



VARIO[®]

HELICOPTER

2017
PRODUCT CATALOGUE

EVERYTHING BUT 1:1!

VARIO GPS-COORDINATES: N 50 06. 669' E 009 43. 514'



Photo: Nicolas Aubert



Dear pilots,

Vario is a company with a long and vibrant history. With dedication to our pilots and the hobby, Vario continues to innovate in Scale Modeling and will always look to the enthusiasm of our customers for the inspiration in our future development. Vario not only works toward the future with new product development, we realize that the support of products you have owned for many years is important to you. Vario continues this dedication to all customers, whether you have just purchased a kit, or purchased one several years ago, Vario will be there to support you in your endeavors. Vario's dedication to producing spare parts for our legacy products provides you with the opportunity to continue to fly your favorite models for many years to come. If you wish to find a spare part for any model, look no further than your build manual. If you do not still have the original build manual, please visit the PDF section on our website. Although our catalog contains many products, there are even more products that may be found on our website. If you are not able to find the part in either location, please contact us via email as we will always work to provide you with the highest quality service. Our customers are our foundation, and our path to the future. We will always strive to provide you with the highest level of support and service as a member of the Vario family.

As a company with history that spans over 41 years, there have been many design improvements and advancements in our product line. Examples of our continued achievement can be seen in the quality and structural rigidity of fiberglass components new products such as the Bell 429 and EC120. By creating close relationships with Bell and Airbus, Vario has been able to use factory 3D modeling data to construct kits and components with fit and finish second to none. Since 2012, kits and build plans have been designed using advanced 3D rendering which provides the pilot with both a True Scale design, and a build manual that is both user friendly and informative. By using 3D data rendering on all current generation products, Vario will continue to lead the industry in both new product design and legacy product support.

When looking for your new scale modeling project, look no further than Vario. With a long history of design, performance, and support, Vario will continue to lead and innovate in the scale aeromodeling community. We wish you success and enjoyment with your next Vario, and we look forward to hearing from you. Many happy landings from all of us at Vario.

Kirsten Zodtner

Kirsten Zodtner
Managing Director Vario Helicopter

The contents of the entire catalogue are subject to alterations.
Images and colors can differ from the actual product.
Mechanics are supplied without servos and electronics.
The shown models are fitted with optional scale accessories.
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Since 1998, Vario Helicopter is a licensee of Airbus Helicopters. The helicopters of Sud Aviation (Gazelle, Lama), Aérospatiale (Ecureuil), MBB (Bo 105, BK 117) and Eurocopter (EC 120, EC 135, EC 145, etc.) also come under this license. The mutual interests of Airbus und Vario are many and there are surprisingly many similarities between real and model helicopters.

In the German TV show Galileo on Pro7 the phenomenon of ground resonance was first introduced at Airbus Helicopters in Donauwörth and thereafter demonstrated in Gräfendorf in Vario. Watch the TV report here on www.vario-helicopter.de.

We recommend for all models the **Ord.No. 14/2** Airbus Helicopters transfer sticker

AIRBUS HELICOPTERS



Foto/Pilot: Hellmut Schulze-Wenck



The EC 120 (H 120) is a large model made more impressive by its specially developed dome mechanics which leave the builder all the required space to build a full scale cockpit. The pre-welded landing skids and luggage door are exactly the same as the full size version. The fuselage was developed with 3-D data that was offered to Vario by Airbus Helicopters.

SCALE 1:4
LENGTH 2300 mm
WIDTH 520 mm
HEIGHT 780 mm
ROTOR ø 2300 mm
WEIGHT E: approx. 19 kg
T: approx. 22 kg
YEAR 2015

FUSELAGE

Fuselage	Ord.No. 1200
• 12-part GRP fuselage • window set • laser cut wooden formers • stainless steel tail rotor shaft (ø 8 mm) • landing gear (ø 20 mm) • various small parts	

ROTOR HEAD

3 blade rotor head	Ord.No. 703/38
swashplate driver	Ord.No. 68/50
3 blade set ø 2300 mm, r.h.r.	Ord.No. 413/4
rotor blade pouch	Ord.No. 33/3
pushrod, 3 pcs	Ord.No. 70/83-3

DRIVE // ELECTRIC



electric mechanics for EC 120	Ord.No. 121/22
Fenestron gearbox claw connector, shaft ø 5 mm	Ord.No. 92/76 Ord.No. 49/12
Fenestron 8 blade, r.h.r.	Ord.No. 93/88
drive set 12S incl. motor Pyro 800-40 L, controller Kosmik 160+ HV	Ord.No. 121/59
dummy exhaust pipe	Ord.No. 121/16

DRIVE // TURBINE



turbine mechanics for EC 120 turbine Jakadofsky Pro 5000 clutch bell t. 40	Ord.No. 120/22
Fenestron gearbox claw connector, shaft ø 5 mm	Ord.No. 92/76 Ord.No. 49/12
Fenestron 8 blade, r.h.r.	Ord.No. 93/88
exhaust pipe for EC 120	Ord.No. 120/16
kerosene tank, 2.5 l	Ord.No. 26/8
tank vent filter	Ord.No. 26/25
refuelling system	Ord.No. 13/32
hose clamp, PU 4 pcs	Ord.No. 26/34

COCKPIT	JOYSTICKS / FOOT PEDALS	PILOT	STATOR	ROTOR HEAD COVER	DECAL	DOOR FITTINGS SET	DOOR HANDLES	SKID FAIRING	TAIL SKID
Ord.No. 120/29	Ord.No. 120/415 // 120/416	Ord.No. 1/40 with 1/47	Ord.No. 120/62	Ord.No. 707/3	Ord.No. 120/0	Ord.No. 120/5	Ord.No. 120/424	Ord.No. 120/425	Ord.No. 120/6



SCALE	1:6
LENGTH	1740 mm
WIDTH	280 mm
HEIGHT	590 mm
ROTOR	Ø 1680 mm
WEIGHT	E: approx. 9.5 kg T: approx. 12.5 kg
YEAR	2002

FUSELAGE

Fuselage electric	Ord.No. 1320
Fuselage turbine	Ord.No. 1340
• 12-part GRP fuselage • window set • laser cut wooden formers • stainless steel tail rotor shaft (Ø 6 mm) • landing gear (Ø 15 mm) • various small parts	

ROTOR HEAD

4 blade rotor head	Ord.No. 704/30 (E), 704/32 (T)
swashplate driver	Ord.No. 68/20 (E), 68/50 (T)
main rotor shaft, 10 x 194 mm	Ord.No. 35/40 (E), incl. in mechanics (T)
4 blade set Ø 1680 mm	Ord.No. 404/41
rotor blade pouch	Ord.No. 33/4
pushrod, 4 pcs	Ord.No. 70/50-4 (E), 70/101-4 (T)

DRIVE // ELECTRIC



DRIVE // TURBINE



electric mechanics incl. 10 blade Fenestron & gearbox	Ord.No. 1002/84
Fenestron speed-up unit	Ord.No. 134/37
tail rotor drive shaft mounting	Ord.No. 132/37 Ord.No. 132/38
drive set 10S incl. motor Pyro 700-52 L, controller JIVE PRO 120+ HV	Ord.No. 3316
drive set 12S incl. motor Pyro 700-45 L, controller JIVE PRO 120+ HV	Ord.No. 3317

JetCat PHT3 I.h.r. (mechanics & turbine)	
gear ratio: 73.25:1	
turbine speed: 94,000 rpm	
rotor speed: 1283 rpm	
Please order with suitable rotor shaft Ord.No. 35/44.	
information and supply: www.jetcat.de	
swashplate	Ord.No. 832/68
dome fittings set JetCat for 4 blade rotor head for 2 blade rotor head	Ord.No. 53/16 Ord.No. 53/15
claw connector	Ord.No. 49/5
Fenestron gearbox claw connector, shaft ø 5 mm	Ord.No. 92/76 Ord.No. 49/12
Fenestron speed-up unit	Ord.No. 134/37
Fenestron 10 blade	Ord.No. 93/90
exhaust, stainless steel	Ord.No. 134/16
kerosene tank, 1.25 l alternative: Kevlar tank	Ord.No. 26/5 Ord.No. 26/50

COCKPIT / SEATS



Ord.No. 134/629 // 134/628

DOOR FITTINGS SET

**Ord.No. 133/5**

PILOT



Ord.No. 1/16 // 1/60

RADAR NOSE CONE

**Ord.No. 133/22**

ROTOR HEAD

**Ord.No. 704/30**

TURBINE OUTLET

**Ord.No. 20/36**

STATOR



Ord.No. 134/62

LANDING GEAR FLOAT SET



Ord.No. 134/1

DECAL



Ord.No. 133/1 // 70/7

DECAL



Ord.No. 134/46 // 134/48

12

H135

model size1050



Pilot: Francis Paduwat

AIRBUS
HELICOPTERS
Officially Licensed Product

The kit of the EC 135 with a rotor diameter of 2.3 m includes the electric mechanics and the Fenestron. The design of the mechanics and its mounting position within the fuselage allow a clear cockpit area.

The Fenestron has ten blades and features an asymmetrical distribution the same as the full size, this not only looks good but is very powerful in operation. Many scale extras are available for this model allowing you to create your own scale master-part.

SCALE	1:4
LENGTH	2430 mm
WIDTH	500 mm
HEIGHT	770 mm
ROTOR	ø 2300 mm
WEIGHT	E: approx. 23 kg T: approx. 27 kg
YEAR	2012

DRIVE // ELECTRIC



electric mechanics for EC 135 incl. main rotor shaft	Ord.No. 1382/22 included in fuselage
Fenestron 10 blade	Ord.No. 138/92 included in fuselage
suitable for Ord.No. 1382/22 & Ord.No. 138/22: drive set 12S incl. motor 800-40 L, controller JIVE PRO 120+ HV	

DRIVE // TURBINE



turbine mechanics for EC 135 incl. main rotor shaft	Ord.No. 138/22 included in fuselage
turbine JetCat SPT5-H with single exhaust to the transmission information and supply: www.jetcat.de	
Fenestron 10 blade	Ord.No. 138/92 included in fuselage
exhaust pipe	Ord.No. 138/16
kerosene tank, 2.5 l	Ord.No. 26/7
tank vent filter	Ord.No. 26/25
refuelling system	Ord.No. 13/32
hose clamp, PU 4 pcs	Ord.No. 26/34

FUSELAGE

Fuselage electric	Ord.No. 1382
Fuselage turbine	Ord.No. 1381
• 11-part GRP fuselage • window set • laser cut wooden formers • stainless steel tail rotor shaft (ø 8 mm) • 10 blade Fenestron • mechanics • landing gear (ø 20 mm) • various small parts	

ROTOR HEAD

4 blade rotor head	Ord.No. 704/38
swashplate driver	Ord.No. 68/50
4 blade set ø 2300 mm	Ord.No. 412/4
rotor blade pouch	Ord.No. 33/40
pushrod, 4 pcs	Ord.No. 70/83-4

COCKPIT / SEATS



Ord.No. 138/29 // 138/28

DOOR FITTINGS SET



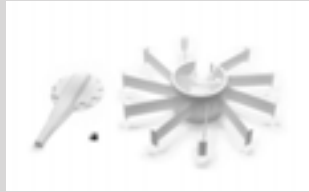
Ord.No. 138/5

PILOT



Ord.No. 1/40 // 1/49

STATOR



Ord.No. 138/62

ROTOR HEAD



Ord.No. 704/38



Photo: Ben Schill · Pilot: Bob Harris



Developing new full size helicopters based on the parts of serveral earlier models is common place today. The origins of Eurocopter's EC 145 are almost obvious to see: The cockpit is from the EC 135 and the other components of the EC 145 (including turbines, transmission, rotor system and rear section) are provided from the BK 117 after a few modifications.

SCALE 1:6
LENGTH 1760 mm
WIDTH 290 mm
HEIGHT 580 mm
ROTOR ø 1680 mm
WEIGHT E: approx. 8.5 kg
T: approx. 13 kg
YEAR 2004

FUSELAGE

Fuselage electric	Ord.No. 1450
Fuselage turbine	Ord.No. 1440
• 14-part GRP fuselage • window set • laser cut wooden formers • stainless steel tail rotor shaft (ø 6 mm) • landing gear (ø 15 mm) • various small parts	

ROTOR HEAD

4 blade rotor head	Ord.No. 704/30 (E), 704/32 (T)
swashplate driver	Ord.No. 68/20 (E), 68/50 (T)
main rotor shaft, 10 x 194 mm	Ord.No. 35/40 (E), incl. in mechanics (T)
4 blade set ø 1680 mm	Ord.No. 404/41
rotor blade pouch	Ord.No. 33/4
pushrod, 4 pcs	Ord.No. 70/50-4 (E), 70/101-4 (T)

DRIVE // ELECTRIC



DRIVE // TURBINE



electric mechanics	Ord.No. 1002/80
40° gearbox	Ord.No. 1059
drive set 10S incl. motor Pyro 700-52 L, controller JIVE PRO 120+ HV	Ord.No. 3316
drive set 12S incl. motor Pyro 700-45 L, controller JIVE PRO 120+ HV	Ord.No. 3317

JetCat PHT3 l.h.r. (mechanics & turbine) gear ratio: 73.25:1 turbine speed: 94,000 rpm rotor speed: 1283 rpm Please order with suitable rotor shaft Ord.No. 35/44 and servo mounting plates. information and supply: www.jetcat.de	
swashplate	Ord.No. 832/68
dome fittings set 4 blade	Ord.No. 53/16
50° gearbox	Ord.No. 1057
alu tail rotor claw connector, shaft ø 5 mm	Ord.No. 1003/80 Ord.No. 49/12
tail rotor blades	Ord.No. 34/30
exhaust pipe, stainless steel	Ord.No. 144/16
kerosene tank, 1.25 l alternative: Kevlar tank	Ord.No. 26/5 Ord.No. 26/50

COCKPIT / SEATS	DOOR FITTINGS SET	PILOT	RADAR NOSE CONE	ROTOR HEAD	TURBINE OUTLET	WINCH	DECAL	JOYSTICKS & FOOT PEDALS	WSPS SET
Ord.No. 144/629 // 134/628	Ord.No. 133/5	Ord.No. 1/70 // 1/79	Ord.No. 133/22	Ord.No. 704/30	Ord.No. 20/36	Ord.No. 701/100	Ord.No. 134/49	Ord.No. 31/31	Ord.No. 20/22

Fenestron antenna
ORD.NO. 134/495

antenna
ORD.NO. 134/432
ORD.NO. 134/434

stator
ORD.NO. 138/62

position lights
ORD.NO. 134/401
ORD.NO. 134/403

The first number after the slash in the Ord.No. indicates the size/scale of the part, for example Ord.No. 134/408 corresponds to Scale 1:4. All the 3D printing parts shown here are also available in scale 1:6 (see online shop).

► More details in the online shop under Scale accessories → Model Specific → EC

pedals
ORD.NO. 134/408

cyclic sticks
ORD.NO. 134/402
ORD.NO. 134/439

rotor brake stick
ORD.NO. 134/452

flat antenna
ORD.NO. 134/412

air inlets
ORD.NO. 134/404
ORD.NO. 134/406

winch connections
ORD.NO. 134/444

fix for winch
ORD.NO. 134/451

distress beacon (in the cockpit)
ORD.NO. 134/443

VHF antenna
ORD.NO. 134/448

pilot seat(s)
ORD.NO. 138/280 // 138/28 1:4
ORD.NO. 134/638 // 134/628 1:6

cable cutter for skids
ORD.NO. 134/461

hinges with butterfly screw
ORD.NO. 134/450

foot steps
ORD.NO. 134/430
ORD.NO. 134/431
ORD.NO. 134/486

bear paws l/r
ORD.NO. 134/488

Photo: Mirco Esterhaus

door hardware
ORD.NO. 134/425

ventilation window
ORD.NO. 134/422

door hardware
ORD.NO. 134/442

top antenna
ORD.NO. 134/410

antenna
ORD.NO. 134/409

opening window
ORD.NO. 134/420

pitot tubes
ORD.NO. 134/426
ORD.NO. 134/449

wipers
ORD.NO. 134/485

door handles
ORD.NO. 134/424

spotlights
ORD.NO. 134/419

air intake NACA duct
ORD.NO. 134/407

antenna
ORD.NO. 134/436

helium tank
ORD.NO. 134/423

speaker
ORD.NO. 134/446

thermal imaging camera incl. support
ORD.NO. 134/416 incl. 134/487



Photo: Michael Laskus | www.brilliantpictures.de · Pilot: Fred Coenen | www.helitech.nl

This model is an impressive helicopter, due to its enormous size it is designed for turbine mechanics only. For transport, the entire tail is removable. A ready-built mechanics support frame is included. The mechanics support is set rearward so a full scale cockpit interior can be fitted. In addition to the basic kit Ord.No. 3500 we can also supply a kit including the mechanics (1002/66) - this kit is Ord.No. 3501.

SCALE 1:4
LENGTH 2450 mm
WIDTH 680 mm
HEIGHT 750 mm
ROTOR ø 2500 mm
WEIGHT approx. 24 kg
YEAR 2005

FUSELAGE

Fuselage	Ord.No. 3500
Fuselage (incl. turbine mechanics)	Ord.No. 3501
• 16-part GRP fuselage • window set • laser cut wooden formers • stainless steel tail rotor shaft (ø 8 mm) • mechanics support • stainless steel tail skid • spring-loaded 3-wheel undercarriage • various small parts	

ROTOR HEAD

3 blade rotor head	Ord.No. 703/43
swashplate driver	Ord.No. 68/50
main rotor shaft, 12 x 560 mm	Ord.No. 722/35
3 blade set ø 2500 mm	Ord.No. 417/3
rotor blade pouch	Ord.No. 33/3

DRIVE // TURBINE



turbine mechanics for Alouette III included in fuselage Ord.No. 3501	Ord.No. 1002/66
turbine Jakadofsky Pro 5000 t. 24	
information and supply: www.jakadofsky.com	
exhaust system Alouette III	Ord.No. 350/16
kerosene tank, 1.25 l (2 pcs required) alternative: Kevlar tank	Ord.No. 26/5 Ord.No. 26/50
tank vent filter	Ord.No. 26/25
refuelling system	Ord.No. 13/32
hose clamp, PU 4 pcs	Ord.No. 26/34

COCKPIT	DOOR FITTINGS SET	PILOT	JOYSTICKS & FOOT PEDALS	ROTOR HEAD	WSPS SET	DUMMY POWER UNIT	EXHAUST COVER	WINCH	POSITION LIGHTS
									
Ord.No. 350/29	Ord.No. 350/5	Ord.No. 1/16 // 1/60	Ord.No. 31/34	Ord.No. 703/43	Ord.No. 20/22	Ord.No. 340/13	Ord.No. 350/17	Ord.No. 350/45	Ord.No. 341/404



Photo: Jeremy Ignacio



For most pilots, there is an absolute favorite among the helicopters, and the BK 117 is in the top 10 on the popularity list. The flexibility of this helicopter makes it well suited to many different applications. Agile and spacious the BK 117 is well suited for the primary use of ambulance services in the EMS, made especially popular by the television series "Medicopter 117".

SCALE 1:7
LENGTH 1520 mm
WIDTH 250 mm
HEIGHT 520 mm
ROTOR ø 1600 mm
WEIGHT approx. 9 kg
YEAR 2002

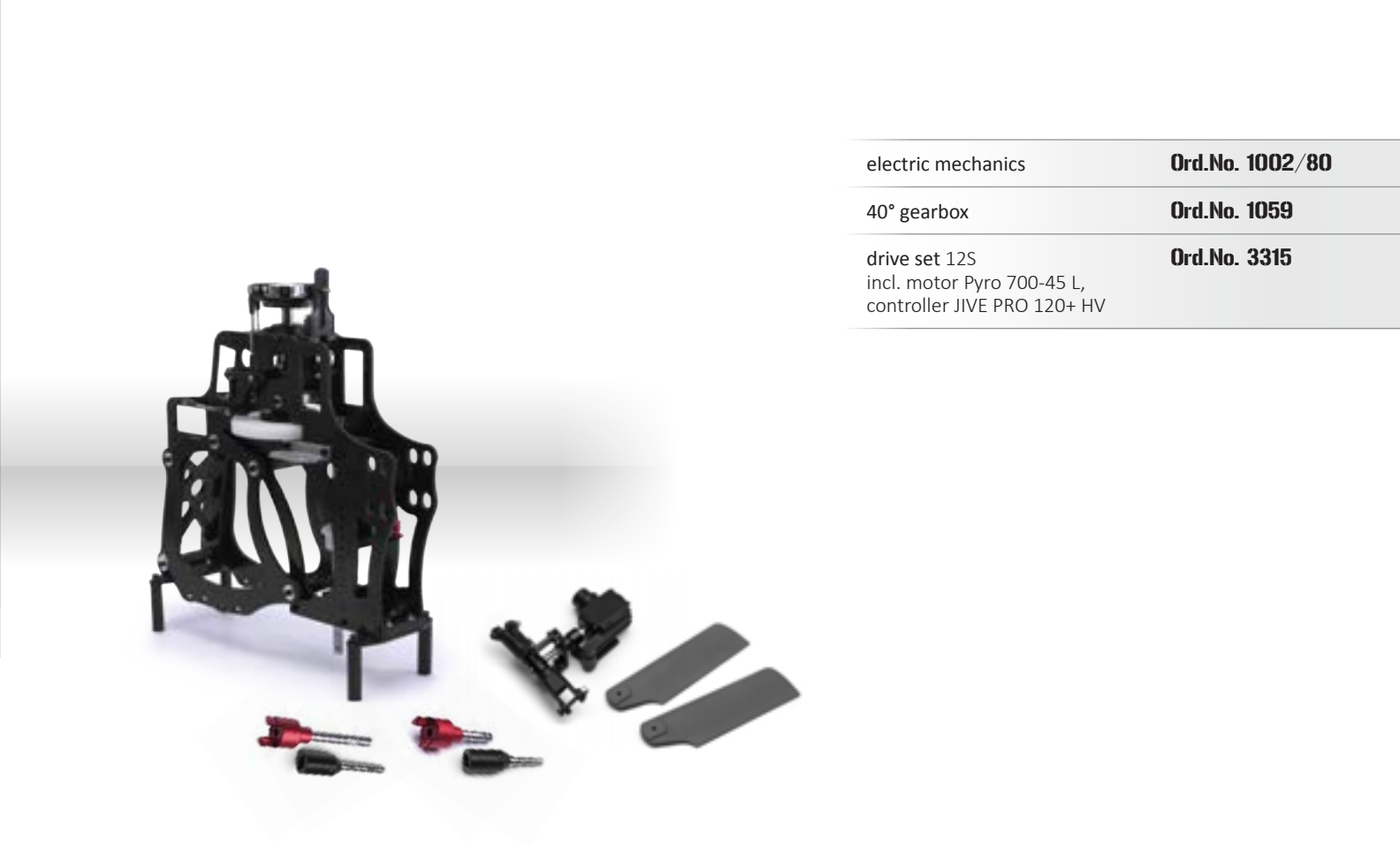
FUSELAGE

ROTOR HEAD

Fuselage	Ord.No. 7002
• 20-part GRP fuselage incl. fully functional access panels • window set • laser cut wooden formers • stainless steel tail rotor shaft (ø 6 mm) • landing gear (ø 15 mm) • various small parts	

4 blade rotor head	Ord.No. 704/30
swashplate driver	Ord.No. 68/20
main rotor shaft, 10 x 194 mm	Ord.No. 35/40
4 blade set ø 1600 mm	Ord.No. 404/31
rotor blade pouch	Ord.No. 33/4
pushrod, 4 pcs	Ord.No. 70/50-4

DRIVE // ELECTRIC



electric mechanics	Ord.No. 1002/80
40° gearbox	Ord.No. 1059
drive set 12S incl. motor Pyro 700-45 L, controller JIVE PRO 120+ HV	Ord.No. 3315

COCKPIT



Ord.No. 701/29

DOOR FITTINGS SET



Ord.No. 701/5 incl. 20/21

PILOT



Ord.No. 1/70 // 1/79

DOORSTEP FITTINGS SET



Ord.No. 701/6

ROTOR HEAD



Ord.No. 704/30

WINCH



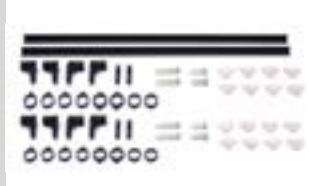
Ord.No. 701/100

RETRACTABLE HINGES



Ord.No. 20/21

SCALE SKID CLAMPS



Ord.No. 60/10

ROTOR HEAD COVER



Ord.No. 707/2

WSPS SET



Ord.No. 20/22



Photo: Werner Unterhauser



We have a smaller version of the BK 117 for SkyFox of petrol mechanics. However, a larger model is called for if you want a turbine-powered version, and this machine has a rotor diameter of 2100 mm. The forward cockpit space can be fitted out completely, and in many other respects scale fans have plenty of scope for additional detail features: working side doors - hinged or sliding - can be installed, and functional rear doors are also possible. If you wish, you can even fit a working winch.

SCALE 1:5
LENGTH 1970 mm
WIDTH 380 mm
HEIGHT 600 mm
ROTOR ø 2100 mm
WEIGHT E: approx. 14.5 kg
T: approx. 16.5 kg
YEAR 2009

FUSELAGE

Fuselage	Ord.No. 7700
• 27-part GRP fuselage incl. fully functional access panels • window set • laser cut wooden formers • stainless steel tail rotor shaft (ø 8 mm) • landing gear (ø 18 mm) • various small parts	

ROTOR HEAD

4 blade rotor head	Ord.No. 704/38
swashplate driver	Ord.No. 68/53
4 blade set ø 2100 mm	Ord.No. 414/4
rotor blade pouch	Ord.No. 33/4
pushrod, 4 pcs	Ord.No. 70/71-4
pushrod, 4 pcs	Ord.No. 70/96-4

DRIVE // ELECTRIC



electric mechanics incl. main rotor shaft	Ord.No. 1002/76
swashplate	Ord.No. 832/68
dome fittings/extension set	Ord.No. 770/53
50° gearbox	Ord.No. 1057
alu tail rotor claw connector, shaft ø 5 mm	Ord.No. 1003/80 Ord.No. 49/12
tail rotor blades	Ord.No. 34/32
drive set 12S incl. motor Pyro 800-40 L, controller JIVE PRO 120+ HV	Ord.No. 3304

DRIVE // TURBINE



JetCat PHT3 l.h.r. (mechanics & turbine) gear ratio: 95.62:1 turbine speed: 96,000 rpm rotor speed: 1004 rpm Please order with suitable rotor shaft Ord.No. 35/52. information and supply: www.jetcat.de	
swashplate	Ord.No. 832/68
dome fittings/extension set	Ord.No. 770/53
50° gearbox	Ord.No. 1057
alu tail rotor claw connector, shaft ø 5 mm	Ord.No. 1003/80 Ord.No. 49/12
tail rotor blades	Ord.No. 34/32
exhaust pipe, stainless steel	Ord.No. 770/16
kerosene tank, 3.3 l	Ord.No. 605/26
general tank accessories: see page 120	

COCKPIT



Ord.No. 770/29

DOOR FITTINGS SET



Ord.No. 770/5 incl. 20/21

PILOT



Ord.No. 1/55 // 1/59

DOORSTEP FITTINGS SET



Ord.No. 770/6

ROTOR HEAD



Ord.No. 704/38

WINCH



Ord.No. 770/10 // 3173

RETRACTABLE HINGES



Ord.No. 20/21

JOYSTICKS & FOOT PEDALS



Ord.No. 31/34

ROTOR HEAD COVER



Ord.No. 707/2

WSPS SET



Ord.No. 20/22



The Bo 105 was established throughout the world just a few years after her first flight in 1967. As the first twin turbine helicopter, equipped with the technical achievement of the hingeless rotor head, the Bo 105 gained great praise and recognition. With its wide landing gear and the high-level tail rotor the helicopter is well suited for the less experienced pilots.

SCALE 1:6
LENGTH 1600 mm
WIDTH 260 mm
HEIGHT 510 mm
ROTOR Ø 1600 mm
WEIGHT approx. 8.5 kg
YEAR 1998

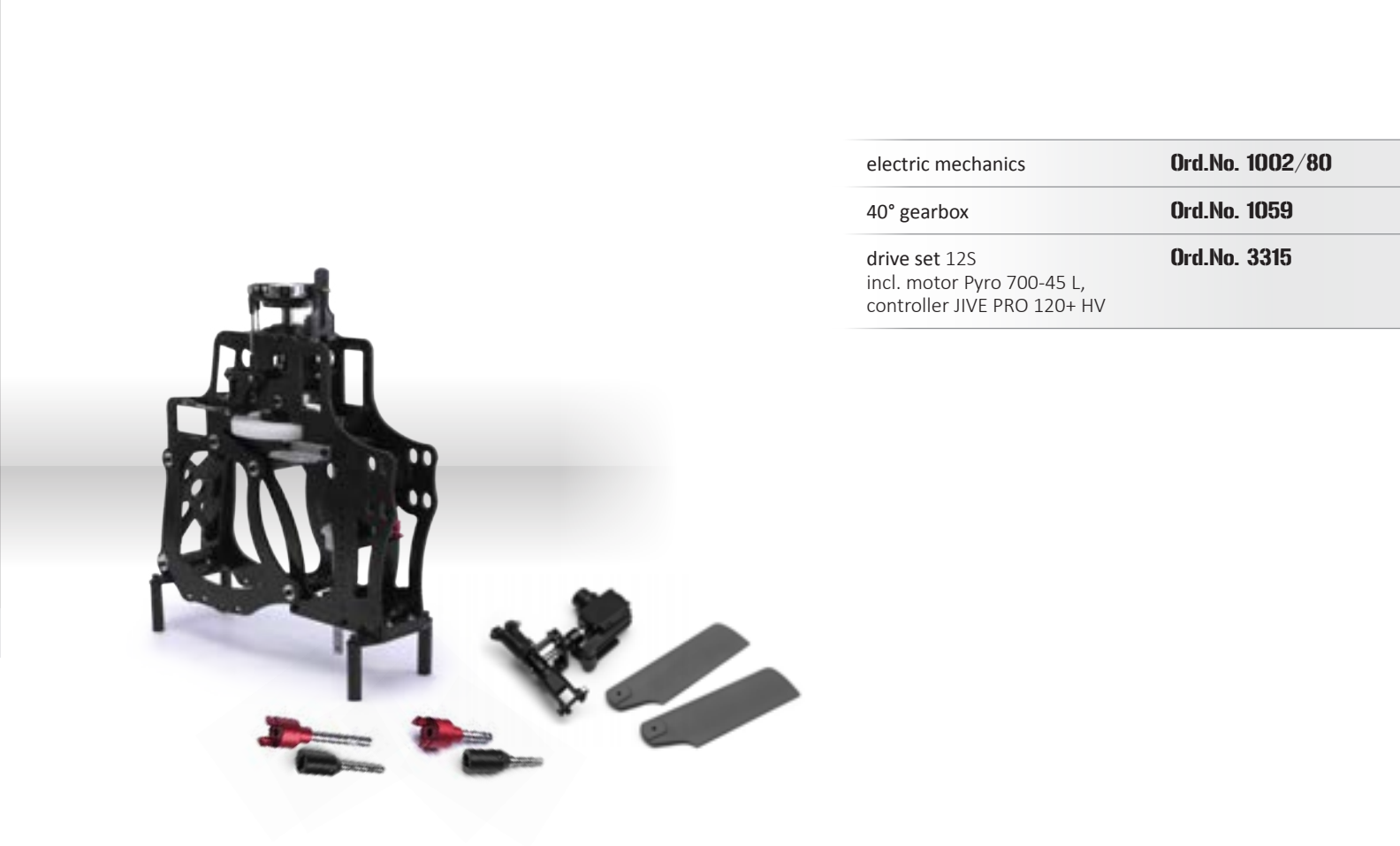
FUSELAGE

ROTOR HEAD

Fuselage electric	Ord.No. 6002
• 13-part GRP fuselage • window set • laser cut wooden formers • stainless steel tail rotor shaft (Ø 6 mm) • landing gear (Ø 15 mm) • various small parts	

4 blade rotor head	Ord.No. 704/30
swashplate driver	Ord.No. 68/20
main rotor shaft, 10 x 194 mm	Ord.No. 35/40
4 blade set Ø 1600 mm	Ord.No. 404/31
rotor blade pouch	Ord.No. 33/4
pushrod, 4 pcs	Ord.No. 70/50-4

DRIVE // ELECTRIC



electric mechanics	Ord.No. 1002/80
40° gearbox	Ord.No. 1059
drive set 12S incl. motor Pyro 700-45 L, controller JIVE PRO 120+ HV	Ord.No. 3315

COCKPIT	DOOR FITTINGS SET	PILOT	DECAL	ROTOR HEAD	LOUDSPEAKER	RADAR COVER	JOYSTICKS & FOOT PEDALS	ROTOR HEAD COVER	SCALE SKID CLAMPS
Ord.No. 601/29	Ord.No. 601/5	Ord.No. 1/16 // 1/60	Ord.No. 60/31 // 70/9	Ord.No. 704/30	Ord.No. 600/13	Ord.No. 600/6	Ord.No. 31/31	Ord.No. 707	Ord.No. 60/10



Photo: Carsten Frenzl - Pilot: Robert Abele



The front doors and sliding doors can be made operational using the optional door fitting kit. You can also fit our fuel filling valve to the filler neck on the Bo 105 fuselage, see Scale accessories. This large Bo 105 helicopter uses mechanics based on the Acrobatic pod & boom helicopter.

SCALE 1:5
LENGTH 1800 mm
WIDTH 320 mm
HEIGHT 560 mm
ROTOR ø 1880 / 1900 mm
WEIGHT E: approx. 10 kg
T: approx. 13.5 kg
YEAR 2007

FUSELAGE

Fuselage electric	Ord.No. 6004
Fuselage turbine	Ord.No. 6005
• 23-part GRP fuselage • window set • laser cut wooden formers • stainless steel tail rotor shaft (ø 8 mm) • 2 additional scale exhaust pipes (T) • landing gear (ø 20 mm) • various small parts	

ROTOR HEAD

4 blade rotor head	Ord.No. 704/32 (E), 704/34 (T)
swashplate driver	Ord.No. 68/50
main rotor shaft, 12 x 245 mm	Ord.No. 35/48 (E), incl. in mechanics (T)
4 blade set ø 1880 / 1900 mm	Ord.No. 404/51 (E), 404/55 (T)
rotor blade pouch	Ord.No. 33/4
pushrod, 4 pcs	Ord.No. 70/83-4 (E), 70/76-4 (T)

DRIVE // ELECTRIC



petrol/electric mechanics	Ord.No. 1002/40
drive set 10S incl. motor Pyro 700-52 L, controller JIVE PRO 120+ HV	Ord.No. 3308
drive set 12S incl. motor Pyro 700-45 L, controller JIVE PRO 120+ HV	Ord.No. 3307

DRIVE // TURBINE



JetCat PHT3-L I.h.r. (mechanics & turbine) gear ratio: 84.44:1 turbine speed: 92,000 rpm rotor speed: 1090 rpm Please order with suitable rotor shaft Ord.No. 35/44. information and supply: www.heli-factory.com add. articulated joint, shaft ø 5 mm		Ord.No. 722/47
dome fittings set PHT3-L	Ord.No. 53/19	
50° gearbox	Ord.No. 1057	
alu tail rotor claw connector, shaft ø 5 mm	Ord.No. 1003/80 Ord.No. 49/12	
tail rotor blades alu	Ord.No. 34/31	
exhaust pipe, stainless steel	Ord.No. 605/16	
kerosene tank, 3.3 l	Ord.No. 605/26	
tank vent filter	Ord.No. 26/25	
refuelling system	Ord.No. 13/32	
hose clamp, PU 4 pcs	Ord.No. 26/34	

COCKPIT

DOOR FITTINGS SET

PILOT

SCREEN WIPERS & AIR COWLS

ROTOR HEAD



Ord.No. 604/29 // 604/529

Ord.No. 604/5

Ord.No. 1/16 // 1/60

Ord.No. 30/46

Ord.No. 704/32



There are two variants of the Ecureuil, a single turbine version (AS 350) and also a twin turbine version (AS 355). Our kit contains fiberglass parts for the construction of both types. Similarly, individual doors are supplied as per the full size. Many full size variants of the Ecureuil have been produced for different applications i.e. military, fire fighting, police, flight training, etc.

SCALE 1:7
LENGTH 1670 mm
WIDTH 320 mm
HEIGHT 500 mm
ROTOR ø 1680 mm
WEIGHT approx. 9 kg
YEAR 1995

Photo: Rolf Piel · Pilot: Lothar Kochhan

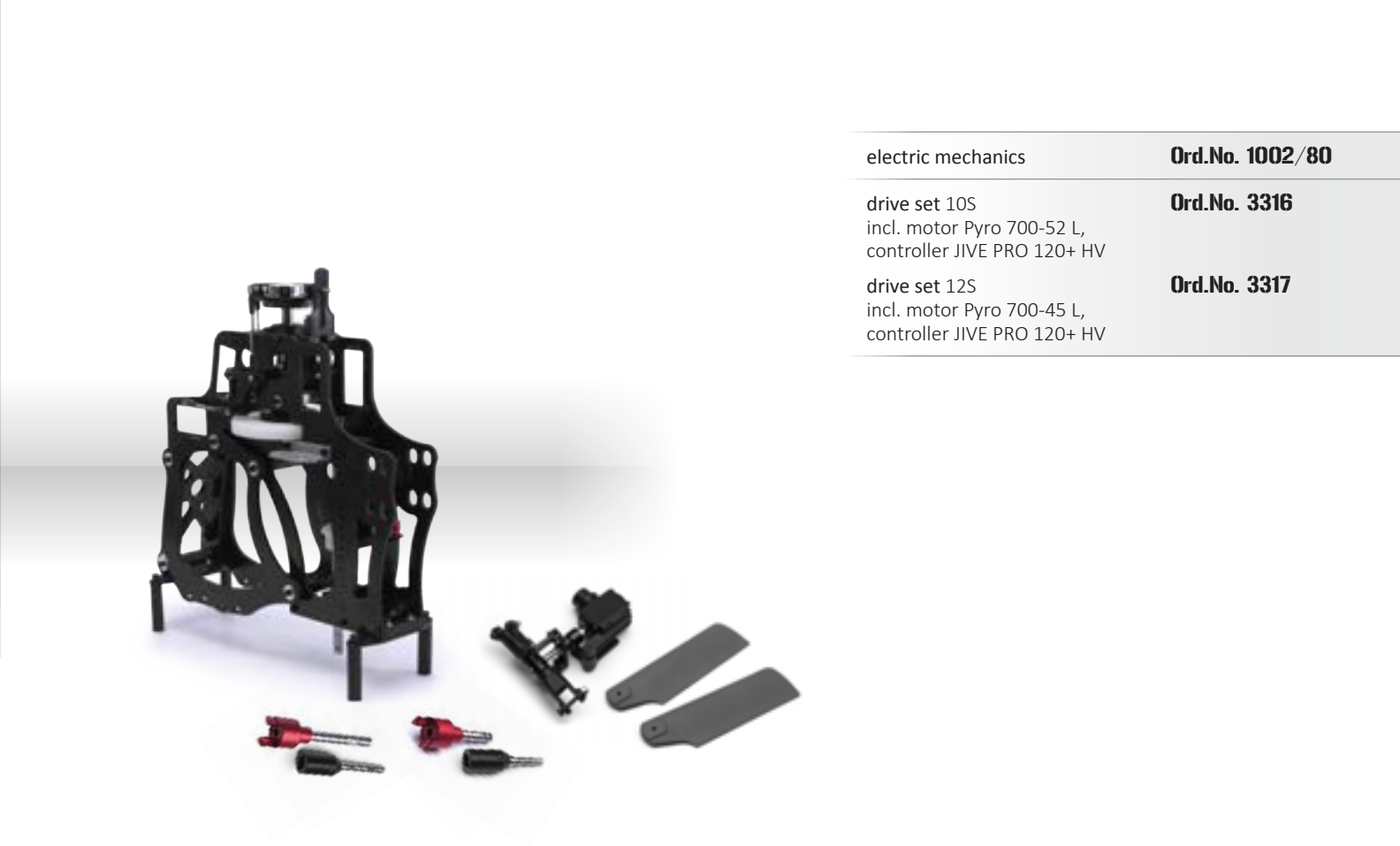
FUSELAGE

ROTOR HEAD

Fuselage	Ord.No. 9002
• 13-part GRP fuselage • window set • laser cut wooden formers • stainless steel tail rotor shaft (ø 6 mm) • landing gear (ø 12 mm) • various small parts	

3 blade rotor head	Ord.No. 703/30
swashplate driver	Ord.No. 68/20
main rotor shaft, 10 x 214 mm	Ord.No. 35/32
3 blade set ø 1680 mm	Ord.No. 404/40
rotor blade pouch	Ord.No. 33/33
pushrod, 3 pcs	Ord.No. 70/70-3

DRIVE // ELECTRIC



electric mechanics	Ord.No. 1002/80
drive set 10S incl. motor Pyro 700-52 L, controller JIVE PRO 120+ HV	Ord.No. 3316
drive set 12S incl. motor Pyro 700-45 L, controller JIVE PRO 120+ HV	Ord.No. 3317

COCKPIT	DOOR FITTINGS SET	PILOT	WINDOW SEALING STRIP	ROTOR HEAD	JOYSTICKS & FOOT PEDALS	ROTOR HEAD COVER	TRIM STRIPING TAPE	DECAL	WSPS SET
Ord.No. 901/29	Ord.No. 901/5	Ord.No. 1/70 // 1/79	Ord.No. 114	Ord.No. 703/30	Ord.No. 31/31	Ord.No. 707	Ord.No. 14/10	Ord.No. 10/47	Ord.No. 20/22



SCALE	1:4
LENGTH	2500 mm
WIDTH	540 mm
HEIGHT	740 mm
ROTOR	ø 2300 mm
WEIGHT	E: approx. 16.5 kg T: approx. 19 kg
YEAR	2010

ROTOR HEAD

3 blade rotor head	Ord.No. 703/40
swashplate driver	Ord.No. 68/50
3 blade set Ø 2300 mm, r.h.r.	Ord.No. 417/2
rotor blade pouch	Ord.No. 33/3

turbine mechanics incl. main rotor shaft	Ord.No. 1002/69
turbine Jakadofsky Pro 5000 clutch bell 3 blade: t. 25 (Pro Edition: t. 26) information and supply: www.jakadofsky.com	
ALTERNATIVE: JetCat PHT3-3 r.h.r. (mechanics & turbine) gear ratio 110.35:1 rotor speed 879 rpm at 97,000 rpm incl. main rotor shaft information and supply: www.jetcat.de	
dome fittings set	Ord.No. 414/53
alu tail rotor claw connector, shaft ø 5 mm	Ord.No. 1003/82 Ord.No. 49/12
tail rotor blades	Ord.No. 34/36
tail rotor speed-up unit (not for JetCat PHT3-3)	Ord.No. 900/37
exhaust pipe, stainless steel	Ord.No. 900/16
kerosene tank, 2.5 l alternative: Kevlar tank	Ord.No. 26/7 Ord.No. 26/70
general tank accessories: see page 120	



ALTERNATIVE: JetCat PHT3-3 r.h.r. (mechanics & turbine)
gear ratio 110.35:1
rotor speed 879 rpm at 97,000 rpm
incl. main rotor shaft
information and supply: www.jetcat.de

ROTOR HEAD



Ord.No. 703/40

pitot tubes
ORD.NO. 900/403

ventilation grilles
ORD.NO. 900/410

ventilation grilles
ORD.NO. 900/411

long step right
ORD.NO. 900/416

hinges
ORD.NO. 900/418

kerosene filling trapdoor
ORD.NO. 900/421

wipers
ORD.NO. 900/422

hook for landing gear
ORD.NO. 900/494

tail strobe
ORD.NO. 900/423

tail antenna
ORD.NO. 900/406

top antenna
ORD.NO. 134/410

opening window
ORD.NO. 134/420

door handles
ORD.NO. 900/420

door handles
ORD.NO. 900/409

door handles
ORD.NO. 900/419

supports
ORD.NO. 900/413

top antenna
ORD.NO. 134/410

steps
ORD.NO. 900/417

step
ORD.NO. 900/412

door handles
lower trapdoors
ORD.NO. 900/408

step
ORD.NO. 900/415
ORD.NO. 900/414

Tip: Many scale parts of the H 135 also fit the Ecureuil.
The first number after the slash in the Ord.No. indicates the size/scale
of the part, for example Ord.No. 134/408 corresponds to scale 1: 4.
All the 3D printing parts shown here are also available in
scale 1:6 (see online shop).

