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**Quality
and performance
since 1985**

**WHEELS
&
BRAKES**

2010



following TRA2007 (tire and rim association)

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**Champion du Monde Endurance
2000, 2002, 2003**

BERINGER® has been manufacturing brakes for motorcycles in the same spirit of quality and performance for 17 years. After only a short time, BERINGER® braking products have been accepted by the well-known racing teams for their exceptional reliability, allowing BERINGER® to be used by 15 teams in the World Endurance Championships over a period of 10 years. BERINGER® was used by the 2000 and 2003 World Champion Team Phase One, 2002 with the Team ZONGSHEN, 2nd in 2005 and 3rd in 2006 with BOLLIGER Team.

Champion US Supermotard 2009

BERINGER® brakes for cars have also been showered

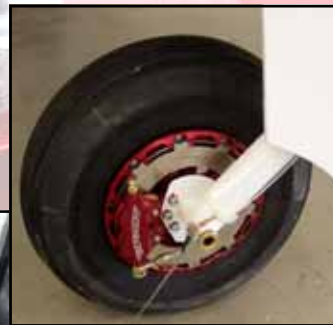
with praise in Supertourismo races with a title in 2002, 2003 and 2005 French Champion. BERINGER® also supplied the brakes for the 2003 RENAULT FRV6.

This was all made possible by a team of exceptional Mechanical Engineers who have studied and developed new products for each specific use. These innovations are covered by many patents and have allowed BERINGER® brakes to take a decisive technological lead.

Of course BERINGER® controls product quality to ensure total reliability to the users of brakes. This is evidenced by the following certifications : ISO 9001, UTAC, TÜV.

BERINGER® wheels and brakes for airplanes are using this innovating technology as well as the patents developed for car and motorcycles competition. They have allowed the creation of a product whose ratio weight/performance is without precedent.

A new standard in safety and efficiency is now available in Aircraft Brake Systems.



WHEEL 5"

- Dimension : 5.00-5 and 4.00-5
- Static load 650 kg (1432 Lbs) Limit load : 2600kg (5731 Lbs)
- TUBELESS in three parts with O-rings and rigid valve.
- Aluminium alloy : 2017 machined from solid on CNC
- Following TRA 2007
- ISO standards bearings for optimized durability 25mm (1") for outer rim and 30mm (1.18") for inner rim (sealed ball bearings)

PATENTED



CALIPER AEROTEC® 2P for 5" wheel

- 2 austenitic stainless steel polished pistons
- Body made of aeronautic alloy which can withstand high temperatures (>200Mpa at 390°F)
- To be used with DOT 4, 2 input M10x1
- Covered with Aerotec® patents
- Maximum operating pressure: 870 psi, tested limit pressure: 1740 psi.
- Brake torque of 4230 in-lb (at maximum operating pressure)
- Use a floating stainless steel disc (patent 4D AEROTEC®)
- Sintered brake pads: allows very high friction temperature (> 1100°F) and very long life

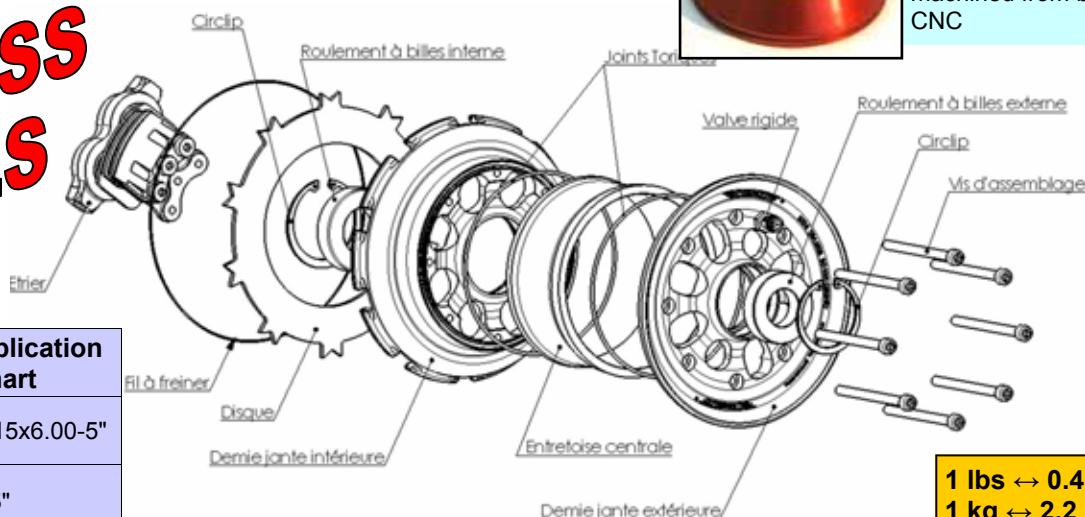


WHEEL CAP



- Anodized cap for wheel
- Alloy: 2017 (AU4G) machined from billet on CNC

TUBELESS WHEELS



Wheel	Tire application chart
JA-01, JA-31, JB-01	5.00-5" 15x6.00-5"
JA-02, JA-32, JB-02	11x4.00-5"

1 lbs ↔ 0.45 kg
1 kg ↔ 2.2 lbs

	Part#	DESCRIPTION	weight	Static load	Brake torque	Max RTO Energy	Price without tax (each)
Wheel with brake	JA-01	5.00-5" Wheel with Aerotec® Caliper 2 pistons EA-01 and stainless steel Disc DSC-006.	1930g	650kg	480 N.m	144,000 ft-lb	354 €
	JA-02	4.00-5" Wheel with Aerotec® Caliper 2 pistons EA-01 and stainless steel Disc DSC-006.	1830g	650kg	480 N.m	144,000 ft-lb	354 €
	JA-31	5.00-5" Wheel with reinforced Aerotec® Caliper 2 pistons EA-03 and stainless steel Disc DSC-005	2050g	650kg	480 N.m	198,000 ft-lb	398 €
	JA-32	4.00-5" Wheel with reinforced Aerotec® Caliper 2 pistons EA-03 and stainless steel Disc DSC-005	1950g	650kg	480 N.m	198,000 ft-lb	398 €
Nose wheel	JB-01	5.00-5" Nose wheel	1220g	650kg			248 €
	JB-02	4.00-5" Nose wheel	1120g	650kg			248 €
Cap	ZJB01	Cap for 5" wheel	30g				39 €

FINISH: Red anodizing is standard color for wheels, brakes and master cylinders. Other colors are available on special order at an additional cost of **48€** per batch of parts: **silver, blue, black, yellow, titanium grey.** Hard Nickel is also available for the wheels with a lead time and an extra cost of **115€**.

