty wheel for high-rack



- · for heavy dynamic loads
- · weight-optimised wheel centre design
- · bayonet brake for wheel cover

7 Heavy-duty wheel for bulldozers



- elastic solid rubber press-on band on cast nylon wheel centre
- · corrosion-resistant version

8 Double flanged wheel with special tread geometry



- concave tread for ideal motion on round tubes
- · synthetic wheel centres to save weight

Heavy-duty wheel for circular welding equipment



- · polyurethane tread
- diameter up to 1,000 mm
- load capacity up to 50,000 kg
- · designed for drum applications



Drive wheels

Drive wheel for construction equipment



- elastic solid rubber press-on band and robust, lacquered steel wheel centre
- · gear with internal or external gearing

Drive wheel with hub keyway for cleaning equipment



- · foam-filled tyres (puncture-proof)
- maintenance-free

Heavy-duty drive wheel for wet cleaning equipment



- slip-resistant rubber compound on a cast wheel centre with
 hub konwoy
- hub keyway

 non-marking, oil-resistant, high traction in wet areas

Heavy-duty drive wheel with tapered tread



- shrink fit cast nylon press-on band
- steel wheel centre for fixing on conical element

Heavy-duty drive roller for circular welding equipment



- roller with polyurethane tread
- · wheel width of up to 1,000 mm
- load capacities: up to 100,000 kg

Drive wheel with extremely high grip in difficult conditions



- reinforced synthetic rim for use in aggressive environments
- secure torque transmission, even with low air pressure

7 Heavy-duty wheel for chain drives



- polyurethane tread
- · cast wheel centres with hub fitting for pinion

8 Chain wheel made of cast nylon



- stainless steel drive hub for extremely high torque
- transmission cast and inseparable individual wheel centre design

Heavy-duty drive wheel for external



- · multicomponent tyre on cast nylon wheel centre
- corrosion-resistant version



Light-duty castors

Light-duty castors are our small all-rounders with an already high load capacity. Light-duty castors are mainly used indoors on equipment and devices like shop equipment, laboratory equipment, furniture, sport equipment and industrial kitchen equipment.

Blickle light-duty castors offer high maneuverability, smooth rolling performance and low rolling resistance with a low unit weight. We provide a wide range of solutions, the majority of which are integrated into end products.





- fixed using central threaded hole with thread brake
- combines the advantages of a top plate fitting with a bolt hole

NSF-certified light-duty swivel castor with special top plate



- small gaps to meet demanding hygiene and cleanliness requirements
- wheel bearing protected with synthetic thread guard

Light-duty swivel castor with wheel brake



 wheel brake can be activated in areas that are difficult to access or covered by bracket sections

Cleanroom light-duty swivel castor with special fitting



- · bracket chromed
- · electrically conductive
- suitable for clean rooms in ISO class 4 according to DIN EN ISO 14644-1

5 Spring-loaded swivel castor



- stem fitting with integrated suspension and fixing tab
- ladder lowers to the ground under load

6 Light-duty swivel castor with special fixing for square tubes



- swivel castor with fixing option for horizontal square tubes
- suitable for easy horizontal movement



Light-duty castors

7 Light-duty swivel castor with special fixing for aluminium profiles



- bracket and thread guard electrostatic powder-coated
- · optimised corrosion protection
- electrically conductive
- Light-duty swivel castor with reduced interference circle



- special brake lever design for reduced interference circle
- fixing bolt pressed in the bolt hole for easy assembly
- Light-duty twin wheel swivel castor with foot guard



- steel foot guard for increased occupational safety
- electrically conductive version

Light-duty swivel castor with central locking for patient wheelchairs



- central and directional lock, can be operated separately
- grooved ball bearing integrated into swivel head with reduced
 tilt
- Light-duty swivel castor for sport equipment



- · compact top plate fitting
- bracket electrostatic powder-coated, excellent corrosion protection
- · electrically conductive
- Light-duty twin wheel swivel castor with load-dependent wheel brake



- bracket with integrated suspension allowing for wheel braking
 under lead.
- spring tension tailored to application

9 Light-duty swivel castor with central wheel and swivel head brake



- · central brake system combined with stem fitting
- high level of operational comfort thanks to elastic solid rubber tyres, non-marking
- Light-duty twin wheel swivel castor for operating tables



- sealed swivel head and wheel bearing
- chromed bracket, compact design, electrical conductive
- Electrically conductive spring-loaded light-duty swivel castor



• castor in electrically conductive version as fifth wheel to ensure dissipation of electrostatic charge



Transport equipment castors

Transport equipment castors are used for a variety of industrial applications. They have a load capacity of up to 1,000 kg and are used both indoors and outdoors. Our transport equipment castors are used on transport carts, machines, scaffolding and waste containers.

Blickle's special solutions are used to meet special requirements. Our solutions come from our expertise in materials and production technology, our creative approach and our many years of experience.





- fixing dimensions and mounting heights in inches, specifically for the US market
- please request our "American Standard Casters" catalogue

2 Air Cargo castor



- synthetic wheel with high-impact resistance
- bracket with enclosed swivel head

3 Triple wheels swivel castor



particularly good floor preservation due to extremely low floor pressure

Scaffolding castor with wheel and swivel head brake



- · leading brake
- stem fitting with cross hole for easy installation on scaffolding cross hole

Scaffolding castor with adjustable offset and special wheel and swivel head brake



- adjustable offset for easy handling and high load capacity
- brake can be actuated on both sides

Scaffolding castor with adjustable offset and height adjustment



- · adjustable offset for easy handling and high load capacity
- spindle to compensate for height differences



Transport equipment castors

7 Swivel castor with combined total and directional lock



- directional lock with cable pull connection and four latching positions
- brake lever with particularly low force required to actuate and release the brake

8 Levelling castor for mobile industrial robots



 integrated truck lock with adjustable tilt and threaded spindle for fixing the castor to the base 9 Swivel castor for mobile hospital beds



- two-row angular contact ball bearing for a particularly robust swivel head
- · compact design with integrated direction reset device

Swivel castor with extended release lever



- easier to release the brake lever in tight spaces
- · easier to operate with safety shoes

Swivel castor with special brake release lever



wheel brake with shortened release lever for tight spaces

Detachable support castor for platform applications



- domed anchor nuts for quick attachment
- · adjustable height thanks to thread in stem fitting

Swivel castor with "ideal-stop" and additional release lever



- all parts of the locking system are fixed and always accessible
- brake released by actuating the release lever from above

14 Fixed castor with wheel brake



· brakes a unit in place

15 Fixed castor with dead man's brake



- brake can be controlled with cable pull or Bowden cable
- dead man's brake on the tread



Heavy-duty castors

Blickle heavy-duty castors are designed for use in tough conditions. Blickle heavy-duty castors provide ergonomic handling, an increased service life and good floor preservation whenever high load capacities or high speeds are required in small spaces. They have a particularly stable design and particularly robust bearings.

Highly-tailored solutions are frequently required for special applications. We can provide the perfect solution for every application, whether that might be a castor with mounting height adjustment, special fittings, a reduced interference circle or spring-loaded applications.





- · triple castor for optimised rotation
- low mounting height
 block brooket curfor
- black bracket surface finish

Heavy-duty triple castor for transport platforms



- · triple castor for optimised rotation
- low mounting height

Heavy-duty tandem roller for use on rails



- compact design with extremely high load capacity
- optimised load distribution thanks to rocker design

Heavy-duty swivel castor with direction reset device



- · direction reset device with latch function
- castor aligned after lowering the plate

5 Eight fixed castors for heavy loads



· excellent load capacity and low mounting height

Swivel castor with no offset for 4-wheel steering



- swivel castor with no offset for pivoting the wheel on the spot
- fixing tab for forced steering of the castor



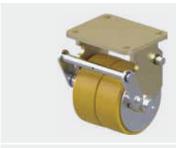
Heavy-duty castors

7 Heavy-duty swivel castor for cleaning equipment



- · outdoor application
- castor screwed on vertically with special fixing tab

Heavy-duty twin wheel fixed castor with integrated drum brake



drum brake can be activated using a cable pull

9 Fixed castor with flanged motor



- · fixed castor with polyurethane tread
- brushless DC motor with electro-mechanical brake system

Stabiliser castor for forklift trucks with special fitting



- installed using top plate fitting with guide stem
- compact design with swivel head bearing in stem fitting
 wivel forth in formed design
- swivel fork in forged design

Heavy-duty twin wheel swivel castor with special directional lock



- directional lock with pluggable direction restriction system
- castor can be rotated on the spot using a tube (connector on bracket)

Swivel castor with electromagnetic drum brake and swivel head brake



- electromagnetic mechanism
- simultaneous swivel head brake and wheel brake

13 Chain steering system



- precise maneuvering of pushed trailers in tight spaces with minimum effort
- 90° lateral motion possible
- precise and tight turning circles for pulled units
- primarily for trailers with a total weight of 300-1,000 kg and max. speed of 6 km/h



Special systems and solutions **Heavy-duty spring-loaded castors**

Heavy-duty spring-loaded twin wheel

swivel castor for aircraft maintenance



• suspension makes it possible to lower the castor under load

2 Spring-loaded heavy-duty swivel



- · compact design
- · polyurethane spring for absorption

Height-adjustable heavy-duty twin wheel swivel castor



- · height adjustment
- · height of castor can be adjusted to change the contact pressure of the drive wheel

Spring-loaded heavy-duty fixed castor with special fitting



· fixed with special flange plate

5 Spring-loaded heavy-duty twin wheel



- · specially-tailored spring tension
- twin wheel system for easier handling

Heavy-duty swivel castor with multicomponent tyres



- · bracket with special direction reset device
- · special fixing plate

7 Heavy-duty spring-loaded twin wheel swivel castor for aircraft maintenance



- suspension for optimised operation on uneven surfaces
- · directional lock for stable movement

8 Spring-loaded heavy-duty twin wheel



- · wheels made of cast nylon
- · hinged polyurethane plate construction

Spring-loaded heavy-duty swivel castor for trailer applications



- no offset, making it possible to swivel on the spot
- · fixing tab for forced steering of the castor



Stainless steel / synthetic / hygiene

- Detectable synthetic wheel for food production
- · wheel centre in blue with metal fibres
- wheel particles can be detected in food production processes

Stainless steel swivel castor with enclosed swivel head for medical applications



- heat-resistant hub disc wheel with exchangeable rubber tyres
- · suitable for autoclaves

Stainless steel swivel castor with direction reset device



- · additional directional lock can be provided in two positions
- suitable for machine washing in accordance with DIN 18867-8

Pressed steel swivel castor, bracket with zinc-nickel coating



- long-term corrosion protection for the bracket
- · alternative to stainless steel bracket
- (approx. 720 h in salt spray test)
- 7 Stainless steel swivel castor for AGV applications



- · particularly low castor width
- internal axle screw fitting with no protrusion
- · automatic direction reset device

5 Synthetic twin wheel swivel castor for industrial kitchen applications



- extremely small gaps to meet demanding hygiene
- requirements
- · optional dead man's brake available with cable pull connection available
- 8 Stainless steel swivel castor for AGV



- · low castor width
- · automatic direction reset device
- suitable for machine washing in accordance with DIN 18867-8

Corrosion-resistant stainless steel swivel castor for the food industry



- · with grease nipple and additional seal in the swivel head
- Stainless steel piano castor



- · high-quality design
- · wheel and bracket made of stainless steel
- · wheel brake for manual actuation



Wheels and castors for forklift trucks and industrial trucks

The running gear of industrial trucks and forklift trucks are subject to a wide range of specific requirements due to their variety of application conditions. These include the dimensions of fittings and the installation area, or suspension and vibration absorption properties for specific vehicles.

