

2013

WHEELS & BRAKES

high performance for Aircraft



Quality and performance since 1985

1985 **Gilbert Béringer** created BERINGER Company, helped by his wife **Véronique**. He has been manufacturing wheels, forks and side cars for motorbikes, and then brakes, in the same spirit of quality and performance for 27 years. BERINGER braking products for motorbikes and cars have been accepted by the well-known racing teams for their exceptional reliability, allowing BERINGER to be used by many teams in the World Endurance Championships with many World Champion titles. This was all made possible by a team of exceptional mechanical engineers who have studied and developed new products whose performance/weight ratio is without precedent, for each specific use.

2002 **BERINGER Wheels & Brakes** was born, when Gilbert Béringer, also a pilot and aircraft builder fond of aviation, decided to apply his patented high performance braking solutions to the aeronautical world.

2007 **Rémi Béringer**, son of Gilbert and Véronique, joined the Company after he graduated as Mechanical Dipl. Engineer. Also fond of aviation, he designed with Gilbert most of the products dedicated to light-sport aircraft, Formula One Racers, gliders and various fast machines.

2009 BERINGER Company sold motorbike and car activities to focus on the development of wheels & brakes for aircraft. **BERINGER AERO** was born.

2011 BERINGER AERO moved to the airport of Gap-Tallard in the south of France, in a new building dedicated to aviation, with a direct access to the runway. This new plant consists of offices, workshops, and test room with the dyno and test benches designed by Rémi. A hangar welcomes the aircraft receiving the wheel & brake prototypes for the tests.

Claire BERINGER, daughter of Gilbert and Véronique, joined the Company after she graduated as Aeronautical & Energy Dipl. Engineer (including 5 months at Oakland University-Detroit, MI) topped with a Master's degree in Commercial and Management Operations..

Loïc and **Sibylle**, two young people from Gap, have also joined the Company.

A FLYING FAMILY In the Béringer family, everybody flies: Gilbert, Véronique and Rémi fly their homebuilt tail dragger as well as gliders; and Claire flies gliders and ultralight Aircraft.

AN ADVANCED TECHNOLOGY

BERINGER makes wheels and braking systems for a wide range of aircraft, from light aircraft up to its now-standard STC for the Pilatus PC-6, plus complete kits for many popular aircraft, that include everything for a bolt-on conversion.

These innovations are covered by many patents and have allowed BERINGER brakes to take a decisive technological lead.

QUALITY and CERTIFICATIONS

Of course, BERINGER® controls product quality to ensure total reliability to the users of wheels and brakes. This is evidenced by the Alternative Procedures to Design Organisation Agreement given by EASA in 2006 and by the Production Organisation Agreement given by DGAC in 2008.



APDOA
Certification d'Organisation
(EASA)



AUTOMATISÉ DE
EXERCICES

Certification
d'Organisation de
Production



Claire - Sibylle - Gilbert - Loïc - Rémi - Véronique

BERINGER AERO's commitment to sustainable development

Respect for the Environment

- At BERINGER, toxic substances and non recyclable materials are eliminated from the fabrication process
- Workshop trash is sorted prior to disposal.
- An environmental awareness campaign is in force and consistently reviewed.

Reduction of Energy Consumption

- Our specially-designed bioclimatic building (BBC) made of local wood only consumes only 10% of the energy required to heat or cool a conventional steel building.
- 98% of the energy used to heat our water is solar-powered
- BERINGER employs vehicles using propane (LPG): they have reduced CO2 emissions and have no particulate emissions.

Eco-Designs for Products

- BERINGER products are designed to have a virtually unlimited service life, because pieces that are worn down can be replaced.
- Components are 99% recyclable.
- 98% of the products are made in France, within a radius of 200 miles; this process reduces transportation and energizes local industrial bases.

Respect for Human Dignity in the Workplace

- From one end of the assembly line to another, from in-house to subcontractors, BERINGER staff members work in optimal conditions following the regulations of OIT (International Work Organization).
- BERINGER does not award contracts based on "lowest-cost," and does not use outsourcing.

Respect for the Ethics of Economics

- BERINGER partners (suppliers, subcontractors, banks, clients) are chosen based on ethical criteria, not only the lowest price
- BERINGER commits to projects based on their moral philosophy :
 - BERINGER wheels are not involved in projects that could intentionally threaten human life.
 - BERINGER has partnerships in eco-friendly projects (e.g., Green challenge, SolarImpulse).

Zero Compromise on Quality

At BERINGER, quality is not only respect for procedures that the EASA certifies, such as the Design Approval Organization and the Production Approval Organization (Part 21G). Quality is a pledge of trust to our clients: our clients entrust us with their lives. To remain worthy of this trust, we offer a life-time warranty (liability insurance) on materials and craftsmanship on all our products.

BERINGER AERO integrates its partners in its projects, from the design stage to commercialization

- AeroProviders : a group of suppliers for Light Aviation manufacturers
- PEGASE : innovation and development group of companies working for Aviation
- Hautes Alpes Développement: Development Agency for local companies In Hautes Alpes department (region) of France.



**made in
respect**
LE CADRE DU DÉVELOPPEMENT DURABLE



Beginning in 2010 and continuing now, the **MADE IN RESPECT** label recognizes BERINGER AERO's commitment to sustainable development

On February 24, 2012, BERINGER AERO won the **Trophée RSE PACA TPE** (Social Responsibility of the Companies).

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CAN'T FIND WHAT YOU NEED ? LET US HELP

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us.sales@beringer-aero-usa.com www.beringer-aero.com

Mailing address : **BERINGER AERO USA Inc.**

4118 N. Nashville - Chicago, IL 60634

WARNING: the mounting and the maintenance of the wheels and brakes must be done by an authorized **BERINGER SERVICE CENTER** (and by a certified Part 145 workshop for certified aircraft). **BERINGER Company is not responsible of troubles due to a wrong mounting, not in accordance with BERINGER instruction (available on our website) and with State of the Art.**

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.

INFRINGEMENTS WILL BE PROSECUTED

■ How can I order BERINGER parts ?

- You can order directly from BERINGER or from our distributors and Service Centers
- Download the order form on our website
- Call us or send an e-mail contact@beringer-aero.com at any time and we will return some ideas.

■ I have a technical question. Who can help ?

- Our Service Centers are able to answer many technical questions, but for a precise technical or engineering question, please contact BERINGER directly.

■ Why are most BERINGER wheels made for tubeless tires?

- Tubeless has many advantages compared to tube type:

- safer (less risk of puncture)
- weight saving (a tube weights around 1 to 2 lbs)
- cost effective (no tube means no tube to buy)

These are the same reasons why nowadays you find tubeless wheels on cars, motorcycles, and all commercial airplanes. Tubeless designs have specific design to be airtight (most designs use o-rings) and precise machining to ensure proper contact between tire and wheel.

■ How can I choose the correct wheels, tires and brakes?

1. First, select your tires according to your use: What kinds of runways: grass, concrete, unimproved?
2. Match the wheel to the tires. (See our tire-wheel application chart in the catalog.)

The brakes you need will depend mostly on the weight of the aircraft and the landing speed, though tire size can come into play at the extremes of the size ranges: to get close, use the formula to calculate the Kinetic energy needed (see the catalogue p12). Many popular setups are already listed.

■ How do I know the type of brake fluid to fill my brake system ?

- The type of brake fluid to use is most of the time written directly on the brake caliper and on master cylinders. DOT4 usually has yellow to amber color and MINERAL ("Mil spec" or "aviation") brake fluid is red. If you have any doubt please contact BERINGER.

■ I filled my brake system with the wrong brake fluid what can I do ?

- The wrong brake fluid will damage the seals after only few minutes of contact. This is potentially dangerous because after a short period your brakes can lock or leak or stop working properly. If you have put the wrong fluid into the system, you will have to change all the seals of the entire system. (Note: this is true, regardless which brand of brake parts you use.) If you have a BERINGER system, ask BERINGER for repair kits or send the parts back to BERINGER service for repair.

■ If I switch to BERINGER Wheels & Brakes do I also need to change my master cylinders ?

- If they are compatible with the brake fluid then you still need to check the hydraulic ratio: with our brakes we recommend using master cylinders with a piston bore of 1/2" (9/16" maximum). If the bore of the master cylinders is too big, they cannot produce enough pressure to provide enough braking torque on the wheels. Some master cylinders are so crude (or just so old) that the inherent smoothness and feel of BERINGER calipers can be masked in operation; for this reason, we recommend using only BERINGER master cylinders.

■ I want to improve my Wheel & Brake system but BERINGER prices are too high.

- BERINGER systems are a little more expensive than ordinary products but thanks to their exceptional reliability and life, the operating cost is much more economical. It is often possible to pay back your investment in 1 or 2 years, with brake components that last, lines that don't leak, pads that have 3-5 times the life of legacy pads, quicker and simpler pad replacements, no tube expenses, no bearing maintenance, and (with ALIR), fewer flat-spotted tires and straighter, shorter stops. And all that time, you are enjoying better, smoother braking. (And BERINGER wheels save weight and look good, too.)

MAIN WHEELS & BRAKES - COMPLETE SETS

Upgrade your aircraft and save 6.60 to 11 lbs kg with high performance BERINGER® wheels and brakes. Complete main 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 discs for increased life.

Wheel & brake set includes:

- 2 wheels with calipers and stainless steel discs
- 2 tires (mounted and pressure tested)
- 2 axles or 2 sets of adaptation parts (as required)
- master cylinders & 2 fluid reservoirs
- 1 parking brake valve (only in Homebuild kits)
- 1 anti-lock regulator or pressure limiter
- stainless steel brake lines
- detailed instructions

TUBELESS WHEELS



All these sets are basic sets. For other types please ask us. For additional options like parking brake valve, copilot brakes, cap kits : see page 8.

Aircraft Type	Rim	Tires	Other parts	Brake fluid	SET Part #	Price
For HOMEBUILT - EXPERIMENTAL Aircraft						
Europa monowheel	6.00-6" HE1	7.00-6" Airtrac	1 hand m. cyl HAB02	DOT4	SEU02	\$2 229
Falco	5.00-5" HE2	Michelin Aviator 5.00-5", 10ply	2 m. cylinders MP-003	MIL	SFA01	\$3 875
Furio	5.00-5" HE2		2 m. cylinders MP-003	MIL	SFU01	\$2 841
Glasair III - RLG	5.00-5" HE2		2 m. cylinders MP-003	MIL	SGL02	\$2 841
Jabiru J400/J430	5.00-5" HE1	5.00-5" 10ply	2 m. cylinders MP-002	DOT4	SJU01	\$2 965
Jabiru J400/J430	5.00-5" HE1		1 hand m. cylinder HAB02	DOT4	SJU05	\$2 794
Lancair legacy - RLG	5.00-5" HE2	Michelin Aviator 5.00-5", 10ply	2 m. cylinders MP-003	MIL	SLC01	\$2 841
Lancair 320/360 - RLG	4.00-5" HE1	11x4.00-5", 8ply	2 m. cylinders MP-003	MIL	SLC04	\$2 706
Norécrin, Nord 1200-1201-1202-1203	6.00-6" JAB-01	6.00-6"	4 m. cylinders MP-002	DOT4	SNR01	\$3 315
For Van's Aircraft						
FUSELAGE KIT - RV6/6A, 7/7A, 8/8A, 9/9A Basic set			2 m. cylinders MP-002 No parking brake valve	MIL	SRVFU01	\$1 001
FUSELAGE KIT - RV6/6A, 7/7A, 8/8A, 9/9A Basic set + copilot brakes			4 m. cylinders MP-002 No parking brake valve	MIL	SRVFU02	\$1 581
FUSELAGE KIT - RV6/6A, 7/7A, 8/8A, 9/9A Basic set + parking brake valve			2 m. cylinders MP-002 parking brake valve	MIL	SRVFU03	\$1 421
FUSELAGE KIT - RV6/6A, 7/7A, 8/8A, 9/9A Basic set + copilot brakes + parking brake valve			4 m. cylinders MP-002 parking brake valve	MIL	SRVFU04	\$1 969
FINISHING KIT - RV6/6A, 7/7A, 8/8A, 9/9A - Main wheels	5.00-5" HE1	Michelin Aviator 5.00-5", 10ply	-	MIL	SRVFI02	\$2 221
FINISHING KIT - RV8 Grove LG - Main wheels	5.00-5" HE1		-	MIL	SRVFI03	\$2 145

MAIN WHEELS & BRAKES - COMPLETE SETS

Aircraft Type	rim	Tires	Other parts	Brake fluid	SET Part #	Price
For Ultralight and LSA						
Air Création Tanarg	-	-	1 regulator with brake lines	DOT4	SAC01	\$544
Aerospool Dynamic WT9	4.00-6"	15 x 6.00-6" 6ply	1 rudder m. cylinder MP-002	DOT4	SAE02	\$2 566
Aerospool Dynamic WT9 S	4.00-6"	15 x 6.00-6" 6ply	1 rudder m. cylinder MP-002	DOT4	SAE01	\$2 709
Atec Faeta	4.00-6"	4.00-6" 6 ply	1 hand m. cylinder HAB02	DOT4	SAF01	\$2 324
Atec Zephyr	4.00-6"	4.00-6" 6 ply	1 hand m. cylinder HAB02	DOT4	SAZ01	\$2 381
Blackshape Prime	4.00-6"	4.00-6" 6 ply	-	DOT4	SBL01	\$1 845
BOT Speedcruiser	4.00-6"	4.00-6" 6 ply	1 rudder m. cylinder MP-002	DOT4	SBT01	\$2 448
Breezer	5.00-5"	5.00-5" 10ply	2 rudder m. cylinders MP-002	DOT4	SBR01	\$2 588
BRM Aero XL8	4.00-6"	4.00-6" 6 ply	1 hand m. cylinder HAB02	DOT4	SBM01	\$2 332
BRM Aero XL8	5.00-5"	5.00-5" 10ply	2 rudder m. cylinders MP-002	DOT4	SBM02	\$2 758
COMCO Ikarus C42	4.00-6"	4.00-6" 6 ply	1 hand m. cylinder HAB02	DOT4	SCC01	\$2 326
Ekolot Junior & Topaz	4.00-6"	4.00-6" 6 ply	1 hand m. cylinder HAB02	DOT4	SEK01	\$2 515
Evektor Eurostar	4.00-6"	15 x 6.00-6" 6ply	2 rudder m. cylinders MP-002	DOT4	SEU01	\$2 719
FK 12	4.00-6"	4.00-6" 6 ply	2 rudder m. cylinders MP-002	DOT4	SFK03	\$2 849
FK Mark I, II, III - FK14	4.00-6"	4.00-6" 6 ply	1 m. cylinder cable actuated	DOT4	SFK02	\$2 541
FK Mark IV - ELA	4.00-6"	4.00-6" 6 ply	1 m. cylinder lever actuated	DOT4	SFK01	\$2 541
Flight Design CTSW 2007	4.00-6"	15 x 6.00-6" 6ply	2 rudder m. cylinders MP-002	DOT4	SFD01	\$2 460
G1 aviation	4.00-6" *	15x6.00-6" 6ply *	1 m. cylinder HAB02 central	DOT4	SGA01	\$2 285
Gaz'Aile	4.00-5"	11X4.00-5" 8 ply	1 hand m. cylinder HAB02	DOT4	SGZ01	\$2 245
Jabiru J170	4.00-6"	4.00-6" 6 ply	2 rudder m. cylinders MP-002	DOT4	SJU03	\$2 849
Jabiru J170	4.00-6"	4.00-6" 6 ply	1 hand m. cylinder HAB02	DOT4	SJU04	\$2 590
Jodel D20 ULM	5.00-5"	5.00-5" 10ply	2 rudder m. cylinders MP-002	DOT4	SJD01	\$2 719
Lambda	4.00-6"	4.00-6" 6 ply	1 hand m. cylinder HAB02	DOT4	SLA01	\$2 326
Magni GYRO	4.00-6"	4.00-6" 6 ply	1 MP-002 + 1 MP-004.1 lever	DOT4	SMG01	\$2 356
MCR01 hand	4.00-5"	11X4.00-5" 8ply	1 hand m. cylinder HAB02	DOT4	SDY02	\$2 494
MCR01 rudder-hyd LG	4.00-5"	11X4.00-5" 8ply	2 rudder m. cylinders MP-002	DOT4	SDY01	\$2 601
MCR01 rudder	4.00-5"	11X4.00-5" 8ply	2 rudder m. cylinders MP-002	DOT4	SDY01	\$2 730
Mysky NG4	5.00-5"	5.00-5" 10ply	2 rudder m. cylinders MP-002	DOT4	SMS01	\$2 752
Pioneer 200/300	4.00-6"	4.00-6" 6 ply	1 rudder m. cylinder MP-002	DOT4	SPI01	\$2 703
Pipistrel Sinus, Virus	4.00-6"	4.00-6" 6 ply	2 rudder m. cylinders MP-002	DOT4	SPP01	\$2 713
RANS Coyote	6.00-6"	15 x 6.00-6" 6ply	2 rudder m. cylinders HBA02	DOT4	SRA02	\$2 666
RANS Coyote 1st type	6.00-6"	15 x 6.00-6" 6ply	2 rudder m. cylinders HBA02	DOT4	SRA01	\$2 666
Savannah (hand brake)	4.00-6"	15 x 6.00-6" 6ply	1 hand m. cylinder HAB02	DOT4	SSV02	\$2 359
Savannah (pedal brake)	4.00-6"	15 x 6.00-6" 6ply	2 rudder m. cylinders HBA02	DOT4	SSV01	\$2 677
Skyleader	4,00-5"	11X4.00-5" 8ply	1 hand m. cylinder HAB02	DOT4	SSL01	\$2 332
Skyranger - Nynja	4.00-6"	4.00-6" 6 ply	1 hand m. cylinder HAB02	DOT4	SSK01	\$2 245
Sting Carbon TL	4.00-5"	11x4.00-5" 8ply	1 hand m. cylinder HAB02	DOT4	SSC01	\$2 557
STORM Century	4.00-5"	11Xx4.00-5" 8ply	1 hand m. cylinder HAB02	DOT4	STR01	\$2 162
Super Guépard	4.00-6"	13x5.00-6 8ply	1 hand m. cylinder HAB02	DOT4	SGU01	\$2 303
Tecnam P2008	5.00-5" HE1	5.00-5" 10ply	2 rudder m. cylinder MP-003	DOT4	STP02	\$2 746
Tecnam P92 5" (flight school use)	5.00-5"	5.00-5" 10ply	1 m. cylinder MP-003	DOT4	STP01	\$2 374
Tecnam P92 6" (standard use)	4.00-6"	4.00-6" 6 ply	1 m. cylinder MP-003	DOT4	STP03	\$2 176
Tecnam P96	5.00-5"	5.00-5" 10ply	1 m. cylinder MP-003	DOT4	STP04	\$2 374
Tecnam P2002	5.00-5"	5.00-5" 10ply	1 m. cylinder MP-003	DOT4	STP04	\$2 374

* other sizes available - please ask us

To be continued next page

FINISH: Red anodizing is standard color for wheels, brakes and master cylinders. Other colors can be available on special order with an extra delay at an additional cost of **\$133** per batch of parts. Colors may vary.