WHEEL 6"

- Static load: 950kg (2094 Lbs) Limit load: 3800kg (8377 Lbs)
- In three parts with rigid valve
- Alloy : 2017 (AU4G) machined from solid on CNC
- Following TRA 2007
- ISO standards bearings for optimised durability: 35mm (1.38") for outer rim and 45mm (1.77") for inner rim (sealed ball bearings)

CALIPER AEROTEC® 3P for 6" wheel

- 3 austenitic stainless steel polished pistons
- Body made of aeronautic alloy which can withstand high temperatures (>200Mpa at 390°F)
- Machined from solid on CNC
- To be used with DOT 4, 2 input M10x1
- Covered with Aerotec® patents
- Maximum operating pressure: 870 PSI tested limit pressure: 1740 PSI.
- Brake torque of 7720 in-lb (at maximum operating pressure)
- Normal Kinetic Energy: 340,000 in-lb
- Maximum R.T.O Kinetic Energy: 405,000 ft-lb
- Fixed caliper with a floating disc (patent 4D AEROTEC®)
- Sintered brake pads: allows very high friction temperature and very long life



3 piston AEROTEC® Caliper with sintered metal pads

TUBELESS WHEELS

USE ONLY
DOT 4
OR BERINGER
BRAKE FLUID

PATENTED

	Part#	DESCRIPTION	weight	Static load	Brake torque	Max RTO Energy	Price without tax (each)
Wheel with brake	JAB01	6.00-6" wheel (CNC machined - tubeless mounting) with Aerotec® Caliper 3 pistons EA-02 and stainless steel Disc DSC-001	3800g	950kg	875 N.m	405,000 ft-lb	548€
Cap	ZJB03	Cap for wheel 6", aluminium CNC machined, anodized	30g				45 €

wheel	Tire application chart		
JAB01	6.00-6"	15x6.00-6"	7.00-6" 8.00-6" 8.50-6"

CAP FOR WHEEL

- ANODIZE CAP FOR WHEEL
- ALLOY 2017 (AU4G) CNC machined from billet



FINISH: Red anodizing is standard color for wheels, brakes and master cylinders. Other colors are available on special order at an additional cost of 48€ per batch of parts: silver, blue, black, yellow, titanium grey. Hard Nickel is also available for the wheels with a lead time and an extra cost of 115€.

WE RECOMMEND FIRST MOUNTING OF TIRES ON WHEELS IN OUR PLANT. This service, free of charge, includes a pressure test, ensuring maximum security of the assembly.

ROUE 6" light WHEEL 6" light

- Static load: 400kg (881 Lbs) Limit load: 1600kg (3526 Lbs)
- In three parts with rigid valve
- Alloy : 2017 (AU4G) machined from billet on CNC
- Following TRA 2007
- ISO standards bearings for optimized durability: 25mm (1") for outer rim and 30mm (1.18") for inner rim (sealed ball bearings)



CALIPER AEROTEC® 2P for wheel 6" light

- 2 austenitic stainless steel polished pistons
- Body made of aeronautic alloy which can withstand high temperatures (>200Mpa at 390°F)
- To be used with DOT 4, 2 input M10x1
- Covered with Aerotec® patents
- Maximum operating pressure: 870 psi
- Tested limit pressure: 1740 psi.
- Brake torque of 4230 in-lb (at maximum operating pressure)
- Normal Kinetic Energy: 120,000 ft-lb Maximum R.T.O Kinetic Energy: 144,000 ft-lb
- Caliper is fixed with a floating disc (patent 4D AEROTEC®)
- Sintered brake pads: allows very high friction temperature (> 1100°F) and very long life

PATENTED



2 piston AEROTEC® Caliper with sintered metal pads

**TUBELESS
WHEELS**

	Part #	DESCRIPTION	weight	Static load	Brake torque	Max RTO Energy	Price without tax (each)
Wheel with brake	JAA01	6.00-6 light Wheel with Aerotec® Caliper 2 pistons EA-01 and stainless steel Disc ZJA02	2100g	400 kg	480 N.m	144,000 ft-lb	378 €
	JAA02	4.00-6 light Wheel with Aerotec® Caliper 2 pistons EA-01 and stainless steel Disc ZJA02	1930g	400 kg	480 N.m	144,000 ft-lb	378 €
Nose wheel	JBA01	6.00-6 light Nose wheel (CNC machined - tubeless mounting)	1410g	400 kg			282 €
	JBA02	4.00-6 light Nose wheel (CNC machined - tubeless mounting)	1240g	400 kg			282 €
Cap	ZJB02	Cap for 6" light Wheel aluminium CNC machined, anodized	30g				39 €

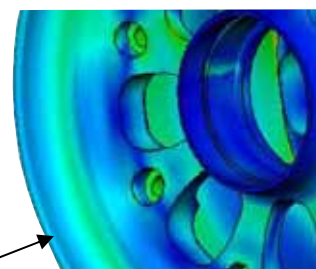
Wheel	Tire	Application Chart
JAA01	600-6"	7.00-6" 800-6"
JBA01	15x600-6"	
JAA02	4.00-6"	15x6.00-6"
JBA02	13x5.00-6"	

CAUTION: static load valid only with appropriate tire

1Lbs ↔ 0.45 kg

CAP FOR WHEEL

- Anodized cap for wheel
- Alloy: 2017 (AU4G) machined from billet on CNC

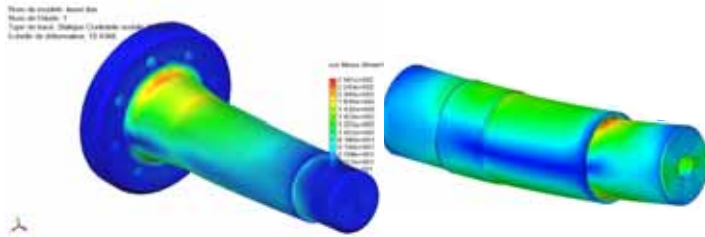


FEM calculated and checked

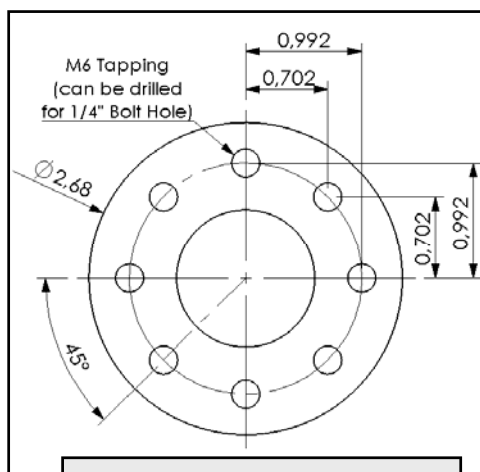
FINISH: Red anodizing is standard color for wheels, brakes and master cylinders. Other colors are available on special order at an additional cost of 48€ per batch of parts: **silver, blue, black, yellow, titanium grey.** Hard Nickel is also available for the wheels with a lead time and an extra cost of 115€.

Nous recommandons le **MONTAGE DES WE RECOMMEND FIRST MOUNTING OF TIRES ON WHEELS** IN OUR PLANT. This service, free of charge, includes a pressure test, ensuring maximum security of the assembly.