► More details in the online shop under
Scale accessories → Model Specific → Ecureuil

ECUREUIL

34

Gazelle SA 342

model size1050



The Aérospatiale Gazelle originated from a French Army requirement for a lightweight utility helicopter. The design quickly attracted British interest, leading to a development and production collaboration with British company Westland Helicopters. This was the first helicopter to use a Fenestron, which allows considerable noise reduction. There are numerous scale options to make your Gazelle very close to the full size.

SCALE

1:4

LENGTH

2400 mm

WIDTH

500 mm

HEIGHT

690 mm

ROTOR

ø 2300 mm

WEIGHT

E: approx. 165 kg

T: approx. 18 kg

YEAR

2011

FUSELAGE

ROTOR HEAD

Fuselage	Ord.No. 3420
12-part GRP fuselage - window set - laser cut wooden formers - stainless steel tail rotor shaft (ø 8 mm) - tail control pushrod - landing gear (ø 20 mm) - various small parts	

3 blade rotor head	Ord.No. 703/38
swashplate	Ord.No. 832/68
swashplate driver	Ord.No. 68/50
3 blade set ø 2300 mm	Ord.No. 413/3
rotor blade pouch	Ord.No. 33/3
pushrod, 3 pcs	Ord.No. 70/96-3

COCKPIT

DOOR FITTINGS SET

STATOR

DUMMY TURBINE

ROTOR HEAD



Ord.No. 342/29 incl. 342/28



Ord.No. 342/5



Ord.No. 342/62



Ord.No. 342/2



Ord.No. 703/38

DRIVE // ELECTRIC



DRIVE // TURBINE



electric mechanics for Gazelle incl. main rotor shaft	Ord.No. 342/23
Fenestron speed-up unit	Ord.No. 342/37
Fenestron gearbox claw connector, shaft ø 5 mm	Ord.No. 92/76 Ord.No. 49/12
Fenestron 13 blade	Ord.No. 93/93
drive set 12S incl. motor Pyro 800-40 L, controller JIVE PRO 120+ HV	Ord.No. 3304

turbine mechanics for Gazelle incl. main rotor shaft	Ord.No. 342/22
turbine Jakadofsky Pro 5000 clutch bell 3 blade: t. 25 (Pro Edition: t. 26) information and supply: www.jakadofsky.com	
ALTERNATIVE: JetCat PHT3-L I.h.r. (mechanics & turbine) gear ratio: 110.25:1 rotor speed: 879 rpm at 97,000 rpm Please order with suitable rotor shaft Ord.No. 35/52. information and supply: www.heli-factory.com add. articulated joint, shaft ø 5 mm	Ord.No. 722/47
Fenestron speed-up unit for mechanics Ord.No. 342/22 for JetCat PHT3-L	Ord.No. 342/37 Ord.No. 342/38
Fenestron gearbox claw connector, shaft ø 5 mm	Ord.No. 92/76 Ord.No. 49/12
Fenestron 13 blade	Ord.No. 93/93
exhaust pipe, stainless steel	Ord.No. 342/16
kerosene tank, 2,5 l	Ord.No. 26/8
general tank accessories: see page 120	



Pilot: Andrea Longo



The construction of the Alouette II is very reminiscent of the Bell 47 with its plexiglass cockpit and the lattice style body. Good visibility for the pilot, remarkable maneuverability and adaptable to many diverse applications make the Alouette a very popular helicopter throughout the world.

SCALE 1:6
LENGTH 1580 mm
WIDTH 320 mm
HEIGHT 460 mm
ROTOR Ø 1680 mm
WEIGHT E: approx. 7 kg
T: approx. 9 kg
YEAR 1998

FUSELAGE

Fuselage electric	Ord.No. 3000
Fuselage turbine	Ord.No. 3002
• lattice fuselage, stainless steel • pre-assembled canopy with opening doors • alu parts for mounting the mechanics • stainless steel tail rotor shaft (Ø 6 mm) • tail control pushrod • landing gear (Ø 15 mm) • aluminum side panels • various small parts	

ROTOR HEAD

3 blade rotor head	Ord.No. 703/30
swashplate driver	Ord.No. 68/20
main rotor shaft	Ord.No. 35/36 (E), 302/35 (T)
3 blade set Ø 1680 mm	Ord.No. 404/40
rotor blade pouch	Ord.No. 33/33
dome fittings/extension set	Ord.No. 53/6 (E), 53/20 (T)
pushrod, 3 pcs	Ord.No. 70/40-3 (E), 70/60-3 (T)
pushrod, 4 pcs	Ord.No. 70/90-4 (E), incl. in dome fittings (T)

DRIVE // ELECTRIC



DRIVE // TURBINE



electric mechanics	Ord.No. 1002/80
dummy turbine	Ord.No. 300/2
drive set 10S incl. motor Pyro 700-52 L, controller JIVE PRO 120+ HV	Ord.No. 3316
drive set 12S incl. motor Pyro 700-45 L, controller JIVE PRO 120+ HV	Ord.No. 3317

JetCat PHT2 I.h.r. (mechanics & turbine) rotor speed: 1400 rpm information and supply: www.jetcat.de	
alu tail rotor claw connector, shaft Ø 5 mm	Ord.No. 1003/50 Ord.No. 49/12
tail rotor blades	Ord.No. 34/30
exhaust system, stainless steel	Ord.No. 302/16
kerosene tank, approx. 1.5 l	Ord.No. 302/26
tank vent filter	Ord.No. 26/25
refuelling system	Ord.No. 13/32
hose clamp, PU 4 pcs	Ord.No. 26/34

COCKPIT

DOOR FITTINGS SET

PILOT

SCALE ROTOR HEAD & 3 BLADE SET

ROTOR HEAD

GRP-CANOPY-UPGRADE

LOAD BASKET

CONVERSION TO LAMA

DUMMY TURBINE

SCALE ACCESSORIES



Ord.No. 300/29

Ord.No. 301/5

Ord.No. 1/16 // 1/60

Ord.No. 703/94 // 404/19

Ord.No. 703/30

Ord.No. 305/80

Ord.No. 302/36

Ord.No. 92/80 // 34/33

Ord.No. 300/2

Ord.No. 300/8 // 20/30



The "Starwood" edition Lama is mostly prefabricated and preassembled. The metal parts such as the lattice tail, mainframe assembly and skids are already powder coated. The front cabin and doors are also semi finished in that the window openings are pre cut-out and the parts are ready painted in white. Also included in the kit is a very impressive scale rotor head and scale tail gearbox, these come preassembled and ready painted, as does the scale dome extension for the main shaft. Scale parts for cabin and main frame are also included, such as seats, joysticks, instrument console, oil tank, air filters, etc. Main rotor and tail blades are included.

SCALE	1:5
LENGTH	2108 mm
WIDTH	470 mm
HEIGHT	700 mm
ROTOR	ø 2280 mm
WEIGHT	E: approx. 16 kg T: approx. 17 kg
YEAR	2013

FUSELAGE

Fuselage electric	Ord.No. 3405
Fuselage turbine	Ord.No. 3404

AL WERT AND THE STARWOOD LAMA

Vario offers the Starwood-Lama in memory of a special person. Al Wert lived until 2013 in a wooded area called Starwood, not far from San Francisco. He was a Vario trader for the West USA and had a great dedication for our hobby. His own model was the Starwood Lama presented here. A fuselage kit with more content and features than the standard Vario version.

DRIVE // ELECTRIC



The Starwood-Lama is a complete kit and contains all flight required parts. For the electric version you will also need the RC components (servos, drive battery, transmitter and receiver) and the following drive set:

drive set 12S
incl. motor Pyro 800-40 L,
controller JIVE PRO 120+ HV

Ord.No. 3340

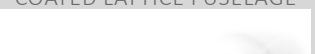
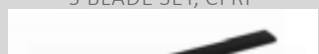
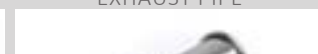
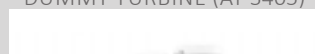
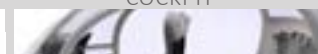
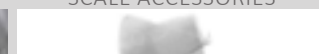
DRIVE // TURBINE



The Starwood-Lama is a complete kit and contains all flight required parts. For the electric version you will also need the RC components (servos, drive battery, transmitter and receiver) and the following turbine:

turbine Jakadofsky RS Starwood edition
information and supply: www.jakadofsky.com

THE FUSELAGE CONTAINS I.A.:

COATED LATTICE FUSELAGE	SCALE ROTOR HEAD	3 BLADE SET, CFRP	TAIL ROTOR / BLADES	EXHAUST PIPE	TANK	DUMMY TURBINE (AT 3405)	COCKPIT	SCALE ACCESSORIES	PILOT
									
	Ord.No. 703/39		Ord.No. 1003/84 // 344/34	Ord.No. 344/16	Ord.No. 344/26	Ord.No. 330/2			Ord.No. 1/55 // 1/59

OPTIONAL:

PILOT



Two Pilot brand figurines, a man and a woman, are sitting on a wooden crate. The man is wearing a dark shirt and light pants, and the woman is wearing a light shirt and dark pants. The crate has some text on it, including "Vint".

Ord.No. 1/55 // 1/59

40

lama

SA 315 B

model size

1150

41

lama

SA 315 B

41



Photo: Gerhard Beer · Pilot: Burkhard Payer

AIRBUS
HELICOPTERS
Officially Licensed Product

In this new version of our popular Lama we have used the mechanics from our Bell 47. This has moved the motor rearward allowing us to remove the cooling hole at the front of the cockpit. It also allows for the installation of a scale cockpit as used in the turbine version. Batteries etc. can be mounted under the cockpit floor. The tail boom is removable for easy transport.

SCALE1:4

LENGTH2400 mm

WIDTH360 mm

HEIGHT835 mm

ROTORø 2500 mm

WEIGHTE: approx. 17 kg
T: approx. 19 kg

YEAR2004

FUSELAGE

Fuselage electric (l.h.r.)	Ord.No. 3300
Fuselage turbine (r.h.r.)	Ord.No. 3400
Fuselage (incl. turbine mechanics)	Ord.No. 3401

• lattice fuselage, stainless steel

• GRP canopy

• stainless steel tail rotor shaft (ø 8 mm)

• landing gear (ø 20 mm)

• dome and swashplate guide

• various small parts

ROTOR HEAD

3 blade rotor head	Ord.No. 703/40
swashplate driver	Ord.No. 68/50
main rotor shaft, 12 x 560 mm	Ord.No. 722/35
3 blade set ø 2500 mm, l/r	Ord.No. 416/3 (E), Ord.No. 417/3 (T)
rotor blade pouch	Ord.No. 33/3

DRIVE // ELECTRIC



electric mechanics	Ord.No. 470/22
dummy turbine	Ord.No. 330/2
drive set 12S incl. motor Pyro 800-40 L, controller JIVE PRO 120+ HV	Ord.No. 3303

DRIVE // TURBINE



turbine mechanics for Lama included in fuselage Ord.No. 3401	Ord.No. 1002/65
turbine Jakadofsky Pro Edition / Pro 5000 clutch bell t. 25 / t. 24	
information and supply: www.jakadofsky.com	
exhaust system for Lama	Ord.No. 340/16
kerosene tank, 1.25 l (2 pcs required) alternative: Kevlar tank	Ord.No. 26/5 Ord.No. 26/50
general tank accessories: see page 120	

WHEEL HOLDER



Ord.No. 340/1

SNOWBOARDS



Ord.No. 340/5

ENTRY STEP



Ord.No. 340/6

COUPLERS



Ord.No. 344/10

DUMMY POWER UNIT (T)



Ord.No. 340/13

COCKPIT / UPGRADE



Ord.No. 340/29 // 341/429

DOOR FITTINGS SET



Ord.No. 330/5

PILOT



Ord.No. 1/40 // 1/49

SCALE ROTOR HEAD



Ord.No. 703/39 incl. 68/50

ROTOR HEAD



Ord.No. 703/40

LOAD BASKET



Ord.No. 341/36

DOOR LATCH



Ord.No. 330/36

TURBINE SCALE-ACCESSORIES



Ord.No. 340/2

CANOPY SHEATH



Ord.No. 330/10

BUBBLE WINDOW



Ord.No. 330/31

LAMIA

BTP
ORD.NO. 341/409

ventilator
ORD.NO. 341/421

gearbox cover
ORD.NO. 341/423

foot step
ORD.NO. 341/424

tail strobe
ORD.NO. 341/414

tail stabilization
ORD.NO. 341/411

kerosene trap
ORD.NO. 341/402

turbine air entry
ORD.NO. 341/412

electric box
ORD.NO. 341/406
ORD.NO. 341/407
ORD.NO. 341/408

collective pitch lever
ORD.NO. 341/426
ORD.NO. 341/427
detailed cockpit panel
ORD.NO. 341/429
pedals
ORD.NO. 341/445

mirror
ORD.NO. 341/417

pitot tube
ORD.NO. 341/405

battery housing
ORD.NO. 341/420
front access panel
ORD.NO. 341/403

position lights
ORD.NO. 341/404

mirror
ORD.NO. 341/416

load basket
ORD.NO. 341/36 1:4
302/36 1:6

reinforcements for skis
ORD.NO. 341/418

cable pulleys
ORD.NO. 341/419

wheel support
ORD.NO. 341/415

Tip: Many scale parts of the Lama also fit the Gazelle.
The first number after the slash in the Ord.No. indicates the size/scale of the part, for example Ord.No. 134/408 corresponds to scale 1: 4.
All the 3D printing parts shown here are also available in scale 1:6 (see online shop).

► More details in the online shop under
Scale accessories → Model Specific → Alouette II / Lama



Photo: Yves van Cauter



Vario offers a wide range of Bell Helicopter models. In the product portfolio of Bell Textron exist classics with cult status such as the Bell UH and the Bell 47. On the other hand, Bell offers modern luxury helicopters with the Bell 429. All these three helicopters can be found at Vario and the list of RC-models can be continued with JetRanger, Bell 212 and 412, the Cobra, Bell 230 and 430, etc. Other models are in the planning stage, because we are constantly working on new helicopters with examples from real life.

The original data in 3-D guarantees thereby correct proportions and a realistic overall impression.

We recommend for all models the **Ord.No. 14/1** Bell Helicopter transfer sticker



BELL HELICOPTER



Photo: Harald Tiefenbrunner · Pilot: Andreas Weidinger

Up to present day there are many full size Bell 47 helicopters flying, so there are many examples to base a model on.

Our Bell 47 GII is a scale model, which is particularly suitable for scale detailing. The cabin has a smoke tinted screen and has open door ways.

- SCALE 1:6
- LENGTH 1660 mm
- WIDTH 310 mm
- HEIGHT 500 mm
- ROTOR ø 1810 mm
- WEIGHT approx. 7.5 kg
- YEAR 1998

FUSELAGE

Fuselage	Ord.No. 4000
• lattice fuselage, stainless steel • canopy • stainless steel tail rotor shaft (ø 6 mm) • landing gear (ø 15 mm) • various small parts	

ROTOR HEAD

semi-scale rotor head	Ord.No. 702/75
rocker block for for FBL conversion	Ord.No. 702/81
swashplate driver	Ord.No. 68/20
main rotor shaft, 10 x 214 mm	Ord.No. 35/30
2 blade set ø 1810 mm	Ord.No. 419
rotor blade pouch	Ord.No. 33/2
pushrod, 2 pcs	Ord.No. 70/121-2
control bridge, articulated	Ord.No. 100/30

DRIVE // ELECTRIC



electric mechanics	Ord.No. 1002/80
drive set 10S incl. motor Pyro 700-52 L, controller JIVE PRO 120+ HV	Ord.No. 3316
drive set 12S incl. motor Pyro 700-45 L, controller JIVE PRO 120+ HV	Ord.No. 3317

DRIVE // PETROL



petrol mechanics gear ratio 90:18	Ord.No. 1002/21
petrol motor G240 23 cm³	Ord.No. 1023
silencer system	Ord.No. 116/95
on-board electric starter for G240	Ord.No. 1023/5
petrol kit incl. tank 540 cm³	Ord.No. 26/100
suppressed plug cap	Ord.No. 4321
fine-mesh filter	Ord.No. 830/68
fuel tubing, 1 m	Ord.No. 830/83
carburetor intake trumpet	Ord.No. 1022/13
general tank accessories: see page 120	

COCKPIT	LANDING GEAR	PILOT	ROTOR BLADE TIE-DOWN	ROTOR HEAD	CANOPY ALTERNATIVE CLEAR
Ord.No. 400/29	Ord.No. 400/2	Ord.No. 1/16 // 1/60	Ord.No. 33/28	Ord.No. 702/75	Ord.No. 400/60

48

Bell 47 G III

model size1050

49

Bell 47 G III



Photo: Daniel Just | www.danieljust.de · Pilot: Stephan Wiederhold

The Bell 47 helicopter is a classic, of which there are many types that are still flown today. We decided to use the G III, a 3-seater version. The engine is located behind the cabin in order to allow a full cockpit interior to be fitted. The complete tail section can be removed (5 bolts) to aid transportation.

SCALE

1:4

LENGTH

2370 mm

WIDTH

550 mm

HEIGHT

760 mm

ROTOR

Ø 2360 mm

WEIGHT

approx. 13.5 kg

YEAR

2007

FUSELAGE

ROTOR HEAD

Fuselage	Ord.No. 4700
10-part GRP set - lattice fuselage, stainless steel, 4-part - canopy, 2-part - stainless steel tail rotor shaft (Ø 8 mm) - tail control pushrod - landing gear (Ø 20 mm) - various small parts	

semi-scale rotor head	Ord.No. 1005/47
swashplate driver	Ord.No. 68/50
main rotor shaft, 12 x 514 mm	Ord.No. 470/35
2 blade set Ø 2360 mm	Ord.No. 413
rotor blade pouch	Ord.No. 33/1
pushrod, 2 pcs	Ord.No. 70/66-2

DRIVE // ELECTRIC



DRIVE // PETROL



petrol/electric mechanics	Ord.No. 470/22
drive set 10S incl. motor Pyro 700-52 L, controller JIVE PRO 120+ HV	Ord.No. 3308
drive set 12S incl. motor Pyro 700-45 L, controller JIVE PRO 120+ HV	Ord.No. 3307

petrol/electric mechanics	Ord.No. 470/22
petrol motor G240 23 cm³	Ord.No. 1023
silencer system	Ord.No. 470/16
on-board electric starter for G240	Ord.No. 1023/5
petrol kit incl. tank 540 cm³	Ord.No. 26/100
suppressed plug cap	Ord.No. 4321
fine-mesh filter	Ord.No. 830/68
fuel tubing, 1 m	Ord.No. 830/83
carburetor intake trumpet	Ord.No. 1022/13
general tank accessories: see page 120	

COCKPIT

DOOR FITTINGS SET

PILOT

WHEEL HOLDER

ROTOR HEAD

CANOPY SHEATH

SEARCHLIGHT



Ord.No. 470/29

Ord.No. 330/5

Ord.No. 1/40 // 1/49

Ord.No. 470/2

Ord.No. 1005/47

Ord.No. 470/7

Ord.No. 10/94



Photo: Dieter F. Heinlin | www.1dfh.de

The list of all variants of the Bell 204 / 205 helicopters would be too large to write here. The differences were in the engine, but also in the equipment: eg

- UH-1D - This version of the Bell 205 was used by the German army
- UH-1V - Rescue and recovery version with winch
- TH-1A - Training helicopters

SCALE	1:7
LENGTH	1710 / 1660 mm
WIDTH	340 mm
HEIGHT	550 / 490 mm
ROTOR	ø 1810 mm
WEIGHT	approx. 9 kg
YEAR	2000



Pilot: Bernd Zimmermann

The Bell 212 is based on the Bell 205, but has 2 turbines. Thanks to the second turbine, the Bell 212 is able to fly at high temperatures and at higher altitudes. The revolutionary thing about this new helicopter was the Pratt & Whitney Canada PT6T-3 Twin-Pac, made up of two coupled PT6 power turbines driving a common gearbox.

SCALE	1:7
LENGTH	1660 mm
WIDTH	340 mm
HEIGHT	490 mm
ROTOR	E: ø 1810 mm T: ø 1680 mm
WEIGHT	approx. 9 kg
YEAR	2001



FUSELAGE		2 BLADE ROTOR HEAD ELECTRIC Ø 12 MM MRS		FUSELAGE		2 BLADE ROTOR HEAD TURBINE Ø 10 MM MRS	
Fuselage Bell 204	Ord.No. 2040	semi-scale rotor head	Ord.No. 702/80	Fuselage electric	Ord.No. 2120	semi-scale rotor head	Ord.No. 702/75
Fuselage Bell 205	Ord.No. 2050	rocker block for for FBL conversion	Ord.No. 702/81	Fuselage turbine	Ord.No. 2125	rocker block for for FBL conversion	Ord.No. 702/81
9/12-part GRP fuselage - window set (upper windows on the full size are green for glare protection) - laser cut wooden formers - stainless steel tail rotor shaft (Ø 6 mm) - landing gear (Ø 15 mm) - various small parts		swashplate driver	Ord.No. 68/50	11-part GRP fuselage - window set (upper windows on the full size are green for glare protection) - laser cut wooden formers - stainless steel tail rotor shaft (Ø 6 mm) - landing gear (Ø 15 mm) - various small parts		swashplate driver	Ord.No. 68/20
		2 blade set Ø 1810 mm	Ord.No. 419			2 blade set Ø 1680 mm	Ord.No. 426
		rotor blade pouch	Ord.No. 33/2			rotor blade pouch	Ord.No. 33/2
		pushrod, 2 pcs	Ord.No. 70/156-2			pushrod, 2 pcs	Ord.No. 70/90-2

COCKPIT	COCKPIT	3D-COCKPIT / SEATS	PILOT	ROTOR HEAD	TURBINE OUTLET 1D/1B	DECAL ELILARIO	DOOR FITTINGS SET	SCALE EXTERNAL FITTINGS	GRP POSITION LIGHTS
Ord.No. 240/29	Ord.No. 250/29	Ord.No. 212/729 // 206/728	Ord.No. 1/70 // 1/79	Ord.No. 702/80	Ord.No. 20/36 // 20/37	Ord.No. 212/0	Ord.No. 250/5 incl. 20/18 & 250/18	Ord.No. 250/19	Ord.No. 212/19

52

Bell 412

model size800



Photo: Mirko Zanni · Pilot: Luca Jardini

The Bell 412 is basically a 212, but it is equipped with a 4-blade rotor. The Bell 412 was certified in 1981. It has better performance with less vibration and lower noise level.

There are many variations of this helicopter and over 700 have been built to date. With our many scale accessories, you can build a beautiful scale version of this popular helicopter.

SCALE1:7

LENGTH1660 mm

WIDTH340 mm

HEIGHT490 mm

ROTOR

E: ø 1810 mm

T: ø 1680 mm

WEIGHTapprox. 9.5 kg

YEAR2001



DRIVE // ELECTRIC



DRIVE // TURBINE



FUSELAGE

Fuselage electric

Ord.No. 4120

Fuselage turbine

Ord.No. 4125

• 11-part GRP fuselage

• window set (upper windows on the full size are green for glare protection)

• laser cut wooden formers

• stainless steel tail rotor shaft (ø 6 mm)

• landing gear (ø 15 mm)

• various small parts

4 BLADE ROTOR HEAD ELECTRIC & TURBINE ø 10 MM MRS

4 blade rotor head

Ord.No. 704/30

swashplate driver

Ord.No. 68/20

4 blade set ø 1680 mm

Ord.No. 404/41

rotor blade pouch

Ord.No. 33/4

pushrod, 4 pcs

Ord.No. 70/70-4 (E), 70/60-4 (T)

JOYSTICKS & FOOT PEDALS



Ord.No. 31/31

DECAL AIR ZERMATT



Ord.No. 412/0

RADAR NOSE CONE



Ord.No. 412/22

SIDE TANKS & RADAR NOSE CONE



Ord.No. 412/10

ROTOR HEAD



Ord.No. 704/30

FOR BELL UH & 212

electric mechanics

main rotor shaft, 12 x 255 mm

Ord.No. 1002/82

Ord.No. 35/45

FOR BELL 412

electric mechanics

main rotor shaft, 10 x 214 mm

Ord.No. 1002/80

Ord.No. 35/32

40° gearbox

Ord.No. 1059

drive set 10S

incl. motor Pyro 700-52 L,

controller JIVE PRO 120+ HV

Ord.No. 3316

drive set 12S

incl. motor Pyro 700-45 L,

controller JIVE PRO 120+ HV

Ord.No. 3317

FOR BELL 212 & 412

JetCat PHT2 l.h.r. (mechanics & turbine)

rotor speed: 1400 rpm

incl. main rotor shaft ø 10 mm for 2 blade rotor head

information and supply: www.jetcat.de

dome fittings set

Ord.No. 53/20

main rotor shaft, 10 x 318.5 mm

(only for Bell 412)

Ord.No. 302/35

40° gearbox

Ord.No. 1059

alu tail rotor

claw connector, shaft ø 5 mm

Ord.No. 1003/50

Ord.No. 49/12

tail rotor blades

Ord.No. 34/30

exhaust system, stainless steel

Ord.No. 412/16

kerosene tank, approx. 2 l

Ord.No. 412/26

general tank accessories: see page 120

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Photo: Frank Wedekind



This is another popular helicopter, both in full size and model form. This is the third size of UH-1D that Vario has developed. It is designed to accept the Vario turbine mechanics Ord.No. 1002/68 or the electric mechanics Ord.No. 1002/78.

SCALE 1:6
LENGTH 2180 mm
WIDTH 405 mm
HEIGHT 620 mm
ROTOR ø 2360 mm
WEIGHT E: approx. 15.5 kg
T: approx. 16 kg
YEAR 2006



Pilot: Yann Ménard



This Bell 212 is designed for our turbine mechanics Ord.No. 1002/68, or our electric mechanics 1002/78. Because the turbine is in its original position (rearward) a full scale cockpit can be added. The tail boom is removable to facilitate transport.

SCALE 1:6
LENGTH 2180 mm
WIDTH 405 mm
HEIGHT 620 mm
ROTOR ø 2360 mm
WEIGHT E: approx. 15.5 kg
T: approx. 17 kg
YEAR 2007

FUSELAGE

2 BLADE ROTOR HEAD

FUSELAGE

2 BLADE ROTOR HEAD

Fuselage	Ord.No. 2060
15-part GRP fuselage - window set (upper windows on the full size are green for glare protection) - door set - laser cut wooden formers - stainless steel tail rotor shaft (ø 8 mm) - landing gear (ø 20 mm) - various small parts	

semi-scale rotor head	Ord.No. 1005/12
2 blade set ø 2360 mm	Ord.No. 413
rotor blade pouch	Ord.No. 33/1

Fuselage	Ord.No. 2140
15-part GRP fuselage - window set (upper windows on the full size are green for glare protection) - door set - laser cut wooden formers - stainless steel tail rotor shaft (ø 8 mm) - landing gear (ø 20 mm) - various small parts	

semi-scale rotor head	Ord.No. 1005/12
2 blade set ø 2360 mm	Ord.No. 413
rotor blade pouch	Ord.No. 33/1

COCKPIT	3D-COCKPIT / SEATS	PILOT	DECAL	ROTOR HEAD	VENTILATION GRILLES	GRP POSITION LIGHTS	RADAR NOSE CONE	JOYSTICKS & FOOT PEDALS	ROTOR HEAD
Ord.No. 206/29	Ord.No. 212/629 // 206/628	Ord.No. 1/16 // 1/60	Ord.No. 205/47	Ord.No. 1005/12	Ord.No. 206/19	Ord.No. 212/19	Ord.No. 414/22	Ord.No. 31/31	Ord.No. 1005/12



Photo: Gonzalo Martinez



This Bell 412 is designed for our turbine mechanics Ord.No. 1002/68, or our electric mechanics 1002/78. Because the turbine is in its original position (rearward) a full scale cockpit can be added. The tail boom is removable to facilitate transport.

SCALE 1:6
LENGTH 2160 mm
WIDTH 405 mm
HEIGHT 640 mm
ROTOR ø 2300 mm
WEIGHT E: approx. 16.5 kg
T: approx. 17.5 kg
YEAR 2008

FUSELAGE

4 BLADE ROTOR HEAD

Fuselage	Ord.No. 4140
15-part GRP fuselage - window set - alu parts for mounting the mechanics - stainless steel tail rotor shaft (ø 8 mm) - landing gear (ø 20 mm) - various small parts	

4 blade rotor head	Ord.No. 704/38
swashplate	Ord.No. 832/68
swashplate driver	Ord.No. 68/50
4 blade set ø 2300 mm	Ord.No. 412/4
rotor blade pouch	Ord.No. 33/40
pushrod, 4 pcs	Ord.No. 70/83-4

COCKPIT



Ord.No. 206/29

DOOR FITTINGS SET



Ord.No. 206/5

PILOT



Ord.No. 1/16 // 1/60

WINCH



Ord.No. 414/45

ROTOR HEAD



Ord.No. 704/38

DRIVE // ELECTRIC



electric mechanics incl. main rotor shaft	Ord.No. 1002/78
dome fittings set 2 blade dome fittings/extension set 4 blade	Ord.No. 53/17 Ord.No. 414/53
50° gearbox	Ord.No. 1055
alu tail rotor claw connector, shaft ø 5 mm	Ord.No. 1003/80 Ord.No. 49/12
tail rotor blades 2 blade tail rotor blades 4 blade	Ord.No. 34/32 Ord.No. 34/36
drive set 12S incl. motor Pyro 800-40 L, controller JIVE PRO 120+ HV	Ord.No. 3304

DRIVE // TURBINE



turbine mechanics incl. main rotor shaft	Ord.No. 1002/68
turbine Jakadofsky Pro 5000 clutch bell 2 blade: t. 27 / 4 blade: t. 24 information and supply: www.jakadofsky.com	
ALTERNATIVE: JetCat PHT3-3 l.h.r. (turbine & mechanics) gear ratio 110.25:1 rotor speed 853 rpm at 94,000 rpm incl. main rotor shaft information and supply: www.jetcat.de add. articulated joint, shaft ø 5 mm	Ord.No. 722/47
dome fittings set 2 blade dome fittings/extension set 4 blade	Ord.No. 53/17 Ord.No. 414/53
50° gearbox	Ord.No. 1055
alu tail rotor claw connector, shaft ø 5 mm	Ord.No. 1003/80 Ord.No. 49/12
tail rotor blades 2 blade tail rotor blades 4 blade	Ord.No. 34/32 Ord.No. 34/36
exhaust pipe Bell UH, st. steel exhaust pipe Bell 212/412, st. steel	Ord.No. 206/16 Ord.No. 214/16
kerosene tank, 2.2 l	Ord.No. 206/26
general tank accessories: see page 120	



Photo: Frank Wedekind



Announced in 1990, the Bell 230 is a development of the Bell 222. Powered by two Allison 250-C30 G, 700shp G2-turbines and a fuel capacity of 710+ liters. Many versions were produced including:

Bell 230 Executive, passenger transport.
Bell 230 Utility, multi-purpose transport.
Bell 230 EMS, Air ambulance version, equipped with one or two stretchers.
It could even be equipped to operate over water.

SCALE 1:7
LENGTH 1800 mm
WIDTH 550 mm
HEIGHT 480 mm
ROTOR ø 1810 mm
WEIGHT approx. 9 kg
YEAR 1998

FUSELAGE

ROTOR HEAD

Fuselage	Ord.No. 2300
	16-part GRP fuselage - window set - laser cut wooden formers - stainless steel tail rotor shaft (ø 6 mm) - landing gear (ø 12 mm) (retractable undercarriage Ord.No. 161 optional) - various small parts

2 blade rotor head	Ord.No. 702/62
swashplate driver	Ord.No. 68/50
main rotor shaft, 12 x 214 mm	Ord.No. 35/49
2 blade set ø 1810 mm	Ord.No. 419
rotor blade pouch	Ord.No. 33/2
pushrod, 2 pcs	Ord.No. 70/91-2



When it comes to performance there are few helicopters that can match the full size Bell 430. It is at the top of its class, and it is often referred to as the flagship civilian helicopter in the range of Bell Helicopter.

Compared with the Bell 230 it is equipped with a 4 blade head, and been 0.45 m longer it has a new cockpit and cabin design.

SCALE 1:7
LENGTH 1850 mm
WIDTH 550 mm
HEIGHT 440 mm
ROTOR ø 1680 mm
WEIGHT approx. 9.5 kg
YEAR 2005

FUSELAGE

ROTOR HEAD

Fuselage	Ord.No. 4300
	14-part GRP fuselage - window set - laser cut wooden formers - stainless steel tail rotor shaft (ø 6 mm) - spring-loaded 3-leg retractable undercarriage - various small parts

4 blade rotor head	Ord.No. 704/32
swashplate driver	Ord.No. 68/50
main rotor shaft, 12 x 245 mm	Ord.No. 35/48
4 blade set ø 1680 mm	Ord.No. 404/41
rotor blade pouch	Ord.No. 33/4
pushrod, 4 pcs	Ord.No. 70/91-4

COCKPIT

DOOR FITTINGS SET

PILOT

RETRACTABLE UNDERCARRIAGE

ROTOR HEAD

LANDING GEAR

NON-SLIP STRIP

BELL HELICOPTER STICKER

WSPS SET

ROTOR HEAD



Ord.No. 230/29

Ord.No. 104/5

Ord.No. 1/70 // 1/79

Ord.No. 161

Ord.No. 702/62

Ord.No. 230/10

Ord.No. 30/41

Ord.No. 14/1

Ord.No. 20/22

Ord.No. 704/32



Photo: Dennis Ideue | www.dennisrc.com

The fuselage of the big AIRWOLF is made from carbon fiber. You may consider to paint just the white part of the fuselage and leave the rest in the carbon fibre look. The material is relatively light and the fuselage is very impressive, even without rivets.

SCALE 1:7
LENGTH 1800 mm
WIDTH 550 mm
HEIGHT 480 mm
ROTOR Ø 1810 mm
WEIGHT approx. 8.5 kg
YEAR 2002

FUSELAGE

ROTOR HEAD

Fuselage	Ord.No. 2002
• 14-part CFRP fuselage • window set • laser cut wooden formers • stainless steel tail rotor shaft (Ø 6 mm) • spring-loaded 3-leg retractable undercarriage • various small parts	

rigid rotor head	Ord.No. 702/62
swashplate driver	Ord.No. 68/50
main rotor shaft, 12 x 214 mm	Ord.No. 35/49
2 blade set Ø 1810 mm	Ord.No. 419
rotor blade pouch	Ord.No. 33/2
pushrod, 2 pcs	Ord.No. 70/91-2

DRIVE // ELECTRIC



electric mechanics	Ord.No. 1002/82
drive set 10S incl. motor Pyro 700-52 L, controller JIVE PRO 120+ HV	Ord.No. 3316
drive set 12S incl. motor Pyro 700-45 L, controller JIVE PRO 120+ HV	Ord.No. 3317

DUMMY MGS	DUMMY ROCKETS	JET NOZZLE	MGS, PNEUMATIC	ROTOR HEAD
Ord.No. 10/205	Ord.No. 10/22	Ord.No. 201/9	Ord.No. 10/210	Ord.No. 702/62



The model incorporates GRP technology which substantially shortens the required building time. The installation of the retractable undercarriage alone is a real time-saver, as it utilises ready-made GRP supports fitted in the stub wings. The supports in the fuselage for the mechanical system are also based on a GRP sub-structure.

SCALE 1:5
LENGTH 2300 mm
WIDTH 600 mm
HEIGHT 630 mm
ROTOR ø 2360 mm
WEIGHT E: approx. 15.5 kg
T: approx. 17 kg
YEAR 2009



Photo: Markus Czermak · Pilot: Stefan Reusch

The 4 bladed Bell 430 is designed for our turbine mechanics Ord.No. 1002/67, or our electric mechanics 1002/77. The model incorporates GRP technology which substantially shortens the required building time. The installation of the retractable undercarriage alone is a real time-saver, as it utilises ready-made GRP supports fitted in the stub wings. The supports in the fuselage for the mechanical system are also based on a GRP sub-structure.

SCALE 1:5
LENGTH 2350 mm
WIDTH 730 mm
HEIGHT 630 mm
ROTOR ø 2300 mm
WEIGHT E: approx. 15 kg
T: approx. 16.5 kg
YEAR 2009

FUSELAGE

ROTOR HEAD

FUSELAGE

ROTOR HEAD

Fuselage	Ord.No. 2340
• 11-part GRP fuselage • window set (upper windows on the full size are green for glare protection) • laser cut wooden formers for the corresponding mechanics • stainless steel tail rotor shaft (ø 8 mm) • spring-loaded 3-leg retractable undercarriage • GRP tank, 2.5 l • various small parts	

2 blade rotor head	Ord.No. 1005/49
swashplate	Ord.No. 832/68
swashplate driver	Ord.No. 68/50
2 blade set ø 2360 mm	Ord.No. 413
rotor blade pouch	Ord.No. 33/1
pushrod, 2 pcs	Ord.No. 70/61-2

Fuselage	Ord.No. 4340
• 18-part GRP fuselage • window set • laser cut wooden formers • stainless steel tail rotor shaft (ø 8 mm) • spring-loaded 3-leg retractable undercarriage • GRP tank, 2.5 l • various small parts	

4 blade rotor head	Ord.No. 704/38
swashplate	Ord.No. 832/68
swashplate driver	Ord.No. 68/53
4 blade set ø 2300 mm	Ord.No. 412/4
rotor blade pouch	Ord.No. 33/40
pushrod, 4 pcs	Ord.No. 70/71-4

COCKPIT	DOOR FITTINGS SET	PILOT	NON-SLIP STRIP	ROTOR HEAD	ROCKET LAUNCHER	SCALE FITTINGS, METAL	REFUELLING SYSTEM	BELL HELICOPTER STICKER	ROTOR HEAD
Ord.No. 434/29	Ord.No. 104/5	Ord.No. 1/55 // 1/59	Ord.No. 30/41	Ord.No. 1005/49	Ord.No. 10/300 // 3174	Ord.No. 20/43	Ord.No. 13/32	Ord.No. 14/1	Ord.No. 704/38



Photo: Roger Oxe · Pilot: Dennis Engel



The AIRWOLF is also available as a large electric powered model. It can be fitted with the optional electronic cannons. These create a realistic background noise, much like the sharp crack of a shooting gun. A rocket launcher can be fitted under the fuselage and other scale accessories are available.

- SCALE 1:5
- LENGTH 2300 mm
- WIDTH 730 mm
- HEIGHT 630 mm
- ROTOR ø 2360 mm
- WEIGHT E: approx. 15 kg
T: approx. 16.5 kg
- YEAR 2009

FUSELAGE

Fuselage	Ord.No. 2004
19-part GRP fuselage - window set - laser cut wooden formers - stainless steel tail rotor shaft (ø 8 mm) - spring-loaded 3-leg retractable undercarriage - GRP tank, 2.5 l - various small parts	

ROTOR HEAD

2 blade rotor head	Ord.No. 1005/49
swashplate	Ord.No. 832/68
swashplate driver	Ord.No. 68/50
2 blade set ø 2360 mm	Ord.No. 413
rotor blade pouch	Ord.No. 33/1
pushrod, 2 pcs	Ord.No. 70/61-2

► MORE ARMING SEE P.138

DUMMY ROCKETS	STUB WINGS	NON-SLIP STRIP	DUMMY TURBINE	ROTOR HEAD
Ord.No. 10/310	Ord.No. 10/420	Ord.No. 30/41	Ord.No. 20/38	Ord.No. 1005/49

DRIVE // ELECTRIC



electric mechanics incl. main rotor shaft	Ord.No. 1002/77
dome fittings set Bell 230/AIRWOLF dome fittings/extension set Bell 430	Ord.No. 53/19 Ord.No. 770/53
alu tail rotor claw connector, shaft ø 5 mm	Ord.No. 1003/80 Ord.No. 49/12
tail rotor blades Bell 230/AIRWOLF tail rotor blades Bell 430	Ord.No. 34/32 Ord.No. 34/36
drive set 12S incl. motor Pyro 800-40 L, controller JIVE PRO 120+ HV	Ord.No. 3304
servo for undercarriage (3 pcs required)	Ord.No. 3896

DRIVE // TURBINE



turbine mechanics incl. main rotor shaft	Ord.No. 1002/67
turbine Jakadofsky Pro 5000 clutch bell 2 blade: t. 27 / 4 blade: t. 24 information and supply: www.jakadofsky.com	
ALTERNATIVE: JetCat PHT3-L I.h.r. (mechanics & turbine) gear ratio: 95.62:1 rotor speed: 962 rpm at 92,000 rpm Please order with suitable rotor shaft Ord.No. 35/52. information and supply: www.heli-factory.com	
dome fittings set Bell 230/AIRWOLF dome fittings/extension set Bell 430	Ord.No. 53/19 Ord.No. 770/53
alu tail rotor claw connector, shaft ø 5 mm	Ord.No. 1003/80 Ord.No. 49/12
tail rotor blades Bell 230/AIRWOLF tail rotor blades Bell 430	Ord.No. 34/32 Ord.No. 34/36
exhaust system, stainless steel	Ord.No. 434/16
servo for undercarriage (3 pcs required)	Ord.No. 3896



Photo: Hellmut Schulze-Wenck · Pilot: Peter Holtackers

The Bell 429 GlobalRanger is a light, twin-engine helicopter developed by Bell Helicopter and Korea Aerospace Industries, based on the Bell 427. First flight of the Bell 429 prototype took place on February 27, 2007, and received type certification on July 1, 2009. The Bell 429 is capable of single-pilot IFR and Runway Category A operations.