Aircraft Type	rim	Tires	Other parts	Brake fluid	SET Part #	Price
Tetras	6.00-6"	8.00-6" 4ply *	1 hand m. cylinder HAB02	DOT4	STE01	\$2 435
Vampyr Century	4.00-6"	4.00-6" 6 ply	1 hand m. cylinder HAB02	DOT4	SVA01	\$2 245
VL3 JMB	4.00-6"	4.00-6" 6ply	2 rudder m. cylinders MP-002	DOT4	SVK01	\$2 719
Zenair CH601XL	4.00-6"	15x6.00-6" 6ply	2 rudder m. cylinders MP-002	DOT4	SZH05	\$2 708
Zenair Zodiac CH650	6.00-6"	15x6.00-6" 6ply	2 rudder m. cylinders MP-002	DOT4	SZH06	\$3 025
Zenair Zodiac CH750	6.00-6"	21x8.00-6" 4ply	2 rudder m. cylinders MP-003	DOT4	SZH07	\$3 084
Zlin Savage 5 (tire < 29 ")	6.00-6"	-	2 rudder m. cylinders HBA03	DOT4	SSA01	\$2 800
Zlin Savage 5 (tire > 29 ") + 2 extra calipers	6.00-6"	-	2 rudder m. cylinders HBA03	DOT4	SSA02	\$3 242

* other sizes available - please ask us

WHEEL & BRAKE SETS - OPTIONS

OPTION	List of parts included in the OPTION	Price
Co-pilot brakes	Two master cylinders (according to the pilot ones) with ends and fittings + 1.50m of hose	from \$549
Parking brake valve	Parking valve + fittings + hose (3 ft)	\$388
Wheel caps 5"	Two caps ZJB01 for 5" wheels	\$122
Wheel caps 6" light	Two caps ZJB02 for 6" light wheels	\$122
Wheel caps 6" HE	Two caps ZJB02 for 6" HE wheels	\$140



Co-pilot brakes



Parking brake valve



Caps on 5" and 6" wheels

NOSE WHEEL KITS - TAIL WHEEL KITS

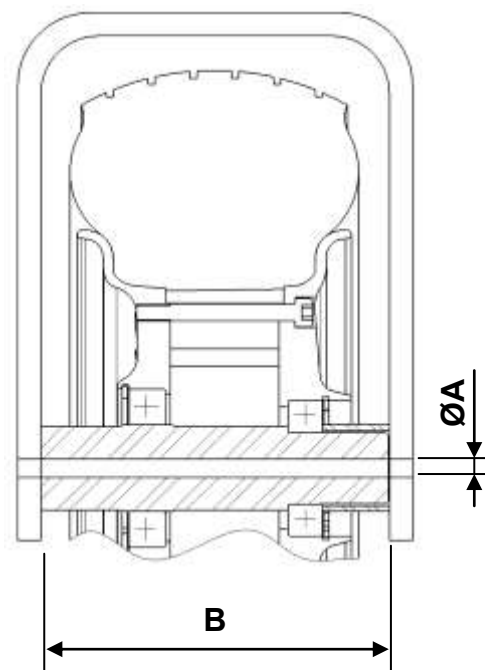
Save up to 4 lbs on your experimental aircraft with lightweight BERINGER® nose wheel. Nose Wheels are aluminum red anodized, machined from billet on CNC, with O-rings for Tubeless mounting.

The NOSE WHEEL KIT includes 1 tubeless nose wheel + 1 tire (mounted on rim, pressure tested) + 1 aluminum axle with bearing spacer.



Other kits are available.
Please ask us.

**TUBELESS
WHEELS**



Aircraft Type	rim	Tire	Ø A	axle B	Weight of the set lbs	set part #	Price
NOSE WHEEL KITS							
Glasair III - RLG	4.00-5"	11x4.00-5" 8ply	1/4"	4.75"	6.36	SGL01A	\$558
Lancair 320, 360 - RLG	4.00-5"		1/4"	4.35"	6.36	SLC02A	\$558
Lancair legacy - RLG	4.00-5"		1/4"	4.35"	6.36	SLC01A	\$558
Van's RV6A, 7A, 8A, 9A	4.00-5"		3/8"	4.53"	6,36	SRV02A	\$558
Van's RV10	5.00-5"	Mich. Aviator 5.00-5" 10ply	3/8"	5.16"	9.11	SRV07A	\$649
G1 Aviation	4.00-6"	13x5.00-6" 4ply			0.00	SGA01A	\$574
MCR 01	4.00-5"	11x4.00-5" 8ply	20mm	129mm	6.36	SDY01A	\$558
MCR 01	3.50-4"	3.00-4 4PLY	6mm	100mm	2.75	SDY02A	\$354
Zenair CH 601XL	4.00-6"	13x5.00-6" 4ply	5/16"	141mm	6.23	SZH02A	\$585
Standard BERINGER	5.00-5"	Mich. Aviator 5,00-5" 10ply	0.79"	5.39 - 5.71"	8,78	SST03	\$649
Standard BERINGER	4.00-6"	13x5.00-6" 4 ply	0.79"	4.92 -5.71"	6.23	SST04	\$558
Standard BERINGER	4.00-5"	11x4.00-5" 8ply	0.79"	4.53 - 5.08"	6.36	SST02	\$498
Standard BERINGER	4.00-5"		0.47"	4.25"	6.36	SST02	\$498
Standard BERINGER	3.50-4"	4.00-4 4PLY	0.24"	4.37"	3,70	SST05	\$354
Standard BERINGER	3.50-4"	3.00-4 4PLY	0.24"	4.37"	2.75	SST06	\$354
Standard BERINGER	3.50-4"	4.00-4 4PLY	0.31"	4.37"	3.70	SST07	\$354
TAIL WHEEL KITS							
MATCO replacement	3.50-4"	2.50 - 2.80-4"	1/2"	-	2.53	SST01	\$354
SCOTT replacement	3.50-4"	2.50 - 2.80-4"	1/2"	-	2.53	ST11	\$354
PIPISTREL Sinus	200x50	200x50 6ply+ tube	0.31"	2.44"	1,83	JC-01	\$246



Tail wheel for Savage:
11.29oz lighter

Replacement
SCOTT mounting

FINISH: Red anodizing is standard color for wheels, brakes and master cylinders. Other colors can be available on special order with an extra delay at an additional cost of \$133 per batch of parts. Colors may vary.



CERTIFIED SETS - STC

Part number	DESCRIPTION	STC part#	Price
STC-002.1	Complete wheel & brake set for Pilatus PC-6 - single seat braking	EASA 10029629	*
STC-002.2	Complete wheel & brake set for Pilatus PC-6 - dual braking	FAA SA03094NY ANAC 2011S07-13	*
STC-003	Complete wheel & brake set for Centrair Pegase	EASA 10039017	\$1 527
STC-004	Complete wheel & brake set for Cirrus SR20/SR22	EASA 10043346	*
STC-005	Complete wheel & brake set for Schleicher ASW20	EASA 10041414	\$1 527
STC-006	Brake kit for ROBIN DR400	EASA 10041955	\$1 950
STC-007	Complete wheel & brake set for Schempp Hirth Discus/Ventus 2A	EASA 10041707	*
STC-008	Nose wheel kit for Twin Otter DHC-6	EASA 10042599 FAA ST03258NY Canada SA13-14	*
STC-009	Complete wheel & brake set for Diamond DA40 NG - Large tires	EASA 10043876	*

* ask us

You are looking for other STC, please contact us



Brake system for ROBIN DR400



Wheel & brake set for Diamond DA40



Wheel & brake set for Pilatus PC-6



Wheel & brake set
for Cirrus SR20/SR22



Nose wheel kit for Twin Otter

WHEEL AND BRAKE COMPLETE SET for Gliders

Upgrade your glider and save 3 to 7 lbs 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 discs 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 Part #	tire	Other parts	Brake fluid	Price
Glasflügel H201Libelle	JA-02	11x4.00-5	1 hand master cylinder HAB02	DOT4	\$1 543
HPH 304S	JA-01	5.00-5	1 rudder master cylinder HBA01	DOT4	*
Jonker JS1	JA-01	5.00-5	1 hand master cylinder HAB02	DOT4	*
LAK-17BT	JA-01	5.00-5	1 hand master cylinder HAB02	DOT4	*
Neukom Elfe S4	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 (EASA Form1)	JA-01	5.00-5	1 hand master cylinder HAB02	DOT4	\$1 527
Stemme S6	JA-01	5.00-5	2 hand master cylinders HAB02	DOT4	*
Sch. Hirth Ventus 2A - Discus 2A (EASA Form1)	JA-02	11x4.00-5	1 master cylinder hydr/cable HAC01	DOT4	\$2 239
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 (EASA Form1)	JA-01	5.00-5	1 hand master cylinder HAB02	DOT4	\$1 527
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	*

* ask us

- braking distance reduced
- Tubeless= eliminates blowout risk
- hydraulic line without maintenance
- braking disc & pad life = 600 landings

TUBELESS WHEEL



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.

WHEELS & BRAKES

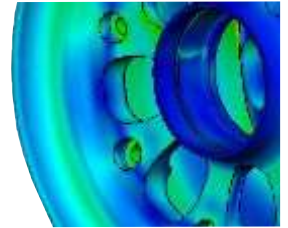
BERINGER WHEELS and BRAKES for main gear are designed to provide the best stopping power and the reliability you are expecting from a safe braking system. We will help you to choose the dimension and brake torque adapted to your aircraft. We have a large range of assemblies: wheel / brake caliper / brake pad / brake disc. We also design and manufacture the optimal upstream components: reservoirs, master cylinders, the ALIR anti-skid system, and parking brakes. All these are tied together with top-quality braided stainless steel Teflon lines and proper fittings. Components and complete systems are available.



BERINGER WHEELS : advanced technology

- High strength aluminum alloy machined from solid on CNC, anodized for optimal corrosion resistance
- TUBELESS wheel with O-rings and rigid valve
- SEALED BALL BEARINGS for optimal durability: greased for life, no maintenance
- Very low rolling resistance

During the design of a wheel we focus on three criteria: strength, weight, and durability. First, we assess the overall design and apply our experience and some hand calculations. Then we build a 3D model on CAD software and run FEM (finite element analysis) in the optimizing process, where we remove material from one side to add it on another, etc... till the result is satisfying for us with an optimized strength/weight ratio.



FEM calculated and checked



Hydraulic press
44,000 lbs

Then we make prototypes and start the qualifying process on our own bench machines.

The BERINGER R&D laboratory is dedicated to Research, Development and Certification tests.

On the wheel itself we do 3 different tests :

- **Load test:** we apply different loadings on the wheel and tire (radial and side load) to check the strength and load rating of the wheel. Ultimate load tests go up to 6 times the static load using our 40,000lb hydraulic press capacity.
- **Pressure test:** Mounted tire is inflated with water up to 3.5 times the maximum inflation pressure to check bolts' strength and wheel stiffness.
- **Roll test :** Wheel is pressed on a rotating drum for 1000 miles at maximum static load to detect eventual fatigue problem or bearing failure, etc...



Ultimate load test
3.50-4 wheel

When the wheel has passed all the tests then we install the wheel on an aircraft for ground and flight checks.



Ultimate load test
11.00-12 wheel

Note: when the wheel's design work for the Solar Impulse was occurring, BERINGER's proprietary dynamometer was employed, because of the BERINGER wheel' strength and our dyno's exceptional ability to load and measure the tire. On the aircraft, that tire and its Beringer wheel (5.00-5) were of course run tubeless, at a pressure of 10 bar (over 140psi) and a static load of 3,850lbs (2.7 times more than rated load).



BRAKE CALIPERS :

- Covered by AEROTEC® Patents
- 2 or 3 stainless steel polished pistons
- Body made of aerospace alloy to withstand high temperatures (>200Mpa at 200°C)
- available for DOT4 fluid **OR** for MINERAL (MIL FLUID) (seals are different; specify and never mix)
- 2 inputs, thread size M10x1
- Full metallic brake pads (no rivets) for extended life



BRAKE DISCS :

- Covered by AEROTEC® patents
- Stainless steel disc or high strength steel disc with coating
- Brake discs are made of highest quality material for thermal stability and long life



Many tests are done to certify brake calipers and discs. One of those tests is the dynamic torque test; for this test we use our dynamometer. The kinetic energy capacity is tested with this machine. The dyno allows us to push the brake system to its limits. Many sensors are installed to measure temperatures. All these tests are performed to ensure the total safety and reliability of the brake system.

Kinetic energy values indicated in the next pages are not only calculated but measured and checked on real tests.



The endurance test is also a proof of quality and durability. The purpose of this test is to verify the life of the parts. The certification test requires 100,000 cycles at maximum operating pressure, but we test our parts to a minimum 200,000 cycles. This represents more cycles than the brake system will be subjected to in the aircraft life.

How to choose your wheel & brake system:

- Select the size of tire that you need
- Then select the wheel size required for this tire (use our application chart page 18)
- Check the static load rating : this is the weight on each wheel (at maximum static aircraft weight) that the wheel is capable of supporting.
- Check the kinetic energy rating : the first function of a brake system is to transform aircraft kinetic energy into heat. This heat is absorbed and dissipated mostly by the disc (a thicker disc will absorb more heat energy).

The kinetic energy required to stop an aircraft is a function of the mass of the aircraft and its landing speed. You can calculate the kinetic energy requirement of your aircraft by using the following formula:

$$\text{Kinetic Energy [FT-LBS]} = \frac{0.044 \times W \times V^2}{N}$$

W = Landing weight (lbs)

V = Braking speed (kts)

N = Number of wheels with brakes

The kinetic energy values shown in the chart on page 14 are maximum values in case of an RTO (Rejected Take Off). This RTO value should be 30% higher than the value calculated above.