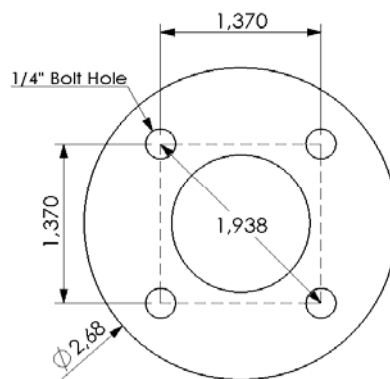
- Material: aluminium anodized or high strength steel with thin nickel coating
- Different types of axle available:
 - for wheel fork
 - for cantilever installation
- FEM calculated and checked for better stress distribution



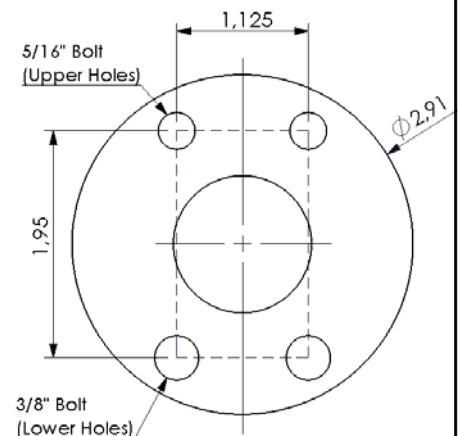
AXLE BOLT HOLE TEMPLATES (dimensions are inches)



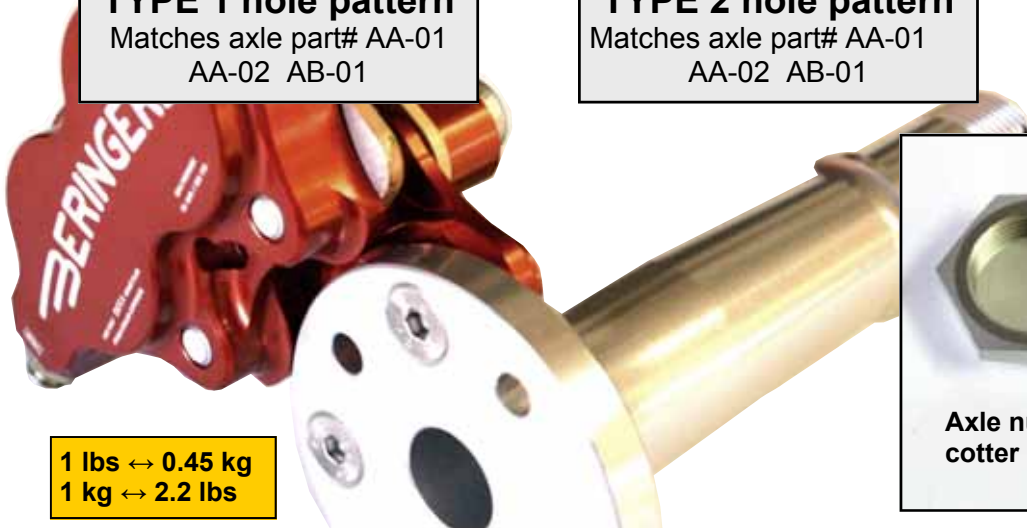
TYPE 1 hole pattern
Matches axle part# AA-01
AA-02 AB-01



TYPE 2 hole pattern
Matches axle part# AA-01
AA-02 AB-01



TYPE 3 hole pattern
Matches axle part# AA-04



1 lbs ↔ 0.45 kg
1 kg ↔ 2.2 lbs



Axle nut and
cotter pin

Part #	DESCRIPTION	weight	Max Static load per axle	Limit load	Price without tax
AA-01	Aluminium Axle for 5.00-5" and 4.00-6" light wheel	240 g	350 kg	1250 kg	64 €
AA-02	Aluminium Axle for 4.00-5" wheel (anodized)	210 g	450 kg	1600 kg	64 €
AA-04	Aluminium Axle for 6.00-6" wheel (anodized)	630 g	800 kg	2800 kg	98 €
AB-01	Steel Axle for 5.00-5" wheel (nickel coated)	620 g	650 kg	2300 kg	86 €
ZSA01	Aluminium nut M25x1,5	5 g	For axle AA-01, AA-02, AB-01		5.9 €
ZSB01	Aluminium nut M35x1,5	10 g	For axle AA-04		8.5 €

Save up to 1.5kg on your experimental aircraft with lightweight BERINGER® nose wheel. Nose Wheels are aluminum red anodized, machined from billet on CNC, with O-rings for Tubeless mounting.

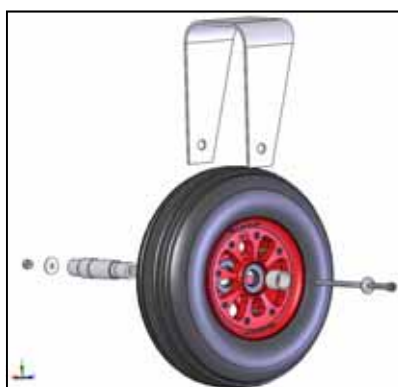
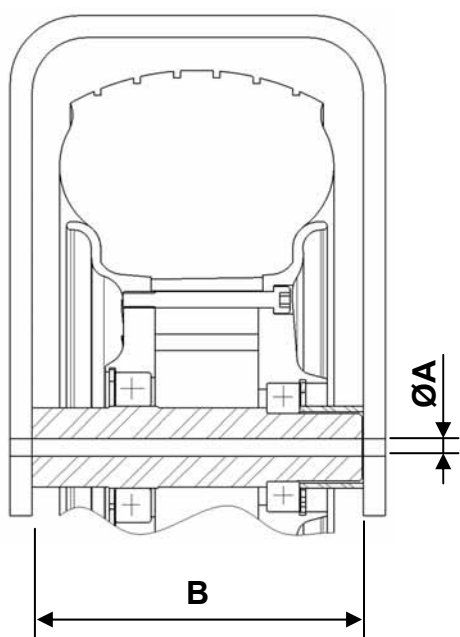
The NOSE WHEEL KIT includes:

- 1 nose wheel
- 1 tire (mounted on rim, pressure tested)
- 1 aluminium axle with bearing spacer

TUBELESS WHEELS



Aircraft Type	Wheel	Tire	axle		Weight of the kit	Kit Part n°	Price without tax
			Ø A	B			
Lancair 320, 360 (retractable LG)	4.00-5"	11x4.00-5" 8ply	6.5mm	110.5mm	2860 g	SLC02A	349 €
Lancair legacy (retractable LG)	4.00-5"	11x4.00-5" 8ply	6.5mm	110.5mm	2860 g	SLC01A	349 €
Glasair III (retractable LG)	4.00-5"	11x4.00-5" 8ply	6.5mm	120.65mm	2860 g	SGL01A	349 €
Van's RV6A, 7A, 9A	4.00-5"	11x4.00-5" 8ply	10mm	115mm	2860 g	SRV02A	349 €
MCR 01	4.00-5"	11x4.00-5" 8ply	20mm	129mm	2860 g	SDY01A	319 €
Zenair CH 601XL	4.00-6"	13x5.00-6" 4ply	8mm	141mm	2800 g	SZH02A	368 €
Standard BERINGER®	4.00-5"	11x4.00-5" 8ply	20mm	115-129mm	2860 g	SST02	298 €
Standard BERINGER®	5.00-5"	Michelin Aviator 5,00-5" 10ply	20mm	137-145mm	3950 g	SST03	398 €
Standard BERINGER®	4.00-6"	13x5,00-6" 4 ply	20mm	125-145mm	2800 g	SST04	354 €
Standard BERINGER®	4.00-5"	11x4.00-5" 8ply	12mm	108mm	2860 g	SST02	298 €



Other kits are available.
Please ask us.