Over the past few decades, we have developed a wide range of solutions in close collaboration with our customers tailored to their specific requirements. We continue to implement this on the basis of our extensive experience derived from working together with a wide range of renowned manufacturers of industrial trucks. The products described below are a selection of the solutions we have provided for clients.





- · ultra-compact castor structure
- · components in forged design

4

Stabiliser for industrial trucks



- · height of castor can be adjusted to change the contact pressure of the drive wheel

2 Stabiliser for industrial trucks



· hydraulic damper for stability

3



Suspension unit for industrial trucks

- · ensures optimal load on the drive wheel
- · adjustable spring tension

5 Stabiliser for industrial trucks



- height can be adjusted to generate the optimum pressure on the drive wheel
- suspension

Heavy-duty stabiliser for industrial



- · height adjustment
- · height of castor can be adjusted to change the contact pressure of the drive wheel
- · twin castor version for improved swiveling



Wheels and castors for AGV applications

Automated guided vehicles (AGV) place significant demands on wheels and castors in very small installation areas. Castors for AGV have a much higher level of operational performance compared to standard castors as they are frequently in permanent use. Because of these application conditions, automated guided vehicles frequently require wheel tread designs that are specifically optimised for AGV applications and ball bearings that are designed for permanent operation.

Some bracket solutions are designed specifically for AGV applications and guarantee a long service life and maintenance-free operation. From ultra-compact swivel castors through to heavy-duty solutions with electromagnetic braking systems, Blickle has a wide range of solutions for AGV applications.

Heavy-duty wheel with optimised tread geometry



- extremely high load capacities at low speed when in constant use
- ball bearing designed specifically for constant use

2 Compact AGV castor with stem fitting



- compact castor with small offset for simultaneous heavy loads
- easy installation with positive locking holder and threaded stem

3 Precision swivel castor for AGV



- very compact design with extremely low mounting height
- special ball bearing swivel head for excellent operational performance

4 Compact drive wheel for AGV objects



 polyurethane tread with special colour for high load capacities and low swivel and rolling resistance

5 Spring-loaded AGV swivel castor



- compact design and small offset for high maneuverability
- the suspension ensures that the wheels remain in contact with the ground at all times

6 Swivel castor with electromagnetic dead man's brake



- extremely high brake retaining forces
- AGV safety component used in an emergency or in the event of a power cut (brakes close)



Foot guard / wheel guard

All of Blickle's foot guard solutions have a common goal: improving occupational safety. Blickle foot guard solutions prevent wheels or fast moving objects from causing foot injuries. In addition to protecting vehicle operators, they minimise the risk of the wheel being damaged by large objects in the path of the vehicle.

Blickle provides a variety of plastic, steel and spring-loaded foot guard solutions. The castors can also be fitted with cleaning brushes and wipers. These remove dirt and small items to protect both the tread and the floor.





 parallel guide makes sure the foot guard is always parallel to and a constant distance from the floor

2 Heavy-duty swivel castor with wiper



• wiper unit protects the wheel against obstacles

3 Castor with spring-loaded foot guard



• improved occupational safety and greater protection against foot injuries

4 Castor with foot guard and cleaning



- stripping of small parts with a brush
- protects wheel and floor against damage

5 Castor with spring-loaded foot guard



· thresholds can be crossed

6 Swivel castor with tread wiper



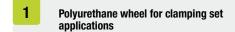
· brush for cleaning the wheel tread



Clamping and wheel sets

Wheel centres for clamping sets can be installed quickly and easily using a clamping element. Clamping sets can also be used for both axial and radial fixing at the same time. This means that the drive wheel can absorb drive forces while being fixed in its position on the axle.

Wheel sets involve fitting multiple wheels to an axle as a single unit. The advantage of having a complete set is that it reduces the amount of work involved to fit the wheels.





- · polyurethane tread with special colour
- · threaded holes for shaft seal
- 4 Wheel set for pallet trucks for particularly smooth motion



- · elastic solid rubber tread
- as alternative to conventional tandem rollers for pallet trucks

2 Corrosion-resistant wheel for external crane systems



- hydrolysis-resistant polyurethane tread
- · nylon wheel centre with molded stainless steel hub
- · clamping set application possible

5 Wheel set for fully-automated milking



- flanged wheels installed and sealed on cylindrical axle
- optimised for permanent deployment (24/7)

3 Wheel centre for permanent deployment



- · polyurethane tread with optimised rolling resistance and high dynamic load resistance
- · clamping set application possible
- Wheel set with heavy-duty wheels for transport equipment



- · heavy-duty wheels installed on square axle
- · elastic rubber tread for absorption and high speeds





Contents General information





Blickle product code system

Blickle product codes have the following structure:

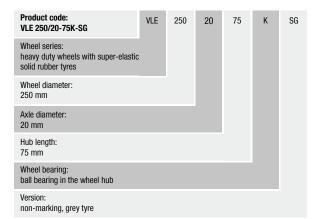
Wheels

Each product code begins with a letter or combination of letters referring to a specific Blickle wheel series. This is followed by the wheel diameter. The number after the slash is the axle diameter.

If there is a third number after a hyphen, it is the hub length.

The final letters G, R, K and PR stand for the different wheel bearings (G - plain bore, R - roller bearing, K - bal bearing and PR - spherical roller bearing). The final letters KA and KF stand for a ball bearing with an integrated synthetic thread guard.

Any additional combinations of letters designate versions or options.



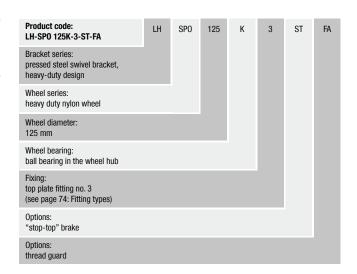
Swivel and fixed castors

Each Blickle swivel bracket series begins with an ${\bf L}$ or ${\bf HR}$ for levelling castors. Each Blickle fixed bracket series uses a combination of letters beginning with a ${\bf B}.$

The product codes for fixed castors and swivel castors therefore comprise the code for the bracket series and the code for the wheel series. The next number usually indicates the wheel diameter. The letters G, R, K and PR indicate the wheel bearing. The final letters KA and KF stand for a ball bearing with an integrated synthetic thread guard.

Any number at the end is used to distinguish between different top plate fitting, bolt hole and stem designs.

Any additional combinations of letters designate versions or options.



Versions / options

Letters and / or numbers are added to the product code for different versions, e.g. special tyres (non-marking grey, electrically conductive, etc.) and options (e.g. brake systems, thread guard, etc.). These are listed under "Versions / options" on the relevant pages (see "Product code suffix").



Addresses of Blickle sales subsidiaries and representative offices

Australia

QHDC Blickle Australia Pty Ltd 60 Newheath Drive Arundel QLD 4215

Phone: +(07) 5582 0000 E-Mail: sales@qhdcblickle.com.au Internet: www.qhdcblickle.com.au

Austria

Blickle Räder + Rollen GmbH Gewerbestraße 20 5082 Grödig Phone: +43 6246 217 00 -0 Fax: +43 6246 217 00 -700

F-mail: info@hlickle at Internet: www.blickle.at

Bangladesh

Pioneer Trade International 250, Haq Tower (2nd floor) Bongshal Road (Near Manoshi Cinema Hall) Nawabpur, Dhaka-1100 Phone: +8802-57165407 Mob.: +8801711851063-4 E-mail: info@ptigroupbd.com

Belarus

Syndic-Bel Ltd. Peredovaya Str. 6, office 115 220070 Minsk Phone: +375-17-336-12-57 E-mail: info@syndic.by Internet: www.syndic.by

Belgium Blickle by

Duwijckstraat 17 2500 Lier Phone: +32 3 828 01 54 Fax: +32 3 827 00 46 E-mail: info@blickle.be Internet: www.blickle.be

Bulgaria DINIS Ltd

227A, Tzar Boris III Blvd. 1618 Sofia Phone: +359 2 955 6200 Fax: +359 2 955 6127 E-mail: info@dinis.bg

Internet: www.blickle.bg

Canada

Blickle Canada Inc. 265. Avenue Liberté Candiac, QC, J5R 3X8 Phone: +1 450 619 6914 +1 800 463 2526 +1 450 845 6262 +1 877 463 2500 F-mail: orders@blickle.ca

Internet: www.blickle.ca

China

Blickle Castors (Taicang) Co., Ltd. Building A, No. 8 Xi Xin Road Fortune Land Euro-US Industrial Park Taicang, Jiangsu 215411 Phone: +86 (0) 512 5320 7717 E-mail: sales@blickle.cn Internet: www.blickle.cn

Colombia

Rodamex Colombia SAS Calle 63a # 30-33 Bogotá

Phone: +57 1 300-45-58 Fax: +57 312-586-5776 E-mail: ventascolombia@rodamex.com.mx Internet: www.rodamex.com.co

Costa Rica

Tecnofijaciones Costado este del Banco Nacional, Condominio Horizontal JW Bodega #21, La Uruca, San José Phone: +506 2256-8115 Fax: +506 2256-8117

E-mail: contacto@tecnofijacionescr.com Internet: www.tecnofijacionescr.com

Croatia HIDROMETAL d.o.o.