If you are not sure what system is right for your aircraft, give us a call

NOSE WHEELS - TAIL WHEELS

Beringer WHEELS without brake for nose wheel or tail wheel are:

- High strength aluminum alloy machined from solid on CNC
- TUBELESS (except JC-01) two or three pieces plus O-ring and rigid valve
- sealed ball bearings for optimal durability:
- Use BERINGER tapered axles with those wheels (except 200x50 version)

TAIL WHEEL 200x50 JC-01

- red anodised
- tyre 200x50 with tube
- for 5/16" bolt
- weight : 260g
- Only fork mounting

Delivered mounted with
6ply tyre and tube

830g

TUBE TYPE



4" ultralight WHEEL

- Bush Tail wheel
- nose wheel for LSA ULM
- High load rating
- Cantilever OR fork mounting
- Perfect for ultralight aircraft

TUBELESS



540g

TUBELESS



5 " NOSE WHEEL

for homebuild aircraft

TUBELESS



6" SL NOSE WHEEL

for ultralight aircraft and LSA

TUBELESS

NEW



Part #	size	Weight Lbs	Static load lbs (kg)	Limit load lbs (kg)	Price
JC-01	200x50 tail wheel + tyre 200x50 6ply+ tube	1.83 Including tyre & tube	300	1,050	\$246
RA-003	3.50-4"	1.199	418	1,463	\$270
JB-01	5.00-5"	2.684	1,430	5,731	\$398
JB-02	4.00-5"	2.464	1,430	5,731	\$398
RA-010	6.00-6 SL	2.959	935	3,300	\$487
RA-009	4.00-6 SL	2.629	935	3,300	\$440
RA-005	6.00-6 HE	4.576	2,090	7,480	\$523

5" WHEEL & BRAKE - STANDARD SERIE

- Static load rating of 1,430 lbs (650kg)
- sizes : 5.00-5 and 4.00-5
- 2 piston standard brake
- Lightweight stainless steel disc
- Suitable for LSA and gliders



**TUBELESS
WHEELS**

5" WHEEL & BRAKE - HE SERIES

TSO & ETSO

(HE means High Energy)

- Static load rating of 1,430 lbs (650kg)
- sizes : 5.00-5 and 4.00-5
- HE caliper 2 piston with cooling thins
- + 40% braking torque
- 2 types of high strength discs
- Insulated full metallic brake pad
- HE1 suitable for 2 seat aircraft (RV's, Aerobatic)
- HE2 (thicker disc) suitable for high landing speed aircraft (Lancair, Glasair,...)



PATENTED

WHEEL CAP

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



6" WHEEL & BRAKE - SL SERIES

These new SL wheels were designed with the new technology improvements made possible thanks to the BERINGER static and dynamic test benches.

- Static load rating increased to 935 lbs (425kg) to fit Aircraft up to 1,870 Lbs (gross weight)

Designed in 2 parts instead of 3:

- even more lighter: **-0.440 Lbs per wheel** (JAA01)
- Easy maintenance: only 1 o'ring seal
- sizes : 4.00-6 and 6.00-6
- 2 piston standard brake
- Lightweight stainless steel disc
- Suitable for ultra light aircraft and LSA



6" WHEEL & BRAKE - HE SERIES

TSO & ETSO

(HE means High Energy)

- Static load rating of 2,090 lbs (950kg)
- size : 6.00-6
- HE caliper 2 piston with cooling thins
- doubled braking torque compare to LIGHT series
- 2 types of high strength discs
- Insulated full metallic brake pad
- HE1 suitable for 2 seat aircraft (Taildragger, Champion, Glasair)
- HE2 (thicker disc) suitable for 4 seat aircraft (Lancair IV, Cirrus SR20, DA40)
- HE3 dual caliper for increased braking torque : ultra short braking distance, suitable for Cirrus SR22, DA42,...



WHEEL CAP

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



WHEELS & BRAKES

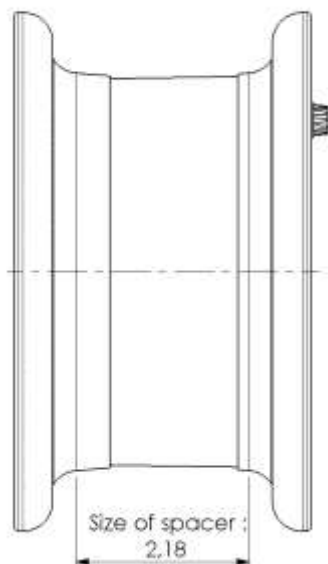
Assy. Part #	Wheel Part #	size	Static load lbs	Limit load lbs	Caliper number	Disc Part #	Braking torque inch.-lbs	Max RTO Energy ft.-lbs	Weight lbs	Price for 1 asy
5" WHEELS - STANDARD series										
JA-01	RF-002	5.00-5"	1,430	5,731	EA-006	DSC-006	2,450	140,000	4.349	\$554
JA-02	RF-007	4.00-5"	1,430	5,731	EA-006	DSC-006	2,450	140,000	4.138	\$554
5" WHEELS - HE series										
JA-51-HE1	RF-005	5.00-5"	1,430	5,731	EA-002	DSC-008	3,500	210,000	5.379	\$686
JA-51-HE2	RF-005	5.00-5"	1,430	5,731	EA-002.2	DSC-008.2	3,500	361,000	5.898	\$747
JA-52-HE1	RF-005	4.00-5"	1,430	5,731	EA-002	DSC-008	3,500	210,000	5.100	\$686
JA-52-HE2	RF-005	4.00-5"	1,430	5,731	EA-002.2	DSC-008.2	3,500	361,000	5.698	\$747
ZJB01	cap	-	-	-	-	-	-	-	0.066	\$61
6" WHEELS - SL series										
JAA01 SL	RF-009	6.00-6	935	3,300	EA-006E	DSC-006	2,450	140,000	4.576	\$682
JAA02 SL	RF-004	4.00-6	935	3,300	EA-006E	DSC-006	2,450	140,000	4.268	\$619
ZJB02	cap	-	-	-	-	-	-	-	0.066	\$68
6" WHEELS - HE series										
JAB02-HE1	RF-006	6.00-6"	2,090	7,480	EA-003N	DSC-009	4,900	355,000	3.772	\$855
JAB02-HE2	RF-006	6.00-6"	2,090	7,480	EA-003.3N	DSC-009.3	4,900	500,000	4.136	\$934
JAB02-HE3	RF-006	6.00-6"	2,090	7,480	EA-003.4N	DSC-009.3	9,800	550,000	4.909	\$1 137
ZJB03	cap	-	-	-	-	-	-	-	0.03	\$78

(HE = High Energy)

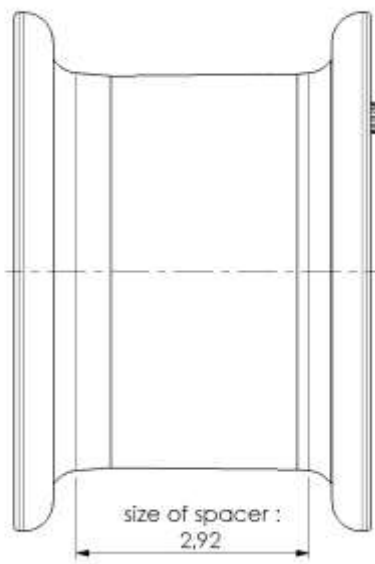
1 lbs ↔ 0.45 kg
1 kg ↔ 2.2 lbs

CAUTION: static load valid only with appropriate tire

4.00-5" Wheel



5.00-5" Wheel



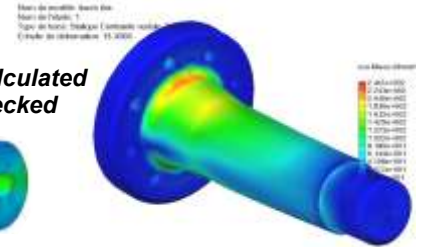
WE RECOMMEND FIRST MOUNTING OF TIRES ON WHEELS IN OUR PLANT. This service, free of charge, includes a pressure test, ensuring maximum security of the assembly.

FINISH: Red anodizing is standard color for wheels, brakes and master cylinders. Other colors are available on special order with an extra delay at an additional cost of \$133 per batch of parts: **silver, black, yellow, titanium grey**. Colors may vary.

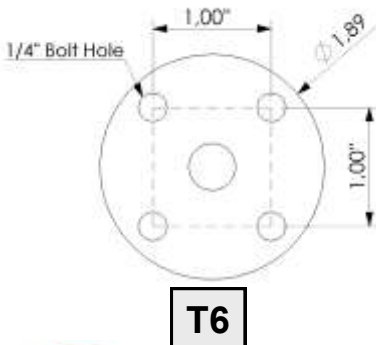
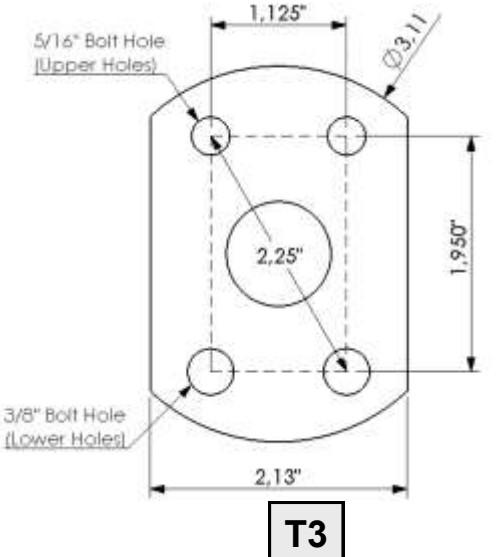
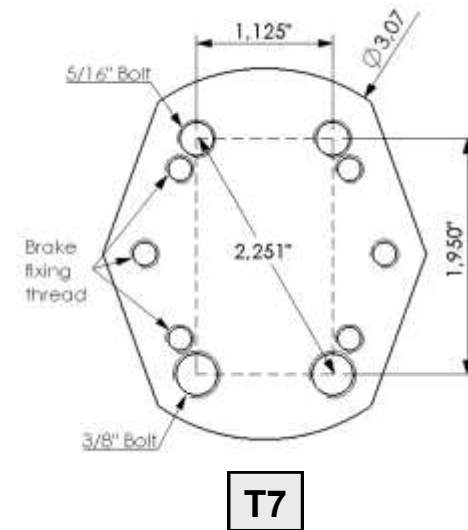
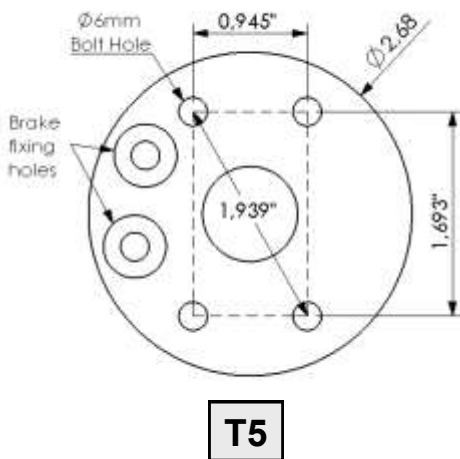
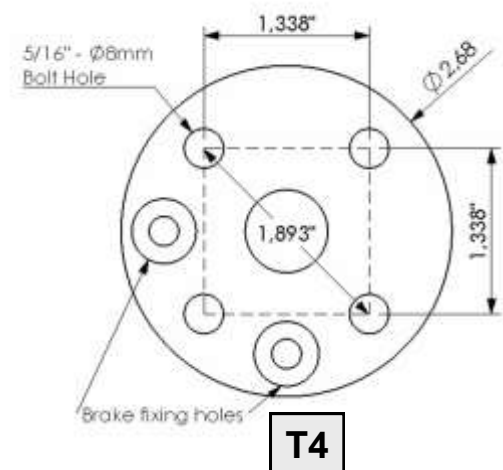
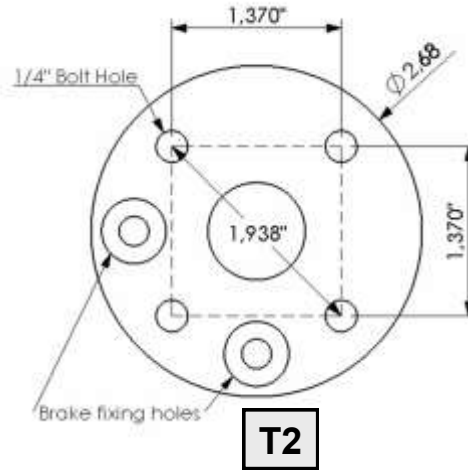
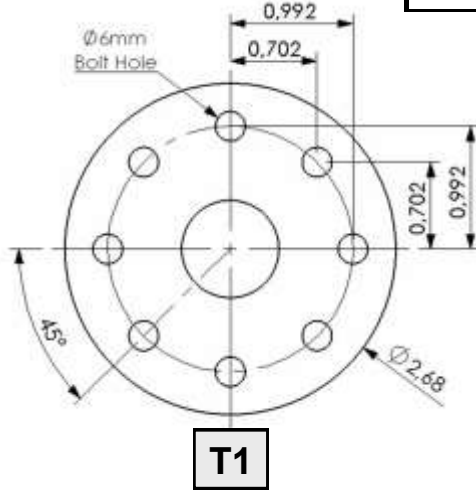
AXLES

Material: High strength anodized aluminum or high strength steel with nickel coating

- Different types of axle available:
 - for wheel fork (supported at both ends)
 - for cantilever installation
- FEM calculated for optimized weight and stress distribution and optimized weight



AXLE BOLT TEMPLATES (dimensions are inches)

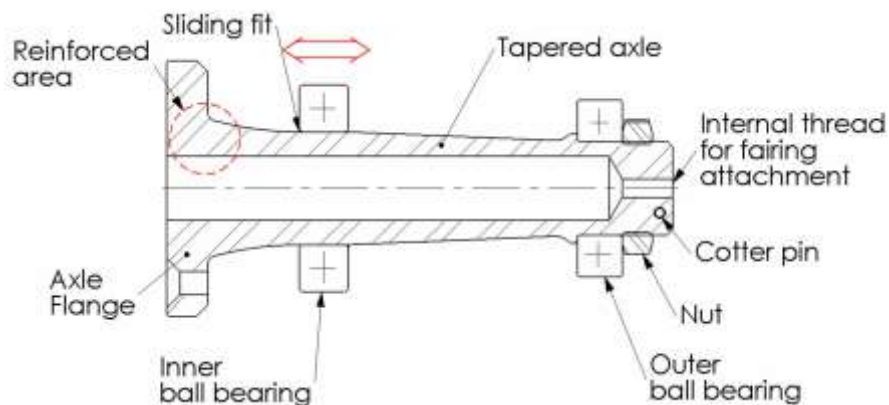


Wheel size→ Axle part #	3.50-4"	4.00-5" & 4.00-5"HE	5.00-5" & 5.00-5"HE	4.00-6" Light	6.00-6" Light	6.00-6" HE
FUS-001	-	-	T1, T2 T4, T5	T1, T2 T4, T5	-	-
FUS-003	-	-	-	-	T1, T2 T4, T5	-
FUS-004	-	-	T2	-	-	-
FUS-005	-	T1, T2 T4, T5	-	-	-	-
FUS-006	T6	-	-	-	-	-
FUS-007	-	-	-	-	-	T3
FUS-008	-	-	-	-	T7	-
FUS-009	-	-	T2	-	-	-

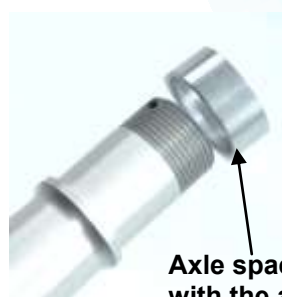
Other axles are available, give us a call



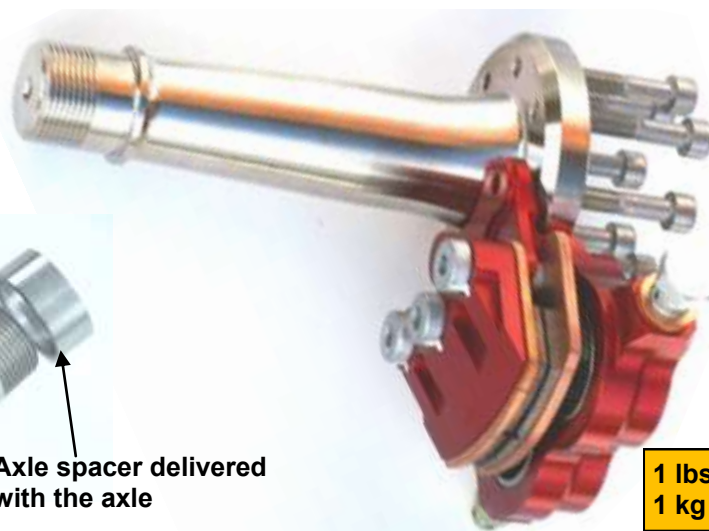
AXLES



Axle nut and cotter pin



Axle spacer delivered with the axle



1 lbs ↔ 0.45 kg
1 kg ↔ 2.2 lbs

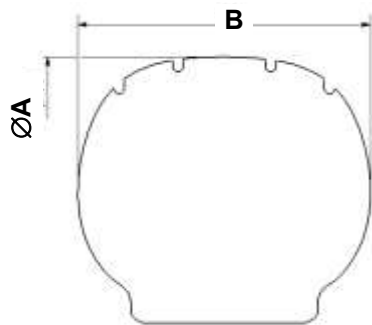
Part #	DESCRIPTION (all aluminium axles are anodized)	Axle thread	Static load rating per axle lbs	Limit load lbs	Weight	Price
FUS-001-T1	Tapered Aluminum Axle	M25x1.5	748	2,600	9 oz	\$98
FUS-001-T2	Tapered aluminum Axle	M25x1.5	748	2,600	9 oz	\$98
FUS-001-T4	Tapered aluminum Axle	M25x1.5	748	2,600	9 oz	\$98
FUS-001-T5	Tapered aluminum Axle	M25x1.5	748	2,600	9 oz	\$98
FUS-003-T1	Tapered aluminum Axle	M25x1.5	660	2,310	14 oz	\$179
FUS-003-T2	Tapered aluminum Axle	M25x1.5	660	2,310	14 oz	\$179
FUS-003-T4	Tapered aluminum Axle	M25x1.5	660	2,310	14 oz	\$179
FUS-003-T5	Tapered aluminum Axle	M25x1.5	660	2,310	14 oz	\$179
FUS-004-T2	Tapered steel Axle <i>Nickel coated</i>	M25x1.5	1,430	5,060	1.3 lbs	\$179
FUS-005-T1	Tapered aluminum Axle	M25x1.5	946	3,399	7.5 oz	\$119
FUS-005-T2	Tapered aluminum Axle	M25x1.5	946	3,399	7.5 oz	\$119
FUS-005-T4	Tapered aluminum Axle	M25x1.5	946	3,399	7.5 oz	\$119
FUS-005-T5	Tapered aluminum Axle	M25x1.5	946	3,399	7.5 oz	\$119
FUS-006-T6	Tapered aluminum Axle	M15x1	400	1,399	1.5 oz	\$89
FUS-007-T3	Tapered aluminum Axle	M35x1.5	1,650	5,775	1.1 lbs	\$329
FUS-008-T7	Tapered aluminum Axle	M25x1.5	704	2,310	14 oz	\$131
FUS-009-T2	Tapered aluminum Axle	M25x1.5	858	3,850	9 oz	\$189
ZSA01	Aluminum nut M25x1,5	M25x1.5	-	-	0.2 oz	\$12
ZSB01	Aluminum nut M35x1,5	M35x1.5	-	-	0.3 oz	\$19
ZSC01	Steel nut M15x1	M15x1	-	-	0.3 oz	\$6

TIRES

BERINGER wheels are tubeless. We can deliver the wheels with the tire on. The pressure of each wheel is tested during 24 hours.