SCALE 1:5
LENGTH 2280 mm
WIDTH 510 mm
HEIGHT 730 mm
ROTOR ø 2300 mm
WEIGHT approx. 20 kg
YEAR 2014

FUSELAGE

Fuselage	Ord.No. 4290
• 15-part GRP fuselage • window set • laser cut wooden formers • stainless steel tail rotor shaft (ø 8 mm) • landing gear (ø 18 mm) • various small parts	

ROTOR HEAD

4 blade rotor head	Ord.No. 704/38
swashplate driver	Ord.No. 68/50
main rotor shaft, 12 x 335 mm	Ord.No. 429/35
4 blade set ø 2300 mm	Ord.No. 412/4
rotor blade pouch	Ord.No. 33/40
pushrod, 4 pcs	Ord.No. 70/96-4

COCKPIT



Ord.No. 429/29

DOOR FITTINGS SET



Ord.No. 429/5

PILOT



Ord.No. 1/55 // 1/59

WSPS SET



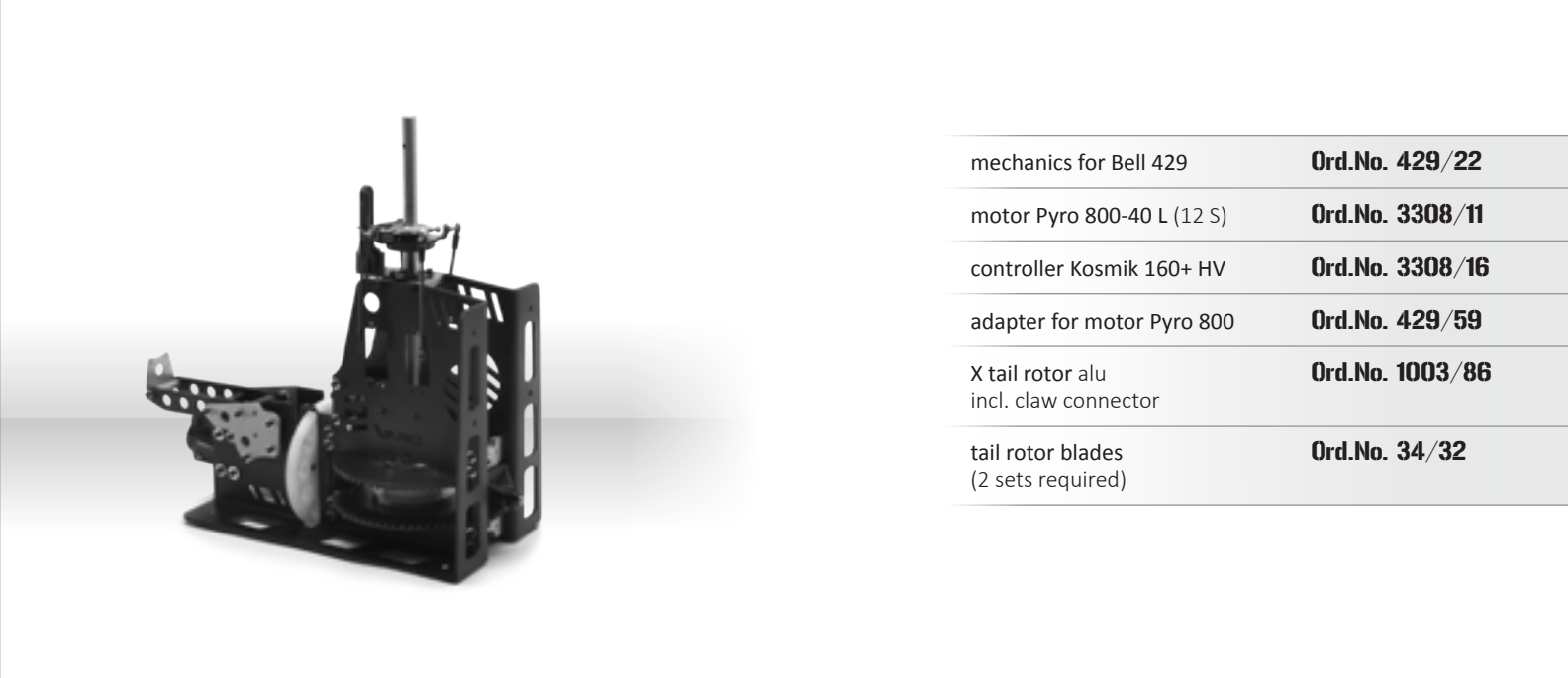
Ord.No. 20/23

ROTOR HEAD



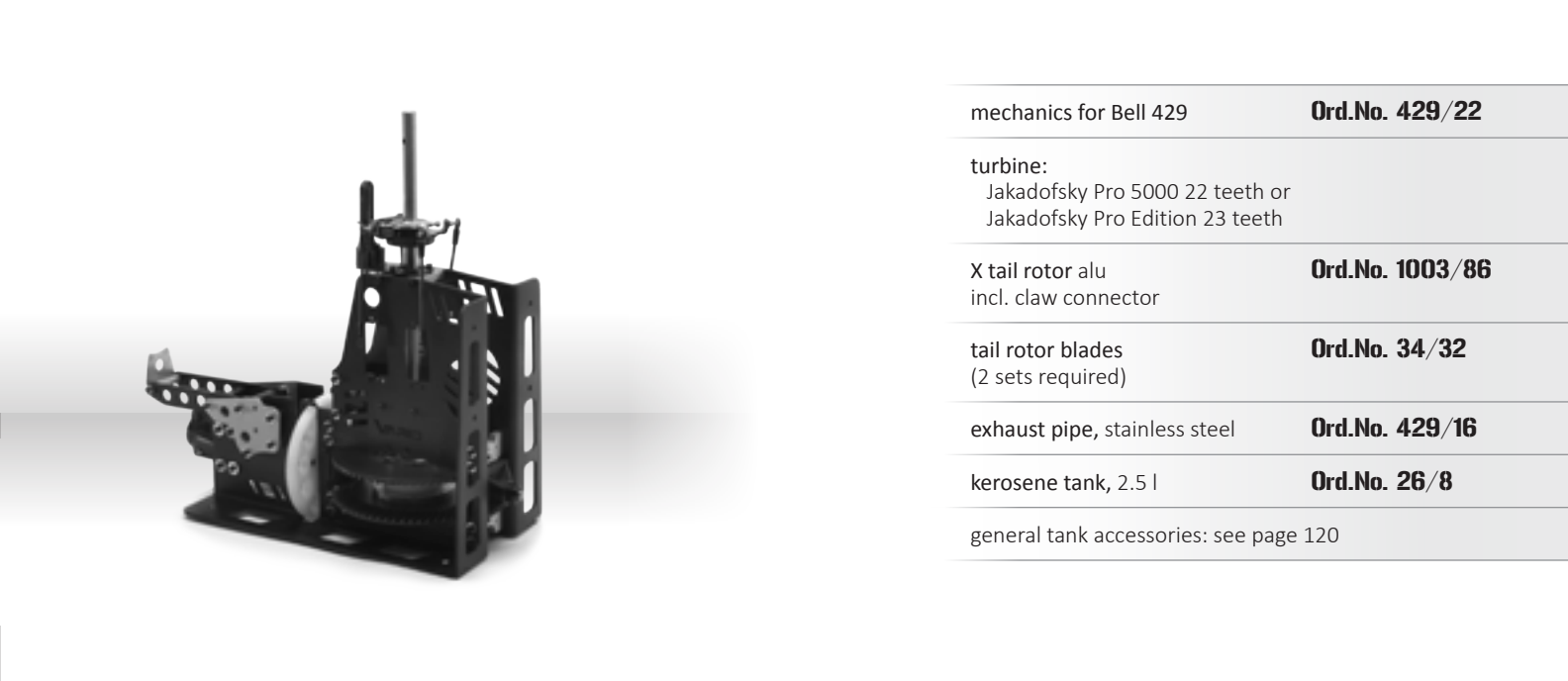
Ord.No. 704/38

DRIVE // ELECTRIC



mechanics for Bell 429	Ord.No. 429/22
motor Pyro 800-40 L (12 S)	Ord.No. 3308/11
controller Kosmik 160+ HV	Ord.No. 3308/16
adapter for motor Pyro 800	Ord.No. 429/59
X tail rotor alu incl. claw connector	Ord.No. 1003/86
tail rotor blades (2 sets required)	Ord.No. 34/32

DRIVE // TURBINE



mechanics for Bell 429	Ord.No. 429/22
turbine: Jakadofsky Pro 5000 22 teeth or Jakadofsky Pro Edition 23 teeth	
X tail rotor alu incl. claw connector	Ord.No. 1003/86
tail rotor blades (2 sets required)	Ord.No. 34/32
exhaust pipe, stainless steel	Ord.No. 429/16
kerosene tank, 2.5 l	Ord.No. 26/8
general tank accessories: see page 120	



► More details in the online shop under Scale accessories → Model Specific → Bell 429



Photo: Daniel Just | www.danieljust.de · Pilot: Roger Oxe



By June 1967, the first AH-1G Huey Cobras had been delivered. Originally designated as UH-1H, the "A" for attack designation was soon adopted and when the improved UH-1D became the UH-1H, the Huey Cobra became the AH-1G. The first prototypes had retractable skid landing gear. There are now many variations and upgrades of the original Cobra. Our model is based on the AH-1S variant.

SCALE 1:7
LENGTH 1900 mm
WIDTH 200 mm
HEIGHT 600 mm
ROTOR ø 1810 mm
WEIGHT E: approx. 9.5 kg
T: approx. 13 kg
YEAR 2003

FUSELAGE

Fuselage electric	Ord.No. 7900
Fuselage turbine	Ord.No. 7910
• 9-part GRP fuselage • window set • laser cut wooden formers • stainless steel tail rotor shaft (ø 6 mm) • landing gear (ø 15 mm) • various small parts	

ROTOR HEAD

2 blade rotor head	Ord.No. 702/62
swashplate driver	Ord.No. 68/50
main rotor shaft, 12 x 255 mm	Ord.No. 35/45 (E)
2 blade set ø 1810 mm	Ord.No. 419
rotor blade pouch	Ord.No. 33/2
pushrod, 2 pcs	Ord.No. 70/130-2 (E), 70/91-2 (T)

COCKPIT



Ord.No. 790/29

DECALS



Ord.No. 790/5

PILOT / OVERALL / HELMET



Ord.No. 1/16 // 1/65 // 1/35

ROCKET / GUN SET



Ord.No. 790/10

ROTOR HEAD



Ord.No. 702/62

DRIVE // ELECTRIC



DRIVE // TURBINE



electric mechanics	Ord.No. 1002/82
40° gearbox	Ord.No. 1059
tail rotor blades	Ord.No. 790/34
drive set 10S incl. motor Pyro 700-52 L, controller JIVE PRO 120+ HV	Ord.No. 3316
drive set 12S incl. motor Pyro 700-45 L, controller JIVE PRO 120+ HV	Ord.No. 3317

JetCat PHT3 l.h.r. (mechanics & turbine) gear ratio: 73.25:1 turbine speed: 94,000 rpm rotor speed: 1283 rpm Please order with suitable rotor shaft Ord.No. 35/47. information and supply: www.jetcat.de	
dome fittings set	Ord.No. 53/15
50° gearbox	Ord.No. 1057
tail drive belt kit	Ord.No. 791/200
alu tail rotor claw connector, shaft ø 5 mm	Ord.No. 1003/80 Ord.No. 49/12
tail rotor blades	Ord.No. 790/34
exhaust pipe	Ord.No. 791/16
kerosene tank, GRP, 1.5 l outside tank used if modelling the firefighter version	Ord.No. 791/26
inside tank, 2.2 l	Ord.No. 791/27
wing brace	Ord.No. 791/28



Photo: Matthias Hof • Pilot: Albertino Doomen



As a model, the JetRanger helicopter has been a great success from the beginning. The first models were designed for methanol engines. But soon came the demand for a benzin / petrol powered model, so this larger JetRanger III has been developed.

SCALE 1:6
LENGTH 1700 mm
WIDTH 240 mm
HEIGHT 580 mm
ROTOR ø 1810 mm
WEIGHT approx. 8.5 kg
YEAR 1995

FUSELAGE

ROTOR HEAD

Fuselage	Ord.No. 1004
• 12-part GRP fuselage • window set (upper windows on the full size are green for glare protection) • laser cut wooden formers • stainless steel tail rotor shaft (ø 6 mm) • landing gear (ø 12 mm) • various small parts	

2 blade rotor head	Ord.No. 702/60
swashplate driver	Ord.No. 68/20
main rotor shaft, 10 x 214 mm	Ord.No. 35/30
2 blade set ø 1810 mm	Ord.No. 419
rotor blade pouch	Ord.No. 33/2
pushrod, 2 pcs	Ord.No. 70/101-2

DRIVE // ELECTRIC



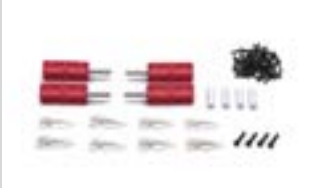
electric mechanics	Ord.No. 1002/80
drive set 10S incl. motor Pyro 700-52 L, controller JIVE PRO 120+ HV	Ord.No. 3316
drive set 12S incl. motor Pyro 700-45 L, controller JIVE PRO 120+ HV	Ord.No. 3317

COCKPIT



Ord.No. 104/29

DOOR FITTINGS SET



Ord.No. 104/5

PILOT



Ord.No. 1/16 // 1/60

EXHAUST PIPES



Ord.No. 30/30

ROTOR HEAD



Ord.No. 702/60

VENTILATION GRILLES



Ord.No. 20/14

SCALE-ACCESSORIES



Ord.No. 13/30

BELL HELICOPTER STICKER



Ord.No. 14/1

WSPS SET



Ord.No. 20/22

JOYSTICKS & FOOT PEDALS



Ord.No. 31/31



Pilot: Thomas Dorner



Before the big JetRanger in the Vario product range there have been several turbine versions.

The newest and most powerful version is equipped with a 2-shaft turbine as well as a ø 15 mm rotor shaft.

SCALE 1:4
LENGTH 2500 mm
WIDTH 360 mm
HEIGHT 890 mm
ROTOR ø 2500 mm
WEIGHT approx. 19 kg
YEAR 2004

FUSELAGE

ROTOR HEAD ø 15 MM MRS

Fuselage	Ord.No. 1005
• 13-part GRP fuselage • window set • laser cut wooden formers • stainless steel tail rotor shaft (ø 8 mm) • landing gear (ø 20 mm) • various small parts	

2 blade rotor head ø 15 mm	Ord.No. 1005/52
swashplate driver	Ord.No. 268/55
main rotor shaft, 15 x 493 mm	Ord.No. 162/35
2 blade set ø 2500 mm	Ord.No. 416 // 416/5 // 416/50
rotor blade pouch	Ord.No. 33/1
pushrod, 2 pcs	Ord.No. 70/176-2

DRIVE // TURBINE



turbine mechanics SPT5-H for JetRanger XL	Ord.No. 1002/62
	
turbine JetCat SPT5-H information and supply: www.jetcat.de	
exhaust pipe, 2 pcs, stainless steel	Ord.No. 105/19
kerosene tank, 2.5 l	Ord.No. 26/6
tank vent filter	Ord.No. 26/25
refuelling system	Ord.No. 13/32
hose clamp, PU 4 pcs	Ord.No. 26/34

COCKPIT	DOOR FITTINGS SET	SCALE ACCESSORIES	KEROSENE TANK 2.5 L	ROTOR HEAD	EXHAUST PIPES	EXHAUST PIPES
						
Ord.No. 105/29	Ord.No. 105/34	Ord.No. 13/31	Ord.No. 26/6	Ord.No. 1005/52	Ord.No. 105/19	Ord.No. 30/29

As we continue to innovate, our product offering expands to provide you with opportunities to build the most unique and intriguing models available to the scale aeromodelling community. With outstanding design and ingenious application of 3-D modeling we are able to offer such incredible models as the Chinook, Air-Crane, Scheizer, and Robinson. Each of these models brings a particular segment of full-scale aviation and delivers it directly to your hangar.

The Chinook is considered the King of military helicopters. With incredible troop carrying capacity, and the ability to transport supplies and weaponry into never before seen locations, the Chinook became a mainstay in the modern military. Although the full scale Chinook was considered a handful to fly, the Vario Chinook is forgiving in the air thanks to modern flybarless control systems. The Air-Crane, is the Big Daddy of all payload carrying helicopters. Harnessing the ability to carry immense payload and the heroic ability to help fight forest fires in remote locations, the Air-Crane is the Goliath of modern helicopters. The Air-Crane holds the fascination of anyone who sees it take to the skies. The Robinson and Schweizer are the models of choice for pilots who wish to fly scale, but also love a relaxing flight. These models are capable in the hands of any pilot, but are less formidable for many who are looking for a more gentle scale model. If the word "unique" is important to your scale projects look no further than Vario NOTAR models. In 1999, Vario became the first company to release a scale helicopter based on the NOTAR design. Vario is proud to be the only scale aeromodelling company that still provides the NOTAR design.



HELICOPTERS OF OTHER BRANDS

- SIKORSKY
- HUGHES AIRCRAFT
- BOEING ROBINSON
- ERICKSON INC.
- AGUSTA
- WESTLAND
- MCDONNELL DOUGLAS

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AW139

model size850



Photo: Christian Kniep

The Agusta AW139 is a modern multi-role helicopter. It has retractable undercarriage, a 5 blade rotor head and an angled 4 blade tail. The model impresses with its detailed GRP fuselage and scale retractable landing gear. The model size is impressive and compact at the same time.

SCALE1:7

LENGTH1970 mm

WIDTH450 mm

HEIGHT560 mm

ROTORØ 1880 mm

WEIGHTE: approx. 16.5 kg
T: approx. 18.5 kg

YEAR2013

DRIVE // ELECTRIC



DRIVE // TURBINE



FUSELAGE

Fuselage electric	Ord.No. 1390
Fuselage turbine	Ord.No. 1400
• 10-part GRP fuselage • window set • laser cut wooden formers • stainless steel tail rotor shaft (Ø 6 / 8 mm) • 3-leg retractable undercarriage • various small parts	

ROTOR HEAD

5 blade rotor head Ø 4 mm cross drilling	Ord.No. 705/36
swashplate driver	Ord.No. 68/52
5 blade set Ø 1880 mm	Ord.No. 404/52
rotor blade pouch	Ord.No. 33/6
pushrod, 5 pcs	Ord.No. 70/80-5

COCKPIT / SEATS



Ord.No. 139/29 // 134/628

DOOR FITTINGS SET



Ord.No. 139/5

PILOT



Ord.No. 1/70 // 1/79

NON-SLIP STRIP



Ord.No. 30/41

ROTOR HEAD



Ord.No. 705/36

AW139

79

electric mechanics for AW139

Ord.No. 139/22

main rotor shaft, 12 x 255 mm

Ord.No. 139/35

50° gearbox

Ord.No. 1054

drive set 12S
incl. motor mount set
motor Pyro 700-52 L,
controller JIVE PRO 120+ HV

Ord.No. 3320
Ord.No. 139/100,

turbine mechanics for AW139
Jakadofsky Pro 5000
clutch bell t. 28
incl. main rotor shaft
information and supply: www.jakadofsky.com

Ord.No. 140/22
Ord.No. 140/35

dome fittings set

Ord.No. 140/53

50° gearbox

Ord.No. 1054

alu tail rotor
tail gearbox input shaft
articulated joint, shaft Ø 5 mm
grub screw M4 x 6 mm, flat

Ord.No. 1003/85
Ord.No. 268/49
Ord.No. 722/47
Ord.No. 90387

tail rotor blades
(2 sets required)

Ord.No. 34/32

exhaust system, stainless steel

Ord.No. 140/16

kerosene tank, 1 l
(2 pcs required)

Ord.No. 140/26

tank vent filter

Ord.No. 26/25

refuelling system

Ord.No. 13/32

hose clamp, PU 4 pcs

Ord.No. 26/34

foot step big
ORD.NO. 139/700

front door steps
ORD.NO. 139/701

cyclic pitch
ORD.NO. 139/715

pedals
ORD.NO. 139/716

collective pitch
ORD.NO. 139/717

ventilation grilles
ORD.NO. 139/718

antenna
ORD.NO. 139/719

pitot tubes
ORD.NO. 139/720

antenna underside
ORD.NO. 139/732

antenna
ORD.NO. 139/733

tail rotor housing
ORD.NO. 139/734

crash position indicator
ORD.NO. 139/735

drainage point
large / medium / small
ORD.NO. 139/737

pressure compensation pipe
ORD.NO. 139/738

inlet
ORD.NO. 139/739

jackpoint
ORD.NO. 139/740

air intake cover front / rear
ORD.NO. 139/742

NACA duct
ORD.NO. 139/743

underside drops
ORD.NO. 139/751

maintenance door
ORD.NO. 139/752

rear cover
ORD.NO. 139/757

antenna between exhaust pipes
ORD.NO. 139/759

rotor head cover
ORD.NO. 139/746

winch
ORD.NO. 139/758

lateral tail antenna
above/below
ORD.NO. 139/731

wipers
ORD.NO. 139/748

weather radar
ORD.NO. 139/753

hinges cover
ORD.NO. 139/747

drops lateral tail
ORD.NO. 139/755

lateral tail antenna
ORD.NO. 139/730

liferaft
ORD.NO. 139/745

side drops
ORD.NO. 139/750

lateral handle
ORD.NO. 139/749

antenna
ORD.NO. 139/754

cover
ORD.NO. 139/756

antenna
ORD.NO. 139/736

pitot tube
ORD.NO. 139/744

camera housing
ORD.NO. 139/741

AGUSTA AW139

► More details in the online shop under Scale accessories → Model Specific → Agusta AW139

82

AGUSTA109 K2

model size700

83

AGUSTA109 K2

83



The full size version of the Agusta 109 K2 is used for high-altitude and high-temperature operations with fixed wheels rather than the retractable wheels of most A109 variants. Typically used by police, search and rescue, and air ambulance operators. The Swiss Air Rescue REGA prefer the Agusta to the BK 117 and the red and white colours are recognised throughout the world.

SCALE

1:6

LENGTH

1760 mm

WIDTH

300 mm

HEIGHT

470 mm

ROTOR

Ø 1600 mm

WEIGHT

approx. 9 kg

YEAR

2002

FUSELAGE

ROTOR HEAD

Fuselage

Ord.No. 9020

- 15-part GRP fuselage
- window set
- laser cut wooden formers
- stainless steel tail rotor shaft (Ø 6 mm)
- spring-loaded 3-wheel undercarriage
- various small parts

4 blade rotor head

Ord.No. 704/30

swashplate driver

Ord.No. 68/20

main rotor shaft, 10 x 174 mm

Ord.No. 35/39

4 blade set Ø 1600 mm

Ord.No. 404/31

rotor blade pouch

Ord.No. 33/4

pushrod, 4 pcs

Ord.No. 70/40-4

DRIVE // ELECTRIC



electric mechanics

Ord.No. 1002/80

drive set 10S
incl. motor Pyro 700-52 L,
controller JIVE PRO 120+ HV

Ord.No. 3316

drive set 12S
incl. motor Pyro 700-45 L,
controller JIVE PRO 120+ HV

Ord.No. 3317

COCKPIT

DOOR FITTINGS SET

PILOT

TAIL SKID

ROTOR HEAD











Ord.No. 920/29

Ord.No. 920/5

Ord.No. 1/16 // 1/60

Ord.No. 920/6

Ord.No. 704/30



Pilot: Mirko Zanni

The Erickson Air-Crane S-64 Heli-tanker is able to carry an integrated tank system with a capacity of 2,600 gallons (9,800 litres) under the fuselage and has acquired an excellent reputation for fighting forest fires. A Russian Antonov AN-124 can be used to transport the helicopter to a required region anywhere in the world.

SCALE 1:10
LENGTH 2140 mm
WIDTH 700 mm
HEIGHT 650 mm
ROTOR Ø 2000 mm
WEIGHT E: approx. 13 kg
T: approx. 15 kg
YEAR 2005

FUSELAGE

Fuselage electric	Ord.No. 6400
Fuselage turbine	Ord.No. 6410
• GRP fuselage • window set • laser cut wooden formers • stainless steel tail rotor shaft (Ø 8 mm) • true to original 3-wheel undercarriage • dummy water tank • various small parts	

ROTOR HEAD

6 blade rotor head	Ord.No. 706/20
swashplate driver	Ord.No. 68/60
main rotor shaft	Ord.No. 640/36 (E), 641/35 (T)
6 blade set Ø 2000 mm	Ord.No. 404/60
rotor blade pouch	Ord.No. 33/6
pushrod, 6 pcs	Ord.No. 70/105-6 (E), 70/100-6 (T)

COCKPIT



Ord.No. 640/29

DUMMY TURBINE



Ord.No. 640/2

DUMMY POND SNORKEL



Ord.No. 640/50

AIRBRUSH TEMPLATE



Ord.No. 640/0

ROTOR HEAD



Ord.No. 706/20

DRIVE // ELECTRIC



petrol/electric mechanics for Air-Crane	Ord.No. 1002/36
50° gearbox	Ord.No. 1057
drive set 10S incl. motor Pyro 700-52 L, controller JIVE PRO 120+ HV	Ord.No. 3308
drive set 12S incl. motor Pyro 700-45 L, controller JIVE PRO 120+ HV	Ord.No. 3307

DRIVE // TURBINE



mechanics SPH5 6 blade	Ord.No. 1002/71
turbine JetCat SPH5 information and supply: www.jetcat.de	
50° gearbox	Ord.No. 1057
exhausts Air-Crane, 2 pcs	Ord.No. 641/16
kerosene tank for Air-Crane, GRP	Ord.No. 641/26
hose clamp, PU 4 pcs resistant to petrol and kerosene	Ord.No. 26/34



Photo: Nicolas Aubert · Pilot: Peter Holtackers

The Apache is a heavy, twin-engine attack helicopter (AH) used mainly by the US Army. This helicopter is very distinguishable by its unique tail rotor, its armaments and its undercarriage – our model is also correct in all these features. The GRP-parts fit together like a puzzle, for example the stabilizer is accurate in how it attaches to the fuselage.

Full size helicopter manufacturers:
Hughes Aircraft (until 1984)
McDonnell Douglas (until 1997)
Boeing (since 1997)

SCALE 1:7
LENGTH 2200 mm
WIDTH 420 / 780 mm
HEIGHT 590 mm
ROTOR ø 2100 mm
WEIGHT approx. 17 kg
YEAR 2015

FUSELAGE

ROTOR HEAD

Fuselage	Ord.No. 6300
• 23-part GRP fuselage • window set • laser cut wooden formers • flex shaft rear tail drive (ø 8 mm) • sprung undercarriage • door fittings set • various small parts	

4 blade rotor head	Ord.No. 704/38
swashplate driver	Ord.No. 68/50
4 blade set ø 2100 mm	Ord.No. 414/4
rotor blade pouch	Ord.No. 33/4
pushrod, 4 pcs	Ord.No. 70/91-4

DRIVE // ELECTRIC



electric mechanics for Apache incl. main rotor shaft	Ord.No. 630/22
X tail rotor alu incl. input shaft	Ord.No. 1003/87
tail rotor blades (2 sets required)	Ord.No. 34/32
drive set 12S incl. motor Pyro 800-40 L, controller Kosmik 160+ HV	Ord.No. 630/100



MULTI FLARES	PITOT TUBES	SENSORS
		
Ord.No. 630/701	Ord.No. 630/705	Ord.No. 630/712
WEAPON KIT	TIPTANKS WITH FLARES	FLAT ANTENNA
		
Ord.No. 630/715	Ord.No. 630/716	Ord.No. 630/722

ANTENNA

Ord.No. 630/736

COCKPIT	JOYSTICKS & FOOT PEDALS	PILOT / OVERALL / HELMET	CYLINDER SET FOR STABILIZERS	ROTOR HEAD	CLIMBING HOLDS	AIR INLET TAIL ROTOR	TURBINE AIR INTAKES	SHAFT ANTENNA	MG
									
Ord.No. 630/29	Ord.No. 31/31	Ord.No. 1/16 // 1/65 // 1/35	Ord.No. 630/2	Ord.No. 704/38	Ord.No. 630/756	Ord.No. 630/780	Ord.No. 630/782	Ord.No. 630/795	Ord.No. 751/205



TOPSELLER

Building a tandem has its own charm and its own set of challenges. This kit and the specially developed equipment has been extensively tested before its launch. It is necessary for a tandem rotor to have a strong rigid construction which ensures the success of this model project. For the first time Vario has made a model of the Chinook in this size available.

SCALE 1:11
LENGTH 1420 mm
WIDTH 350 mm
HEIGHT 830 mm
ROTOR 2x Ø 1550 mm
WEIGHT approx. 10 kg
YEAR 2016

FUSELAGE

ROTOR HEAD

Fuselage	Ord.No. 4800
• 11-part GRP fuselage • window set incl. bubble windows • laser cut wooden formers • electric mechanics • sprung undercarriage • various small parts	

tandem rotor head mandatory, must not be replaced by other rotor heads (2x required)	Ord.No. 703/480
swashplate driver (2x required)	Ord.No. 68/20
2x 3 blade set Ø 1550 mm	Ord.No. 404/480
rotor blade pouch	Ord.No. 33/6

CO-ROTATING DOME COVERAGE SET



Ord.No. 480/53



DRIVE // ELECTRIC



tandem-electric mechanics
transmission 1:8.96
incl. main rotor shaft, pushrods

Ord.No. 480/22
included in fuselage

Bavarian Demon 3SX / AXON
free Tandem update on bavariandemon.com

Ord.No. 3273

motor Pyro 850-24 L (12S)

Ord.No. 3308/15

controller JIVE PRO 120+ HV

Ord.No. 3308/17



90

CH 53

model size900



CH-53 is the military name for the all-weather transport helicopter "Sikorsky S-65".

We offer the CH-53 Superstallion as a turbine model for advanced pilots. It is powered by a JetCat SPH5 turbine mounted in our mechanics Ord.No. 1002/71.

SCALE	1:11
LENGTH	2030 mm
WIDTH	460 mm
HEIGHT	540 mm
ROTOR	ø 2000 mm
WEIGHT	approx. 18.5 kg
YEAR	2008

FUSELAGE

ROTOR HEAD

Fuselage	Ord.No. 5300
• 17-part GRP fuselage • window set • laser cut wooden formers • stainless steel tail rotor shaft (ø 8 mm) • spring-loaded 3-leg retractable undercarriage • various small parts	

6 blade rotor head	Ord.No. 706/20
swashplate driver	Ord.No. 68/60
main rotor shaft, 12 x 275 mm	Ord.No. 641/35
6 blade set ø 2000 mm	Ord.No. 404/60
rotor blade pouch	Ord.No. 33/6
pushrod, 6 pcs	Ord.No. 70/100-6

DRIVE // TURBINE



mechanics SPH5 6 blade	Ord.No. 1002/71
turbine JetCat SPH5 information and supply: www.jetcat.de	
50° gearbox	Ord.No. 1055
exhausts for CH-53, l/r	Ord.No. 530/16
kerosene tank, 1.25 l (2 pcs required) alternative: Kevlar tank	Ord.No. 26/5 Ord.No. 26/50
tank vent filter	Ord.No. 26/25
refuelling system	Ord.No. 13/32
hose clamp, PU 4 pcs	Ord.No. 26/34

COCKPIT

JOYSTICKS & FOOT PEDALS

PILOT

DECAL

ROTOR HEAD

EXHAUST COVER

LOADING DOOR ACTUATOR SET

NON-SLIP STRIP

ANTICOLLISION LIGHT

STICKER "DANGER"



Ord.No. 530/29



Ord.No. 31/31



Ord.No. 1/80 // 1/89



Ord.No. 530/0



Ord.No. 706/20



Ord.No. 530/17



Ord.No. 530/45



Ord.No. 30/41



Ord.No. 10/96



Ord.No. 14/34



Photo: Marcel Germann · Pilot: Gerd von Runkel

The Exec is another large model in the Vario range. Following the current trend, this helicopter is designed for our electric mechanics. A wooden frame, which bolts into the fuselage, accommodates the mechanics. The tail boom is detachable, and is secured to the fuselage by a central screw fastening. An optional cockpit interior is, of course, also available for this model.

SCALE 1:3
LENGTH 2300 mm
WIDTH 390 mm
HEIGHT 870 mm
ROTOR Ø 2360 mm
WEIGHT approx. 16 kg
YEAR 2010

FUSELAGE

ROTOR HEAD

Fuselage	Ord.No. 9500
• 16-part GRP fuselage • window set • laser cut wooden formers • stainless steel tail rotor shaft (Ø 8 mm) • tail control pushrod • landing gear • various small parts	

2 blade rotor head	Ord.No. 1005/49
swashplate driver	Ord.No. 68/50
main rotor shaft, 12 x 514 mm	Ord.No. 470/35
2 blade set Ø 2360 mm	Ord.No. 413
rotor blade pouch	Ord.No. 33/1
pushrod, 2 pcs	Ord.No. 70/66-2

COCKPIT	DOOR FITTINGS SET	PILOT	JOYSTICKS & FOOT PEDALS	ROTOR HEAD
Ord.No. 950/29	Ord.No. 330/5	Ord.No. 1/30 // 1/39	Ord.No. 31/34	Ord.No. 1005/49

DRIVE // ELECTRIC



electric mechanics for Exec	Ord.No. 950/22
drive set 12S incl. motor Pyro 800-40 L, controller JIVE PRO 120+ HV	Ord.No. 3303

THE EXEC AT GALILEO

In early 2015, Vario was proud to be involved in an episode of the No. 1 German science TV show "Galileo". A production crew visited Vario, to learn more about a helicopter phenomenon called ground resonance. After beginning their investigation into ground resonance at Airbus in Donauwörth, Galileo then visited Vario for actual testing with the Vario Exec model. While attempting to create a resonance situation, our technicians learned it is very difficult to induce resonance in a Vario under normal conditions. Our techs had to improvise in order to initiate resonance, and even then they had to "work" very hard to cause an actual crash to occur. This inherent stability can be attributed to the outstanding design process that is a part of each Vario helicopter. Even though the "Galileo" Vario Exec did incur some damage during the experiment, it is now flying again thanks to Gerd von Runkel and his dedication to Vario.



94



Hughes

500E(D)

model size

750



Hughes

500E(D)

95



HUGHES

AIRCRAFT

Pilot: Nick Kalias

SCALE1:6

LENGTH1480 mm

WIDTH260 mm

HEIGHT530 mm

ROTORØ 1680 mm

WEIGHTapprox. 7.5 kg

YEAR1994

In May 1965, the Hughes company won the contract for a new observation helicopter for the U.S. Army, and produced the OH-6 Cayuse (Hughes Model 369). The OH-6 was later developed into the civilian model 500, variants of which remain in production to this day. In January 1984, Hughes Helicopters, Inc. was sold to McDonnell Douglas and was renamed McDonnell Douglas Helicopter System.

FUSELAGE

ROTOR HEAD

Fuselage	Ord.No. 9006
• 9-part GRP fuselage • window set • laser cut wooden formers • stainless steel tail rotor shaft (Ø 6 mm) • landing gear (Ø 12 mm) • various small parts	

5 blade rotor head	Ord.No. 705/30
swashplate driver	Ord.No. 68/20
main rotor shaft, 10 x 174 mm	Ord.No. 35/39
5 blade set Ø 1680 mm	Ord.No. 404/42
rotor blade pouch	Ord.No. 33/6
pushrod, 5 pcs	Ord.No. 70/40-5

COCKPIT



Ord.No. 905/29

DOOR FITTINGS SET



Ord.No. 905/5

PILOT



Ord.No. 1/16 // 1/60

ROUND CANOPY (D-VERSION)



Ord.No. 905/33

ROTOR HEAD



Ord.No. 705/30

DRIVE // ELECTRIC



petrol/electric mechanics gear ratio 90:18	Ord.No. 1002/21
drive set 10S incl. motor Pyro 700-52 L, controller JIVE PRO 120+ HV	Ord.No. 3308
drive set 12S incl. motor Pyro 700-45 L, controller JIVE PRO 120+ HV	Ord.No. 3307



Photo: Tony Smith, Technote RC

In 2009, Vario Helicopter celebrated its 35th anniversary, and one of the most popular full size helicopters also achieved 35 years of flight. In 1974, the Hughes 500 was introduced. The "old" version of the Hughes 500 with rounded cabin nose and V-tail was fitted with a 4 blade head.

SCALE 1:5
LENGTH 1720 mm
WIDTH 340 mm
HEIGHT 630 mm
ROTOR ø 1880 mm
WEIGHT approx. 9.5 kg
YEAR 2004



FUSELAGE

Fuselage	Ord.No. 9042
Fuselage Logo 800	Ord.No. 9046
• 14-part GRP fuselage • window set • laser cut wooden formers • stainless steel tail rotor shaft (ø 8 mm) • landing gear (ø 15 mm) • various small parts	

ROTOR HEAD

4 blade rotor head	Ord.No. 704/32
swashplate driver	Ord.No. 68/50
4 blade set ø 1880 mm	Ord.No. 404/51
rotor blade pouch	Ord.No. 33/4
pushrod, 4 pcs	Ord.No. 70/101-4



Ord.No. 904/29



Ord.No. 905/5



Ord.No. 1/55 // 1/59



Ord.No. 707/2



Ord.No. 704/32

DRIVE // ELECTRIC



electric mechanics incl. main rotor shaft	Ord.No. 1002/76
swashplate	Ord.No. 832/68
dome fittings set	Ord.No. 53/16
alu tail rotor claw connector, shaft ø 5 mm	Ord.No. 1003/80 Ord.No. 49/12
tail rotor blades	Ord.No. 34/32
drive set 12S incl. motor Pyro 800-40 L, controller JIVE PRO 120+ HV	Ord.No. 3304

DRIVE // TURBINE



JetCat PHT3 I.h.r. (mechanics & turbine) gear ratio: 95.62:1 turbine speed: 96,000 rpm rotor speed: 1004 rpm Please order with suitable rotor shaft Ord.No. 35/44 and servo mounting plates. information and supply: www.jetcat.de	
swashplate	Ord.No. 832/68
dome fittings set	Ord.No. 53/16
alu tail rotor claw connector, shaft ø 5 mm	Ord.No. 1003/80 Ord.No. 49/12
tail rotor blades	Ord.No. 34/32
exhaust system, stainless steel	Ord.No. 904/16
kerosene tank, 1.25 l alternative: Kevlar tank	Ord.No. 26/5 Ord.No. 26/50

DRIVE // LOGO 800 / NON-VARIO



The kit contains everything to convert a Logo 800 into a ready-to-fly Hughes 500, including a suitable rotor shaft, linkages and swashplate driver for mounting a Vario 4 blade rotor head with Vario rotor blades, unpainted fuselage and door fittings set. Optional is the cockpit interior.
Further required parts for the 4 blade conversion are:
Ord.No. 704/37 4 blade rotor head, **Ord.No. 945/54** dome fittings/extension set, **Ord.No. 404/56** 4 blade set ø 1900 mm

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Hughes

500E

model size

850



Photo: Daniel Just | www.danieljust.de · Pilot: Michael Dressendörfer

HUGHES

AIRCRAFT

The Hughes 500E, Ord.No. 9004, 9041 and 9045 has a pointed nose and a T-tail – the D-version, Ord.No. 9042, 9044 and 9046 has a rounded canopy and a V-tail. The model comes with a pointed canopy and T-tail and can be fitted with the optional 5 blade rotor head and scale cockpit. Access to the interior is made easy through the opening doors on each side. Many prefabricated parts allow for a fast and simple construction of the model.