Ive Pavlica 17 a 31222 Bizovac Phone: +385 31 673 014 +385 31 673 014 E-mail: hidrometal@net.hr Internet: www.hidrometal.net

Czech Republic

Blickle, a.s. Maříkova 32 621 00 Brno

Phone: +420 541 420 821 Fax: +420 541 420 820 E-mail: info@blickle.cz Internet: www.blickle.cz

Denmark

KS Gruppen A/S Troensevei 20 Postbox 8110 9220 Aalborg Øst Phone: +45 9815 1511 Fax: +45 9815 7011 E-mail: ks@ks-gruppen.dk Internet: www.ks-gruppen.dk

Egypt

German Institute For Foreign Trade "GFT" 76, El Gomhorya Street Mamr Abualgoukh - fifth floor Ramses, Cairo Showroom: 55, El Nady el Riady Street Faisal, Giza Phone: +20 2 35691787

Mob.: +20 111 060 1330 Fax: +20 2 35691297 E-mail: info@gft-egypt.com

Estonia ARTIUM ITC OÜ

Klaasi 4 50409 Tartu Phone: +372 740 9400 +372 740 9404 E-mail: info@artium.ee Internet: www.artium.ee

Finland

Blickle Oy Tiilenpolttajankuja 3 01720 Vantaa Phone: +358 9 540 7520 +358 9 540 75225 E-mail: myynti@blickle.fi Internet: www.blickle.fi

France

Blickle France SAS Zone Artisanale 2 rue du Commerce 68420 Herrlisheim/Colman Phone: +33 389 492425 +33 389 493945 E-mail: info@blickle.fr Internet: www.blickle.fr

Germany (Headquarters)

Blickle Räder+Rollen GmbH u. Co. KG Heinrich-Blickle-Str. 1 72348 Rosenfeld Phone: +49 7428 932 0 +49 7428 932 209 E-mail: info@blickle.com Internet: www.blickle.com

Greece G.P. Dimitriadis S.A.

8 Mesologiou Str. 18545 Piraeus Phone: +30 210 4129441 Fax: +30 210 4116736 E-mail: info@dimitriadissa.gr Internet: www.dimitriadissa.gr

Guatemala

TECNIPESA Calzada Atanacio Tzul 22-00 Centro Empresarial El Cortijo No. 2 Bodega 408 Zona 12 Guatemala Ciudad Phone: +502 2428 5931 E-mail: ventas@tecnipesa.net Internet: www.tecnipesa.net

Ferreteria Lewonski, S.A. Boulevard Liberación 2-29 Zona 9, 01009 Guatemala Ciudad Phone: +502 2383 7800 Fax: +502 2383 7810 E-mail: ventas@lewonski.com Internet: www.lewonski.com

Hong Kong

Sinoford Enterprises Limited Flat B15/9F, Tonic Industrial Center 19 Lam Hing Street, Kowloon Bay

Phone: +852 2796 8829 Fax: +852 2799 9418

E-mail: cecilia.yeung@sinoford.com.hk

Hungary ROLL-N Ipari Kerekek Kft. Hunor u. 44-46 1037 Budapest Phone: +36 (1) 453 0169 +36 (1) 439-0290 E-mail: info@roll-n.hu Internet: www.roll-n.hu

Iceland

Kollunarklettsvegur 4 104 Reykjavik Phone: +354 587 6677 Fax: +354 587 6690 E-mail: jon@fast.is Internet: www.fast.is

India (Northern India) Speciality Urethanes Private Limited

N/19, Additional MIDC, area Satara Maharashtra 415 004 Phone: +91 2162 240721/22/23 Fax: +91 2162 240724 E-mail: anuj@suprathane.com Internet: www.suprathane.com

India (Southern India)

H.M. Gulamali H.O. 146, Broadway Chennai 600 108 Phone: +91 44 4216 1010 / 2020 Mob.: +91 98400 52860 E-mail: info@hmg.co.in

Indonesia

PT Buana Mas Prestasi Hardware Tools & Machinery Co., LTD. Jl. Pangeran Jayakarta 46 Blok A No. 7 Jakarta Pusat 10730 Phone: +62 21 628 6413 +62 21 639 6938

Kalaye Bartar Co. (PJV) No. 83. Asad Abadi St. Qazvin 34188-14699 PO Box 34145-1133

E-mail: emgun@dnet.net.id

Phone: +98 28 33570026 / 33570028 Fax: +98 28 33220677 / 33237706 E-mail: info@yektarahro.com



Addresses of Blickle sales subsidiaries and representative offices

Ireland

Parnells
A1-A2 Southcity Business Centre
Whitestown Way, Tallaght
Dublin D24 HT95
Phone: +353 1 452 0482
E-mail: info@parnells.eu
Internet: www.parnells.eu

Israel

A. Chemlani Technologies Ltd. 6 Ha'charuv Ave., Hi-Lev Area 2016500 BAR-LEV INDUSTRIAL ZONE Phone: +972 4 841 5395 Fax: +972 4 841 5397 E-mail: sales@chemlani.co.il Internet: www.chemlani.co.il

Italy Blickle Italia S.r.I.

Via Lavoratori Autobianchi, 1 Edificio 9 20832 Desio (MB) Phone: +39 0362 186731 Fax: +39 0362 1867350 E-mail: info@blickle.it Internet: www.blickle.it

Japan Nikkai KMO Co., Ltd.

Nomura-Umeda A 707 4-Tsuruno-Chou,Kita-ku,Osaka-Shi Osaka, 530-0014 Phone: +81 6 7174 1474 Fax: +81 50 3737 1356 E-mail: info@nikkai-kmo.com Internet: www.nikkai-kmo.com

SISIKU ADDKREIS CORPORATION
4th FI. MARUSHO-Bldg.
1-16-15, Nagadohe
Kanazawa 9200867
Phone: +81 76 221 0449
Fax: +81 76 223 0449
E-mail: info@sisiku.com
Internet: www.sisiku.com

Kazakhstan

Vneshpromimport Ltd.
Moldagulovoi Str. 45 Office 82
050004 Almaty
Phone: +7 727 2710348
E-mail: vneshprom@mail.ru

Promwheels Ltd.
Zhenis ave. 72
010000 Nur-Sultan, Saryarka district
Phone: +7 7172 76 83 62
E-mail: info@p-w.kz
Internet: www.promwheels.kz

Kuwait

Bin Nisf Gen. Trdg. & Contg. Co PO Box 871 Safat 13009 Phone: +965 1822244 Fax: +965 24839353 E-mail: binnisf@binnisf.com Internet: www.bin-nisf.com

Latvia AB TRANSYSTEMS SIA

Maskavas ielā 227 1019 Rīga Phone: +371 67 140 102 Fax: +371 67 140 103 E-mail: info@abtransystems.lv Internet: www.abtransystems.lv

Lithuania Kronsteinu ratuku centras, UAB

Priegliaus g. 8 06269 Vilnius Phone: +370 5 2308031 Fax: +370 5 2308030 E-mail: info@ratukai.lt Internet: www.ratukai.lt

Luxembourg

Pfeifer Sogequip S.à.r.l.
Zone Industrielle
Schifflange-Foetz
3844 Schifflange
Phone: +352 57 42 42
E-mail: info@pfeifer-sogequip.lu
Internet: www.pfeifer-sogequip.lu

Malaysia

GLOBUS
GLOBUS CASTORS (M) SDN BHD
No. 8, Lorong Pala 5, Kawasan
Industri Permatang Tinggi,
14000 Bukit Mertajam, Penang
Phone: +604-3054918
Fax: +6017-40911118
E-mail: ronnieteo6928@gmail.com

Malta

Multitrade Ltd.
Siggiewi Road
Zebbug ZBG 2301
Phone: +356 2146 5006
Fax: +356 2146 0195
E-mail: admin@multitrademalta.com
Internet: www.multitrademalta.com

Mauritius

Nuco Ltd. Cascade Road 11219 Pailles Phone: +230 286-2941

+230 212-9235 Fax: +230 286-2956 E-mail: sales@nucoltd.com

Mexico

Nuevas Industrias Rodamex SA de CV Saturno No. 25, Fraccionamiento Nueva Industrial Vallejo CP 07700 México DF Phone: +52 55864888 Fax: +52 10551139 - 43 E-mail: ventasblickle@rodamex.com.mx Internet: www.rodamex.com.mx

Morocco

Comptoir du Roulement
12, Route des Ouled Ziane
Casablanca Maroc
Phone: +212 522 317656 / 312895
Fax: +212 522 542538 / 315784
E-mail: comptoir_roulement@cdr.co.ma

Netherlands Blickle Wielen B.V.

Hoofdveste 32 3992 DG Houten Phone: +31 30 241 15 94 Fax: +31 30 241 02 77 E-mail: info@blickle.nl Internet: www.blickle.nl

New Zealand

Wheelco
160 Taurikura Drive
Tauriko
Tauranga 3110
Phone: 07 578 3030
Fax: 07 579 9730
E-mail: sales@wheelco.co.nz
Internet: www.wheelco.co.nz

Nigeria

BG Wheels West Africa Limited 19 Town Planning Ilupeju, Lagos Phone: +234 (0) 1 293 1114 Mob.: +234 (0) 802 340 2006 E-mail: info@rhabe.com

Norway

Blickle Norge AS

Varnesveien 34
Falkensten Næringspark
3189 Horten
Phone: +47 3308 4920
Fax: +47 3308 4921
E-mail: firmapost@blickle.no
Internet: www.blickle.no

Pakistan

M/S United Trading 302, Mehrab Market Kutchi Gali#1 Marriot Road Karachi Phone: +92 21 35312117-8, 35450500 Fax: +92 21 35312119 E-mail: unitedtr@cyber.net.pk

Peru

JR Internacional Company S.A.C.
Calle José de Rivadeneyra 692
Urb. Sta. Catalina – La Victoria
Lima 13
Phone: +51 1 265 1157
E-mail: ventas@jrintercompany.com
www.jrintercompany.com

Poland Promag s.a.

ul. Romana Maya 11 61-371 Poznań Phone: +48 (61) 65 54 555 Infoline: 801 005 112 E-mail: kola@promag.pl Internet: www.promag.pl

Portugal

Rodalges Equipamentos Industriais, Lda. Zona Ind. Monte da Barca, Lote 13 2100-051 Coruche Phone: +351 243 611 040 Fax: +351 243 611 049 E-mail: info@rodalges.pt

QatarMars Trading & Contracting Co.