1 lbs ↔ 0.45 kg 1 inch ↔ 25.4mm
1 kg ↔ 2.2 lbs



Wheel size→ Tire size ↓	200x50	3.50-4"	4.00-5"	5.00-5"	4.00-6"	6.00-6"
200x50	ok	-	-	-	-	-
2.80/2.50-4"	-	ok	-	-	-	-
10x3.50-4"	-	ok	-	-	-	-
3.00-4"	-	ok	-	-	-	-
4.00-4"	-	ok	-	-	-	-
11x4.00-5"	-	-	ok	-	-	-
5.00-5"	-	-	*	ok	-	-
380x150-5" (15x6.00-5)	-	-	-	ok	-	-
13x5.00-6"	-	-	-	-	ok	-
4.00-6"	-	-	-	-	ok	-
15x6.00-6"	-	-	-	-	ok	ok
6.00-6"	-	-	-	-	ok	ok
7.00-6"	-	-	-	-	-	ok
8.00-6"	-	-	-	-	-	ok
21x8.00-6"						ok
8.50-6"	-	-	-	-	-	ok
26"	-	-	-	-	-	ok
29"	-	-	-	-	-	ok
31"	-	-	-	-	-	ok

* Mounting may be possible for special application (contact BERINGER)

4.00-5" A : Outside diameter of tyre (inches)
B : Tyre width (inches)
15x6.00-6" C : Inside diameter of tyre (inches)



Part #	Description	Static load lbs	Ø A (inch)	B (inch)	Weight lbs	Price
PAG05	200X50 tire and tube	non certified	7.9	2	1.1	\$57
PAG04	2.80/2.50-4"	non certified	9	2.75	1.32	\$32
PAG02	3.00-4" 4 ply	non certified	10.35	3.54	1.32	\$32
PAG06	10x3.50-4" 4 ply	non certified	9.84	3.23	2.53	\$69
PAG01	4.00-4" 4 ply	non certified	11.9	3.93	2.2	\$32
PAG03	4.00-4" 8 ply	non certified	12	4.3	2.86	\$91
PAC01	11x4.00-5" 8 ply	non certified	11.6	3.78	3.74	\$63
PAA02	5.00-5" 10 ply TUBELESS Michelin Aviator	2150	14.2	4.65	5.72	\$187
PAA04	5.00-5" 10 ply TUBELESS Aero Classic	2150	14.2	4.65	6.16	\$148
PAA05	5.00-5" 10 ply TUBELESS Condor	2150	14.2	4.65	5.90	\$132
PAB01	380x150-5" 6 ply (15x6.00-5) Michelin Air	1598	14.96	5.5	6.6	\$173
PAC03	13x5.00-6" 4 ply	non certified	13.4	4.65	2.86	\$52
PAC04	13x5.00-6" 8 ply	non certified	13.4	4.65	3.3	\$54
PAC02	15x6.00-6" 6 ply	non certified	14.75	5.1	4.84	\$45
PAD01	4.00-6" 6 ply SAVA	non certified	14.5	4.4	2.86	\$45
PAC05	15x6.00-6" 6 ply AirTrac	1950	15	5.3	6.16	\$162
PAB03	6.00-6", 4 ply AirTrac	1150	17.5	6.3	6.732	\$139
PAD03	4.00-6" 6 ply reinforced AeroClassic	non certified	14.5	4.4	3.696	\$69
PAE01	8.00-6" 4ply Carlisle	non certified	17.7	7.1	8.58	\$121
PAF03	21x8.00-6" 4 ply AeroClassic (21")	non certified	20.5	7.1	10.78	\$139
PAF02	26" 6 ply Good Year	non certified	24.4	9	23.76	\$721

Notes: dimensions A and B may change depending on wheel size and also on batches of tires

26" BUSH WHEEL with TIRE

Thanks to their incredible 26" diameter and very low pressure (0,6 bar), the new BUSH WHEELS will allow you to approach landings across water, to land on riverbeds, and on soft or rough terrain. They offer you a new dimension of freedom.

The BUSH WHEEL includes the famous BERINGER 2-piston brake, fully capable of delivering all the torque required by the large-diameter tire. You will be able to stop your aircraft within meters and still be able to hold against full power with the brakes.



21" BUSH WHEEL with TIRE

With a 21" diameter and low pressure (0,6 to 0,8 bar), the BERINGER 21" BUSH WHEEL is able to handle soft or rough terrain, expanding your landing possibilities.

With a 15.35lbs weight (wheel+brake+tire), the 21" assembly reduces weight and cost while maintaining high performance bush capability. Allowed for landing on concrete. Very good compromise for all terrain landing.



29" and bigger BUSH WHEEL without TIRE

wheel with double caliper system : double the braking torque
Suitable for 29 and 31 inch bushwheel.

NEW



Part #	DESCRIPTION	Weight lbs	Price euro
BUSH26	wheel & brake (caliper, pads, disc) + tire 26"	28.380	\$1 403
BUSH21	wheel & brake (caliper, pads, disc) + tire 21"	15.356	\$821
PAF02	26" TUBELESS 6 ply	23.760	\$721
PAF03	21x8.00-6" 4 ply AeroClassic (21")	10.780	\$139
JAA01-29	Wheel & brake (2 x calipers, pads, disc) without tire	5.940	\$877

BRAKE FLUIDS : information

Brake fluid is critical to the function and performance of your brake system. Choosing the right brake fluid will insure trouble free functioning for many years. Conversely, the wrong brake fluid will damage seals and cause the failure of your brake system. There are two predominant “families” of brake fluid in use worldwide:



A. The first family is polyethylene-glycol based and is compatible with only EPDM seals.

These fluids have been developed for the hydraulic brakes of motor vehicles and are called DOT3, DOT4, DOT5 or DOT5.1

DOT3 has lower performance and has been replaced by DOT4. DOT4 is the most commonly used fluid in motor vehicles. DOT5 is usually silicone-based, but is not commonly used, and is not miscible (“mixable”) with DOT3 or DOT4. DOT5.1 is not miscible with DOT5 and may also be not miscible with DOT3 or DOT4.

The primary objection to DOT 3 and 4 fluids was that they are hygroscopic (they absorb water). However, in a sealed reservoir, in a corrosion-resistant brake system, DOT4 fluids will remain usable for minimum 10 years. Additionally DOT3 and 4 brake fluids are aggressive with paint. Continent systems and care in handling remove this negative.

In the “DOT” family, we recommend using DOT4 and only DOT4 because the performance is adequate, and all DOT4 brands are miscible with each other.

DOT4 is used on many ultralight aircraft. You can purchase DOT4 almost everywhere around the globe as it is used on all recent cars and most motorcycles.



B. The second family is mineral-oil based and compatible with only* NBR (Nitrile) seals.

The hydraulic fluid MIL-H-5606 has been commonly used in general aviation for many years.

The major deficiencies of MIL-H-5606 are its high flammability and a relatively low boiling point.

In the “mineral” or “MIL” family we recommend using the MIL-PRF-87257 as a replacement of the MIL-H-5606. These 2 fluids are compatible and miscible each other. MIL-PRF-87257 is fire resistant and synthetic-hydrocarbon based, it has also a higher boiling point than MIL-H-5606.

FLUID	FLUID Color	SEALS	
		EPDM	NBR (Nitrile)
DOT4	colorless to amber	ok	Not compatible
MIL-H-5606	red	Not compatible	ok
MIL-PRF-87257	red	Not compatible	ok

***NBR (Nitrile) seals → mineral fluid → red color → MIL-PRF-87257 recommended
EPDM seals → DOT4 brake fluid → colorless to amber color → DOT4 only***

Notes:

EPDM seals are very sensitive to petroleum based solvent: few minutes of contact can completely damage the EPDM seals. That is why we recommend cleaning the parts only with a dry cloth or soap and water.

* These fluids may be compatible with other seal materials (contact us for more information)

MASTER CYLINDERS

These master cylinders have been designed for a very long life and assure very long trouble free service. We have tested them over 100,000 cycles with success.

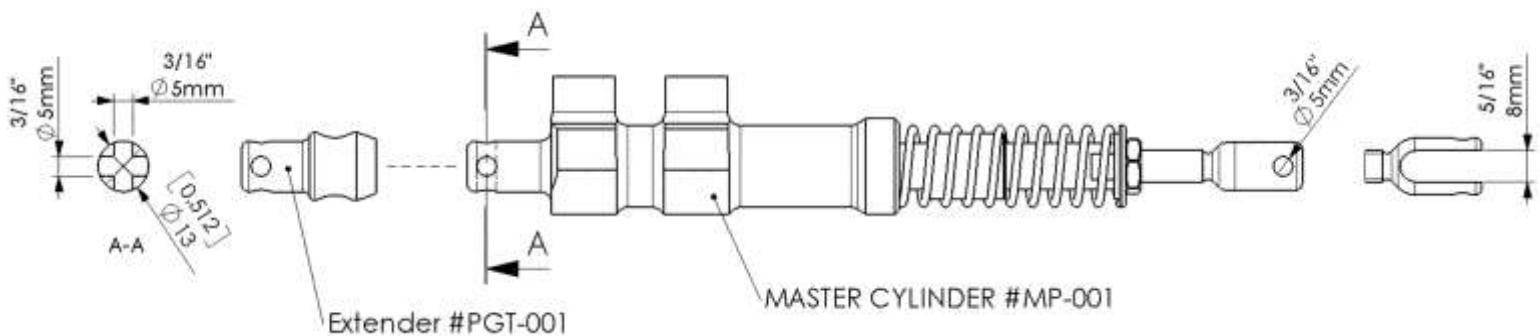
The piston is protected from dust by a lipseal.

- available for DOT4 fluid **OR** for MINERAL (MIL FLUID) (seals are different, never mix)
- high quality aluminum alloy machined from solid on CNC
- 100% protected from corrosion: anodized coating and stainless steel components
- Light weight: more than 30% of weight saving compare to standard master cylinder
- Ultralow friction for improved efficiency

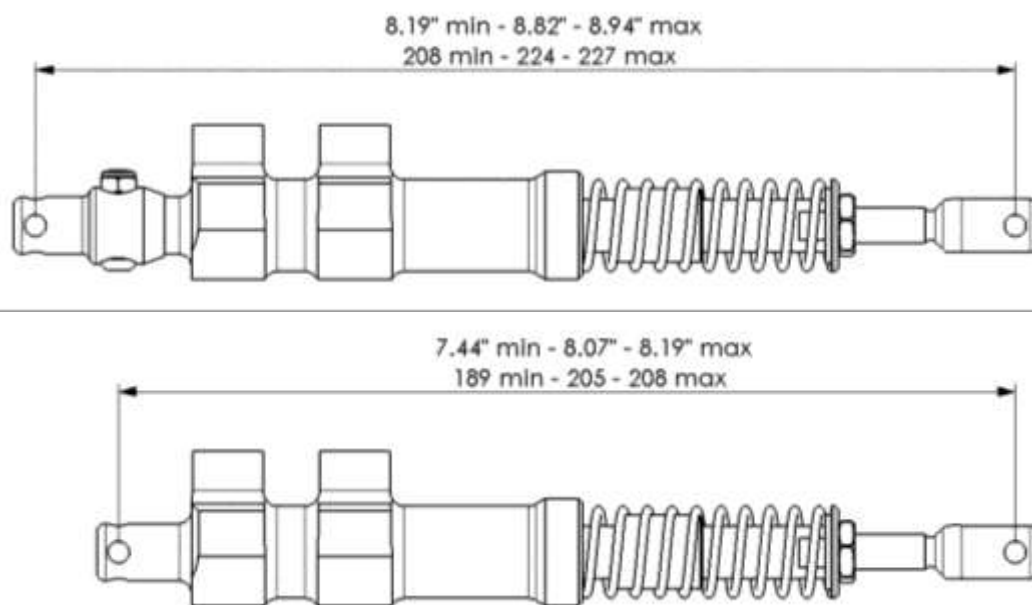


MP-001 series - BORE 9/16"