SCALE

1:5

LENGTH

1720 mm

WIDTH

340 mm

HEIGHT

630 mm

ROTOR

Ø 1880 mm

WEIGHT

approx. 9.5 kg

YEAR

2002

FUSELAGE

Fuselage	Ord.No. 9004
Fuselage Logo 800	Ord.No. 9045
14-part GRP fuselage - window set - laser cut wooden formers - stainless steel tail rotor shaft (Ø 8 mm) - landing gear (Ø 15 mm) - various small parts	

ROTOR HEAD

5 blade rotor head	Ord.No. 705/32
swashplate driver	Ord.No. 68/52
5 blade set Ø 1880 mm	Ord.No. 404/52
rotor blade pouch	Ord.No. 33/6
pushrod, 5 pcs	Ord.No. 70/101-5

COCKPIT



Ord.No. 904/29

DOOR FITTINGS SET



Ord.No. 905/5

PILOT



Ord.No. 1/55 // 1/59

ROTOR HEAD COVER



Ord.No. 707/5

ROTOR HEAD



Ord.No. 705/32

DRIVE // ELECTRIC



NEW IN 2016

DRIVE // TURBINE



electric mechanics incl. main rotor shaft	Ord.No. 1002/76
5 blade swashplate, Ø 12 mm	Ord.No. 68/54
dome fittings set	Ord.No. 53/16
alu tail rotor claw connector, shaft Ø 5 mm	Ord.No. 1003/80 Ord.No. 49/12
tail rotor blades	Ord.No. 34/32
drive set 12S incl. motor Pyro 800-40 L, controller JIVE PRO 120+ HV	Ord.No. 3304

JetCat PHT3 l.h.r. (mechanics & turbine)
gear ratio: 95.62:1
turbine speed: 96,000 rpm
rotor speed: 1004 rpm
Please order with suitable rotor shaft Ord.No. 35/44
and servo mounting plates.
information and supply: www.jetcat.de

5 blade swashplate, Ø 12 mm	Ord.No. 68/54
dome fittings set	Ord.No. 53/16
alu tail rotor claw connector, shaft Ø 5 mm	Ord.No. 1003/80 Ord.No. 49/12
tail rotor blades	Ord.No. 34/32
exhaust system, stainless steel	Ord.No. 904/16
kerosene tank, 1.25 l alternative: Kevlar tank	Ord.No. 26/5 Ord.No. 26/50

DRIVE // LOGO 800 / NON-VARIO

NEW IN 2016

The kit contains everything to convert a Logo 800 into a ready-to-fly Hughes 500, including a suitable rotor shaft, linkages and swashplate driver for mounting a Vario 5 blade rotor head with Vario rotor blades, unpainted fuselage and door fittings set. Optional is the cockpit interior. Further required parts for the 5 blade conversion are:
Ord.No. 705/37 5 blade rotor head, Ord.No. 945/53 dome fittings/extension set, Ord.No. 404/57 5 blade set Ø 1900 mm



The MD 902 is an update version of the MD 900 with more powerful turbines.

Vario now presents the new version with electric power. Since it is much more powerful than its predecessor, Vario also named it the MD 902.

SCALE 1:6
LENGTH 1660 mm
WIDTH 400 mm
HEIGHT 600 mm
ROTOR ø 1550 mm
WEIGHT approx. 10 kg
YEAR 2000

Photo: Mark Ryder | www.runryder.com · Pilot: Sandy Jaffe

FUSELAGE

Fuselage	Ord.No. 9010
• 16-part GRP fuselage • window set • laser cut wooden formers • tail control with rotating end cap • landing gear (ø 12 mm) • various small parts	

ROTOR HEAD

swashplate driver	Ord.No. 68/20
main rotor shaft, 10 x 174 mm	Ord.No. 35/18
5 blade set ø 1550 mm	Ord.No. 404/900
rotor blade pouch	Ord.No. 33/6
pushrod, 5 pcs	Ord.No. 70/60-5

DRIVE // ELECTRIC



mechanics for MD 902 incl. rotor head	Ord.No. 1002/34
drive set MD 902 12S incl. motor Pyro 700-52 L, controller JIVE PRO 120+ HV	Ord.No. 3321
required battery capacity: 8,000 - 10,000 mAh	



In 1999 Vario released the first commercially available Notar model helicopter based on the Hughes MD 520. This was a first at time as it had no tail rotor and was controlled by vectoring air out through the rear of the boom. This model was powered by a glow engine but this model now shows the continuation of technology by being powered by a powerful electric motor.

Fuselage Ord.No. 9008

SCALE 1:6
LENGTH 1400 mm
WIDTH 270 mm
HEIGHT 550 mm
ROTOR ø 1550 mm
WEIGHT approx. 9 kg
YEAR 1999



COCKPIT
Ord.No. 907/29

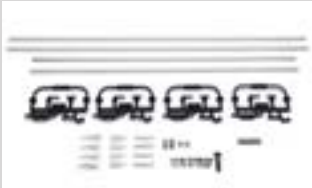
DOOR FITTINGS SET
Ord.No. 905/5

COCKPIT



Ord.No. 909/29

DOOR FITTINGS SET



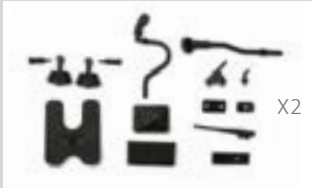
Ord.No. 909/5

PILOT



Ord.No. 1/16 // 1/60

JOYSTICKS & FOOT PEDALS



Ord.No. 31/31

STEPS



Ord.No. 30/42

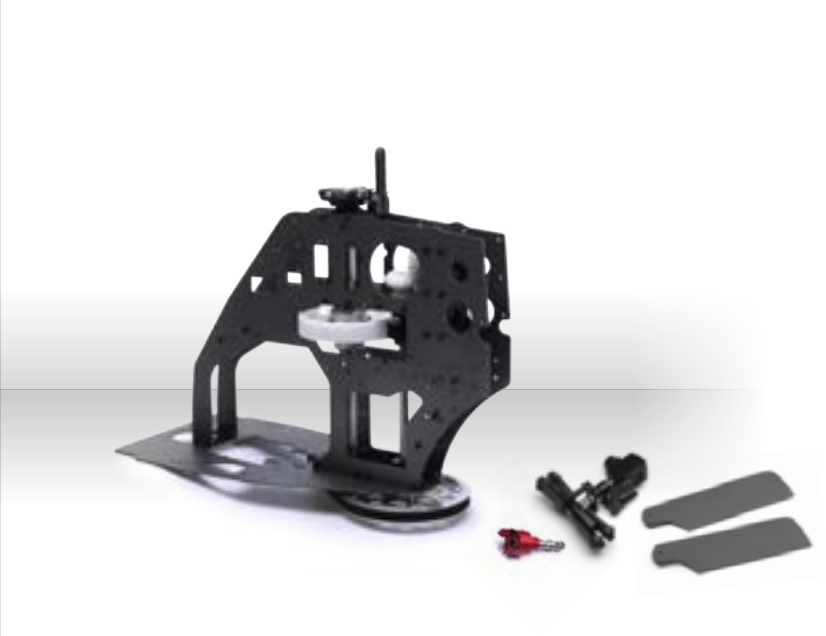


Photo: Michael Laskus · Pilot: Guy Vanderschelden

In this new version of our popular R22 we have used the mechanics from our Bell 47. This has moved the motor rear-ward allowing us to remove the cooling hole at the front of the cockpit. It also allows for the installation of a cockpit. Batteries etc. can be mounted under the cockpit floor.

SCALE 1:4
LENGTH 1820 mm
WIDTH 330 mm
HEIGHT 800 mm
ROTOR ø 2160 mm
WEIGHT approx. 12 kg
YEAR 2010

DRIVE // ELECTRIC



petrol/electric mechanics	Ord.No. 470/23
drive set 10S incl. motor Pyro 700-52 L, controller JIVE PRO 120+ HV	Ord.No. 3308
drive set 12S incl. motor Pyro 700-45 L, controller JIVE PRO 120+ HV	Ord.No. 3307

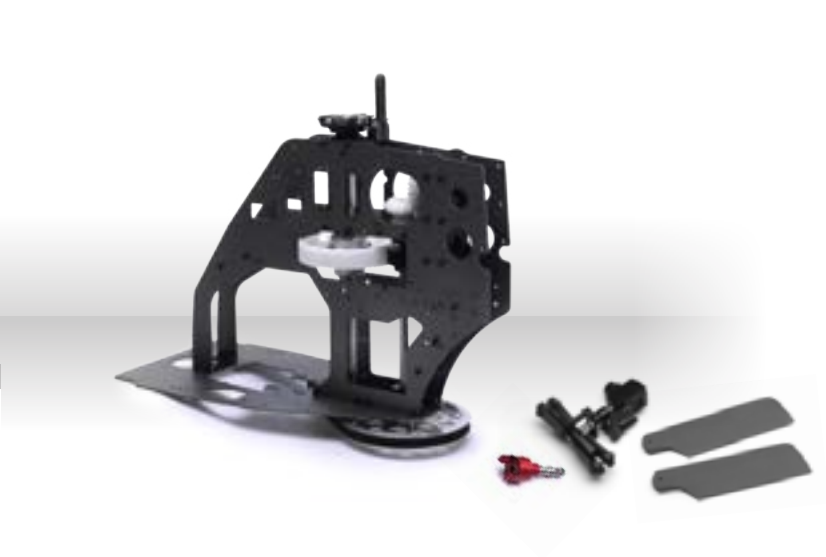
FUSELAGE

ROTOR HEAD

Fuselage	Ord.No. 7022
• 12-part GRP fuselage • window set, smoked • laser cut wooden formers • stainless steel lattice frame • stainless steel tail rotor shaft (ø 8 mm) • landing gear (ø 15 mm) • various small parts	

2 blade rotor head	Ord.No. 1005/49
swashplate driver	Ord.No. 68/50
main rotor shaft, 12 x 560 mm	Ord.No. 722/35
2 blade set ø 2160 mm	Ord.No. 415
rotor blade pouch	Ord.No. 33/1
pushrod, 2 pcs	Ord.No. 70/105-2

DRIVE // PETROL



petrol/electric mechanics	Ord.No. 470/23
petrol motor G240 23 cm³	Ord.No. 1023
silencer system	Ord.No. 722/16
on-board electric starter for G240	Ord.No. 1023/5
petrol kit incl. tank 540 cm³	Ord.No. 26/100
suppressed plug cap	Ord.No. 4321
fine-mesh filter	Ord.No. 830/68
fuel tubing, 1 m	Ord.No. 830/83
carburetor intake trumpet	Ord.No. 1022/13

general tank accessories: see page 120

COCKPIT

DOOR FITTINGS SET

PILOT

SEARCHLIGHT

ROTOR HEAD



Ord.No. 722/29



Ord.No. 722/5



Ord.No. 1/40 // 1/49



Ord.No. 722/95 // 10/97



Ord.No. 1005/49



Photo: Nicolas Aubert · Pilot: Michel Revire

Mikhail Mil Leontyevich worked for 18 years with rotary-wing aircraft and helicopters before he founded Mil helicopters in 1947 in Moscow. Since the start of the company, Mil has developed more than 20 different helicopters with more than 200 variants. Our model of the Mil-2 is powered by the SPH5 turbine from JetCat and has an impressive 2.5 m rotor diameter.

SCALE 1:6
LENGTH 2200 mm
WIDTH 600 mm
HEIGHT 700 mm
ROTOR ø 2500 mm
WEIGHT approx. 17.5 kg
YEAR 2006

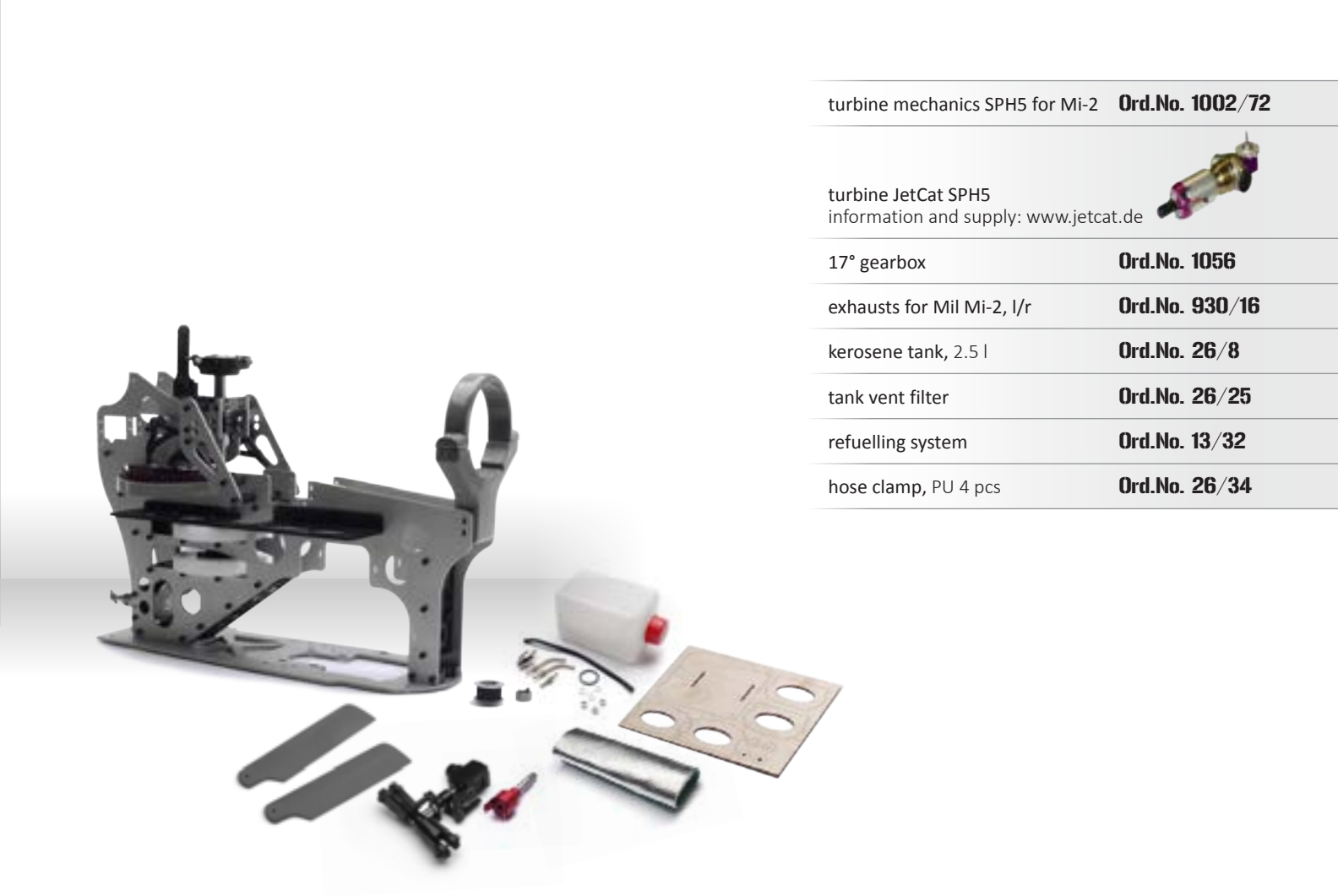
FUSELAGE

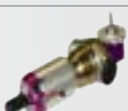
ROTOR HEAD

Fuselage	Ord.No. 9300
• 9-part GRP fuselage • window set • stainless steel tail rotor shaft (ø 8 mm) • spring-loaded 3-wheel undercarriage • laser cut wooden formers • various small parts	

3 blade rotor head	Ord.No. 703/40
swashplate driver	Ord.No. 68/50
main rotor shaft, 12 x 310 mm	Ord.No. 641/35
3 blade set ø 2500 mm	Ord.No. 416/3
rotor blade pouch	Ord.No. 33/3
pushrod, 3 pcs	Ord.No. 70/101-3

DRIVE // TURBINE



turbine mechanics SPH5 for Mi-2	Ord.No. 1002/72
turbine JetCat SPH5 information and supply: www.jetcat.de	
17° gearbox	Ord.No. 1056
exhausts for Mil Mi-2, l/r	Ord.No. 930/16
kerosene tank, 2.5 l	Ord.No. 26/8
tank vent filter	Ord.No. 26/25
refuelling system	Ord.No. 13/32
hose clamp, PU 4 pcs	Ord.No. 26/34

COCKPIT	DOOR FITTINGS SET	PILOT	DUMMY FUELTANKS	ROTOR HEAD
				
Ord.No. 930/29	Ord.No. 930/5	Ord.No. 1/16 // 1/60	Ord.No. 930/26	Ord.No. 703/40



Photo: Hans-Peter Schuchter · Pilot: Kurt Giovanelli

TOPSELLER

In 1955, Hughes Tool Company's Aircraft Division carried out a market survey which showed that there was a demand for a low-cost, lightweight two-seat helicopter. The division began building the Model 269 in September 1955. In 1964, Hughes introduced the slightly-larger three-seat model 269B which it marketed as the Hughes 300. In 1969 the improved Hughes 300C (sometimes 269C) was released.

SCALE 1:5
LENGTH 1440 mm
WIDTH 300 mm
HEIGHT 640 mm
ROTOR ø 1680 mm
WEIGHT approx. 7.5 kg
YEAR 2002

FUSELAGE

Fuselage	Ord.No. 6030
• GRP canopy and stabilisers • tinted front glazing • rear boom tube • tail rotor shaft (ø 2 mm) • metal supports for mounting the mechanics • dome • landing gear (ø 12 mm) • various small parts	

ROTOR HEAD

3 blade rotor head	Ord.No. 703/30
swashplate driver	Ord.No. 68/20
main rotor shaft, 10 x 286 mm	Ord.No. 35/41
3 blade set ø 1680 mm	Ord.No. 404/40
rotor blade pouch	Ord.No. 33/33
pushrod, 3 pcs	Ord.No. 70/40-3

DRIVE // ELECTRIC



petrol/electric mechanics gear ratio 90:18	Ord.No. 1002/21
drive set 10S incl. motor Pyro 700-52 L, controller JIVE PRO 120+ HV	Ord.No. 3308
drive set 12S incl. motor Pyro 700-45 L, controller JIVE PRO 120+ HV	Ord.No. 3307

DRIVE // PETROL



petrol/electric mechanics gear ratio 90:18	Ord.No. 1002/21
petrol motor G240 23 cm³	Ord.No. 1023
silencer system	Ord.No. 116/95
petrol kit incl. tank 540 cm³	Ord.No. 26/100
suppressed plug cap	Ord.No. 4321
fine-mesh filter	Ord.No. 830/68
fuel tubing, 1 m	Ord.No. 830/83
carburetor intake trumpet	Ord.No. 1022/13
general tank accessories: see page 120	

COCKPIT



Ord.No. 603/29

DOOR FITTINGS SET



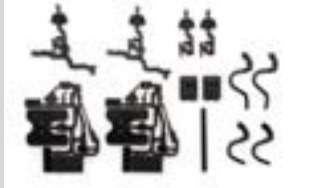
Ord.No. 603/5

PILOT



Ord.No. 1/55 // 1/59

JOYSTICKS & FOOT PEDALS



Ord.No. 31/33

ROTOR HEAD



Ord.No. 703/30

DECAL



Ord.No. 603/0

108



SCHWEIZER 300C

model size

1000



109



In 1955, Hughes Tool Company's Aircraft Division carried out a market survey which showed that there was a demand for a low-cost, lightweight two-seat helicopter. The division began building the Model 269 in September 1955. In 1964, Hughes introduced the slightly-larger three-seat Model 269B which it marketed as the Hughes 300. In 1969 the improved Hughes 300C (sometimes 269C) was released.

SCALE	1:4
LENGTH	2190 mm
WIDTH	650 mm
HEIGHT	835 mm
ROTOR	Ø 2200 mm
WEIGHT	approx. 15 kg
YEAR	2011

FUSELAGE

ROTOR HEAD

Fuselage	Ord.No. 6032
• GRP canopy • window set clear • rear boom tube • stainless steel tail rotor shaft (Ø 8 mm) • dome and swashplate guide • landing gear (Ø 12 mm) • various small parts	

3 blade rotor head	Ord.No. 703/38
swashplate driver	Ord.No. 68/50
main rotor shaft, 12 x 560 mm	Ord.No. 722/35
3 blade set Ø 2200 mm	Ord.No. 413/2
rotor blade pouch	Ord.No. 33/3
pushrod, 3 pcs	Ord.No. 70/142-3

DRIVE // ELECTRIC



petrol/electric mechanics for Schweizer 300C	Ord.No. 632/22
toothed belt pulley 77 teeth	Ord.No. 722/77
drive set 12S incl. motor Pyro 800-40 L, controller JIVE PRO 120+ HV	Ord.No. 3303

DRIVE // PETROL



petrol/electric mechanics for Schweizer 300C	Ord.No. 632/22
petrol motor G290 29 cm³	Ord.No. 1030
silencer system	Ord.No. 632/16
petrol kit incl. tank 540 cm³	Ord.No. 26/100
suppressed plug cap	Ord.No. 4321
fine-mesh filter	Ord.No. 830/68
fuel tubing, 1 m	Ord.No. 830/83
carburetor intake trumpet	Ord.No. 1022/13
general tank accessories: see page 120	

COCKPIT



Ord.No. 632/29

DOOR FITTINGS SET



Ord.No. 330/5

PILOT



Ord.No. 1/40 // 1/49

DUMMY BELTS



Ord.No. 632/45

ROTOR HEAD



Ord.No. 703/38



T-REX

VARIO FUSELAGES FOR T-REX 700 (2011, DFC, -DOMINATOR)

These kits include everything to transform the T-Rex 700E helicopter into a ready-to-fly scale model. The tail rotor shaft of the T-Rex is used. The components of these kits are similar to all other fuselage kits of Vario (e.g., unpainted GRP parts). In addition, the T-Rex kits contain the door hardware kit. Optional: cockpit interior, scale parts and true to original multi blade head.

H135 // ORD.NO. 1310 // 1:6

The 8 blade Fenestron is included, an upgrade (**Ord.No. 93/100**) to a 10 blade Fenestron is possible. This setup is intended for operation with the original 2 blade rotor head of the T-Rex Trainer.

BO 105 // ORD.NO. 6007 // 1:6

If you prefer the left hand blade rotation as full size, the freewheel of the T-Rex mechanics can be reversed by 180°. The l.h.r. rotor blades have the **Ord.No. 404/31**.

OPTION: 4 BLADE ROTOR HEAD

4 blade rotor head	Ord.No. 704/32
--------------------	-----------------------

dome fittings set	Ord.No. 607/53
-------------------	-----------------------

main rotor shaft, 12 x 244 mm	Ord.No. 607/35
-------------------------------	-----------------------

4 blade set ø 1600 mm, r.h.r.	Ord.No. 404/18
-------------------------------	-----------------------

For the 4 blade configuration the electric motor Kontronik Pyro 700-34 **Ord.No. 3308/13** for 12S is required.

LAMA ALOUETTE II // ORD.NO. 3007 // 1:6

A special feature of this model is the detachable nose section, which makes a battery change easy.

If you want to implement the 3 blade-tail rotor, which is typical for a Lama, the tail rotor fittings set **Ord.No. 92/87** developed especially for the T-Rex Lama is recommended.

OPTION: 3 BLADE ROTOR HEAD

3 blade rotor head	Ord.No. 703/32
--------------------	-----------------------

dome fittings set	Ord.No. 307/53
-------------------	-----------------------

main rotor shaft, 12 x 244 mm	Ord.No. 607/35
-------------------------------	-----------------------

3 blade set ø 1600 mm, r.h.r.	Ord.No. 404/28
-------------------------------	-----------------------

For the 3 blade configuration the electric motor Kontronik Pyro 700-34 **Ord.No. 3308/13** for 12S is required.

BELL 212 // ORD.NO. 2127 & BELL 412 // ORD.NO. 4127 & BELL UH-1D // ORD.NO. 2057 // 1:7

The rear drive is via a ø 5 mm Flex shaft.

OPTION: 2 BLADE ROTOR HEAD WITH WIPPE

rocker kit	Ord.No. 257/45
------------	-----------------------

dome fittings set	Ord.No. 257/53
-------------------	-----------------------

swashplate driver	Ord.No. 68/50
-------------------	----------------------

main rotor shaft (vorbildgetreu)	Ord.No. 257/36
----------------------------------	-----------------------

scale 2 blade set, l.h.r. will need the freewheel turning over	Ord.No. 419
---	--------------------

pushrod, 4 pcs	Ord.No. 70/100-4
----------------	-------------------------

For the 2 blade configuration the electric motor Kontr. Pyro 700-34 **Ord.No. 3308/13** for 12S is required.

OPTION: 4 BLADE ROTOR HEAD

4 blade rotor head	Ord.No. 704/36
--------------------	-----------------------

swashplate	Ord.No. 832/68
------------	-----------------------

main rotor shaft, 12 x 278 mm	Ord.No. 257/35
-------------------------------	-----------------------

4 blade set ø 1680 mm, r.h.r.	Ord.No. 404/39
-------------------------------	-----------------------

pushrod, 2 pcs (2x already included in mechanics)	Ord.No. 70/100-2
--	-------------------------

For the 4 blade configuration the electric motor Kontronik Pyro 700-34 **Ord.No. 3308/13** for 12S is required.

SKYFOX GOES ELECTRIC

The e-power mechanics **Ord.No. 1002/15** which derives from the legendary Vario SkyFox mechanics fits to the following fuselages:
Recommended LiPo battery: 10 S (resp. 2x 5S)



Fuselage	Ord.No.	Ø	drive set
Alouette II	3001	1600 mm	3313
BK 117	7001	1600 mm	3313
Bo 105	6001	1600 mm	3313
Ecureuil	9001	1600 mm	3313
Tiger	9003	1600 mm	3313
Airwolf Carbon	2001 2008	1500 mm	3314
Airwolf	2003	1810 mm	3312
Bell 47	4001	1810 mm	3312
Bell 204	2041	1810 mm	3312
Bell 205	1100	1630 mm	3313
Bell 205	2051	1810 mm	3312
Bell 212	2130	1810 mm	3312
Bell 412	4130	1680 mm	3312
Bell 222	2005	1500 mm	3314
Bell 230	2310	1810 mm	3312
JetRanger III	1006	1500 mm	3314
Long Ranger	5006	1500 mm	3314
Agusta 109 K2	9021	1600 mm	3313
Hughes 500E	9005	1500 mm	3313
Schweizer 300	6031	1600 mm	3313
Westland Lynx	7050	1600 mm	3313



OTHER BRANDS



► For current powerful brushless motors we recommend the following tuning parts for your SkyFox. The corresponding rotor head components & more accessories (like gearbox and scale options) can be found in our online shop.



ORD.NO. 1006/15
alu main gearbox
with bevel gears module 0.8

ORD.NO. 1006/10
main gearbox



Tiger



Westland Lynx



Dauphin



Photo/Model: Dennis Ideue H 155



Photo: Dr. Ulrich Kund Bell 205



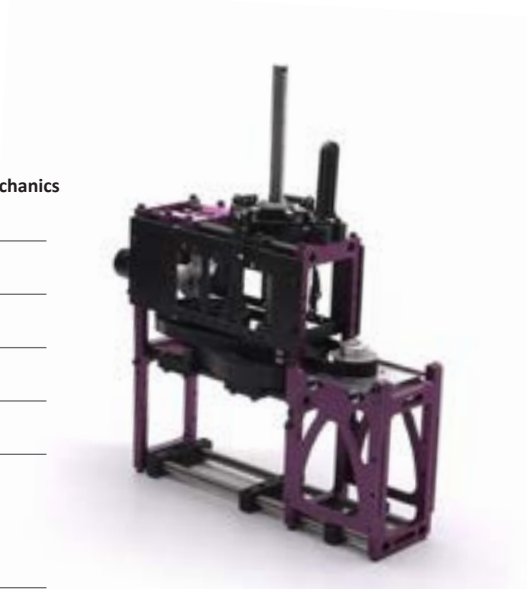
JetRanger

X-TREME GOES ELECTRIC

Light and strong electric mechanics
Recommended LiPo battery: 10 S (resp. 2x 5S) / 12 S (resp. 2x 6S) LiPo battery



Fuselage	Ord.No.	Ø	drive set 10S//12S	recommended mechanics
BK 117	7001	1600 mm	3309 // 3309/12	1002/7
Bo 105	6001	1600 mm	3309 // 3309/12	1002/7
Dauphin	1360	1600 mm	3309 // 3309/12	1002/9
H 135	1330	1680 mm	3310 // 3310/12	1002/8
H 145	1460	1680 mm	3310 // 3310/12	1002/4
H 155	1550	1630 mm	3309 // 3309/12	1002/3
Airwolf	2003	1810 mm	3310 // 3310/12	1002/4
Bell 205	2051	1810 mm	3310 // 3310/12	1002/4
Bell 212	2130	1810 mm	3310 // 3310/12	1002/4
Bell 412	4130	1680 mm	3310 // 3310/12	1002/4
Bell 230	2310	1810 mm	3310 // 3310/12	1002/4
Agusta 109 K2	9021	1600 mm	3309 // 3309/12	1002/7



► The corresponding rotor head components & more accessories (like gearbox and scale options) can be found in our online shop.

PETROL.



PETROL HELICOPTERS

Piston engines are true to original for Schweizer, Robinson R22 and Bell 47. These helicopter types are shown in the first part of the catalogue. Vario has many more models for petrol mechanics – see the following list. The advantage of petrol models is obvious: reliable drive, long flight times, short refuelling and an affordable and worldwide available fuel.

AIRBUS
HELICOPTERS



Bell
Helicopter
A Textron Company

OTHER BRANDS

fuselage	Ord.No.	Ø	mechanics	motor	silencer	rotor head accessories
Alouette II	3000	1680 mm	1002/21	1023	116/95	see p. 36
BK 117	7002	1600 mm	1002/22	1023	116/95	see p. 20
Bo 105	6002	1600 mm	1002/22	1023	116/95	see p. 24
Ecureuil	9002	1680 mm	1002/21	1023	116/91	see p. 28
H 135	1320	1680 mm	1002/29 10 blade Fenestron 1002/25 8 blade Fenestron	1023	116/96	see p. 10
H 145	1450	1680 mm	1002/21	1023	116/95	see p. 14
Airwolf	2002	1810 mm	1002/23	1023	116/95	see p. 60
Bell 205 / 204	2050 / 2040	1810 mm	1002/23	1023	116/85 / 116/89	see p. 50, 51
Bell 212 / 412	2120 / 4120	1810 / 1680 mm	1002/23 / 1002/21	1023	116/95	see p. 50, 51 / 52
Bell 230 / 430	2300 / 4300	1810 / 1680 mm	1002/23	1023	116/95	see p. 58 / 59
Cobra	7900	1810 mm	1002/23	1023	116/89	see p. 70
JetRanger "big"	1004	1810 mm	1002/21	1023	116/95	see p. 72
Agusta 109 K2	9020	1600 mm	1002/22	1023	116/99	see p. 82
Hughes 500D / E	9044 / 9041	1880 mm	1002/26	1023	116/95	see p. 96 / 98
Hughes 500E	9006	1680 mm	1002/21	1023	116/99	see p. 94

VARIO ACROBATIC MECHANICS

Agusta AW139	1390	1880 mm	1002/40	1030	139/16	see p. 78
Air-Crane	6400	2160 mm	1002/35	1023	640/16	see p. 84

Bo 105	6004	1880 mm	1002/40	1023	604/16	see p. 26
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OTHER MECHANICS

Lama	3300	2360 mm	470/22	1023	940/16	see online
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PETROL

POD AND BOOM

complete kits incl. mechanics, rotor head, rotor blades, canopy, landing gear, tail boom, tail rotor components and various small parts



TOPSELLER

Benzin
Trainer

BENZIN-TRAINER

affordable starter kit
fits in many Vario scale
models (→ p. 116)

ORD.NO. 8301
ORD.NO. 8310
ORD.NO. 8311
ORD.NO. 8330

Ø 10 MM ROTOR SHAFT
flybar
flybarless
flybar · motor/silencer
flybarless · motor/silencer

ORD.NO. 8312
ORD.NO. 8315
ORD.NO. 8313
ORD.NO. 8314

Ø 12 MM ROTOR SHAFT
flybar
flybarless
flybar · motor/silencer
flybarless · motor/silencer

ACCESSORIES

ORD.NO. 1023
petrol motor 23 cm³
ORD.NO. 116/95
silencer system

XL

XLV

ORD.NO. 2600

flybar

ACCESSORIES

ORD.NO. 1023
petrol motor 23 cm³
ORD.NO. 260/16
silencer system
ORD.NO. 416
2 blade set Ø 2500 mm



BENZIN
Acrobatic

BENZIN-ACROBATIC

ACCESSORIES

ORD.NO. 1023
petrol motor 23 cm³
ORD.NO. 834/16
silencer system
ORD.NO. 834/15
CFRP-upgrade

ORD.NO. 8302
ORD.NO. 8320

Ø 1630 MM
flybar
flybarless

ORD.NO. 8304
ORD.NO. 8340
ORD.NO. 8303
ORD.NO. 8333

Ø 1780 MM
flybar
flybarless
flybar · motor/silencer
flybarless · motor/silencer

the Acrobatic version
fits in Vario Agusta
AW139, Air-Crane, Bo 105

PETROL



PETROL MOTOR G240, 23 CM³ // ORD.NO. 1023
PETROL MOTOR, 29 CM³ // ORD.NO. 1030

including:
Ord.No. 1023/11
carburetor

Ord.No. 1023/1
throttle lever

Ord.No. 1022/3
high performance spark plug

Ord.No. 830/3
cooling fan puller



ORD.NO. 4321
suppressed plug cap



ORD.NO. 1022/13
carburetor intake trumpet
optimizes the flow of air
entering the carburetor
incl. screws and gasket
Ord.No. 1022/14



ORD.NO. 830/67
cooling fan for petrol motor



ORD.NO. 830/64
toothed belt clutch bell
alu, 22 teeth, twice ball raced
(incl. clutch lining
48 x 45 x 16.5 mm **Ord.No. 830/8**)
incl. flywheel, split taper collet,
circlip



ORD.NO. 830/7
flywheel
dimensions: ø 60 x 16 mm



ORD.NO. 830/65
split taper collet
ø 8 mm



ORD.NO. 64/57
circlip
2 pcs



ORD.NO. 11/84
assembly spanner
for fixing the flywheel



ORD.NO. 834/38
mechanics/motor
support kit



ORD.NO. 1023/5
on-board electric starter for G230/G240, 9.6 V, including:
• starter motor with pinion gear **Ord.No. 1023/9**
• base plate and reduction gear stage incl. freewheel
• modified fan
• servo with switch adaptor to control the start-up
• safety switch (must be used with the throttle servo
to prevent starts above the low stick positio)



ORD.NO. 1022/4
oil for petrol motor 1l
for best lubrication



ORD.NO. 9/20
sound-damping material
dimensions: approx. 200 x 10 x 1000 mm
weight: approx. 75 g



ORD.NO. 9/26
heat isolating stripe
ceramic
dimensions: 50 x 3 x 1000 mm
for turbine exhaust



ORD.NO. 9/25
heat reflective mat
dimensions: approx. 300 x 700 mm

► Silencer, manifolds and gaskets can be found in our online shop.

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PETROL TANKS //



Ord.No. 830/26
tank 540 cm³



Ord.No. 834/26
tank 540 cm³ Acrobatic



Ord.No. 3720
filling station 3 l



Ord.No. 3741
separate pump holder
and hand wind pump



Ord.No. 830/68
fine-mesh filter



Ord.No. 26/7
tank 2.5 l



Ord.No. 830/27
tank 540 cm³



Ord.No. 140/26
tank 1 l



Ord.No. 26/5
tank 1.25 l



Ord.No. 26/8
tank 2.5 l



Ord.No. 26/30
felt clunk pick-up



Ord.No. 13/27
filler valve fairing

TOPSELLER



Ord.No. 13/25
incl. **Ord.No. 13/28 + 13/24**
filler valve



Ord.No. 830/82
fuel tubing



Ord.No. 830/83
fuel tubing



Ord.No. 26/50
kevlar tank 2.5 l



Ord.No. 26/60
kevlar tank 2.8 l



Ord.No. 26/70
kevlar tank 2.8 l



Ord.No. 3744
filling station 20 l



Ord.No. 3740
filling station 10 l



Ord.No. 3721
geared pump



Ord.No. 830/24
fuel tank nipple
with bend M5



Ord.No. 116/5
fuel tank nipple /
pressure nipple M5



Ord.No. 26/1
fuel tubing plug



Ord.No. 26/2
rubber cap for
fuel tank nipples



Ord.No. 830/68
fine-mesh filter



Ord.No. 26/30
felt clunk pick-up



Ord.No. 13/27
filler valve fairing



Ord.No. 13/25
incl. **Ord.No. 13/28 + 13/24**
filler valve



Ord.No. 13/32
refuelling system



Ord.No. 26/34
hose clamp



Ord.No. 830/82
fuel tubing



Ord.No. 3741
separate pump holder
and hand wind pump



Ord.No. 3721
geared pump



Ord.No. 830/24
fuel tank nipple
with bend M5



Ord.No. 116/5
fuel tank nipple /
pressure nipple M5



Ord.No. 10/82
fuel tubing
for methanol



Ord.No. 26/2
rubber cap for
fuel tank nipples



Ord.No. 26/34
hose clamp



Ord.No. 26/25
tank vent filter

TANKS

PETROL

KEROSENE

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KEROSENE TANKS //



PLASTIC RIVETS

Vario rivets available in black and white. These rivets are normally applied after the preparation and priming of the fuselage prior to the final paint finish. Firstly mark the required position of the rivets on the fuselage then drill 1 mm holes with the supplied drill bit. The rivets can then be cut off and glued in the holes using thin viscosity super glue (**Ord.No. 10/127**). Once fitted and painted they give an excellent scale appearance.

white **Ord.No. 10/30**
black **Ord.No. 10/32**
1200 pcs



4 WAYS TO GET TO IT RIVET TECHNIQUES



SELF-ADHESIVE RIVETS

The self adhesive silver / grey vinyl rivets are cut into strips to suit your model and then applied directly to the fuselage. The advantage of this method is the rivets are fast to apply and evenly spaced.

Ord.No. 10/33
1200 pcs



RIVET STAMP SET

The stamp is used to produce several rivets evenly spaced apart. This tool makes the whole process easier. After the tray is filled with glue, the tip of the punch / tool will be immersed in the glue giving a uniform droplet size.

Ord.No. 10/280
package content: riveting stamp in 3 sizes,
shell, liquid glue 60 ml



SCALE MODEL RIVET KIT

The kit contains a 50 ml bottle of rivet glue and a toolbox. The Vario rivet glue is colored and has an ideal consistence. The toolbox with 4 different syringes and 5 different caps (each with 4) permit different techniques and intensities of application. The rivet glue can be re-ordered seperately (**Ord.No. 10/281**). Users of this rivet glue will appreciate the ease of application and with a little practise how fast it is to apply correct sized rivet heads.

Ord.No. 10/28



DOOR ACCESSORIES



Ord.No. 30/36
door magnets
4 pcs



Ord.No. 30/28
threaded bushes for
door handles
2-part, each 2 pcs



Ord.No. 330/36
door latch
e.g. for lama
2-part, each 4 pcs



Ord.No. 400/14
edging strip, black
approx. 600 x 4.5 mm
inside approx. 0.5 mm, elastic



Ord.No. 20/21
retractable hinges
e.g. for BK 117



Ord.No. 20/15
door hinges
non-working
2-part, each 12 pcs



Ord.No. 20/18
door hinges
e.g. for Bell UH
2-part, each 2 pcs



Ord.No. 30/34
door handle set
5-part, each 2 pcs



Ord.No. 105/35
door handle set big
2-part, each 4 pcs



Ord.No. 909/6
sliding door guide
2-part, each 2 pcs



Ord.No. 30/48
sliding door guide
8 pcs

► On the fuselage pages, you can find the corresponding door fittings set for your helicopter model. These always contain door handles, magnets and more accessories.

WINDOWS



Ord.No. 20/20
sliding window



Ord.No. 20/19
door hinges
2-part (l/r), each 2 pcs



Ord.No. 104/35
sliding latch set
2x **Ord.No. 10/35** sliding latch
2x Allen screw M2 x 10
8x countersunk screw 1.3 x 10 mm

SCREEN WIPERS & ANTENNAS



Ord.No. 30/31
scale fittings set up to scale 1:5:
4x screen wipers (width: 8.5 cm)
2x screen wipers (width: 5.6 cm)
19x antennas, 4x door handles, 2x pitot tubes

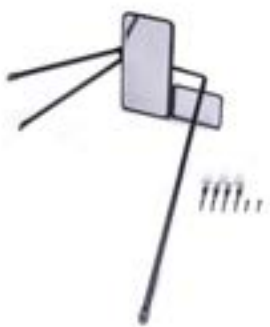
► Screen wipers on a scale of 1:4
see the corresponding fuselage.