COMPLETE KITS FOR MAIN LANDING GEAR see following pages



Upgrade your aircraft and save 3 to 4.5 kg with high performances BERINGER® wheels and brakes. These complete wheels and brake sets are designed to mount directly, replacing original equipment. Wheels are aluminum red anodized, fully CNC machined, with O-rings for Tubeless mounting. Brake calipers use sintered metallic pads and stainless steel pistons for increased life time.

Wheel & brake set includes:

- 2 wheels 5" with reinforced calipers and stainless steel discs
- 2 tires (mounted on rims and pressure tested)
- 2 axles or 2 sets of adaptation parts
- master cylinders & 2 fluid reservoirs
- 1 parking brake valve
- 1 anti-lock regulator
- stainless steel brake lines
- detailed mounting procedure.

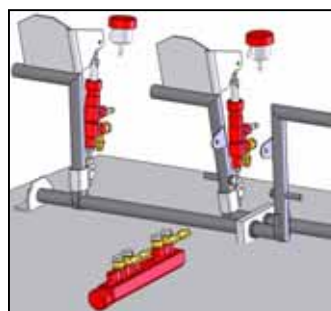
PATENTED



Aircraft Type	Wheels	Tires	Other parts	Brake fluid	Part #	Price without tax
Van's RV6, 7, 9	JA-31	Michelin Aviator 5,00-5", 10ply	4 master cylinders HBA01	DOT4	SRV01	2423 €
Van's RV6, 7, 9	JA-31	Michelin Aviator 5,00-5", 10ply	2 master cylinders HBA01 No parking brake valve	DOT4	SRV06	2013 €
Van's RV6A, 7A, 9A	JA-31	Michelin Aviator 5,00-5", 10ply	4 master cylinders HBA01	DOT4	SRV02	2423 €
Van's RV6A, 7A, 9A	JA-31	Michelin Aviator 5,00-5", 10ply	2 master cylinders HBA01 No parking brake valve	DOT4	SRV05	2013 €
Van's RV8	JA-31	Michelin Aviator 5,00-5", 10ply	2 master cylinders HBA01	DOT4	SRV03	2033 €
Van's RV8A	JA-31	Michelin Aviator 5,00-5", 10ply	2 master cylinders HBA01	DOT4	SRV04	2065 €
Lancair 320/360 (retractable LG)	JA-32	11x4.00-5", 8ply	4 master cylinders HBA01	DOT4	SLC02	2092 €
Lancair 320/360 (retractable LG)	JA-32	11x4.00-5", 8ply	2 master cylinders HBA01 No parking brake valve	DOT4	SLC04	1691 €
Lancair legacy (retractable LG)	JA-31	Michelin Aviator 5,00-5", 10ply	4 master cylinders HBA01	DOT4	SLC01	2430 €
Lancair legacy (retractable LG)	JA-31	Michelin Aviator 5,00-5", 10ply	2 master cylinders HBA01 No parking brake valve	DOT4	SLC03	1986 €
Glasair III (retractable LG)	JA-31	Michelin Aviator 5,00-5", 10ply	4 master cylinders HBA01	DOT4	SGL01	2384 €
Glasair III (retractable LG)	JA-31	Michelin Aviator 5,00-5", 10ply	2 master cylinders HBA01 No parking brake valve	DOT4	SGL02	1986 €



**TUBELESS
WHEELS**



Other kits are available.
Please ask us.

Main wheel mounting schema
with BERINGER wheel

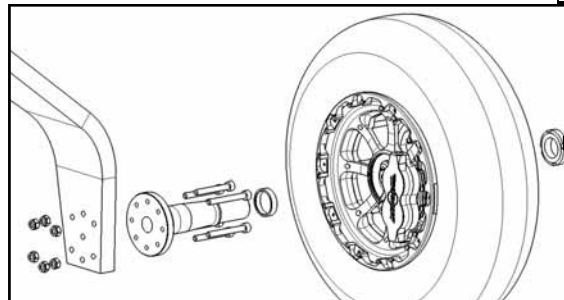
Upgrade your aircraft or ultralight and save 3 to 5kg with high performances BERINGER® wheels and brakes. These complete wheels and brake sets are designed to mount directly, replacing original equipment. Wheels are aluminum red anodized, fully CNC machined, with O-rings for Tubeless mounting. Brake calipers use sintered metallic pads and stainless steel pistons for increased life time.

The wheel & brake set includes:

- 2 wheels with caliper and stainless steel discs
- 2 Tires
- 2 axles
- master cylinders with reservoir
- 1 anti-lock regulator or ultra light pressure limiter
- stainless steel brake lines
- detailed mounting procedure.