PO Box 148 DOHA Phone: +974 44447747 Fax: +974 44601290 E-mail: mars@qatar.net.qa Internet: www.marsqatar.com

Internet: www.rodalges.pt

Romania

Blickle Romania S.R.L. Maramureşului 57 400246 Cluj-Napoca E-mail: info@blickle.ro Internet: www.blickle.ro

Russia

Syndic Ltd.
Botkinskaya Str. b 15
194044 St. Petersburg
Phone: +7 812 336-90-85
Fax: +7 812 336-90-85
E-mail: info@syndic.ru
Internet: www.syndic.ru

Syndic Ltd.

3rd Mytishchinsky Str. 16/2
129626 Moscow
Phone: +7 495 660-14-49
E-mail: info@syndic-c.ru
Internet: www.syndic-c.ru

Evrokolesa Ltd. Novorossiysk Str. d. 238 / 1 350059 Krasnodar Phone: +7 (861) 202-50-27 E-mail: krasnodar@e-w.ru Internet: www.e-w.ru



Addresses of Blickle sales subsidiaries and representative offices

Evrokolesa Ltd. Meshchersky Boulevar 11 603070 N. Novgorod Phone: +7 (831) 262-13-52 E-mail: nnovgorod@e-w.ru Internet: www.e-w.ru

Belomorskaya Str. d. 69B 420085 Kazan Phone: +7 (843) 212-20-87 E-mail: kazan@e-w.ru Internet: www.e-w.ru

Evrokolesa Ltd.

Evrokolesa Ltd. Academica Schwartz Str. d. 17 620010 Ekaterinburg Phone: +7 (343) 288-70-08 E-mail: ekaterinburg@e-w.ru Internet: www.e-w.ru

Evrokolesa Ltd. Kozhzavodskaya Str. 10-a 454084 Chelyabinsk Phone: + 7 (351) 200-37-14 E-mail: chelyabinsk@e-w.ru Internet: www.e-w.ru

Evrokolesa Ltd. Zhurinskaya Str. d. 80/6, office 9 630005 Novosibirsk Phone: + 7 (383) 388-68-47 E-mail: novosibirsk@e-w.ru Internet: www e-w ru

Saudi Arabia

Jeddah Branch

Nazar K. Al-Dilijan & Sons Holding Co. PO Box 3880 Dammam 31481 Phone: +966 (13) 8344420 Fax: +966 (13) 8335682 E-mail: sales@nkd.com.sa Internet: www.nkd.com.sa

-Saudi-Arabia-Phone: +966 (12) 6022133 +966 (12) 6022133 E-mail: salesjeddah@nkd.com.sa

Rivadh Branch -Saudi-Arabia-Phone: +966 (11) 4477295 Fax: +966 (11) 4470527

E-mail: salesriyadh@nkd.com.sa

Serhia

Jobix-Nonnenmann Vuka Karadzica 15 22300 Stara Pazova Phone: +381 22-311-706 +381 22-316-380 E-mail: jobixsp@ptt.rs Internet: www.jobix-nonnenmann.com

Singapore Kheng Yew Trading Pte. Ltd. 234 Balestier Road Singapore 329698 Phone: +65 6252 6622 Fax: +65 6253 7911 E-mail: sales@khengyew.com.sg Internet: www.khengyew.com

Slovakia

Blickle, a.s. Maříkova 32 621 00 Brno

Phone: +420 541 420 821 Fax: +420 541 420 820 E-mail: info@blickle.cz Internet: www.blickle.cz

Slovenia

trgovina, storitve in svetovanje, d. o. o. Savlje 89 1000 Liubliana Phone: +386 1 580 78 20 Fax: +386 1 563 24 66 E-mail: info@stalus.si Internet: www.stalus.si

South Africa

Moducast SA (Pty) Ltd. Sunridge Park 33 Lily Avenue Port Elizabeth 6045 Phone: +27 41 4841523 +27 41 48 44965 E-mail: lscanlen@trilogiq.co.za

South Korea

Cofacs Korea Corporation Korea Business Center, 904 Gangnam-daero 309, Seocho-gu 06628 Seoul

Phone: +82 02 521 5288 Fax: +82 02 521 5289 E-mail: cofacs@cofacs.co.kr Internet: www.cofacs.co.kr

Spain

Blickle Hispania, S.A. Travessia Prat de la Riba, 98 08849 Sant Climent de Llobregat (Barcelona) Phone: +34 93 659 23 32 Fax: +34 93 659 19 08 E-mail: info@blickle.es

Internet: www.blickle.es Blickle Hispania, S.A. Avda. Ribera del Loira, 46

28042 Madrid Phone: +34 910 607 563 +34 910 607 423 Fax: F-mail: info@blickle.es Internet: www.blickle.es

Sweden

Blickle AB Box 22157 / Muskötgatan 23 250 23 Helsingborg / 254 66 Helsingborg Phone: +46 42 185170 E-mail: info@blickle.se Internet: www.blickle.se

Switzerland Blickle Räder+Rollen GmbH

Shoppingmeile Zone 3 Kernenriedstrasse 1 3421 Lyssach Phone: +41 34 448 66 66 Fax: +41 34 448 66 69 E-mail: info@blickle-raeder.ch

Internet: www.blickle-raeder.ch

Svria

Abdul Kader Abou-Rikab Company/Partners Al Kuwatli Street 6. Hama Phone: +963 33 22481810 Fax: +963 33 22481811 Mob.: +963 940 639465 E-mail: abdulkader@abou-rikab.com Internet: www.abou-rikab.com

Tunisia

Ets. Boudrant 53, Avenue de Carthage 1000 Tunis – R.P. Phone: +216 71 340244 Fax: +216 71 348910 E-mail: info@boudrant.com.tn Internet: www.boudrant.com.tn

Turkey

Blickle Sanayi Tekerlekleri Tic. Ltd. Şti. Atatürk Mahallesi · Bostancı Dudullu Yolu Caddesi Kerem Bey Sokak NO: 1/1 Özdemir Plaza 34758 Ataşehir/Istanbul Phone: +90 216 455 82 62 Fax: +90 216 455 83 22 E-mail: info@blickle.com.tr Internet: www.blickle.com.tr

Torgowyi Dom Skladskaya Tehnika Ltd. Lineynaya Str. 17b 03038 Kiew Phone: +380 44 528 5460 Fax: +380 44 528 4160 E-mail: koleso.vst@gmail.com Internet: www.skladtex.com.ua Internet: www.kolesa-roliki.kiev.ua

United Arab Emirates

Al Wafa General Trading Co. L.L.C. PO Box 11157 Dubai Phone: +971 4 2557777 Fax: +971 4 2388832

E-mail: nasamo@emirates.net.ae

United Kingdom Blickle Castors & Wheels Ltd.

No. 30 Vincent Avenue Crownhill, Milton Keynes Bucks MK8 0AB Phone: +44 (0) 1908 560904 Fax: +44 (0) 1908 260510 E-mail: sales@blickle.co.uk Internet: www.blickle.co.uk

Uruguay Essen Ltda.

Miguelete 1824 11800 Montevideo Phone: +598 292 900 92 Fax: +598 292 900 92 E-mail: ventas@essenltda.com.uy Internet: www.essenItda.uy

Blickle U.S.A. Wheels and Casters Inc. 75 Coweta Industrial Parkway Newnan, GA 30265 Phone: +1 888 558 7878 Fax: +1 470 414 2332 E-mail: info@blickle.us Internet: www.blickle.us

Vietnam

Hoa Thinh Production & Trading Joint Stock Company 11E - C Road · Tan Tao Industrial Park Binh Tan Dist. · HCMC Phone: +84 28 3751 5778; 3751 5779 Fax: +84 28 3751 5924 E-mail: castorwheels@hoathinh.com.vn Internet: www.hoathinh.com.vn

Yemen Capital Light Stores

Alkasr Algmhori Street Sana'a PO Box 655 Phone: +967 1 276385 Fax: +967 1 214145 E-mail: capitallight@y.net.ye



Alphabetic product / series number list

Series Numbers	Pa	age
ALB	67,	307
ALBS68, 3	19.	499
	-,	
ALES	60 :	209
, 220		_00
ALEV63, 221, 429–430, 5	67 (സ
ALEV03, 221, 429–430, 31	υ, ι	002
ALCI.	71	110
ALSI	/1,4	448
ALST66, 294, 433, 4	99,	567
ALTH65, 274, 432, 499, 50	37–	568
ALTPU	82, (602
B-ALB		308
B-ALEV	:	222
B-ALSI		449
B-ALST		
B-ALTH		
B-G		
B-GEV		
B-GSPO		
B-GST		
B-GTH		
B-P		
B-PATH		
B-PHN		
B-P0345, 348–3	-,	
B-P0ES		
B-POEV214, 2		
B-POH	٠ '	454
B-POHI	٠	459
B-POSI	٠	449
B-POTH	:	264
B-POTHS	:	271
B-POW		
B-PP3		
B-PPN		
B-RD		
B-TPA		
B-V		
B-VE		
B-VEHI		
B-VLE		
B-VPP1		
B-VSTH		
B-VW		
B-VWPP		203
BB	81,	589
BEVZDG	80,	586
BEVZST	81,	587
BH-ALB30	08–	310
BH-ALBS 320, 32	22–	323
BH-ALEV22		
BH-ALST 295–296, 29		
BH-ALTH275–276, 2		
BH-DSPK		
BH-DSPKGSPO		
BH-G		
BH-GB		
BH-GSP0		
BH-GST302-3		
BH-GTH288-2		
BH-PATH		
BH-P0 349, 35		
BH-P0EV 216–217, 2		
BH-P0TH264-265, 20		
BH-P0THS2		
BH-RD		
BH-SE		
BH-SETH		
BH-SP0358, 360–361, 3	63	498
BH-SVS		
BH-V		
₽11 ¥		_U I