MIRRORS



Ord.No. 30/39
mirror set ø 24 mm

Ord.No. 30/40
mirror set ø 40 mm



Ord.No. 340/40
mirror set for large-scale models (e.g. lama)
mirror sizes: approx. 40 x 84 and 14 x 22 mm

WIRE CUTTERS



Ord.No. 20/22
WSPS set
total length: 95 mm
2 pcs



Ord.No. 20/23
WSPS set
total length: 140 mm
2 pcs

LANDING SKID ACCESSORIES



Ord.No. 72/19
rubber bellow
5 x 15 x 57 mm
perfect imitation fairing
for the rotor shaft



Ord.No. 20/32
rubber bellow
6 x 16 x 65 mm
for protecting the
metal articulated joint



Ord.No. 20/30
rubber bellow set
5 parts
3 different sizes



Ord.No. 4/1 **TOPSELLER**
stainless steel clip set
2 parts
each 4x Ø 3 mm and 4x Ø 6 mm
for Alouette and Bell 47 G

LOAD BASKET

BEAR PAWS



Ord.No. 302/36
load basket for Alouette II
275 x 50 x 55 mm

Ord.No. 341/36
load basket for Lama
410 x 100 x 70 mm



Ord.No. 12/20
bear paws
for Bo 105, BK 117, EC
scale 1:6



Ord.No. 12/23
bear paws
incl. screws
for Ecureuil
scale 1:4



Ord.No. 12/21
bear paws
for skid tube Ø 15 mm

Ord.No. 12/22
for skid tube Ø 20 mm

SKID END CAPS

FOR Ø10 MM



Ord.No. 12/1
skid end caps
for skid tube Ø 10 mm
with 0.5 mm wall thickness
2 pairs



Ord.No. 12/2
skid end caps
for skid tube Ø 10 mm
with 1.0 mm wall thickness
2 pairs



Ord.No. 10/44
skid end caps
for skid tube Ø 10 mm
4 pcs

FOR Ø12 MM



Ord.No. 12/3
skid end caps
for skid tube Ø 12 mm
2 pairs



Ord.No. 10/43
skid end caps
for skid tube Ø 12 mm
4 pcs



Ord.No. 6/8
skid end caps Bell UH
for skid tube Ø 12 mm
2 pairs

FOR Ø15 MM



Ord.No. 10/42
skid end caps
for skid tube Ø 15 mm
4 pcs

FOR Ø18 MM



Ord.No. 12/4
skid end caps
for skid tube Ø 18 mm
4 pcs

FOR Ø20 MM



Ord.No. 10/46
skid end caps Lama
for skid tube Ø 20 mm
2 pcs



Ord.No. 10/49
skid end caps Bell 47 GIII
for skid tube Ø 20 mm
2 pairs

SKID LIGHTING



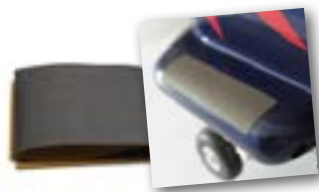
Ord.No. 12/30
skid lighting
for skid tube Ø 10 mm

Ord.No. 12/32
for skid tube Ø 12 mm

Ord.No. 12/35
for skid tube Ø 15 mm

Ord.No. 12/40
for skid tube Ø 20 mm

DOORSTEPS



Ord.No. 30/41
non-slip strip
self-adhesive
80 x 500 mm



Ord.No. 30/44
scale doorstep
with self-adhesive
non-slip strips



Ord.No. 18/19
L-form 8 x 4 x 250 mm
e.g. for self built sliding doors



Ord.No. 30/42
undercarriage / maintenance steps
depth: approx. 6 mm
width: 15 resp. 20 mm

RADAR NOSES



Ord.No. 133/22
radar nose cone
10 x 7.5 x 8 cm
e.g. for EC 135
and EC 145



Ord.No. 600/6
radar cover
61 x 41 x 28 mm
weight: approx. 3 g
e.g. for Bo 105
(Ord.No. 6002)



Ord.No. 20/39
ventilation slots
17 x 90 mm
2 pcs



Ord.No. 20/14
ventilation grilles
3 parts



Ord.No. 20/9
grille, flexible
195 x 300 mm
1 mm grid
aluminum/expanded metal

Ord.No. 412/22
10 x 8 x 6 cm
e.g. for Bell 412
(Ord.No. 4120)

Ord.No. 414/22
10 x 12 x 10 cm
e.g. for Bell 412
(Ord.No. 4140)

Ord.No. 20/40
25 x 95 mm
slot width: 18 mm
2 pcs

Ord.No. 20/41
35 x 100 mm
slot width: 23 mm
2 pcs

Ord.No. 20/11
250 x 250 mm
5 mm grid
metal, silver-coloured

Ord.No. 20/12
200 x 250 mm
1.5 mm grid
metal, silver-coloured

Ord.No. 20/13
200 x 400 mm
1 mm grid
plastic, white

VENTILATION GRILLES / SLOTS

WINCHES



Ord.No. 350/45
working winch
fully functional
e.g. for Alouette III
*Photo: Uwe Knoke



Ord.No. 770/10
cable winch crane
fully functional
e.g. for BK 117 (Ord.No. 7700)

Ord.No. 701/100
e.g. for BK 117 (Ord.No. 7002)

Ord.No. 3173
controller for winch motor
Ord.No. M1023/5
servo
*Photo: Norbert Graf



Ord.No. 22/29
swivel for winch cable



Ord.No. 30/45
hook
length: 50 mm

Ord.No. M1023/5
servo



Ord.No. 330/45
hook
e.g. for Lama

Ord.No. M1023/5
servo

SIREN & LOUDSPEAKER



Ord.No. 414/45
winch, electric
e.g. for Bell 212 / 412

Ord.No. 13/2
loud-hailers siren
6 - 12 Volt
weight: approx. 30 g



Ord.No. 600/13
loudspeaker
conic
Ø 11 - 35 mm
length: 38 mm
weight: approx. 1.5 g



Ord.No. 1/51
heli rescue triangle

FILLER VALVES

► On page 120, you can find tank filler valves, which can also be used as scale parts of an electric helicopter model.

DECALS // STICKERS



Ord.No. 10/47
scale placards



Ord.No. 2/30
registration stickers
type heights: 5 / 4.4 / 3 cm



Ord.No. 14/34
sticker arrows "Danger"



Ord.No. 2/34
warning notice tail rotor
3.7 x 1.5 cm
2-part (l/r)



Ord.No. 10/45
German flag
1.5 x 3 / 2 x 3 cm
transfer / sticker
2 x 2 pcs



Ord.No. 2/50 - 2/65
coat of arms of the German
states, approx. 4.5 x 6.5 cm
2 pcs

POLIZEI

Ord.No. 2/32
Polizei lettering
20 x 5.3 cm
2 pcs



Ord.No. 2/31
Bundeswehr logo
6.3 x 6.3 cm
4 pcs



Ord.No. 412/0
decal sheet AIR ZERMATT
33 x 23 cm



Ord.No. 307/1
decal stars AIR ZERMATT
red + white
in 3 sizes
Ord.No. 307/0
airbrush template
AIR ZERMATT for lama



Ord.No. 2/82
identification plate
Eurocopter
BK 117
1.5 x 1.5 cm



Ord.No. 2/83
identification plate
Bell Helicopter
Bell 230
1.5 x 1.5 cm



Ord.No. 14/1
Bell Helicopter
transfer sticker
3.7 x 2.4 cm
2 pcs



Ord.No. 14/100
sticker lettering
Bell Helicopter, grey
8 x 2.5 cm
2 pcs



Ord.No. 14/2
Airbus Helicopters
transfer sticker
7 x 2 cm
2 pcs



Ord.No. 2/36
hinge stickers
1:7.2
120 pcs



Ord.No. 2/35
door latch stickers
2-part (l/r)

DUMMY EXHAUSTS



Ord.No. 20/35
turbine outlet for UH-1D
ø 42 mm



Ord.No. 20/36
turbine outlet for UH-1D / EC 135
ø 53 mm



Ord.No. 20/37
turbine outlet for UH-1B
ø 64 mm



Ord.No. 505/1
turbine outlet for Long Ranger
approx. 25 x 52 mm
height 15 / 20 mm



Ord.No. 701/47
exhaust pipes for BK 117
plastic, grey
ø approx. 42 mm
height approx. 9 / 22 mm
2 pcs



Ord.No. 133/32
exhaust pipes for EC 135
plastic, grey
ø approx. 60 mm
height approx. 45 / 115 mm
2 pcs



Ord.No. 30/30
exhaust pipes for JetRanger
plastic, chrome-plated
ø approx. 22 mm
ext. height approx. 50 mm
2 pcs



Ord.No. 30/29
exhaust pipes for JetRanger XL
GRP



Ord.No. 10/19
exhaust pipes
metal
ø approx. 32 mm
height approx. 40 mm
2 pcs



Ord.No. 10/20
exhaust pipes
metal
ø approx. 40 mm
height approx. 25 mm
2 pcs



Ord.No. 10/21
exhaust pipes
metal
ø approx. 32 mm
height approx. 27 / 57 mm
2 pcs



Ord.No. 30/32
exhaust pipes for Bell 222 and Airwolf
plastic, grey
ø approx. 47 mm
ext. height approx. 35 mm
2 pcs



Ord.No. 136/47
exhaust pipes for Dauphin
plastic, grey
ø approx. 47 mm
height approx. 75 mm
2 pcs



Ord.No. 60/30
exhaust pipes for Bo 105 and Ecureuil



Ord.No. 30/33
exhaust pipe for Ecureuil, single turbine



Ord.No. 30/47
exhaust pipes for Bell 230 and big Airwolf
plastic, grey
ø approx. 50 mm
height approx. 70 mm
2 pcs



Ord.No. 907/9
exhaust pipe for MD520N
plastic, grey
ø approx. 50 mm
height approx. 58 mm



Ord.No. 30/37
exhaust pipes for Lynx
plastic, grey
ø approx. 37 mm
height approx. 20 mm
2 pcs



Ord.No. 604/47
exhaust pipe for Bo 105
plastic, grey
ø approx. 37 mm
height approx. 40 mm
2 pcs



Ord.No. 139/32
dummy exhaust pipes
for Agusta AW139



Ord.No. 121/16
dummy exhaust pipe
for EC 120 electric



Ord.No. 201/9
jet nozzle for Airwolf
plastic
ø approx. 35 mm
height approx. 30 mm
2 pcs



Ord.No. 530/17
exhaust cover ø 55 mm
Ord.No. 350/17
exhaust cover ø 90 mm
for Lama or Alouette III

► Metal exhaust pipes have a true to design color scheme produced by heat.

SEARCHLIGHTS



Ord.No. 10/95
searchlight ø 40 mm
length: 48 mm, weight: 70 g
6 - 9 V
including:
Ord.No. 10/99
halogen lamp, 6 V



Ord.No. 10/98
searchlight ø 50 mm
required power source: 4.8 V



Ord.No. 10/93
searchlight ø 54 mm
length: 74 mm
weight: 70 g
12 V



Ord.No. 10/94
searchlight ø 57 mm
e.g. for Bell 47
weight: approx. 70 g
length: 70 mm
12 V



Ord.No. 20/45
folding searchlight
length: 50 mm



Ord.No. 20/49
folding searchlight
length: 75 mm

The folding searchlight is triggered by a servo and has a length of 75 mm. It is suitable for models with the scale 1:4, 1:5 and 1:6. Equipped with 3 Watt LEDs, also visible by daylight.



Ord.No. 10/97
integrated searchlight ø 21 mm
installed depth: 14.5 mm
required power source: 4.8 V

POSITION / ACL



Ord.No. 20/59
navigation lights complete set

LEDs (3 watt):
1x red and 1x green for position recognition
(steady light, therefore with heat sink),
2x white and 2x red for anticollision

lighting electronics
Aurora, 6-channel, small, adjustable without PC
incl. rechargeable battery pack

formed parts for the integration of this lighting,
e.g. **Ord.No. 10/18**



Ord.No. 20/60
position light 4.8 V ø 10 mm

Ord.No. 20/65
position light 4.8 V ø 12 mm

Ord.No. 20/70
position light 4.8 V ø 15 mm



Ord.No. 10/96
anticollision light 4.8 V
for ø 12 mm drill hole
height above model: 21 mm

Ord.No. 10/960
rotating beacon 4.8 V

including:
Ord.No. 10/18
lamp holder red



Ord.No. 10/48
dummy navigation light
2 pcs



Ord.No. 10/15
navigation lights, ultra-bright
4.8 - 6 V
approx. 30 g



Ord.No. 20/17
tail navigation lights



Ord.No. 20/51
lamp sockets red / green
in 4 sizes (each 2 lamps
(1x red + 1x green)):
ø 10, 12, 15, 20 mm



Ord.No. 20/52
lamp sockets clear
in 4 sizes
(each 4 lamps):
ø 10, 12, 15, 20 mm

HELICOPTER ARMING



Ord.No. 10/22

dummy rockets
suitable for Ord.No. 2001,
2008, 2002 and 2003



Ord.No. 201/9

jet nozzle for Airwolf
PVC, height approx. 30 mm
2 pcs
suitable for Ord.No. 2002 and 2003



Ord.No. 10/310

dummy rockets
suitable for Ord.No. 2004



Ord.No. 10/200

MGs, pneumatic
suitable for Ord.No. 2001 and 2008

including:
control electronics for MGs
(incl. manual (DVD))

Ord.No. 3175
Ord.No. 3617)

Ord.No. 10/210

MGs, pneumatic
suitable for Ord.No. 2002 and 2003

including:
control electronics for MGs
(incl. manual (DVD))

Ord.No. 3175
Ord.No. 3617)



Ord.No. 10/205

Airwolf dummy machine guns
suitable for Ord.No. 2001,
2008, 2002 and 2003



Ord.No. 160/10
expansion set for lowering the undercarriage
suitable for Ord.No. 2001 and 2008



Ord.No. 903/10
weapons system with nose cannon
suitable for Tiger



Ord.No. 20/38
dummy turbine with electronics
2 sets required
suitable for Ord.No. 2004



Ord.No. 790/10
rocket / gun set for Cobra



Ord.No. 630/715
weapon kit for Apache 1:7



Ord.No. 751/205
MG for Apache



Ord.No. 10/300
rocket launcher
suitable for Ord.No. 2001,
2008, 2002 and 2003

Ord.No. 3174
switch module



COCKPIT BELL 429
ORD.NO. 429/29 (1:5)



COCKPIT EC 135 / 145
ORD.NO. 138/29 (1:4)
134/629 // 144/629 (1:6)



COCKPIT EC 120
ORD.NO. 120/29 (1:4)



COCKPIT AGUSTA AW139
ORD.NO. 139/29 (1:7)



COCKPIT SCHWEIZER
ORD.NO. 632/29 (1:3)

► The new generation of Vario cockpits is a combination of GRP and 3-D printed parts. Here are just a few examples. The suitable cockpit for every helicopter model can be found on the helicopter pages at the front of the catalogue.



COCKPIT BELL UH / 212 / 412
ORD.NO. 212/729 (1:7) // 212/629 (1:6)
(kit excl. seats)

SEATS
ORD.NO. 206/728 (1:7) // 206/628 (1:6)

COCKPIT BO 105
ORD.NO. 604/29 (1:5)
(kit incl. seats)

UPGRADE ORD.NO. 604/529 (1:5)
(3D-printed instruments)

SEATS



Ord.No. 29/5
6.5 x 10.5 x 13 cm
scale 1:6 - 1:7
all-round seat

Ord.No. 120/280
10 x 12.5 x 26 cm
scale 1:4
for EC 120, Ecureuil
Ord.No. 120/28
2 pcs

Ord.No. 342/28
10.5 x 11 x 18.5 cm
scale 1:4.2
for Gazelle
2 pcs

Ord.No. 29/4
7 x 7 x 16 cm
scale 1:5
for Airwolf, Bell 230,
Bell 430



Ord.No. 138/280
9 x 10 x 20.5 cm
scale 1:4
for EC 135
Ord.No. 138/28
2 pcs

Ord.No. 206/628
8 x 11 x 13.5 cm
scale 1:6
for Bell UH
2 pcs

Ord.No. 139/728
7 x 8 x 17.5 cm
scale 1:7
for Agusta AW139
2 pcs

Ord.No. 134/638
6 x 6.7 x 13.7 cm
scale 1:6
for EC 135
Ord.No. 134/628
2 pcs

Ord.No. 206/728
6.5 x 10.5 x 12 cm
scale 1:7
for Bell UH
2 pcs



Ord.No. 20/87
LED strip white (60 LEDs / m)
e.g. for background lighting
of the cockpit instruments

SAFETY BELTS



Ord.No. 29/1
safety belt (scale 1:8 - 1:6)
2 pcs



Ord.No. 29/7
safety belt for large-scale models
(scale 1:5 - 1:4)
1 pcs

COCKPIT FLOORING



Ord.No. 20/25
floor cladding
170 x 300 x 0.4 mm
plastic
fluted finish

Ord.No. 20/26
floor cladding
170 x 300 x 0.4 mm
plastic
studded finish

Ord.No. 20/28
floor cladding
170 x 300 x 0.4 mm
aluminum
smooth finish

Ord.No. 20/24
decal studded cockpit
flooring (fine)
self-adhesive
300 x 420 mm

Ord.No. 29/6
cockpit paint
with paintbrush

Ord.No. 20/44
(rough)

INSTRUMENT PANEL



Ord.No. 29/2
scale instruments
each ø 12 mm

Ord.No. 29/3
scale instruments
each ø 16 mm

Ord.No. 29/8
decal scale instruments
scale 1:7



Ord.No. 29/81
decals for consoles &
overhead panel



Ord.No. 29/9
label for battery block
32 x 11 mm



Ord.No. 30/50
fire extinguisher
70 mm



Ord.No. 30/35
fire extinguisher
39 mm

JOYSTICK SET & FOOT PEDAL



JOYSTICK SET // SCALE 1:6 - 1:8

Ord.No. 31/31
2x cyclic pitch joystick (height: 8 cm)
2x collective pitch (length: 8.5 cm)
4x foot pedal
suitable e.g. for Bo 105 (Ord.No. 6001)

Ord.No. 31/32
like Ord.No. 31/31
but different shaped foot pedal
suitable e.g. for BK 117 (Ord.No. 7002)



JOYSTICK SET // SCALE 1:4 - 1:5

Ord.No. 31/34
2x cyclic pitch joystick (height: 12 cm)
2x collective pitch (length: 9 cm)
2x foot pedal
suitable e.g. for EC 135 (Ord.No. 1320)

Ord.No. 31/340
1x cyclic & collective pitch

JOYSTICK SET // SCALE 1:3 - 1:4

Ord.No. 31/40
movable
incl. cyclic pitch joystick (height: 16 cm)
suitable e.g. for EC 135 (Ord.No. 1380)



JOYSTICKS // COLLECTIVE



Ord.No. 139/717



Ord.No. 134/439
Ord.No. 134/639



Ord.No. 341/426
Ord.No. 341/526
Ord.No. 341/626



Ord.No. 341/427
Ord.No. 341/527
Ord.No. 341/627

JOYSTICKS // CYCLIC



Ord.No. 120/415



Ord.No. 139/715



Ord.No. 134/402
Ord.No. 134/602



Ord.No. 134/452
Ord.No. 134/652

ROTORBREAK

FOOT PEDALS



Ord.No. 120/416



Ord.No. 139/716



Ord.No. 134/408
Ord.No. 134/608



Ord.No. 341/445
Ord.No. 341/545
Ord.No. 341/645

The scale is indicated by the number after the slash in the Ord.No. – e. g. Ord.No. 206/628 has the scale 1:6.
All 3-D printed parts are available in many more scales upon request.

PILOTS & MORE



made in Germany

scale	white long sleeve & jeans	brown long sleeve & chino	pilot's helmet	leather jacket	overall	various
1:3 Philipp 600 mm	1/30	1/39	1/41 white (d)	1/320		glasses 1/310
1:4 William 450 mm	1/40	1/49	1/21 white (e)	1/420	1/42 red 1/45 olive-green	outdoor jacket 1/46 green 1/47 red telephone 134/460 flashlight 134/455
1:5 Paul 360 mm	1/55	1/59	1/37 white (d)	1/520		glasses 1/510
1:6 Gerhard 300 mm Sebastian 300 mm	1/16 Gerhard (beige suit)	1/60 Sebastian (olive-green suit)	1/31 white (a) 1/33 grey (b) 1/35 olive-green (c)		1/61 orange 1/62 red 1/63 blue 1/64 brown 1/65 olive-green	pilot's jacket 1/29 telephone 134/660 flashlight 134/655
1:7 Joe 240 mm	1/70	1/79	1/38 white (a)	1/720 1/72 red 1/73 blue 1/74 brown 1/75 olive-green	1/71 orange	
1:8 Daniel 220 mm	1/80	1/89	1/38 white (a)	1/820		
1:14 Elliot 125 mm	M870/27 (different clothes)					



LEATHER JACKET



OVERALL



PILOT'S JACKET



OUTDOOR JACKET



PILOT'S HELMET



GLASSES



TELEPHONE
ON BOARD



FLASHLIGHT
MAGLITE



ELECTRONICS



AXON

FLYBARLESS AS HELL

VORBEREITET MIT SENSORBUS
SENSOR BUS PREPARED

3 PARAMETERBÄNKE
3 BANKED PARAMETER SETS

MEHRERE HORIZONT- & RETTUNGSMODI
MULTIPLE HORIZON & RESCUE MODES

INTERNER DREHZAHLEBER
INTERNAL GOVERNOR

NEUESTE 32-BIT TECHNOLOGIE
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Ord.No. 3274

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Ord.No. 3271

bavarianDEMON 3X
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STABILIZATION SYSTEMS
RC HELICOPTERS AND RC PLANES
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SERVOS



Ord.No. 5156
JR DS8411
torque 13 kg



Ord.No. 5157
Futaba BLS 452
brushless
torque 14 kg



Ord.No. 3896
Futaba S-3071mg-HV S-BUS
servo for retracting wheels

LEADS



servo extension lead
Ord.No. 3935/1 100 mm
Ord.No. 3935 250 mm
Ord.No. 3935/3 500 mm
Ord.No. 3935/4 700 mm
Ord.No. 3935/2 1000 mm



Ord.No. 3936/1
Y-lead



Ord.No. 1040
suppressor



Ord.No. 3941
servo plug lead

ACCESSORIES



Ord.No. 3948
servo numbers (3 x 10 pcs)



Ord.No. 3942
servo packer (10 pcs)



Ord.No. 809/3
gyro/receiver plate, CFRP
for SkyFox mechanics



Ord.No. 870/8
bracket for gyro

RC SYSTEM ACCESSORIES

Ord.No. 994 3-servo ccpm
incl. 4 servos JR DS8411 **Ord.No. 5156**

Ord.No. 995 4-servo ccpm
incl. 5 servos JR DS8411 **Ord.No. 5156**

Ord.No. 996 4-servo ccpm
incl. 6 servos JR DS8411 **Ord.No. 5156**

Ord.No. 998 4-servo ccpm
incl. 5x brushless servos
Futaba BLS 452 **Ord.No. 5157**
If throttle servo required order one more servo.



All sets additionally contain the following items in different quantities:

Ord.No. 1413	Multiplex safety switch
Ord.No. 97/9	screw fitting pushrod connector
Ord.No. 3935	extension lead 250 mm
Ord.No. 3941/40	output arms for JR servos
Ord.No. 060	ball-end bolt fixation material

SERVO OUTPUT ARMS



Ord.No. 3971
for Futaba servos
thread M2.5, aluminum
incl. ball-end bolts Ord.No. 060/7



Ord.No. 3961
for JR servos
thread M2.5, aluminum
incl. ball-end bolts Ord.No. 060/7



Ord.No. 3941/45
for Futaba servos
reinforced, 4 pcs



Ord.No. 3941/40
for JR servos
reinforced, 4 pcs

BATTERY ACCESSORIES



Ord.No. 3201
receiver battery
with 2 cables
NiMH 4.8 V 3,000 mAh



Ord.No. 3206
receiver battery
2S LiPo 4,000 mAh



Ord.No. 1413
Multiplex SAFETY-SWITCH LiPo
electronic switch harness



Ord.No. 1414
dual power supply
with gas cap switch



Ord.No. 6422
charger for 12V input
2 outputs



Ord.No. 6421/1
LiPo board set



Ord.No. 6422/1
power supply for charger, 40A



Ord.No. 15/3
high-current connector set
gold plated plug 4 mm



Ord.No. 15/4
high current connectors
6 mm



Ord.No. 15/5
high current connectors
8 mm



Ord.No. 28/16
charge lead
gold plated plug 4 mm



Ord.No. 28/17
banana plugs, 1 pair
for charger output socket



Ord.No. 15/6
MPX high current plug for battery
Ord.No. 15/8
charge lead



Ord.No. 1405
charge lead for Futaba
receivers



Ord.No. 3021
charge lead for Graupner
receivers



Ord.No. 3022
charge lead for Graupner
transmitters

CABLE ORGANIZATION



Ord.No. 3503
RC connector retainer
2 pcs



Ord.No. 10/2
heat shrink sleeve set
each 2x sleeve with 2 mm,
3.1 mm and 5.5 mm
length: each 25 cm



Ord.No. 742/36
cable clips
self-adhesive
4 pcs



Ord.No. 755/31
adhesive velcro pads
20 x 20 mm



Ord.No. 742/38
double-sided foam tape
38 mm



Ord.No. 10/86
hook-and-loop tape
self-adhesive
25 x 500 mm



Ord.No. 10/85
hook-and-loop tape
self-adhesive
30 x 500 mm



Ord.No. 755/29
elastic velcro
for battery attachment
length: each 30 cm
2 pcs



Ord.No. 1406
cable spiral tubing
1 m, transparent



Ord.No. 1407
cable spiral tubing
1 m, black



Ord.No. 1408
textile cable protection sleeve



Ord.No. 10/84
rubber grommets
6 x 9 mm
6 pcs



Ord.No. 7/10
3 x 6 mm
2 pcs



Ord.No. 3504
cable and tube fittings



Ord.No. 1409
cable clamp
10 pcs



Ord.No. 755/25
foam tube, inside 22 mm

Ord.No. 755/26
foam tube, inside 35 mm

Ord.No. 742/35
cable tie (each 10 pcs)
100 mm, black

Ord.No. 742/40
200 mm, black

Ord.No. 742/41
200 mm, white

Ord.No. 742/42
360 mm, black

TRANSMITTER TRAYS

FUTABA



Ord.No. 3078
transmitter tray for T14MZ
in carbon fibre look



Ord.No. 3080
transmitter tray for FX-20,
22, 30, 32
in carbon fibre look
with covered compartments
on both sides



Ord.No. 3088
transmitter tray for T18SZ
material: carbon
approx. 295 x 150 x 138 cm



Ord.No. 3098
transmitter tray for T14SG
material: carbon
approx. 295 x 150 x 138 cm

GRAUPNER



Ord.No. 3071
transmitter tray for mc-18 & mc-24
in carbon fibre look
with covered compartments
on both sides, inner dimensions:
approx. 235 x 165 x 50 mm



Ord.No. 3096
transmitter tray for mc-20
material: carbon
approx. 342 x 170 x 128 mm



Ord.No. 3095
transmitter tray for mc-32
material: carbon
approx. 385 x 190 x 148 mm



Ord.No. 3082
transmitter tray for mx-22 & mx-24
material: carbon
approx. 310 x 150 x 147 mm

JR PROPO



Ord.No. 3082
transmitter tray for DSX9
material: carbon
approx. 310 x 150 x 147 mm



Ord.No. 3075
transmitter tray for 28X
material: carbon
height: approx. 13 cm

SPEKTRUM



Ord.No. 3081
transmitter tray for DX8 & DX7s
material: carbon
approx. 310 x 150 x 143 mm

JETI



Ord.No. 3097
transmitter tray for DC-14, 16, 24
material: carbon
approx. 385 x 187 x 127 mm

TRANSMITTER ACCESSORIES



Ord.No. 1126
neckstrap 120 cm
incl. spreader pad
(removable by
hook-and-loop tape)



Ord.No. 1124
spreader pad for neckstrap
with hook-and-loop tape



Ord.No. 1127
cross-over strap
for transmitter



Ord.No. 3085
rainshield
in carbon fibre look
suitable for
Ord.No. 3071 & 3080



Ord.No. 11/90
socket spanner
metal core



Ord.No. 3026
marker caps
white
inner ø: 3 mm
height: 13 mm
4 pcs



Ord.No. 3027
marker caps
white
inner ø: 4 mm
height: 15 mm
4 pcs





DRIVE

ELECTRIC DRIVE SETS



FOR E-POWER MECHANICS SKYFOX ORD.NO. 1002/15

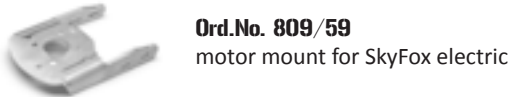


Ord.No. 3314 for 10S
for 1500 mm rotor disc

Ord.No. 3313 for 10S
for 1600 mm rotor disc

Ord.No. 3312 for 10S
for 1800 mm rotor disc

Upgrade your existing SkyFox mechanics Ord.No. 1002/19 with this drive set, the pinion shaft Ord.No. 41/25 and the steel internal tooth gear Ord.No. 36/48 for electric drive.



Ord.No. 809/59
motor mount for SkyFox electric



FOR PETROL MECHANICS ORD.NO. 1002/21 - 1002/23



Ord.No. 3308 for 10S
also for Benzin-Trainer

Ord.No. 3307 for 12S
also for Benzin-Trainer

Ord.No. 830/58
toothed belt pulley 15 t for $\varnothing$ 8 mm shaft XL 037

Ord.No. 830/62
toothed belt pulley 15 t for $\varnothing$ 6 mm shaft XL 037

Ord.No. 830/59
motor mount for petrol mechanics

FOR X-TREME MECHANICS ORD.NO. 1002/3 - 1002/9



Ord.No. 3309 for 10S
Ord.No. 3309/12 for 12S
for mechanics Ord.No. 1002/3, 1002/7, 1002/8, 1002/9

Ord.No. 3310 for 10S
Ord.No. 3310/12 for 12S
for mechanics Ord.No. 1002/4

Ord.No. 3311
for X-Treme Trainer Ord.No. 8707 & 8708



Ord.No. 871/100
conversion kit X-Treme mechanics



Ord.No. 830/100
conversion kit petrol mechanics/electric, shaft $\varnothing$ 8 mm

e.g. for Air-Crane Ord.No. 6400,
Hughes 500E Ord.No. 9006,
Schweizer 300 Ord.No. 6030,
Bell 47 Ord.No. 4700 and Bo 105 Ord.No. 6004

Ord.No. 830/101
conversion kit petrol mechanics/electric, shaft $\varnothing$ 6 mm

ELECTRIC DRIVE SETS



FOR MECHANICS ORD.NO. 1002/80 & 1002/82



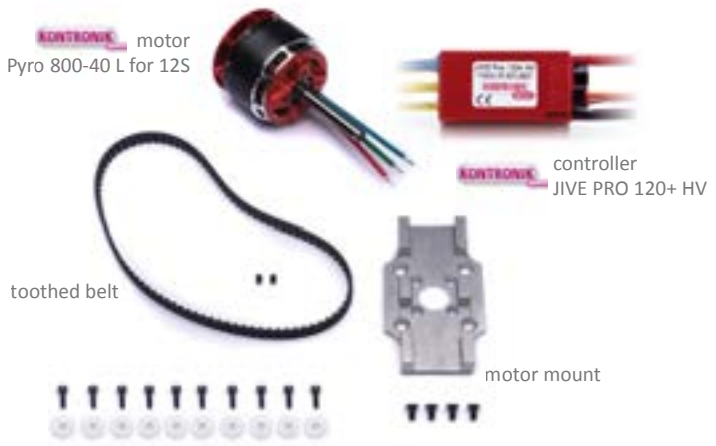
- Ord.No. 3315** for 12S
for 1600 mm rotor disc
- Ord.No. 3316** for 10S
for 1680 mm rotor disc multi blade
for 1800 mm rotor disc 2 blade
- Ord.No. 3317** for 12S
for 1680 mm rotor disc multi blade
for 1800 mm rotor disc 2 blade
- Ord.No. 3318** for 10S
for 1880 mm rotor disc
- Ord.No. 3319** for 12S
for 1880 mm rotor disc



- Ord.No. 59/40**
motor mount with accessories
for electric motors with $\varnothing$ 8 mm shaft
- Ord.No. 59/41**
motor mount with accessories
for electric motors with $\varnothing$ 6 mm shaft
- Ord.No. 59/11**
motor mount only



FOR MECHANICS ORD.NO. 1002/77 & 1002/78



- Ord.No. 3304** for 12S
Additionally required:
Ord.No. 500/13 toothed belt pulley
for rotor speed 850 rpm - 4 blade, 2300 mm rotor disc
- Ord.No. 500/18** toothed belt pulley
for rotor speed 875 rpm - 3 blade, 2300 mm rotor disc
- Ord.No. 500/19** toothed belt pulley
for rotor speed 960 rpm - 2 blade, 2360 mm rotor disc



FOR TURBINE MECHANICS (JAKADOFSKY)



- Ord.No. 429/59**
turbine adapter for Pyro 800

For installing a Pyro 800 motor for replacing a Jakadofsky turbine (e.g. in the Bell 429). This adapter can be covered by the GRP dummy turbine **Ord.No. 330/2**.

SPUR GEARS MODULE1

no. of teeth	drilling ø	attachment	material	Ord.No.
18	8 mm	ø 2 mm steel pin Ord.No. 44/8	steel	830/18
20	5 mm	2x grub M4x4 Ord.No. 90385	steel	15/20
20	8 mm	2x grub M4x6 Ord.No. 90387	steel	908/20
21	8 mm	2x grub M4x4 Ord.No. 90385	steel	641/21
21	8 mm	ø 2 mm steel pin Ord.No. 44/8	steel	830/21
22	8 mm	ø 3 mm steel pin Ord.No. 44/3	steel	871/22
23	5 mm	2x grub M4x4 Ord.No. 90385	steel	15/23
23	8 mm	2x grub M4x4 Ord.No. 90385	steel	640/23
23	8 mm	ø 2 mm steel pin Ord.No. 44/8	steel	830/23
24	5 mm	2x grub M4x4 Ord.No. 90385	steel	15/24
24	8 mm	2x grub M4x4 Ord.No. 90385	steel	429/24
25	5 mm	2x grub M4x4 Ord.No. 90385	steel	15/25
26	5 mm	2x grub M4x4 Ord.No. 90385	steel	15/26
26	8 mm	2x grub M4x4 Ord.No. 90385	steel	890/18
27	5 mm	2x grub M4x4 Ord.No. 90385	steel	15/27
28	5 mm	2x grub M4x4 Ord.No. 90385	steel	15/28
32	10 mm	2x grub M4x4 Ord.No. 90385	steel	268/32
36	8 mm	2x grub M4x4 Ord.No. 90385	aluminum	809/62
40	8 mm	2x grub M4x4 Ord.No. 90385	aluminum	809/64
40	5 mm	2x grub M4x4 Ord.No. 90385	aluminum	103/40
40	10 mm	2x grub M4x4 Ord.No. 90385	aluminum	268/40
45	8 mm	2x grub M4x4 Ord.No. 90385	aluminum	808/45
48	17 mm	hub Ord.No. 44/9	plastic	44/65
52	17 mm	hub Ord.No. 44/9	plastic	44/52
52	17 mm	hub Ord.No. 44/9	plastic	44/58
54	17 mm	hub Ord.No. 44/9	plastic	44/54
55	17 mm	hub Ord.No. 44/9	plastic	44/10
58	17 mm	hub Ord.No. 44/9	plastic	44/45
65	17 mm	hub Ord.No. 44/9	plastic	44/70
66	6 mm	ø 2 mm steel pin Ord.No. 44/8	plastic	7/66
75	17 mm	hub Ord.No. 44/9	plastic	44/75
81	38 mm	hub Ord.No. 266/31	plastic	266/81
85	36 mm	freewheel Ord.No. 830/36	plastic	830/85
87	36 mm	freewheel Ord.No. 830/36	plastic	830/87
90	36 mm	freewheel Ord.No. 830/36	plastic	830/90
102	36 mm	freewheel Ord.No. 830/36	plastic	871/102
120	52 / 10 mm	hub Ord.No. 340/31	plastic	500/121
130	52 mm	hub Ord.No. 340/31	plastic	890/130



GEARS

SPUR GEARS MODULE1.5

no. of teeth	drilling ø	attachment	material	Ord.No.
12	8 mm	2x grub M4x6 Ord.No. 90387	steel	930/12
17	10 mm	2x grub M4x6 Ord.No. 90387	steel	266/17
20	10 mm	2x grub M4x6 Ord.No. 90387	steel	722/20
20	10 mm	3x grub M4x6 Ord.No. 90387	steel	268/20
23	10 mm	2x grub M4x6 Ord.No. 90387	steel	138/23
47	17 mm	hub Ord.No. 340/44	aluminum	340/47
60	40 mm	hub Ord.No. 120/36	plastic	120/60
60	40 mm	freewheel Ord.No. 260/36	plastic	120/61
60	36 mm	freewheel Ord.No. 830/36	plastic	930/61
70	40 mm	freewheel Ord.No. 830/36	plastic	260/70

BEVEL GEARS

no. of teeth	module	drilling ø	attachment	material	Ord.No.
15	2	10 mm	2x grub M4x4 Ord.No. 90385	steel	606/15
16	1.5	5 mm	2x grub M4x6 Ord.No. 90387	plastic	830/16
16	1.5	8 mm	2x grub M4x6 Ord.No. 90387	plastic	830/17
16	2	5 mm	2x grub M4x6 Ord.No. 90387	plastic	830/28
16	2	8 mm	2x grub M4x6 Ord.No. 90387	plastic	830/29
16	2.5	10 mm	2x grub M4x6 Ord.No. 90387	plastic	722/18
16	0.7	5 mm	2x grub M3x3 Ord.No. 90365	steel	95
16	0.7	6 mm	2x grub M3x3 Ord.No. 90365	steel	42
18	0.8	5 mm	2x grub M3x3 Ord.No. 90365	steel	95/5
18	0.8	6 mm	2x grub M3x3 Ord.No. 90365	steel	95/6
19	0.8	5 mm	2x grub M3x3 Ord.No. 90365	steel	95/7
19	0.7	6 mm	2x grub M3x3 Ord.No. 90365	steel	42/18
19	0.7	6 mm	2x grub M3x3 Ord.No. 90365	steel	42/19
22	0.7	5 mm	2x grub M3x3 Ord.No. 90365	steel	95/2
30	2	17 mm	hub Ord.No. 340/36	plastic	606/40

PLATE GEAR SETS

no. of teeth	module	drilling ø	attachment	material	Ord.No.
25	1.3	10	2x grub M4x4 Ord.No. 90385	steel	266/70
70	1.3	17	hub Ord.No. 340/36	plastic	
14	1.5	10	2x grub M4x4 Ord.No. 90385	steel	500/70
63	1.5	40	freewheel Ord.No. 500/361 bzw. 500/362 plastic	plastic	

Ord.No. 41/25

pinion shaft
tooth height 16.5 mm



Ord.No. 95/20

set for speed up gearing
for the tail rotor of the
Hughes 500 (Ord.No. 9040)
with ball race and bevel gears

3M TOOTHED BELT PULLEYS

no. of teeth	drilling ø	attachment	Ord.No.
18	8 mm	steel pin ø3 x 12 mm Ord.No. 44/3	870/18
20	6 mm	2x M4x4 Ord.No. 90385	128/20
22	6 mm	2x M4x4 Ord.No. 90385	128/22
24	6 mm	2x M4x4 Ord.No. 90385	128/25
24	8 mm	2x M4x4 Ord.No. 90385	128/24
26	6 mm	2x M4x4 Ord.No. 90385	128/26
28	6 mm	2x M4x4 Ord.No. 90385	128/28
30	6 mm	2x M4x4 Ord.No. 90385	871/30
32	6 mm	2x M4x4 Ord.No. 90385	870/32
55	17 mm	hub Ord.No. 44/9	833/44
60	29 mm	hub Ord.No. 870/61	870/60 GRP
72	29 mm	hub Ord.No. 870/61	870/72
84	36 mm	hub Ord.No. 870/36	870/84 GRP

material: aluminum

T5 TOOTHED BELT PULLEYS

no. of teeth	drilling ø	attachment	Ord.No.
14	8 mm	steel pin ø3 x 12 mm Ord.No. 44/3	870/14
14	9.5 mm	for output shaft JetCat SPH 5	641/14
60	36 mm	hub Ord.No. 870/36	870/59

material: aluminum



XL TOOTHED BELT PULLEYS

no. of teeth	drilling ø	attachment	Ord.No.
14	6 mm	2x M4x4 Ord.No. 90385	139/14
15	6 mm	2x M4x4 Ord.No. 90385	830/62
15	8 mm	2x M4x4 Ord.No. 90385	830/58
16	8 mm	2x M4x4 Ord.No. 90385	500/20
17	8 mm	2x M4x4 Ord.No. 90385	500/13
18	8 mm	2x M4x4 Ord.No. 90385	500/18
19	6 mm	2x M4x4 Ord.No. 90385	500/190
20	6 mm	2x M4x6 Ord.No. 90387	872/20
20	8 mm	2x M4x6 Ord.No. 90387	500/19
21	6 mm	2x M4x6 Ord.No. 90385	500/21
22	6 mm	2x M4x6 Ord.No. 90387	872/22
24	8 mm	2x M4x6 Ord.No. 90387	429/25
26	8 mm	2x M4x6 Ord.No. 90387	500/26
27	8 mm	2x M4x6 Ord.No. 90387	500/27
28	10 mm	2x M4x6 Ord.No. 90387	605/28
30	8 mm	2x M4x6 Ord.No. 90387	500/300
32	8 mm	2x M4x6 Ord.No. 90387 / steel pin ø 2 mm Ord.No. 44/8	830/32
37	12 mm	2x M4x6 Ord.No. 90387	950/37
40	8 mm	steel pin ø 2 mm Ord.No. 44/8	830/40
44	12 mm	2x M4x6 Ord.No. 90387	500/43
48	12 mm	2x M4x6 Ord.No. 90387	500/47
48	29 mm	hub Ord.No. 870/61	872/48
54	10 mm	3x M4x6 Ord.No. 90387	103/54
60	29 mm	hub Ord.No. 870/61	139/60
77	10 mm	3x M4x6 Ord.No. 90387	722/77
83	10 mm	3x M4x6 Ord.No. 90387	260/83
83	12 mm	3x M4x6 Ord.No. 90387	103/83

material: aluminum

3M TOOTHED BELTS

effective length	belt width	Ord.No.
177	9 mm	64/100
201	9 mm	833/100
300	15 mm	870/100
384	9 mm	128/41
447	9 mm	870/120
474	9 mm	870/121
564	9 mm	870/110
606	9 mm	860/120

T5 TOOTHED BELTS

effective length	belt width	Ord.No.
340	11 mm	870/105
400	11.5 mm	641/41

XL TOOTHED BELTS

effective length	belt width	Ord.No.
100	9.5 mm	429/41
112	9.5 mm	830/33
120	9.5 mm	830/41
130	9.5 mm	830/39
150	9,5 mm	121/41
190	9.5 mm	834/41
200	9.5 mm	604/41
210	9.5 mm	722/41
220	9.5 mm	470/41
230	9.5 mm	640/41
240	9.5 mm	872/120
306	9.5 mm	103/120
438	9.5 mm	722/120
506	9.5 mm	260/120



TOOTHED
BELTS &
-PULLEYS

ROTOR SHAFTS SKY-FOX

	length	ø	ø drilling: rotor head	Ord.No.
	194 mm	10 mm	3 mm	35/10
	204 mm	10 mm	3 mm	35/12
	214 mm	10 mm	3 mm	35/18
	294 mm	10 mm	3 mm	35/20
	302 mm	10 mm	3 mm	35/21
	234 mm	10 mm	3 mm	35/24
	234 mm	10 mm	3 mm	35/25
	274 mm	10 mm	3 mm	35/43
	209 mm	12 mm	3 mm	35/46

ROTOR SHAFTS X-TREME

	length	ø	ø drilling: rotor head	Ord.No.
	220 mm	10 mm	3 mm	35/33
	213 mm	10 mm	3 mm	35/34
	213 mm	10 mm	3 mm	35/35
	235 mm	10 mm	3 mm	35/37
	243 mm	10 mm	3 mm	35/38
	249 mm	10 mm	3 mm	35/42