Aircraft Type	wheels	tires	Other parts	Brake fluid	Part #	Price without tax
Air Création Tanarg	-	-	1 regulator with brake lines	DOT 4	SAC01	332 €
BOT Speedcruiser	JAA02	4.00-6" 6 ply	1 rudder master cylinder HBA01	DOT4	SBT01	*
Breezer	JA-01	5.00-5" 10ply	2 rudder master cylinders HBA01	DOT4	SBR01	*
C42 COMCO Ikarus	6"	15 x 6.00-6" 6ply	1 hand master cylinder HAB02	DOT4	SCC01	*
Dynamic WT9	JAA02	15 x 6.00-6" 6ply	1 rudder master cylinder HBA01	DOT4	SAE02	1614 €
Dynamic WT9 Speed	JAA02	15 x 6.00-6" 6ply	1 rudder master cylinder HBA01	DOT4	SAE01	1704 €
Eurostar EVEKTOR	JAA02	15 x 6.00-6" 6ply	2 rudder master cylinders HBA01	DOT4	SEU01	1660 €
Gaz'Aile	JA-02	11X4.00-5" 8 ply	1 hand master cylinder HAB02	DOT4	SGZ01	1370 €
G1 aviation	JAA02	8.00-6" 4ply	1 hand master cylinder HAB02	DOT4	SGA01	1502 €
Jabiru J400/J430	JA-31	5.00-5" 10ply	2 rudder master cylinders HBA01	DOT4	SJU01	1865 €
Jabiru J400/J430	JA-31	5.00-5" 10ply	1 hand master cylinder HAB02	DOT4	SJU05	1707 €
Jabiru J170	JAA02	4.00-6" 6 ply	2 rudder master cylinders HBA01	DOT4	SJU03	1739 €
Jabiru J170	JAA02	4.00-6" 6 ply	1 hand master cylinder HAB02	DOT4	SJU04	1581 €
Jodel D20 ULM	JA-01	5.00-5" 10ply	2 rudder master cylinders HBA01	DOT4	SJD01	1660 €
MCR01	JA-02	11X4.00-5" 8 ply	2 rudder master cylinders HBA01	DOT4	SDY01	1667 €
Mysky NG4	JA-01	5.00-5" 10ply	2 rudder master cylinders HBA01	DOT4	SMS01	
Norécrin, Nord 1200, 1201, 1202, 1203	JAB01	6.00-6	4 rudder master cylinders HBA01	DOT4	SNR01	2085 €
RANS Coyote	JAA02	15 x 6.00-6" 6ply	1 hand master cylinder HAB02	DOT4		1370 €
Savannah	JAA02	15 x 6.00-6" 6ply	1 hand master cylinder HAB02	DOT4	SSV01	1370 €
Sinus, Virus PIPISTREL	JAA02	4.00-6" 6 ply	4 maître cylindres palonnier HBA01	DOT4	SPP01	1990 €
Skyranger	JAA02	15 x 6.00-6" 6ply	1 hand master cylinder HAB02	DOT4		1370 €
Sting Carbon TL	JA-02	11X4.00-5" 8 ply	1 maître cylindre manche HAB01	DOT4	SSC01	1561 €
STORM Century	JA-02	11X4.00-5" 8 ply	1 hand master cylinder HAB02	DOT4	STR01	1320 €
VL3 AVEKO	JAA02	4.00-6" 6ply	2 rudder master cylinders HBA01	DOT4	SVK01	*
Zenair CH601XL	JAA02	15x6,00-6" 6ply	2 rudder master cylinders HBA01	DOT4	SZH05	1653 €
						* please ask us



**TUBELESS
WHEELS**

Upgrade your glider and save 1.5 to 3.5kg with high performances BERINGER® wheels and brakes. These complete wheel and brake sets are designed to mount directly, replacing original equipment. Wheels are aluminum red anodized, fully CNC machined, with O-rings for Tubeless mounting.

Brake calipers use sintered metallic pads and stainless steel pistons for increased life time.

The wheel & brake set includes:

- 1 wheel with caliper 2P and stainless steel disc
- 1 tire + 1 axle
- 1 master cylinder with reservoir
- 1 ultra light pressure limiter
- Stainless steel brake line
- Detailed mounting procedure

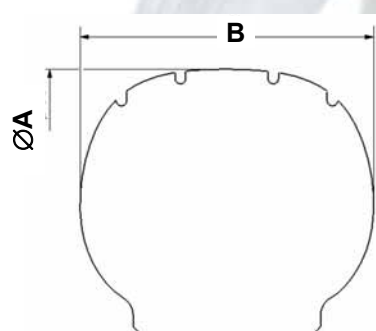


Type of glider	wheel	tire	Other parts	Brake fluid	Price without tax
Schempp Hirth Duo, Arcus	JA-01	380x150-5	1 master cylinder hydr/cable HAC01	DOT4	*
Schleicher ASW17	JA-02	5.00-5	1 hand master cylinder HAB02	DOT4	*
Schleicher ASW20	JA-01	5.00-5	1 hand master cylinder HAB02	DOT4	*
Schleicher ASW22	JA-01	5.00-5	1 hand master cylinder HAB02	DOT4	*
Test Bonus	JA-01	5.00-5	2 hand master cylinders HAB02	DOT4	*
Neukom Elfe S4	JA-02	11x4.00-5	1 hand master cylinder HAB02	DOT4	*
HPH 304S	JA-01	5.00-5	1 rudder master cylinder HBA01	DOT4	*
Glasflügel H201Libelle	JA-02	11x4.00-5	1 hand master cylinder HAB02	DOT4	*
Nimbus 3 et 4	JA-01	380x150-5	1 master cylinder hydr/cable HAC01	DOT4	*
Pégase	JA-01	5.00-5	1 hand master cylinder HAB02	DOT4	*
Stemme S6	JA-01	5.00-5	2 hand master cylinderS HAB02	DOT4	*
Schempp Hirth Ventus 2	JA-02	5.00-5	1 master cylinder hydr/cable HAC01	DOT4	*

* nous consulter

TIRES

Part#	DESCRIPTION		ØA (inch)	B (inch)	weight	Price without tax
PAA02	Michelin Aviator 5.00-5", 10 ply TUBELESS	Static load 2150 lbs	14.2	4.65	2640g	132 €
PAB01	Michelin Air 380x150-5", 6 ply,	Static load 1598 lbs	14.96	5.5	3000g	122 €
PAB02	Michelin Aviator 15x6.00-6", 6 ply,	Static load 1950 lbs	14.96	6.3	3150g	112 €
PAB03	Michelin Aviator 6.00-6", 8 ply TUBELESS	Static load 2350 lbs	17.5	6.3	4000g	149 €
PAB04	Michelin Aviator 8.00-6", 6 ply	Static load 2050 lbs	18.9	7.8	5800g	132 €
PAC01	11x4.00-5", 8 ply Tubeless	(non certified)	11.6	3.78	1580g	34 €
PAC02	15x6.00-6", 6 ply	(non certified)	14.75	5.1	2100g	32 €
PAC03	13x5.00-6", 4 ply	(non certified)	13.4	4.65	1400g	32 €
PAE01	Carlisle 8.00-6", 4ply	(non certified)	17.7	7.1	2970g	85 €
PAD01	4.00-6 6 ply	(non certified)	14.5	4.4	1600g	34 €



1Lbs ↔ 0.45 kg
1 in ↔ 25,4mm



HAND MASTER CYLINDER AEROTEC®

- available built-in reservoir or remote reservoir (to be ordered separately)
- parking brake valve optional
- Utilizes a three ball bearing system
- Covered with the world-wide AEROTEC® patents, it brings exceptional brake feeling
- Machined from billet on CNC
- Weight: 285g
- To fix on 22 mm (0.86") axle or directly on flat surface with 2 screws
- Works in all position



Part #	DESCRIPTION	weight	Price without tax
HAA03	Additional master cylinder to mount in serie (double braking control). To be used with primary HAB01 or HAB02	285g	224 €
HAB01	Built-in master cylinder	295g	226 €
HAB02	Built-in master cylinder with mechanical parking brake valve	295g	242 €



MASTER CYLINDER actuated with CABLE

Built-in reservoir, delivered with aluminium support.
Actuated with cable and wrapping, it can be installed in the fuselage

NEW

MASTER CYLINDER BUILT-IN RESERVOIR for CENTRAL STATION

All in one: lever, master cylinder, tight reservoir. To be mounted on Ø22mm axle or on support with two screws M6.