Attachments available

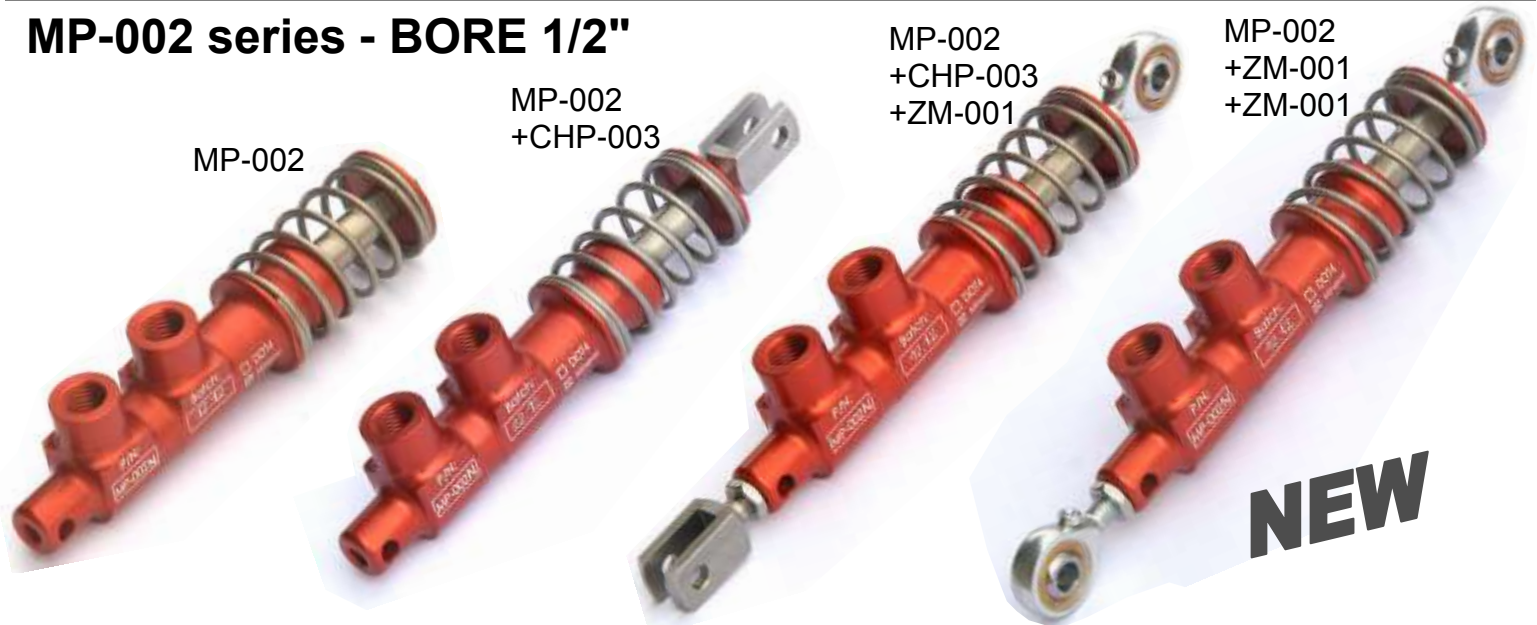


Pin-to-Pin length

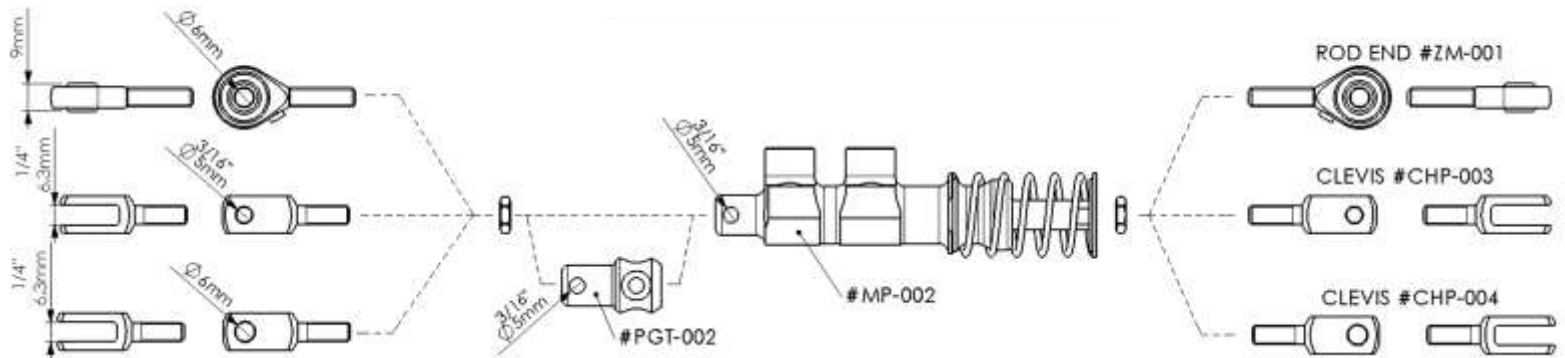


MASTER CYLINDERS

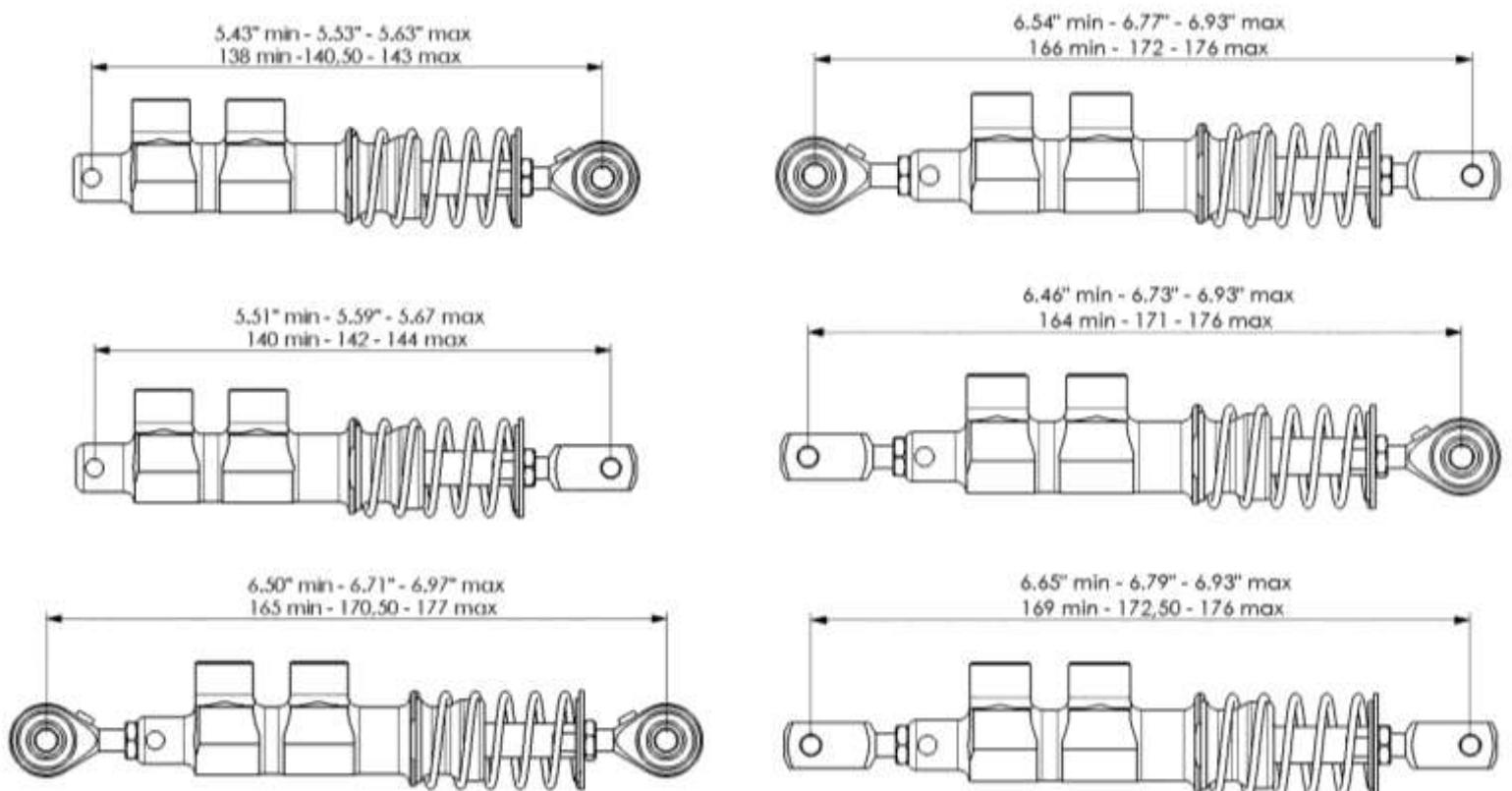
MP-002 series - BORE 1/2"



Attachments available



MP-002 : Pin-to-Pin length



MASTER CYLINDERS

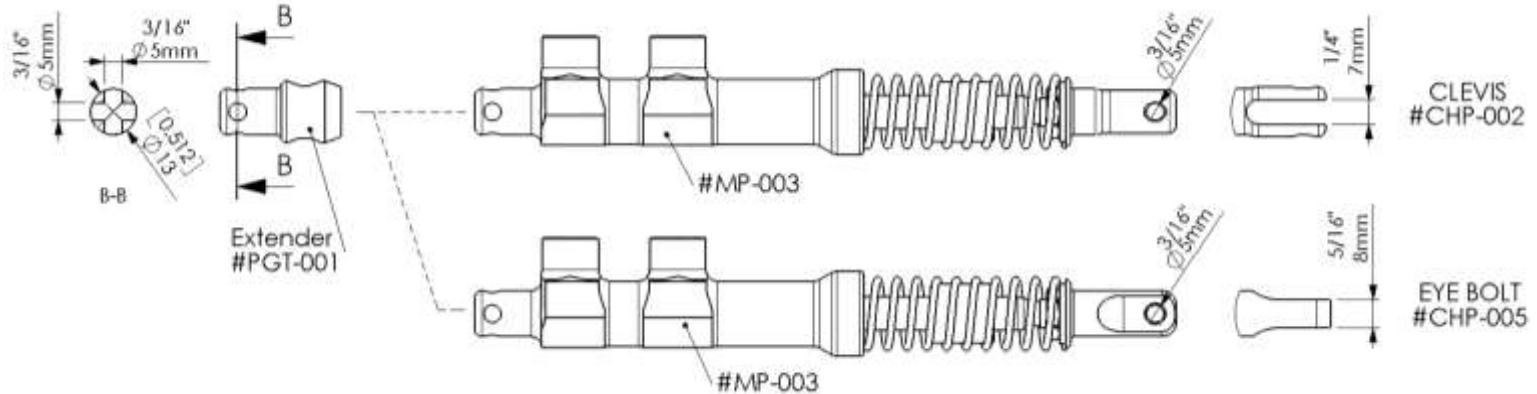
MP-003 series - BORE 1/2"

NEW

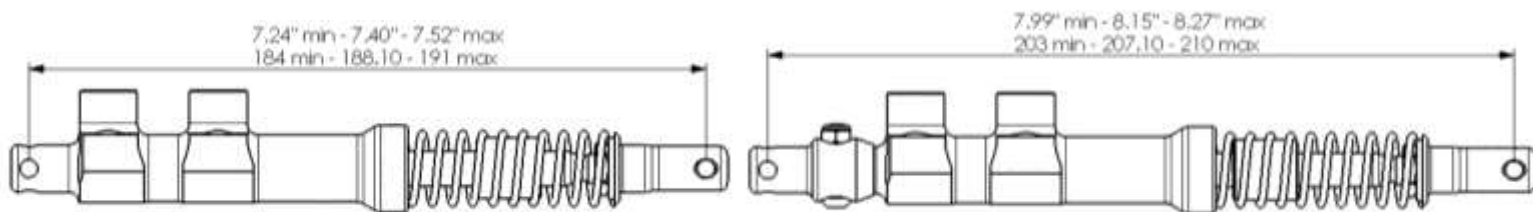


MP-003+CHP-002

End pieces available



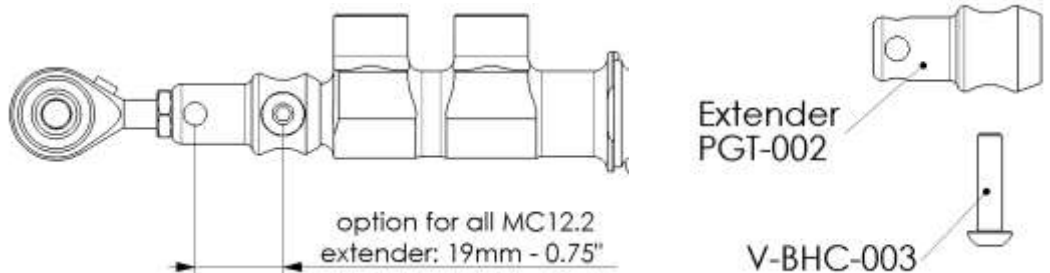
Pin-to-Pin length



MASTER CYLINDERS extenders and adapters

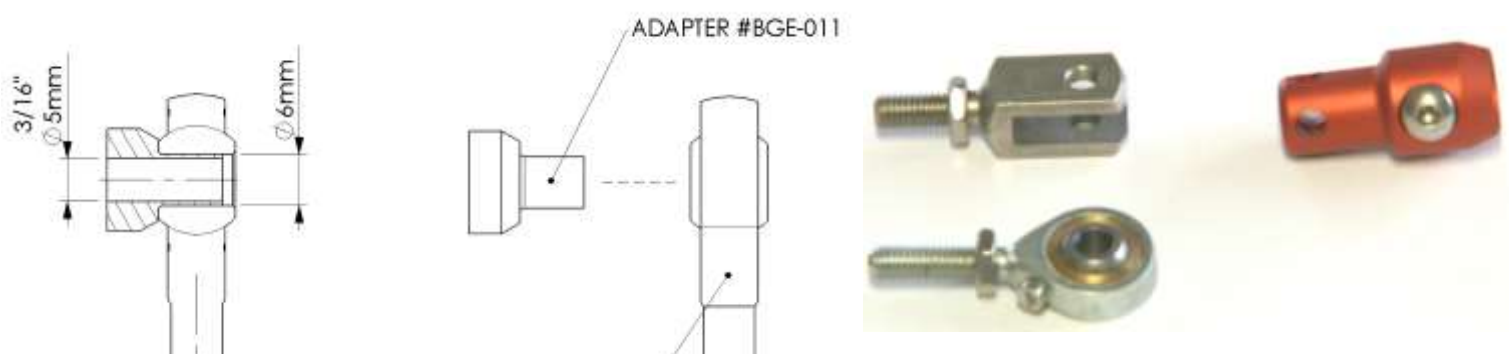
Extenders can bring all master cylinders to a longer pin-to-pin distance.

- for MP-001 and MP-003 use PGT-001
- for MP-002 use PGT-002



Adapter for rod ends:

our rod ends are only metric Ø6mm. For connexion with 3/16" bolts, please order the adapter P/N: BGE-011



LEVER MASTER CYLINDERS

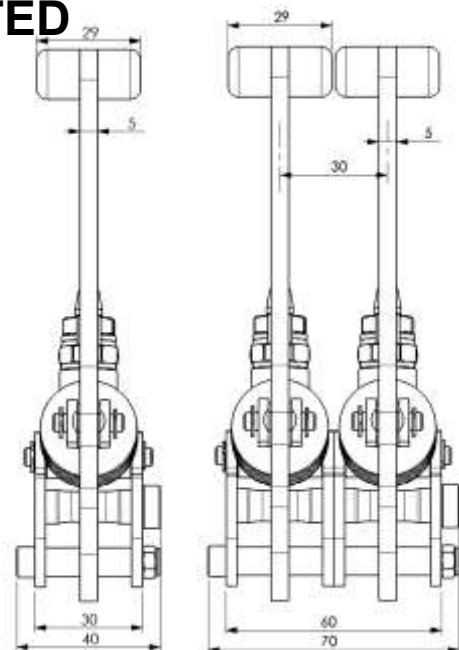
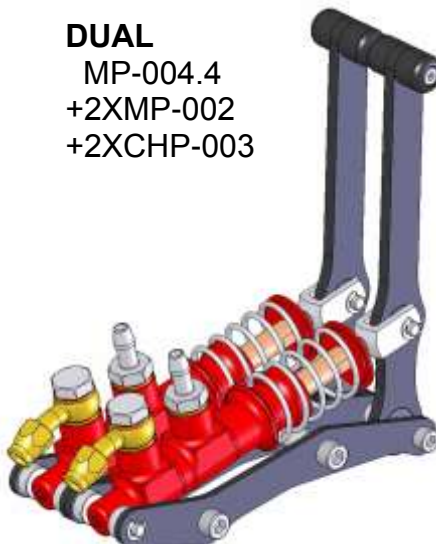
LEVER MASTER CYLINDER - HAND OPERATED

SINGLE
MP-004.3
+MP-002
+CHP-003

NEW

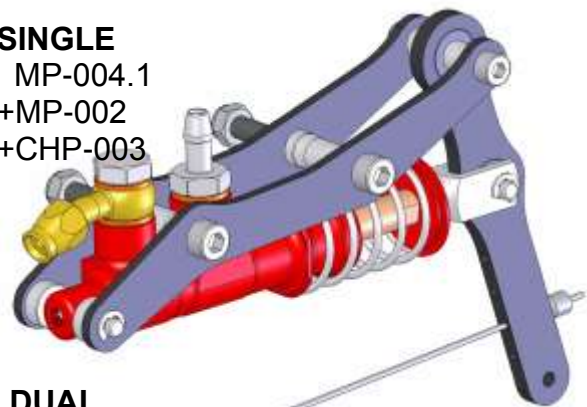


DUAL
MP-004.4
+2XMP-002
+2XCHP-003

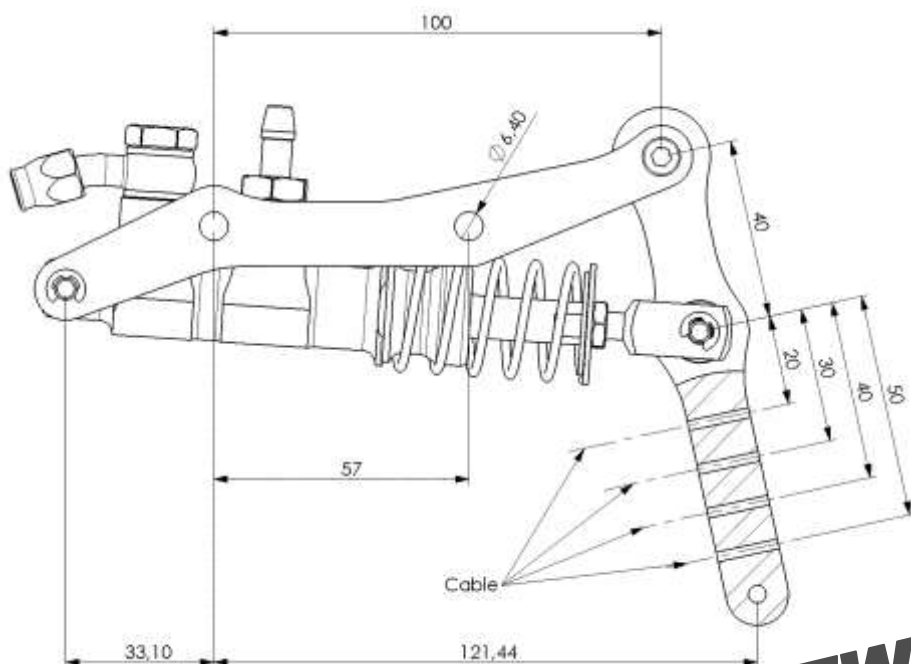
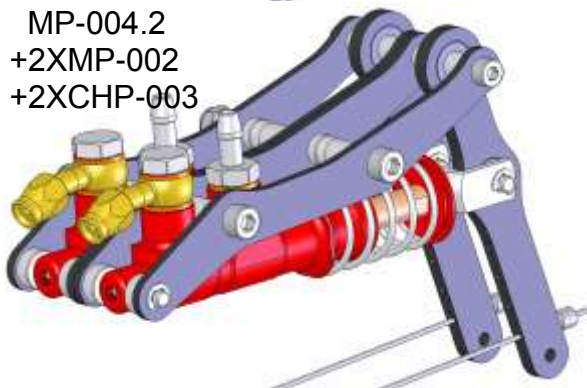