ROTOR SHAFTS VARIO TURBINE MECHANICS

	length	ø	ø drilling: rotor head	Ord.No.
	389 mm	12 mm	4 mm	500/34
	286 mm	12 mm	4 mm	500/35
	372 mm	12 mm	4 mm	342/35

also usable with electric mechanics **Ord.No. 1002/77 & 1002/78**

ROTOR SHAFTS PETROL

	length	ø	ø drilling: rotor head	Ord.No.
	214 mm	10 mm	3 mm	35/30
	194 mm	10 mm	3 mm	35/31
	214 mm	10 mm	3 mm	35/32
	224 mm	10 mm	3 mm	35/36
	174 mm	10 mm	3 mm	35/39
	194 mm	10 mm	3 mm	35/40
	286 mm	10 mm	3 mm	35/41
	255 mm	12 mm	3 mm	35/45
	245 mm	12 mm	3 mm	35/48
	214 mm	12 mm	3 mm	35/49

also usable with electric mechanics **Ord.No. 1002/80 & 1002/82**

ROTOR SHAFTS VARIOUS

	length	ø	ø drilling: rotor head	Ord.No.
JETCAT PHT2 	318.5 mm	10 mm	3 mm	302/35
JETCAT PHT3 / PHT3L 	279 mm	12 mm	3 mm	35/47
	310 mm	12 mm	3 mm	35/44
	286 mm	12 mm	4 mm	35/52
T-Rex 	244 mm	12 mm	3 mm	607/35
	257.5 mm	12 mm	4 mm	257/36
	278 mm	12 mm	4 mm	257/35

CLAMP RINGS



for ø 10 mm **Ord.No. 54/9**
for ø 12 mm **Ord.No. 54/14**
for ø 15 mm **Ord.No. 268/54**



Ord.No. 11/27
circlip pliers

DOME EXTENSION



ORD.NO. 53/7
dome extension 49 mm
alu



ORD.NO. 53/8
suitable plate for mounting
the swashplate guide

suitable ball race:
ORD.NO. 55/5
for Ø 10 mm shaft
ORD.NO. 55/6
for Ø 12 mm shaft



ORD.NO. 53/6
dome extension set 49 mm



ORD.NO. 240/53
dome extension 78 mm
alu



ORD.NO. 240/54
suitable plate for mounting
the swashplate guide

suitable ball race:
ORD.NO. 55/5
for Ø 10 mm shaft
ORD.NO. 55/6
for Ø 12 mm shaft



ORD.NO. 722/53
dome extension 109 mm
alu



ORD.NO. 53/8
suitable plate for mounting
the swashplate guide

suitable ball race:
ORD.NO. 55/5
for Ø 10 mm shaft
ORD.NO. 55/6
for Ø 12 mm shaft

FREEWHEELS/HUBS

SKYFOX MECHANICS



ORD.NO. 36/48
freewheel bell with
steel internal tooth gear

ORD.NO. 36/47
only internal tooth gear,
screws



ORD.NO. 36/25
freewheel set



ORD.NO. 36/40
reinforced freewheel bell
with 2 freewheel bearings Ø 10 mm
and GRP internal tooth gear
outside diameter: 59 mm

ORD.NO. 36/41
only internal tooth gear,
screws

ORD.NO. 44/7
freewheel hub
with Ø 10 mm freewheel
for driven tail in autorotation
l.h. rotor system



ORD.NO. 36/4
freewheel washer
5.9 x 11.9 mm

X-TREME MECHANICS



ORD.NO. 870/36
freewheel
for Ø 10 mm shaft

PETROL/ELECTRIC MECHANICS



ORD.NO. 830/36
freewheel
for Ø 10 mm shaft

TURBINE/ELECTRIC MECHANICS



ORD.NO. 500/361
freewheel
for Ø 12 mm shaft
with freewheel direction
counter-clockwise
ORD.NO. 500/362
clockwise

XLV

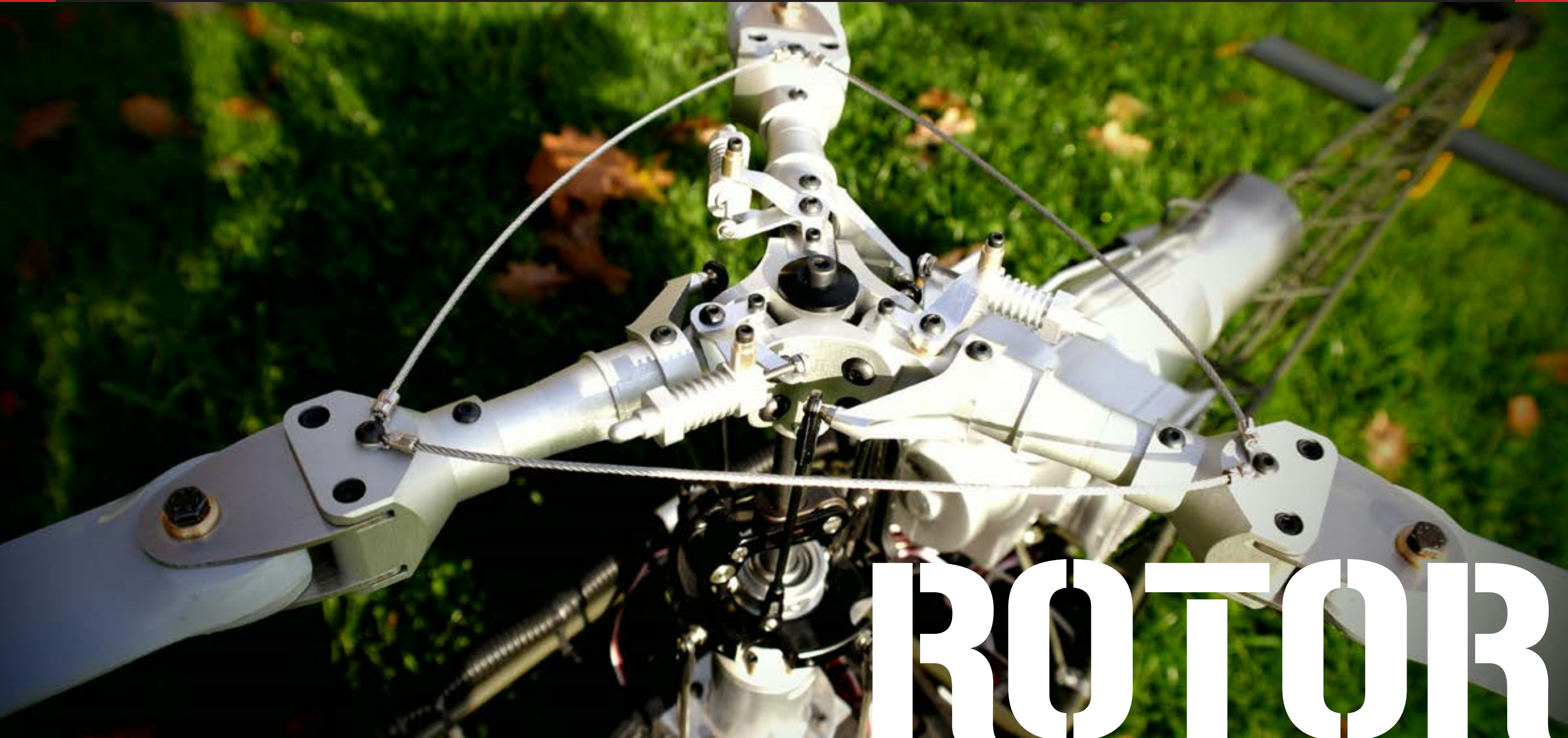


ORD.NO. 260/36
freewheel
for Ø 12 mm shaft

XLC



ORD.NO. 268/36
freewheel
for Ø 15 mm shaft



ROTOR

2-BLADE ROTOR HEADS with flybar

∅ rotor shaft	blade grip	∅ blade holder screw	recommended rotor ∅	MTOW	blade holder screw ∅	Ord.No.
10 mm	14 mm 1-hole	4 mm	1380 - 1680 mm	9 kg	approx. 180 mm	1005/50 79/10
10 mm	14 mm 1-hole	5 mm	1780 - 1820 mm	13 kg	approx. 180 mm	1005/60
12 mm	14 mm 1-hole	5 mm	1780 - 1930 mm	15 kg	approx. 180 mm	1005/61
12 mm	22 mm 1-hole	6 mm	2160 - 2500 mm	22 kg	approx. 260 mm	722/72 (w/o collective pitch compensator) 79/30

2-BLADE SCALE ROTOR HEADS

∅ rotor shaft	blade grip	∅ blade holder screw	recommended rotor ∅	MTOW	blade holder screw ∅	Ord.No.
10 mm	14 mm 1-hole	4 mm	1630 mm	9 kg	approx. 180 mm	702/70
10 mm	14 mm 1-hole	5 mm	1810 mm	13 kg	approx. 180 mm	702/75 *
12 mm	14 mm 1-hole	5 mm	1810 mm	15 kg	approx. 180 mm	702/80 *
12 mm	22 mm 1-hole	6 mm	2360 mm	22 kg	approx. 260 mm	1005/12
12 mm	22 mm 1-hole	6 mm	2360 - 2500 mm	22 kg	approx. 260 mm	1005/47



*** optional accessories when using a swashplate stabilization electronics: Ord.No. 702/81**
rocker block for FBL conversion

3-BLADE SCALE ROTOR HEADS

∅ rotor shaft	blade grip	∅ blade holder screw	recommended rotor ∅	MTOW	blade holder screw ∅	Ord.No.
10 mm	14 mm 1-/2-hole	4 mm	1610 - 1710 mm	10 kg	approx. 255 mm	703/94
12 mm	22 mm 1-hole	6 mm	2460 - 2660 mm	24 kg	approx. 490 mm	703/39
SPECIAL ROTOR HEAD 3 blade rotor head for tandem helicopters						
10 mm	14 mm 1-hole	4 mm	1500 mm	approx. 5 kg / head	approx. 200 mm	703/480

ROTOR HEADS

	∅ rotor shaft	blade grip	∅ blade holder screw	recommended rotor ∅	MTOW	blade holder screw ∅	ORD.NO.
2-BLADE 	10 mm	14 mm 1-hole	4 mm	1500 - 1680 mm	10 kg	approx. 180 mm	702/59
	10 mm	14 mm 1-hole	5 mm	1780 - 1930 mm	12 kg	approx. 180 mm	702/60
	12 mm	14 mm 1-hole	5 mm	1780 - 1930 mm	15 kg	approx. 180 mm	702/62
	12 mm	22 mm 1-hole	6 mm	2360 - 2500 mm	22 kg	approx. 260 mm	1005/49
	15 mm	22 mm 1-hole	6 mm	2360 - 2500 mm	25 kg	approx. 260 mm	1005/52
3-BLADE 	10 mm	14 mm 1-hole	5 mm	1500 - 1680 mm	12 kg	approx. 185 mm	703/35
	12 mm	14 mm 1-hole	5 mm	1500 - 1680 mm	14 kg	approx. 185 mm	703/34
	10 mm	14 mm 2-hole	4 mm	1500 - 1680 mm	12 kg	approx. 150 mm	703/30
	12 mm	14 mm 2-hole	4 mm	1500 - 1680 mm	14 kg	approx. 150 mm	703/32
	12 mm	18 mm 1-hole	5 mm	2200 - 2300 mm	22 kg	approx. 270 mm	703/38
	12 mm	22 mm 1-hole	6 mm	2300 - 2500 mm	20 kg	approx. 320 mm	703/40
	12 mm	22 mm 1-hole	6 mm	2300 - 2500 mm	25 kg	approx. 325 mm	703/43
	15 mm	22 mm 1-hole	6 mm	2500 mm	32 kg	approx. 325 mm	268/72
4-BLADE 	10 mm	14 mm 1-hole	5 mm	1500 - 1680 mm	12 kg	approx. 185 mm	704/35
	12 mm	14 mm 1-hole	5 mm	1680 - 1880 mm	15 kg	approx. 185 mm	704/34
	10 mm	14 mm 2-hole	4 mm	1500 - 1680 mm	12 kg	approx. 150 mm	704/30
	12 mm	14 mm 2-hole	4 mm	1680 - 1880 mm	15 kg	approx. 150 mm	704/32
	12 mm	14 mm 2-hole	4 mm	1680 - 1880 mm	15 kg	approx. 150 mm	704/36
	12 mm	18 mm 1-hole	5 mm	2100 - 2300 mm	22 kg	approx. 270 mm	704/38
5-BLADE 	10 mm	14 mm 1-hole	5 mm	1500 - 1600 mm	12 kg	approx. 185 mm	705/35
	12 mm	14 mm 1-hole	5 mm	1680 - 1880 mm	15 kg	approx. 185 mm	705/34
	10 mm	14 mm 2-hole	4 mm	1500 - 1600 mm	12 kg	approx. 150 mm	705/30
	12 mm	14 mm 2-hole	4 mm	1680 - 1880 mm	15 kg	approx. 150 mm	705/32
	12 mm	14 mm 2-hole	4 mm	1680 - 1880 mm	20 kg	approx. 150 mm	705/36
6-BLADE 	12 mm	14 mm 1-hole	5 mm	2000 mm	20 kg	approx. 220 mm	706/20

► Our rotor heads are always supplied with screws and ball-end bolts.

ROTOR HEADS

BLADE HOLDERS

	blade grip	Ø blade holder screw	material	Ord.No.
	14 mm	4 mm	aluminum	76/10 76/20 set
	14 mm	4 mm	plastic	76/15
	14 mm	5 mm	plastic	76/16
	14 mm	2x 4 mm	plastic	76/18
	14 mm	5 mm	plastic	76/19
	18 mm	5 mm	plastic	76/25
	22 mm	6 mm	plastic	702/76
	22 mm	6 mm	plastic	832/76

DAMPING COMPONENTS

Ord.No. 74/5
O-rings for Ø 8 mm thrust bearing shaft: 3 x 7 mm soft
4 pcs

Ord.No. 74/10
hard
4 pcs

Ord.No. 74/7
rotor head dampers adjustable for 2 blade flybarless systems (hard/hard or hard/soft) with double O-ring per side

SCALE ROTOR HEAD COVERS

Ord.No. 707
for multi blade heads Ø 82 mm
e.g. for Ord.No. 1320

Ord.No. 707/3
3 blade
Ø 155 mm
e.g. for Ord.No. 1200

Ord.No. 707/2
4 blade
Ø 123 mm
e.g. for Ord.No. 1320

Ord.No. 707/6
4 blade
Ø 156 mm
e.g. for Ord.No. 1380

Ord.No. 707/5
5 blade
Ø 123 mm
e.g. for Ord.No. 9041

PADDLES

Ord.No. 91/50
2 pcs
approx. 29 g each
for Ø 4 mm or 5 mm flybar

Ord.No. 91/60
2 pcs
approx. 29 g each
for Ø 4 mm flybar

Ord.No. 91/65
3D paddle, 2 pcs
approx. 19 g each
for Ø 4 mm flybar

FLYBARS

Ø 4 mm x 510 mm **Ord.No. 79/10**

Ø 4 mm x 560 mm **Ord.No. 79/13**

Ø 5 mm x 530 mm **Ord.No. 79/25**

Ø 5 mm x 600 mm **Ord.No. 79/30**

ACCESSORIES

Ord.No. 91/67
heat shrink for paddles
Ord.No. 91/66 & Ord.No. 91/68

Ord.No. 79/8
inertia weights for Ø 5 mm flybar
2 pcs

Ord.No. 79/1
flybar spirit level

Ord.No. 91/1
flybar jig
2 pcs

Ord.No. 79/3
rotor head immobiliser for flybar

BALL COLLETS

Ord.No. 86/5
Ø 4 mm, 2 pcs

Ord.No. 86
Ø 4 mm, 2 pcs
Ord.No. 86/10
Ø 5 mm, 2 pcs

Ord.No. 832/66
Ø 5 mm, 2 pcs

ROTOR HEAD COVERS Ø 60 MM

Ord.No. 72/5
for rounded rockers GRP

Ord.No. 72/6
for rounded or flat rockers
Ø 50 mm alu

Ord.No. 72/1
for 2 blade rotor heads up to Ø 2000 mm CFRP

Ord.No. 72/4
for flat rockers GRP, black
Ord.No. 72/3
GRP, red

CLAMP RINGS

Ord.No. 54/16
for Ø 17 mm

Ord.No. 54/13
for Ø 10 mm

Ord.No. 54/18
for Ø 12 mm

Ord.No. 832/54
for Ø 24 mm, without pin

Ord.No. 832/55
for Ø 12 mm

SHARK SKIN ROTOR BLADES



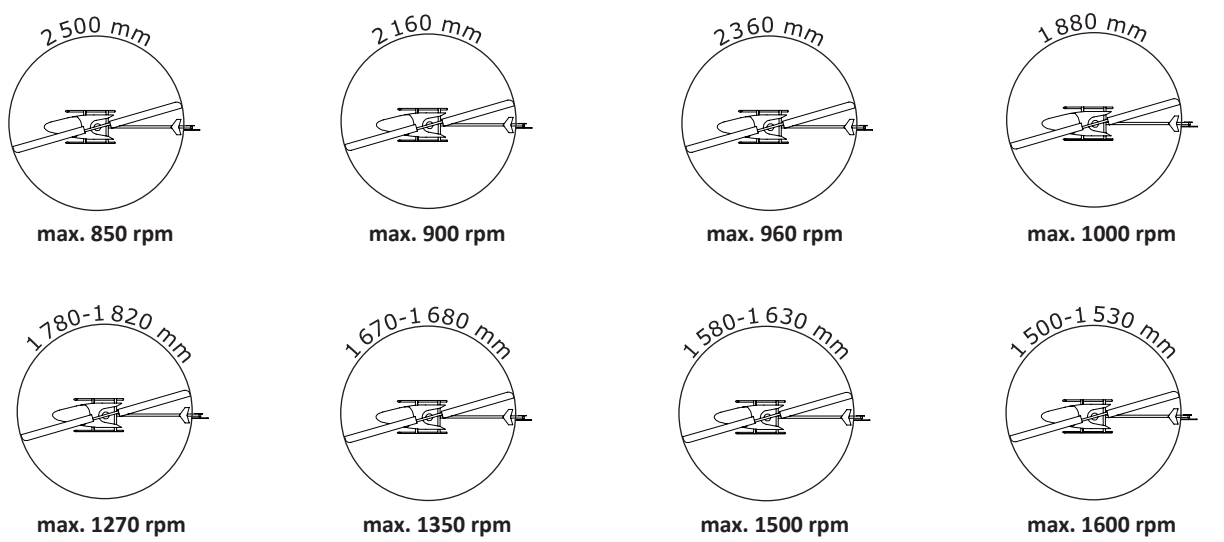
The choice of the right blades is often a problem, especially in consideration of the wide range of profiles, shapes of blades and weights. There is no easy option available, because every rotor blade serves its own typical application-purpose, which must be tested individually to find the right blade for the particular requirement. One thing that all rotor blade sets have in common is that they are all well balanced, at the most a correction of the tracking may be necessary before the first flight. (Remove one pushrod from the blade holder and turn the ball link one turn, test it again, if necessary repeat the adjustment until correct tracking is achieved). We recommend a colourmark on one of the blades and on the mechanical side on the double balllink (not at the black blade holder), to avoid mixing-up the assignment of the blades to the correct blade holder at a later time.

Symmetrical rotor blades - GRP beginner blades - due to their profile are well suited for left- and right rotation systems. Rolls can be flown precisely with the control commands achieving a constant response from the rotor blade. This results from a good flexibility of the blades. Advanced pilots, who prefer a stiffer blade, fly with blades which are made from carbon or with a carbon-kevlar-cord. Better rigidness of the rotor blades leads to better response as well as agility, which have an advantageous effect in 3-D flights.

The auto-rotation characteristics are defined by the profile (less descending speed by asymmetrical blades), this is noticeable in fast forward flight as well. The advantages of a beginner blade can be noticed in the price and on the other hand in use for 3-D aerobatics.

Rotor blades with reflex profile are a very good compromise for everybody who does not fly 3-D exclusively, blades are only partially suitable for 3-D flight. During the auto-rotation a lot of energy is stored in the blades, so it is possible that the helicopter can be lifted two or even three times of the ground at the end of an auto or into a hover on the spot in order to land it smooth.

It is important that you never repair blades or utilise faulty blades; the safety risk is too high! From a set of damaged blades you can setup the rotor head on your work bench. You saw off the blades 20 cm before the blade grip and then use these "short rotors" for adjustment on the work bench. The head of the rotor can be easily turned without the problem of the long blades hitting objects.





2-BLADE SETS

	diameter	blade root	blade chord	profile thickness	weight	material	symmetry	Ord.No.
FAI-Rotorblatt 660 mm length	Ø 1500 mm	14 mm / Ø 4 mm	65 mm	9.5 mm	approx. 195 g	CFRP	symmetric, r.h.r.	403/33
660 mm length	Ø 1500 mm	14 mm / Ø 4 mm	62 mm	7.5 mm	approx. 175 g	CFRP	reflex	403
660 mm length	Ø 1500 mm	14 mm / Ø 4 mm	62 mm	7.5 mm	approx. 200 g	CFRP	reflex	407
3D Rotorblatt 660 mm length	Ø 1500 mm	14 mm / Ø 4 mm	65 mm	9.5 mm	approx. 180 g	CFRP	symmetric	403/2
700 mm length	Ø 1580 mm	14 mm / Ø 4 mm	59 mm	8 mm	approx. 170 g	CFRP	symmetric	403/9
700 mm length	Ø 1580 mm	14 mm / Ø 4 mm	59 mm	8 mm	approx. 170 g	CFRP	symmetric, r.h.r.	403/8
725 mm length	Ø 1630 mm	14 mm / Ø 4 mm	69 mm	8 mm	approx. 210 g	CFRP	symmetric	431
725 mm length	Ø 1630 mm	14 mm / Ø 4 mm	69 mm	8 mm	approx. 210 g	CFRP	symmetric, r.h.r.	431/1
750 mm length	Ø 1680 mm	14 mm / Ø 5 mm	75 mm	11 mm	approx. 250 g	CFRP	reflex	426
800 mm length	Ø 1780 mm	14 mm / Ø 5 mm	68 mm	9 mm	approx. 235 g	CFRP	symmetric	422
800 mm length	Ø 1780 mm	14 mm / Ø 5 mm	75 mm	11 mm	approx. 250 g	CFRP	reflex	421
800 mm length	Ø 1780 mm	14 mm / Ø 5 mm	75 mm	11 mm	approx. 250 g	CFRP	reflex, r.h.r.	420
820 mm length	Ø 1820 mm	14 mm / Ø 5 mm	75 mm	11 mm	approx. 270 g	CFRP	reflex	427
875 mm length	Ø 1930 mm	14 mm / Ø 5 mm	75 mm	11 mm	approx. 280 g	CFRP	reflex	424
950 mm length	Ø 2160 mm	22 mm / Ø 6 mm	75 mm	11 mm	approx. 400 g	CFRP	reflex	415
950 mm length	Ø 2160 mm	22 mm / Ø 6 mm	75 mm	11 mm	approx. 400 g	CFRP	reflex, r.h.r.	415/1
1050 mm length	Ø 2360 mm	22 mm / Ø 6 mm	75 mm	11 mm	approx. 450 g	CFRP	reflex	413
1050 mm length	Ø 2360 mm	22 mm / Ø 6 mm	75 mm	11 mm	approx. 450 g	CFRP	reflex, r.h.r.	413/1
1120 mm length	Ø 2500 mm	22 mm / Ø 6 mm	75 mm	11 mm	approx. 500 g	CFRP	reflex	416
1120 mm length	Ø 2500 mm	22 mm / Ø 6 mm	75 mm	11 mm	approx. 500 g	CFRP	reflex, r.h.r.	417
1120 mm length	Ø 2500 mm	22 mm / Ø 6 mm	75 mm	7.5 mm	approx. 580 g	CFRP	reflex	416/50
1120 mm length	Ø 2500 mm	22 mm / Ø 6 mm	75 mm	7.5 mm	approx. 580 g	CFRP	reflex, r.h.r.	417/50

3-BLADE SETS

	diameter	blade root	blade chord	profile thickness	weight	material	symmetry	Ord.No.
965 mm length	Ø 2200 mm	18 mm / Ø 5 mm	65 mm	9 mm	approx. 450 g	CFRP	reflex	413/2
1015 mm length	Ø 2300 mm	18 mm / Ø 5 mm	65 mm	9 mm	approx. 480 g	CFRP	reflex	413/3
1015 mm length	Ø 2300 mm	18 mm / Ø 5 mm	65 mm	9 mm	approx. 480 g	CFRP	reflex, r.h.r.	413/4
990 mm length	Ø 2300 mm	22 mm / Ø 6 mm	75 mm	11 mm	approx. 420 g	CFRP	reflex	417/4
990 mm length	Ø 2300 mm	22 mm / Ø 6 mm	75 mm	11 mm	approx. 420 g	CFRP	reflex, r.h.r.	417/2
1090 mm length	Ø 2500 mm	22 mm / Ø 6 mm	75 mm	11 mm	approx. 500 g	CFRP	reflex	416/3
1090 mm length	Ø 2500 mm	22 mm / Ø 6 mm	75 mm	11 mm	approx. 500 g	CFRP	reflex, r.h.r.	417/3
1120 mm length	Ø 2560 mm	22 mm / Ø 6 mm	75 mm	7.5 mm	approx. 570 g	CFRP	reflex	416/350
1120 mm length	Ø 2560 mm	22 mm / Ø 6 mm	75 mm	7.5 mm	approx. 570 g	CFRP	reflex, r.h.r.	417/350

4-BLADE SETS

	diameter	blade root	blade chord	profile thickness	weight	material	symmetry	Ord.No.
915 mm length	Ø 2100 mm	18 mm / Ø 5 mm	65 mm	9 mm	approx. 420 g	CFRP	reflex	414/4
1015 mm length	Ø 2300 mm	18 mm / Ø 5 mm	65 mm	9 mm	approx. 480 g	CFRP	reflex	412/4



2-BLADE SETS SCALE FOR BELL

	diameter	blade root	blade chord	profile thickness	weight	material	symmetry	Ord.No.
725 mm length	Ø 1630 mm	14 mm / Ø 4 mm	62 mm	8 mm	approx. 210 g	CFRP	reflex	418
815 mm length	Ø 1810 mm	14 mm / Ø 5 mm	72 mm	9 mm	approx. 260 g	CFRP	reflex	419



3-BLADE SETS

	diameter	blade root	blade chord	profile thickness	weight	material	symmetry	Ord.No.
675 mm length	Ø 1500 mm	14 mm 2-hole	53 mm	6.8 mm	approx. 165 g	CFRP	reflex	404/20
675 mm length	Ø 1500 mm	14 mm 2-hole	53 mm	6.8 mm	approx. 165 g	CFRP	reflex, r.h.r.	404/19
675 mm length for tandem helicopter	Ø 1550 mm	14 mm / Ø 4 mm	53 mm	6.8 mm	approx. 165 g	CFRP	reflex, l.h.r. + r.h.r.	404/480
725 mm length	Ø 1600 mm	14 mm 2-hole	53 mm	6.8 mm	approx. 175 g	CFRP	reflex	404/30
725 mm length	Ø 1600 mm	14 mm 2-hole	53 mm	6.8 mm	approx. 175 g	CFRP	reflex, r.h.r.	404/28
765 mm length	Ø 1680 mm	14 mm 2-hole	53 mm	6.8 mm	approx. 185 g	CFRP	reflex	404/40
765 mm length	Ø 1680 mm	14 mm 2-hole	53 mm	6.8 mm	approx. 185 g	CFRP	reflex, r.h.r.	404/38

4-BLADE SETS

	diameter	blade root	blade chord	profile thickness	weight	material	symmetry	Ord.No.
675 mm length	Ø 1500 mm	14 mm 2-hole	53 mm	6.8 mm	approx. 165 g	CFRP	reflex	404/21
725 mm length	Ø 1600 mm	14 mm 2-hole	53 mm	6.8 mm	approx. 175 g	CFRP	reflex	404/31
725 mm length	Ø 1600 mm	14 mm 2-hole	53 mm	6.8 mm	approx. 175 g	CFRP	reflex, r.h.r.	404/18
765 mm length	Ø 1680 mm	14 mm 2-hole	53 mm	6.8 mm	approx. 185 g	CFRP	reflex	404/41
765 mm length	Ø 1680 mm	14 mm 2-hole	53 mm	6.8 mm	approx. 185 g	CFRP	reflex, r.h.r.	404/39
865 mm length	Ø 1880 mm	14 mm 2-hole	53 mm	6.8 mm	approx. 200 g	CFRP	reflex	404/51

5-BLADE SETS

	diameter	blade root	blade chord	profile thickness	weight	material	symmetry	Ord.No.
675 mm length	Ø 1500 mm	14 mm 2-hole	53 mm	6.8 mm	approx. 165 g	CFRP	reflex	404/22
725 mm length	Ø 1600 mm	14 mm 2-hole	53 mm	6.8 mm	approx. 175 g	CFRP	reflex	404/32
765 mm length	Ø 1680 mm	14 mm 2-hole	53 mm	6.8 mm	approx. 185 g	CFRP	reflex	404/42
865 mm length	Ø 1880 mm	14 mm 2-hole	53 mm	6.8 mm	approx. 200 g	CFRP	reflex	404/52



4-BLADE SETS

870 mm length	diameter	blade root	blade chord	profile thickness	weight	material	symmetry	Ord.No.
	Ø 1900 mm	14 mm / Ø 5 mm	44 mm	7 mm	approx. 230 g (l+r usable)	CFRP	symmetric	404/56
680 mm length	Ø 1550 mm	14 mm / Ø 5 mm	47 mm	7 mm	approx. 150 g	CFRP	reflex	404/900

5-BLADE SETS

870 mm length	diameter	blade root	blade chord	profile thickness	weight	material	symmetry	Ord.No.
	Ø 1900 mm	14 mm / Ø 5 mm	44 mm	7 mm	approx. 230 g (l+r usable)	CFRP	symmetric	404/57
890 mm length	Ø 2000 mm	14 mm / Ø 5 mm	47 mm	7 mm	approx. 250 g	CFRP	reflex	404/60

6-BLADE SETS

950 mm length	diameter	blade root	blade chord	profile thickness	weight	material	symmetry	Ord.No.
	Ø 2160 mm	22 mm / Ø 6 mm	76 mm	6.5 mm	approx. 480 g	aluminum	reflex	415/5
1050 mm length	Ø 2360 mm	22 mm / Ø 6 mm	76 mm	6.5 mm	approx. 530 g	aluminum	reflex	413/5
1120 mm length	Ø 2500 mm	22 mm / Ø 6 mm	76 mm	6.5 mm	approx. 570 g	aluminum	reflex	416/5
1120 mm length	Ø 2500 mm	22 mm / Ø 6 mm	76 mm	6.5 mm	approx. 570 g	aluminum	reflex, r.h.r.	417/5

ALUMINUM, BLACK ANODIZED

2-BLADE SETS

950 mm length	diameter	blade root	blade chord	profile thickness	weight	material	symmetry	Ord.No.
	Ø 2160 mm	22 mm / Ø 6 mm	76 mm	6.5 mm	approx. 480 g	aluminum	reflex	415/5
1050 mm length	Ø 2360 mm	22 mm / Ø 6 mm	76 mm	6.5 mm	approx. 530 g	aluminum	reflex	413/5
1120 mm length	Ø 2500 mm	22 mm / Ø 6 mm	76 mm	6.5 mm	approx. 570 g	aluminum	reflex	416/5
1120 mm length	Ø 2500 mm	22 mm / Ø 6 mm	76 mm	6.5 mm	approx. 570 g	aluminum	reflex, r.h.r.	417/5

3-BLADE SETS

1120 mm length	diameter	blade root	blade chord	profile thickness	weight	material	symmetry	Ord.No.
	Ø 2560 mm	22 mm / Ø 6 mm	76 mm	6.5 mm	approx. 580 g	aluminum	reflex	416/35
1120 mm length	Ø 2560 mm	22 mm / Ø 6 mm	76 mm	6.5 mm	approx. 580 g	aluminum	reflex, r.h.r.	417/35



ROTOR BLADE POUCHES

Our rotor blade pouches have an anthracite colored material similar to Cordura. They are well padded for the safety of your blades. For the tail rotor blades there is a smaller bag attached. A grip assures easy transport. Choose here the fitting pouch according to the number and length of the blades:



fitting rotor blades	bag length	max. blade width	Ord.No.
2 blade max. ø 2100 mm	98 cm	9.5 cm	33/2
2 blade max. ø 2500 mm	120 cm	9.5 cm	33/1
3 blade max. ø 2100 mm	104 cm	9.5 cm	33/33
3 blade max. ø 2500 mm	120 cm	9.5 cm	33/3
4 blade max. ø 2100 mm	98 cm	9.5 cm	33/4
4 blade max. ø 2500 mm	120 cm	9.5 cm	33/40
6 blade max. ø 2500 mm	120 cm	9.5 cm	33/6



Ord.No. 33/28
rotor blade tie-down (blade restraint)
for max. 100 mm blade chord

Ord.No. 33/27
for max. 110 mm blade chord

Ord.No. 33/26
blade restraint



rotor blade support
black with Vario logo
Ord.No. 33/20
for use with pod and boom models
for rotor blades up to max. 65 mm blade chord
Ord.No. 33/22
for use with pod and boom models
for rotor blades up to max. 80 mm blade chord

Ord.No. 33/25
for use with fuselage models
dimensions: 35 x 200 x 200 mm



Ord.No. 11/33
rotor blade Allen key
for M5
Ord.No. 11/34
for M6



Ord.No. 11/30
rotor setting-up tools
set of pitch gauge, swashplate jigs,
flybar spirit level, paddle jig,
ball link driver etc.



Ord.No. 10/4
pitch gauge



Ord.No. 10/41
digital pitch gauge

SWASH PLATES

FOR 10 MM SHAFT · 2/3/4 BLADE
ORD.NO. 68/31



FOR 12 MM SHAFT · 2/3/4 BLADE
ORD.NO. 832/68



FOR 10 MM SHAFT · 2/3/4 BLADE
ORD.NO. 68/14



FOR 12 MM SHAFT · 5 BLADE
ORD.NO. 68/54



FOR 15 MM SHAFT · 2/3/4 BLADE
ORD.NO. 268/68



FOR 12 MM SHAFT · 6/7 BLADE
ORD.NO. 68/56



FOR 15 MM SHAFT · 2/3 BLADE
ORD.NO. 320/68



for coaxial helicopters

FOR 10 MM SHAFT · 5 BLADE
ORD.NO. 68/15



extra long ball-end bolt at the inner ring



ORD.NO. 68/20
for Ø 10 mm shaft
*



ORD.NO. 68/50
for Ø 12 mm shaft
*



ORD.NO. 68/60
for Ø 12 mm shaft
6/7 blade
*



ORD.NO. 268/55
for Ø 15 mm shaft
*



ORD.NO. 68/4
swashplate jig
height: 13 mm

ORD.NO. 68/17
swashplate jig
height: 20 mm



ORD.NO. 68/52
for Ø 12 mm shaft
5 blade



ORD.NO. 344/68
for Ø 12 mm shaft
Starwood Lama



ORD.NO. 68/53
inner diameter 24 mm
for 4 blade rotor head
Ord.No. 704/38 with dome extension
*



ORD.NO. 68/21
ball connector
(spare part at *)

SWASHPLATE DRIVERS & ACCESSORIES

PUSHRODS
Ø2.5 MM

length	Ord.No.	length	Ord.No.
32 mm	70/32	100 mm	70/100
40 mm	70/40	110 mm	70/110
45 mm	70/45	120 mm	70/120
50 mm	70/50	135 mm	70/135
55 mm	70/55	140 mm	70/140
60 mm	70/60	155 mm	70/155
65 mm	70/65	160 mm	70/160
70 mm	70/70	175 mm (thread one-sided)	70/175
55 mm	70/75	180 mm	70/180
80 mm	70/80		
90 mm	70/90		

length of thread on both sides: approx. 8 mm
package content: 1 pc
Packages with different quantities can be found
in the online shop (e.g. 70/50-4 = 4 pcs).

MATERIAL FOR PUSHRODS
Ord.No. 88/10 pushrod material (3 pcs à 400 mm)
individually cuttable, not threaded
Ord.No. 70/20 die for threads M2.5
Ord.No. 10/39 thread-cutting oil

→ BALL-LINKS
& YOKES



**BALL-LINKS
FOR BALL DIAMETER 4.8 MM**
Ord.No. 107/9 (10 pcs)
Ord.No. 107/17 (25 pcs)



YOKES M2.5
Ord.No. 107/35 metal (2 pcs)
Ord.No. 107/36 GRP (2 pcs)

FIT ALL BALL-LINKS:

Ord.No. 107/0
ball-link driver with handle

Ord.No. 107/1
ball-link driver AF5.5
for electric drill or socket spanner

Ord.No. 107/2
ball-link driver AF4
for Ord.No. 10/44

Ord.No. 11/99
ball-link pliers



PUSHRODS
Ø3.0 MM

length	Ord.No.	length	Ord.No.
70 mm	70/71	120 mm	70/121
75 mm	70/76	130 mm	70/130
83 mm	70/83	142 mm	70/142
90 mm	70/91	150 mm	70/150
100 mm	70/101	156 mm	70/156
110 mm	70/111	172 mm	70/172
115 mm	70/116		

length of thread on both sides: approx. 8 mm
package content: 1 pc
Packages with different quantities can be found
in the online shop (e.g. 70/50-4 = 4 pcs).

→ BALL-LINKS

PUSHRODS
Ø2.0 MM

→ BALL-LINKS



**BALL-LINKS
FOR BALL DIAMETER 5.5 MM**
Ord.No. 107/15 (10 pcs)
Ord.No. 107/31 (25 pcs)

**BALL-LINKS
FOR BALL DIAMETER 4.8 MM**
Ord.No. 107/49 (10 pcs)
Ord.No. 107/48 (25 pcs)
Option: To use the ball links Ord.No. 107/17 with the
Ø 3 mm pushrods simply drill out to Ø 2.8 mm using
drill Ord.No. 11/73.



**BALL-LINKS
FOR BALL DIAMETER 4.8 MM**
Ord.No. 107/8 (10 pcs)
Ord.No. 107/10 (25 pcs)

	H ball center height	M thread	L thread length	Ø ball diameter	Ord.No. (package content: 2 pcs) 060 (6 pcs)
	3.5 mm	M2	5 mm	4.8 mm	060/1
	9.5 mm	M2.5	3 mm	4.8 mm	060/2
	5.0 mm	M3	3 mm	4.8 mm	060/3
	6.5 mm	M3	6 mm	4.8 mm	060/4
	8.5 mm	M3	3 mm	4.8 mm	060/5
	20.0 mm	M3	7 mm	4.8 mm	060/6
	4.0 mm	M3	3 mm	4.8 mm	060/7
	3.5 mm	M2.5	5 mm	4.8 mm	060/8
	3.0 mm	M3	9 mm	4.8 mm	060/9
	8.0 mm	M3.5	3 mm	5.5 mm	060/10
	3.5 mm	M2.5	3 mm	4.8 mm	060/11
	9.0 mm	M2.5	6 mm	4.8 mm	060/12
	6.5 mm	M3	6 mm	7.8 mm	060/14
	9.5 mm	M3	3 mm	5.5 mm	060/15
	3.5 mm	M2	3.5 mm	4.8 mm	060/17
	13.0 mm	M3	9 mm	4.8 mm	060/18
	5.0 mm	M3	3 mm	5.5 mm	060/19
	11.0 mm	M3	3 mm	4.8 mm	060/20
	3.0 mm	M3.5	7.5 mm	4.8 mm	060/23
	5.0 mm	M3.5	3 mm	4.8 mm	060/24
	10.0 mm	M3	9 mm	4.8 mm	060/28
	5.0 mm	M2	5 mm	4.8 mm	060/29
	5.0 mm	M4	6 mm	4.8 mm	060/30
	5.0 mm	M4	6 mm	5.5 mm	060/55 (6 pcs)
	3.5 mm	M2.5	7 mm	5.5 mm	

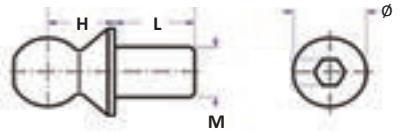
BALL- END BOLTS

BALL-END BOLTS

Ball-end bolts of steel with special surface treatment are available with different ball diameters. The main size used is 4.8 mm, however, a diameter of 5.5 mm is also available.

To avoid confusion with Ø 5.5 mm when checking the thread and length measurements also check the ball diameter.

The length of a ball-end bolt is measured from the middle of the ball to the start of the thread.