NEW



Part #	DESCRIPTION	weight	Price without tax
HAC01	Master cylinder Built-in reservoir with aluminium support	295g	226 €
HAB04	Master cylinder built-in reservoir for central station	300g	242 €

MASTER CYLINDER for Rudder pedals

- weight: 135g
- Diameter of the piston: 12.7 mm (0.5 ")
- Piston maximum travel : 20 to 22mm (0.75 to 0.86")
- Generated volume : 1.5 cubic inch
- Thread type of the connections: M10x1
- Ball end rods: M6x1 (male).
- Machined from solid on CNC
- Allows the mounting of 2 master cylinders in series (for right and left seat) see page 13



Part #	DESCRIPTION	length	weight	Price without tax
HBA01	Master cylinder for rudder pedals	170mm	135g	164 €
HBA02	Master cylinder longer for rudder pedals	190mm	139g	164 €

Remote RESERVOIR

- Transparent reservoir with CNC aluminium cover and visible fluid level
- With tight bellows
Delivered with mounting kit and hose
- Masse: 39g

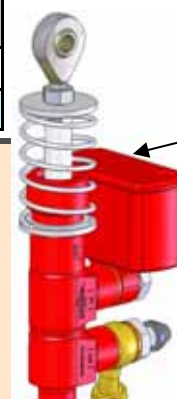
TIGHT 100%



Integral RESERVOIR ultra compact

- CNC machined from aluminium billet,
- with tight bellows
- Direct mounting on the master cylinder, 180° rotatable
- Weight : 55g

NEW



Vertical mounting
side mounting

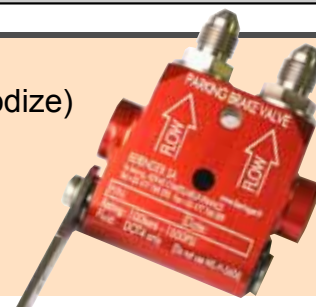


Part #	DESCRIPTION	weight	Price without tax
HFA01	Remote reservoir kit	39g	31€
HFA02	Integral reservoir CNC machined for rudder master cylinder	55g	46€

Lightweight parking brake valve, aluminum anodized

Available for mineral-based fluid (blue anodize) or DOT4 brake fluid.(red anodize)

- Actuated with lever quarter turn
- Fully CNC machined
- Max. input pressure: 1450PSI
- Max. input pressure: 100 bars
- BERINGER® braking systems use only DOT4 brake fluid



Part #	DESCRIPTION	weight	Price without tax
HVA01	Parking brake valve DOT4 fluid RED ANODISE DOT4	200g	186 €
HVA02	Parking brake valve mineral fluid BLUE ANODISE MIL-H-5606	200g	186 €

REGULATORS & PRESSURE LIMITERS

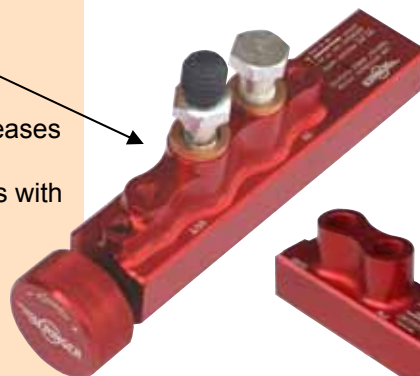
Ultra light PRESSURE LIMITER

- Can progressively limit the pressure in the braking system at 25, 35, 45 or 60bars
- Highly recommended to avoid over pressure and damage on the brake system
- To be used absolutely with master cylinder HAA02.
- Thread type of connection: M10x1
- Machined from solid on CNC
- For DOT4 brake fluid
- Weight: 65 g



ANTI-LOCK REGULATOR

- Low hysteresis anti-lock regulator
- For aircraft with symmetrical braking system
- This system avoids problems of brake blocking and increases life of tires and brake systems (linings, disc, inner rim)
- Can be adjusted from 10 to 40 bars or from 20 to 50 bars with a thumbwheel
- thread type of connection: M10x1
- For DOT4 brake fluid
- Machined from solid on CNC
- Weight: 270g



ALIR System
Anti Lock
In line
Regulator

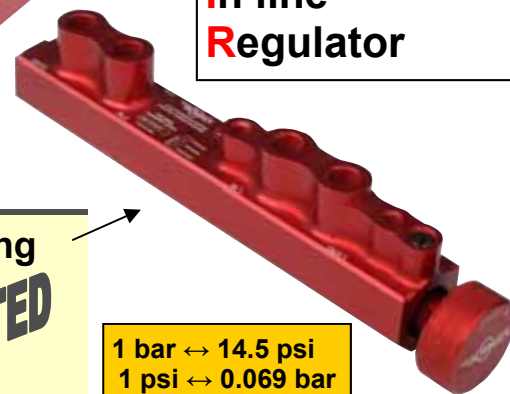
BALANCED ANTI-LOCK REGULATOR for in-line braking