LEVER MASTER CYLINDER - CABLE OPERATED

SINGLE
MP-004.1
+MP-002
+CHP-003



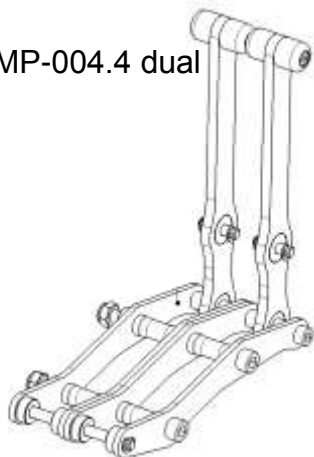
DUAL
MP-004.2
+2XMP-002
+2XCHP-003



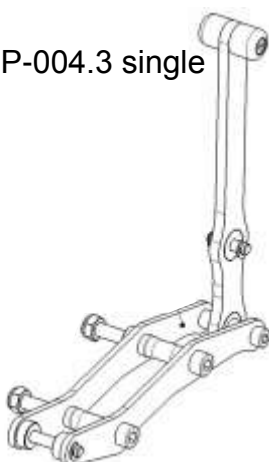
NEW

KITS for MP-002

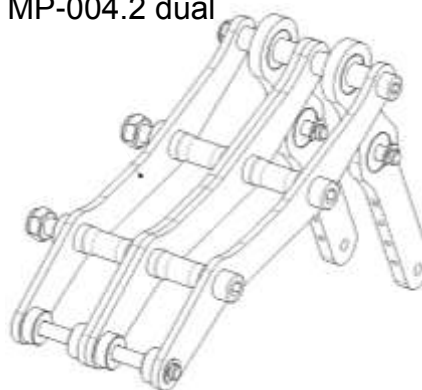
MP-004.4 dual



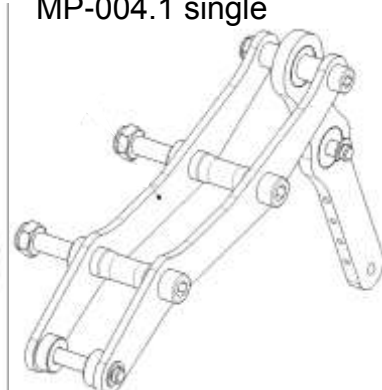
MP-004.3 single



MP-004.2 dual



MP-004.1 single



MASTER CYLINDERS & LEVER MASTER CYLINDERS

CAUTION: The seals inside the MASTER BRAKE CYLINDERS are specific for each type of brake fluid.

- It is not possible to put DOT4 brake fluid in a master cylinder with seals for MINERAL (MIL) fluid and it is not possible to put MINERAL brake fluid in a master cylinder with seals for DOT4 brake fluid.
- The letter **E** means for DOT4 brake fluid
- The letter **N** means for MINERAL (MIL) brake fluid

MP-002E or MP-002N



Part Number	Description	Brake fluid	Note	Piston bore inch	Standard pressure PSI	Max pressure PSI	Weight oz	Unit Price
MP-001E	master cylinder	DOT4		9/16	870	870	5.6	\$209
MP-001N	master cylinder	Mineral		9/16	870	870	5.6	\$209
MP-002E	master cylinder	DOT4	*	1/2	870	1450	3.3	\$169
MP-002N	master cylinder	Mineral	*	1/2	870	1450	3.3	\$169
MP-003E	master cylinder	DOT4	*	1/2	870	1450	4	\$179
MP-003N	master cylinder	Mineral	*	1/2	870	1450	4	\$179
MP-004.1	Single Lever kit - cable operated		**	-	-	-	5.6	\$69
MP-004.2	Dual lever kit - cable operated		**	-	-	-	11.2	\$129
MP-004.3	Single lever kit - hand operated		***	-	-	-	4.8	\$79
MP-004.4	Dual lever kit - hand operated		***	-	-	-	9.6	\$149
PGT-001	Extender with bolt for MP-001 and MP-003			-	-	-	0.3	\$18
PGT-002	Extender with bolt for MP-002			-	-	-	0.3	\$18
ZM-001	Rod end			-	-	-	0.8	\$18
CHP-002	Clevis for MP-003			-	-	-	0.25	\$15
CHP-003	Clevis for MP-002			-	-	-	0.5	\$15
CHP-004	Clevis for MP-002			-	-	-	0.5	\$15
CHP-005	Eye bolt for MP-003			-	-	-	0.3	\$15
BGE-011	Adapter for rod end			-	-	-	0.15	\$5

* For MP-002 and MP-003 the ends must be ordered separately

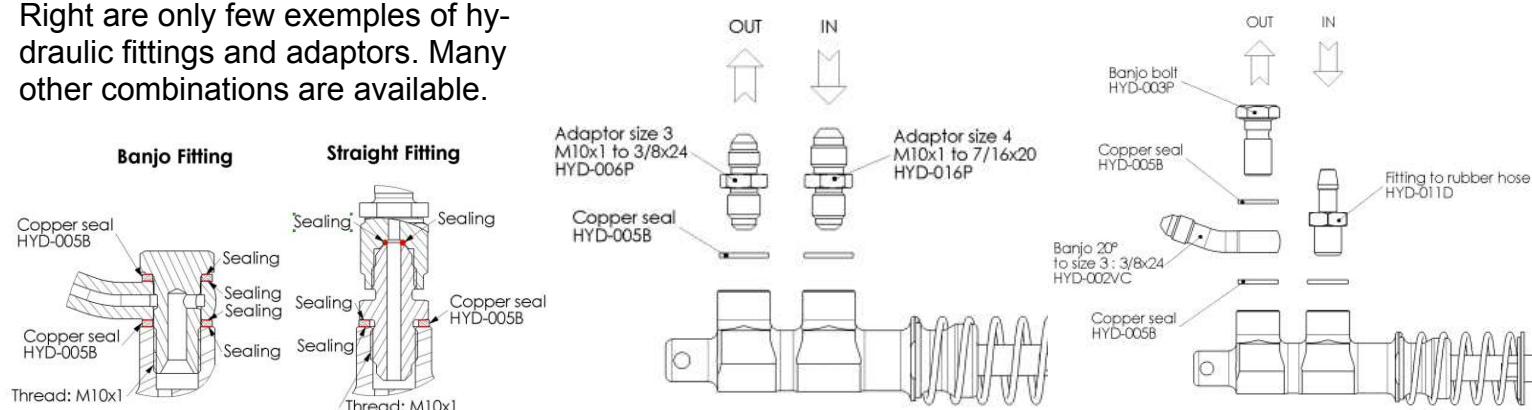
1 bar ↔ 14.5 psi - 1 psi ↔ 0.069 bar

** Master cylinder is not included in the kit. Please order one MP-002 (E or N) and one CHP-003

*** Master cylinders are not included in the kit. Please order two MP-002 (E or N) and two CHP-003

Hydraulic fittings for MASTER CYLINDERS (see pages 34 & 35)

Right are only few exemples of hydraulic fittings and adaptors. Many other combinations are available.



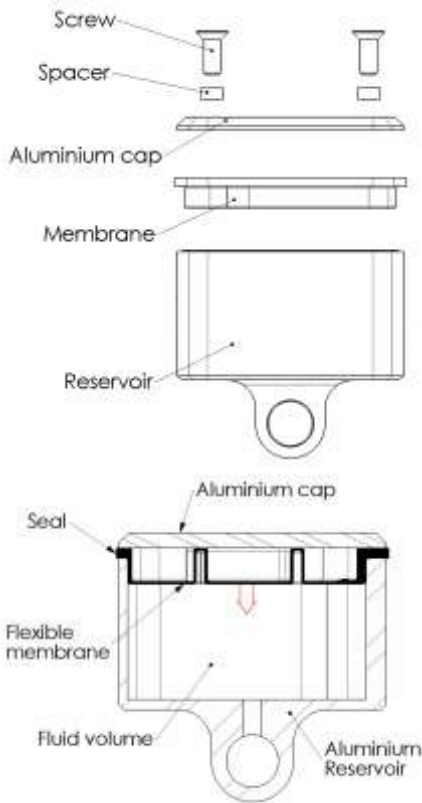
BRAKE FLUID RESERVOIRS

Each master cylinder requires a reservoir. We propose several types depending on your plane configuration. The reservoirs always incorporates tight bellows and are 100% tight, without any risk of leak. You must not install them close to the engine (install only inside the cockpit).

INTEGRAL BRAKE FLUID RESERVOIR

Vertical or horizontal mounting - available for DOT4 OR MINERAL brake fluid

- CNC machined from aluminium billet
- Weight : from 55g (2 oz) to
- Attaches directly to the master cylinder, 180° rotatable
- Perfect for aerobatic use

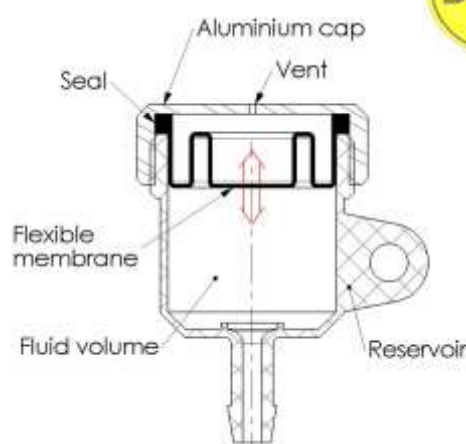


REMOTE BRAKE FLUID RESERVOIR

Transparent reservoir with CNC aluminium cover and visible fluid level and with mounting kit and 0.50m of EPDM tube. **Available for DOT4 brake fluid only.**

It is not possible to put DOT4 brake fluid in a master cylinder with seals for MINERAL (MIL) fluid and it is not possible to put MINERAL brake fluid in a master cylinder with seals for DOT4 brake fluid.

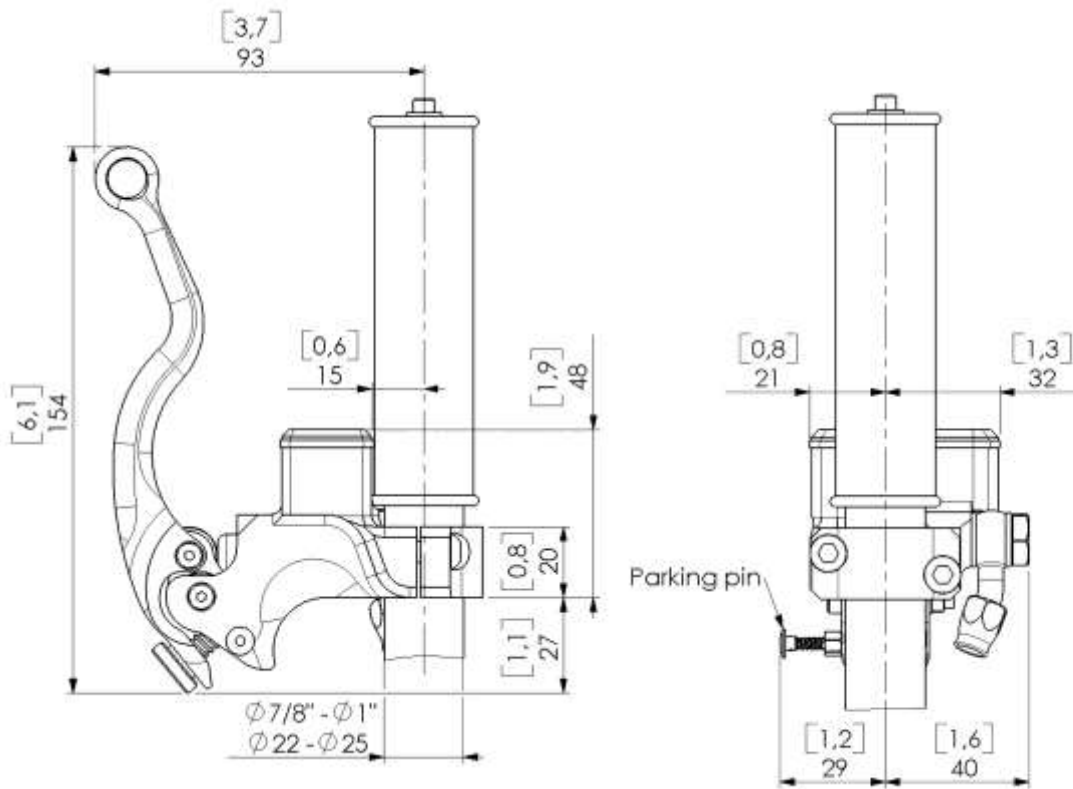
- The letter E means for DOT4 brake fluid
- The letter N means for MIL brake fluid



Part #	Brake fluid ref	DESCRIPTION	weight oz	Price
HFA01	E	Remote reservoir kit	1.38	\$39
HFA02	E or N	Integral reservoir CNC machined	1.94	\$69
HFA03	E or N	Integral reservoir CNC machined (Van's for example)	1.59	\$69
HFA04	E or N	Integral reservoir CNC machined	1.27	\$69
HFA05	E or N	Integral reservoir CNC machined side output	1.31	\$108

HAND MASTER CYLINDER AEROTEC®

- built-in reservoir
- parking brake pin optional
- three ball bearing for smooth operation, long life
- Covered with the world-wide AEROTEC® patents, it brings exceptional brake feeling
- Machined from billet on CNC
- To install on 22mm (7/8") or 25mm (1") axle or directly on flat surface with 2 screws



MASTER CYLINDER - CABLE OPERATED

- Built-in reservoir, delivered with aluminium support
- Actuated with sleeved cable
- only available for DOT4



MASTER CYLINDER - HAND OPERATED

All in one: lever, master cylinder, sealed reservoir. To be mounted on Ø22mm axle or on support with two 6mm screws.