Saulas Numbers	age
	•
BH-VPP	
BH-VSTH BH-VW	
BH-VWPP	
BHF-ALEV	
BHF-ALST	
BHF-ALTH	483
BI-G	160
BIK-G	469
BK-ALB	200
BK-ALBS	
BK-ALEV	
BK-ALST	
BK-ALTH	
BK-G	
BK-GSP0	
BK-PATH	
BK-P0 BK-P0EV	
BK-POH	
BK-POHI	
BK-POTH	
BK-POTHS	
BK-POW	342
BK-RD	
BK-SE	
BK-SPO BK-VSTH	
DK-V31H	497
BKFG-TPA154-	-155
BKFGX-TPA	155
BKPA-PATH	138
BKPA-P0A	
BKPA-POES	
BKPA-TPA	
BKPA-VPA	130
BKPXA-PATH	395
BKPXA-P0	
BKPXA-TPA	
BKPXA-VPA	393
BKRA-PATH	137
BKRA-POA	
BKRA-POES	
BKRA-TPA	123
BKRA-VPA	129
BKRXA-PATH	304
BKRXA-PO	
BKRXA-TPA	
BKRXA-VPA	
DLY DODG	41E
BKX-POBS BKX-POEV	
BKX-POH	
BKX-P0HI	
BKX-POTH	
BKX-SP0	421
BO-ALEV	226
BO-ALST	
BO-ALTH	
BO-G380,	470
BO-GB	314
BO-GST302,	
BO-GTH288,	
BO-PO	
BO-SE	
BO-SPO	

BOD-ALB......311

Series Numbers	Page
BOD-ALBS	499
BOD-ALEV	
BOD-ALTH	
BOD-GTH	
BOD-SE	
BOD-SP0	
BOD-VSTH	292
BPA-PATH	138
BPA-P0A	497
BPA-TPA	
BPA-VPA	
DI A-VI A	100
BPFE-ALEV	477
BPFE-ALTH	484
PRV POV	000
BPX-PGV	603
BPXA-PATH	
BPXA-P0	397
BPXA-TPA	391
BPXA-VPA	393
BRA-PATH	137
BRA-POA	
BRA-TPA	
BRA-VPA	
DID VIA	140
BRXA-PATH	204
BRXA-P0	
BRXA-TPA	
BRXA-VPA	392
BS-ALBS	324
BS-G	381
BS-GB	316
BS-GEV	
BS-GSP0	
BS-GST	
BS-GTH	
BS-P	
BS-PS	
BS-SE	
BS-SETH	
BS-SPK	529
BS-SPKGSP0	527
BS-SPKVS	531
BS-SP0	365
BS-SVS	384
BS-VLE	
20 122	20 .
BSD-GB	317
BSD-GSP0	
BSD-GSF0	
BSD-GTH	293
BSD-SE	
BSD-SPO	
BSD-VSTH	293
BSEV80, 58	4–585
BSFE-GB	
BSFE-GST	482
BSFE-GTH	486
BSFE-SE	
BSFN-GB	487
BSFN-GST	
BSFN-GTH	
BSFN-SE	
DOFIN-0E	4/ŏ
BSSD-GSP0	271
บบบ-นบFU	o <i>i</i> I
DTII ^	4 500
BTH 8	1,588
DV DATU	
BX-PATH	
BX-PHN	
BX-P0 41	
DV DODC	115

BX-P0EV 403, 405 BX-P0H 456 BX-POHI 461 BX-POSI 451 BX-POTH 413 BX-POTHS 409, 412 BX-TPA 399 BX-VPP 401
DS64, 236
DSPK75, 534
DSPKGSP075, 532
FP074, 520
FPOB73, 518
FPTH72, 515
FPU72, 514
FSTH73, 517
FSVU73, 519
FTH73, 516
G70, 376, 436, 468
GB67, 312–313, 569
GBA78, 552
GBN 76, 544–545
GEV 63, 234
GEVA77, 550
GEVN75, 540
GSP070, 368, 496–499
GST67, 301
GSTA77, 551
GSTN
GTH66, 286–287, 568
GTHN 75, 541–542
GVU68, 326, 570
GVUN
HB78, 563
HP079, 566
HRIG 100
HRLH / HRLHD101
HRLH-SP0506
HRLHD-SP0 506
HRLK 99 HRLK-ALST 501 HRLK-ALTH 501 HRLK-ALTH-F 503 HRLK-ALTH-HN 502 HRLK-PATH-HYD 508 HRLK-PO 501 HRLK-PO 501 HRLK-PO-F 503

Series Numbers

Page



Alphabetic product / series number list

O-ulas Numbana	
Series Numbers Page HRLK-PO-HN 502 HRLK-PO-VS 504 HRLK-POEV 501 HRLK-SPO 501 HRLK-SPO-HN 502	2 4 1 1
HRLKF	9
HRLSD 101 HRLSD-GTH 507 HRLSD-SPO 507	7
HRP / HRSP100	0
HRP-POA505	5
HRSP-GSPO	5
HTH78, 560–562	
HTHW79, 564–565	5
L.ALB. 306 L-ALEV. 222 L-ALST. 295 L-ALTH. 277 L-GEV. 594 L-GSPO. 497 L-GST. 594 L-GTH. 594 L-GTH. 594 L-P. 245 L-P. 245 L-P. 246 L-POTH. 266 L-POTH. 266 L-POTHS 271 L-POW 344 L-PP. 335 L-RD. 207 L-V. 201 L-VLE 255 L-VWPP. 194 L-VWP. 205 L-WWPP. 203	8 2 5 5 7 4 7 4 4 5 1 9 6 4 1 1 9 5 7 1 0 4 7 5 3 0
LD-POA	0
LDA 86 LDA-PATH. 140 LDA-POA 147 LDA-TPA 126 LDA-VPA 132	0 7 6
LE 90 LE-PATH 255 LE-PO 345, 497 LE-POES 216 LE-POEV 214, 497 LE-PP 337 LE-PPN 333 LE-TPA 187 LE-VE 196 LE-VPP 191	9 7 7 7 7 8
LER 91 LER-PATH 260 LER-PO 346, 496 LER-POES 211	0 6

Series Numbers	Page
LER-POEV21	-
LER-PUEV21	
LER-PPN	
LER-TPA	
LER-VE	
LER-VPP	192
LEX	
LEX-PATH	
LEX-PO LEX-POBS	
LEX-POEV.	
LEX-POTHS	
LEX-TPA	
LEX-VPP	401
LEXR	
LEXR-PATH LEXR-PO	
LEXR-POEV	
LEXR-POTHS	
LEXR-TPA	
LEXR-VPP	402
LEXZLEXZ-PO	
LEXZ-POTHS	
LEXZ-PUTHS	411
LEZ	91
LEZ-P0	347
LEZ-VE	198
LEZ-VPP	193
LH9	0 400
LH-ALB9	
LH-ALBS	
LH-ALEV	
LH-ALST	
LH-ALTH	
LH-G	
LH-GB	
LH-GST50	
LH-GTH	
LH-P0	352
LH-POEV	
LH-POTH 26	
LH-SE	
LH-SETH	
LH-SVS	
LH-VSB	
LH-VSTH28	8, 498
LUB	
LHD9	
LHD-ALBS	
LHD-ALEV	
LHD-ALST	
LHD-ALTH	499
LHD-GSPO	
LHD-POEV	
LHD-SE	
LHD-SPOLHD-VSTH	
	100
LHF	
LHF-ALEV	476
LHF-ALST	
LHF-ALTH	483
LHZ	മാ
LHZ-ALTH	
LHZ-SPO	
<u> Ш</u>	
LI-ALSI	
LI-GLI-PHN	
LI 1 1114	+04

Series Numbers Page
LI-POH454
LI-POHI
LI-POSI
LI-VENI 443 LI-VKHT 446
LIK
LIK-POH
LIK-POHI
LIKX
LIKX-POH
LIO
LIR97
LIR-ALSI
LIR-PHN
LIR-POH
LIR-POHI
LIR-VEHI
LIX98
LIX-PHN
LIX-POHI
LIX-POSI
LIX-VKHT447
LIXR98
LIXR-PHN
LIXR-P0H
LIXR-POHI
LIXR-POSI452
LK92
LK-ALB
LK-ALBS
LK-ALST
LK-ALTH276
LK-G
LK-GSP0
LK-P0
LK-P0EV217
LK-POTH
LK-POTHS
LK-RD
LK-SE229
LK-SP0
LK-VSTH497
LKD / LKDG 89–90
LKD-PATH
LKDB-PUA171
LKDG / LKDB 89
LKDG-PATH
LKDGX-PATH 178–179
LKDX / LKDGX90
LKDX-PATH176–177
LKFG