BALLS FOR BALL-LINKS

for fitting to control levers and servos



Ø4.8 MM

Ord.No. 107/42

drill hole Ø 2 mm
10 pcs

Ord.No. 107/12

drill hole Ø 2 mm
25 pcs

Ord.No. 107/43

drill hole Ø 2.5 mm
10 pcs

Ord.No. 107/13

drill hole Ø 2.5 mm
25 pcs

Ø5.5 MM

Ord.No. 107/44

drill hole Ø 2.5 mm
10 pcs

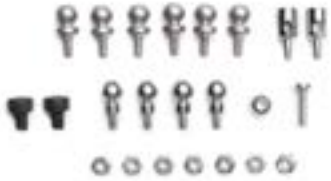
Ord.No. 107/14

drill hole Ø 2.5 mm
25 pcs



Ord.No. 80/21

ball retainer set



Ord.No. 97/4

servo linkage set

BALL-LINKS



Ord.No. 107/27

ball-link
drilling Ø 3 mm
curved
6 pcs



Ord.No. 107/28

ball-link
drilling Ø 3 mm
straight
4 pcs



Ord.No. 107/25

ball-link
ball raced
2 pcs



Ord.No. 107/34

ball-link for M3 pushrods
bigger, more sturdy version
length: 22 mm
largest Ø: 13 mm
2 pcs



Ord.No. 97/9

screw fixing pushrod connector
for control wire from 1.5 - 2.0 mm
incl. screw and nut

TAIL ROTORS



no. of blades	casing	Ord.No.
TAIL ROTOR WITH Ø5 MM SHAFT		
2	plastic	1003/10
2	aluminum	1003/50
TAIL ROTOR WITH Ø6 MM SHAFT		
2	aluminum	1003/80
3	aluminum	1003/81
4	aluminum	1003/85
4	aluminum	1003/86 (X-arrangement) incl. claw connection
TAIL ROTOR WITH Ø6 MM SHAFT + CASE EXTENSION		
2	aluminum	1003/82
3	aluminum	1003/83
4	aluminum	1003/87 (X-arrangement) incl. flex shaft connection

REQUIRED ACCESSORIES

For the input shaft please choose one of the following:

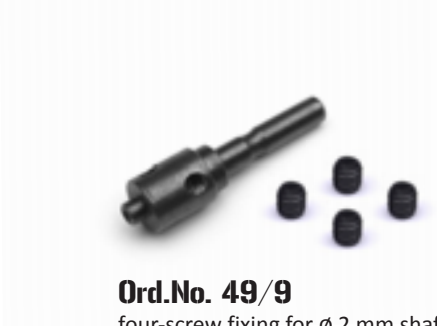


Ord.No. 49/12
claw connector

Ord.No. 49/8
cruciform element



Ord.No. 49/56
articulated gearbox connector



Ord.No. 49/9
four-screw fixing for Ø 2 mm shaft



Ord.No. 90385
grub screw M4 x 4

TAIL ROTOR

TAIL ROTOR BELLCRANKS

upgrade options of the default plastic bellcranks (Ord.No. 97/10, 97/30)



Ord.No. 97/15
bellcrank
aluminum
left
Ord.No. 97/16
right



Ord.No. 97/12
tail rotor bellcrank
reinforced
left
Ord.No. 97/13
right

BUSHES



GRP TAIL ROTOR (each 1 pc)
5 x 8 x 1.2 mm Ord.No. 94/1
5 x 8 x 1.6 mm Ord.No. 94/5



ALU TAIL ROTOR (each 1 pc)
5 x 6 x 13.6 mm Ord.No. 94/7
5 x 6 x 19 mm Ord.No. 94/9
6 x 7 x 17.5 mm Ord.No. 94/4



LINKAGE (each 1 pc)
2 x 4 x 1 mm Ord.No. 90538 6 pcs
2 x 5 x 9.7 mm Ord.No. 101/49
3 x 5 x 6 mm Ord.No. 97/7

TAIL BLADE HOLDERS



Ord.No. 103/7
tail blade holder
aluminum
Ord.No. 103/6
plastic (included
in tail rotor)



Ord.No. 103/10
tail blade holder
for hubs with Ø 5 mm drilling



TAIL ROTOR HUBS



Ord.No. 101/75
2 blade
for tail rotor
shaft ø 5 mm



Ord.No. 101/76
2 blade
for tail rotor
shaft ø 6 mm



Ord.No. 101/80
3 blade
for tail rotor
shaft ø 5 mm



Ord.No. 101/86
3 blade
for tail rotor
shaft ø 6 mm



Ord.No. 101/90
4 blade
for tail rotor
shaft ø 5 mm



Ord.No. 101/96
4 blade
for tail rotor
shaft ø 6 mm

CONTROL BRIDGES



Ord.No. 100/10
Ord.No. 100/20 ballr.
2 blade
for tail rotor
shaft ø 5 mm



Ord.No. 100/30 ballr.
2 blade
for tail rotor
shaft ø 5 mm



Ord.No. 100/60 ballr.
2 blade
for tail rotor
shaft ø 6 mm



Ord.No. 101/21
3 blade
for tail rotor
shaft ø 5 mm
with short joints



Ord.No. 101/23 ballr.
3 blade
for tail rotor
shaft ø 5 mm
with long joints



Ord.No. 101/22 ballr.
3 blade
for tail rotor
shaft ø 6 mm



Ord.No. 101/45
4 blade
for tail rotor
shaft ø 5 mm



Ord.No. 101/48 ballr.
4 blade
for tail rotor
shaft ø 6 mm



Ord.No. 100/100
2 blade
hole ø 6 mm
for tail rotor shaft ø 5 mm
aluminum



Ord.No. 101/60
2 blade
hole ø 8 mm
for tail rotor shaft ø 6 mm
aluminum



Ord.No. 101/210
3 blade
hole ø 6 mm
for tail rotor shaft ø 5 mm
aluminum



Ord.No. 101/220
3 blade
hole ø 8 mm
for tail rotor shaft ø 6 mm
aluminum



Ord.No. 101/450
4 blade
hole ø 6 mm
for tail rotor shaft ø 5 mm
aluminum



Ord.No. 101/480
4 blade
hole ø 8 mm
for tail rotor shaft ø 6 mm
aluminum

The plastic versions are supplied in the mechanics and in the Vario tail rotor assemblies. Vario here gives you the opportunity to use aluminum versions which are more resistant to heat.

CONVERSION SETS TAIL ROTOR

2→3 BLADE



Ord.No. 103/20
tail blade holder
conversion set from a 2 to 3 blade tail rotor



Ord.No. 92/80
scale tail rotor fittings set for 3-blade
conversion set from a 2 to 3 blade tail rotor
for 2 blade tail rotors with a ø 5 mm shaft

application example:
Ord.No. 3000, 3001, 3002 → conversion to Lama



Ord.No. 92/81
scale tail rotor fittings set for 3-blade
conversion set from a 2 to 3 blade tail rotor
for 2 blade tail rotors with a ø 6 mm shaft

application example:
Lama Ord.No. 3401

2→4 BLADE



Ord.No. 92/82
scale tail rotor fittings set for 4-blade
conversion set from a 2 to 4 blade tail rotor
for 2 blade tail rotors with ø 6 mm shaft

application example:
Air-Crane Ord.No. 6400

TAIL ROTOR BLADES



Already included in the mechanics.

2-BLADE SETS symmetric

	recommended for model / rotor ø	blade root	blade chord	weight	material	Ord.No.
102 mm length	1500 - 1600 mm	8 mm / Ø 3 mm	26 mm	approx. 8 g	plastic	34/7
105 mm length	1500 - 1600 mm	8 mm / Ø 3 mm	26-32 mm	approx. 9 g	CFRP	34/15
120 mm length	1800 mm	8 mm / Ø 3 mm	35 mm	approx. 13 g	CFRP	34/30
140 mm length	Cobra	8 mm / Ø 3 mm	34 mm	approx. 15 g	CFRP	790/34
143 mm length	Bo 105 (T)	8 mm / Ø 3 mm	30 mm	approx. 16 g	aluminum	34/31
156 mm length	2000 - 2300 mm	8 mm / Ø 3 mm	42 mm	approx. 16 g	CFRP	34/32
180 mm length	> 2300 mm	8 mm / Ø 3 mm	42 mm	approx. 20 g	CFRP	34/36
185 mm length	Schweizer 300	8 mm / Ø 3 mm	50 mm	approx. 22 g	CFRP	632/34

3-BLADE SETS symmetric

	recommended for model / rotor ø	blade root	blade chord	weight	material	Ord.No.
102 mm length	1500 - 1600 mm	8 mm / Ø 3 mm	26 mm	approx. 10 g	plastic	34/34
120 mm length	1800 mm	8 mm / Ø 3 mm	35 mm	approx. 13 g	CFRP	34/33
156 mm length	2000 - 2300 mm	8 mm / Ø 3 mm	42 mm	approx. 16 g	CFRP	34/35
180 mm length	> 2300 mm	8 mm / Ø 3 mm	42 mm	approx. 20 g	CFRP	34/37

FENESTRON



	hub ø	ring ø	max. permissible speed	ORD.NO.	stator	cover cap	replacement blades (CFRP)
8-BLADE	45 mm	approx. 180 mm	9500 rpm	92/90	(134/62)	92/97 (incl.)	34/10 or 34/11 (PVC)
	45 mm	approx. 180 mm	9500 rpm	92/95 incl. transmission	(134/62)	92/97 (incl.)	34/10 or 34/11 (PVC)
	45 mm	approx. 182 mm	12000 rpm	93/88	120/62	92/97 (incl.)	34/18
10-BLADE	48 mm	approx. 182 mm	9500 rpm	93/90	134/62	34/91	34/23
	89 mm	approx. 255 mm	7500 rpm	138/92 incl. transmission	138/62	138/63 (incl.)	34/25
13-BLADE	54 mm	approx. 191 mm	9500 rpm	93/93	342/62	–	34/24

► Spare parts can be found in the build plans (→Website) and in the online shop.



Ord.No. 34/5
pitch gauge
for tail rotor



Ord.No. 34/9
tail blade balance shaft



Ord.No. 97/31
bellcrank for Fenestron



Ord.No. 342/96
reinforcing plate for
Fenestron bellcrank
aluminum



Ord.No. 134/37
transmission for speed-up
petrol/electric mechanics/
JetCat PHT3



Ord.No. 132/37
Ord.No. 132/38
mounting
for Ord.No. 134/37 on
petrol/electric mechanics
2 pcs



Ord.No. 92/76
90° gearbox
for Fenestron



GEARBOXES



Ord.No. 1058
40° gearbox
claw / claw



Ord.No. 1057
50° gearbox
articulated joint / claw



Ord.No. 1059
40° gearbox
articulated joint / claw

tuning option:
Ord.No. 1059/1
steel bevel gears
2 pcs



Ord.No. 1056
17° gearbox
claw / claw
one side for tail boom
for Mil Mi-2



Ord.No. 1060
40° gearbox
steel bevel gears
shaft $\varnothing$ 6 mm
for connectors:
Ord.No. 49/7 or
Ord.No. 49/64



Ord.No. 1054
50° gearbox
articulated joint / claw
one side for tail boom



Ord.No. 1058/6
holder for 40° gearbox
2-part



Ord.No. 1058/7
lever holder for
40° gearbox



Ord.No. 61/20
bellcrank set 60°



Ord.No. 1055
50° gearbox
claw / claw
both sides for tail boom

CLAW CONNECTORS



Ord.No. 49/6
for $\varnothing$ 2 mm shaft



Ord.No. 49/5
for $\varnothing$ 5 mm shaft



Ord.No. 49/7
for $\varnothing$ 6 mm shaft



Ord.No. 49/18
for $\varnothing$ 8 mm shaft



Ord.No. 49/12
shaft $\varnothing$ 5 x 22 mm



Ord.No. 830/49
shaft $\varnothing$ 5 x 37 mm



Ord.No. 49/8
cruciform element

GRUB SCREWS



Ord.No. 90385
M4 x 4
6 pcs



Ord.No. 90387
M4 x 6
6 pcs



Ord.No. 49/16
retaining spring
for claw coupling
2 pcs

ARTICULATED JOINTS



Ord.No. 49/62
for $\varnothing$ 2 mm shaft



Ord.No. 49/65
for $\varnothing$ 5 mm shaft



Ord.No. 49/64
for $\varnothing$ 6 mm shaft
for 40° gearbox



Ord.No. 49/61
for $\varnothing$ 6 mm shaft



Ord.No. 49/56
shaft $\varnothing$ 5 x 22 mm



Ord.No. 49/60
shaft $\varnothing$ 5 x 37 mm

ARTICULATED JOINTS XL TUBE DRIVE ADPAPTERS YOKE CONNECTOR



Ord.No. 722/47
for $\varnothing$ 5 mm shaft
steel



Ord.No. 722/48
for $\varnothing$ 8 mm shaft
steel



Ord.No. 722/49
for $\varnothing$ 8 mm shaft
steel



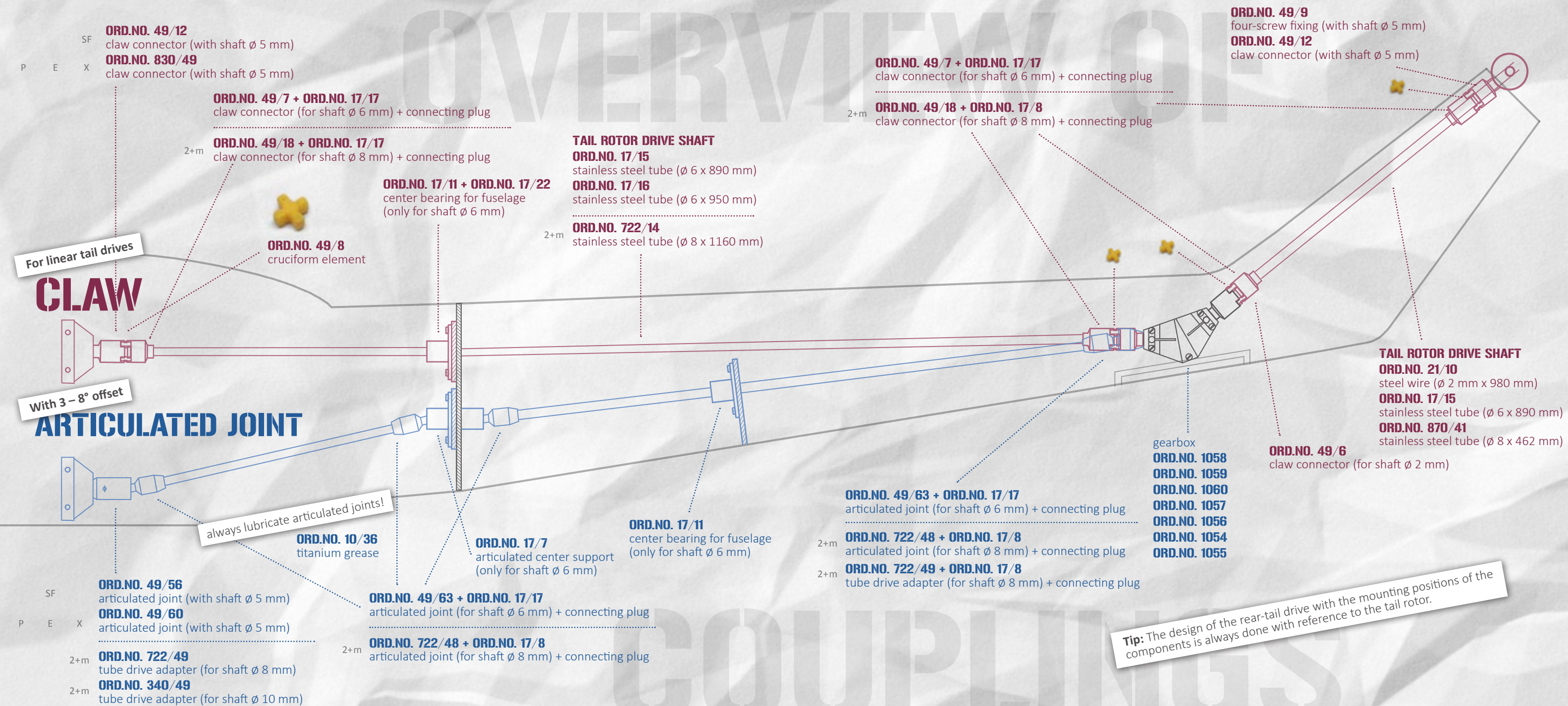
Ord.No. 340/49
for $\varnothing$ 10 mm shaft
steel



Ord.No. 49/55
yoke connector
shaft $\varnothing$ 5 mm



Ord.No. 49/1
bell with collet
(Ord.No. 49 B)



TAIL DRIVE



- Ord.No. 17/14**
stainless steel tail drive system Ø 20 mm
- set content:
- | | |
|---------------------------------|----------------------|
| stainless steel tube Ø 6 mm | Ord.No. 17/16 |
| connecting plug | Ord.No. 17/17 |
| 3x center bearing set | Ord.No. 17/66 |
| incl. O-ring 12 x 3 mm | Ord.No. 17/63 |
| alternative: center bearing set | Ord.No. 17/19 |
| ball race 6 x 13 x 5 mm | Ord.No. 17/22 |
| claw connector Ø 6 mm | Ord.No. 49/7 |
| cruciform element | Ord.No. 49/8 |
| grub screw M4 x 4 | Ord.No. 90385 |



- Ord.No. 17/75**
stainless steel tail drive system Ø 25 mm
- set content:
- | | |
|-----------------------------|----------------------|
| stainless steel tube Ø 6 mm | Ord.No. 17/15 |
| connecting plug | Ord.No. 17/17 |
| 2x center bearing set | Ord.No. 17/68 |
| incl. O-ring 19 x 2 mm | Ord.No. 17/64 |
| ball race 6 x 13 x 5 mm | Ord.No. 17/22 |
| claw connector Ø 6 mm | Ord.No. 49/7 |
| cruciform element | Ord.No. 49/8 |
| grub screw M4 x 4 | Ord.No. 90385 |



- Ord.No. 17/10**
ball raced stainless steel tail drive system
- set content:
- | | |
|-----------------------------|----------------------|
| stainless steel tube Ø 6 mm | Ord.No. 17/16 |
| connecting plug | Ord.No. 17/17 |
| center bearing | Ord.No. 17/11 |
| ball race 6 x 13 x 5 mm | Ord.No. 17/22 |
| claw connector Ø 6 mm | Ord.No. 49/7 |
| cruciform element | Ord.No. 49/8 |
| grub screw M4 x 4 | Ord.No. 90385 |



- Ord.No. 17/55**
stainless steel tail drive system
- set content:
- | | |
|-----------------------------|----------------------|
| stainless steel tube Ø 6 mm | Ord.No. 17/16 |
| connecting plug | Ord.No. 17/17 |
| center bearing | Ord.No. 17/11 |
| ball race 6 x 13 x 5 mm | Ord.No. 17/22 |
| claw connector Ø 2 mm | Ord.No. 49/6 |
| claw connector Ø 6 mm | Ord.No. 49/7 |
| cruciform element | Ord.No. 49/8 |
| grub screw M4 x 4 | Ord.No. 90385 |



- Ord.No. 17/20**
articulated joint stainless steel tail drive system
- set content:
- | | |
|-----------------------------|----------------------|
| stainless steel tube Ø 6 mm | Ord.No. 17/15 |
| connecting plug | Ord.No. 17/17 |
| center bearing | Ord.No. 17/11 |
| ball race 6 x 13 x 5 mm | Ord.No. 17/22 |
| articulated joint | Ord.No. 49/63 |
| grub screw M4 x 4 | Ord.No. 90385 |



- Ord.No. 17/13**
articulated joint stainless steel tail drive system with articulated center support
- set content:
- | | |
|-----------------------------|----------------------|
| stainless steel tube Ø 6 mm | Ord.No. 17/15 |
| connecting plug | Ord.No. 17/17 |
| articulated center support | Ord.No. 17/7 |
| articulated joint | Ord.No. 49/63 |
| grub screw M4 x 4 | Ord.No. 90385 |

Ø20x0.8mm TAIL BOOMS

length	drive support	fixing	color	Ord.No.
900 mm	x	slotted	titan	301
900 mm	ball race 17/24 Ø 8 mm	x	blank	302/1
780 mm	x	slotted	blank	304
780 mm	ball race 17/24 Ø 8 mm	x	blank	304/1
780 mm	ball race 17/22 Ø 6 mm	x	blank	304/5
780 mm	x	slotted	black	305
710 mm	x	slotted	black	309
810 mm	x	slotted	titan	310
900 mm	ball race 17/22 Ø 6 mm	slotted	titan	831/13
780 mm	ball race 17/22 Ø 6 mm	slotted	black	840/13

Ø20x0.5mm TAIL BOOMS

790 mm	x	slotted	black	313
790 mm	ball race 17/22 Ø 6 mm	slotted	black	808/13

Ø31x1mm TAIL BOOMS

length	drive support	fixing	color	Ord.No.
1200 mm	ball race 55/2 Ø 8 mm	perforated 3 x 120°	black	260/13
1300 mm	ball race 55/2 Ø 8 mm	perforated 3 x 120°	black	268/13
1200 mm	x	perforated 3 x 120°	black	331
1300 mm	x	perforated 3 x 120°	black	332



Ord.No. 2/20
marker panel sheet
for tail boom
red
Ord.No. 2/21
green
Ord.No. 2/22
yellow

Ø25x0.8mm TAIL BOOMS

length	drive support	fixing	color	Ord.No.
1260 mm	ball race 64/71 Ø 8 mm	x	blank	105/13
1100 mm	ball race 64/71 Ø 8 mm	slotted	blank	120/13
910 mm	ball race 17/22 Ø 6 mm	slotted	blank	139/13
820 mm	x	slotted	black	311
790 mm	x	perforated 3 x 90°	velvet	314
720 mm	x	slotted	black	315
700 mm	ball race 64/71 Ø 8 mm	x	blank	315/1
790 mm	x	perforated 3 x 90°	blank	319
840 mm	x	perforated 3 x 90°	velvet	320
910 mm	x	slotted	black	321
1180 mm	ball race 64/71 Ø 8 mm	slotted	blank	429/13
1055 mm	ball race 64/71 Ø 8 mm	perforated 3 x 90°	blank	722/13
820 mm	ball race 17/22 Ø 6 mm	slotted	black	832/13
910 mm	ball race 17/22 Ø 6 mm	slotted	black	834/13
900 mm	ball race 17/22 Ø 6 mm	slotted	orange	837/13
840 mm	ball race 17/22 Ø 6 mm	perforated 3 x 90°	velvet	860/13



TAIL BOOM

TAIL BOOM HOLDERS



Ord.No. 834/70
tail boom holder
2-part
screw with socket-head cap screws M3 x 55
(Ord.No. 90135) between the side frames



Ord.No. 809/70
tail boom holder
2-part
screw with socket-head cap screws M3 x 60
(Ord.No. 90140) between the side frames

TAIL ROTOR HOLDERS



Ord.No. 800/3
tail rotor holder
for tail boom ø 20 mm



Ord.No. 800/30
tail rotor holder, aluminum
for tail boom ø 20 mm
required tail fin and strut holder:
Ord.No. 870/17



Ord.No. 870/3
tail rotor holder, aluminum
for tail boom ø 25 mm

► This tail rotor holder is mounted in the tail boom using high strength thread lock fluid **Ord.No. 10/23**.

TAIL FIN AND STRUT HOLDERS



Ord.No. 800/2
tail fin and strut holder
2-part
for tail boom ø 20 mm



Ord.No. 870/17
tail fin and strut holder
2-part
for tail boom ø 25 mm



Ord.No. 8/6
tail rotor servo holder
for tail boom ø 20 mm
2 pcs



Ord.No. 907/2
servo holder

Ord.No. 8/5
for tail boom ø 25 mm
2 pcs

SERVO HOLDERS



Ord.No. 21/30
tail rotor push-pull set



Ord.No. 800/12
tail boom clip
incl. fittings
3 pcs

Ord.No. 21/10
pushrod
steel
ø 2 x 1000 mm



Ord.No. 21/15
carbon fibre pushrod set
for tail boom ø 20 mm
Ord.No. 800/28
clip



Ord.No. 21/25
carbon fibre pushrod set
for tail boom ø 25 mm
Ord.No. 800/38
clip

Ord.No. 21/4
pushrod
CFRP
ø 4 x 1000 mm
Ord.No. 21/5
ø 4 x 1350 mm

TAIL ROTOR DRIVE SHAFTS

ø 6 MM

Ord.No. 17/15
stainless steel tube
ø 6 x 0.3 x 890 mm

Ord.No. 17/16
stainless steel tube
ø 6 x 0.3 x 950 mm

Ord.No. 17/17
connecting plug
for stainless steel shaft ø 6 mm
2 pcs

ø 8 MM

Ord.No. 722/14
stainless steel tube
ø 8 x 0.5 x 1160 mm

Ord.No. 105/14
stainless steel tube
ø 8 x 0.5 x 462 mm
ø 8 x 0.5 x 1160 mm

Ord.No. 17/8
connecting plug
for stainless steel shaft ø 8 mm
2 pcs

TOPSELLER



Ord.No. 17
steel wire with hook
ø 2 x 980 mm



Ord.No. 800/9
PTFE bush guide
for tail boom ø 20 mm
wall thickness 0.8 mm
3 pcs



WORKING TOOLS



Ord.No. 11/24
helicopter scales



Ord.No. 9/5
protective goggles



Ord.No. 11/85
pushrod calipers, with
measuring holders **Ord.No. 11/86**
and leather case



Ord.No. 11/37
all-purpose pliers

CUTTING



Ord.No. 11/60
tubing cutter
for tubes up to $\varnothing$ 15 mm



Ord.No. 11/31
wire cutters for steel wire



Ord.No. 11/26
glazing panel shears rounded
Ord.No. 11/260
glazing panel shears straight



Ord.No. 11/59
cutting tool set:
scalpel & steel ruler
Ord.No. 11/58
scalpel



Ord.No. 11/22
magnetiser



Ord.No. 11/9
three-armed gripper
total length: 115 mm



Ord.No. 11/80
pipe bending tool



Ord.No. 90/4
heat gun



Ord.No. 11/29
Widia disc cutter
with mandrel



Ord.No. 11/36
disc cutter set
5 pcs



PERMA-GRIT®
Ord.No. 90/57
cutting disc $\varnothing$ 19 mm
Ord.No. 90/56
cutting disc $\varnothing$ 32 mm
both with mandrel



PERMA-GRIT®
Ord.No. 90/54
rotary file $\varnothing$ 4 mm rod, fine
Ord.No. 90/55
rotary file dome head $\varnothing$ 7 mm, fine



Ord.No. 90/7
hammer
weight: 230 g



Ord.No. 90/9
assembly tray



Ord.No. 11/21
tool case with foam to cut



Ord.No. 11/53
ridge cutter



Ord.No. 11/64
hole cutter
up to $\varnothing$ 16 mm



Ord.No. 11/43
hole cutter with handle
up to $\varnothing$ 14 mm

ALLEN KEYS



width across flats	Ord.No.
Allen key imperial	11/1
1.5 mm	11/2
2 mm	11/3
2.5 mm	11/4
3 mm	11/5
4 mm	11/6
5 mm	11/7



Ord.No. 11/0
Set: Ord.No. 11/1 - 11/6

SOCKET SPANNERS



OPEN-ENDED SPANNERS



width across flats	Ord.No.
0.9 mm	11/23
1.5 mm	11/14
2 mm	11/13
2.5 mm	11/12
2.5 mm	11/16 ball head
2.5 mm	11/82 socket sp. length: 230 mm
3 mm	11/11
3 mm	11/10 ball head
Torx T6	90/12

width across flats	Ord.No.
4 mm	11/19
5.5 mm	11/18
7 mm	11/17
8 mm	11/20 Flexi shaft

width across flats	Ord.No.
4 / 5 mm	11/91
4.5 / 5.5 mm	11/92
6 / 7 mm	11/93
7 / 8 mm	11/94



width across flats	Ord.No.
3 mm	11/8 socket sp. length: 345 mm
4 mm	11/33
5 mm	11/34



Ord.No. 11/15
pocket Allen key set



width across flats	Ord.No.
10 mm	11/66
11 mm	11/63
13 mm	11/62
14 mm	11/67



Ord.No. 11/35
tool case set

GRINDING



Ord.No. 90/10
file set with handle
6 parts



Ord.No. 11/28
glasspaper file 25 cm, flat
Ord.No. 11/56
glasspaper file 25 cm, convex/concave
Ord.No. 11/57
abrasive tape
60 cm roll



Ord.No. 10/77
sanding sponge



Ord.No. 10/76
sanding

PERMA-GRIT®



Ord.No. 90/51
hand file square ø 6 mm
Ord.No. 90/49
hand file round ø 6 mm
Ord.No. 90/50
hand file half round



Ord.No. 90/47
hand file flat
Ord.No. 90/52
hand file slot
Ord.No. 90/48
hand file round ø 12 mm



Ord.No. 90/53
wedge sanding block



Ord.No. 90/40
needle file set, containing:
Ord.No. 90/46 handle
Ord.No. 90/41 needle file triangular
Ord.No. 90/42 needle file flat
Ord.No. 90/43 needle file round
Ord.No. 90/44 needle file half round
Ord.No. 90/45 needle file square

SCREWDRIVERS

SOCKET SPANNERS HEXAGONAL Ø4 MM



Ord.No. 111/47 socket spanner Allen AF 1.3 (for **Ord.No. 90412**)

Ord.No. 111/20 Allen set, containing:



- Ord.No. 11/47** socket spanner Allen AF 1.5
- Ord.No. 11/48** socket spanner Allen AF 2
- Ord.No. 11/49** socket spanner Allen AF 2.5
- Ord.No. 11/50** socket spanner Allen AF 3
- Ord.No. 11/54** socket spanner Allen AF 4

Ord.No. 111/30 slot head set, containing:



- Ord.No. 11/52** socket spanner slot head AF 2.5 / 4
- Ord.No. 111/31** socket spanner slot head AF 2 / 3.5
- Ord.No. 11/51** socket spanner cross slot PH0 / PH1
- Ord.No. 111/32** socket spanner cross slot PH000 / PH00
- Ord.No. 111/33** socket spanner cross slot PZ0 / PZ1

Ord.No. 111/40 hexagonal set, containing:



- Ord.No. 111/41** socket spanner hexagonal AF 2 / 2.5
- Ord.No. 111/42** socket spanner hexagonal AF 3
- Ord.No. 111/43** socket spanner hexagonal AF 3.5
- Ord.No. 11/46** socket spanner hexagonal AF 4
- Ord.No. 111/44** socket spanner hexagonal AF 4.5
- Ord.No. 111/45** socket spanner hexagonal AF 5
- Ord.No. 11/45** socket spanner hexagonal AF 5.5

Ord.No. 111/50 Torx set, containing:



- Ord.No. 111/51** socket spanner Torx T5 / T6
- Ord.No. 111/52** socket spanner Torx T6 / T8
- Ord.No. 111/53** socket spanner Torx T7 / T9
- Ord.No. 111/54** socket spanner Torx T10 / T15
- Ord.No. 111/55** socket spanner Torx T15 / T20



Ord.No. 11/44
handle for socket spanners
hexagonal Ø 4 mm



Ord.No. 111/100 complete socket spanner set, containing:

- Ord.No. 111/20** Allen set
- Ord.No. 111/30** slot head set
- Ord.No. 111/40** hexagonal set
- Ord.No. 111/50** Torx set
- Ord.No. 11/44** handle for socket spanners hexagonal Ø 4 mm
- Ord.No. 107/2** ball-link driver 4 mm

Ord.No. 11/39 fine-point screwdriver set in pouch, containing:

- Ord.No. 11/47** socket spanner Allen AF 1.5
- Ord.No. 11/48** socket spanner Allen AF 2
- Ord.No. 11/49** socket spanner Allen AF 2.5
- Ord.No. 11/50** socket spanner Allen AF 3
- Ord.No. 11/52** socket spanner slot head AF 2.5 / 4
- Ord.No. 11/51** socket spanner cross slot PH0 / PH1
- Ord.No. 11/44** handle for socket spanners hexagonal Ø 4 mm
- Ord.No. 107/2** ball-link driver 4 mm

SOCKET SPANNERS HEXAGONAL Ø6 MM

Ord.No. 111/10 complete socket spanner set, containing:

- Ord.No. 111/12** socket spanner cross slot - slot head/Phillips PH2
- Ord.No. 111/13** socket spanner cross slot - slot head/Phillips PH1
- Ord.No. 111/14** socket spanner Allen AF 3
- Ord.No. 111/15** socket spanner Allen AF 4
- Ord.No. 111/16** socket spanner Allen AF 5
- Ord.No. 111/17** socket spanner Allen AF 6
- Ord.No. 111/11** handle for socket spanners hexagonal Ø 6 mm



Ord.No. 11/25
precision screwdriver set



Ord.No. 90/12
screwdriver Torx T6



Ord.No. 111/11
handle for socket spanners
hexagonal Ø 6 mm

DRILLING

TWIST DRILLS



diameter Ø	Ord.No.
1 mm	11/74
1.2 mm	11/96
1.5 mm	11/70
1.8 mm	11/87
2 mm	11/71
2.2 mm	11/75
2.5 mm	11/72
2.8 mm	11/73
3 mm	11/98
4 mm	11/89
5 mm	11/97
8 mm	11/81
set: 1.8 mm, 2 mm, 2.5 mm, 8 mm	11/69

SET

TAPPING THREADS

INTERNAL THREADS



- Ord.No. 11/76
tap HSS M2
- Ord.No. 11/77
tap HSS M2.5
- Ord.No. 11/78
tap HSS M3
- Ord.No. 11/79
tap HSS M4
- Ord.No. 11/55
tap HSS M5



Ord.No. 90/5
T-handle ratcheting tap wrench
reversible



Ord.No. 10/39
thread-cutting oil
for tapping threads

EXTERNAL THREADS



- Ord.No. 70/21
die M2
- Ord.No. 70/20
die M2.5
- Ord.No. 70/22
die M3



- | | | | |
|---|----------------|--|----------------|
| 1 Thread-lock fluid
high-strength, green, 10 ml | Ord.No. 10/23 | 10 Cyano glue, low viscosity, 20 g | Ord.No. 10/127 |
| 2 Thread-lock fluid
medium-strength, blue, 10 ml | Ord.No. 10/24 | 11 Cyano glue, high viscosity, 20 g | Ord.No. 10/125 |
| 3 Pin | Ord.No. 11/41 | 12 UHU coll express, wood glue, 10 g | Ord.No. 10/12 |
| 4 Thread-lock lacquer, 20 ml
for indicating secured screws
red | Ord.No. 16/6 | 13 Adhesive L530, 20 g | Ord.No. 10/13 |
| blue | Ord.No. 16/7 | 14 UHU hart, 30 g | Ord.No. 10/60 |
| yellow | Ord.No. 16/8 | 15 UHU plus endfest 300, 33 g | Ord.No. 10/27 |
| 5 Activator spray, 200 ml | Ord.No. 10/29 | 16 UHU plus endfest 300, 53 g
Mixer nozzles
5 pcs | Ord.No. 10/3 |
| 6 Speedy Combine powder, 40 g | Ord.No. 10/124 | 17 WELDYYX Expert adhesive, 25 ml | Ord.No. 10/130 |
| 7 Superglue, clear setting, anti fog, 20 g | Ord.No. 10/128 | 18 Dispenser | Ord.No. 10/1 |
| 8 Cyano glue, black, 20 g | Ord.No. 10/126 | | |
| 9 Cyano-acrylate cleaner, 20 g | Ord.No. 10/89 | | |

TOPSELLER



- 1| Silicone oil, 100 ml

Point oiler with silicone oil
100 ml

Lubricant set
incl. silicone oil, 100 ml
Titanium, grease, 10 ml (Ord.No. 10/36)
Pin
- 2| Extreme grease, 10 ml

Ord.No. 10/360
- 3| Maintenance spray, 200 ml

Ord.No. 16/4
- 4| Mechanics cleaner, 500 ml

Ord.No. 10/88
- 5| Penetrating oil, 10 ml

Ord.No. 10/38
- 6| Mechanics maintenance spray, 150 ml

Ord.No. 10/87
- 7| Thread-cutting oil, 50 ml

Ord.No. 10/39
- 8| Screen polish, 5 g

Ord.No. 30/11

TIPP

TIPP



PROTECTIVE LOTION WITH LOTUS EFFECT // ORD.NO. 16/5

When applied to a smooth rotor blade surface it allows the easy removal of insects after a flight. It also gives a brilliant long lasting shine to helicopter fuselages. This protective film is also recommended for use on full size helicopters, planes, cars and tablet / smartphones. The lotus effect is excellent in rain as it causes water to roll off in fine drops.

200 ml, incl. microfiber cloth



- 1| 2-pack filler paste
242 g paste, 8 g hardener

Ord.No. 16/10
- 2| Sanding primer for wood, 250 ml

Ord.No. 10/76
- 3| 30 minute epoxy, 2x 50 g

Ord.No. 10/129
- 4| Poxan 30, 10 g
epoxy-thickener

Ord.No. 623
- 5| Five minute epoxy, 50 ml
Mixer nozzles, 5 pcs

Ord.No. 10/73
- 6| High power epoxy resin, 200 g
+ hardener, 80 g (40 minutes)

Ord.No. 10/74
- 7| Glue dispenser

Ord.No. 10/123
- 8| Silicone rubber sealant, 90 ml

Ord.No. 10/75
- 9| Heat-resistant spray
400 ml, matt black

Ord.No. 10/11
- 10| Silencer paint
150 ml, black

Ord.No. 16/1
- 11| Transparent-spray, 150 ml
blue
green
black

Ord.No. 16/2
- 12| Spray can holder

Ord.No. 16/3

TIPP

NEW TIPP

TOPSELLER

NEW





MOUNTING MATERIAL

BALL RACES

shielded	Ord.No.
dimensions	
2 x 5 x 2.3 mm	107/24
2 x 6 x 2.5 mm	71/7
2.5 x 8 x 2.8 mm	71/19
3 x 7 x 3 mm	71/16
3 x 8 x 3 mm	58/11
3 x 10 x 4 mm	84
4 x 9 x 4 mm	40/1
4 x 13 x 5 mm	40
5 x 13 x 4 mm	96
5 x 13 x 5 mm	96/1
5 x 16 x 5 mm	38/2
6 x 10 x 2.5 mm	99 A open
6 x 12 x 4 mm	38/4
6 x 13 x 5 mm	17/22
6 x 15 x 5 mm	38
6 x 16 x 5 mm	7/17
6 x 19 x 6 mm	38/1
7 x 13 x 3 mm	94/27
7 x 14 x 3.5 mm	17/23 open
8 x 12 x 3.5 mm	64/16
8 x 14 x 3.5 mm	64/71
8 x 14 x 4 mm	17/24
8 x 16 x 4 mm	75 open
8 x 16 x 5 mm	64/3
8 x 16 x 6 mm	7/37
8 x 19 x 6 mm	55/2
8 x 22 x 7 mm	39
9.5 x 22 x 5.5 mm	64/0
10 x 19 x 5 mm	55/1
10 x 21 x 5 mm	55/5
10 x 22 x 6 mm	39/2
10 x 26 x 8 mm	75/1
12 x 21 x 5 mm	55/6
12 x 28 x 7 mm	55/9
12 x 28 x 8 mm	55/8
15 x 24 x 5 mm	64/19
15 x 28 x 7 mm	268/57
17 x 26 x 5 mm	68/6 sealed
20 x 32 x 7 mm	68/2
25 x 37 x 7 mm	68/3 sealed



FLANGED BALL RACES

dimensions	Ord.No.
3 x 7 x 3 mm	71/11
4 x 9 x 4 mm	35/13
6 x 10 x 3 mm	92/91

THRUST BEARINGS

dimensions	Ord.No.
4 x 10 x 4 mm	94/3
6 x 10 x 3 mm	94/6
7 x 13 x 4.5 mm	94/17
8 x 15 x 5 mm	117/8
9 x 20 x 7 mm	117/1
10 x 24 x 9 mm	117/2
10 x 25 x 6 mm	55/3
12 x 25 x 6 mm	55/7

FREEWHEEL BEARINGS

dimensions	Ord.No.
ø 6 mm	36/27
ø 10 mm	36/7
ø 12 mm	36/12

SWIVEL BEARINGS

dimensions	Ord.No.
8 x 16 x 8 mm	72/31
10 x 19 x 9 mm	68/1 for swashplate
12 x 22 x 10 mm	68/51 for swashplate

SLIDE BEARINGS

dimensions	Ord.No.
3 x 7 x 3 mm	71/3 Delrin, 12 pcs
3 x 8 x 3 mm, 2 parts	57/3 Delrin, 6x2 pcs
3 x 7 x 3 mm, flanged	71/12 Delrin, 12 pcs

ALLEN / SOCKET HEAD CAP SCREWS

ISO 4762 certified

dimensions	quality	Ord.No. (6 pcs)
M2 x 6 mm	12.9	90010
M2 x 8 mm	12.9	90015
M2 x 10 mm	12.9	90020
M2 x 14 mm	12.9	90022
M2 x 16 mm	12.9	90023
M2 x 20 mm	12.9	90021
M2.5 x 6 mm	12.9	90025
M2.5 x 8 mm	12.9	90030
M2.5 x 10 mm	12.9	90035
M2.5 x 12 mm	12.9	90036
M2.5 x 14 mm	12.9	90037
M3 x 4 mm	12.9	90040
M3 x 6 mm	12.9	90050
M3 x 8 mm	12.9	90060
M3 x 10 mm	12.9	90070
M3 x 14 mm	12.9	90081
M5 x 14 mm	12.9	117/5 2 pcs
M5 x 16 mm	12.9	90200
M2.5 x 4 mm	VA	90024
M1.6 x 10 mm	8.8	92020
M2.5 x 18 mm	8.8	90038
M3 x 8 mm	8.8	90055
M3 x 10 mm	8.8	90065
M3 x 12 mm	8.8	90075
M3 x 14 mm	8.8	90080
M3 x 16 mm	8.8	90085
M3 x 18 mm	8.8	90090
M3 x 20 mm	8.8	90095
M3 x 22 mm	8.8	90100
M3 x 25 mm	8.8	90105
M3 x 30 mm	8.8	90110
M3 x 35 mm	8.8	90115
M3 x 40 mm	8.8	90120
M3 x 45 mm	8.8	90125
M3 x 50 mm	8.8	90130
M3 x 55 mm	8.8	90135
M3 x 60 mm	8.8	90140
M3 x 70 mm	8.8	90143
M3.5 x 8 mm	8.8	90062
M3.5 x 16 mm	8.8	90063
M4 x 8 mm	8.8	90144
M4 x 10 mm	8.8	90145
M4 x 12 mm	8.8	90147
M4 x 14 mm	8.8	90150
M4 x 16 mm	8.8	90155
M4 x 18 mm	8.8	90160
M4 x 20 mm	8.8	90165
M4 x 22 mm	8.8	90170
M4 x 25 mm	8.8	90175
M4 x 30 mm	8.8	90180
M4 x 35 mm	8.8	90185
M4 x 40 mm	8.8	90190
M4 x 45 mm	8.8	90192
M4 x 50 mm	8.8	90195
M4 x 60 mm	8.8	90194
M5 x 12 mm	8.8	90196
M5 x 18 mm	8.8	90203
M5 x 20 mm	8.8	90201
M5 x 30 mm	8.8	90202
M5 x 45 mm	8.8	90204
M5 x 50 mm	8.8	90205
M6 x 20 mm	8.8	90207
M6 x 40 mm	8.8	90210
M6 x 60 mm	8.8	90218



BEARINGS

SCREWS

COUNTERSUNK SCREWS

quality 8.8

dimensions	Ord.No. (6 pcs)
M1.2 x 10 mm	90440
M1.6 x 10 mm	92030
M2 x 4 mm	90443
M2 x 6 mm	90445
M2 x 6 mm	90446
M2 x 12 mm	90450
M2 x 14 mm	90455
M3 x 6 mm	90465
M3 x 8 mm	90470
M3 x 10 mm	90480
M3 x 14 mm	90481
M3 x 18 mm	90478
M3 x 8 mm	90475 stainless steel

ALLEN

M2,5 x 8 mm	90460
M3 x 12 mm	90484
M3 x 16 mm	90477
M4 x 6 mm	90479
M4 x 8 mm	90482
M4 x 12 mm	90476
M4 x 16 mm	90474
M5 x 12 mm	90198

FILLISTER HEAD SCREWS

Allen

dimensions	Ord.No. (6 pcs)
M2 x 8 mm	90412 silver
M3 x 10 mm	90416
M3 x 14 mm	90418
M3 x 18 mm	90420
M3 x 20 mm	90425
M3 x 22 mm	90430
M5 x 55 mm	90436 cross slot, silver
M6 x 12 mm	90437 cross slot, silver