Part #	DESCRIPTION	Weight oz	brake fluid	Price
HAB01	Built-in master cylinder	10.41	DOT4	\$352
HAB02	Built-in master cylinder with mechanical parking brake pin	10.41	DOT4	\$377
HAA03	Additional master cylinder to mount in serie (double braking control). To be used with primary HAB01 or HAB02	10	DOT4	\$377
HAC01	Master cylinder CABLE actuated with support	10.41	DOT4	\$352
HAB04	Master cylinder built-in reservoir	10.41	DOT4	\$377



PRESSURE LIMITER

Ultra lightweight PRESSURE LIMITER for symetrical braking on two wheels or one wheel system

- Limits progressively the pressure in the braking system from 25, 35, 45 or 60 bar
- Highly recommended to avoid over pressure and damage to the brake system
- must be used with hand master cylinder
- outlet M10x1
- Machined from solid on CNC
- For DOT4 brake fluid OR MIL (on demand)
- Anodized for corrosion resistance



Smaller than a marker

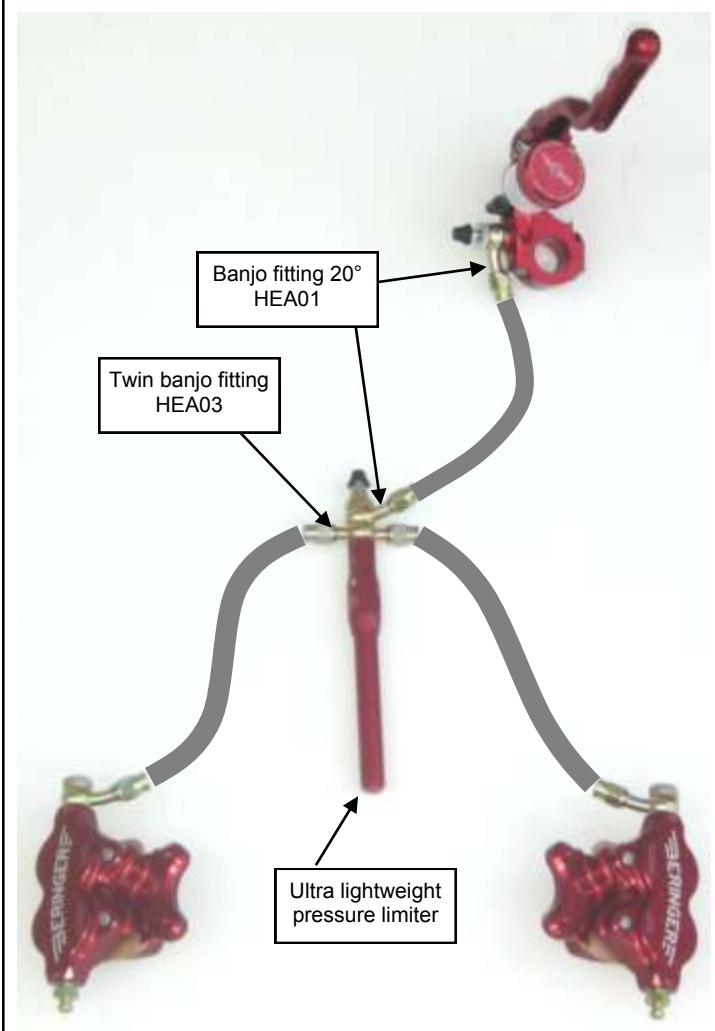


HZA01-HZA02-HZA03-HZA04

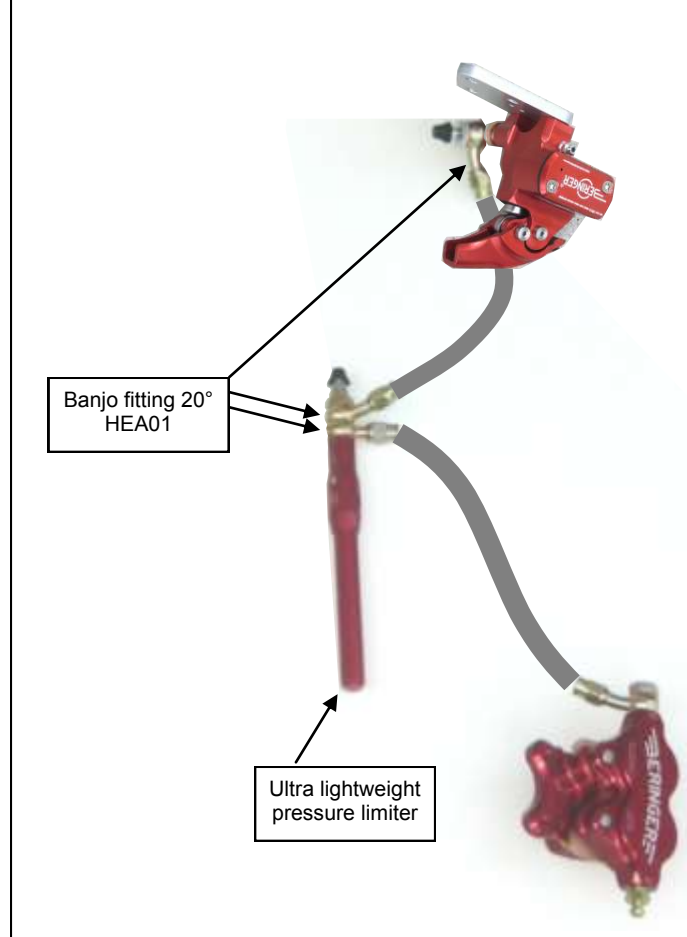
Part #	DESCRIPTION	weight oz	brake fluid	Price
HZA04	Ultralight pressure limiter 25 bar	2.30	DOT4	\$126
HZA01	Ultralight pressure limiter 35 bar	2.30	DOT4	\$126
HZA02	Ultralight pressure limiter 45 bar	2.30	DOT4	\$126
HZA03	Ultralight pressure limiter 60 bar	2.30	DOT4	\$126

BRAKE SCHEMATICS with ultralightweight limiter

symmetrical braking on two wheels
(hand master cylinder + limiter)



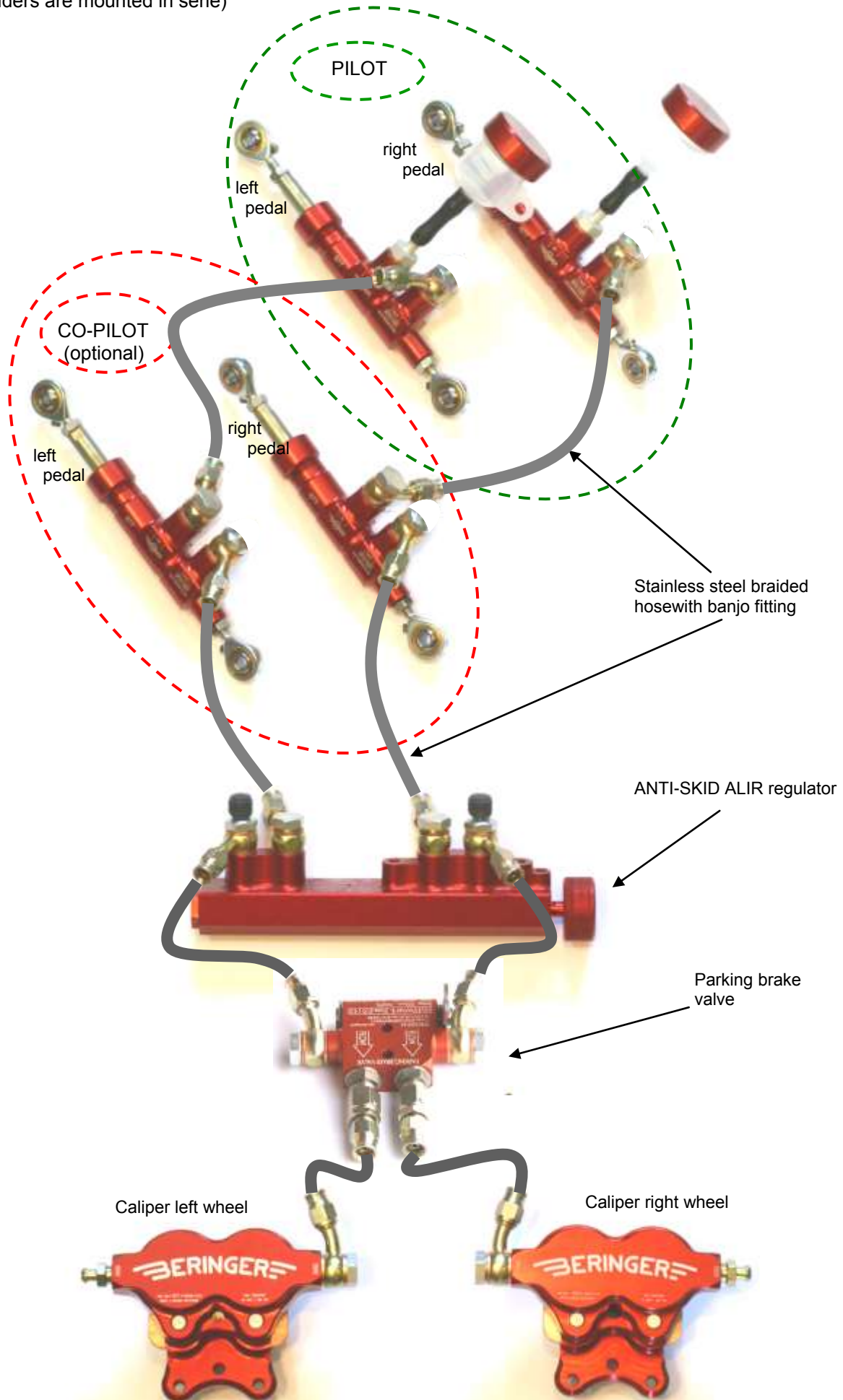
braking on one wheel
(master cylinder cable operated + limiter)
(glider)



BRAKING SYSTEM SCHEMATIC

Differential braking system with in-line balanced anti-lock regulator (anti-skid & in-line braking) and parking brake valve

(master cylinders are mounted in serie)



Many accidents occurring on the ground are due to a bad control of the brakes

Avoid all these risks with the BERINGER ALIR on your aircraft

The BERINGER ALIR system improves the control of the brakes and helps the pilot to control the brakes.

This Anti-skid in Line Regulator allows the control of the direction on the ground with differential braking. It avoids wheel locking and risk of nose over when applying full effort on the braking pedals.

It reduces the stopping distance.

The BERINGER ALIR system is included in most of the wheel & brake kits.



**a real advance
in term of safety**

ALIR System
Anti Lock
In line
Regulator

ALIR PRESSURE REGULATOR allowing a ± 1 bar maximum reference pressure and an equipressure left-right

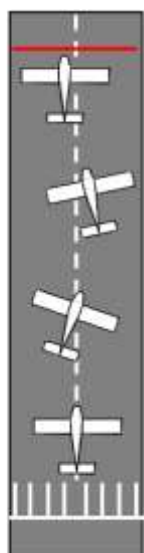
EMERGENCY BRAKING : comparison of:

- blue curve : with ALIR: the pilot applies full braking without any control (similar to a car ABS)

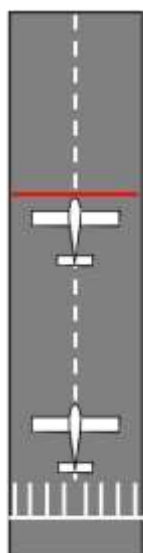
- red curve: without ALIR: no regulation, the pilot must control the braking

(in both cases, conditions are the same: same plane, same brakes)

Weight of the aircraft: 2,640lbs, braking speed: 70 Kt



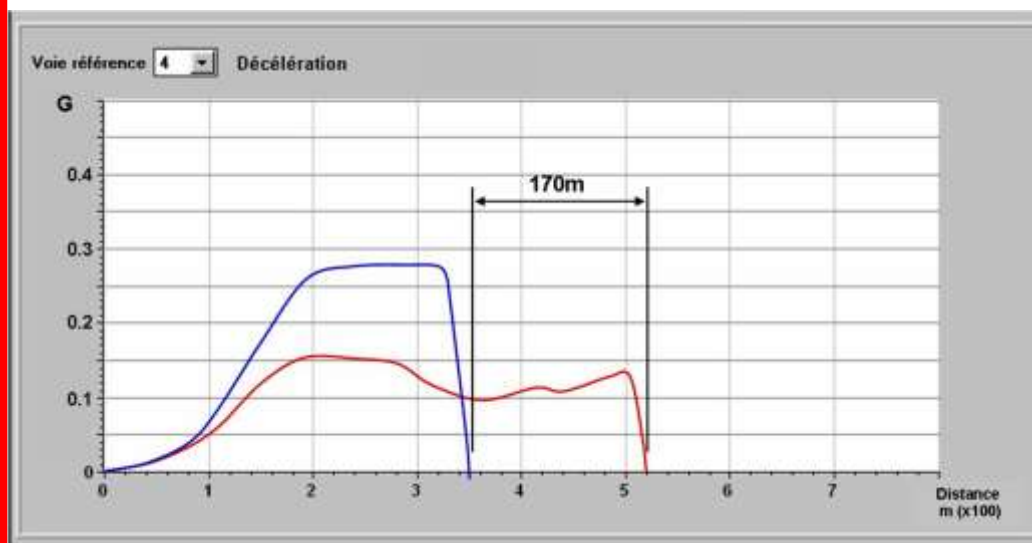
Without ALIR



with ALIR

The ALIR system allows the control of the direction on the ground with differential braking.

The system can be installed on certain old aircraft.



Nota: BERINGER brake pads used in the ALIR system have a friction coefficient that increases with the temperature allowing an increase of the deceleration when the lift decreases on the wings.

ANTI-SKID - pressure regulators - PARKING BRAKE VALVE

ALIR : In-line BALANCED ANTI-LOCK REGULATOR

Installs in-line; regulates in case of emergency overpressure

- low hysteresis
- Adjustment range: 10 to 40 bars (or 20 to 50 bars, with thumbwheel)
- Machined from solid on CNC
- For DOT4 OR MINERAL (MIL) brake fluid
- 2 inputs, 2 outputs (thread : M10x1)

ALIR

HCA02 - HCA12



ANTI-LOCK REGULATOR

- Low hysteresis
- Adjustment range: 10 to 40 bars (or 20 to 50 bars, with thumbwheel)
- Threaded connection: M10x1
- Machined from solid on CNC
- For DOT4 OR MINERAL (MIL) brake fluid
- Weight: from 9.52 oz



OR



HCA01 - HCA11



Part #	DESCRIPTION	weight oz	brake fluid	Price
HCA01E	Anti-lock regulator 10 to 40 bar	9.52	DOT4	\$197
HCA01N	Anti-lock regulator 10 to 40 bar	9.52	MINERAL	\$197
HCA02E	In-line balanced anti-lock regulator 10 to 40 bar	11.64	DOT4	\$197
HCA02N	In-line balanced anti-lock regulator 10 to 40 bar	11.64	MINERAL	\$197
HCA12E	In-line balanced anti-lock regulator 20 to 50 bar	11.64	DOT4	\$197
HCA12N	In-line balanced anti-lock regulator 20 to 50 bar	11.64	MINERAL	\$197

PARKING BRAKE VALVE

Available for DOT4 OR MINERAL (MIL) brake fluid

- Open/close quarter turn lever operated
- CNC machined from billet, red anodized
- Max. input pressure: 1500PSI (100 bar)
- Optimized for long life
- 100% protected from corrosion: anodized coating and stainless steel components



OR

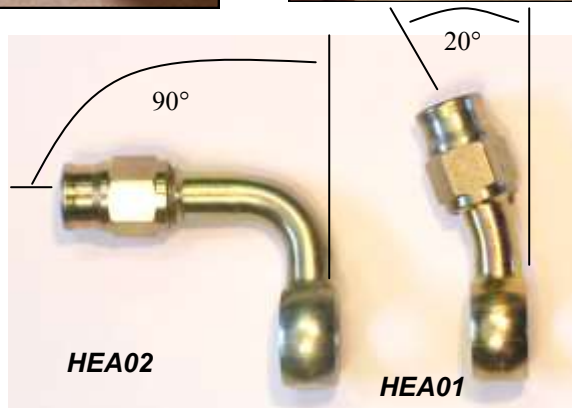
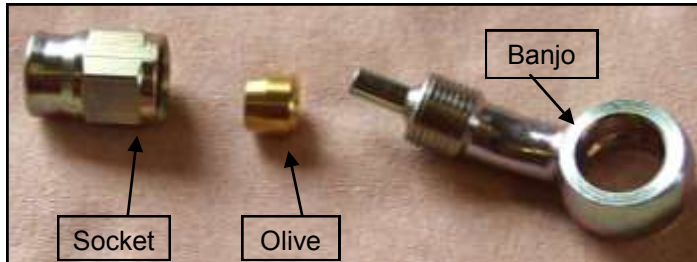


Part #	DESCRIPTION	Weight oz	Outlet port	brake fluid	Price
HVA01E	Parking brake valve	4.44	-3 Flare (3/8x24)	DOT4	\$298
HVA01N	Parking brake valve	4.44	-3 Flare (3/8x24)	MINERAL	\$298
HVA02E	Parking brake valve	4.44	-4 Flare (7/16x20)	DOT4	\$298
HVA02N	Parking brake valve	4.44	-4 Flare (7/16x20)	MINERAL	\$298

HOSE - HOSE FITTINGS - TO BE SCREWED

SCREW IT YOURSELF: You order brake hose and brake fittings separately and you follow the «assembly instructions» delivered with the parts.