Allows to brake in line in case of emergency braking

- 2 feeding and 2 output (thread : M10x1)
- For DOT4 brake fluid
- weight: 330g

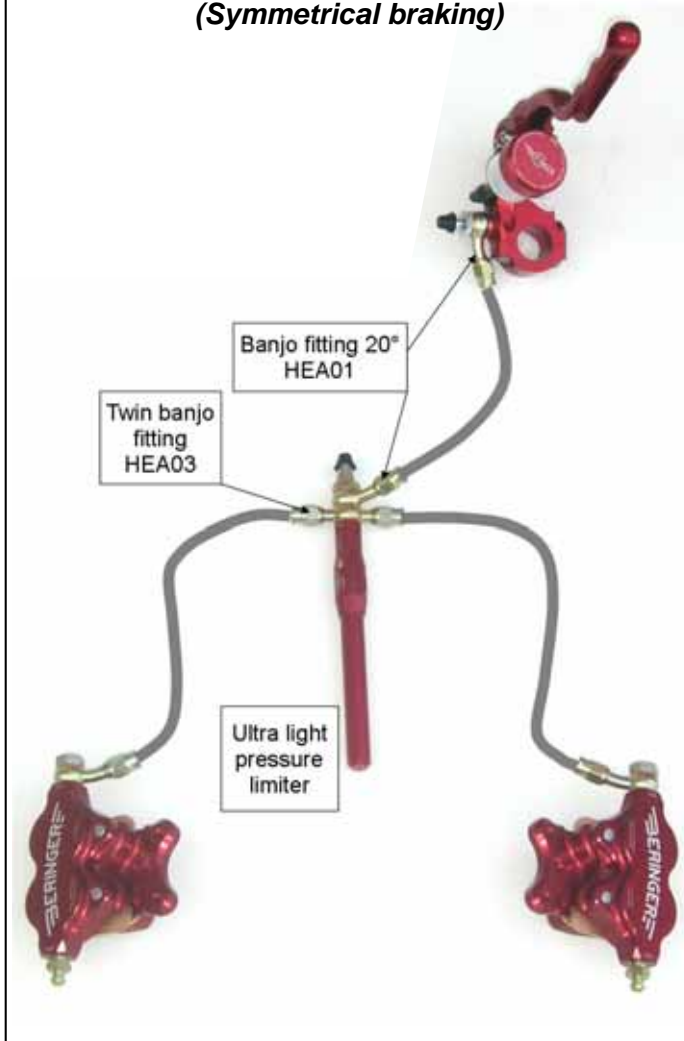
PATENTED

1 bar ↔ 14.5 psi
1 psi ↔ 0.069 bar

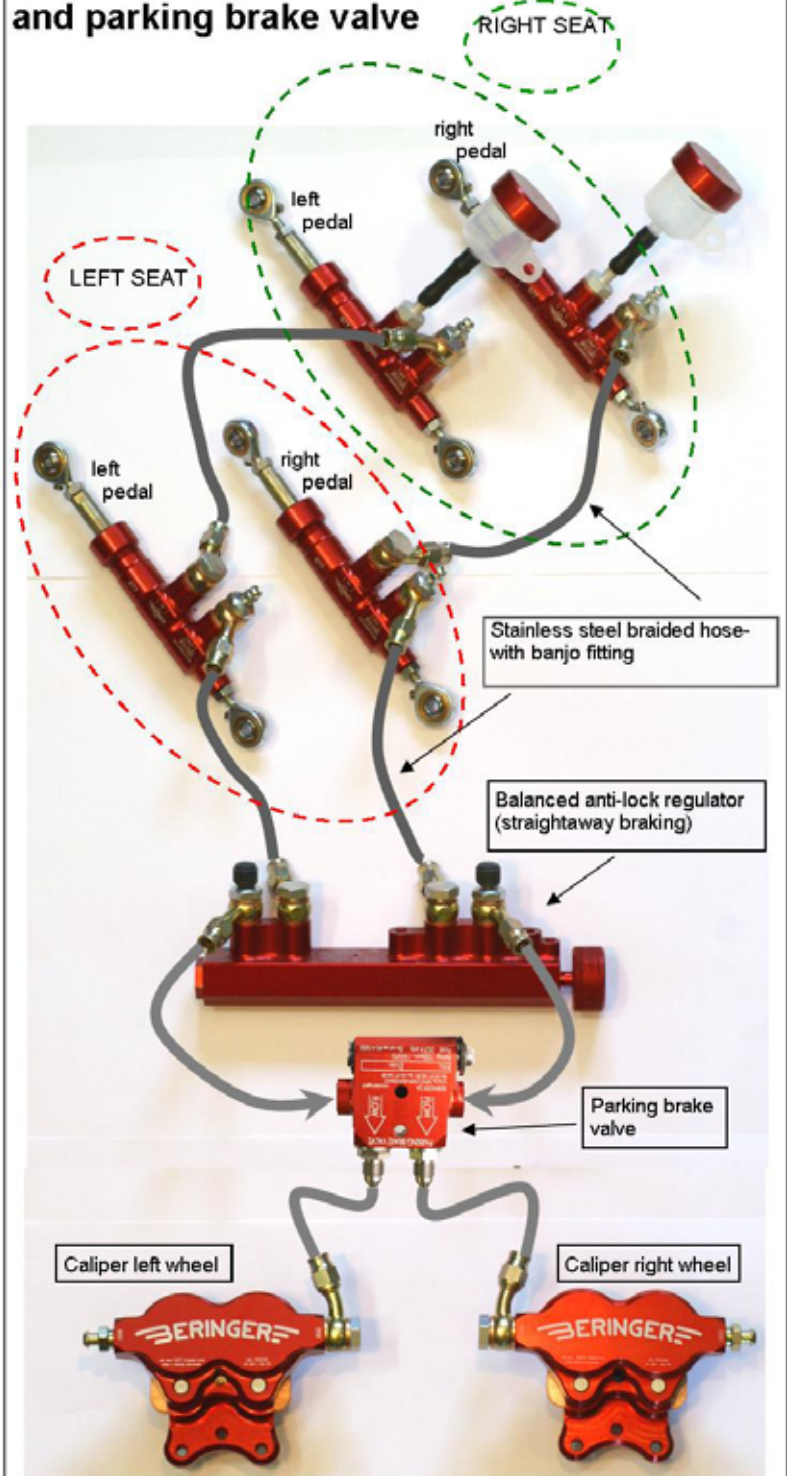


Part #	DESCRIPTION	weight	Price without tax
HCA01	Anti-lock regulator 10 to 40 bars brake fluid DOT4	270g	124 €
HCA11	Anti-lock regulator 20 to 50 bars brake fluid DOT4	270g	124 €
HCA02	Balanced anti-lock regulator 10 to 40 bars brake fluid DOT4	330g	124 €
HCA12	Balanced anti-lock regulator 20 to 50 bars brake fluid DOT4	330g	124 €
HZA04	Ultralight pressure limiter 25 bars brake fluid DOT4	65g	79 €
HZA01	Ultralight pressure limiter 35 bars brake fluid DOT4	65g	79 €
HZA02	Ultralight pressure limiter 45 bars brake fluid DOT4	65g	79 €
HZA03	Ultralight pressure limiter 60 bars brake fluid DOT4	65g	79 €

BRAKE SCHEMA with ultra light regulator (Symmetrical braking)



Differential braking system with balanced anti-lock regulator (straightaway braking) and parking brake valve



CAUTION: BERINGER® and AEROTEC® are registered trademarks. BERINGER® owns 9 different world patents protecting its unique technology on master cylinders, calipers, discs, brake regulators and aircraft wheels.

INFRINGERS WILL BE PROSECUTED

A fitting is required at each end of stainless steel hose.