FLANGED

M3 x 8 mm	90415
M5 x 10 mm	90434 2 pcs
M5 x 14 mm	90435 2 pcs

HEX-HEAD SCREWS

ISO 4017 certified

dimensions	Ord.No. (6 pcs)
M4 x 25 mm	90390
M4 x 30 mm	90395
M4 x 35 mm	90400
M4 x 40 mm	90405

FLAT HEAD SCREWS

recommended for windows

dimensions	Ord.No.
1.6 x 6 mm	90222 12 pcs
1.6 x 6 mm	90223 50 pcs

ROTOR HEAD SCREWS

dimensions	Ord.No. (incl. nut)
M3 x 17 mm	055
M3 x 18 mm	097
M3 x 19 mm	096
M3 x 24 mm	053 2 pcs
M3 x 28 mm	098

BLADE HOLDER SCREWS

dimensions	Ord.No. (incl. nut, 2 pcs)
M3 x 20 mm G12	054 tail rotor
M3 x 24 mm G12	053 tail rotor
M4 x 26 mm G12	059 3 pcs
M4 x 33 mm G12	052
M4 x 28 mm	050 incl. washers
M5 x 34 mm	057
M5 x 42 mm	058
M6 x 49 mm	056

PVC SCREWS

dimensions	Ord.No. (6 pcs)
M3 x 10 mm	90575
M3 x 20 mm	90580
M3 x 25 mm	90585
M4 x 20 mm	90590
M5 x 60 mm	90593

GRUB SCREWS

dimensions	format	Ord.No. (6 pcs)
M2 x 3 mm	flat	90363
M2.5 x 16 mm	flat	90362
M3 x 3 mm	flat	90365
M3 x 3 mm	flat	90366 12 pcs, with Allen key
M3 x 4 mm	ring serration	90370
M3 x 4 mm	pointed tip	90375
M3 x 5 mm	flat	90380
M3 x 16 mm	flat	90383
M3 x 20 mm	flat	90384
M4 x 4 mm	flat	90385
M4 x 6 mm	flat	90387
M4 x 20 mm	flat	90378
M4 x 30 mm	flat	90382
M4 x 40 mm	flat	90386
M5 x 10 mm	stud bolt	90389
M6 x 12 mm	pointed tip	90392

SELF-TAPPING SCREWS

dimensions	Ord.No. (6 pcs)
1.3 x 10 mm	90220 12 pcs, countersunk
1.3 x 10 mm	90221 50 pcs, countersunk
1.6 x 6 mm	90222 12 pcs, flat head
1.6 x 6 mm	90223 50 pcs, flat head
2.2 x 4.5 mm	90325
2.2 x 6 mm	90410 PT filister head, flanged
2.2 x 6.5 mm	90330
2.2 x 9.5 mm	90335
2.9 x 6.5 mm	90340
2.9 x 9.5 mm	90345
2.9 x 13 mm	90350
2.9 x 16 mm	90355
2.9 x 19 mm	90360
4.2 x 9.5 mm	90361

KNURLED HEAD SCREWS

for mounting canopies

dimensions	Ord.No. (2 pcs)
M3 external thread	800/35
M4 internal thread	800/31
M4 external thread	800/32
M4 external thread	800/33 plastic

SCREWS

HEXAGON NUTS



dimensions	Ord.No. (6 pcs)
M1.2	90483
M1.6	92040
M2	90485
M2.5	90490
M3	90495
M4	90500
M5	90505
M11, fine thread	116/25 2 pcs

SELF-LOCKING NUTS



dimensions	Ord.No. (6 pcs)
M2	90525
M2.5	90527
M3	90530
M4	90535
M5	90536
M6	90537

CAPTIVE NUTS



dimensions	Ord.No. (6 pcs)
M2	90510
M3	90515
M3 large	90520
M4 large	90521

INSERTS



dimensions	Ord.No. (6 pcs)
M3 x 5 x 6 mm	063
M4 x 6.5 x 8 mm	064
M3 x 5.5 x 6 mm	066 for wood
M4 x 8 x 10 mm	065 for wood



NUTS

SPLIT WASHERS



dimensions	Ord.No. (6 pcs)
3 mm	90595
3.5 mm	90596
4 mm	90600
5 mm	90605
6 mm	90610

CIRCLIPS / RETAINING SPRINGS

use	Ord.No. (2 pcs)
for Fenestron	92/98 8 pcs
for claw connector	49/16



for ø 2 mm shaft	100/8 4 pcs
for ø 3 mm shaft	56 B 6 pcs
for ø 5 mm shaft	94 C



for ø 10 mm shaft	35 A
for ø 8 mm shaft	870/20
for petrol clutch	64/57
circlip set	35/9 10 pcs



COLLETS



ø	Ord.No. (2 pcs)
2 mm	49 B 1 pc
3 mm	163
4 mm	164
5 mm	165
8 mm	251/49 1 pc

SCREW EYELETS



ø	length	Ord.No. (4 pcs)
4 mm	9 mm	90660
8 mm	20 mm	90665
10 mm	20 mm	90670 hook
13 mm	28 mm	90680 M4

STEEL PINS



dimensions	Ord.No. (2 pcs)
1.5 x 8 mm	101/6
2 x 10 mm	101/7
2 x 12 mm	101/8
2 x 16 mm	44/8
2 x 18 mm	49/0
2 x 20 mm	101/9
2 x 24 mm	72 A
2 x 30 mm	54/8
2 x 40 mm	54/7
3 x 12 mm	44/3
3 x 14 mm	830/34
3 x 26 mm	903/9
3 x 30 mm	161/5
3 x 40 mm	832/56
3 x 65 mm	158/1
4 x 10 mm	44/4
4 x 16 mm	603/20
4 x 40 mm	190/5
4 x 45 mm	920/9
4 x 55 mm	161/6
5 x 70 mm	101/10

SPLIT PINS



dimensions	Ord.No. (6 pcs)
1.8 x 6 mm	90638
2.2 x 14 mm	90640
2.2 x 6 mm	90642
2.3 x 14 mm	90645
3 x 16 mm	90650

SHIMS



dimensions	Ord.No. (6 pcs)
3 x 5 x 0.5 mm	90810
3 x 6 x 0.1 mm	90820
3 x 6 x 0.2 mm	90830
3 x 6 x 0.3 mm	90840
4 x 7 x 0.5 mm	90845
4 x 8 x 0.1 mm	90850
4 x 8 x 0.2 mm	90860
4 x 8 x 0.3 mm	90870
4 x 8 x 0.5 mm	90880
5 x 10 x 0.1 mm	90890
5 x 10 x 0.2 mm	90900
5 x 10 x 0.3 mm	90910
5 x 10 x 0.5 mm	90920
6 x 12 x 0.1 mm	90930
6 x 12 x 0.2 mm	90940
6 x 12 x 0.3 mm	90950
6 x 12 x 1 mm	90960
8 x 14 x 0.2 mm	90970
8 x 14 x 0.3 mm	90980
8 x 14 x 0.5 mm	90990
10 x 16 x 0.1 mm	91000
10 x 16 x 0.5 mm	91010
12 x 8 x 0,5 mm	91019
12 x 8 x 1 mm	91020
washer set, assorted	91200 20 pcs
shim	
60 x 11.5 x 0.2 mm	91160 2 pcs



SHIM RINGS



dimensions	Ord.No. (6 pcs)
6.3 x 7.85 x 0.18 mm	91310
7.3 x 8.8 x 0.18 mm	91320
8.3 x 9.8 x 0.18 mm	91330
10.3 x 11.8 x 0.22 mm	91340

WASHERS



dimensions	Ord.No. (6 pcs)
2.2 x 5 x 0.2 mm	90540
2.5 x 5.8 x 0.5 mm	90541
2.1 x 7 x 0.5 mm	90542
3.1 x 12 x 1.7 mm	59/0 aluminum, 4 pcs
3.2 x 9 x 0.7 mm	90545
3.2 x 12 x 0.6 mm	90546
3.4 x 6.8 x 0.6 mm	90544
3.7 x 8 x 0.4 mm	90547
3.7 x 10.3 x 0.7 mm	90548
4.3 x 9 x 0.7 mm	90560
4.3 x 12 x 0.8 mm	90565
5 x 15 x 1.7 mm	117/6 2 pcs
5.3 x 10 x 1 mm	90566 stainless steel
5.4 x 14.9 x 1.6 mm	90564
6.5 x 19.8 x 1.2 mm	90570
6.4 x 12 x 1.5 mm	90567
8 x 14 x 1 mm	90571
8.5 x 15 x 1.5 mm	90573
8.5 x 15.8 x 1.5 mm	90572
10.5 x 18 x 1.6 mm	90569
2 x 5 x 1.2 mm	90555 rubber
3.5 x 12 x 3 mm	82/53 rubber, 2 pcs
4 x 15 x 4 mm	90556 rubber
5 x 17 x 2.5 mm	117/12 4 pcs
6 x 21.8 x 4 mm	832/77 2 pcs



SPECIAL WASHERS

dimensions	Ord.No. (2 pcs)
5.9 x 11.9 mm	36/4 1 pc
9.1 x 20 mm	117/11 4 pcs
8 x 16 mm	117/4
10 x 24.6 mm	117/3
12 x 25.9 mm	832/75
2.5 x 9 mm	87/21
5 x 15 mm	77



BUSHES

dimensions	Ord.No. (2 pcs)
2 x 3 x 2.2 mm	71/5
2.1 x 3 x 5.5 mm	61 A 4 pcs
2.8 x 5 x 2 mm	71/18
3 x 4 x 6.3 mm	57 A
3 x 4 x 12.1 mm	57 C
3 x 5 x 2.6 mm	102
3 x 5 x 4.8 mm	71/2
3 x 5 x 6.5 mm	57/1
3.1 x 4 x 6.4 mm	78 A
3.1 x 8 x 6 mm	500/25
3.1 x 8 x 10 mm	907/49
3.1 x 8 x 11.1 mm	860/25
3.1 x 8 x 17.2 mm	103/25
3.1 x 10 x 4 mm	57/2
3.1 x 10 x 23.5 mm	605/66 plastic
3.1 x 12 x 9 mm	808/66
4 x 6 x 1.5 mm	85/1
4 x 6 x 9.2 mm	260/8
4 x 6 x 27.7 mm	71/6
4 x 7 x 7 mm	94/13 flanged
5 x 6 x 14 mm	94/12
5 x 7 x 3.7 mm	330/15
5 x 8 x 2.5 mm	94/11
5 x 8 x 5 mm	49/53
6 x 8 x 4.5 mm	41 A
8 x 12 x 10.5 mm	830/19 1 pc
10 x 14 x 2.5 mm	36/11
12 x 18 x 6 mm	103/37 1 pc



MISCELLANEOUS



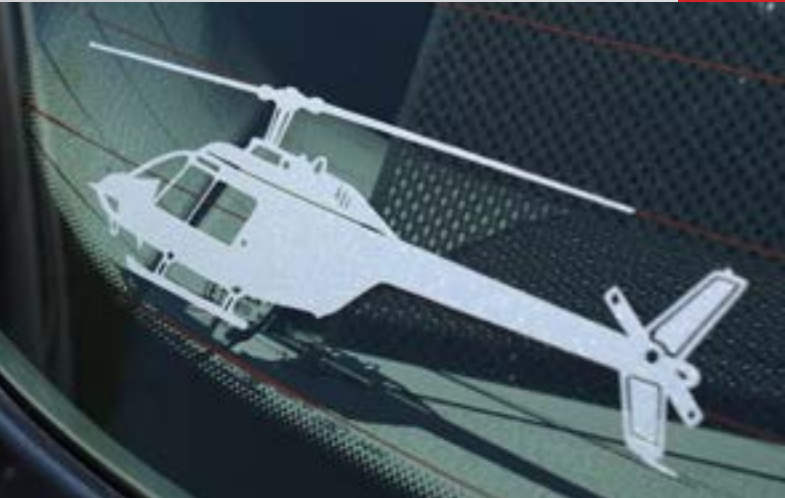
Ord.No. 10/68
adhesive weights

BUSHES

WASHERS



MERCHANDISING



Ord.No. 14/80
Vario Helicopter transfersticker
suitable for helicopter model or car
dimensions: approx. 60 x 25 mm
2 pcs



Ord.No. 2/16
Vario Helicopter Pilot sticker
dimensions: approx. 250 x 500 mm
black-red
Ord.No. 2/17
red-silver



Ord.No. 14/82
Vario Helicopter car sticker transparent
dimensions: approx. 176 x 63 mm



Ord.No. 2/18
Vario Helicopter sticker set
including:
2x silver sticker Vario Helicopter, dimensions: approx. 45 x 12 mm
2x silver sticker Vario Helicopter, dimensions: approx. 71 x 22 mm
2x transparent sticker Vario Helicopter Pilot, dimensions: 73 x 51 mm

Ord.No. 2/19
Vario Helicopter Pilot
sticker for license plate
dimensions: approx. 490 x 17 mm
2 pcs



Ord.No. 2/8
badge Vario Helicopter
zum Aufbügeln
dimensions: approx. 30 x 100 mm



Ord.No. 2/4
sew-on badge Vario Helicopter
dimensions: approx. 82 x 105 mm

CAR STICKERS HELICOPTER
silver matte
width: 200 mm



Ord.No. 14/60
Agusta A109



Ord.No. 14/70
Ecureuil



Ord.No. 14/630
Apache



Ord.No. 14/342
Gazelle



Ord.No. 14/62
Bell 222



Ord.No. 14/78
Hughes 500E



Ord.No. 14/64
BK 117



Ord.No. 14/76
JetRanger III



Ord.No. 14/66
Bo 105



Ord.No. 14/72
Lama



Ord.No. 14/480
Chinook



Ord.No. 14/74
Schweizer 300C



Ord.No. 14/120
EC 120



Ord.No. 14/903
Tiger



Ord.No. 14/68
EC 135



Ord.No. 14/29
AIRWOLF

SHOW THAT YOU ARE A VARIO PILOT



DENNIS ENGEL
VARIO TEAM PILOT



ROBIN ADAMSCHAK
VARIO TEAM PILOT



RETO MARBACH
VARIO TEAM PILOT



STEFAN REUSCH
VARIO TEAM PILOT



PETER HOLTACKERS
VARIO TEAM PILOT



PILOT'S WINTER JACKET

with hood
logo stitch on left breast

size S	Ord.No. 5/89
size M	Ord.No. 5/90
size L	Ord.No. 5/91
size XL	Ord.No. 5/92
size XXL	Ord.No. 5/93
size XXXL	Ord.No. 5/88

SOFTSHELL JACKET

dryplexx
logo on the back

size S	Ord.No. 5/98
size M	Ord.No. 5/94
size L	Ord.No. 5/95
size XL	Ord.No. 5/96
size XXL	Ord.No. 5/97

FLEECE JACKET

with helicopter zipper
& logo stitch on left breast

size S	Ord.No. 5/5S
size M	Ord.No. 5/5M
size L	Ord.No. 5/5L
size XL	Ord.No. 5/5XL
size XXL	Ord.No. 5/5XXL

POLO SHIRT

logo stitch on left breast

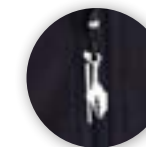
	black	white
size S	Ord.No. 5/0	
size M	Ord.No. 5/1	Ord.No. 5/6
size L	Ord.No. 5/2	Ord.No. 5/7
size XL	Ord.No. 5/3	Ord.No. 5/8
size XXL	Ord.No. 5/4	Ord.No. 5/9

BASE BALL CAP

ORD.NO. 5/23

UMBRELLA

ORD.NO. 5/30





Ord.No. 5/104
mug JetRanger small
Ord.No. 5/105
mug JetRanger big
Ord.No. 5/120
mug EC 120
Ord.No. 5/205
mug Bell UH

Ord.No. 5/430
mug Bell 430
Ord.No. 5/342
mug Gazelle
Ord.No. 5/480
mug Chinook
Ord.No. 5/630
mug Apache

Ord.No. 5/900
mug Ecureuil big
Ord.No. 5/901
mug Ecureuil small
Ord.No. 5/903
mug Tiger



Ord.No. 5/45
coffee mug



Ord.No. 5/46
thermo mug



Ord.No. 3995
mouse pad

Ord.No. 5/33
key chain
„Remove before flight“
red
Ord.No. 5/34
black
Ord.No. 5/35
blue
Ord.No. 5/36
green
Ord.No. 5/37
orange



Ord.No. 5/38
mini flashlight
as key chain
(blue LED)



Ord.No. 5/39
paper weight
rotor blades contain
a pen and letter opener



Ord.No. 5/50
camping chair
Vario Helicopter Pilot
with cup holder



Ord.No. 22/30
wind sock
length: approx. 90 cm
upper ø: approx. 20 cm
with ball raced peg,
without mast



Ord.No. 9/30
helicopter landing pad
dimensions: 83 x 83 cm



Ord.No. 141
helicopter training
landing gear



Ord.No. 144
transport wheels with pneumatic
small
Ord.No. 145
big
Ord.No. 146
transport wheels for large models
big



Ord.No. 22/10
chopper carry-strap



Ord.No. 130/1
skid mounting clamp
2 pcs



Ord.No. 143
floats



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CAM & CARRIER
www.cam-and-carrier.com



The Vario Benzin-Trainer in action for protecting the Australian rain forest from invasive weeds.
Photo: CSIRO (Project ResQu), www.csiro.au
(equipment not included in kit)

BENZIN-TRAINER
ORD.NO. 8311

Model helicopters are now employed increasingly for industrial tasks, e.g. for aerial photography using still and video cameras. Our Benzin-Trainer with 1780 mm rotor diameter is an excellent choice for such special purposes. It is a very reliable helicopter that has sold many hundreds of units. It is known for being very robust and easy to maintain. Vario uses a 23 cm³ petrol engine, as this is the best choice for good power with low vibration.

LENGTH	1460 mm
WIDTH	200 mm
HEIGHT	520 mm
ROTOR	ø 1780 mm, 2 blade
MOTOR	23 cm³ petrol motor
WEIGHT	7.3 kg
PAYLOAD WEIGHT	4 kg



Ord.No. 800/43
metal canopy latch
+ tools
3 pcs

XLC V2 **ORD.NO. 2682**

The XLC helicopter is designed as a load-carrier, and is capable of transporting a payload of up to 15 kg in addition to its airframe weight of around 17 kg. The fuel tank capacity of around 9.5 litres is also generous, permitting extended flight times of up to 45 minutes. However, please note that a full tank halves the maximum possible payload. The low vibration levels of the 3-blade main rotor and turbine power system also make the model an ideal choice for many kinds of applications, especially as a camera platform. The tall landing gear provides generous space for external loads, and features suitable equipment attachment facilities.

LENGTH	2450 mm
WIDTH	700 mm
HEIGHT	1000 mm
ROTOR	ø 2500 mm, 3 blade
MOTOR	turbine (JetCat SPT5)
WEIGHT	17 kg
PAYLOAD WEIGHT	15 kg



XFD **ORD.NO. 8350**

The XFD ("extended flight distance") Acrobat has been developed for extended flight times. Long flight times allow the completion of many tasks under the conditions of autonomous flight. The reliability of the Benzin-Trainer here is enriched by longer flight times. The simple design layout of the mechanics combined with the excellent flight characteristics enable it to complete many different applications. Vario uses a 23 cm³ petrol engine, as this is the best choice for good power with low vibration. The features of a 4-blade main rotor minimize vibrations even further.

LENGTH	1720 mm
WIDTH	340 mm
HEIGHT	630 mm
ROTOR	ø 1780 mm, 4 blade
MOTOR	23 cm³ petrol motor
WEIGHT	approx. 7.3 kg
PAYLOAD WEIGHT	4 kg
FLIGHT TIME	1 hour



XLC COMPACT
ORD.NO. 2675

XLC Compact helicopter is a smaller version of our XLC helicopter and uses an electric motor to drive the mechanics. The low vibration levels of the 4-blade main rotor and electric power system makes this helicopter a good choice as a camera platform. The tall landing gear provides generous space for external loads, and features suitable equipment attachment facilities.

LENGTH	2100 mm
WIDTH	770 mm
HEIGHT	930 mm
ROTOR	ø 2100 mm, 4 blade
MOTOR	electric battery: 12 S LiPos
WEIGHT	approx. 14 kg
PAYLOAD WEIGHT	7 kg
FLIGHT TIME	at 10,000 mAh and 7 kg payload: 7 minutes

SECURITY ADVICES

This catalogue reflects the range of different helicopter models that have been developed by Vario. At the same time, we are considering future projects in order to generate an even greater variety of helicopter types and sizes. Please consider the following safety guidelines for all models:

Do not start or power up your helicopter, until you are familiar with all functions available to you, and how they interact with the model itself. Only use motors of the type and size we suggest. Please do not experiment with overly long main shafts, without considering a support dome on the top bearing block. To do so could destroy the model from a bent main shaft. Most importantly, please respect the suggested gear ratio in combination of the main rotor blade size, in order to not exceed the max rpm of the combination.

"Just because all the parts fit together, does not mean it is safe to fly." In this catalogue, we have put together components that work together and work well. We want you to take advantage of the time and energy we spent to ensure your success with your project. Our goal is your satisfaction and safe handling every time you use our products.

The Vario Team wishes Happy landings to all its customers all over the world!

OUR PARTNERS / COOPERATIONS



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2018
NEUHEITEN
NEW RC HELI STUFF

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Originaldaten von Airbus gewährleisten korrekte Proportionen der Zelle. Eine geniale Größe, vorgesehen für eine kompakte e-Mechanik, die im Dom ihren Platz findet.

Utilizing actual Airbus data ensures correct scale proportions. Perfectly sized and designed for our compact new e-mechanics to fit completely within the dome cover.

MASSTAB / SCALE 1:5
LÄNGE / LENGTH 2000 mm
BREITE / WIDTH 300 mm
HÖHE / HEIGHT 600 mm
ROTOR Ø 2000 mm
GEWICHT / WEIGHT ca. 15,5 kg
JAHR / YEAR 2018

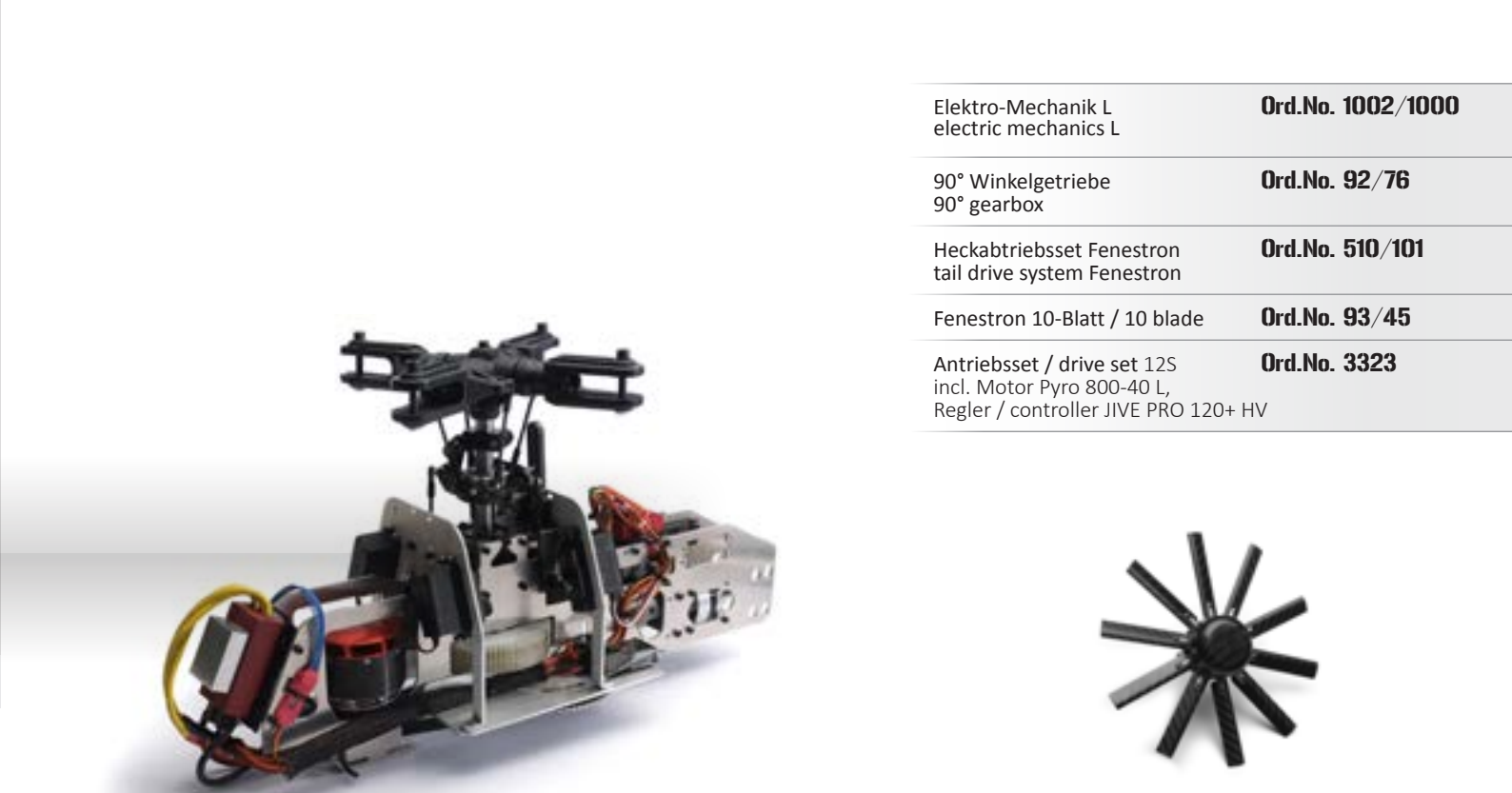
RUMPFBAUSATZ / FUSELAGE

ROTORKOPF / ROTOR HEAD

Bausatz Elektro / Kit electric	Ord.No. 1470
• 16-teiliger GFK-Rumpf / 16-part GRP fuselage • Scheibensatz (teilweise gewölbt) / window set • Spantensatz / laser cut wooden formers • Edelstahl-Heckantriebswelle / stainless steel tail rotor shaft (Ø 8 mm) • Kufenlandegestell / landing gear (Ø 18 mm) • diverse Kleinteile und Montagematerial / various small parts and mounting material	

4-Blatt-Rotorkopf / 4 blade rotor head	Ord.No. 704/37
Taumelscheibenmitnehmer / swashplate driver	Ord.No. 68/50
Hauptrotorwelle / main rotor shaft, 12 x 220 mm	Ord.No. 147/35
4-Blatt-Satz / 4 blade set Ø 2000 mm	Ord.No. 404/63
Rotorblatt-Tasche / rotor blade pouch	Ord.No. 33/4
Gestänge, VE 4 Stück / pushrod, 4 pcs	Ord.No. 70/60-4

ANTRIEB // ELEKTRO DRIVE // ELECTRIC



Elektro-Mechanik L electric mechanics L	Ord.No. 1002/1000
90° Winkelgetriebe 90° gearbox	Ord.No. 92/76
Heckabtriebsset Fenestron tail drive system Fenestron	Ord.No. 510/101
Fenestron 10-Blatt / 10 blade	Ord.No. 93/45
Antriebsset / drive set 12S incl. Motor Pyro 800-40 L, Regler / controller JIVE PRO 120+ HV	Ord.No. 3323



► Weiteres Zubehör finden Sie Online auf www.vario-helicopter.de / More accessories can be found on www.vario-helicopter.de

ANTENNENBÜGEL VOR ANTENNA	HECKANTENNE TAIL ANTENNA	ANTENNE HECKAUSLEGER ANTENNA TAIL BOOM
		
Ord.No. 147/610	Ord.No. 147/611	Ord.No. 147/612

COCKPIT & INNENVERKLEIDUNG COCKPIT & INNER COVER	TÜR-BESCHLAGSATZ DOOR FITTINGS SET	PILOT	STEUERKNÜPPEL / PEDALEN JOYSTICKS / FOOT PEDALS	ROTORKOPF ROTOR HEAD	STATOR	PATIENTENTRAGE PATIENT STRETCHER	HUTZENSET AIR COWLS SET	LUFTEINLASS AIR INLET	HAUBENVERSCHLUSS QUICK RELEASE LATCH
									
Ord.No. 147/29	Ord.No. 147/5	Ord.No. 1/16 // 1/60	Ord.No. 147/602 // 134/608	Ord.No. 704/37	Ord.No. 147/62	Ord.No. 147/56	Ord.No. 147/601	Ord.No. 147/605	Ord.No. 147/615



Photo: Michael Laskus



Detailliert , faszinierend und clever gemacht. Das 1,80 m Lama bietet Lama-Fans mehr als alle anderen Lama Bausätze zuvor: Anlenkung und Taumelscheibenführung wie beim Original, abnehmbare Verkleidungsbleche, richtige Proportionen. Akkus werden elegant unter dem Cockpitboden untergebracht.

Detailed, fascinating, elegantly engineered, and correctly proportioned, the new 1.80 m Lama offers Lama fans more than our other Lama kits before. This includes a true-to-scale swashplate guidance system and removable fairing plates. Batteries are now placed under the cockpit floor for a more realistic appearance.

MASSTAB / SCALE	1:6,3
LÄNGE / LENGTH	1640 mm
BREITE / WIDTH	380 mm
HÖHE / HEIGHT	530 mm
ROTOR	Ø 1800 mm
GEWICHT / WEIGHT	ca. 7,3 kg
JAHR / YEAR	2017

RUMPFBAUSATZ / FUSELAGE

ROTORKOPF / ROTOR HEAD

Bausatz Elektro / Kit electric	Ord.No. 3005
- Gitterrumpf aus Edelstahl / lattice fuselage, stainless steel - Kanzel aus GFK / GRP canopy - Edelstahl-Heckantriebswelle / stainless steel tail rotor shaft (Ø 6 mm) - Kufenlandegestell / landing gear (Ø 15 mm) - Dom und Taumelscheibenführung / dome and swashplate guide - diverse Kleinteile / various small parts	

3-Blatt-Rotorkopf / 3 blade rotor head	Ord.No. 703/94
Taumelscheibenmitnehmer / swashplate driver	Ord.No. 68/20
Hauptrotorwelle / main rotor shaft	Ord.No. 35/42
3-Blatt-Satz / 3 blade set Ø 1680 mm	Ord.No. 404/38
Rotorblatt-Tasche / rotor blade pouch	Ord.No. 33/33
Gestänge, VE 3 Stück / pushrod, 3 pcs	Ord.No. 70/40-3
► Weiteres Zubehör finden Sie Online auf www.vario-helicopter.de / More accessories can be found on www.vario-helicopter.de	

COCKPIT	TÜR-BESCHLAGSATZ DOOR FITTINGS SET	PILOT	STEUERKNÜPPEL / PEDALEN JOYSTICKS / FOOT PEDALS	SCALE-ROTORKOPF SCALE ROTOR HEAD
Ord.No. 305/29	Ord.No. 301/5	Ord.No. 1/16 // 1/60	Ord.No. 305/501 // 341/526 // 341/645	Ord.No. 703/94

ANTRIEB // ELEKTRO

DRIVE // ELECTRIC



Elektro-Mechanik electric mechanics	Ord.No. 305/24
3-Blatt Heckrotor 3 blade tail rotor	Ord.No. 1003/51
Klauenanschluss, Welle Ø 5 mm claw connector, shaft Ø 5 mm	Ord.No. 49/12
Heckrotorblätter tail rotor blades	Ord.No. 34/33
Antriebsset / drive set 12S incl. Motor Pyro 800-40 L, Regler / controller JIVE PRO 120+ HV	Ord.No. 3323

TURBINEN SCALETEILE TURBINE DETAILS	VORDERE WARTUNGSKLAPPE FRONT ACCESS PANEL	ÖLTANK OIL TANK	ÖLTANK OIL TANK	ABDECKUNG HECKROTOR GEARBOX COVER
Ord.No. 305/2	Ord.No. 305/503	Ord.No. 341/607	Ord.No. 341/608	Ord.No. 341/623
ANTIKOLLISIONSLICHT ANTI COLLISION LIGHT	WÄRMETAUSCHER HEAT EXCHANGER	FALTENBALG RUBBER BELLOW	HECKSTABILISIERUNG TAIL STABILIZER	FÜHRUNGSDUMMY DUMMY GUIDANCE
Ord.No. 305/96	Ord.No. 341/613	Ord.No. 305/20	Ord.No. 305/511	Ord.No. 305/19



Der JetRanger ist als Turbinen- und Elektroversion mit einer ø 15 mm Rotorwelle ausgestattet. Wer den kompletten Cockpitraum ausbauen möchte, wählt die neue Elektroversion, denn bei ihr ist die Mechanik vollständig im Dom untergebracht.
The Jet Ranger is now equipped with a ø 15 mm main rotor shaft in both the turbine and the electric version. If you would like to use all of the interior space for a full cockpit and cabin area, we recommend the new electric version that has the entire mechanics housed in the dome area.

MASSSTAB / SCALE	1:4
LÄNGE / LENGTH	2500 mm
BREITE / WIDTH	360 mm
HÖHE / HEIGHT	890 mm
ROTOR	ø 2500 mm
GEWICHT / WEIGHT	ca. 19 kg
JAHR / YEAR	2004

RUMPFBAUSATZ / FUSELAGE

Bausatz Elektro / Kit electric	Ord.No. 1005
• 13-teiliger GFK-Rumpf / 13-part GRP fuselage • Scheibensatz / window set • Spantensatz / laser cut wooden formers • Edelstahl-Heckantriebswelle / stainless steel tail rotor shaft (ø 8 mm) • Kufenlandegestell / landing gear (ø 20 mm) • diverse Kleinteile / various small parts	

ROTORKOPF / ROTOR HEAD ø 15 MM HRW/MRS

2-Blatt-Rotorkopf / 2 blade rotor head ø 15 mm	Ord.No. 1005/52
Taumelscheibenmitnehmer / swashplate driver	Ord.No. 268/55
Hauptrotorwelle / main rotor shaft, 15 x 493 mm	Ord.No. 112/35 (E), 162/35 (T)
2-Blatt-Satz / 2 blade set ø 2500 mm	Ord.No. 416 / 416/5 / 416/50
Rotorblatt-Tasche / rotor blade pouch	Ord.No. 33/1
Gestänge, VE 2 Stück / pushrod, 2 pcs	Ord.No. tba (E), 70/176-2 (T)

► Weiteres Zubehör finden Sie Online auf www.vario-helicopter.de / More accessories can be found on www.vario-helicopter.de

COCKPIT



Ord.No. 105/29 (T)

TÜR-BESCHLAGSATZ
DOOR FITTINGS SET



Ord.No. 105/34

SCALE-ZUBEHÖR
SCALE ACCESSORIES



Ord.No. 13/31

KEROSINTANK 2,5 L
KEROSENE TANK 2.5 L



Ord.No. 26/6

ROTORKOPF
ROTOR HEAD



Ord.No. 1005/52

ANTRIEB // ELEKTRO

DRIVE // ELECTRIC



Elektro-Mechanik XL electric mechanics XL	Ord.No. 1002/1200
Alu-Heckrotor / tail rotor alu	Ord.No. 1003/88
Heckrotorblätter tail rotor blades	Ord.No. 34/36
Antriebsset / drive set 12S incl. Motor Pyro 850-50 L, Regler / controller Kosmik 160+ HV	Ord.No. 3324
Abgasrohr-Attrappen dummy exhaust pipes	Ord.No. 30/29

ANTRIEB // TURBINE

DRIVE // TURBINE



Turbinen-Mechanik SPT5-H turbine mechanics SPT5-H für/for JetRanger XL	Ord.No. 1002/62
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Turbine JetCat SPT5-H
Information und Bezug / and supply: www.jetcat.de

Abgasrohre, 2 Stück, Edelstahl exhaust pipe, 2 pcs, stainless steel	Ord.No. 105/19
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Kerosintank, 2,5 l kerosene tank, 2,5 l	Ord.No. 26/6
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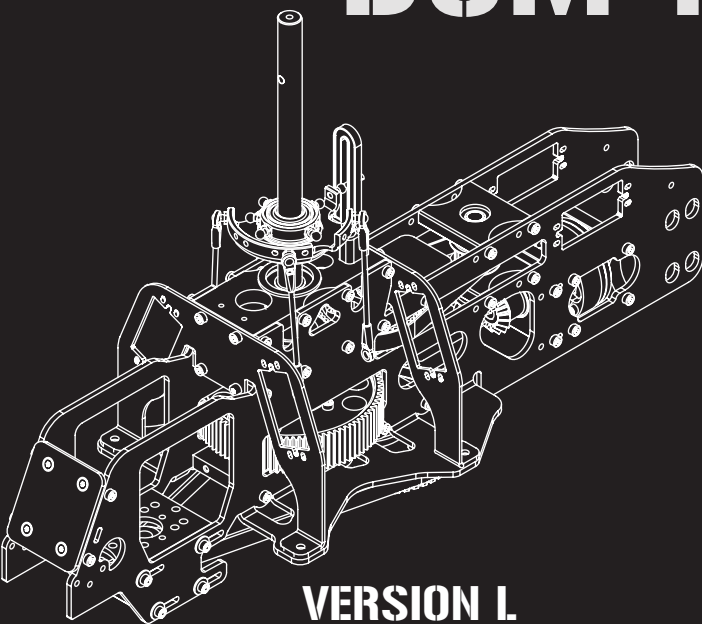
Filter für Tankentlüftung tank vent filter	Ord.No. 26/25
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Kerosin-Betankungssystem refuelling system	Ord.No. 13/32
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Schlauchschelle, VE 4 Stück hose clamp, PU 4 pcs	Ord.No. 26/34
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DIE NEUEN VARIO DOM-MECHANIKEN IN 2 GRÖSSEN

THE NEW VARIO DOME MECHANICS IN 2 SIZES

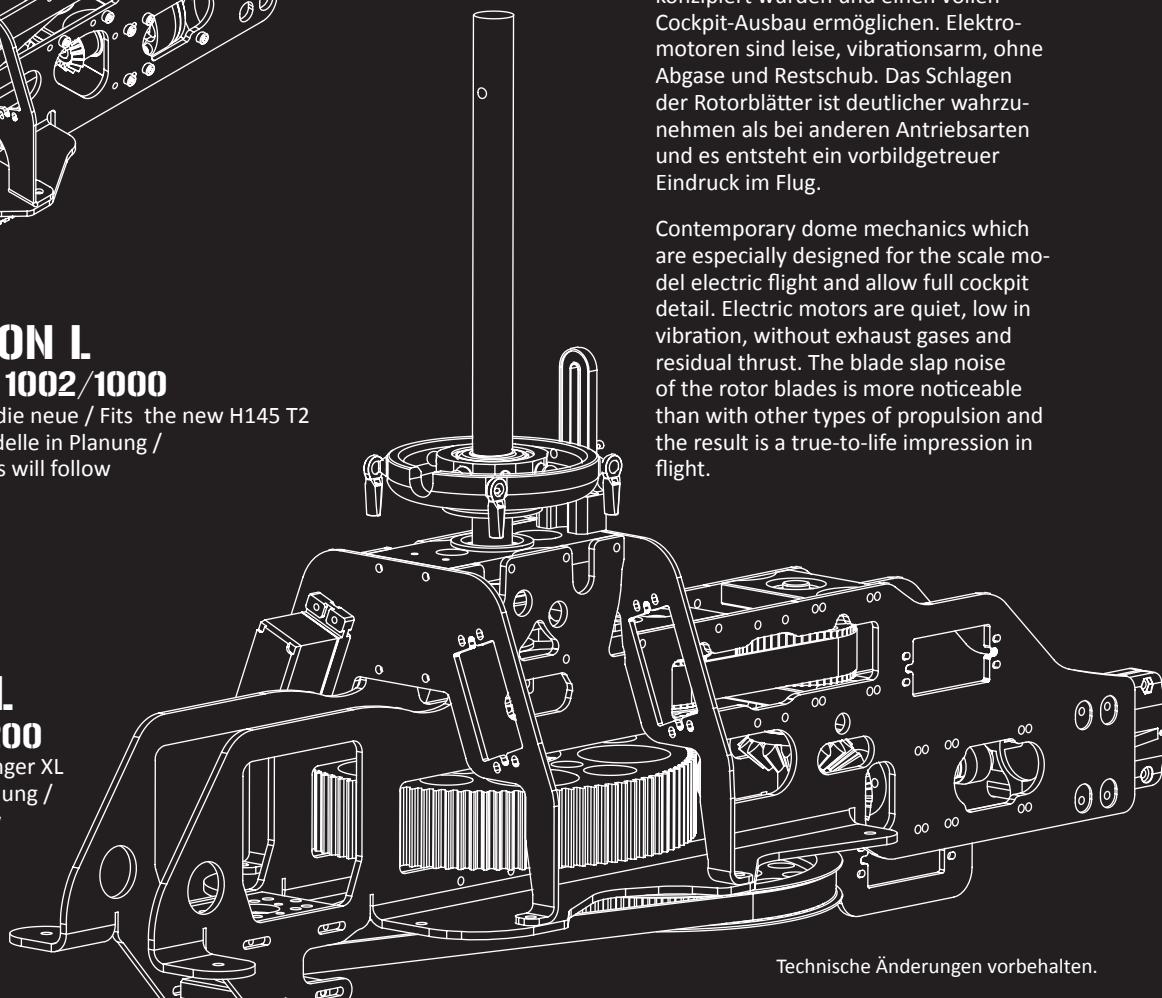


VERSION L ORD.NO. 1002/1000

Passend für die neue / Fits the new H145 T2
Weitere Modelle in Planung /
More models will follow

VERSION XL Ord.No. 1002/1200

Passend für / Fits JetRanger XL
Weitere Modelle in Planung /
More models will follow



Brandneue Dom-Mechaniken, die speziell für den Elektroflug im Scale Modell konzipiert wurden und einen vollen Cockpit-Ausbau ermöglichen. Elektromotoren sind leise, vibrationsarm, ohne Abgase und Restschub. Das Schlagen der Rotorblätter ist deutlicher wahrzunehmen als bei anderen Antriebsarten und es entsteht ein vorbildgetreuer Eindruck im Flug.

Contemporary dome mechanics which are especially designed for the scale model electric flight and allow full cockpit detail. Electric motors are quiet, low in vibration, without exhaust gases and residual thrust. The blade slap noise of the rotor blades is more noticeable than with other types of propulsion and the result is a true-to-life impression in flight.