LKFGX	87
LKFGX-TPA	. 100
LKPA-GSP0	407
LKPA-PATH	
LKPA-POA 145	497
LKPA-POES	
LKPA-TPA	. 124
LKPA-VPA	130
LUDA VOTU	. 100
LKPA-VSTH142	497
LVDVA DATIL	205
LKPXA-PATH	
LKPXA-P0	. 397
LKPXA-TPA	
LKPXA-VPA	. 393
LKR	00
LKR-ALBS	. 321
LKR-ALST	
LKR-ALTH	. 277
LKR-GSP0	496
LKR-P0EV	
LKR-P0TH	. 266
LKR-SPO	
LKR-VSTH	. 496
LVDA 00D0	40-
LKRA-GSP0	
LKRA-PATH	.137
LKRA-P0A144	
LKRA-P0ES	. 134
LKRA-TPA	
LKRA-VPA128-	
LKRA-VSTH141,	496
LIGHT VOITI 111,	100
LKRXA-PATH	. 394
LKRXA-P0	206
LKRXA-TPA	
LKRXA-VPA	392
LKX	97
LKX	
LKX-POBS	. 416
LKX-POBS LKX-POEV	. 416 . 406
LKX-POBS LKX-POEV	. 416 . 406
LKX-POBS LKX-POEV LKX-POTH	. 416 . 406 . 414
LKX-POBS LKX-POEV	. 416 . 406 . 414
LKX-POBS	. 416 . 406 . 414 . 421
LKX-POBS	. 416 . 406 . 414 . 421
LKX-POBS	. 416 . 406 . 414 . 421
LKX-POBS	. 416 . 406 . 414 . 421 86
LKX-POBS	. 416 . 406 . 414 . 421 86
LKX-POBS	. 416 . 406 . 414 . 421 86 . 139
LKX-POBS LKX-POEV LKX-POTH LKX-SPO LMDA LMDA LMDA-PATH LMDA-POA	. 416 . 406 . 414 . 421 86 . 139 . 146
LKX-POBS	. 416 . 406 . 414 . 421 86 . 139 . 146
LKX-POBS	. 416 . 406 . 414 . 421 86 . 139 . 146 . 125
LKX-POBS	. 416 . 406 . 414 . 421 86 . 139 . 146 . 125
LKX-POBS	. 416 . 406 . 414 . 421 86 . 139 . 146 . 125
LKX-POBS	. 416 . 406 . 414 . 421 86 . 139 . 146 . 125 . 131
LKX-POBS	. 416 . 406 . 414 . 421 86 . 139 . 146 . 125 . 131
LKX-POBS LKX-POEV LKX-POTH LKX-SPO LMDA LMDA LMDA-PATH LMDA-POA LMDA-TPA LMDA-TPA LMDA-VPA	. 416 . 406 . 414 . 421 86 . 139 . 146 . 125 . 131
LKX-POBS LKX-POEV LKX-POTH LKX-SPO LMDA LMDA-PATH LMDA-PATH LMDA-POA LMDA-POA LMDA-VPA LMDA-VPA LCO LO-ALEV LO-ALEV LO-ALET LO-ALTH	. 416 . 406 . 414 . 421 86 . 139 . 146 . 125 . 131
LKX-POBS LKX-POEV LKX-POTH LKX-SPO LMDA LMDA LMDA-PATH LMDA-POA LMDA-TPA LMDA-TPA LMDA-VPA	. 416 . 406 . 414 . 421 86 . 139 . 146 . 125 . 131
LKX-POBS LKX-POEV LKX-POEV LKX-POTH LKX-SPO LMDA LMDA-PATH LMDA-POA LMDA-POA LMDA-VPA LMDA-VPA LUDA-UPA LUDA-UPA LO-ALST LO-ALST LO-ALST	. 416 . 406 . 414 . 421 86 . 139 . 146 . 125 . 131 93 . 226 . 300 . 281
LKX-POBS	. 416 . 406 . 414 . 421 86 . 139 . 146 . 125 . 131 93 . 226 . 300 . 281 . 380
LKX-POBS LKX-POEV LKX-POTH LKX-SPO LMDA LMDA LMDA-PATH LMDA-POA LMDA-TPA LMDA-VPA LO-ALEV LO-ALEV LO-ALTH LO-G LO-G LO-GST LO-GTH	. 416 . 406 . 414 . 421 86 . 135 . 146 . 125 . 300 . 281 . 380 . 304 . 290
LKX-POBS	. 416 . 406 . 414 . 421 86 . 135 . 146 . 125 . 300 . 281 . 380 . 304 . 290
LKX-POBS LKX-POBS LKX-POEV LKX-POTH LKX-SPO LMDA LMDA LMDA-PATH LMDA-PATH LMDA-POA LMDA-PAA LMDA-VPA LMDA-VPA LMDA-VPA LO-ALEV LO-ALEV LO-ALST LO-GST LO-GST LO-GTH	. 416 . 406 . 414 . 421 86 . 139 . 146 . 125 . 131 93 . 226 . 300 . 281 . 304 . 290 . 354
LKX-POBS LKX-POEV LKX-POEV LKX-POTH LKX-SPO LMDA LMDA-PATH LMDA-PATH LMDA-POA LMDA-PAPA LMDA-VPA LLMDA-VPA LLO LO-ALEV LO-ALEV LO-ALST LO-GE LO-GST LO-GTH LO-FO	. 416 . 406 . 414 . 421 86 . 139 . 146 . 125 . 131 93 . 226 . 300 . 281 . 380 . 304 . 290 . 354 . 231
LKX-POBS	. 416 . 406 . 414 . 421 86 . 139 . 146 . 125 . 131 93 . 226 . 300 . 281 . 380 . 304 . 290 . 291 . 284
LKX-POBS LKX-POEV LKX-POEV LKX-POTH LKX-SPO LMDA LMDA-PATH LMDA-PATH LMDA-POA LMDA-PAPA LMDA-VPA LLMDA-VPA LLO LO-ALEV LO-ALEV LO-ALST LO-GE LO-GST LO-GTH LO-FO	. 416 . 406 . 414 . 421 86 . 139 . 146 . 125 . 131 93 . 226 . 300 . 281 . 380 . 304 . 290 . 291 . 284
LKX-POBS	. 416 . 406 . 414 . 421 86 . 139 . 146 . 125 . 131 93 . 226 . 300 . 281 . 380 . 304 . 290 . 291 . 284
LKX-POBS LKX-POBS LKX-POEV LKX-POTH LKX-SPO LMDA LMDA LMDA-PATH LMDA-PATH LMDA-PATH LMDA-POA LMDA-TPA LMDA-TPA LMDA-UPA LMDA-UPA LO-ALEV LO-ALEV LO-ALTH LO-G LO-GST LO-GTH LO-GST LO-SET LO-SET	. 416 . 406 . 414 . 421 86 . 139 . 146 . 125 . 131 93 . 226 . 300 . 281 . 380 . 324 . 231 . 284 . 364
LKX-POBS LKX-POEV LKX-POEV LKX-POTH LKX-SPO LMDA LMDA-PATH LMDA-PATH LMDA-POA LMDA-PAA LMDA-VPA LMDA-VPA LO-ALEV LO-ALST LO-ALTH LO-G LO-GST LO-GTH LO-FO LO-SETH LO-SPO	. 416 . 406 . 414 . 421 86 . 139 . 146 . 125 . 131
LKX-POBS LKX-POBS LKX-POEV LKX-POTH LKX-SPO LMDA LMDA LMDA-PATH LMDA-PATH LMDA-PATH LMDA-POA LMDA-TPA LMDA-TPA LMDA-UPA LMDA-UPA LO-ALEV LO-ALEV LO-ALTH LO-G LO-GST LO-GTH LO-GST LO-SET LO-SET	. 416 . 406 . 414 . 421 86 . 139 . 146 . 125 . 131
LKX-POBS LKX-POEV LKX-POEV LKX-POTH LKX-SPO LMDA LMDA-PATH LMDA-PATH LMDA-POA LMDA-PPA LMDA-VPA LLMDA-VPA LLO-ALEV LLO-ALEV LLO-ALST LO-G LO-G LO-GTH LLO-SE LO-SET LO-SE LO-SPO LOD LOD LOD LOD LOD LOD LOD LOD LOD LO	. 416 . 406 . 414 . 421 86 . 139 . 146 . 125 . 131
LKX-POBS LKX-POEV LKX-POEV LKX-POTH LKX-SPO LMDA LMDA LMDA-PATH LIMDA-POA LMDA-TPA LMDA-VPA LO LO-ALEV LO-ALST LO-GTH LO-GTH LO-SE LO-SET LO-SET LO-SET LO-SET LO-SPO LOD LOD-ALTH LOD LOD-COPH LO	. 416 . 406 . 414 . 421
LKX-POBS LKX-POEV LKX-POEV LKX-POTH LKX-SPO LMDA LMDA-PATH LMDA-PATH LMDA-POA LMDA-PPA LMDA-VPA LLMDA-VPA LLO-ALEV LLO-ALEV LLO-ALST LO-G LO-G LO-GTH LLO-SE LO-SET LO-SE LO-SPO LOD LOD LOD LOD LOD LOD LOD LOD LOD LO	. 416 . 406 . 414 . 421
LKX-POBS LKX-POEV LKX-POEV LKX-POTH LKX-SPO LMDA LMDA LMDA-PATH LMDA-PATH LMDA-POA LMDA-TPA LMDA-VPA LO LO-ALEV LO-ALEV LO-ALTH LO-G LO-GST LO-GST LO-GST LO-SPO LO-SE LO-SPO LOD-ALTH LO-SPO LOD-ALTH LOD-SPO	. 416 . 406 . 414 . 421
LKX-POBS LKX-POEV LKX-POEV LKX-POTH LKX-SPO LMDA LMDA LMDA-PATH LMDA-PATH LMDA-POA LMDA-TPA LMDA-VPA LO LO-ALEV LO-ALEV LO-ALTH LO-G LO-GST LO-GST LO-GST LO-SPO LO-SE LO-SPO LOD-ALTH LO-SPO LOD-ALTH LOD-SPO	. 416 . 406 . 414 . 421
LKX-POBS LKX-POEV LKX-POEV LKX-POTH LKX-SPO LMDA LMDA-PATH LMDA-PATH LMDA-POA LMDA-PATH LMDA-PAB LMDA-VPA LMDA-VPA LMDA-UPA LMDA-UPA LO-ALEV LO-ALEV LO-ALEV LO-GTH LO-G LO-GST LO-GTH LO-SET LO-SETH LO-SPO LOD-ALTH LOD-GTH LOD-ALTH LOD-GTH LOD-ALTH LOD-GTH LOD-ALTH LOD-GTH LOD-SPO	. 416 . 406 . 414 . 421 86 . 139 . 146 . 125 . 131 . 226 . 300 . 281 . 380 . 290 . 354 . 292 . 364 . 292 . 366 . 292
LKX-POBS LKX-POEV LKX-POEV LKX-POTH LKX-SPO LMDA LMDA-PATH LMDA-PATH LMDA-POA LMDA-PATH LMDA-PAB LMDA-VPA LMDA-VPA LMDA-UPA LMDA-UPA LO-ALEV LO-ALEV LO-ALEV LO-GTH LO-G LO-GST LO-GTH LO-SET LO-SETH LO-SPO LOD-ALTH LOD-GTH LOD-ALTH LOD-GTH LOD-ALTH LOD-GTH LOD-ALTH LOD-GTH LOD-SPO	. 416 . 406 . 414 . 421 86 . 139 . 146 . 125 . 131 . 226 . 300 . 281 . 380 . 290 . 354 . 292 . 364 . 292 . 366 . 292
LKX-POBS LKX-POEV LKX-POEV LKX-POTH LKX-SPO LMDA LMDA-PATH LMDA-PATH LMDA-POA LMDA-PATH LMDA-PAB LMDA-VPA LMDA-VPA LMDA-UPA LMDA-UPA LO-ALEV LO-ALEV LO-ALEV LO-GTH LO-G LO-GST LO-GTH LO-SET LO-SETH LO-SPO LOD-ALTH LOD-GTH LOD-ALTH LOD-GTH LOD-ALTH LOD-GTH LOD-ALTH LOD-GTH LOD-SPO	. 416 . 406 . 414 . 421 86 . 139 . 146 . 125 . 131 . 226 . 300 . 281 . 380 . 290 . 354 . 292 . 364 . 292 . 366 . 292
LKX-POBS LKX-POEV LKX-POEV LKX-POTH LKX-SPO LMDA LMDA LMDA-PATH LMDA-PATH LMDA-POA LMDA-TPA LMDA-VPA LO LO-ALEV LO-ALST LO-ALTH LO-G LO-GST LO-GST LO-SPO LO-SE LO-SPO LOD-ALTH LOD-SPO LOD-ALTH LOD-SPO LOD-ALTH LOD-GTH LOD-SPO LOD-VSTH	. 416 . 406 . 414 . 421
LKX-POBS LKX-POEV LKX-POEV LKX-POTH LKX-SPO LMDA LMDA LMDA-PATH LMDA-PATH LMDA-POA LMDA-TPA LMDA-VPA LO LO-ALEV LO-ALST LO-ALTH LO-G LO-GST LO-GST LO-SPO LO-SE LO-SPO LOD-ALTH LOD-SPO LOD-ALTH LOD-SPO LOD-ALTH LOD-GTH LOD-SPO LOD-VSTH	. 416 . 406 . 414 . 421
LKX-POBS LKX-POEV LKX-POEV LKX-POTH LKX-SPO LMDA LMDA LMDA-PATH LIMDA-POA LMDA-TPA LMDA-VPA LO LO-ALEV LO-ALST LO-GTH LO-GTH LO-SE LO-SET LO-SET LO-SET LO-SET LO-SPO LOD LOD-ALTH LOD LOD-COPH LO	. 416 . 406 . 414 . 421
LKX-POBS LKX-POEV LKX-POEV LKX-POTH LKX-SPO LMDA LMDA-PATH LMDA-PATH LMDA-POA LMDA-PAPA LMDA-VPA LMDA-VPA LMDA-VPA LO-ALEV LO-ALST LO-ALTH LO-G LO-GTH LO-SE LO-SETH LO-SPO LOD-ALTH LOD-GTH LOD-GTH LOD-GTH LOD-GTH LOD-SPO LOD-SPO LOD-SPO LOD-SPO LOD-VSTIH LPA	. 4166 . 4066 . 4144 . 421 86 . 139 . 146 . 125 131 93 . 226 . 300 . 281 . 380 . 290 . 354 . 292 . 292 . 366 . 292 . 2
LKX-POBS LKX-POEV LKX-POEV LKX-POTH LKX-SPO LMDA LMDA LMDA-PATH LLMDA-POA LMDA-TPA LMDA-TPA LMDA-VPA LO LO-ALEV LO-ALST LO-ALITH LO-GGTH LO-SE LO-SETH LO-SETH LO-SPO LOD LOD-ALTH LOD-GTH LOD-GTH LOD-SPO LOD-SPO LOD-SPO LOD-SPO LOD-VSTH LPA LPA / LKPA	
LKX-POBS LKX-POEV LKX-POEV LKX-POTH LKX-SPO LMDA LMDA LMDA-PATH LLMDA-POA LMDA-TPA LMDA-TPA LMDA-VPA LO LO-ALEV LO-ALST LO-ALITH LO-GGTH LO-SE LO-SETH LO-SETH LO-SPO LOD LOD-ALTH LOD-GTH LOD-GTH LOD-SPO LOD-SPO LOD-SPO LOD-SPO LOD-VSTH LPA LPA / LKPA	
LKX-POBS LKX-POEV LKX-POEV LKX-POTH LKX-SPO LMDA LMDA LMDA-PATH LIMDA-POA LMDA-TPA LMDA-TPA LMDA-VPA LO LO-ALEV LO-ALST LO-ALTH LO-G LO-GST LO-GTH LO-PO LO-SE LO-SE LO-SE LO-SE LO-SE LO-STH LO-SPO LOD-ALTH LOD-ALTH LOD-COPO LOD-SPO LOD-WSTH LDD-WSTH LPA LPA / LKPA LPA / LKPA LRA-GSPO LPA-PATH	
LKX-POBS LKX-POES LKX-POEV LKX-POTH LKX-SPO LMDA LMDA LMDA-PATH LMDA-PATH LMDA-PATH LMDA-POA LMDA-TPA LMDA-TPA LMDA-TPA LMDA-UPA LO -ALEV LO-ALEV LO-ALST LO-ALTH LO-G LO-GS LO-GST LO-GTH LO-SPO LOSE LO-SPO LOD-SE LOD-STH LDO-SPO LOD-VSTH LPA LPA / LKPA LPA-GSPO LPA-PATH LPA-POA 145,	
LKX-POBS LKX-POEV LKX-POEV LKX-POTH LKX-SPO LMDA LMDA LMDA-PATH LIMDA-POA LMDA-TPA LMDA-TPA LMDA-VPA LO LO-ALEV LO-ALST LO-ALTH LO-G LO-GST LO-GTH LO-PO LO-SE LO-SE LO-SE LO-SE LO-SE LO-STH LO-SPO LOD-ALTH LOD-ALTH LOD-COPO LOD-SPO LOD-WSTH LDD-WSTH LPA LPA / LKPA LPA / LKPA LRA-GSPO LPA-PATH	
LKX-POBS LKX-POES LKX-POEV LKX-POTH LKX-SPO LMDA LMDA LMDA-PATH LMDA-PATH LMDA-PATH LMDA-POA LMDA-TPA LMDA-TPA LMDA-TPA LMDA-UPA LO -ALEV LO-ALEV LO-ALST LO-ALTH LO-G LO-GS LO-GST LO-GTH LO-SPO LOSE LO-SPO LOD-SE LOD-STH LDO-SPO LOD-VSTH LPA LPA / LKPA LPA-GSPO LPA-PATH LPA-POA 145,	. 416 . 406 . 414 . 421 86 . 139 . 146 . 125 . 300 . 281 . 380 . 290 . 354 . 292 . 292 . 366 . 292 . 497