- BERINGER Brake hose is stainless steel braided with PTFE inner tube and stainless steel fittings.
- provides consistent brake pedal pressure without spongy feeling.
 - flexibility allows landing gear leg movements and avoids leakage that appears with hardline tube.
 - ends can be straight fittings, female concave seat: 7/16x20 or 3/8x24 (steel plated or stainless)
 - operating pressure up to 3000 PSI - burst pressure 9000PSI



HYD-005P



HYD-003P



HYD-011D



HEA12



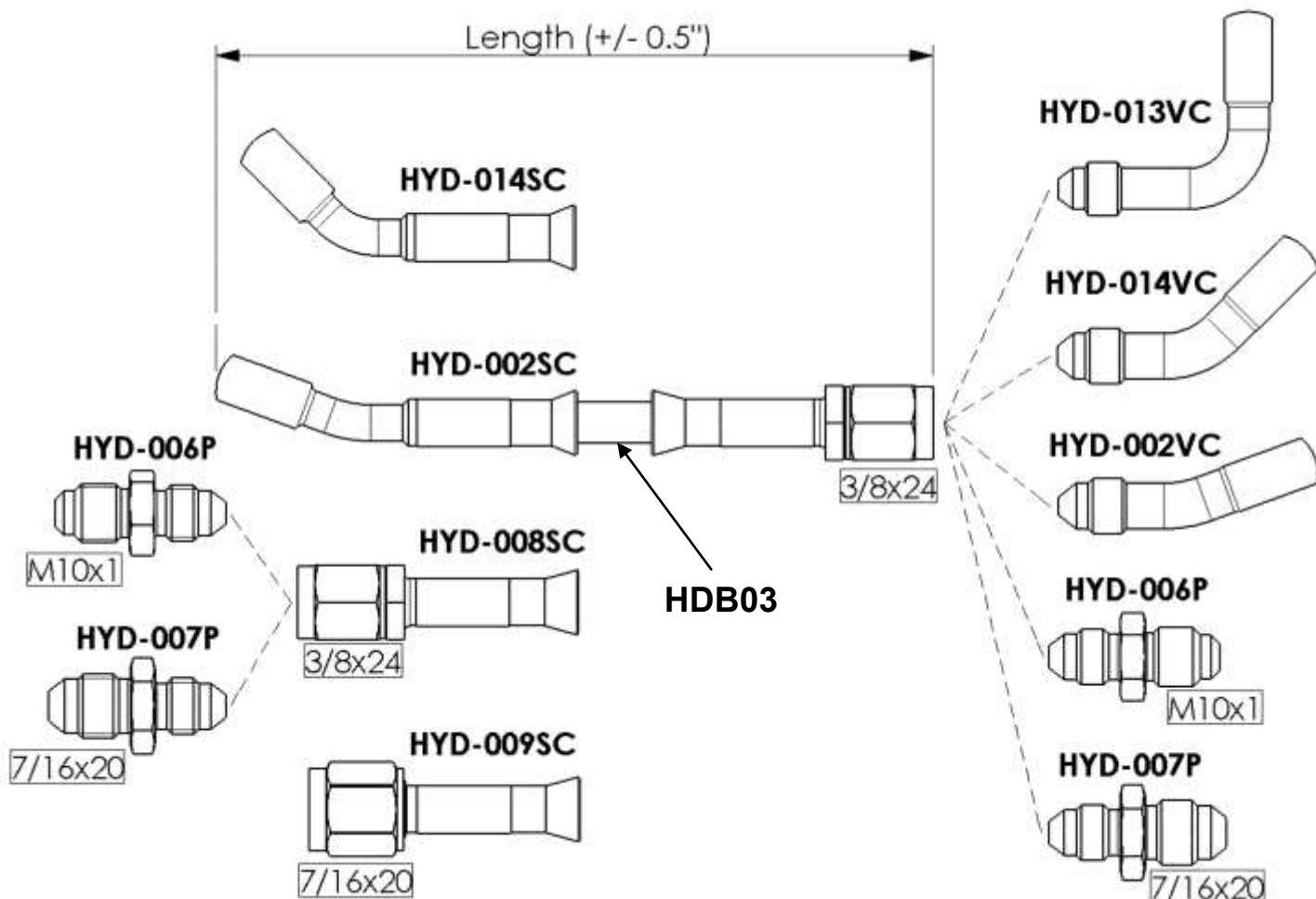
ZGA01

Part #	DESCRIPTION	Price
HOSE Ø 0.264" and FITTINGS		
HDB01	Hose Ø 0.264" - inner tube PTFE high temperature - Stainless steel braided (per foot)	\$6
HEA01	Banjo fitting 20°	\$16
HEA02	Banjo fitting 90°	\$23
HEA03	Twin Banjo	\$49
HYD-008P	Straight fitting, male M10x1	\$28
HYD-016P	Brake adaptor Metric M10x1 / 7/16x20	\$16
HYD-024VD	Adaptor 3/8" UNF - 1/8 NPTF	\$13
HEA08	Straight fitting, female concave seat 7/16x20 (stainless)	\$49
HOSE Ø 0.2" and FITTINGS		
HDB02	Hose Ø 0.2" - inner tube PTFE high temperature - Stainless steel braided (per foot)	\$12
HEA13	Banjo fitting straight Ø 5,2mm stainless	\$53
HEA14	Straight fitting 3/8x24 stainless Ø 5,2mm	\$32
HEA15	T fitting	\$45
OTHER PARTS and OTHER FITTINGS		
HEA12	Olive spare part for Ø 0.264" hose only	\$4
HYD-005B	Copper seal	\$0.65
HYD-003P	Banjo bolt M10x100	\$3.9
HYD-011D	Fitting for rubber hose (connection to reservoir)	\$16
HDA01	EPDM hose for reservoir, specific DOT4 brake fluid - per foot	\$9
ZGA01	Cushioned tube clamps for stainless steel hose (batch 10 clamps)	\$10
HEA11	Bulkhead fittings	\$29

HOSE ASSEMBLY - ASSEMBLED BY US

WE ASSEMBLE THESE HOSES AND FITTINGS and WE DELIVER THEM READY TO INSTALL.

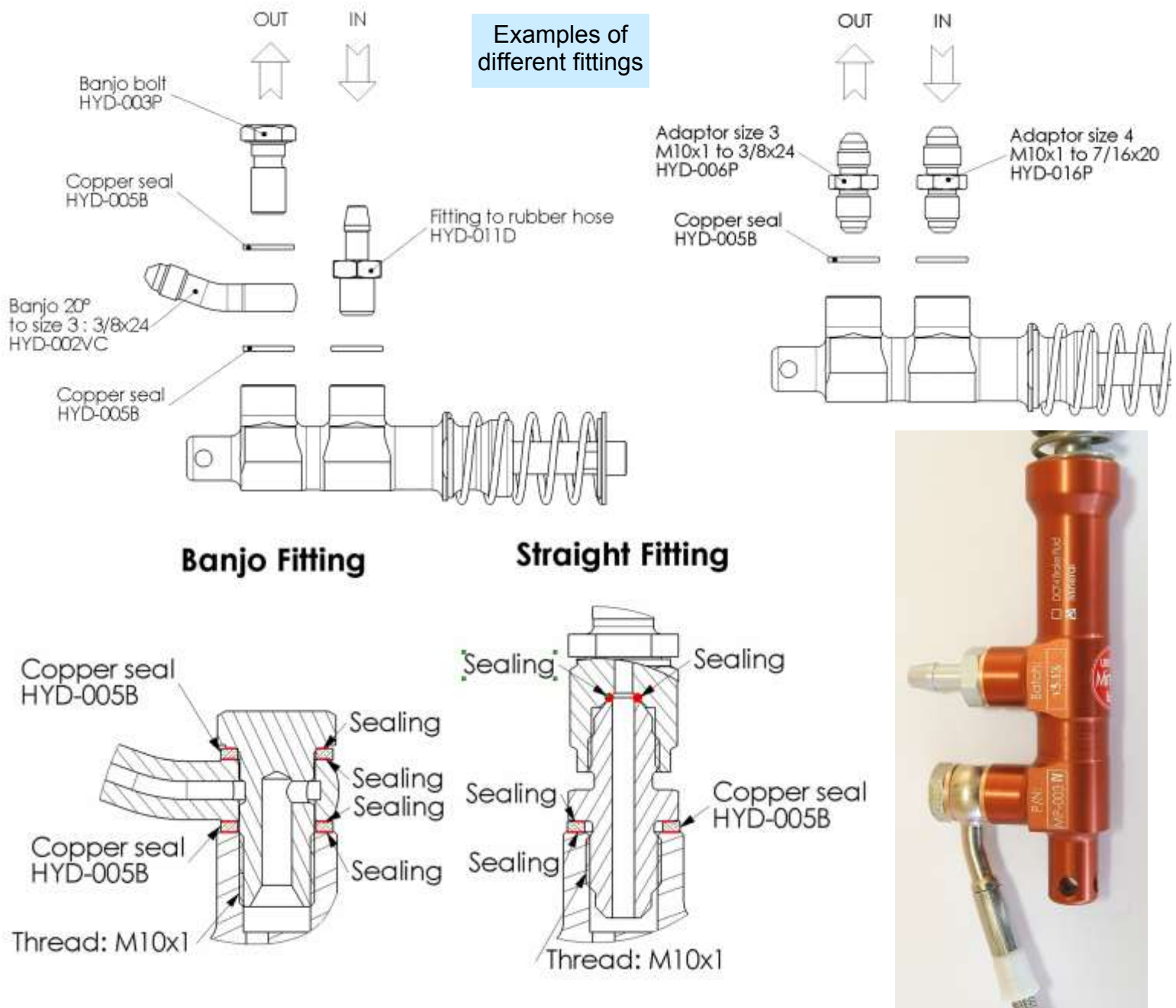
Choose your fittings, your length and order your brake hose assembly ready to use. The hose assembly is checked. Do not hesitate to contact us, we will help you.



Part #	DESCRIPTION	Price
HOSE Ø 0.295" and FITTINGS		
HDB03	Hose Ø0.295" - inner tube: PTFE high temperature - Stainless steel braided + protecting cover (per meter)	\$6
HYD-013VC	Banjo fitting 90° - 3/8x24	\$25
HYD-014VC	Banjo fitting 45° - 3/8x24	\$24
HYD-002VC	Banjo fitting 20° - 3/8x24	\$16
HYD-006P	Adapter M10x1 / 3/8x24	\$12.5
HYD-007P	Adapter 3/8x24 / 7/16x20	\$14.5
HYD-014SC	Banjo fitting 45°	\$24
HYD-002SC	Banjo fitting 20°	\$16
HYD-008SC	Straight fitting 3/8x24	\$27
HYD-009SC	Straight fitting 7/16x20	\$45
OTHER PARTS and OTHER FITTINGS		
HYD-005B	Copper seal	\$0.65
HYD-003P	Banjo bolt M10x100	\$3.9
HYD-011D	Fitting for rubber hose (connection to reservoir)	\$16
HDA01	EPDM hose for reservoir, specific DOT4 brake fluid - per foot	\$9
ZGA01	Cushioned tube clamps for stainless steel hose (batch 10 clamps)	\$10
HEA11	Bulkhead fittings	\$29



BRAKE HOSE - BRAKE HOSE FITTINGS - ASSEMBLIES



HOSE ASSEMBLY for Van's

Retrofit your RV with stainless brake hose assemblies. They provide consistent brake pedal pressure without spongy feeling. The flexibility allows landing gear leg movements and avoids leakage that appears with hardline tube

- stainless steel braided hose with PTFE inner tube
- stainless steel fittings.
- Connects the brake caliper to fuselage connector: straight fittings, female concave seat 7/16x20.
- pressure tested and delivered with certificate.



Part #	DESCRIPTION	Length foot	Price
HED01	Set of 2 Brake lines for RV6, 7, 9	3.61 (x2)	\$198
HED02	Set of 2 Brake lines for RV6A, 7A, 9A	2.8 (x2)	\$198

1 inch ↔ 25,4mm

BRAKE DISCS for BERINGER wheels

Part #	DESCRIPTION	Price
DSC-006	Stainless steel brake disc for Aerotec® caliper EA-006 (3.2mm) (1/8")	\$56
DSC-008	Stainless steel brake disc for Aerotec® caliper EA-002 (4.2mm) (0.165")	\$76
DSC-008.2	Steel brake disc for Aerotec® caliper EA-002.2 (7.2 mm) (0.283") (0.22")	\$139
DSC-009	Stainless steel brake disc for Aerotec® caliper EA-003 (5.6mm) (0.22")	\$115
DSC-009.3	Steel brake disc for Aerotec® caliper EA-003.3 / EA-003.4 (9mm) (0.354")	\$166



BRAKE DISCS for ROBIN DR400

- 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 distortion
- Anticorrosion coating for easy running



**longer life
maintenance reduced**

Part #	DESCRIPTION	Price
AV-ROB-001	Brake disc for ROBIN DR400	\$310

Delivered with EASA Form1

BRAKE PADS

- Friction material: sintered metallic
- High coefficient of friction - Very long life - high temperature resistant 600°C



Part #	DESCRIPTION (a set includes 2x pads for 1 caliper procedure)	Price
ZEA01	pads for BERINGER standard caliper EA-006 or EA-001	\$53
ZEA02	pads for BERINGER reinforced caliper EA-03	\$72
PQT-009	pads for BERINGER HE caliper EA-002 and EA-002.2	\$83
PQT-010	pads for BERINGER HE caliper EA-003 and EA-003.3 / EA-003.4	\$99

PATENTED

SPARE CLIPS

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

Part #	DESCRIPTION	Price
KCA01	CLIPS for one 5" wheel (10 left +10 right) old type	\$32
KCA03	CLIPS for one 5" wheel (10 left +10 right) NEW type	\$32
KCA02	CLIPS for one 6" Light wheel (10 pieces)	\$32
KCA04	CLIPS for one 6" HE wheel 10 L+10 R	\$32

KCA02



KCA01



KCA03



O'ring SEALS

You must change the o'ring seals at each tire changing.

Part #	DESCRIPTION	Price
KDF03	O-ring seals for 3.50-4" wheel (set for two wheel)s	\$14
KDF01	O-ring seals for 5" wheel (set for one wheel)	\$14
KDF02	O-ring seals for 6" and 6" light wheel (set for one wheel)	\$14
KDF02C	O-ring seals for 6" CLASSIC wheel (set for one wheel)	\$14
KDF04	O-ring seals for 6" SL wheel (set for two wheel)s	\$14
ZPA02	Safety wire stainless steel (for 2 wheels)	\$1



BERINGER® TOOL for tire changing

Specific tire change tool for BERINGER® wheels with conical aluminum spacer : eases mounting of tire on wheel half.

- Plywood flanges steady tire while positioning second wheel half with the O-ring.
- Includes: Plywood flanges, bolts with butterfly nut and conical aluminum spacer

Part #	DESCRIPTION	Price
OPA01	Tire change tool for 5" wheels	\$125
OPA02	Tire change tool for 6" wheels	\$147



REPAIR KITS

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

Part #	DESCRIPTION	Price
KBA01	Repair kit for 2 piston calipers EA-01 and EA-03	\$77
KBA02	Repair kit for 3 piston caliper EA-02	\$102
KER01	Repair kit for integral reservoir HFA02-03-04-05	\$11.7



BRAKE BLEEDER TANK

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

TIRE LUBRICANT

Spray of professional liquid soap, Michelin BIB'UP

SPRAY ANTI-PUNCTURE

to spray into the tire in case of puncture

Part #	DESCRIPTION	Price
ONA01	Spray Tyre Up	\$30
ONB01	Spray anti-puncture	\$30
ONC01	Pressure bleeder pump	\$110

Brake bleeder tank



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.

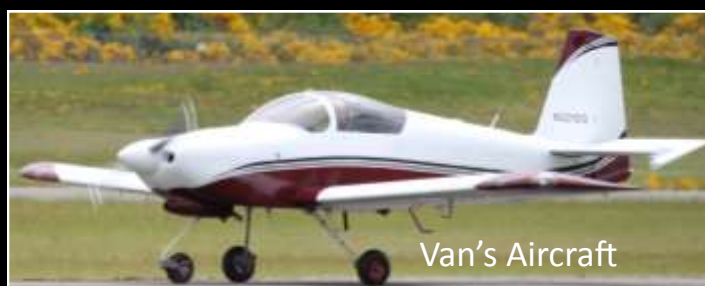
Part #	DESCRIPTION	Price
HJA01	High performance Brake fluid DOT4 0.33L	\$24
HJA02	High performance Brake fluid DOT5 Silicone base DOT5 cannot be mixed with DOT4 0.33L	\$34



They have chosen **BERINGER** as original equipment...



Pilatus



Van's Aircraft



Diamond



Aquila



Stemme



Pipistrel



Aerospool



ZLIN Aviation



BRM Aero



Comco iKARUS



DTA



Shark Aero



Icon Aircraft



Aeropro Nitra



Supermarine Aircraft



Magnaghi

and many others ...



Schempp Hirth



Jonker Sailplanes



Lange

NEW PERFORMANCE

for the PILATUS PC-6



tubeless

Switch to a high performance
Wheel & Brake System, and reduce
your maintenance cost.



The complete Wheel & brake kit consists of:

- 2 main wheels (aluminium CNC machined)
- 2 calipers (3 pistons)
- 2 discs (steel)
- pads (sintered metal)
- hoses and hydraulic connection
- 1 tail wheel with axle
- 2 master cylinders
- 1 hydraulic regulator
- specific tools for maintenance



**QUALITY
OPTIMUM PERFORMANCE
DURABILITY**

Investment paid off
in less than 1000 hours
(from 2 to 3 years of use)

Part number	DESCRIPTION
STC-002.1	Complete wheel & brake set for Pilatus PC-6 - single seat braking
STC-002.2	Complete wheel & brake set for Pilatus PC-6 - dual braking