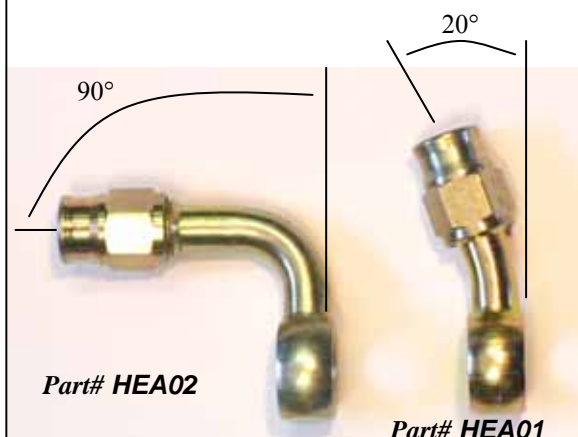


Part# HEA04

Part# HDB01



Stainless steel hose
braided for brake lines



Part# HEA02

Part# HEA01



STAINLESS STEEL

Part# HEA08 and HEA09



Part# HEA05

**CHOOSE your fittings, length and ORDER
YOUR BRAKE LINE
READY TO USE**

Ask for special brake line ORDER FORM

Part #	DESCRIPTION	Price without tax
HDA01	EPDM hose for reservoir, specific for DOT4 brake fluid	Per meter 4 €
HJA01	High performance Brake fluid DOT4	(0.5 L) 18.40 €
HJA02	High performance Brake fluid DOT5 Silicone base (longer life time). DOT5 cannot be mixed with DOT4.	(0.35 L) 22.50 €
HDB01	Stainless steel hose, braided, PTFE high temperature inner tube	Per meter 9.50 €
HEA01	Banjo fitting 20°	8.4 €
HEA02	Banjo fitting 90°	16.8 €
HEA03	Banjo twin	32 €
HEA04	Straight fitting, male M10x1	12.30 €
HEA05	Brake adaptor Metric M10x1 to JIC 7/16x20	8.90 €
HEA08	Straight fitting, female concave seat 7/16x20 (stainless)	35 €
HEA09	Straight fitting, female concave seat 3/8x24 (stainless)	29 €
ZGA01	Cushioned tube clamps for stainless steel hose	(batch of 10 parts) 7 €

BRAKE LINES for RV's

Retrofit your RV with stainless brake lines :

- BERINGER® Brake hose is stainless steel braided with PTFE inner tube and stainless steel fittings. It provides consistent brake pedal pressure without spongy feeling. The flexibility allows landing gear leg movements and avoids leakage that appears with hardline tube. Each brake line connect brake caliper to fuselage connector: straight fittings, female concave seat 7/16x20.
- Each brake line is pressure tested and delivered with certificate.



Part #	DESCRIPTION	length	Price without tax
HED01	Set of 2 Brake lines for RV6, 7, 9	1100mm (x2)	138 €
HED02	Set of 2 Brake lines for RV6A, 7A, 9A	850mm (x2)	138 €

- Designed and produced following the ADOA et POA (PART21G) agreement
- high resistance CRO-MO steel
- Fully machined on CNC
- Stabilizing heat treatment to limit heat distorsion
- Anticorrosion coating for easy running

CRO-MO alloy

longer life, maintenance reduced

Part #	DESCRIPTION	Price without tax
AV-ROB-001	Disque de frein pour DR400	195 €

Delivered with EASA Form1

BRAKING DISCS for BERINGER® wheels

Part #	DESCRIPTION	Price without tax
DSC-001	Stainless steel brake disc for Aerotec® caliper 3P EA-02	85 €
DSC-005	Stainless steel brake disc for reinforced Aerotec® caliper 2P EA-03	48 €
DSC-006	Stainless steel brake disc for Aerotec® caliper 2P EA-01	41 €
DSC-007	Stainless steel brake disc for reinforced Aerotec® caliper 2P EA-03 high energy	ask us



SPECIFIC TOOLS

BERINGER® TOOL for tire changing

- Specific tire change tool for BERINGER® wheels with conical aluminum spacer to insert tire on wheel half.
- Plywood flanges maintain tire while positioning second wheel half with the O-ring.
- Includes: Plywood flanges, bolts with butterfly nut and conical aluminum spacer

Part#	DESCRIPTION	Price without tax
OPA01	Tire change tool for 5" wheels	78 €
OPA02	Tire change tool for 6" wheels	92 €
KDF01	O-rings to be replaced at each tyre changing for 5" wheel (set for one wheel)	8 €
KDF02	O-rings to be replaced at each tyre changing for 6" and 6" light wheel (set for one wheel)	8 €


O'ring
KDF01 & KDF02

Pressure
bleeder

TIRE LUBRICANT

Spray of professional liquid soap, Michelin BIB'UP

SPRAY ANTI-PUNCTURE

to spray into the tire in case of puncture

BRAKE PRESSURE BLEEDER helps the bleeding by sending the brake fluid under pressure in the line. Delivered with manometer, hose and fittings

WARNING: the o'ring located between the rims and spacer must be replaced at each tire changing.

Part#	DESCRIPTION	Price without tax
ONA01	Spray Michelin Bib Up	19€
ONB01	Spray anti-puncture	19€
ONC01	Pressure bleeder	69€

PADS

- Friction material: sintered metal
- High coefficient of friction
- Very long life time
- Withstand very high temperatures 600°C

PATENTED



Part#	DESCRIPTION	Price without tax
ZEA01	OEM pads for BERINGER® 2 piston caliper EA-01 (incl. 2 pads for 1 caliper, screws & procedure)	33 €
ZEA02	OEM pads for BERINGER® 2 piston reinforced caliper EA-03 (incl. 2 pads for 1 caliper, screws & procedure)	45 €
ZEB01	OEM pads for BERINGER® 3 piston caliper EA-02 (incl. 2 pads for 1 caliper, screws & procedure)	58 €

REPAIR KITS

Repair kits are available for BERINGER® master cylinders, 2 and 3 piston calipers. They include all piston seals, specific grease, bearings (master cylinders), copper seals, assembling instructions.

Part#	DESCRIPTION	Price without tax
KAA01	Repair kit for BERINGER® hand master cylinders HAA01, HAA02, HAB01, HAB02	48 €
KAB01	Repair kit for rudder pedal master cylinder HBA01	72 €
KBA01	Repair kit for 2 piston calipers EA-01 and EA-03	48 €
KBA02	Repair kit for 3 piston caliper EA-02	62 €



SPARE CLIPS

Stainless steel clips between wheel rim and disc.
Includes: 10 left and 10 right (set for 1 wheel), procedure



Part#	DESCRIPTION	Price without tax
KCA01	Spare CLIPS for one 5" wheel (10 left and 10 right)	20 €
KCA02	Spare CLIPS for one 6" Light wheel (10 pieces)	20 €

OTHER PARTS

- O'ring seal for BERINGER® rims
- Safety wire
- Brake fluid

Part#	DESCRIPTION	Price without
KDF01	O-ring seals to be replaced at each tyre changing for 5" wheel (set for one wheel)	8 €
KDF02	O-ring seals to be replaced at each tyre changing for 6" and 6" light wheel (set for one wheel)	8 €
ZPA01	Safety wire stainless steel (roll of 450g)	32 €
HJA01	High performance Brake fluid DOT4 0.5L	18.40 €
HJA02	High performance Brake fluid DOT5 Silicone base (longer life) DOT5 cannot be mixed with DOT4. 0.35L	22.50 €



DOT4 brake fluid

High performance DOT4 brake fluid with dry boiling point at 440°F minimum meets FMVSS 116/DOT4 specifications.

DOT4 is yellow colored and it is not compatible with brake system designed for mineral base fluids.

Illustrations and photos are not contractual. Parts can be modified in the constant search for improvements.