Series Numbers

Page



Alphabetic product / series number list

Series Numbers Page
LPFE95
LPFE-ALEV
LPX 102 LPX-PGV 603
LPXA / LKPXA
LPXA-PATH395
LPXA-P0
LPXA-VPA
LPZ102
LPZ-ALEV
LR
LR-VSTH
LRA496
LRA / LKRA86
LRA-GSP0496
LRA-PATH137
LRA-POA
LRA-VPA
LRA-VSTH 141, 496
LRXA / LKRXA95
LRXA-PATH394
LRXA-P0
LRXA-VPA
LS94
LS-ALBS
LS-GB
LS-GEV
LS-GST
LS-GTH
LS-P
LS-SE
LS-SETH
LS-SVS
LS-VLE251
LSD
LSD-GSP0371, 499
LSD-GST 306
LSD-GTH
LSD-SP0
LSD-VSTH293
LSFE
LSFE-GST
LSFE-GTH
LSFN
LSFN-GST481
LSFN-GTH
LSSD

Series Numbers Page
LUH93
LUH-ALBS
LUH-ALST
LUH-ALTH280
LUH-GB
LUH-GST
LUH-PO
LUH-POEV
LUH-POTH
LUH-SPO
LWG-TPA159–161
LWGX-TPA165–167
LWK / LWG 88
LWK-TPA156–158
LWKX / LWGX 88–89
LWKX-TPA162–164
LX
LX-P0EV
LX-P0TH
LX-POTHS412
P
PA
PATH61, 136, 258, 431
PGV82, 602
PHN
PK
P069, 343–344, 435, 496–497, 500, 567
POA61, 143, 496–497, 500
POBS
POES
POEV63, 212–213, 496–497, 499–500
POH71, 453
POHI72, 458
POSI71, 448
POTH
POTHS 65, 270
POW69, 340
PP69, 336, 434
PPN
PS 64, 246
RB 80, 571–575, 578–579
RD62, 206
REV79, 571–574, 576

RTH......79, 571–579

Series Numbers	Page
RVU	80, 576, 578
SE	63, 228, 499
SETH	66, 282
SPK	74, 528
SPKGSP0	74, 526
SPKVS	74, 530
SPKVSN	76, 547
SP0	69, 355–356, 498–499
SVS	70, 382, 437, 498
TPA	60, 122, 186, 426
V	62, 199–200, 428
VE	61, 195, 428
VEHI	70, 442
VKHT	71, 445
VLE	65, 249
VLEA	77, 549
VPA	60, 127, 427
VPP	61, 189–190
VSB	67, 312
VSTH	66, 286, 496–500, 568
VSVU	
vw	62, 204
VWPP	62, 202



Alphabetic keywords list

Index	Page
Adapter plate	607
Air cargo castor	
Antistatic	
Autoclave	
Axle tube	117
	84
Ball bearing (C), central b	
	85
	84–85
Besthane . 56, 256–257,	85
Destrialie.30, 230-237,	556–559, 582–583
Besthane Soft56, 256-	
	53, 184–185
	53, 184–185, 388–389,
	495, 556–559, 594–595
	52, 184–185
	53, 120–121, 184–185
	104
	86–102
	112–114, 594–597
Bumper	116, 148, 169, 398
	, , , , , , , , , , , , , , , , , , , ,
	44
	113
	113, 168
	617
Chemical resistance	
	512–513, 556–559
	553, 623
	492–493
Compressed cast nylon	57, 330–331, 492–495,
	524–525
	50
Corrosion resistant	50, 152–153, 388–389, 440–441, 601–604
Crowned (convoy)	440–441, 601–604
	592–593
odotornoning	
Dead man's brake	114, 594–596
	116
	115
	536–547, 611
	114, 594–596
Elastic solid rubber	53, 184–185, 388–389,
424–425, 475,	492–495, 556–559, 582,
F1 11 11 1	594–595, 602–604
	600 50. 422–425
, , , , , , , , , , , , , , , , , , , ,	,
Environmental factors	117 50
	600
	105, 148, 168, 398
Extrathane55, 120–	101 050 057 101 105
475 402 405 512	121, 256–257, 424–425
470, 482-480, 512-	121, 256–257, 424–425, 513, 538–539, 556–559,
475, 492–495, 512–	121, 256–257, 424–425, 513, 538–539, 556–559, 582–583, 594–595
	513, 538–539, 556–559, 582–583, 594–595
Fitting types	513, 538–539, 556–559, 582–583, 594–595 104–105
Fitting types	513, 538–539, 556–559, 582–583, 594–595 104–105
Fitting typesFixed castorFlanged wheel	513, 538–539, 556–559, 582–583, 594–595 104–105 44 524–525
Fitting typesFixed castorFlanged wheelFloor pressure	513, 538–539, 556–559, 582–583, 594–595
Fitting typesFixed castorFlanged wheelFloor pressureFloor surface preservatio	513, 538–539, 556–559, 582–583, 594–595
Fitting types	513, 538–539, 556–559, 582–583, 594–595
Fitting types	513, 538–539, 556–559, 582–583, 594–595
Fitting types	513, 538–539, 556–559, 582–583, 594–595
Fitting types	513, 538–539, 556–559, 582–583, 594–595
Fitting types	513, 538–539, 556–559, 582–583, 594–595
Fitting types	513, 538–539, 556–559, 582–583, 594–595
Fitting types	513, 538–539, 556–559, 582–583, 594–595
Fitting types Fixed castorFlanged wheel Floor pressure Floor surface preservatio FLOW Foot guard Forklift trucks FTF / FTS Furniture castor Guide rollers Heat-resistant	513, 538–539, 556–559, 582–583, 594–595
Fitting types	513, 538–539, 556–559, 582–583, 594–595
Fitting types	513, 538-539, 556-559, 582-583, 594-595
Fitting types Fixed castor Flanged wheel Floor pressure Floor surface preservatio FLOW Fort guard Forklift trucks FIF / FTS Furniture castor Guide rollers Heat-resistant Heavy-duty castor Hub cap / hub end cap Hub keyway	513, 538–539, 556–559, 582–583, 594–595
Fitting types Fixed castor Flanged wheel Floor pressure Floor surface preservatio FLOW Fort guard Forklift trucks FIF / FTS Furniture castor Guide rollers Heat-resistant Heavy-duty castor Hub cap / hub end cap Hub keyway	513, 538-539, 556-559, 582-583, 594-595
Fitting types Fixed castorFlanged wheel Floor pressure Floor surface preservatio FLOW Fort guard Forklift trucks FTF / FTS Furniture castor Guide rollers Heat-resistant Heavy-duty castor Hub cap / hub end cap Hub keyway Hub length	513, 538–539, 556–559, 582–583, 594–595

Index	Page
Jack	114, 606
Levelling castors45, 118–148,	390-398,
Load capacity (static and dynamic)	612–613 46
Manoeuvrability	44
Non-marking	120–121 388–389,
Offset	44
Operating noise	
Operating temperature Operational comfort	
B	
Pallet truck castors	
Plate (fitting)	
Plug-in pin	
Ply rating54 Polypropylene57, 330–331,	424–425
Polyurethane	55–56
Press-on band44,	
Profile types	
Radstop	,
Ribbed profile	
RimRoller bearing	
Rolling resistance	
Running wheel	559, 610
Safety factor Sandwich wheel Scaffolding castor Shore hardness Smooth rolling performance Smooth rolling quality53, 184–185, 424–425, 475, 492–495, 557–	.340–342 614 48 48 388–389, 559, 582,
Soft rubber 52–53, 120–121,	601-604 184-185
Softhane55, 256–257, 424–425,	475, 482,
492–495, 538–539, 556–559,	
Special versions Spherical roller bearing	
Spring-loaded castors	
Stainless steel.50, 152–153, 388–389,	
Standard application conditions	-604, 619 46
Standard solid rubber52, 184–185,	388–389,
Starlock cap	424-425
Starting resistance	
Stem (fitting)	104
Stop-fix	
Stop-top Swivel castor	
Swivel head	44
Swivel head separate	
Tailor-made solutions	592_502
TempLine53,	
Test conditions	45
Thermoplastic polyurethane (TPU)55,	
152–153, 256–257, 388–389, 424– 512–513,	
Thermoplastic rubber-elastomer (TPE)	52,
120–121, 152–153, 184–185,	
Thread guard	424–425 116
-	

Index	Page
Top plate fitting	104, 106–111
Total height	44
Transport unit castors	45, 614–615
Tread	44, 52–59
Tread and tyre hardness	
Triple castor	
Truck lock	
Tyre	44
Vulkollan56, 256–257,	512–513, 538–539 556–559
WAVE	152–153
Wear resistance	49
Wheel	44
Wheel bearing	84–85
Wheel brake	112-113, 115
Wheel for stackers and forkli	ft trucks 556-559
	620
Wheel series	
Wheel set	623
7ig-zag profile	241 538–539 582





Blickle product information

All of the information about Blickle products in this catalogue must be taken into consideration when evaluating the liability and obligations of the manufacturer regarding its products, particularly in accordance with Section 4 of the Product Liability Act and Section 3(2) of the Product Safety Act. The manufacturer will not be liable if this information is not complied with.

1.0 Product information and intended use

Wheels and castors are defined as components that are exchangeable and can be attached to units, furniture, transport systems or similar products to render them mobile.

This product information relates to wheels and castors, particularly passively-steered castors (swivel castors), for vehicles and equipment that are temporarily moved by hand (objects) at no faster than walking pace (4 km/h) and not for permanent operation.

Within the context of this product information, wheels and castors are used in the following areas:

Residential:

e.g. seating, domestic furniture

Services sector:

- general services, e.g. trolleys, office furniture
- · Hospitals, e.g. hospital beds

Industrial:

 e.g. transport units for medium and heavy loads

Intended use includes proper installation:

- a) The product must be fastened to the object at all available points.
- b) The object must be adequately stable at these points.
- c) The installation must not impede or alter the functionality of the product.
- d) Swivel castors must be installed in such a way that they pivot around a vertical axis.
- e) Fixed castors must be installed in such a manner that their wheel axles are aligned.
- f) All castors on an object must have the same mounting height.

Special versions must be used for wet rooms, applications in the vicinity of the sea, equipment exposed to the elements or in aggressive environments that lead to increased corrosion.

Special versions must be specified when products are used in a temperature range that is outside of the normal range for the standard products in this catalogue. Standard products must not be exposed to the rated load under these conditions.

The wheel, bracket, brake and axle options form a single functional unit. Blickle only assumes liability for original products.

Clients must take all possible loads into consideration when selecting castors. If they are not taken into consideration, additional safety factors should be used (see Wheel and castor guide on Page 50).

2.0 Incorrect use

The following situations are some examples where wheels and castors are being used incorrectly:

- a) The wheels and castors are used to carry loads in excess of the maximum load capacity in the catalogue.
- b) The product is used on an unsuitable and uneven floor.
- c) The product is used at temperatures that are too high or too low.
- d) A unit is forcibly moved when the brake is activated or if the brake is used to slow down.
- e) The product could be affected by particularly aggressive substances.
- f) The product is affected by unusually severe loads as a result of impact or falls.
- g) Foreign bodies could penetrate the press-on
- h) The wheels and castors are operated at an excessively high speed.
- i) Changes are made that were not approved by the manufacturer.
- j) The wheels and castors are exposed to mechanical damage due to external factors or a collision

3.0 Product performance

If no specific information is provided about product performance in our catalogues, brochures, service descriptions, etc., you must contact us to determine if our wheels and castors or their components meet your requirements.

Please refer to the relevant DIN, ISO and EN standards for guidance.

Differing from the standard approach for wheels and castors, the brake forces of castors with brake systems are designed to ensure the optimal balance between high brake forces and low actuation forces.

4.0 Product maintenance

Recommended annual maintenance / inspection:

- Lubricant should be added once a year for products with a grease nipple until a small amount of grease comes out of the bearings. We recommend using a multi-purpose calcium complex based grease (such as Renolit CX-EP 2) with a temperature range of between -30°C and 140°C. We recommend using a different grease if the product is used in different application conditions.
- 2. Check that all of the screw fittings are secure.
- Check that the wheel, swivel head, lock, directional lock, brakes and other options are functioning properly.
- Check the play of the wheel bearing and swivel head, ideally in accordance with DIN EN 12530 to 12533. (ISO 22881 to ISO 22884)
- 5. Check the air pressure of pneumatic tyres in accordance with the Blickle General Catalogue.
- Inspect solid rubber tyres and treads for wear and abrasion. For guidance: max. abrasion
 1/2 thread thickness.

We recommend performing the above measures more frequently if you are using the products in non-standard application conditions.

Cleaning agents may only be used if they do not contain any substances that may cause damage

Castors and their components must be replaced as soon as they start functioning incorrectly.

5.0 Product conformity

Up-to-date information about guidelines and standards related to product safety requirements and technical market access requirements (e.g. ATEX, REACh, RoHS, PAK/GS) is available at www.blickle.com.

6.0 Obligation to provide information and instructions

In order to comply with our obligation to provide information, instructions and maintenance guidance in accordance with the Product Liability Act, we provide the following:

- · for retailers:
- catalogues with product and user information
- · for processors:
- catalogues with product and user information
 for users: product and user information

In order to make sure that wheels and castors function properly

- Retailers are obliged to comply with this product information (see 1.0–5.0) and the user information. They are also required to request this information from the manufacturer and pass it on to processors if necessary.
- Processors are obliged to comply with this product information (see 1.0–5.0) and the user information. They are also required to request this information from the manufacturer and pass it on to users if necessary.

Diagrams, drawings, dimensions, etc. are subject to change and are therefore provided on a non-binding basis.

